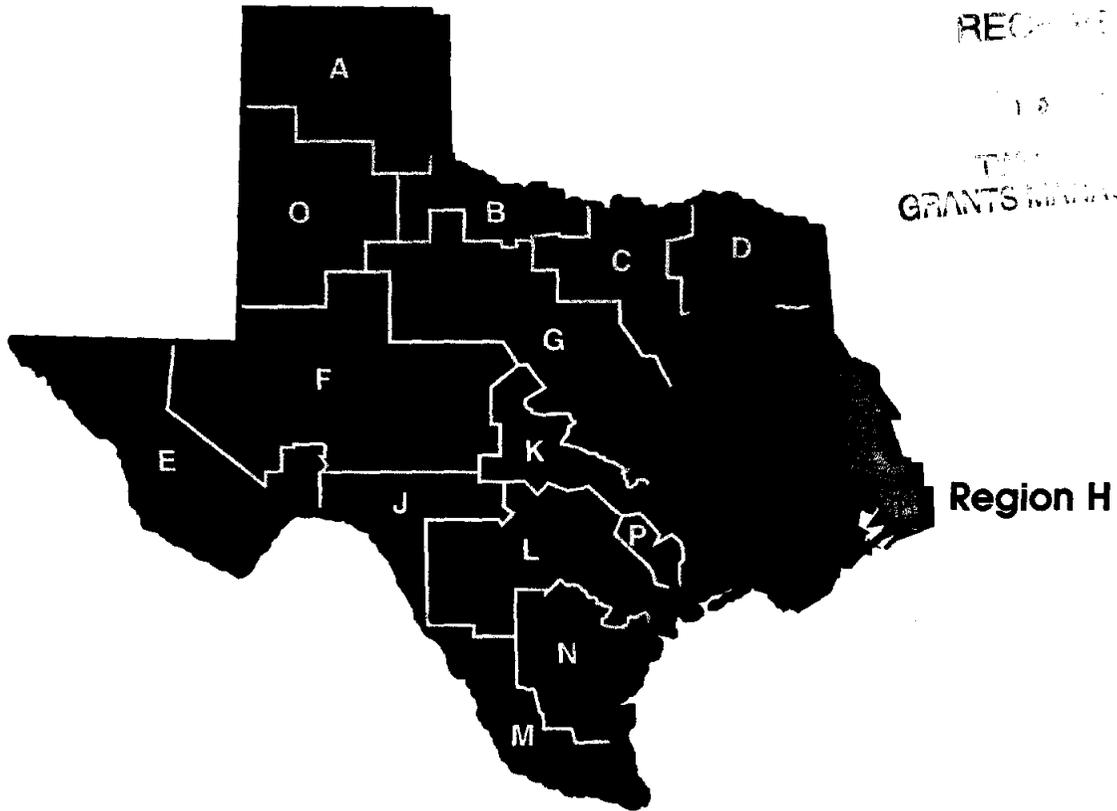


# REGION H WATER PLANNING GROUP



## INFRASTRUCTURE FINANCING REPORT

*prepared by*

**Brown & Root / TurnerCollie & Braden**

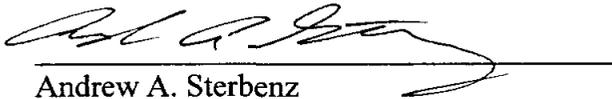
**Joint Venture**

**Ekistics Corporation  
LBG-Guyton Associates**

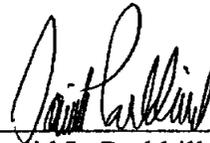
**May 2002**

## Region H Water Planning Group

# INFRASTRUCTURE FINANCING REPORT



Andrew A. Sterbenz  
Project Manager, Kellogg, Brown & Root



David L. Parkhill, P.E.  
Director, Environmental Water Resources  
Kellogg, Brown & Root, Inc.

May 31, 2002

*prepared by*

**Brown & Root / TurnerCollie&Braden**

**Joint Venture**

**Ekistics Corporation  
LBG-Guyton Associates**

**Region H Water Planning Group**  
**Infrastructure Financing Report**

**Table of Contents**

<b>Section</b>	<b>Page</b>
1.0 Introduction.....	1
2.0 Summary of Survey Responses .....	2
2.1 Municipal Water User Groups.....	2
2.2 Non-Municipal Water User Groups.....	5
3.0 Policy Recommendations .....	7
3.1 Recommendations Relating to Direct Financial Assistance Programs.....	7
3.2 Policy Recommendations which Indirectly Impact Financing for Water Infrastructure .....	8
Appendix A – Tabulated Survey Results	
Appendix B – Survey Questionnaires	
Appendix C – Policy Recommendation Discussions	
Appendix D – References	
Appendix E – Comments Received	

**List of Tables**

Table 2-1: Recommended Water Supply and Transmission Systems .....	3
Table 2-2: Summary of Survey Responses .....	5

**List of Figures**

Figure 2-1: Cost by Decade .....	4
Figure 2-2: Capital Costs by Category.....	4

## **1.0 Introduction**

In Senate Bill 2 of the 77<sup>th</sup> Texas Legislature, the preparation of an Infrastructure Financing Report was added to the regional planning process. The purpose of the report is to identify the funding needed to implement the water management strategies recommended in the Regional Water Plans. The primary objectives of the report are:

- 1) Determine the number of Political Subdivisions with identified needs that will be unable to finance their water infrastructure needs;
- 2) Determine the amount of infrastructure costs in the Regional Water Plans that cannot be financed by the local Political Subdivisions;
- 3) Determine funding options, such as State funding, that are proposed by the Political Subdivisions to finance water infrastructure costs that cannot be financed locally; and
- 4) Determine additional roles the RWPGs propose for the State in financing the recommended water supply projects.

A survey of Water User Groups with identified infrastructure needs was conducted, and the results of those surveys are summarized in Section 2.

The Region H Water Planning Group reviewed the current role of the State in financing water supply projects, and makes recommendations for program increases and new initiatives in Section 3.

## 2.0 Summary of Survey Responses

Surveys were sent to forty-four municipalities and the five major water providers with projected water shortages and anticipated capital costs in the 2001 Region H Water Plan. Of these, 20 surveys were completed and returned. Water User Groups (WUGs) that did not correspond to a single Political Subdivision, such as Census Defined Places and unincorporated areas, were included in the major water provider surveys, based on service area. The responses received are tabulated in Appendix A, and the actual questionnaires are at Appendix B.

In the 2001 Region H Water Plan, \$2.58 billion of water supply and infrastructure needs were identified. Of that, \$1.04 billion was the estimated cost of new water supply projects and major transmission systems (see Table 2-1). The remaining \$1.54 billion was in local infrastructure for water treatment plants, transmission mains, pump stations and storage tanks. The local infrastructure costs were allocated to each municipal WUG in the 2001 Region H Water Plan, and were included in the surveys. The costs of the water supply projects and major transmission lines were not distributed among the municipal WUGs, but the cost of these projects was reflected in the unit cost of water received from these projects.

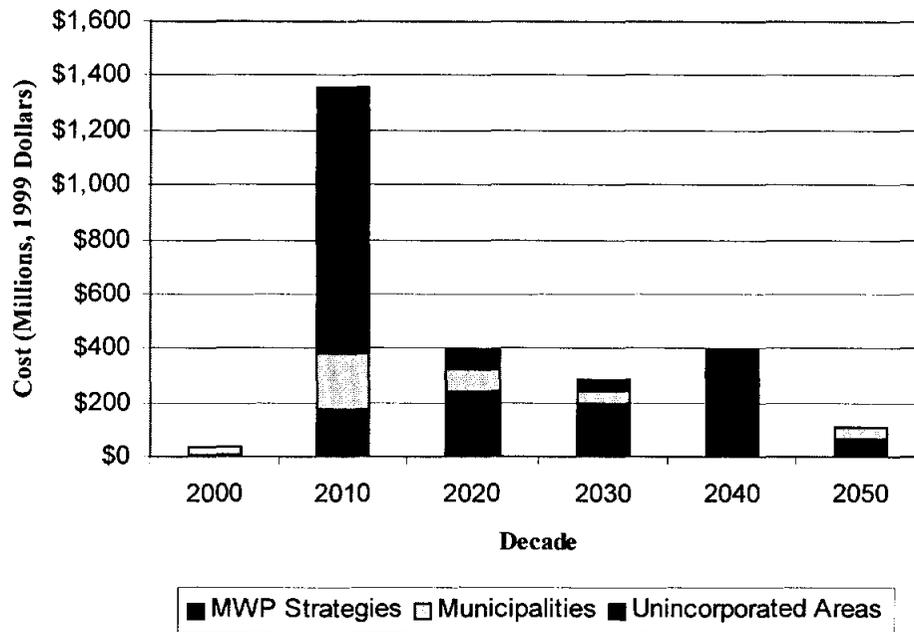
**Table 2-1: Recommended Water Supply and Transmission Systems**

<b>Management Strategy</b>	<b>Decade</b>	<b>Yield (acre-feet/year)</b>	<b>Strategy Cost (1999 \$)</b>
Allens Creek Reservoir	2020	99,650	\$ 157,300,000
Little River Reservoir	2040	129,000	\$ 361,065,000
Bedias Reservoir	2030	90,700	\$ 132,000,000
Bedias to SJRA Transfer	2030	None	\$ 62,340,000
Wastewater Reclamation	2010	90,700	\$ 175,498,000
Luce Bayou Transfer	2020	None	\$ 84,000,000
Houston/GCWA Transfer	2050	23,000	\$ 63,270,000
SJRA/CLCND Contract	2000	30,000	\$ 8,250,000
<b>Total</b>			<b>\$1,043,723,000</b>

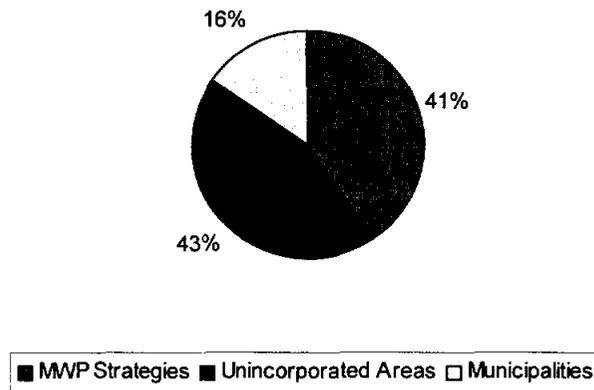
## 2.1 Municipal Water User Groups

In developing cost estimates for local infrastructure, the Region H Water Plan assumed that facilities would be constructed to meet the ultimate (usually 2050) demand. Because many of these facilities are first needed in 2010, the majority of the facility costs appear in that decade (See Figure 2-1). Adding to the high projected costs in that decade was the requirement to include facility costs for the unincorporated municipal areas within each county. These costs were estimated by determining the average facility costs per acre-foot of water for the discrete municipalities within a county, and then applying that average cost to the needs of the unincorporated areas. This broad method resulted in a facility cost estimate for the unincorporated areas of \$1.23 billion (see Figure 2-2).

**Figure 2-1: Capital Cost by Decade**



**Figure 2-2: Capital Costs by Category**



The factor most responsible for the high water infrastructure cost projections in this region is the predominant availability and use of groundwater. The ability to easily develop groundwater wells throughout the region has allowed development to occur at significant distances from surface water sources. As projected water demands surpass the sustainable yield of the Gulf Coast aquifer, communities now face the need to construct long pipelines and treatment facilities. Although some of these facilities were estimated to serve multiple WUGs, there exist many opportunities for individual communities and

water suppliers to provide water more efficiently through regional cooperation and phasing of the surface water conversion.

Maintenance and replacement of existing treatment and transmission systems are not addressed in the Region H cost estimates. However, these are significant and on-going costs, and will impact communities' ability to fund additional infrastructure. These maintenance costs are expected to increase as a percentage of water system budgets as facilities constructed in the mid-20<sup>th</sup> century reach the end of their design life.

In the 20 survey responses received, seven respondents (35%) anticipated fully funding the infrastructure costs through utility revenues, with some anticipating State participation to defer payment schedules. Eight respondents (40%) anticipated needing state assistance to cover some or all of the estimated infrastructure costs. Three respondents (15%) stated that their current systems were sufficient to meet their projected growth and water demands. Finally, two respondents redirected the surveys to retail water suppliers, who were then contacted but did not respond. The survey results are Tabulated in Appendix A, and summarized in Table 2-2, below.

**Table 2-2: Summary of Survey Responses**

Category		No. of Entities	Total Estimated Infrastructure Cost (1999 \$)	Portion of Cost the Respondents are Unable to Pay (1999 \$)
Municipalities	Surveyed**	44	\$ 402,564,000	
	Responded*	20	\$ 183,379,000	\$ 93,780,000
Major Water Providers County-Other***	Surveyed**	5	\$1,043,723,000	
	Surveyed**	5	\$1,128,908,000	

\*\* Values represent entire user category

\* Values represent only responses received

\*\*\* County-Other areas included in MWP survey, grouped by service area

Several Political Subdivisions that did not agree with the population and water demand projections applied to them in the regional plan, stating that their community would be built-out below the 2050-population projection. They anticipated their current groundwater source would be adequate to meet their needs. Several other communities did not agree with the timing of infrastructure upgrades, seeing their expansion needs coming later than what is shown in the regional plan.

During the first round of Regional Water Planning, three regional entities were formed that were not addressed in the current Regional Water Plan. These entities are the North Harris County Regional Water Authority, the West Harris County Regional Water Authority and the Mid-Brazoria Regional Water Planning Group. Each of these entities includes incorporated areas and municipal county-other areas. Because of the limitations in the cost estimating methods used for municipal county-other areas, specific project and cost data could not be assembled for the standard survey forms to be prepared. Instead,

more generalized questions were addressed to these entities to determine (1) if state participation is needed to fund their infrastructure needs, and (2) would the entity utilize the state participation program if it were made available for their projects. The entities responded that their infrastructure planning was based on fully funding their additional infrastructure with user rates and fees. Although all expressed an interest in utilizing the state participation program to oversize facilities in anticipation of future growth, none was currently planning on submitting a request.

Surveys were sent to Regional Water Providers to address major water supply projects and the needs of unincorporated municipal areas within their service areas. County governments in this region are not historically responsible for water supply, and therefore were not included in the survey. Due to an error in the survey preparation, these surveys were mailed late and will be included in a letter Addendum to this report.

## **2.2 Non-Municipal Water User Groups**

Non-municipal Water User Groups were not surveyed, since their specific water infrastructure needs were not addressed in the 2001 Regional Water Plan. Water demands were aggregated at the County and Basin level, which precluded the mapping and sizing of pipelines as was used in developing the municipal infrastructure cost projections. It is expected that within the non-municipal water use categories, any local infrastructure will be funded using a combination of the methods outlined below, which come from a review of existing funding programs and information contained in previous water plans.

**Manufacturing:** Projected water shortages for manufacturing occur due to supply contracts expiring, projected growth exceeding available local supply (groundwater) and, in some counties, regulatory limits reducing the availability of groundwater. It is anticipated that those companies with projected shortages will coordinate directly with the surface water providers identified for any infrastructure needed to bring water to their sites. The funding of this construction may occur in a number of ways. The typical method is for the water provider to construct the distribution system supplying the customers, and pass through the cost in the water rate. State assistance may be requested through the State Loan Program for some projects. A second funding option is for the manufacturer to directly construct the required infrastructure, which would be a site-specific consideration. In areas not currently served by a surface water provider, a private developer may chose to establish a distribution utility, or a public-private partnership may be formed between the water supplier and end user to develop a new system.

**Steam Electric Power:** Projected shortages in water supply for power were predominantly a due to contracts expiring, which are recommended to be renewed. It is expected that the power plant owners, as a part of any facility upgrades they may make, will include any required water supply intakes and pipelines or contract directly with existing major water providers to obtain the needed additional water.

**Mining:** Mining is projected to experience water shortages in Brazoria, Harris, Liberty and Montgomery Counties due to limits on the availability of groundwater. It is anticipated that those companies with projected shortages will coordinate directly with the surface water providers identified for any infrastructure needed to bring water to their sites. The cost of this infrastructure is expected to be paid by the private mining entities.

**Irrigation:** Anticipated infrastructure costs for irrigation are related to the irrigation conservation management strategy, which includes such measures as canal lining, upgrading to more efficient irrigation systems and laser-leveling fields. Individual irrigators would predominantly fund these measures, with assistance from the State through the Agricultural Water Conservation Loan Program. This program requires the funds to be requested through a soil and water conservation district, underground water conservation district or an authorized supplier of water for irrigation, which would then manage the projects locally. Since small irrigators may be unable to assume full financial liability for these improvements, subsidies or grants from the State and/or the water providers may be needed to ensure these improvements are made.

### **3.0 Policy Recommendations**

The Legislature has directed each regional water planning group to propose roles for the State to take in financing the recommended water supply projects. The Region H Water Planning Group has reviewed the existing funding programs and the needs of the region, and offers the following recommendations. Recommendations are grouped by category. Further discussions of each program or policy are provided at Appendix C.

#### **3.1 Recommendations Relating to Direct Financial Assistance Programs**

- The State Participation Program will be the most important financing program for water supply projects sized to meet projected long-term demands. Increase the funding of this program as needed to allow development of these water supply projects.
- The State Revolving Fund Programs will remain important to assist some systems in meeting minimum drinking water standards. As infrastructure ages and water quality standards increase, the demand for this assistance will grow. Increase the funding of this program in future decades, and expand the program to include coverage for system capacity increases to meet projected growth for communities.
- The State Loan Program for political subdivisions and water supply corporations offers loans at a cost advantage over many commercial and many public funding options. Some entities will benefit from these loans as they convert from groundwater to surface water supplies. Increase funding of this program to allow financing of near-term infrastructure cost projections.
- Irrigation conservation is an important part of the Region H Water Plan. Individual irrigators will require assistance in upgrading their irrigation systems to increase water efficiency. Provide a mechanism to leverage Federal grant programs by providing the local matching share. Increase funding of the Agricultural Water Conservation loan program, and consider adding a one-time grant or subsidy program to stimulate early adoption of conservation practices by individual irrigators.
- The Regional Water Supply and Wastewater Facilities Planning Program assists political subdivisions with planning grants, allowing small communities to pursue cost-efficient regional solutions. Increase funding of this program in anticipation of upcoming development throughout the state, and expand the program to include the costs for preliminary engineering design and development of detailed engineering cost estimates of recommended facilities.
- The USDA Rural Utilities Service offers Water and Waste Disposal Loans and Grants to rural areas and towns of up to 10,000 people. Certain communities within Texas are specifically targeted for these grants. Support continued and increased funding of this program at the Federal level, and fund the state Rural Water Assistance Fund.

### **3.2 Policy Recommendations which Indirectly Impact Financing for Water Infrastructure**

- Desalination is becoming an attractive management strategy to regions of the State, including Region H, but it is not yet cost-competitive with more traditional water supply projects. Provide research grants for the study of current and upcoming desalination technologies available to wholesale and retail water suppliers. Fund appropriate demonstration facilities to encourage development of new technologies.
- Irrigators cannot generally afford the increased cost of water when new supplies are developed. By reducing demand in a cost-efficient manner, small irrigators may be able to continue farming. Provide increased research grants to study and better develop drought-resistant crop species and efficient irrigation practices.
- The US Army Corps of Engineers (USACE) constructs civil works projects for flood control, navigation and ecosystem restoration. USACE participation in water supply projects is limited by current regulations. Support regulatory changes that will allow USACE to increase water supply storage in new reservoirs that they construct and manage, and investigate other alternatives for increased involvement of USACE in funding water supply projects.
- Under the current Texas Water Code, water rights developed as a result of an interbasin transfer become junior to other water rights granted before the interbasin transfer permit. Interbasin transfers are used throughout Region H and are an important component of the Region H Water Plan. Revise the current law on interbasin transfers to remove this barrier.
- The Region H Water Plan relies upon Advanced Water Conservation to reduce demands. However, realizing advanced conservation savings in unincorporated areas may be difficult, as these practices require management, funding and oversight. Strengthen the statewide conservation programs by developing stronger and more effective funding and enforcement mechanisms, including pricing strategies, down to the lowest water provider, public and private.
- The costs to water users can be reduced if optimally sized regional facilities can be constructed instead of multiple small systems. Several options for forming agreements between political subdivisions exist. Region H supports the forming of regional facilities and encourages the State to remove any impediments to these entities, including restrictions to the use of public/private partnerships. Additionally, the State Participation Program should be made available to these public/private partnerships and to private nonprofit water supply corporations.
- Current levels of funding within the State of Texas bay and estuary programs are insufficient to continue the needed monitoring, study and development of management strategies for the State. Increase funding of bay and estuary programs to (1) increase the body of scientific knowledge about Galveston Bay in general, and (2) establish a body of research for the other estuaries of the state.

- In recent years, lawsuits have been brought against major reservoir operators by plaintiffs in the downstream floodplains. These cases have the potential to increase reservoir insurance costs and reduce available storage capacity, impacting the cost of surface water throughout the state. Develop State legislation clarifying the liability exposure of reservoir operators for passing flood flows through water supply reservoirs.

## **Appendix A – Tabulated Survey Results**















TABLE A-2: MUNICIPALITY CONTACTS LOG

NAME	TITLE	ENTITY	TELEPHONE	FAX	MAIL DATE	FAX DATE	PHONE DATE	SURVEY REC'D	CONTACT PERSON
Hon. Troy Lewis	Mayor	City of Alvin	281-388-4200	281-331-7215	07-Mar-02	22-Apr-02	22 Apr 02; 15 May 02		Fred Mendoza
Hon. Bruce Corner	Mayor	City of Anahuac	409-267-6681	409-267-6839	07-Mar-02	22-Apr-02	15-May-02		
Hon. Gerald L. Roberts	Mayor	City of Angleton	979-849-4364	979-849-5561	07-Mar-02	22-Apr-02	15-May-02		
Hon. Joe Mims	Mayor	Village of Bayou Vista	409-935-8348	409-935-1205	07-Mar-02	22-Apr-02	22, 25, 29 Apr 02; 7, 15 May 02		Lydia Cook
Hon. Edna Akins	Mayor	City of Baytown	281-422-8241	281-420-8588	07-Mar-02	22-Apr-02	21 Apr 02; 2 May 02	07-May-02	Donna Sama (Eharcia), Fred Pack (DPW)
Hon. Mary Ann Goodie	Mayor	City of Bellair	713-862-8222	713-868-4211	07-Mar-02		15, 22, 25 Mar 02; 5, 11 18 Apr 02	22-Apr-02	Richard J. Jarama, Dir. Public Works (713-862-1150), Robert Schuler, Chairman, Miller Inc.
Hon. Keith Woods	Mayor	City of Brookshire	281-375-5050	281-375-5045	07-Mar-02	22-Apr-02	15-May-02		
Hon. Bill Marshall	Mayor	City of Dunke's Hill Village	713-467-8702	713-827-8752	07-Mar-02			13-Mar-02	
Hon. Jerry Adkins	Mayor	City of Clute	979-265-2541	979-265-4551	07-Mar-02	22-Apr-02	15-May-02		
Hon. Carol Moore	Mayor	City of Conroe	936-838-1181	936-825-4772	07-Mar-02			26-Mar-02	
Hon. Wayne Riddle	Mayor	City of Deer Park	281-478-7247	281-478-7217	07-Mar-02	22-Apr-02	15-May-02		
Hon. Ken Hufstetter	Mayor	City of Dickinson	281-337-2489	281-337-6190	07-Mar-02		15-May-02		Survey returned blank. Referred to Galveston Co. WCID #1
Hon. Brad Emel	Mayor	City of El Lago	281-326-1951	281-326-1878	07-Mar-02	22-Apr-02	15-May-02		Per Jill in Mayor's Office call MUD at 281-326-5573 for 15 May follow-up
Hon. James A. Barrow	Mayor	City of Freeport	979-233-3526	979-233-8967	07-Mar-02		11-12-Mar-02	16-Apr-02	Ron Bottoms
Hon. Harold B. Whitaker	Mayor	City of Friendswood	281-986-3270	281-482-1834	07-Mar-02		05-Apr-02	18-Apr-02	Roger Roegner
Hon. Michael Dinges	Mayor	City of Fulshear	281-346-1796	281-346-2556	07-Mar-02	22-Apr-02	15-May-02		
Hon. Roger Quiroz	Mayor	City of Galveston	409-766-2104	409-787-3511	07-Mar-02			18-Apr-02	E-mailed information, Brandon E. Wade, Dir. Public Works & Municipal Utilities
Hon. Hayden Berry	Mayor	City of Hempstead	979-826-2486	979-826-6703	07-Mar-02	22-Apr-02	15-May-02		
Hon. Kyle Campbell	Mayor	City of Hitchcock	409-986-5591	409-986-6903	07-Mar-02	22-Apr-02	15-May-02		
Hon. Wilson Archer	Mayor	City of Humble	281-446-3061	281-446-7843	07-Mar-02	22-Apr-02	15-May-02		
Hon. Bill Green	Mayor	City of Huntsville	936-295-6471	936-291-5409	07-Mar-02	22-Apr-02	12, 13 Mar 02; 15 May 02		Bill Doggett, Water Utility
Hon. Mike Jackson	Mayor	City of Jacinto City	713-674-8424	713-675-8525	07-Mar-02	22-Apr-02	15-May-02		
Hon. Ed Heathcott	Mayor	City of Jersey Village	713-466-2100	713-466-2134	07-Mar-02		27, 28 Mar 02	04-Apr-02	Rod Hainey, DPW
Hon. Doyle Callender	Mayor	City of Katy	281-391-4800	281-391-4813	07-Mar-02	22-Apr-02	23, 24 APR 02; 15 May 02		Johnny Nelson, City Admin.
Hon. Dennis Rygaard	Mayor	City of La Marque	409-938-9200	409-939-9216	07-Mar-02	22-Apr-02	15-May-02		
Hon. Norman Malone	Mayor	City of La Porte	281-471-5020	281-471-7168	07-Mar-02	22-Apr-02	15-May-02		
Hon. Steve Pirie	Mayor	City of Lake Jackson	979-415-2400		07-Mar-02		15-Mar-02	19-Apr-02	Craig Nesbit
Hon. Bill Flegler	Mayor	City of Livingston	936-327-9311		07-Mar-02			26-Mar-02	
Hon. Jim McDonald	Mayor	City of Meadows Place	281-983-2950	281-983-2940	07-Mar-02	22-Apr-02	15-May-02		
Hon. Allen Owen	Mayor	City of Missouri City	281-261-4260	281-403-0683	07-Mar-02	22-Apr-02	1, 2, 3, 4 Apr 02; 15 May 02		Lee Dorger, DPW
Hon. Joe Michels	Mayor	City of Oak Ridge North	281-282-1648	281-367-7729	07-Mar-02		03-Apr-02	10-Apr-02	Paul Mendes
Hon. Howard L. Kaye	Mayor	City of Pahrump Village	936-856-2521	936-856-2547	07-Mar-02		11-Mar-02; 1 Apr 02	09-Apr-02	Dale Evans, Lisa Evans
Hon. John Manlove	Mayor	City of Pasadena	713-477-1511	713-472-0144	07-Mar-02	22-Apr-02	15-May-02		
Hon. Jon Reid	Mayor	City of Pearland	281-882-1608	281-882-1705	07-Mar-02		11-Apr-02	16-Apr-02	Allen Mueller
Hon. Raymond Carreathers	Mayor	City of Prairie View	936-857-3711	936-857-5836	07-Mar-02	22-Apr-02	15-May-02		
Hon. J. Mark G. Wood	Mayor	City of Richmond	281-332-2310	281-232-8826	07-Mar-02			28-Mar-02	

TABLE A-2: MUNICIPALITY CONTACTS LOG

Hon. Peggy Gartman	Mayor	City of Richwood	876-265-2082	876-265-7345	07-Mar-02		12-13-Mar-02	18-Mar-02	Karen Schrom
Hon. Joe Gurecky	Mayor	City of Rosenberg	832-595-3300	832-595-3335	07-Mar-02			25-Mar-02	
Hon. Robert Cheek	Mayor	City of Santa Fe	409-925-6412	409-316-1941	07-Mar-02	22-Apr-02	15-May-02		
Hon. David Vetter, Jr.	Mayor	City of Shenandoah	281-298-5522	281-367-2225	07-Mar-02	22-Apr-02	15-May-02		
Hon. Louise Richman	Mayor	City of Spring Valley	713-465-8308	713-461-7969	07-Mar-02	22-Apr-02	15-May-02		
Hon. Dean Allen Hancock	Mayor	City of Sugar Land	281-275-2700	281-275-2712	07-Mar-02		21-Apr-02	16-Apr-02	Sue Ellen Staags
Hon. Rick Hampton	Mayor	City of Tomball	281-351-5484	281-351-6258	07-Mar-02			08-Apr-02	
Hon. Ruth Castleschouldt	Mayor	City of Willis	936-856-4611	936-890-1246	07-Mar-02	22-Apr-02	24, 26 Apr 02; 15 May 02		Brenda in Mayor's office

	Survey returned.
	Follow-up needed; previous phone contact.
	Follow-up needed,

27-May-02

## **Appendix B – Survey Questionnaires**

## WATER INFRASTRUCTURE FINANCING SURVEY

Region Name: Region H Water Planning Group

Name of Political Subdivision: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Title: \_\_\_\_\_

Telephone: \_\_\_\_\_ E-mail: \_\_\_\_\_

**Background:** On January 5, 2001, Regional Water Planning Groups (RWPGs) all across the State of Texas formally submitted 16 adopted regional water plans to the Texas Water Development Board (TWDB) per requirements of Senate Bill 1 (75<sup>th</sup> Texas Legislature). The adopted regional water plans examined and analyzed the water supply needs for all water users in the State. Based on the analysis, the RWPGs identified water management strategies necessary to ensure a sufficient supply of water for the 50-year planning period. The RWPGs also developed preliminary capital cost estimates for each of the strategies recommended in the approved regional water plan.

Senate Bill 2 (77<sup>th</sup> Texas Legislature) expanded the RWPG's assignment. Senate Bill 2 charges the RWPGs with examining what financial assistance, if any, is needed to implement the water management strategies and projects recommended in the most recently approved regional water plan.

Senate Bill 2 specifically requires that the RWPG report to the TWDB how political subdivisions all across Texas propose to pay for future water infrastructure needs.

The purpose of this survey is to complete this charge with your input.

**Please return the completed survey by April 8, 2002 to:**

Region H Water Planning Group  
c/o Glenda Callaway, Principal  
Ekistics Corporation  
2727 Kirby Drive, Suite 523  
Houston, Texas 77098  
713-520-8150 facsimile  
E-mail address: glencall@aol.com

**If you have any questions regarding this survey, please contact:  
Glenda Callaway at 713-520-9031.**

## WATER INFRASTRUCTURE FINANCING SURVEY

**Instructions:** For each of the recommended strategies in the Region H Regional Water Plan to meet your water needs, please answer the following questions. A separate sheet has been provided for each water management strategy.

**Name of Political Subdivision:** \_\_\_\_\_

**Water Management Strategy Name:** \_\_\_\_\_

**Capital Cost: \$** \_\_\_\_\_

1. Using current utility revenue sources, including implementing necessary rate and tax increases, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above?

The political subdivision can afford to pay \$ \_\_\_\_\_.

2. If you could access the State Participation Program, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above using current utility revenue sources, including implementing necessary rate and tax increases?

The political subdivision can afford to pay \$ \_\_\_\_\_.

3. How much of the capital cost is the political subdivision unable to pay for the water management strategy identified above?

The political subdivision cannot afford to pay \$ \_\_\_\_\_.

4. For the costs the political subdivision cannot pay, what option(s) is proposed? What, if any, state funding sources would the political subdivision consider? (Please use additional sheets, if necessary.)

---

---

---

---

---

---

---

---

---

---

**Summary of Recommended Water Management Strategies for:  
XYZ Water District**

<b>Political Subdivision</b>	<b>Strategy</b>	<b>Strategy Implementation Date</b>	<b>Total Capital Cost</b>
XYZ Water District	Supply side conservation	2010	\$900,000,000
XYZ Water District	Reclaimed wastewater	2010	\$72,868,103
XYZ Water District	Conversion of rights to use water	2010	\$273,445,428
XYZ Water District	Desalination	2020	\$27,681,705
XYZ Water District	New well field	2020	\$356,138,169
XYZ Water District	Groundwater transfer via long-distance pipeline	2030	\$356,138,169

## WATER INFRASTRUCTURE FINANCING SURVEY

**Instructions:** For each of the recommended strategies in the Region H Regional Water Plan to meet your water needs, please answer the following questions. A separate sheet has been provided for each water management strategy.

**Name of Political Subdivision:** BAYTOWN

**Water Management Strategy Name:** RENEW CURRENT CONTRACT

**Capital Cost:** \$ \$4,083,000.00

1. Using current utility revenue sources, including implementing necessary rate and tax increases, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above?

The political subdivision can afford to pay \$ -0-.

2. If you could access the State Participation Program, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above using current utility revenue sources, including implementing necessary rate and tax increases?

The political subdivision can afford to pay \$ -0-.

3. How much of the capital cost is the political subdivision unable to pay for the water management strategy identified above?

The political subdivision cannot afford to pay \$ 4,083,000.

4. For the costs the political subdivision cannot pay, what option(s) is proposed? What, if any, state funding sources would the political subdivision consider? (Please use additional sheets, if necessary.)

TWDB Funding 100%

---

---

---

---

---

---

---

---

**Summary of Recommended Water Management Strategies for:**

**BAYTOWN**

<b>Political Subdivision</b>	<b>Strategy</b>	<b>Strategy Implementation Date</b>	<b>Total Capital Cost</b>
<b>BAYTOWN</b>	<b>RENEW CURRENT CONTRACT</b>	<b>2030</b>	<b>\$4,083,000.00</b>

## WATER INFRASTRUCTURE FINANCING SURVEY

Region Name: Region H Water Planning Group

Name of Political Subdivision: City of Baytown

Contact Person: FRED PACK Dir of PW  
Hon. Pete G. Alfaro Title: Mayor

Telephone: 281-422-8281 420-5312 E-mail: \_\_\_\_\_

**Background:** On January 5, 2001, Regional Water Planning Groups (RWPGs) all across the State of Texas formally submitted 16 adopted regional water plans to the Texas Water Development Board (TWDB) per requirements of Senate Bill 1 (75<sup>th</sup> Texas Legislature). The adopted regional water plans examined and analyzed the water supply needs for all water users in the State. Based on the analysis, the RWPGs identified water management strategies necessary to ensure a sufficient supply of water for the 50-year planning period. The RWPGs also developed preliminary capital cost estimates for each of the strategies recommended in the approved regional water plan.

Senate Bill 2 (77<sup>th</sup> Texas Legislature) expanded the RWPG's assignment. Senate Bill 2 charges the RWPGs with examining what financial assistance, if any, is needed to implement the water management strategies and projects recommended in the most recently approved regional water plan.

Senate Bill 2 specifically requires that the RWPG report to the TWDB how political subdivisions all across Texas propose to pay for future water infrastructure needs.

The purpose of this survey is to complete this charge with your input.

**Please return the completed survey by April 8, 2002 to:**

Region H Water Planning Group  
c/o Glenda Callaway, Principal  
Ekistics Corporation  
2727 Kirby Drive, Suite 523  
Houston, Texas 77098  
713-520-8150 facsimile  
E-mail address: glencall@aol.com

**If you have any questions regarding this survey, please contact:  
Glenda Callaway at 713-520-9031.**

**WATER INFRASTRUCTURE FINANCING SURVEY**

**Instructions:** For each of the recommended strategies in the Region H Regional Water Plan to meet your water needs, please answer the following questions. A separate sheet has been provided for each water management strategy.

**Name of Political Subdivision:** BELLAIRE

**Water Management Strategy Name:** NEW CONTRACT WITH HOUSTON

**Capital Cost: \$** \$2,139,000.00

1. Using current utility revenue sources, including implementing necessary rate and tax increases, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above?

The political subdivision can afford to pay \$ 2,139,000.00.

2. If you could access the State Participation Program, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above using current utility revenue sources, including implementing necessary rate and tax increases?

The political subdivision can afford to pay \$ 2,139,000.00.

3. How much of the capital cost is the political subdivision unable to pay for the water management strategy identified above?

The political subdivision cannot afford to pay \$ 0.00.

4. For the costs the political subdivision cannot pay, what option(s) is proposed? What, if any, state funding sources would the political subdivision consider? (Please use additional sheets, if necessary.)

The City of Bellaire intends to fund the capital cost of the  
project with general funds. Operational costs and costs of  
purchased water will be paid by water revenues.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**WATER INFRASTRUCTURE FINANCING SURVEY**

**Instructions:** For each of the recommended strategies in the Region H Regional Water Plan to meet your water needs, please answer the following questions. A separate sheet has been provided for each water management strategy.

**Name of Political Subdivision:** BELLAIRE

**Water Management Strategy Name:** WASTEWATER REUSE

**Capital Cost:** \$ \$5,048,000.00

1. Using current utility revenue sources, including implementing necessary rate and tax increases, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above?

The political subdivision can afford to pay \$ N/A.

2. If you could access the State Participation Program, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above using current utility revenue sources, including implementing necessary rate and tax increases?

The political subdivision can afford to pay \$ N/A.

3. How much of the capital cost is the political subdivision unable to pay for the water management strategy identified above?

The political subdivision cannot afford to pay \$ N/A.

4. For the costs the political subdivision cannot pay, what option(s) is proposed? What, if any, state funding sources would the political subdivision consider? (Please use additional sheets, if necessary.)

The City of Bellaire has no plans for a Wastewater  
Reuse Project for the next Fiscal Year.



# PUBLIC WORKS DEPARTMENT

Richard L. Larsen, Director

SERVICE CENTER, 4337 Edith  
Phone: (713) 662-8150 Fax: (713) 662-8179

Mailing Address: 7008 S. Rice Avenue Bellaire, Texas 77401

## FAX COVER SHEET

COMPANY Region "H" Water Planning Group

ATTENTION Glenda Callaway

FAX NUMBER 713/520-8150

DATE 4-22-02 TIME SENT \_\_\_\_\_

# OF PAGES (S) INCLUDING COVER SHEET 3

FROM Richard Larsen PHONE 713/662-8150

COMMENTS

---

---

---

---

# WATER INFRASTRUCTURE FINANCING SURVEY

**Instructions:** For each of the recommended strategies in the Region H Regional Water Plan to meet your water needs, please answer the following questions. A separate sheet has been provided for each water management strategy.

**Name of Political Subdivision:** BUNKER HILL VILLAGE

**Water Management Strategy Name:** NEW CONTRACT WITH HOUSTON

**Capital Cost:** \$ \$1,194,000.00

1. Using current utility revenue sources, including implementing necessary rate and tax increases, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above?

The political subdivision can afford to pay \$ 1,194,000.

2. If you could access the State Participation Program, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above using current utility revenue sources, including implementing necessary rate and tax increases?

The political subdivision can afford to pay \$ \_\_\_\_\_.

3. How much of the capital cost is the political subdivision unable to pay for the water management strategy identified above?

The political subdivision cannot afford to pay \$ \_\_\_\_\_.

4. For the costs the political subdivision cannot pay, what option(s) is proposed? What, if any, state funding sources would the political subdivision consider? (Please use additional sheets, if necessary.)

---

---

---

---

---

---

---

---

---

---

**Summary of Recommended Water Management Strategies for:**

**BUNKER HILL VILLAGE**

<b>Political Subdivision</b>	<b>Strategy</b>	<b>Strategy Implementation Date</b>	<b>Total Capital Cost</b>
<b>BUNKER HILL VILLAGE</b>	<b>NEW CONTRACT WITH HOUSTON</b>	<b>2010</b> (?)	<b>\$1,194,000.00</b>

## WATER INFRASTRUCTURE FINANCING SURVEY

**Instructions:** For each of the recommended strategies in the Region H Regional Water Plan to meet your water needs, please answer the following questions. A separate sheet has been provided for each water management strategy.

**Name of Political Subdivision:** CONROE

**Water Management Strategy Name:** NEW CONTRACTS WITH SJRA

**Capital Cost: \$** \$48,101,000.00

1. Using current utility revenue sources, including implementing necessary rate and tax increases, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above?

The political subdivision can afford to pay \$ 24,101,000.

2. If you could access the State Participation Program, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above using current utility revenue sources, including implementing necessary rate and tax increases?

The political subdivision can afford to pay \$ 24,101,000

3. How much of the capital cost is the political subdivision unable to pay for the water management strategy identified above?

The political subdivision cannot afford to pay \$ 24,000,000.

4. For the costs the political subdivision cannot pay, what option(s) is proposed? What, if any, state funding sources would the political subdivision consider? (Please use additional sheets, if necessary.)

---

---

---

---

---

---

---

---

**Summary of Recommended Water Management Strategies for:**

**CONROE**

<b>Political Subdivision</b>	<b>Strategy</b>	<b>Strategy Implementation Date</b>	<b>Total Capital Cost</b>
<b>CONROE</b>	<b>NEW CONTRACTS WITH SJRA</b>	<b>2010</b>	<b>\$48,101,000.00</b>

## WATER INFRASTRUCTURE FINANCING SURVEY

Region Name: Region H Water Planning Group

Name of Political Subdivision: City of Conroe

Contact Person: Hon. Carter Moore Title: Mayor

Telephone: 936-539-4431 E-mail: \_\_\_\_\_

**Background:** On January 5, 2001, Regional Water Planning Groups (RWPGs) all across the State of Texas formally submitted 16 adopted regional water plans to the Texas Water Development Board (TWDB) per requirements of Senate Bill 1 (75<sup>th</sup> Texas Legislature). The adopted regional water plans examined and analyzed the water supply needs for all water users in the State. Based on the analysis, the RWPGs identified water management strategies necessary to ensure a sufficient supply of water for the 50-year planning period. The RWPGs also developed preliminary capital cost estimates for each of the strategies recommended in the approved regional water plan.

Senate Bill 2 (77<sup>th</sup> Texas Legislature) expanded the RWPG's assignment. Senate Bill 2 charges the RWPGs with examining what financial assistance, if any, is needed to implement the water management strategies and projects recommended in the most recently approved regional water plan.

Senate Bill 2 specifically requires that the RWPG report to the TWDB how political subdivisions all across Texas propose to pay for future water infrastructure needs.

The purpose of this survey is to complete this charge with your input.

**Please return the completed survey by April 8, 2002 to:**

Region H Water Planning Group  
c/o Glenda Callaway, Principal  
Ekistics Corporation  
2727 Kirby Drive, Suite 523  
Houston, Texas 77098  
713-520-8150 facsimile  
E-mail address: glencall@aol.com

**If you have any questions regarding this survey, please contact:  
Glenda Callaway at 713-520-9031.**

**WATER INFRASTRUCTURE FINANCING SURVEY**

Region Name: Region H Water Planning Group

Name of Political Subdivision: City of Dickinson

Contact Person: Hon. Ken Hufstetler Title: Mayor

Telephone: 281-337-2489 E-mail: \_\_\_\_\_

**Background:** On January 5, 2001, Regional Water Planning Groups (RWPGs) all across the State of Texas formally submitted 16 adopted regional water plans to the Texas Water Development Board (TWDB) per requirements of Senate Bill 1 (75<sup>th</sup> Texas Legislature). The adopted regional water plans examined and analyzed the water supply needs for all water users in the State. Based on the analysis, the RWPGs identified water management strategies necessary to ensure a sufficient supply of water for the 50-year planning period. The RWPGs also developed preliminary capital cost estimates for each of the strategies recommended in the approved regional water plan.

Senate Bill 2 (77<sup>th</sup> Texas Legislature) expanded the RWPG's assignment. Senate Bill 2 charges the RWPGs with examining what financial assistance, if any, is needed to implement the water management strategies and projects recommended in the most recently approved regional water plan.

Senate Bill 2 specifically requires that the RWPG report to the TWDB how political subdivisions all across Texas propose to pay for future water infrastructure needs.

The purpose of this survey is to complete this charge with your input.

Please return the completed survey by April 8, 2002 to:

Region H Water Planning Group  
c/o Glenda Callaway, Principal  
Ekistics Corporation  
2727 Kirby Drive, Suite 523  
Houston, Texas 77098  
713-520-8150 facsimile  
E-mail address: glencall@aol.com

Be advised the  
City of Dickinson  
does not ~~provide~~  
~~provide~~  
provide potable  
water for  
community;  
contact  
Gal. City WCED #1

If you have any questions regarding this survey, please contact:  
Glenda Callaway at 713-520-9031.

## WATER INFRASTRUCTURE FINANCING SURVEY

**Instructions:** For each of the recommended strategies in the Region H Regional Water Plan to meet your water needs, please answer the following questions. A separate sheet has been provided for each water management strategy.

**Name of Political Subdivision:** DICKINSON

**Water Management Strategy Name:** INCREMENTALLY INCREASE  
EXISTING CONTRACT UP TO 3315 ACFT/YR LARGER 2050

**Capital Cost:** \$ \$1,962,000.00

1. Using current utility revenue sources, including implementing necessary rate and tax increases, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above?

The political subdivision can afford to pay \$ \_\_\_\_\_.

2. If you could access the State Participation Program, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above using current utility revenue sources, including implementing necessary rate and tax increases?

The political subdivision can afford to pay \$ \_\_\_\_\_.

3. How much of the capital cost is the political subdivision unable to pay for the water management strategy identified above?

The political subdivision cannot afford to pay \$ \_\_\_\_\_.

4. For the costs the political subdivision cannot pay, what option(s) is proposed? What, if any, state funding sources would the political subdivision consider? (Please use additional sheets, if necessary.)

---

---

---

---

---

---

---

---

---

---

**Summary of Recommended Water Management Strategies for:**

**DICKINSON**

<b>Political Subdivision</b>	<b>Strategy</b>	<b>Strategy Implementation Date</b>	<b>Total Capital Cost</b>
<b>DICKINSON</b>	<b>INCREMENTALLY INCREASE EXISTING CONTRACT UP TO 3315 ACFT/YR LARGER 2050</b>	<b>2000</b>	<b>\$1,962,000.00</b>

## WATER INFRASTRUCTURE FINANCING SURVEY

**Instructions:** For each of the recommended strategies in the Region H Regional Water Plan to meet your water needs, please answer the following questions. A separate sheet has been provided for each water management strategy.

**Name of Political Subdivision:** FREEPORT

**Water Management Strategy Name:** INCREASE EXISTING CONTRACT

**Capital Cost:** \$ \$8,694,000.00

1. Using current utility revenue sources, including implementing necessary rate and tax increases, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above?

The political subdivision can afford to pay \$ 8,694,000.

2. If you could access the State Participation Program, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above using current utility revenue sources, including implementing necessary rate and tax increases?

The political subdivision can afford to pay \$ \_\_\_\_\_.

3. How much of the capital cost is the political subdivision unable to pay for the water management strategy identified above?

The political subdivision cannot afford to pay \$ \_\_\_\_\_.

4. For the costs the political subdivision cannot pay, what option(s) is proposed? What, if any, state funding sources would the political subdivision consider? (Please use additional sheets, if necessary.)

The City will continue to operate under a cost of service methodology which also accounts for any capital outlay that is required. Additional revenue sources would assist in keeping the city's revenues in cash ~~for~~ in check.

**Summary of Recommended Water Management Strategies for:**

**FREEPORT**

<b>Political Subdivision</b>	<b>Strategy</b>	<b>Strategy Implementation Date</b>	<b>Total Capital Cost</b>
<b>FREEPORT</b>	<b>INCREASE EXISTING CONTRACT</b>	<b>2010</b>	<b>\$8,694,000.00</b>

## WATER INFRASTRUCTURE FINANCING SURVEY

Region Name: Region H Water Planning Group

Name of Political Subdivision: City of Freeport

Contact Person: Hon. James A. Barnett, Jr. Title: Mayor

Telephone: 979-233-3526 E-mail: \_\_\_\_\_

**Background:** On January 5, 2001, Regional Water Planning Groups (RWPGs) all across the State of Texas formally submitted 16 adopted regional water plans to the Texas Water Development Board (TWDB) per requirements of Senate Bill 1 (75<sup>th</sup> Texas Legislature). The adopted regional water plans examined and analyzed the water supply needs for all water users in the State. Based on the analysis, the RWPGs identified water management strategies necessary to ensure a sufficient supply of water for the 50-year planning period. The RWPGs also developed preliminary capital cost estimates for each of the strategies recommended in the approved regional water plan.

Senate Bill 2 (77<sup>th</sup> Texas Legislature) expanded the RWPG's assignment. Senate Bill 2 charges the RWPGs with examining what financial assistance, if any, is needed to implement the water management strategies and projects recommended in the most recently approved regional water plan.

Senate Bill 2 specifically requires that the RWPG report to the TWDB how political subdivisions all across Texas propose to pay for future water infrastructure needs.

The purpose of this survey is to complete this charge with your input.

**Please return the completed survey by April 8, 2002 to:**

Region H Water Planning Group  
c/o Glenda Callaway, Principal  
Ekistics Corporation  
2727 Kirby Drive, Suite 523  
Houston, Texas 77098  
713-520-8150 facsimile  
E-mail address: glencall@aol.com

**If you have any questions regarding this survey, please contact:  
Glenda Callaway at 713-520-9031.**

## WATER INFRASTRUCTURE FINANCING SURVEY

**Instructions:** For each of the recommended strategies in the Region H Regional Water Plan to meet your water needs, please answer the following questions. A separate sheet has been provided for each water management strategy.

**Name of Political Subdivision:** FRIENDSWOOD

**Water Management Strategy Name:** CONTRACT INCREASE 7185  
ACFTYR(2030)EXTEND THRU 2050(GALVESTON & HARRIS)

**Capital Cost:** \$ \$4,584,000.00

1. Using current utility revenue sources, including implementing necessary rate and tax increases, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above?

The political subdivision can afford to pay \$ See attached

2. If you could access the State Participation Program, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above using current utility revenue sources, including implementing necessary rate and tax increases?

The political subdivision can afford to pay \$ See attached

3. How much of the capital cost is the political subdivision unable to pay for the water management strategy identified above?

The political subdivision cannot afford to pay \$ See attached

4. For the costs the political subdivision cannot pay, what option(s) is proposed? What, if any, state funding sources would the political subdivision consider? (Please use additional sheets, if necessary.)

---

---

---

---

---

---

---

---

---

---

**Summary of Recommended Water Management Strategies for:**

**FRIENDSWOOD**

<b>Political Subdivision</b>	<b>Strategy</b>	<b>Strategy Implementation Date</b>	<b>Total Capital Cost</b>
<b>FRIENDSWOOD</b>	<b>CONTRACT INCREASE 7185 ACFTYR(2030)EXTEND THRU 2050(GALVESTON &amp; HARRIS)</b>	<b>2020</b>	<b>\$4,584,000.00</b>

ATTACHMENT TO  
REGION H WATER PLANNING GROUP  
WATER INFRASTRUCTURE FINANCING SURVEY

During calendar year 2000 the City of Friendswood contracted with Kltz Associates, Inc. to assist in preparing a Groundwater Reduction Plan (GRP). The City Council approved this document by resolution in January 2001. This plan was developed in response to changes in the Harris-Galveston Coastal Subsidence District regulations, which as of January 1, 2001, required the City of Friendswood to have sufficient surface water available to supply 80 percent of the amount needed each year. The GRP showed the Subsidence District how and when we would meet the new requirements.

At the time the GRP was developed, the City owned 3 million gallons per day (MGD) capacity in Houston's Southeast Water Purification Plant. This is our sole source of surface water. This plant is being expanded and after completion we will be able to obtain an additional 1.5 MGD of surface water, bringing our capacity to 4.5 MGD. The City Council also approved the purchase of an additional 1.5 MGD capacity in the Southeast Water Purification Plant from other participants, which will give us 6.0 MGD surface water capacity. The City's water wells have a capacity of 8.0 MGD and according to the GRP engineering report, have "a safe long-term yield of 5.0 MGD." This capacity is projected to meet the City's average demands through 2010.

The City issued revenue bonds in each of the past three years to pay for water system improvements and purchase additional capacity in the Southwest Water Purification Plant.

- 1999 - \$4,945,000
- 2000 - \$3,515,000
- 2001 - \$6,100,000

In January of this year the water rate charged to the City's utility customers was adjusted. The rate structure changed from a descending rate to a flat rate. The new rate structure was designed to increase water revenue by 15% to provide adequate resources to operate the water utility system and pay the additional debt service resulting from the bond issues. The second reason for the rate adjustment was to move from a structure that charged customers less as they used more water, to a flat rate that will serve as a conservation measure.

The City is projected to build-out between 2015 and 2020 with a population of approximately 57,400. To meet the additional water supply needs of a population of this size, the City plans to participate in the next expansion of the Southwest Water Purification Plant. This expansion is scheduled to occur in the next 2-3 years and will result in the City receiving additional capacity of 6 MGD, at a cost of approximately \$8.9 million. Additional debt will be required to purchase this capacity when it becomes available.

Subj: **Region H Water Planning Group Financing Survey--City of Galveston**  
Date: 4/16/2002 1:43:23 PM Central Daylight Time  
From: [WadeBrad@cityofgalveston.org](mailto:WadeBrad@cityofgalveston.org)  
To: [glencall@aol.com](mailto:glencall@aol.com)  
CC: [LeblancSte@cityofgalveston.org](mailto:LeblancSte@cityofgalveston.org), [RogerQuiroga@cityofgalveston.org](mailto:RogerQuiroga@cityofgalveston.org),  
[GilbreathLis@cityofgalveston.org](mailto:GilbreathLis@cityofgalveston.org), [rdistre@hotmail.com](mailto:rdistre@hotmail.com)

*Sent from the Internet (Details)*

Ms. Callaway:

In response to the survey that you sent to Mayor Quiroga of Galveston, the City of Galveston is NOT prepared to pay \$34.7 M for construction of the Little River Reservoir with the GCWA under its current rate structure or taxing structures.

At this time, we have not identified a funding mechanism from which to pay any of the proposed costs. We would welcome any State dollars that may be available.

The City of Galveston will be working over the next several years to reclaim a large unaccounted for water issue 30%-40% that is primarily due to leakage. This may suffice for Galveston's needs during the planning period, but at this time, it is too early to tell if the strategy will be effective. Meanwhile, the City of Galveston wishes to remain a part of the Little River Project.

Brandon E. Wade, P.E.  
Assistant City Manager /  
Director of Public Works and Municipal Utilities  
City of Galveston

(409) 797-3520

**Subj:** Re: Region H Water Planning Group Financing Survey--City of Galveston  
**Date:** 4/17/2002 8:57:01 AM Central Daylight Time  
**From:** Glencall  
**To:** WadeBrad@cityofgalveston.org

Thank you for your response to the Region H Infrastructure Financing Survey. GC

Glenda L. Callaway  
Ekistics Corporation  
2727 Kirby Drive, Suite 523  
Houston, TX 77098-1201  
713-520-9031; fax 713-520-8150

## WATER INFRASTRUCTURE FINANCING SURVEY

**Instructions:** For each of the recommended strategies in the Region H Regional Water Plan to meet your water needs, please answer the following questions. A separate sheet has been provided for each water management strategy.

**Name of Political Subdivision:** JERSEY VILLAGE

**Water Management Strategy Name:** NEW CONTRACT WITH HOUSTON

**Capital Cost:** \$ \$1,445,000.00

1. Using current utility revenue sources, including implementing necessary rate and tax increases, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above?

The political subdivision can afford to pay \$ PROJECT COMPLETED

2. If you could access the State Participation Program, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above using current utility revenue sources, including implementing necessary rate and tax increases?

The political subdivision can afford to pay \$ N/A.

3. How much of the capital cost is the political subdivision unable to pay for the water management strategy identified above?

The political subdivision cannot afford to pay \$ N/A.

4. For the costs the political subdivision cannot pay, what option(s) is proposed? What, if any, state funding sources would the political subdivision consider? (Please use additional sheets, if necessary.)

---

---

---

---

---

---

---

---

---

---

**Summary of Recommended Water Management Strategies for:**

**JERSEY VILLAGE**

<b>Political Subdivision</b>	<b>Strategy</b>	<b>Strategy Implementation Date</b>	<b>Total Capital Cost</b>
<b>JERSEY VILLAGE</b>	<b>NEW CONTRACT WITH HOUSTON</b>	<b>2010</b>	<b>\$1,445,000.00</b>

## WATER INFRASTRUCTURE FINANCING SURVEY

Region Name: Region H Water Planning Group

Name of Political Subdivision: City of Jersey Village

Contact Person: Hon. Ed Heathcott Title: Mayor

Telephone: 713-466-2100 E-mail: \_\_\_\_\_

**Background:** On January 5, 2001, Regional Water Planning Groups (RWPGs) all across the State of Texas formally submitted 16 adopted regional water plans to the Texas Water Development Board (TWDB) per requirements of Senate Bill 1 (75<sup>th</sup> Texas Legislature). The adopted regional water plans examined and analyzed the water supply needs for all water users in the State. Based on the analysis, the RWPGs identified water management strategies necessary to ensure a sufficient supply of water for the 50-year planning period. The RWPGs also developed preliminary capital cost estimates for each of the strategies recommended in the approved regional water plan.

Senate Bill 2 (77<sup>th</sup> Texas Legislature) expanded the RWPG's assignment. Senate Bill 2 charges the RWPGs with examining what financial assistance, if any, is needed to implement the water management strategies and projects recommended in the most recently approved regional water plan.

Senate Bill 2 specifically requires that the RWPG report to the TWDB how political subdivisions all across Texas propose to pay for future water infrastructure needs.

The purpose of this survey is to complete this charge with your input.

**Please return the completed survey by April 8, 2002 to:**

Region H Water Planning Group  
c/o Glenda Callaway, Principal  
Ekistics Corporation  
2727 Kirby Drive, Suite 523  
Houston, Texas 77098  
713-520-8150 facsimile  
E-mail address: glencall@aol.com

**If you have any questions regarding this survey, please contact:  
Glenda Callaway at 713-520-9031.**

## WATER INFRASTRUCTURE FINANCING SURVEY

**Instructions:** For each of the recommended strategies in the Region H Regional Water Plan to meet your water needs, please answer the following questions. A separate sheet has been provided for each water management strategy.

**Name of Political Subdivision:** LAKE JACKSON

**Water Management Strategy Name:** INCREASE EXISTING CONTRACT

**Capital Cost:** \$ \$872,000.00

1. Using current utility revenue sources, including implementing necessary rate and tax increases, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above?

The political subdivision can afford to pay \$ See Attached.

2. If you could access the State Participation Program, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above using current utility revenue sources, including implementing necessary rate and tax increases?

The political subdivision can afford to pay \$ See Attached.

3. How much of the capital cost is the political subdivision unable to pay for the water management strategy identified above?

The political subdivision cannot afford to pay \$ See Attached.

4. For the costs the political subdivision cannot pay, what option(s) is proposed? What, if any, state funding sources would the political subdivision consider? (Please use additional sheets, if necessary.)

See Attached

---

---

---

---

---

---

---

---

---

---

**Summary of Recommended Water Management Strategies for:**

**LAKE JACKSON**

<b>Political Subdivision</b>	<b>Strategy</b>	<b>Strategy Implementation Date</b>	<b>Total Capital Cost</b>
<b>LAKE JACKSON</b>	<b>INCREASE EXISTING CONTRACT</b>	<b>2010</b>	<b>\$872,000.00</b>

The adopted Region H plan showed that the City of Lake Jackson can meet projected water shortages by increasing our supply contract from Brazosport Water Authority (BWA). According to the plan this would require BWA to acquire more water from the Brazos River Authority (BRA), build a new raw water pump station and transmission line, expand their plant, and for the city to build a new line from BWA to our facilities.

Before the plan was adopted the city's representatives to the planning committee pointed out that the plan did not account for all of our existing well capacity and that we would rely on groundwater rather than more BWA water to meet our needs. The planning committee apparently did not accept this as part of the adopted plan.

The \$872,000 represents only the construction cost of a new line from BWA to our facilities. The BWA plant expansion is projected at \$30 million and their raw water supply is projected at \$8 million.

While we could plug through a calculation using projected water use, the \$872,000 capital cost, our portion of funding BWA improvements, and come up with a projected water and sewer rate and then determine if this is acceptable or not. We do not think this exercise has much practical use for anyone. Again, our intention is to supplement our surface water needs with well water – as we do now.

The City's concern with the water plan as it is written is if it becomes the rationale behind future regulation of the groundwater supply that prevents us from using our existing well capacity or expanding it.

If you have any questions, please do not hesitate to contact Craig Nisbett, Public Works Director, at 979-415-2430 or City Manager, William P. Yenne at 979-415-2500.

## WATER INFRASTRUCTURE FINANCING SURVEY

**Instructions:** For each of the recommended strategies in the Region H Regional Water Plan to meet your water needs, please answer the following questions. A separate sheet has been provided for each water management strategy.

**Name of Political Subdivision:** LIVINGSTON

**Water Management Strategy Name:** EXTEND EXISTING CONTRACT  
THROUGH 2050 (5,601 AC-FT/YR)

**Capital Cost:** \$ \$927,000.00

1. Using current utility revenue sources, including implementing necessary rate and tax increases, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above?

The political subdivision can afford to pay \$ 927,000.00.

2. If you could access the State Participation Program, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above using current utility revenue sources, including implementing necessary rate and tax increases?

The political subdivision can afford to pay \$ \_\_\_\_\_.

3. How much of the capital cost is the political subdivision unable to pay for the water management strategy identified above?

The political subdivision cannot afford to pay \$ \_\_\_\_\_.

4. For the costs the political subdivision cannot pay, what option(s) is proposed? What, if any, state funding sources would the political subdivision consider? (Please use additional sheets, if necessary.)

---

---

---

---

---

---

---

---

---

---

## WATER INFRASTRUCTURE FINANCING SURVEY

Region Name: Region H Water Planning Group

Name of Political Subdivision: City of Oak Ridge North

Contact Person: Hon. Joe Michels Title: Mayor

Telephone: 281-292-4648 E-mail: \_\_\_\_\_

**Background:** On January 5, 2001, Regional Water Planning Groups (RWPGs) all across the State of Texas formally submitted 16 adopted regional water plans to the Texas Water Development Board (TWDB) per requirements of Senate Bill 1 (75<sup>th</sup> Texas Legislature). The adopted regional water plans examined and analyzed the water supply needs for all water users in the State. Based on the analysis, the RWPGs identified water management strategies necessary to ensure a sufficient supply of water for the 50-year planning period. The RWPGs also developed preliminary capital cost estimates for each of the strategies recommended in the approved regional water plan.

Senate Bill 2 (77<sup>th</sup> Texas Legislature) expanded the RWPG's assignment. Senate Bill 2 charges the RWPGs with examining what financial assistance, if any, is needed to implement the water management strategies and projects recommended in the most recently approved regional water plan.

Senate Bill 2 specifically requires that the RWPG report to the TWDB how political subdivisions all across Texas propose to pay for future water infrastructure needs.

The purpose of this survey is to complete this charge with your input.

**Please return the completed survey by April 8, 2002 to:**

Region H Water Planning Group  
c/o Glenda Callaway, Principal  
Ekistics Corporation  
2727 Kirby Drive, Suite 523  
Houston, Texas 77098  
713-520-8150 facsimile  
E-mail address: glencall@aol.com

**If you have any questions regarding this survey, please contact:  
Glenda Callaway at 713-520-9031.**

**WATER INFRASTRUCTURE FINANCING SURVEY**

**Instructions:** For each of the recommended strategies in the Region H Regional Water Plan to meet your water needs, please answer the following questions. A separate sheet has been provided for each water management strategy.

**Name of Political Subdivision:** OAK RIDGE NORTH

**Water Management Strategy Name:** NEW CONTRACTS WITH SJRA

**Capital Cost:** \$ \$1,680,000.00

1. Using current utility revenue sources, including implementing necessary rate and tax increases, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above?

The political subdivision can afford to pay \$ 10%.

2. If you could access the State Participation Program, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above using current utility revenue sources, including implementing necessary rate and tax increases?

The political subdivision can afford to pay \$ 0.

3. How much of the capital cost is the political subdivision unable to pay for the water management strategy identified above?

The political subdivision cannot afford to pay \$ All.

4. For the costs the political subdivision cannot pay, what option(s) is proposed? What, if any, state funding sources would the political subdivision consider? (Please use additional sheets, if necessary.)

STATE Provide Funding ASSISTANCE  
FOR UNFUNDED MANDATES . . . . .

WE HAVE A FUNCTIONAL AND EFFICIENT WATER  
SYSTEM NOW - WHY MANDATE A CHANGE?

**Summary of Recommended Water Management Strategies for:**

**OAK RIDGE NORTH**

<b>Political Subdivision</b>	<b>Strategy</b>	<b>Strategy Implementation Date</b>	<b>Total Capital Cost</b>
<b>OAK RIDGE NORTH</b>	<b>NEW CONTRACTS WITH SJRA</b>	<b>2020</b>	<b>\$1,680,000.00</b>

## WATER INFRASTRUCTURE FINANCING SURVEY

**Instructions:** For each of the recommended strategies in the Region H Regional Water Plan to meet your water needs, please answer the following questions. A separate sheet has been provided for each water management strategy.

**Name of Political Subdivision:** PANORAMA VILLAGE

**Water Management Strategy Name:** NEW CONTRACTS WITH SJRA

**Capital Cost: \$** \$6,883,000.00

1. Using current utility revenue sources, including implementing necessary rate and tax increases, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above?

The political subdivision can afford to pay \$ -0-.

2. If you could access the State Participation Program, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above using current utility revenue sources, including implementing necessary rate and tax increases?

The political subdivision can afford to pay \$ -0-.

3. How much of the capital cost is the political subdivision unable to pay for the water management strategy identified above?

The political subdivision cannot afford to pay \$ 6,883,000.00.

4. For the costs the political subdivision cannot pay, what option(s) is proposed? What, if any, state funding sources would the political subdivision consider? (Please use additional sheets, if necessary.)

---

See Attached

---

---

---

---

---

---

---

---

**Summary of Recommended Water Management Strategies for:**

**PANORAMA VILLAGE**

<b>Political Subdivision</b>	<b>Strategy</b>	<b>Strategy Implementation Date</b>	<b>Total Capital Cost</b>
<b>PANORAMA VILLAGE</b>	<b>NEW CONTRACTS WITH SJRA</b>	<b>2020</b>	<b>\$6,883,000.00</b>

4. The City of Panorama Village has a current population of approximately 2000 residents and 900 homes. We are approximately 75% built out. Our water supply is all ground water from three (3) wells as follows:

Water Well No. 1 = 500 gpm capacity

Water Well No. 2 = 700 gpm capacity

Water Well No. 3 = 750 gpm capacity

Well No. 3 was placed in operation early this year and brings our daily capacity to 2,808,000 gallons per day. During the last 3 years our maximum daily demand was 1,300,000 gallons or 85% of our capacity from Wells No. 1 and No. 2.

Table C-3: Conveyance and Treatment Facility Costs by Decade lists Panorama Village under the water user group requiring connection by regional provider with a total capacity of \$6,883,000. We would make the following comments:

- a. We feel we have adequate capacity from our present facilities considering use are presently about 75% build out with little opportunity of annexing adjacent land.
- b. In the remote possibility that we would require additional supplies we would pursue working out an Inter Local Agreement with the City of Conroe that has a main line running from I-45 west along League Line road and runs along the south side of Panorama Village and a proposed main line running west from I-45 along FM 830 and the north side of Panorama Village.
- c. The City of Panorama Village currently has Water Revenue of \$200,000 - \$300,000 per year, depending on weather. Out of this must come the cost to operate our plant. The cities Maintenance and Operations budget, excluding Water and Sewer, is \$507,732 for the current year and Debt Service is \$263,007. Considering our size and revenue source we are not in a position to commit to sharing in the \$6,883,000 Total Capital Cost.

## WATER INFRASTRUCTURE FINANCING SURVEY

Region Name: Region H Water Planning Group

Name of Political Subdivision: City of Panorama Village

Contact Person: Hon. Howard L. Kravetz Title: Mayor

Telephone: 936-856-2821 E-mail: \_\_\_\_\_

**Background:** On January 5, 2001, Regional Water Planning Groups (RWPGs) all across the State of Texas formally submitted 16 adopted regional water plans to the Texas Water Development Board (TWDB) per requirements of Senate Bill 1 (75<sup>th</sup> Texas Legislature). The adopted regional water plans examined and analyzed the water supply needs for all water users in the State. Based on the analysis, the RWPGs identified water management strategies necessary to ensure a sufficient supply of water for the 50-year planning period. The RWPGs also developed preliminary capital cost estimates for each of the strategies recommended in the approved regional water plan.

Senate Bill 2 (77<sup>th</sup> Texas Legislature) expanded the RWPG's assignment. Senate Bill 2 charges the RWPGs with examining what financial assistance, if any, is needed to implement the water management strategies and projects recommended in the most recently approved regional water plan.

Senate Bill 2 specifically requires that the RWPG report to the TWDB how political subdivisions all across Texas propose to pay for future water infrastructure needs.

The purpose of this survey is to complete this charge with your input.

**Please return the completed survey by April 8, 2002 to:**

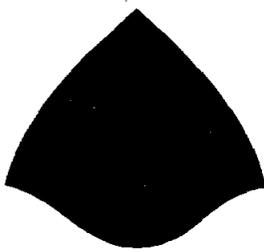
Region H Water Planning Group  
c/o Glenda Callaway, Principal  
Ekistics Corporation  
2727 Kirby Drive, Suite 523  
Houston, Texas 77098  
713-520-8150 facsimile  
E-mail address: glencall@aol.com

**If you have any questions regarding this survey, please contact:  
Glenda Callaway at 713-520-9031.**

**FAXED**  
4/9/02

CITY OF PANORAMA VILLAGE, TEXAS

MAILING ADDRESS:  
99 HIWON Dr., PANORAMA VILLAGE, TEXAS 77304-1123  
(936) 856-2821  
(936) 856-2751  
FAX (936)856-2547



Office of the Mayor

April 8, 2002

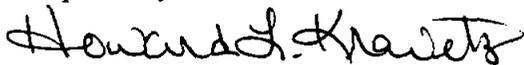
Region H Water Planning Group  
c/o Glenda Callaway, Principal  
Ekistics Corporation  
2727 Kirby Dr.  
Houston, Texas 77098

Dear Ms. Callaway:

The attached information is submitted as general information for your Water Infrastructure Financing Survey. This small community would be unable to participate at the levels indicated in your proposal. A brief overview of this community's finances, population, and water pumping capacity is provided.

Finally, all water issues concerning Montgomery County cities and MUDs should be addressed to the recently formed Lone Star Ground Water Conservation District. This organization will be formulating a water policy for the entire county.

Respectfully submitted,



Howard L. Kravetz, Mayor

1 - Attachment - Water Survey

## WATER INFRASTRUCTURE FINANCING SURVEY

**Instructions:** For each of the recommended strategies in the Region H Regional Water Plan to meet your water needs, please answer the following questions. A separate sheet has been provided for each water management strategy.

**Name of Political Subdivision:** PEARLAND

**Water Management Strategy Name:** EXTEND EXISTING CONTRACT THROUGH 2050-HARRIS AND BRAZORIA SPLIT (10 MGD)

**Capital Cost: \$** \$2,320,000.00

1. Using current utility revenue sources, including implementing necessary rate and tax increases, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above?

The political subdivision can afford to pay \$ 2,320,000.  
*\* Requires at least a 10% water rate increase*

2. If you could access the State Participation Program, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above using current utility revenue sources, including implementing necessary rate and tax increases?

The political subdivision can afford to pay \$ 2,320,000.

3. How much of the capital cost is the political subdivision unable to pay for the water management strategy identified above?

The political subdivision cannot afford to pay \$ 0.

4. For the costs the political subdivision cannot pay, what option(s) is proposed? What, if any, state funding sources would the political subdivision consider? (Please use additional sheets, if necessary.)

---

---

---

---

---

---

---

---

---

---

## WATER INFRASTRUCTURE FINANCING SURVEY

**Instructions:** For each of the recommended strategies in the Region H Regional Water Plan to meet your water needs, please answer the following questions. A separate sheet has been provided for each water management strategy.

**Name of Political Subdivision:**           RICHMOND          

**Water Management Strategy Name:**           NEW CONTRACT          

**Capital Cost:** \$           \$15,232,000.00          

1. Using current utility revenue sources, including implementing necessary rate and tax increases, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above?

The political subdivision can afford to pay \$ 3,000,000.00.

2. If you could access the State Participation Program, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above using current utility revenue sources, including implementing necessary rate and tax increases?

The political subdivision can afford to pay \$ 3,000,000.00.

3. How much of the capital cost is the political subdivision unable to pay for the water management strategy identified above?

The political subdivision cannot afford to pay \$ 12,232,000.00.

4. For the costs the political subdivision cannot pay, what option(s) is proposed? What, if any, state funding sources would the political subdivision consider? (Please use additional sheets, if necessary.)

The political subdivision would consider all  
possible options.

---

---

---

---

---

---

---

---

## WATER INFRASTRUCTURE FINANCING SURVEY

**Instructions:** For each of the recommended strategies in the Region H Regional Water Plan to meet your water needs, please answer the following questions. A separate sheet has been provided for each water management strategy.

**Name of Political Subdivision:**           RICHWOOD          

**Water Management Strategy Name:**           INCREASE EXISTING CONTRACT          

**Capital Cost:** \$           \$4,333,000.00          

1. Using current utility revenue sources, including implementing necessary rate and tax increases, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above?

The political subdivision can afford to pay \$ \_\_\_\_\_.

2. If you could access the State Participation Program, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above using current utility revenue sources, including implementing necessary rate and tax increases?

The political subdivision can afford to pay \$ \_\_\_\_\_.

3. How much of the capital cost is the political subdivision unable to pay for the water management strategy identified above?

The political subdivision cannot afford to pay \$ \_\_\_\_\_.

4. For the costs the political subdivision cannot pay, what option(s) is proposed? What, if any, state funding sources would the political subdivision consider? (Please use additional sheets, if necessary.)

The City of Richwood recently drilled two new wells and increased our storage capacity. Based on our growth rate over the past 30 years, our current capacity should be sufficient for at least 40 years.

---

---

---

---

---

---

---

---

---

---

## WATER INFRASTRUCTURE FINANCING SURVEY

**Instructions:** For each of the recommended strategies in the Region H Regional Water Plan to meet your water needs, please answer the following questions. A separate sheet has been provided for each water management strategy.

**Name of Political Subdivision:** ROSENBERG

**Water Management Strategy Name:** NEW CONTRACT

**Capital Cost:** \$ \$14,705,000.00

1. Using current utility revenue sources, including implementing necessary rate and tax increases, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above?

The political subdivision can afford to pay \$ 0.

2. If you could access the State Participation Program, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above using current utility revenue sources, including implementing necessary rate and tax increases?

The political subdivision can afford to pay \$ 0.

3. How much of the capital cost is the political subdivision unable to pay for the water management strategy identified above?

The political subdivision cannot afford to pay \$ 14,705,000.

4. For the costs the political subdivision cannot pay, what option(s) is proposed? What, if any, state funding sources would the political subdivision consider? (Please use additional sheets, if necessary.)

The City of Rosenberg is in the process of updating its Water and Sewer Rate Study and evaluating the percentage increase in its current water and sewer rates necessary to maintain the current rate structure. The City would appreciate any State or Federal grant funding that may be available to offset any required funding needs for this strategy.

---

---

### WATER INFRASTRUCTURE FINANCING SURVEY

Instructions: For each of the recommended strategies in the Region H Regional Water Plan to meet your water needs, please answer the following questions. A separate sheet has been provided for each water management strategy.

Name of Political Subdivision: SUGAR LAND

Water Management Strategy Name: EXTEND EXISTING CONTRACT THROUGH 2050 -SPLIT BY BASIN (22,396 AC-FT/YR)

Capital Cost: \$ \$4,071,000.00

- Using current utility revenue sources, including implementing necessary rate and tax increases, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above?

The political subdivision can afford to pay \$ All of the necessary funding can be absorbed by the city.

- If you could access the State Participation Program, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above using current utility revenue sources, including implementing necessary rate and tax increases?

The political subdivision can afford to pay \$ 100%

- How much of the capital cost is the political subdivision unable to pay for the water management strategy identified above?

The political subdivision cannot afford to pay \$ 0

- For the costs the political subdivision cannot pay, what option(s) is proposed? What, if any, state funding sources would the political subdivision consider? (Please use additional sheets, if necessary.)

---



---



---



---



---



---



---



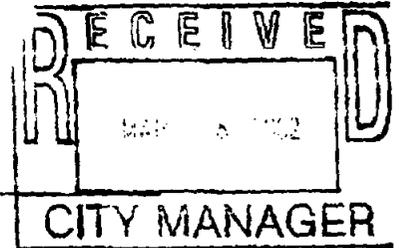
---

**Summary of Recommended Water Management Strategies for:**

**SUGAR LAND**

Political Subdivision	Strategy	Strategy Implementation Date	Total Capital Cost
SUGAR LAND	EXTEND EXISTING CONTRACT THROUGH 2050 -SPLIT BY BASIN (22,396 AC-FT/YR)	2020	\$4,071,000.00

**WATER INFRASTRUCTURE FINANCING SURVEY**



Region Name: Region H Water Planning Group

Name of Political Subdivision: City of Sugar Land

Contact Person: Hon. Dean Allen Hrbacek

Title: Mayor

Telephone: 281-275-2700

E-mail: \_\_\_\_\_

**Background:** On January 5, 2001, Regional Water Planning Groups (RWPGs) all across the State of Texas formally submitted 16 adopted regional water plans to the Texas Water Development Board (TWDB) per requirements of Senate Bill 1 (75<sup>th</sup> Texas Legislature). The adopted regional water plans examined and analyzed the water supply needs for all water users in the State. Based on the analysis, the RWPGs identified water management strategies necessary to ensure a sufficient supply of water for the 50-year planning period. The RWPGs also developed preliminary capital cost estimates for each of the strategies recommended in the approved regional water plan.

Senate Bill 2 (77<sup>th</sup> Texas Legislature) expanded the RWPG's assignment. Senate Bill 2 charges the RWPGs with examining what financial assistance, if any, is needed to implement the water management strategies and projects recommended in the most recently approved regional water plan.

Senate Bill 2 specifically requires that the RWPG report to the TWDB how political subdivisions all across Texas propose to pay for future water infrastructure needs.

The purpose of this survey is to complete this charge with your input.

**Please return the completed survey by April 8, 2002 to:**

Region H Water Planning Group  
c/o Glenda Callaway, Principal  
Ekistics Corporation  
2727 Kirby Drive, Suite 523  
Houston, Texas 77098  
713-520-8150 facsimile  
E-mail address: glencall@aol.com

**If you have any questions regarding this survey, please contact:  
Glenda Callaway at 713-520-9031.**

## WATER INFRASTRUCTURE FINANCING SURVEY

**Instructions:** For each of the recommended strategies in the Region H Regional Water Plan to meet your water needs, please answer the following questions. A separate sheet has been provided for each water management strategy.

**Name of Political Subdivision:** TOMBALL

**Water Management Strategy Name:** NEW CONTRACT WITH HOUSTON

**Capital Cost:** \$ \$19,491,000.00

1. Using current utility revenue sources, including implementing necessary rate and tax increases, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above?

The political subdivision can afford to pay \$ 0.

2. If you could access the State Participation Program, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above using current utility revenue sources, including implementing necessary rate and tax increases?

The political subdivision can afford to pay \$ 0.

3. How much of the capital cost is the political subdivision unable to pay for the water management strategy identified above?

The political subdivision cannot afford to pay \$ 19,491,000.

4. For the costs the political subdivision cannot pay, what option(s) is proposed? What, if any, state funding sources would the political subdivision consider? (Please use additional sheets, if necessary.)

---

---

---

---

---

---

---

---

---

---

**Summary of Recommended Water Management Strategies for:**

**TOMBALL**

<b>Political Subdivision</b>	<b>Strategy</b>	<b>Strategy Implementation Date</b>	<b>Total Capital Cost</b>
<b>TOMBALL</b>	<b>NEW CONTRACT WITH HOUSTON</b>	<b>2010</b>	<b>\$19,491,000.00</b>

## WATER INFRASTRUCTURE FINANCING SURVEY

Region Name: Region H Water Planning Group

Name of Political Subdivision: City of Tomball

Contact Person: Hon. H. G. Hap Harrington Title: Mayor

Telephone: 281-351-5484 E-mail: \_\_\_\_\_

**Background:** On January 5, 2001, Regional Water Planning Groups (RWPGs) all across the State of Texas formally submitted 16 adopted regional water plans to the Texas Water Development Board (TWDB) per requirements of Senate Bill 1 (75<sup>th</sup> Texas Legislature). The adopted regional water plans examined and analyzed the water supply needs for all water users in the State. Based on the analysis, the RWPGs identified water management strategies necessary to ensure a sufficient supply of water for the 50-year planning period. The RWPGs also developed preliminary capital cost estimates for each of the strategies recommended in the approved regional water plan.

Senate Bill 2 (77<sup>th</sup> Texas Legislature) expanded the RWPG's assignment. Senate Bill 2 charges the RWPGs with examining what financial assistance, if any, is needed to implement the water management strategies and projects recommended in the most recently approved regional water plan.

Senate Bill 2 specifically requires that the RWPG report to the TWDB how political subdivisions all across Texas propose to pay for future water infrastructure needs.

The purpose of this survey is to complete this charge with your input.

**Please return the completed survey by April 8, 2002 to:**

Region H Water Planning Group  
c/o Glenda Callaway, Principal  
Ekistics Corporation  
2727 Kirby Drive, Suite 523  
Houston, Texas 77098  
713-520-8150 facsimile  
E-mail address: glencall@aol.com

**If you have any questions regarding this survey, please contact:  
Glenda Callaway at 713-520-9031.**

## **Regional Water Authority – Telephonic Survey Record**

Entity: West Harris County Regional Water Authority  
POC: Mr. Dan Sallee, President  
Telephone: 713-961-8500  
Survey date: May 29, 2002

1. We do not have an infrastructure estimate prepared for your regional authority. As you develop your plan, what percentage do you expect to fund from user rates and taxes, and what percentage do you expect to get from state or external funding sources?

Summary of response: The WHCRWA is working on the assumption that local funding will be used to meet 100% of the infrastructure costs. The target user rate is currently \$0.95 per thousand gallons for all customers.

2. If you could access the state participation program, what percentage of infrastructure costs would you expect the state to provide? Under the state participation program, a portion of the facility would be owned by the state until the customer base grows enough to fully utilize the facility. The state is then repaid through revenues.

Summary of response: State participation for oversized facilities is not currently being considered as a funding option, but may be considered as oversized transmission lines are constructed from the Jersey Village Pump Station.

## Regional Water Authority – Telephonic Survey Record

Entity: Mid-Brazoria Regional Water Planning Group  
POC: Mr. Wayne Szabo, Alvin Director of Public Works  
Telephone: 281-388-4200  
Survey date: May 29, 2002

1. We do not have an infrastructure estimate prepared for your regional authority. As you develop your plan, what percentage do you expect to fund from user rates and taxes, and what percentage do you expect to get from state or external funding sources?

Summary of response: After the initial Mid-Brazoria RWPG Study completed by TC&B in 2001, the group became inactive. The two largest cities, Pearland and Angelton, fell out of the group to pursue independent management strategies.

The City of Alvin anticipates self-funding their internal infrastructure requirements, with possible assistance only coming from the TWDB loan programs. The City is planning a new well, which will provide increased GW capacity to meet their anticipated 2030 demands.

No regional water facility construction is anticipated for the MBRWPG. Alvin and the other Mid-Brazoria members are currently discussing participation in the GCWA regional plant.

2. If you could access the state participation program, what percentage of infrastructure costs would you expect the state to provide? Under the state participation program, a portion of the facility would be owned by the state until the customer base grows enough to fully utilize the facility. The state is then repaid through revenues.

Summary of response: State participation is not an anticipated need for the group at this time. If needed in the future, it is not expected that the state would fund more than 50% of a facility cost.

## **Regional Water Authority – Telephonic Survey Record**

Entity: North Harris County Regional Water Authority  
POC: Mr. Ed Shackelford, General Manager  
Telephone: 281-440-3924  
Survey date: attempted May 29 and 31, 2002

1. We do not have an infrastructure estimate prepared for your regional authority. As you develop your plan, what percentage do you expect to fund from user rates and taxes, and what percentage do you expect to get from state or external funding sources?

Summary of response:

2. If you could access the state participation program, what percentage of infrastructure costs would you expect the state to provide? Under the state participation program, a portion of the facility would be owned by the state until the customer base grows enough to fully utilize the facility. The state is then repaid through revenues.

Summary of response:

## **Appendix C – Policy Discussions**

In the 2001 Region H Water Plan, nine recommendations were made to the Legislature regarding policies and programs that directly or indirectly funded water projects and water infrastructure. These recommendations included:

- Revise Chapter 297.73 of the Texas Water Code to exempt from cancellation those water rights that have not been used in whole or in part for 10 years.
- Adopt regulations to exempt from cancellation any water rights of project sponsors, whose water rights were developed as a result of financing a water supply project.
- Remove barriers to interbasin transfers of water.
- Establish funding for continuing the Bays and Estuaries programs of state resource agencies and for additional monitoring and research to develop strategies to meet freshwater inflow needs.
- Establish financing mechanisms for development of new water supply projects identified within the adopted regional water plans.
- Continue and expand funding of the State of Texas Groundwater Availability Modeling effort.
- Establish funding for agricultural research into the area of efficient irrigation practices.
- Establish a research and development program for desalination with appropriate financial incentives for desalination project implementation.
- Address and improve water conservation activities in the state.

The first two recommendations were acted on during the 79<sup>th</sup> State Legislature. Water rights for projects developed to meet identified future needs are now exempted from cancellation. Those recommendations that have not been acted on are included in the discussions that follow.

Existing state and federal programs for funding water supply and infrastructure were reviewed for their applicability to the Region H Water Plan. Recommendations generally fell into two categories: those addressing direct assistance programs (loans and grants), and those addressing indirect actions that impact water infrastructure financing.

The program and policy areas considered are discussed on the following pages. The recommendations are summarized in Section 3 of the Report.

**C.1 Program / Policy Item:** State Participation Program for regional water and wastewater projects

**Administering Agency:** TWDB

**Discussion:** This program enables the Water Development Board to assume a temporary ownership interest in a regional project when the local sponsors are unable to assume debt for an optimally sized facility. Payments on the funds provided by the State are deferred until a customer base grows into the capacity it funded. The deferred interest payments do not accrue additional interest. By funding up to 50% of a project, the program helps the local sponsors optimize facility sizes and avoid later expansions and replacements.

This program will be extremely important for the development of the recommended water management strategies, as well as for water treatment and distribution systems. Large projects, particularly reservoirs, must be developed in anticipation of future demands due to the long periods of time required for planning, permitting, property acquisition and construction. For example, Bédias Reservoir, which will require a transmission system as well as the reservoir itself, is estimated to cost \$194.3 million. The current customer base cannot support this high cost. The Bureau of Reclamation no longer funds the development of new water supply reservoirs and this project would not qualify for other federal funding. Therefore, the State Participation program is one of the few programs available to assist local sponsors with this water management strategy. Other reservoir projects within Region H could also experience similar financing issues.

The State Participation Program will also be important during the expansion of surface water service into areas affected by subsidence. As areas develop and implement Groundwater Reduction Plans, it is expected that communities will develop plans for regional treatment and distribution systems to reduce costs. State participation in these facilities will allow them to be optimally sized at their inception. The State Participation Program offers the important advantage of reducing the unit costs for water service for both existing and future water users of the optimally sized facility.

**Policy Recommendation:** Increase funding of the State Participation Program as needed to allow development of these water supply projects.

**C.2 Program / Policy Item:** State Revolving Fund Programs (Drinking Water State Revolving Fund and Clean Water State Revolving Fund)

**Administering Agency:** TWDB

**Discussion:** These programs provide loans at subsidized interest rates for the construction of water treatment and distribution systems and for source water protection (DWSRF) and for wastewater collection and treatment systems (CWSRF). As the loans are paid off, the TWDB uses the funds to make new loans (thus the name Revolving Fund). State funds for the program receive a federal match through the Environmental Protection Agency. These loans are intended for projects to bring existing systems into compliance with rules and regulations, and are available to political subdivisions, water supply corporations and privately-owned water systems. Applications are collected at the beginning of each year, given a priority ranking, and funded to the extent possible. Projects not funded in a given year may carry forward into the next year's ranking.

These programs are important in that they assist sub-standard water systems in attaining the minimum water quality mandated by Federal and State regulations, but they are not intended to fund system expansions due to projected growth. However, these programs may apply to individual systems in the Region experiencing water quality declines, or to those systems affected by the changed standard for Arsenic. The SRF Fund may also provide assistance to water providers with aging treatment systems and transmission lines.

**Policy Recommendation:** Increase the funding of this program in future decades, and expand the program to include coverage for system capacity increases to meet projected growth for communities.

### **C.3 Program / Policy Item: State Loan Program**

**Administering Agency:** TWDB

**Discussion:** The State Loan Program provides loans to Political Subdivisions and Water Supply Corporations for water, wastewater, flood control and municipal solid waste projects. Payments are not deferred in this program as they are under the State Participation Program, and the interest rates are not subsidized as they are in the Revolving Fund Programs. These loans are available for both local projects and for the local sponsors of regional projects. Acquisition and construction of water treatment and distribution systems are eligible for funding. Loans are made on a first come, first served basis.

This program will be heavily utilized in groundwater-served areas introducing surface water to meet current and projected demands. The ready availability of groundwater across the region has allowed development to occur outside existing surface water service areas. As the limits of available groundwater are reached (sustainable yields and/or regulatory limits), surface water treatment and transmission systems must be constructed to meet future demands. The costs are significant in that they are required in a short time span, instead of initiated and expanded over time as they are in areas originally served by surface water. Where local rate payers cannot afford to directly pay for transition costs, State loans offer a significant cost advantage over most commercial and many public funding options, using the State's high bond rating rather than the rating of the local sponsor.

**Policy Recommendation:** Increase funding of this program to meet near-term infrastructure cost projections.

#### **C.4 Program / Policy Item:** Agricultural Water Conservation Loan Program

**Administering Agency:** TWDB

**Discussion:** This program provides loans to soil and water conservation districts, underground water conservation districts and districts authorized to supply water for irrigation. These districts may further lend the funds to private individuals for equipment and materials, labor, preparation and installation costs to improve water-use efficiency related to irrigation of their private lands. There is also a grant program for equipment purchases by eligible districts for the measurement and evaluation of irrigation systems and agricultural water conservation practices, and for efficient irrigation and conservation demonstration projects, among others. However, these grants are not available to individual irrigators. Similar Federal loan and grant programs are available, but require a 25% to 50% local match.

In the Region H Water Plan, irrigation conservation is a recommended strategy in three counties (Brazoria, Fort Bend, and Waller), and is extremely important in Brazoria County where the reductions in irrigation are projected to allow reallocation of supply to meet manufacturing demands. As it is unlikely that manufacturers will seek out and fund irrigation conservation projects, the task of encouraging conservation will fall to the wholesale water providers and those government entities with jurisdiction in those counties. Even with Agricultural Water Conservation Loan Program assistance, irrigators will be slow to invest in water-conserving equipment until water rates increase, making it economically advantageous to do so. The difficulty increases in areas where groundwater is the primary supply source for irrigation.

Eligible districts will need to act as conservation brokers, identifying those irrigators with the potential to reduce water demand through equipment improvements, and matching them with available loans. By reducing usage in this manner, water suppliers will be able to provide the saved portion of their supply to new customers. To assist with the immediate adoption of these improved conservation practices, a one-time grant or subsidy program for water-efficient equipment purchases may help by reducing the loans amounts required by each irrigator. If the requirements of an existing Federal loan or grant program could be met, the State could provide all or part of the local matching share. Since the methods used by irrigators vary across the state, such a program would need to be flexible, with local oversight provided by those districts currently eligible for the Agricultural Water Conservation Loan Program. Consistency with the applicable Regional Water Plan may be included as a prerequisite for this program, as it is for other State grants and loans.

**Policy Recommendation:** Provide a mechanism to leverage Federal grant programs by providing the local matching share. Increase funding of this loan program and consider adding a one-time grant or subsidy component to stimulate early adoption of conservation practices by individual irrigators.

### **C.5 Program / Policy Item: Regional Water Supply and Wastewater Facilities Planning Program**

**Administering Agency:** TWDB

**Discussion:** This program provides planning grants to Political Subdivisions for studies and analyses to determine feasible alternatives for regional water supply and wastewater facility needs. The planning must include more than one service area or political subdivision to be considered regional. Grants are generally limited to 50% of the total cost, and cannot be applied to the preparation of state and federal permits, administrative or legal proceedings of regulatory agencies, or the preparation of engineering plans and specifications.

This grant program can assist in planning for local areas, particularly the unincorporated areas of each county. Local sponsors investigating the best means to serve their populations may join with neighboring communities and water providers and request a planning grant, thus reducing their individual planning costs. Determination of the optimal institutional arrangement between political subdivisions is one of the eligible study areas under this program. Should a regional facility prove to be the best solution for the group, they may elect to pursue additional support from the State Loan and Participation programs.

One limitation of the program is that it cannot be applied to the detailed facility planning or preliminary engineering design of the proposed facility. These early engineering phase costs can represent as much as 30% of the cost of the facility, and generally must be completed before accurate financial requirements can be defined. Inclusion of these costs in either the planning grant or pre-project loan programs would better help these small communities develop the projects they need.

**Policy Recommendation:** Increase funding of this program in anticipation of upcoming development throughout the state, and expand the program to include the preliminary engineering design costs for recommended facilities.

**C.6 Program / Policy Item:** Water and Waste Disposal Loans and Grants

**Administering Agency:** USDA Rural Utilities Service

**Discussion:** This Federal program provides loans and grants in rural areas and communities of up to 10,000 people for water, wastewater, storm water and municipal solid waste projects. The program is intended for communities that cannot obtain commercial loans at reasonable rates. Loans are made at or below market rates, depending upon the eligibility of the recipient. Grants can cover up to 75% of project costs when required to reduce user costs to a reasonable level. A separate program of Emergency Community Water Assistance Grants (up to \$500,000 per project) is also available to communities experiencing rapid declines in water quality or quantity.

This program is similar to the state loan and revolving fund programs. It offers another option to small communities and rural areas unable to finance required infrastructure without assistance. However, this is a nationwide program, and the competition for available funds is correspondingly greater. Colonias and border areas are specifically identified as target areas for the grant portion of this program, and it is therefore in the State's interest to support its continued funding.

The TWDB was recently authorized by the 77<sup>th</sup> Texas legislature to establish a similar program at the state level. The Rural Water Assistance Fund will provide low-interest loans to municipalities, water districts and non-profit water supply corporations. The program is still under development and has not yet been funded.

**Policy Recommendation:** Support continued and increased funding of this program at the Federal level, and fund the state Rural Water Assistance Fund.

**C.7 Program / Policy Item:** Water Research Program - Desalination

**Administering Agency:** TWDB

**Discussion:** The Texas Water Development Board offers research grants to individuals or political subdivisions for water research on topics published in the Board's Request for Proposals. Eligible topics include product and process development.

In the Region H Water Plan, one recommendation to the legislature is to establish a research and development program for desalination, with appropriate financial incentives for desalination project implementation. This recommendation was based on the evaluation of a desalination water management strategy that was not cost-competitive with more traditional water supply projects in this region. Four Planning Regions recommended desalination as a management strategy. If desalination can be made more cost effective than constructing new reservoirs, brackish groundwater in coastal areas can be used to supply a large portion of this Region as well.

While the Water Research Program is not structured to fund demonstration plants or subsidize private developers, it does allow the State to begin the study of desalination and assemble a body of guidance documents for political subdivisions wishing to further investigate this strategy. An initial study might be added at the next research funding cycle.

**Policy Recommendation:** Provide research grants for the study of current and upcoming desalination technologies available to wholesale and retail water suppliers. Fund appropriate demonstration facilities to encourage development of new technologies.

**C.8 Program / Policy Item:** Water Research Program - Agriculture

**Administering Agency:** TWDB

**Discussion:** The Texas Water Development Board offers research grants to individuals or political subdivisions for water research on topics published in the Board's Request for Proposals. Eligible topics include product and process development.

In the Region H Water Plan, one recommendation to the legislature is to establish funding for agricultural research in the areas of efficient irrigation practices and the development of water-efficient and drought-resistant crop and species. Irrigators cannot generally afford the increased cost of water when new supplies are developed in today's market. By reducing demand in a cost-efficient manner, small irrigators may be able to continue farming. This is another potential topic for the Water Research Program.

**Policy Recommendation:** Provide increased research grants to study and better develop drought-resistant crop species and efficient irrigation practices.

**C.9 Program / Policy Item:** Federal Civil Works projects

**Administering Agency:** U.S. Army Corps of Engineers

**Discussion:** The U.S. Army Corps of Engineers (USACE) builds and operates dams and reservoirs for flood control purposes under its Civil Works program. Congress authorizes funding on a project by project basis. Under current regulations, storage in these reservoirs may be used for present and future municipal and industrial water supply, but that portion of the project must be funded by a non-Federal agency. Also, only 30% of the M&I water storage may be allocated to future needs. The balance must supply existing water users, as the repayment schedule for non-Federal costs is capped at 30 years. USACE is also authorized to fund projects for navigation, water quality improvement and ecosystem restoration.

As a result of the first round of Regional Water Planning, the Texas Congressional Delegation requested a study on the potential for federal assistance with water supply in Texas. The Fort Worth District recently published the Texas Water Allocation Assessment Report, which identifies those projects that USACE might participate in. Within Region H, only Bedias Reservoir might receive USACE funding if the scope of the project were modified to include flood control. Also discussed were potential modifications to existing reservoirs to increase water supply yields (these modifications are generally limited to a 15% increase in storage). A saltwater barrier to improve water quality in the Brazos River was also identified as a potential project. USACE also has the ability to provide planning assistance to states for regional water supply studies, particularly studies crossing state and international boundaries.

Limitations for USACE assistance with water supply projects are (1) current policy preventing the USACE from participating in single-purpose water supply projects, (2) USACE inability to share the cost of water supply projects, and (3) the time required to move appropriations actions through the federal government.. The Texas Congressional Delegation could pursue changes to the governing regulations to allow participation in water supply projects, or to increase the percentage of water supply storage for future use allowed in USACE projects. However, USACE civil works projects are authorized individually by Congress. If the project sponsor desires USACE assistance, an exception permitting that assistance might be authorized in the same appropriation bill. The latter option requires the sponsor to have a project champion in Congress.

**Policy Recommendation:** Support regulatory changes that will allow USACE to increase water supply storage in new reservoirs which they construct and manage, and investigate other alternatives for increased involvement by USACE in funding water supply projects.

### **C.10 Program / Policy Item: Junior Water Rights Provision**

**Administering Agency:** TNRCC

**Discussion:** Under the current Texas Water Code, water rights developed as a result of an interbasin transfer become junior to other water rights granted before the interbasin transfer permit. The effect of this change is to make obtaining a permit for interbasin transfer significantly more problematic than it was under prior law and thus discourages the use of interbasin transfers for water supply.

In the Region H Water Plan, one recommendation to the Legislature is to revise the current law on interbasin transfers and remove the unnecessary and counterproductive barriers to such transfers that now exist. This recommendation is based on the following reasons: (1) Current supplies greatly exceed projected demands in some basins, and the supplies already developed in those basins can only be used via interbasin transfers; (2) Interbasin transfers have been used extensively in Texas and are an important part of the state and region current water supply; and (3) Regional water supply plans for major metropolitan areas in Texas (Dallas-Fort Worth and San Antonio) rely on interbasin transfers as a key component of their plans.

Regional water providers still need to pursue interbasin transfers as cost-effective means of meeting projected demands. Current junior water rights provisions make such transfers more costly and thus more difficult to finance, as the reliability of the water rights directly influences the financial risk of the project. This may result in increased reliance on State funding of grant and subsidy programs, or force the local sponsors to pursue more expensive projects that can receive financing.

**Policy Recommendation:** Revise the current law on interbasin transfers and remove this barrier.

### **C.11 Program / Policy Item: Water Conservation**

**Administering Agency:** TNRCC

**Discussion:** The need to conserve water and reduce demand is recognized by the State as a necessary and economical alternative to developing new sources of water supply. Formal water conservation plans are now required for all holders of existing permits, certified filing or certificate of adjudication for surface water in the amounts of 1,000 acre-feet per year or more for municipal, industrial, and other non-industrial use, and for 10,000 acre-feet per year or more for irrigation. Water Conservation Plans are not required for groundwater supply systems or smaller surface water systems, but are required as a condition for funding under several of the TWDB loan and grant programs. Currently, plans are required to include conservation goals, metering methods, public education, non-promotional rate structures and implementation and enforcement methods.

In the Region H Water Plan, one recommendation to the Legislature is to address and improve water conservation activities in the state. Advanced water conservation is expected to reduce demands in Region H by 30,563 acre-feet per year in 2050. Achieving advanced conservation savings in unincorporated areas may be difficult, however, since these practices require some management, funding and oversight, and there is no central agency established to provide this effort in those areas. A regional means of establishing goals and monitoring progress is needed. Once regional programs are established, economies of scale can be realized in the areas of public education and progress monitoring.

**Policy Recommendation:** Strengthen the statewide conservation programs by developing stronger and more effective funding and enforcement mechanisms, including pricing strategies, down to the lowest water provider, public and private.

## **C.12 Program / Policy Item: Regionalization**

**Administering Agency:** None – Market Factors

**Discussion:** As communities assess the growing costs of water infrastructure, economies of scale can be realized by combining the needs of water user groups into larger, more efficient water supply, treatment and distribution facilities. Regional facilities offer interconnections between existing systems, which can increase overall reliability. The individual system connections to these systems can be phased over time to meet regional demands with less impact on individual systems than each individually trying to expand. In areas where groundwater limits are being reached, regional groups can identify areas where surface water supply is most needed, and allow other areas to remain on groundwater systems. Sharing costs across a wide customer base keeps rates comparable between service areas.

A range of cooperative options exists, including formation of regional authorities, inter-local agreements, public-private partnerships, local government corporations and public contracting with a private regional supplier. The optimal arrangement between political subdivisions depends upon the specific project and the goals of the parties. Partnerships with private investors through public-private partnerships and direct contracting with privately-owned facilities offer an advantage of using private financing to meet part of the initial planning and construction costs. The regulations governing these partnerships must protect the public represented by the partnership, but if too restrictive, may prevent the partnership from realizing potential cost savings through the use of private-sector procurement and construction practices.

Consideration should be given to reducing procurement restrictions for Local Government Corporations to encourage the pooling of resources for funding regional projects. Also, existing assistance programs should remain available when political subdivisions enter into public/public or public/private partnerships.

**Policy Recommendation:** Region H supports the forming of regional partnerships and encourages the State to allow them the greatest possible latitude for financing in their governing regulations. Additionally, the State Participation Program should be made available to these public/private partnerships and to private nonprofit water supply corporations.

### **C.14 Program / Policy Item: State Bays and Estuary Programs**

#### **Administering Agency: TNRCC**

**Discussion:** The Galveston Bay Estuary Program is established under the EPA's National Estuaries Program. Galveston Bay Implementation Grants are provided by the TNRCC for projects that implement action items found in "The Galveston Bay Plan." Actions outlined in The Galveston Bay Plan include habitat protection, species population protection, public health protection, freshwater inflow and bay circulation, spills/dumping, shoreline management, water and sediment quality, non-point sources of pollution, point sources of pollution, research, public participation and education, and the Galveston Bay regional monitoring program. Funding for the Grant Program is limited.

One of the recommendations to the legislature in the Region H Water Plan is to establish funding for continuing the bay and estuary programs of state resource agencies and for additional monitoring and research to develop strategies to meet freshwater inflow needs. Galveston Bay is a unique resource that is a vital part of the Region H economy. Current levels of funding for programs within the State of Texas related to bays and estuaries are insufficient to provide the needed monitoring, analysis and development of management strategies for these significant resources.

In-stream flow requirements and freshwater inflow requirements for estuaries are now required considerations in new water rights and water supply projects. These target flows must therefore be appropriate, since they will affect operational changes for existing reservoirs and the permitting and cost of any future reservoirs. Although Region H is focused upon the Galveston Bay, the same body of scientific knowledge must be developed for Sabine Lake, Matagorda Bay and the other bays and estuaries in the State of Texas.

**Policy Recommendation:** Increase funding of the programs which impact research related to the bays and estuaries in order to (1) increase the body of scientific knowledge about Galveston Bay in general, and (2) establish a body of research for the other estuaries of the state.

### **C.14 Program / Policy Item: Flood Litigation**

**Administering Agency:** Major Water Providers

**Discussion:** Flood control reservoirs are generally drawn down at the beginning of the annual wet season so that when large rain events occur, the runoff may be captured and later released more slowly into the receiving stream. These reservoirs therefore reduce downstream flood levels and prevent inundation in low areas. In contrast, water supply reservoirs are operated to capture and retain as much streamflow as allowable under their permits, in order to have supply available during periods of high demand. This practice results in less available storage volume to capture runoff during major storms. When a major storm event occurs upstream or above a water supply reservoir, the reservoir operator must sometimes release flood flows during and after the event to prevent flooding upstream of the reservoir or to prevent damage to the dam and other facilities associated with the reservoir. This flood flow can contribute to downstream flooding, but with most reservoirs, actually reduces the amount of flooding which would have occurred had the reservoir not been constructed.

In recent years, plaintiffs with property in the downstream floodplains have brought multiple lawsuits against major water supply reservoir operators. Some recent court decisions have held the operators liable for damages to the downstream properties. Most of these cases are still under appeal by reservoir operators. If the appeals are not successful, this will force insurance rates for these entities to rise and operational changes to occur that may result in less available storage for periods of need. The net affect to water users will be an increase in the cost of surface water throughout the state.

**Policy Recommendation:** Consider State legislation clarifying the liability exposure of reservoir operators for passing storm flows through water supply reservoirs.

## Appendix D - References

### Self-Financing Information

A Handbook for Board Members of Water Districts in Texas, Fourth Edition, *Sections on Taxation and Bonds only*, TNRCC Regulatory Guidance RG-238, June 1996

TNRCC Jurisdiction Over Utility Rates and Service Policies, TNRCC Regulatory Guidance RG-245, rev. July 2000

Texas Small Towns Environment Program (STEP), Guidelines for Community Self-Help Projects, The Rensselaerville Institute, 2001

Texas Small Towns Environment Program (STEP), Role of Government to Support Community Self-Help Projects, The Rensselaerville Institute, 2001

Texas Small Towns Environment Program (STEP), Sparkplugs...Leading Resident Volunteers Through Community Self-Help, The Rensselaerville Institute, 2001

### Government Loan and Grant Programs

2003 Drinking Water State Revolving Fund (DWSRF) Funding Opportunities for Public Drinking Water Projects & Source Water Protection Projects, TWDB Letter, November 15, 2001, with attachments

Agricultural Water Conservation Loan Program, summary information from the TWDB website, [www.twdb.state.tx.us](http://www.twdb.state.tx.us)

Agricultural Water Conservation Program, Texas Administrative Code, Title 31, Chapter 367

Civil Works Programs, US Army Corps of Engineers, 2001 Report, *Introduction and Water Supply sections only*.

Clean Water State Revolving Fund, Texas Administrative Code, Title 31, Chapter 375

Economically Distressed Areas Program (EDAP), summary information from the TWDB website, [www.twdb.state.tx.us](http://www.twdb.state.tx.us) *Two eligible counties in Region H, Leon and Liberty*

EDAP Status Report, TWDB, December 31, 2001

Funding Sources for Utilities, TNRCC Regulatory Guidance RG-220, rev. May 2001

Financial Assistance Programs, Texas Administrative Code, Title 31, Chapter 363

Research and Planning Funding, Texas Administrative Code, Title 31, Chapter 355

Water and Waste Disposal Programs, Fiscal Year 2001, USDA Rural Utilities Service, July 1, 2001

### **Additional Reports**

Clean Safe Water for the 21<sup>st</sup> Century, Water Infrastructure Network, April 2000

Drinking Water Infrastructure Needs Survey, Second Report to Congress, *Executive Summary and Appendices B, C and E only*, US EPA Report 814-R-01-004, February 2001

Funding America's Drinking Water Infrastructure: From Public to Private, Christina Brow, Washington Internships for Students of Engineering, 2001

Texas Water Allocation Assessment Report, prepared for the Fort Worth District, USACE by Freese and Nichols, Inc., March 2002

Water Infrastructure Now, Water Infrastructure Network, February 2001

Water Conservation Plans, Drought Contingency Plans, Guidelines and Requirements, Texas Administrative Codes, Title 30, Chapter 288

## **Appendix E – Comments Received**

The following comments on the Draft Infrastructure Financing Report were received during the Public Meeting portion of the Region H Water Planning Group meeting held May 1, 2002.

Speaker: Ken Kramer, Sierra Club

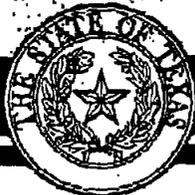
Comments: Mr. Kramer pointed out that the review period for this report was too short, and additional time is needed. He stated that the survey questions were difficult to answer as worded, and therefore the validity of the numeric totals should be addressed in the text. Mr. Kramer stated that some of the policy recommendations may require additional thought and consideration, and the RHWPG may wish to hold them out of this report and submit them at a later time. He recommended that specific improvements to the Agricultural Water Conservation Program be considered and included. He also asked that the wording on the Junior Water Rights provision be edited to make it clear that only that provision is recommended for removal. Finally, he pointed out that the policy recommendations in Section 3 of the report are not in the same order as they appear in Appendix C, which made it difficult for the reader.

Responses: The final version of the report will not be submitted until June 1, 2002, and comments may be submitted during the review period. The RHWPG acknowledged the confusion in answering the surveys. The RHWPG discussed all of the recommendations in the draft report, and decided to withdraw one and clarify several others. Appendix C was reordered to correct the discrepancy in sequencing.

The attached letter commenting on the draft report was received from the Texas Water Development Board. The responses are listed below, by comment number.

1. Table A4 will be added to Appendix A of the IFR to document follow-up efforts with water providers. Due to an error in the survey preparation, these surveys were mailed late and will be included in a letter Addendum to this report.
2. County Aggregated Water Use Categories (non-municipal uses) were addressed collectively based on information in the State Water Plan, existing studies and existing funding program information. Separate surveys were not prepared for non-municipal WUGs with needs. The text of the report will be clarified to reflect this.
3. Major water providers were surveyed to address County-Other Water User Groups with needs within their service areas. The follow-up documentation will be included in Table A4.

4. Major water providers were surveyed to address County-Other Water User Groups with needs within their service areas. Table A1 in Appendix A will be updated and reissued in the addendum.
5. Because of the limitations of the Municipal County-Other cost estimating used in the first round of water planning, meaningful cost data could not be compiled to accompany a formal survey. The three regional WUGs were informally surveyed telephonically. Their responses have been added to Appendices A and B.



# TEXAS WATER DEVELOPMENT BOARD



Walton H. Madden, Jr., *Chairman*  
William W. Meadows, *Member*  
Dario Vidal Guerra, Jr., *Member*

J. Kevin Ward  
*Executive Administrator*

Jack Hunt, *Vice Chairman*  
Thomas Weir Lobatt III, *Member*  
E. G. Rod Pittman, *Member*

May 21, 2002

Mr. Jim Adams, P.E.  
San Jacinto River Authority  
P.O. Box 329  
Conroe, Texas 77305-0329

RE: Regional Water Planning Grant Contract Between the San Jacinto River Authority (SJRA) and the Texas Water Development Board (Board), Contract No. 2002-483-434, Review of Draft Final Reports Entitled "Region H Water Planning Group Infrastructure Financing Report"

Dear Mr. Adams:

Staff members of the Texas Water Development Board have completed a review of the draft report under TWDB Contract No. 2002-483-434. As stated in the above referenced contract, the SJRA will consider incorporating comments from the EXECUTIVE ADMINISTRATOR shown in Attachment 1 and other commentors on the draft final report into a final report. The SJRA must include a copy of the EXECUTIVE ADMINISTRATOR's comments in the final report.

The Board looks forward to receiving one (1) electronic copy, one (1) unbound single-sided camera-ready original, and nine (9) bound double-sided copies of the final report on this planning project.

Please contact Ernest Rebeck, Ph.D., P.E. at (512) 936-2317 if you have any questions about the Board's comments.

Sincerely,

*William F. Mulligan III*

William F. Mulligan, III  
Deputy Executive Administrator  
Office of Planning

Cc: Ernest Rebeck, Ph.D., P.E., TWDB

### Our Mission

*Provide leadership, technical services and financial assistance to support planning, conservation, and responsible development of water for Texas.*

P.O. Box 13231 • 1700 N. Congress Avenue • Austin, Texas 78711-3231

Telephone (512) 463-7847 • Fax (512) 475-2053

1-800-RELAYTX (for the hearing impaired)

URL Address: <http://www.twdb.state.tx.us>

E-Mail Address: [info@twdb.state.tx.us](mailto:info@twdb.state.tx.us)

TNRIS - The Texas Information Gateway • [www.tnris.state.tx.us](http://www.tnris.state.tx.us)

A Member of the Texas Geographic Information Council (TGIC)



**ATTACHMENT 1**  
**TEXAS WATER DEVELOPMENT BOARD**  
**TWDB Contract No. 2002-483-434**

**TWDB COMMENTS ON THE DRAFT REGION H WATER PLANNING GROUP  
INFRASTRUCTURE FINANCING REPORT**

---

1. Please provide documentation of follow-up (minimum of two efforts) for Major Water Providers with Needs. Include date of contact, method of contact, person contacted, and name of Major Water Provider.
2. Please provide documentation of the process used for the responses for the County Aggregated Water Uses category.
3. Please provide documentation of follow-up (minimum of two efforts) for County-Other Water User Groups with Needs. Include date of contact, method of contact, person contacted, and name of political subdivision.
4. Please provide documentation of the process used for the responses for the County-Other Water User Groups with Needs category.
5. The following task effort under Task 1 of the scope of work was not completed: Prepare background information for the three future WUG's (the North Harris county Regional Water Authority, the West Harris County Regional Water Authority, and the Mid-Brazoria County Water Planning Group) and include them in the survey.

August 9, 2002

Texas Water Development Board  
Attn: Phyllis Thomas  
1700 N. Congress Avenue  
Austin, Texas 78711

Re: Addendum to Region H Infrastructure Financing Report

Ms. Thomas:

We have completed the infrastructure financing survey of the Major Water providers in Region H. The following additions and survey results are provided for addition to the Infrastructure Financing Report dated May 31, 2002.

#### **Addendum**

*The following paragraphs replace the final paragraph of Section 2.1:*

Surveys were sent to Regional Water Providers to address the needs of unincorporated municipal areas within their service areas. County governments in this region are not historically responsible for water supply, and therefore were not included in the survey. As pointed out in the survey responses, unincorporated municipal areas are served by numerous small retail water providers, which will bear the financial responsibility for constructing local infrastructure. The major water providers will construct transmission systems to serve those areas, and may also serve as project sponsors for regional facilities. The role of the major providers in these areas was best summarized by the TRA in their survey response: "Trinity River Authority develops water utility supply projects by entering into service contracts with potential water user entities. Funding in the amount of 100% of the capital cost is provided by the user, typically to re-pay for the issuance of Authority revenue bonds. Until a potential user contracts with the Authority to fund water utility development, no current utility revenue sources exist to fund a project's development. TRA usually serves as the vehicle for development based on the user's willingness and ability to fund."

Within Harris County, the new regional water authorities are working with the City of Houston to contract for wholesale water supply. The authorities will construct transmission systems from the City of Houston transmission points to the individual utility districts, phasing their construction over time to meet the ground to surface water conversion goals established by the Harris-Galveston Coastal Subsidence District. The regional authorities will appear as wholesale water providers in the 2006 Regional Water Plan.

Table 2-2 is replaced with the updated table below:

**Table 2-2: Summary of Survey Responses**

Category		No. of Entities	Total Estimated Infrastructure Cost (1999 \$)	Portion of Cost the Respondents are Unable to Pay (1999 \$)
Municipalities	Surveyed**	44	\$ 402,564,000	
	Responded*	20	\$ 183,379,000	\$ 93,780,000
Major Water Providers	Surveyed**	5	\$1,043,723,000	
	Responded*	4	\$674,115,000	\$460,932,000
County-Other***	Surveyed**	5	\$1,128,908,000	
	Responded*	4	\$1,010,739,600	\$756,578,900

\*\* Values represent entire user category

\* Values represent only responses received

\*\*\* County-Other areas included in MWP survey, grouped by service area

The following Section is added following Section 2.3:

### 2.3 Major Water Providers

The Major Water Providers in Region H were surveyed in reference to the recommended major water supply and transmission systems in the 2001 Region H Water Plan. Detailed responses could not be made for strategies projected for implementation beyond the year 2020, because the customer base does not currently exist to support these projects. The MWP's anticipate some need for state Participation in water supply projects sized to meet 50-year demand projections, since the planning and construction must precede the population growth they are intended to support. State Participation is being used for Allens Creek Reservoir, which is currently being developed by the City of Houston and the Brazos River Authority.

The MWP survey results are tabulated in Appendix A and the actual survey forms are included in Appendix B.

If you have any questions, please contact me at (713) 260-3222.

Sincerely,  
Kellogg Brown & Root, Inc.

Andrew A. Sterbenz  
Project Manager

Encl.

Table A1, Survey Results (replaces current table in Appendix A)

Table A3, Major Water Provider Survey Results (addition to Appendix A)

Table A4, Major Water Provider Contact log (addition to Appendix A)

Survey response from NHCRWA (addition to Appendix B)

Surveys received from Major Water Providers (addition to Appendix B)

## **Regional Water Authority – Telephonic Survey Record**

Entity: North Harris County Regional Water Authority  
POC: Mr. Ed Shackelford, General Manager  
Telephone: 281-440-3924  
Survey date: e-mail response on July 10, 2002

1. We do not have an infrastructure estimate prepared for your regional authority. As you develop your plan, what percentage do you expect to fund from user rates and taxes, and what percentage do you expect to get from state or external funding sources?

Response: The North Harris County Regional Water Authority is prepared to pay for the infrastructure at 100% if necessary. The estimated cost in today's dollars is \$585 million for the total conversion from groundwater to surface water excluding the cost of purchasing capacity from the City of Houston for the water. The water cost could easily push the grand total to just under \$1 billion. It would be great for the NCHRWA and its constituent utility districts/municipalities if lower interest loans from the market or grant (state or federal) monies were available, say to the percentage of 50%.

2. If you could access the state participation program, what percentage of infrastructure costs would you expect the state to provide? Under the state participation program, a portion of the facility would be owned by the state until the customer base grows enough to fully utilize the facility. The state is then repaid through revenues.

Response: The NCHRWA's master distribution system is sized to service portions of the boundary for certain dated milestones. Consequently, there is not a lot of oversizing anticipated in the phased construction. The oversizing that is anticipated is for the 2020 phased construction so that funds would not be needed until 2015 or so. Oversizing may account for 25% at the most of the 2020 conversion cost. That amount is 25% of \$375 million, approximately \$94 million in today's dollars.

## Regional Water Authority – Telephonic Survey Record

Entity: West Harris County Regional Water Authority  
POC: Mr. Dan Sallee, President  
Telephone: 713-961-8500  
Survey date: May 29, 2002

1. We do not have an infrastructure estimate prepared for your regional authority. As you develop your plan, what percentage do you expect to fund from user rates and taxes, and what percentage do you expect to get from state or external funding sources?

Summary of response: The WHCRWA is working on the assumption that local funding will be used to meet 100% of the infrastructure costs. The target user rate is currently \$0.95 per thousand gallons for all customers.

2. If you could access the state participation program, what percentage of infrastructure costs would you expect the state to provide? Under the state participation program, a portion of the facility would be owned by the state until the customer base grows enough to fully utilize the facility. The state is then repaid through revenues.

Summary of response: State participation for oversized facilities is not currently being considered as a funding option, but may be considered as oversized transmission lines are constructed from the Jersey Village Pump Station.

## Regional Water Authority – Telephonic Survey Record

Entity: Mid-Brazoria Regional Water Planning Group  
POC: Mr. Wayne Szabo, Alvin Director of Public Works  
Telephone: 281-388-4200  
Survey date: May 29, 2002

1. We do not have an infrastructure estimate prepared for your regional authority. As you develop your plan, what percentage do you expect to fund from user rates and taxes, and what percentage do you expect to get from state or external funding sources?

Summary of response: After the initial Mid-Brazoria RWPG Study completed by TC&B in 2001, the group became inactive. The two largest cities, Pearland and Angelton, fell out of the group to pursue independent management strategies.

The City of Alvin anticipates self-funding their internal infrastructure requirements, with possible assistance only coming from the TWDB loan programs. The City is planning a new well, which will provide increased GW capacity to meet their anticipated 2030 demands.

No regional water facility construction is anticipated for the MBRWPG. Alvin and the other Mid-Brazoria members are currently discussing participation in the GCWA regional plant.

2. If you could access the state participation program, what percentage of infrastructure costs would you expect the state to provide? Under the state participation program, a portion of the facility would be owned by the state until the customer base grows enough to fully utilize the facility. The state is then repaid through revenues.

Summary of response: State participation is not an anticipated need for the group at this time. If needed in the future, it is not expected that the state would fund more than 50% of a facility cost.











WUG NAME	WUG ID	WUG RWFG SEQ. ID	CITY ID	WUG COUNTY ID	WUG BASIN ID	WUGS NAME	WUGS TYPE	SO ID	SO NAME	CAP COST	Strategy Implementation	
COUNTY-OTHER	080996236	H	0096	0157	236	08	EXTEND EXISTING CONTRACT THROUGH 2050	4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030
COUNTY-OTHER	080996236	H	0096	0157	236	10	EXTEND EXISTING CONTRACT THROUGH 2050	4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030
COUNTY-OTHER	080996237	H	0096	0157	237	10	ALLENS CREEK RESERVOIR CONTRACT WITH BRA	4J1	12900	ALLENS CREEK LAKE/RESERVOIR	\$0.00	2030
COUNTY-OTHER	080996237	H	0096	0157	237	10	LITTLE RIVER RESERVOIR CONTRACTS WITH BRA	4J3	12770	LITTLE RIVER LAKE/RESERVOIR	\$0.00	2040
COUNTY-OTHER	080996237	H	0096	0157	237	10	MUNICIPAL CONSERVATION	4A1			\$0.00	2020
COUNTY-OTHER	080996237	H	0096	0157	237	10	NEW CONTRACTS	4E	12080	BRAZOS RIVER AUTHORITY SYSTEM	\$71,941,920.00	2020
COUNTY-OTHER	080996237	H	0096	0157	237	12	ALLENS CREEK RESERVOIR CONTRACT WITH BRA	4J1	12900	ALLENS CREEK LAKE/RESERVOIR	\$0.00	2030
COUNTY-OTHER	080996237	H	0096	0157	237	12	LITTLE RIVER RESERVOIR CONTRACTS WITH BRA	4J3	12770	LITTLE RIVER LAKE/RESERVOIR	\$0.00	2040
COUNTY-OTHER	080996237	H	0096	0157	237	12	MUNICIPAL CONSERVATION	4A1			\$0.00	2020
COUNTY-OTHER	080996237	H	0096	0157	237	12	NEW CONTRACTS	4E	12080	BRAZOS RIVER AUTHORITY SYSTEM	\$53,945,110.00	2020
BRAZOS RIVER COMBINED RUN-OF-RIVER	081001020	H	1001	1001	020	11	EXTEND EXISTING CONTRACT THROUGH 2050	4P	341201D	RIVER	\$0.00	2010
MANUFACTURING	081001020	H	1001	1001	020	12	ALLENS CREEK RESERVOIR CONTRACT WITH BRA	4J1	12900	ALLENS CREEK LAKE/RESERVOIR	\$157,300,000.00	2020
MANUFACTURING	081001020	H	1001	1001	020	12	EXTEND EXISTING CONTRACT THROUGH 2050	4P	12080	BRAZOS RIVER AUTHORITY SYSTEM	\$0.00	2040
MANUFACTURING	081001020	H	1001	1001	020	12	BY BASIN	4P	3461202366	BRAZOS RIVER RUN-OF-RIVER	\$0.00	2050
MANUFACTURING	081001020	H	1001	1001	020	12	LITTLE RIVER RESERVOIR CONTRACT WITH BRA	4J3	12770	LITTLE RIVER LAKE/RESERVOIR	\$361,065,000.00	2040
NEW CONTRACT - CONTRACTUAL TRANSFER OF SUPPLY	081001020	H	1001	1001	020	12	SAN JACINTO-BRAZOS RIVER RUN-SUPPLY	4E	3461196357A	OF-RIVER	\$0.00	2010
MANUFACTURING	081001020	H	1001	1001	020	12	NEW CONTRACTS	4E	12080	BRAZOS RIVER AUTHORITY SYSTEM	\$0.00	2010
MANUFACTURING	081001020	H	1001	1001	020	13	LITTLE RIVER RESERVOIR CONTRACT WITH BRA	4J3	12770	LITTLE RIVER LAKE/RESERVOIR	\$0.00	2040
MANUFACTURING	081001020	H	1001	1001	020	13	NEW CONTRACTS	4E	12080	BRAZOS RIVER AUTHORITY SYSTEM	\$0.00	2010
EXTEND EXISTING CONTRACT THROUGH 2050	081001020	H	1001	1001	020	09	EXTEND EXISTING CONTRACT THROUGH 2050	4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030
MANUFACTURING	081001020	H	1001	1001	020	09	BY BASIN	4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030
MANUFACTURING	081001020	H	1001	1001	020	10	LITTLE RIVER RESERVOIR CONTRACTS WITH BRA	4J3	12770	LITTLE RIVER LAKE/RESERVOIR	\$0.00	2050
MANUFACTURING	081001020	H	1001	1001	020	10	NEW CONTRACTS	4E	12080	BRAZOS RIVER AUTHORITY SYSTEM	\$0.00	2000
MANUFACTURING	081001020	H	1001	1001	020	11	ALLENS CREEK RESERVOIR CONTRACT WITH BRA	4J1	12900	ALLENS CREEK LAKE/RESERVOIR	\$0.00	2030
MANUFACTURING	081001020	H	1001	1001	020	11	LITTLE RIVER RESERVOIR CONTRACTS WITH BRA	4J3	12770	LITTLE RIVER LAKE/RESERVOIR	\$0.00	2040
MANUFACTURING	081001020	H	1001	1001	020	11	NEW CONTRACTS	4E	12080	BRAZOS RIVER AUTHORITY SYSTEM	\$0.00	2000
MANUFACTURING	081001020	H	1001	1001	020	11	CONSERVATION	4A2	38079	IRRIGATION CONSERVATION	\$0.00	2010
MANUFACTURING	081001020	H	1001	1001	020	12	NEW CONTRACTS	4E	12080	BRAZOS RIVER AUTHORITY SYSTEM	\$0.00	2000
MANUFACTURING	081001020	H	1001	1001	020	11	EXTEND EXISTING CONTRACT THROUGH 2050	4P	12080	BRAZOS RIVER AUTHORITY SYSTEM	\$0.00	2010
MANUFACTURING	081001020	H	1001	1001	020	11	EXTEND EXISTING CONTRACT THROUGH 2050	4P	346100454	SAN JACINTO RIVER RUN-OF-RIVER	\$0.00	2010
MANUFACTURING	081001020	H	1001	1001	020	11	LITTLE RIVER RESERVOIR CONTRACTS WITH GCWA	4J3	12770	LITTLE RIVER LAKE/RESERVOIR	\$0.00	2040
MANUFACTURING	081001020	H	1001	1001	020	11	NEW CONTRACTS WITH GCWA	4E	12080	BRAZOS RIVER AUTHORITY SYSTEM	\$0.00	2030
MANUFACTURING	081001020	H	1001	1001	020	11	NEW CONTRACTS WITH GCWA	4E	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2050
MANUFACTURING	081001020	H	1001	1001	020	09	BEDIAS RESERVOIR CONTRACT WITH SJRA	4J2	08270	BEDIAS LAKE/RESERVOIR	\$0.00	2030
MANUFACTURING	081001020	H	1001	1001	020	09	EXTEND EXISTING CONTRACT THROUGH 2050	4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030
MANUFACTURING	081001020	H	1001	1001	020	09	EXTEND EXISTING CONTRACT THROUGH 2050	4P	341080527B	TRINITY RIVER RUN-OF-RIVER	\$0.00	2020
MANUFACTURING	081001020	H	1001	1001	020	09	EXTEND EXISTING CONTRACTS THROUGH 2050	4P	346100494	SAN JACINTO RIVER RUN-OF-RIVER	\$0.00	2010
MANUFACTURING	081001020	H	1001	1001	020	09	NEW CONTRACTS WITH SJRA	4E	341080527B	TRINITY RIVER RUN-OF-RIVER	\$0.00	2010
MANUFACTURING	081001020	H	1001	1001	020	09	UNKNOWN	4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030
MANUFACTURING	081001020	H	1001	1001	020	10	EXTEND EXISTING CONTRACT THROUGH 2050	4P	10230	HOOJUSTON LAKE/RESERVOIR	\$0.00	2030

Please do not alter populated fields.

WUG_NAME	WUG_ID	WUG_RWPG	SEQ_ID	CITY_ID	WUG_COUNTY_ID	WUG_BASIN_ID	WMS_NAME	WMS_TYPE	SO_ID	SO_NAME	CAP_COST	Strategy Implementation Date
<b>Please do not alter populated fields.</b>												
MANUFACTURING	081001101	H	1001	1001	101	11	NEW CONTRACTS	4E	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030
RENEW EXISTING CONTRACT - WATER RATE	081001101	H	1001	1001	101	11	UNKNOWN	4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030
MANUFACTURING	081001170	H	1001	1001	170	10	NEW CONTRACTS WITH SJRA	4E	10060	CONROE LAKE/RESERVOIR	\$0.00	2010
STEAM ELECTRIC POWER	081002079	H	1002	1002	079	12	EXTEND EXISTING CONTRACT THROUGH 2050	4P	12080	BRAZOS RIVER AUTHORITY SYSTEM	\$0.00	2040
STEAM ELECTRIC POWER	081002101	H	1002	1002	101	10	EXTEND EXISTING CONTRACT THROUGH 2050	4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030
STEAM ELECTRIC POWER	081002101	H	1002	1002	101	10	EXTEND EXISTING CONTRACT THROUGH 2050	4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030
STEAM ELECTRIC POWER	081002101	H	1002	1002	101	11	NEW CONTRACT	4E	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2010
MINING	081003020	H	1003	1003	020	11	NEW CONTRACTS	4E	12080	BRAZOS RIVER AUTHORITY SYSTEM	\$0.00	2000
MINING	081003020	H	1003	1003	020	12	NEW CONTRACT	4E	12080	BRAZOS RIVER AUTHORITY SYSTEM	\$0.00	2020
MINING	081003020	H	1003	1003	020	13	LITTLE RIVER RESERVOIR CONTRACT WITH BRA	4J3	12770	LITTLE RIVER LAKE/RESERVOIR	\$0.00	2050
MINING	081003020	H	1003	1003	020	13	NEW CONTRACTS	4E	12080	BRAZOS RIVER AUTHORITY SYSTEM	\$0.00	2000
MINING	081003101	H	1003	1003	101	10	EXTEND EXISTING CONTRACT THROUGH 2050	4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030
MINING	081003101	H	1003	1003	101	11	NEW CONTRACT	4E	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2010
MINING	081003146	H	1003	1003	146	08	NEW CONTRACT WITH TRA	4E	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030
MINING	081003146	H	1003	1003	146	09	NEW CONTRACT WITH TRA	4E	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030
MINING	081003170	H	1003	1003	170	10	NEW CONTRACTS WITH SJRA	4E	10060	CONROE LAKE/RESERVOIR	\$0.00	2000
CONTRACTUAL TRANSFER - REDESIGNATE MFG	081004020	H	1004	1004	SAN JACINTO-BRAZOS RIVER RUN-020	11	SUPPLY AS IRR (CONJ W/CONSER)	4E	3461105357A	OF RIVER	\$0.00	2020
IRRIGATION	081004020	H	1004	1004	020	11	EXTEND EXISTING CONTRACT THROUGH 2050	4P	3461205322B	BRAZOS RIVER RUN-OF-RIVER	\$0.00	2030
IRRIGATION	081004020	H	1004	1004	020	11	IRRIGATION CONSERVATION	4A2	38020	IRRIGATION CONSERVATION	\$186,300.00	2010
IRRIGATION	081004020	H	1004	1004	020	11	NEW CONTRACTS	4E	12080	BRAZOS RIVER AUTHORITY SYSTEM	\$0.00	2000
CONTRACTUAL TRANSFER - REDESIGNATE MFG	081004020	H	1004	1004	SAN JACINTO-BRAZOS RIVER RUN-020	12	SUPPLY AS IRR (CONJ W/CONSER)	4E	3461105357A	OF RIVER	\$0.00	2020
IRRIGATION	081004020	H	1004	1004	020	12	IRRIGATION CONSERVATION	4A2	38020	IRRIGATION CONSERVATION	\$7,400.00	2010
IRRIGATION	081004020	H	1004	1004	020	13	IRRIGATION CONSERVATION	4A2	38020	IRRIGATION CONSERVATION	\$9,300.00	2010
IRRIGATION	081004020	H	1004	1004	020	13	NEW CONTRACTS	4E	12080	BRAZOS RIVER AUTHORITY SYSTEM	\$0.00	2000
IRRIGATION	081004079	H	1004	1004	079	10	IRRIGATION CONSERVATION	4A2	38079	IRRIGATION CONSERVATION	\$80,700.00	2020
IRRIGATION	081004079	H	1004	1004	079	12	IRRIGATION CONSERVATION	4A2	38079	IRRIGATION CONSERVATION	\$186,300.00	2020
IRRIGATION	081004237	H	1004	1004	237	10	IRRIGATION CONSERVATION	4A2	38237	IRRIGATION CONSERVATION	\$0.00	2010
IRRIGATION	081004237	H	1004	1004	237	10	LITTLE RIVER RESERVOIR CONTRACTS WITH BRA	4J3	12770	LITTLE RIVER LAKE/RESERVOIR	\$0.00	2050
IRRIGATION	081004237	H	1004	1004	237	10	NEW CONTRACT	4E	12080	BRAZOS RIVER AUTHORITY SYSTEM	\$0.00	2000



VEY RESULTS

TABLE A1: SUF

How much can PWSG afford from current utility revenue?	WMS NAME	Accession Number	WMS ID	WMS TYPE	WMS COUNTY ID	WMS BASIN	WMS NAME	Contact	WMS TYPE	SO ID Title	SO NAME	Telephone	CAP COST	Emergency Implementation Date
Program, how much can P.S. afford														
unable to pay for WMS?														
re: Please do not take populated fields?														
	FRIENDSWOOD	080315000	H	0315	0217	080	13	RENEW CURRENT CONTRACT		4P	3461205366	BRAZOS RIVER RUN-OF-RIVER	\$0.00	2050
	FRIENDSWOOD	080317000	H	0317	0219	084	11	2050/GALVESTON & HARRIS CO1		4E	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2000
	FRIENDSWOOD	080317000	H	0317	0219	084	11	CONTRACT(2001.1.5 MGD) EXTENDS THRU 2050		4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2010
	FRIENDSWOOD	080317000	H	0317	0219	101	11	CONTRACT(2001.1.5 MGD) EXTENDS THRU 2050	Mayor / Dir. Admin	4E	08400	LIVINGSTON LAKE/RESERVOIR	\$4,584,000.00	2020
	FRIENDSWOOD	080317000	H	0317	0219	101	11	CONTRACT(2001.1.5 MGD) EXTENDS THRU 2050		4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2010
	FULSHEAR	080323000	H	0323	0869	079	11	MUNICIPAL CONSERVATION	Provider is Brazos River Authority	4A1			\$0.00	2020
	FULSHEAR	080323000	H	0323	0869	079	11	NEW CONTRACTS	Michael Dinges	4E	Mayor 12080	BRAZOS RIVER AUTHORITY SYSTEM	\$4,384,000.00	2030
	FULSHEAR	080323000	H	0323	0869	079	12	NEW CONTRACTS		4E	12080	BRAZOS RIVER AUTHORITY SYSTEM	\$0.00	2020
	GALENA PARK	080328000	H	0328	0226	101	10	INCREASE EXISTING CONTRACT		4E	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2000
	GALENA PARK	080328000	H	0328	0226	101	10	RENEW CURRENT CONTRACT		4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030
	GALENA PARK	080328000	H	0328	0226	101	10	RENEW CURRENT CONTRACT	City if working a reclaim unaccounted for water (30-40%) due to leak in system in part of Little	4E	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030
	HEDWIG VILLAGE	080391000	H	0391	0269	101	10	INCREASE EXISTING CONTRACT	Asst. City Manager	4E	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2010
	HEDWIG VILLAGE	080391000	H	0391	0269	101	10	RENEW CURRENT CONTRACT	Provider is Brazos River Authority	4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030
	HEMPSTEAD	080394000	H	0394	0271	287	12	ALLENS CREEK RESERVOIR CONTRACTS WITH BRA		4J1	Mayor 12900	ALLENS CREEK LAKE/RESERVOIR	\$7,341,000.00	2030
	HEMPSTEAD	080394000	H	0394	0271	287	12	LITTLE RIVER RESERVOIR CONTRACTS WITH BRA		4J3	12770	LITTLE RIVER LAKE/RESERVOIR	\$0.00	2040
	HEMPSTEAD	080394000	H	0394	0271	287	12	MUNICIPAL CONSERVATION		4A1			\$0.00	2030
	HIGHLANDS	080404000	H	0404	0277	101	09	INCREASE EXISTING CONTRACT		4E	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2010
	HIGHLANDS	080404000	H	0404	0277	101	09	RENEW CURRENT CONTRACT	Provider is Baytown Area Water Authority, from City of Houston	4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030
	HIGHLANDS	080404000	H	0404	0277	101	10	INCREASE EXISTING CONTRACT	Provider is Baytown Area Water Authority, from City of Houston	4E	08400	LIVINGSTON LAKE/RESERVOIR	\$1,271,000.00	2010
	HIGHLANDS	080404000	H	0404	0277	101	10	RENEW CURRENT CONTRACT	Provider is Gulf Coast Water Authority, from Brazos River Authority	4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030
	HITCHCOCK	080408000	H	0408	0289	101	10	CONTRACT TO 471 ACFTYR LARG	Mayor	4E	12080	BRAZOS RIVER AUTHORITY SYSTEM	\$5,326,000.00	2000
	HUMBLE	080424000	H	0424	0289	101	10	MUNICIPAL CONSERVATION	Provider is City of Houston	4A1			\$0.00	2010
	HUMBLE	080424000	H	0424	0289	101	10	NEW CONTRACT WITH HOUSTON	Mayor	4E	Mayor 08400	LIVINGSTON LAKE/RESERVOIR	\$3,288,000.00	2010
	HUNTERS CREEK VILLAGE	080425000	H	0425	0290	101	10	INCREASE EXISTING CONTRACT		4E	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2010
	HUNTERS CREEK VILLAGE	080425000	H	0425	0290	101	10	RENEW CURRENT CONTRACT	Provider is Trinity River Authority	4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030
	HUNTSVILLE	080427000	H	0427	0292	286	08	BETWEEN BASINS(209 AC FTYR)	Mayor / Bill Doggett	4P	Mayor 08400	LIVINGSTON LAKE/RESERVOIR / 936-294-5700	\$3,400,000.00	2030
	HUNTSVILLE	080427000	H	0427	0292	286	10	BY BASIN (9,209AC FTYR)	Provider is City of Houston	4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030
	JACINTO CITY	080440000	H	0440	0301	101	10	INCREASE EXISTING CONTRACT	Mayor Jackson	4E	Mayor 08400	LIVINGSTON LAKE/RESERVOIR	\$876,000.00	2000
	JACINTO CITY	080440000	H	0440	0301	101	10	RENEW CURRENT CONTRACT		4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030
	JERSEY VILLAGE	080447000	H	0447	0709	101	10	MUNICIPAL CONSERVATION		4A1			\$0.00	2010
	JERSEY VILLAGE	080447000	H	N/A	0709	N/A	10	NEW CONTRACT WITH HOUSTON	Mayor / Rod Haines	4E	Mayor 08400	LIVINGSTON LAKE/RESERVOIR / 713-466-2400	\$45,000.00	2010
	KATY	080458000	H	0458	0312	079	10	MUNICIPAL CONSERVATION		4A1			\$0.00	2020
	KATY	080458000	H	0458	0312	079	10	NEW CONTRACTS		4E	12080	BRAZOS RIVER AUTHORITY SYSTEM	\$0.00	2010
	KATY	080458000	H	0458	0312	101	10	ALLENS CREEK RESERVOIR CONTRACTS WITH BRA		4J1	12900	ALLENS CREEK LAKE/RESERVOIR	\$0.00	2030
	KATY	080458000	H	0458	0312	101	10	MUNICIPAL CONSERVATION	Provider is Brazos River Authority	4A1			\$0.00	2020
	KATY	080458000	H	0458	0312	101	10	NEW CONTRACTS	Mayor / Johnny Neal	4E	Mayor 12080	BRAZOS RIVER AUTHORITY SYSTEM	\$25,388,000.00	2010
	KATY	080458000	H	0458	0312	287	10	MUNICIPAL CONSERVATION		4A1			\$0.00	2020
	KATY	080458000	H	0458	0312	287	10	NEW CONTRACT	Provider is Gulf Coast Water Authority, from Brazos River Authority	4E	12080	BRAZOS RIVER AUTHORITY SYSTEM	\$0.00	2020
	LA MARQUE	080488000	H	0488	0346	11	11	TO 275 ACFTYR LARG	Mayor	4E	12080	BRAZOS RIVER AUTHORITY SYSTEM	\$1,173,000.00	2030
	LA PORTE	080489000	H	0489	0346	101	11	UNTIL 2001 FACILITY EXPANSION	Provider is City of Houston	4E	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2000

How much can PWDG afford from current utility revenue?	WUG NAME	Accession Number	WUG ID	WUG COUNTY	WUG BASIN	WUG COUNTY ID	WUG BASIN	WUG NAME	Contact	WUG TYPE	SO ID	SO NAME	Telephone	CAP	COST	Strategy
Program, how much can P.S. afford																Implementation
unable to pay for WMS?																Date
new Release do not take populated fields?																
	MISSION BEND	080602000	H	0602	0917	079	11	NEW CONTRACT WITH HOUSTON		4E	08400	LIVINGSTON LAKE/RESERVOIR		\$0.00		2010
	MISSION BEND	080602000	H	0602	0917	101	10	MUNICIPAL CONSERVATION		4A1				\$0.00		2010
	MISSION BEND	080602000	H	0602	0917	101	10	NEW CONTRACT WITH HOUSTON		4E	08400	LIVINGSTON LAKE/RESERVOIR		\$1,485,000.00		2010
	EXTEND EXISTING CONTRACT THROUGH 2050 - SPLIT MISSOURI CITY	080603000	H	0603	0409	079	10	BRAZOS RIVER COMBINED RUN-OF-BY BASIN (135 AC-FT/YR)		4P	3412010	RIVER		\$0.00		2010
	MISSOURI CITY	080603000	H	0603	0409	079	10	INCREASE EXISTING CONTRACT		4E	12060	BRAZOS RIVER AUTHORITY SYSTEM		\$0.00		2030
	MISSOURI CITY	080603000	H	0603	0409	079	10	BRAZOS RIVER COMBINED RUN-OF		4P	3412010	RIVER		\$0.00		2010
	EXTEND EXISTING CONTRACT THROUGH 2050 - SPLIT MISSOURI CITY	080603000	H	0603	0409	079	11	BRAZOS RIVER COMBINED RUN-OF BY BASIN (135 AC-FT/YR)		4P	3412010	RIVER		\$0.00		2010
	MISSOURI CITY	080603000	H	0603	0409	079	11	Provider is Gulf Coast Water Authority		4E	12060	BRAZOS RIVER AUTHORITY SYSTEM	281-438-286	\$96,000.00		2030
	MISSOURI CITY	080603000	H	0603	0409	079	11	INCREASE EXISTING CONTRACT	Mark Owen / Lee Dorger	4E	12060	BRAZOS RIVER AUTHORITY SYSTEM	281-438-286	\$96,000.00		2030
	MISSOURI CITY	080603000	H	0603	0409	079	11	BRAZOS RIVER COMBINED RUN-OF		4P	3412010	RIVER		\$0.00		2010
	EXTEND EXISTING CONTRACT THROUGH 2050 - SPLIT MISSOURI CITY	080603000	H	0603	0409	101	10	BRAZOS RIVER COMBINED RUN-OF ACFT/YR-HARRIS CO PORTION		4P	3412010	RIVER		\$0.00		2010
	FACILITY EXPANSION INCREASES SE NASSAU BAY	080623000	H	0623	0424	101	11	CONTRACT 2001 0.95 MGD EXTENDS THRU 2050		4E	08400	LIVINGSTON LAKE/RESERVOIR		\$0.00		2010
	NEEDVILLE	080627000	H	0627	0428	079	12	MUNICIPAL CONSERVATION		4A1				\$0.00		2020
	SUPPLY REALIZED THROUGH IRRIGATION NEEDVILLE	080627000	H	0627	0428	079	12	CONSERVATION		4A2	38079	IRRIGATION CONSERVATION		\$0.00		2020
	NEEDVILLE	080627000	H	0627	0428	079	13	MUNICIPAL CONSERVATION		4A1				\$0.00		2020
	SUPPLY REALIZED THROUGH IRRIGATION NEEDVILLE	080627000	H	0627	0428	079	13	CONSERVATION		4A2	38079	IRRIGATION CONSERVATION		\$0.00		2020
	OAK RIDGE NORTH	080649000	H	0649	0726	170	10	MUNICIPAL CONSERVATION		4A1				\$0.00		2020
	OAK RIDGE NORTH	080649000	H	0649	0726	170	10	NEW CONTRACT		4E	10090	CONROE LAKE/RESERVOIR		\$1,680,000.00		2020
	OYSTER CREEK	080664000	H	0664	0730	020	11	INCREASE EXISTING CONTRACT		4E	3461205366	BRAZOS RIVER RUN-OF-RIVER		\$0.00		2010
	OYSTER CREEK	080664000	H	0664	0730	020	11	RENEW CURRENT CONTRACT		4P	3461205366	BRAZOS RIVER RUN-OF-RIVER		\$0.00		2050
	PANORAMA VILLAGE	080676000	H	0676	0732	170	10	MUNICIPAL CONSERVATION		4A1				\$0.00		2020
	PANORAMA VILLAGE	080676000	H	0676	0732	170	10	NEW CONTRACT		4E	10060	CONROE LAKE/RESERVOIR		\$6,883,000.00		2020
	EXISTING CONTRACT INCREASES BY PASADENA	080680000	H	0680	0456	101	10	UNTIL 2001 FACILITY EXPANSION		4E	08400	LIVINGSTON LAKE/RESERVOIR		\$0.00		2000
	EXTEND CONTRACT 2001 FACILITY EXPANSION PASADENA	080680000	H	0680	0456	101	10	INCREASES SE CONTRACT THROUGH 2050-HARRIS		4P	08400	LIVINGSTON LAKE/RESERVOIR		\$0.00		2010
	FACILITY EXPANSION INCREASES SE PASADENA	080680000	H	0680	0456	101	10	CONTRACT CLEAR LAKE WA 11.85MGD TO 2050		4P	08400	LIVINGSTON LAKE/RESERVOIR		\$5,578,000.00		2010
	FACILITY EXPANSION INCREASES SE PASADENA	080680000	H	0680	0456	101	11	CONTRACT CLEAR LAKE WA 11.85MGD TO 2050		4P	08400	LIVINGSTON LAKE/RESERVOIR		\$0.00		2010
	EXTEND CONTRACT 2001 FACILITY EXPANSION PASADENA	080680000	H	0680	0456	101	11	INCREASES SE CONTRACT 7.5 MGD		4P	08400	LIVINGSTON LAKE/RESERVOIR		\$0.00		2010
	PEARLAND	080684000	H	0684	0457	101	11	BRAZOS RIVER COMBINED RUN-OF		4P	3412010	RIVER		\$2,320,000.00		2020
	PEARLAND	080684000	H	0684	0457	101	11	EXTEND EXISTING CONTRACT THROUGH 2050-HARRIS AND BRAZORIA SPLIT (10 MGD)		4P	3412010	RIVER		\$2,320,000.00		2020
	INCREASE EXISTING CONTRACT BY PINEY POINT VILLAGE	080700000	H	0700	0468	101	10	AND EXTEND THROUGH 2050		4E	08400	LIVINGSTON LAKE/RESERVOIR		\$0.00		2010
	PINEY POINT VILLAGE	080700000	H	0700	0468	101	10	RENEW CURRENT CONTRACT		4P	08400	LIVINGSTON LAKE/RESERVOIR		\$0.00		2030
	PRAIRIE VIEW	080720000	H	0720	0485	287	12	ALLENS CREEK RESERVOIR CONTRACTS WITH BRA		4J1	12900	ALLENS CREEK LAKE/RESERVOIR		\$10,754,000.00		2030
	PRAIRIE VIEW	080720000	H	0720	0485	287	12	LITTLE RIVER RESERVOIR CONTRACTS WITH BRA		4J3	12770	LITTLE RIVER LAKE/RESERVOIR		\$0.00		2040
	PRAIRIE VIEW	080720000	H	0720	0485	287	12	MUNICIPAL CONSERVATION		4A1				\$0.00		2030
	RICHMOND	080749000	H	0749	0500	079	12	ALLENS CREEK RESERVOIR CONTRACT WITH BRA		4J1	12900	ALLENS CREEK LAKE/RESERVOIR		\$0.00		2030
	RICHMOND	080749000	H	0749	0500	079	12	LITTLE RIVER RESERVOIR CONTRACTS WITH BRA		4J3	12770	LITTLE RIVER LAKE/RESERVOIR		\$0.00		2050
	RICHMOND	080749000	H	0749	0500	079	12	MUNICIPAL CONSERVATION		4A1				\$0.00		2020
	RICHWOOD, N/A	080750000	H	0750	0501	020	11	NEW CONTRACT	Hilmar G. Moore	4E	12090	BRAZOS RIVER AUTHORITY SYSTEM		\$15,232,000.00		2020
	RICHWOOD, N/A	080750000	H	0750	0501	020	11	RENEW CURRENT CONTRACT		4E	3461205366	BRAZOS RIVER RUN-OF-RIVER		\$4,333,000.00		2010
	RICHWOOD, N/A	080750000	H	0750	0501	020	11	RENEW CURRENT CONTRACT		4P	3461205366	BRAZOS RIVER RUN-OF-RIVER		\$0.00		2050



TABLE AT: SUF

WUGS_NAME	WUGS_ID	WUGS_RWPG_SEQ_ID	CITY_ID	WUGS_COUNTY_ID	WUGS_BASIN_ID	WUGS_NAME	WUGS_TYPE	SO_ID	SO_NAME	CAP_COST	Strategy Implementation
Please do not alter populated fields.											
COUNTY-OTHER	080996079	H	079	12		LITTLE RIVER RESERVOIR CONTRACTS WITH BRA	4J3	12770	LITTLE RIVER LAKE/RESERVOIR	\$0.00	2040
COUNTY-OTHER	080996079	H	079	12		MUNICIPAL CONSERVATION	4A1			\$0.00	2010
COUNTY-OTHER	080996079	H	079	12		NEW CONTRACTS	4E	12080	BRAZOS RIVER AUTHORITY SYSTEM	\$140,524,428.00	2010
COUNTY-OTHER	080996079	H	079	13		ALLENS CREEK RESERVOIR CONTRACT WITH BRA	4J1	12900	ALLENS CREEK LAKE/RESERVOIR	\$0.00	2030
COUNTY-OTHER	080996079	H	079	13		EXTEND EXISTING CONTRACT THROUGH 2050	4P	3412010	RIVER	\$0.00	2010
COUNTY-OTHER	080996079	H	079	13		MUNICIPAL CONSERVATION	4A1			\$0.00	2010
COUNTY-OTHER	080996079	H	079	13		NEW CONTRACTS	4E	12090	BRAZOS RIVER AUTHORITY SYSTEM	\$26,389,077.00	2040
COUNTY-OTHER	080996084	H	084	07		MUNICIPAL CONSERVATION	4A1			\$0.00	2000
COUNTY-OTHER	080996084	H	084	07		NEW CONTRACTS WITH GCWA	4E	12080	BRAZOS RIVER AUTHORITY SYSTEM	\$315,960.00	2000
COUNTY-OTHER	080996084	H	084	11		MUNICIPAL CONSERVATION	4A1			\$0.00	2030
COUNTY-OTHER	080996084	H	084	11		NEW CONTRACTS WITH GCWA	4E	12090	BRAZOS RIVER AUTHORITY SYSTEM	\$800,508.00	2030
COUNTY-OTHER	080996101	H	101	09		EXTEND EXISTING CONTRACT THROUGH 2050	4P	10030	HOUSTON LAKE/RESERVOIR	\$0.00	2010
COUNTY-OTHER	080996101	H	101	09		EXTEND EXISTING CONTRACT THROUGH 2050	4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030
COUNTY-OTHER	080996101	H	101	09		EXTEND EXISTING CONTRACT THROUGH 2050	4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030
COUNTY-OTHER	080996101	H	101	09		EXTEND EXISTING CONTRACT THROUGH 2050	4P	3461004964	SAN JACINTO RIVER RUN-OF-RIVER	\$0.00	2040
COUNTY-OTHER	080996101	H	101	09		EXTEND EXISTING CONTRACT THROUGH 2050	4P	3412010	RIVER	\$0.00	2010
COUNTY-OTHER	080996101	H	101	09		MUNICIPAL CONSERVATION	4A1			\$0.00	2010
COUNTY-OTHER	080996101	H	101	09		NEW CONTRACTS WITH SJRA	4E	10080	CONROE LAKE/RESERVOIR	\$26,303,868.00	2010
COUNTY-OTHER	080996101	H	101	09		RENEW CURRENT CONTRACT	4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030
COUNTY-OTHER	080996101	H	101	10		BEDIAS RESERVOIR CONTRACTS WITH SJRA	4J2	08270	BEDIAS LAKE/RESERVOIR	\$78,809,712.00	2030
COUNTY-OTHER	080996101	H	101	10		EXTEND EXISTING CONTRACT THROUGH 2050	4P	3412010	RIVER	\$0.00	2010
COUNTY-OTHER	080996101	H	101	10		EXTEND EXISTING CONTRACT THROUGH 2050	4P	10030	HOUSTON LAKE/RESERVOIR	\$0.00	2030
COUNTY-OTHER	080996101	H	101	10		EXTEND EXISTING CONTRACT THROUGH 2050	4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2010
COUNTY-OTHER	080996101	H	101	10		EXTEND EXISTING CONTRACT THROUGH 2050	4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030
COUNTY-OTHER	080996101	H	101	10		EXTEND EXISTING CONTRACT THROUGH 2050	4P	3461004964	SAN JACINTO RIVER RUN-OF-RIVER	\$0.00	2040
COUNTY-OTHER	080996101	H	101	10		MUNICIPAL CONSERVATION	4A1			\$0.00	2010
COUNTY-OTHER	080996101	H	101	10		NEW CONTRACTS WITH HOUSTON	4E	08400	LIVINGSTON LAKE/RESERVOIR	\$26,866,736.00	2010
COUNTY-OTHER	080996101	H	101	10		NEW CONTRACTS WITH SJRA	4E	3410862718	TRINITY RIVER RUN-OF-RIVER	\$0.00	2010
COUNTY-OTHER	080996101	H	101	10		RENEW CURRENT CONTRACT	4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030
COUNTY-OTHER	080996101	H	101	11		EXTEND EXISTING CONTRACT THROUGH 2050	4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2010
COUNTY-OTHER	080996101	H	101	11		EXTEND EXISTING CONTRACT THROUGH 2050	4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030
COUNTY-OTHER	080996101	H	101	11		EXTEND EXISTING CONTRACT THROUGH 2050	4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030
COUNTY-OTHER	080996101	H	101	11		EXTEND EXISTING CONTRACT THROUGH 2050	4P	10030	HOUSTON LAKE/RESERVOIR	\$0.00	2030
COUNTY-OTHER	080996101	H	101	11		EXTEND EXISTING CONTRACT THROUGH 2050	4P	3412010	RIVER	\$0.00	2010
COUNTY-OTHER	080996101	H	101	11		EXTEND EXISTING CONTRACT THROUGH 2050	4P	3461004964	SAN JACINTO RIVER RUN-OF-RIVER	\$0.00	2040
COUNTY-OTHER	080996101	H	101	11		MUNICIPAL CONSERVATION	4A1			\$0.00	2010
COUNTY-OTHER	080996101	H	101	11		NEW CONTRACTS WITH HOUSTON	4E	08400	LIVINGSTON LAKE/RESERVOIR	\$89,362,079.00	2010
COUNTY-OTHER	080996101	H	101	11		RENEW CURRENT CONTRACT	4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030
COUNTY-OTHER	080996146	H	146	06		MUNICIPAL CONSERVATION	4A1			\$0.00	2030
COUNTY-OTHER	080996146	H	146	06		NEW CONTRACT WITH TRA	4E	08400	LIVINGSTON LAKE/RESERVOIR	\$342,807.00	2030
COUNTY-OTHER	080996146	H	146	07		NEW CONTRACT WITH TRA	4E	08400	LIVINGSTON LAKE/RESERVOIR	\$36,231.00	2030

TABLE A1: SUF

WUG NAME	WUG ID	WUG RWPS	SEQ ID	CITY ID	WUG COUNTY ID	WUG BASIN ID	WUGS NAME	WUGS TYPE	SG_ID	SG_NAME	CAP_COST	Strategy Implementation
COUNTY-OTHER	080996226	H	0898	0757	236	08	EXTEND EXISTING CONTRACT THROUGH 2050	4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030
COUNTY-OTHER	080996236	H	0899	0757	236	10	EXTEND EXISTING CONTRACT THROUGH 2050	4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030
COUNTY-OTHER	080996237	H	0946	0757	237	10	ALLENS CREEK RESERVOIR CONTRACT WITH BRA	4I	12600	ALLENS CREEK LAKE/RESERVOIR	\$0.00	2030
COUNTY-OTHER	080996237	H	0898	0757	237	10	LITTLE RIVER RESERVOIR CONTRACTS WITH BRA	4I	12770	LITTLE RIVER LAKE/RESERVOIR	\$0.00	2040
COUNTY-OTHER	080996237	H	0899	0757	237	10	MUNICIPAL CONSERVATION	441			\$0.00	2020
COUNTY-OTHER	080996237	H	0898	0757	237	10	NEW CONTRACTS	4E	12680	BRAZOS RIVER AUTHORITY SYSTEM	\$21.94	2020
COUNTY-OTHER	080996237	H	0899	0757	237	12	ALLENS CREEK RESERVOIR CONTRACT WITH BRA	4I	12600	ALLENS CREEK LAKE/RESERVOIR	\$0.00	2030
COUNTY-OTHER	080996237	H	0898	0757	237	12	LITTLE RIVER RESERVOIR CONTRACTS WITH BRA	4I	12770	LITTLE RIVER LAKE/RESERVOIR	\$0.00	2040
COUNTY-OTHER	080996237	H	0899	0757	237	12	MUNICIPAL CONSERVATION	441			\$0.00	2020
COUNTY-OTHER	080996237	H	0898	0757	237	12	NEW CONTRACTS	4E	12680	BRAZOS RIVER AUTHORITY SYSTEM	\$59.845	2020
BRAZOS RIVER COMBINED RUN-OFF MANUFACTURING	081001020	H	1001	1001	020	11	EXTEND EXISTING CONTRACT THROUGH 2050	4P	3412010	RIVER	\$0.00	2010
MANUFACTURING	081001020	H	1001	1001	020	12	ALLENS CREEK RESERVOIR CONTRACT WITH BRA	4I	12600	ALLENS CREEK LAKE/RESERVOIR	\$157.200	2020
MANUFACTURING	081001020	H	1001	1001	020	12	EXTEND EXISTING CONTRACT THROUGH 2050	4P			\$0.00	2030
MANUFACTURING	081001020	H	1001	1001	020	12	BY BASIN	4P	3461206366	BRAZOS RIVER RUN-OF-RIVER	\$0.00	2050
MANUFACTURING	081001020	H	1001	1001	020	12	LITTLE RIVER RESERVOIR CONTRACT WITH BRA	4I	12770	LITTLE RIVER LAKE/RESERVOIR	\$381.065	2040
NEW CONTRACT - CONTRACTUAL TRANSFER OF MANUFACTURING	081001020	H	1001	1001	020	12	SAN JACINTO BRAZOS RIVER SUPPLY	4E	3461106357A	OF RIVER	\$0.00	2010
MANUFACTURING	081001020	H	1001	1001	020	12	NEW CONTRACTS	4E	12680	BRAZOS RIVER AUTHORITY SYSTEM	\$0.00	2010
MANUFACTURING	081001020	H	1001	1001	020	13	LITTLE RIVER RESERVOIR CONTRACT WITH BRA	4I	12770	LITTLE RIVER LAKE/RESERVOIR	\$0.00	2040
MANUFACTURING	081001020	H	1001	1001	020	13	NEW CONTRACTS	4E	12680	BRAZOS RIVER AUTHORITY SYSTEM	\$0.00	2010
EXTEND EXISTING CONTRACT THROUGH 2066 SUPPLY MANUFACTURING	081001020	H	1001	1001	020	09	EXTEND EXISTING CONTRACT THROUGH 2050	4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030
MANUFACTURING	081001020	H	1001	1001	020	09	BY BASIN	4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030
MANUFACTURING	081001020	H	1001	1001	079	10	LITTLE RIVER RESERVOIR CONTRACTS WITH BRA	4I	12770	LITTLE RIVER LAKE/RESERVOIR	\$0.00	2050
MANUFACTURING	081001020	H	1001	1001	079	10	NEW CONTRACTS	4E	12680	BRAZOS RIVER AUTHORITY SYSTEM	\$0.00	2000
MANUFACTURING	081001020	H	1001	1001	079	11	ALLENS CREEK RESERVOIR CONTRACT WITH BRA	4I	12600	ALLENS CREEK LAKE/RESERVOIR	\$0.00	2030
MANUFACTURING	081001020	H	1001	1001	079	11	LITTLE RIVER RESERVOIR CONTRACTS WITH BRA	4I	12770	LITTLE RIVER LAKE/RESERVOIR	\$0.00	2040
MANUFACTURING	081001020	H	1001	1001	079	11	NEW CONTRACTS	4E	12680	BRAZOS RIVER AUTHORITY SYSTEM	\$0.00	2000
SUPPLY REALIZED THROUGH IRRIGATION MANUFACTURING	081001020	H	1001	1001	079	11	CONSERVATION	442	34079	IRRIGATION CONSERVATION	\$0.00	2010
MANUFACTURING	081001020	H	1001	1001	079	12	NEW CONTRACTS	4E	12680	BRAZOS RIVER AUTHORITY SYSTEM	\$0.00	2000
MANUFACTURING	081001020	H	1001	1001	084	11	EXTEND EXISTING CONTRACT THROUGH 2050	4P	12680	BRAZOS RIVER AUTHORITY SYSTEM	\$0.00	2010
MANUFACTURING	081001084	H	1001	1001	084	11	EXTEND EXISTING CONTRACT THROUGH 2050	4P	3461004964	SAN JACINTO RIVER RUN-OF-RIVER	\$0.00	2010
MANUFACTURING	081001084	H	1001	1001	084	11	LITTLE RIVER RESERVOIR CONTRACTS WITH GCWA	4I	12770	LITTLE RIVER LAKE/RESERVOIR	\$0.00	2040
MANUFACTURING	081001084	H	1001	1001	084	11	NEW CONTRACTS WITH GCWA	4E	12680	BRAZOS RIVER AUTHORITY SYSTEM	\$0.00	2000
MANUFACTURING	081001084	H	1001	1001	084	11	NEW CONTRACTS WITH GCWA	4E	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030
MANUFACTURING	081001084	H	1001	1001	084	11	BEDIAS RESERVOIR CONTRACTS WITH SURA	4I	08270	BEDIAS LAKE/RESERVOIR	\$0.00	2030
MANUFACTURING	081001101	H	1001	1001	101	09	EXTEND EXISTING CONTRACT THROUGH 2050	4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030
MANUFACTURING	081001101	H	1001	1001	101	09	EXTEND EXISTING CONTRACT THROUGH 2050	4P	3410809218	TRINITY RIVER RUN-OF-RIVER	\$0.00	2020
MANUFACTURING	081001101	H	1001	1001	101	09	EXTEND EXISTING CONTRACTS THROUGH 2050	4P	3461004964	SAN JACINTO RIVER RUN-OF-RIVER	\$0.00	2010
MANUFACTURING	081001101	H	1001	1001	101	08	NEW CONTRACTS WITH SURA	4E	3410809218	TRINITY RIVER RUN-OF-RIVER	\$0.00	2010
NEW EXISTING CONTRACT - WATER RATE MANUFACTURING	081001101	H	1001	1001	101	09	UNKNOWN	4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030
MANUFACTURING	081001101	H	1001	1001	101	10	EXTEND EXISTING CONTRACT THROUGH 2050	4P	10070	HOUSTON LAKE/RESERVOIR	\$0.00	2030

Please do not alter populated fields.

TABLE A1: SUF

	WUG NAME	WUG ID	WUG RWPG	SEQ ID	CITY ID	WUG COUNTY ID	WUG BASIN ID	WMS NAME	WMS TYPE	SO ID	SO NAME	CAP_COST	Strategy Implementation Date
	Please do not alter populated fields.												
	MANUFACTURING	081001101	H	1001	1001	101	11	NEW CONTRACTS	4E	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030
RENEW	EXISTING CONTRACT - WATER RATE	081001101	H	1001	1001	101	11	UNKNOWN	4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030
	MANUFACTURING	081001170	H	1001	1001	170	10	NEW CONTRACTS WITH SJRA	4E	10060	CONROE LAKE/RESERVOIR	\$0.00	2010
	STEAM ELECTRIC POWER	081002079	H	1002	1002	079	12	EXTEND EXISTING CONTRACT THROUGH 2050	4P	12080	BRAZOS RIVER AUTHORITY SYSTEM	\$0.00	2040
	STEAM ELECTRIC POWER	081002101	H	1002	1002	101	10	EXTEND EXISTING CONTRACT THROUGH 2050	4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030
	STEAM ELECTRIC POWER	081002101	H	1002	1002	101	10	EXTEND EXISTING CONTRACT THROUGH 2050	4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030
	STEAM ELECTRIC POWER	081002101	H	1002	1002	101	11	NEW CONTRACT	4E	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2010
	MINING	081003020	H	1003	1003	020	11	NEW CONTRACTS	4E	12080	BRAZOS RIVER AUTHORITY SYSTEM	\$0.00	2000
	MINING	081003020	H	1003	1003	020	12	NEW CONTRACT	4E	12080	BRAZOS RIVER AUTHORITY SYSTEM	\$0.00	2020
	MINING	081003020	H	1003	1003	020	13	LITTLE RIVER RESERVOIR CONTRACT WITH BRA	4J3	12770	LITTLE RIVER LAKE/RESERVOIR	\$0.00	2050
	MINING	081003020	H	1003	1003	020	13	NEW CONTRACTS	4E	12080	BRAZOS RIVER AUTHORITY SYSTEM	\$0.00	2000
	MINING	081003101	H	1003	1003	101	10	EXTEND EXISTING CONTRACT THROUGH 2050	4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030
	MINING	081003101	H	1003	1003	101	11	NEW CONTRACT	4E	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2010
	MINING	081003146	H	1003	1003	146	08	NEW CONTRACT WITH TRA	4E	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030
	MINING	081003146	H	1003	1003	146	09	NEW CONTRACT WITH TRA	4E	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030
	MINING	081003170	H	1003	1003	170	10	NEW CONTRACTS WITH SJRA	4E	10060	CONROE LAKE/RESERVOIR	\$0.00	2000
CONTRACTUAL TRANSFER - REDESIGNATE MFG	IRRIGATION	081004020	H	1004	1004	SAN JACINTO-BRAZOS RIVER RUN-020	11	SUPPLY AS IRR (CONJ W/CONSER)	4E	3461105357A	OF-RIVER	\$0.00	2020
	IRRIGATION	081004020	H	1004	1004	020	11	EXTEND EXISTING CONTRACT THROUGH 2050	4P	3461205322B	BRAZOS RIVER RUN-OF-RIVER	\$0.00	2030
	IRRIGATION	081004020	H	1004	1004	020	11	IRRIGATION CONSERVATION	4A2	38020	IRRIGATION CONSERVATION	\$186,300.00	2010
CONTRACTUAL TRANSFER - REDESIGNATE MFG	IRRIGATION	081004020	H	1004	1004	SAN JACINTO-BRAZOS RIVER RUN-020	12	SUPPLY AS IRR (CONJ W/CONSER)	4E	3461105357A	OF-RIVER	\$0.00	2020
	IRRIGATION	081004020	H	1004	1004	020	12	IRRIGATION CONSERVATION	4A2	38020	IRRIGATION CONSERVATION	\$7,400.00	2010
	IRRIGATION	081004020	H	1004	1004	020	13	IRRIGATION CONSERVATION	4A2	38020	IRRIGATION CONSERVATION	\$9,300.00	2010
	IRRIGATION	081004020	H	1004	1004	020	13	NEW CONTRACTS	4E	12080	BRAZOS RIVER AUTHORITY SYSTEM	\$0.00	2000
	IRRIGATION	081004079	H	1004	1004	079	10	IRRIGATION CONSERVATION	4A2	38079	IRRIGATION CONSERVATION	\$80,700.00	2020
	IRRIGATION	081004079	H	1004	1004	079	12	IRRIGATION CONSERVATION	4A2	38079	IRRIGATION CONSERVATION	\$188,300.00	2020
	IRRIGATION	081004237	H	1004	1004	237	10	IRRIGATION CONSERVATION	4A2	38237	IRRIGATION CONSERVATION	\$0.00	2010
	IRRIGATION	081004237	H	1004	1004	237	10	LITTLE RIVER RESERVOIR CONTRACTS WITH BRA	4J3	12770	LITTLE RIVER LAKE/RESERVOIR	\$0.00	2050
	IRRIGATION	081004237	H	1004	1004	237	10	NEW CONTRACT	4E	12080	BRAZOS RIVER AUTHORITY SYSTEM	\$0.00	2000





WUG NAME	WUG STATE	WUG COUNTY	WUG CITY	WUG COUNTY ID	WUG BASIN ID	WUG NAME	WUG TYPE	WUG ID	SO NAME	CAP COST	Implementation Date	Effort
MISSION BEND	080603000	H	0602	0917	101	10	NEW CONTRACT WITH HOUSTON	4E	08400	LIVINGSTON LAKE/RESERVOIR	\$1,685,000.00	2010
EXTEND EXISTING CONTRACT THROUGH MISSOURI CITY	080603000	H	0603	0408	079	10	BY BASIN (135 AC-FYR)	4P	3412010	BRAZOS RIVER COMBINED RUN-OF-RIVER	\$0.00	2010
MISSOURI CITY	080603000	H	0603	0409	079	10	INCREASE EXISTING CONTRACT	4E	12080	SYSTEM	\$0.00	2030
MISSOURI CITY	080603000	H	0603	0409	079	10	RENEW CURRENT CONTRACT	4P	3412010	BRAZOS RIVER COMBINED RUN-OF-RIVER	\$0.00	2010
EXTEND EXISTING CONTRACT THROUGH MISSOURI CITY	080603000	H	0603	0409	079	11	BY BASIN (135 AC-FYR)	4P	3412010	BRAZOS RIVER COMBINED RUN-OF-RIVER	\$0.00	2010
LIBERTY CITY	080603000	H	0603	0408	079	11	INCREASE EXISTING CONTRACT	4E	12080	SYSTEM	\$8,386,000.00	2030
MISSOURI CITY	080603000	H	0603	0409	079	11	RENEW CURRENT CONTRACT	4P	3412010	BRAZOS RIVER COMBINED RUN-OF-RIVER	\$0.00	2010
EXTEND EXISTING CONTRACT THROUGH MISSOURI CITY	080603000	H	0603	0408	101	10	ACT/FYR-HARRIS CO PORTION	4P	3412010	BRAZOS RIVER COMBINED RUN-OF-RIVER	\$0.00	2010
FACILITY EXPANSION INCREASES SE NASSAU BAY	080623000	H	0623	0424	101	11	CONTRACT, 2001.055 MGD; EXTENDS THRU 2050	4E	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2010
NEEDVILLE	080627000	H	0627	0428	079	12	MUNICIPAL CONSERVATION	4A1			\$0.00	2020
SUPPLY REALIZED THROUGH IRRIGATION NEEDVILLE	080627000	H	0627	0428	079	12	CONSERVATION	4A2	38079	IRRIGATION CONSERVATION	\$0.00	2020
NEEDVILLE	080627000	H	0627	0428	079	13	MUNICIPAL CONSERVATION	4A1			\$0.00	2020
SUPPLY REALIZED THROUGH IRRIGATION NEEDVILLE	080627000	H	0627	0428	079	13	CONSERVATION	4A2	38079	IRRIGATION CONSERVATION	\$0.00	2020
OAK RIDGE NORTH	080649000	H	0649	0726	170	10	MUNICIPAL CONSERVATION	4A1			\$0.00	2020
functional and efficient water system now why mandate a change?	080649000	H	0649	0726	170	10	NEW CONTRACT	4E	10060	CONROE LAKE/RESERVOIR	\$1,680,000.00	2020
OYSTER CREEK	080664000	H	0664	0730	020	11	INCREASE EXISTING CONTRACT	4E	3461205366	BRAZOS RIVER RUN-OF-RIVER	\$0.00	2010
OYSTER CREEK	080664000	H	0664	0730	020	11	RENEW CURRENT CONTRACT	4P	3461205366	BRAZOS RIVER RUN-OF-RIVER	\$0.00	2050
PANORAMA VILLAGE	080676000	H	0676	0732	170	10	MUNICIPAL CONSERVATION	4A1			\$0.00	2020
City believes ground water wells provide adequate supply. If additional needed, will seek interlocal with City of Conroe. (See full PANORAMA VILLAGE)	080676000	H	0676	0732	170	10	NEW CONTRACT	4E	10060	CONROE LAKE/RESERVOIR	\$6,883,000.00	2020
EXISTING CONTRACT INCREASES BY 275 AD-FYR PASADENA	080680000	H	0680	0456	101	10	UNTIL 2001 FACILITY EXPANSION	4E	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2000
EXTEND CONTRACT 2001 FACILITY EXPANSION PASADENA	080680000	H	0680	0456	101	10	INCREASES SE CONTRACT 7.5 MGD	4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2010
FACILITY EXPANSION INCREASES SE PASADENA	080680000	H	0680	0456	101	10	CONTRACT CLEAR LAKE WA 11.85MGD TO 2050	4P	08400	LIVINGSTON LAKE/RESERVOIR	\$5,579,000.00	2010
FACILITY EXPANSION INCREASES SE PASADENA	080680000	H	0680	0456	101	11	CONTRACT CLEAR LAKE WA 11.85MGD TO 2050	4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2010
TEXTEND CONTRACT 2001 FACILITY EXPANSION PASADENA	080680000	H	0680	0456	101	11	INCREASES SE CONTRACT 7.5 MGD	4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2010
EXTEND EXISTING CONTRACT THROUGH PEARLAND	080684000	H	0684	0457	020	11	HARRIS AND BRAZORIA SPLIT (10 MGD)	4P	3412010	BRAZOS RIVER COMBINED RUN-OF-RIVER	\$2,320,000.00	2020
PEARLAND	080684000	H	0684	0457	020	11	HARRIS AND BRAZORIA SPLIT (10 MGD)	4P	3412010	BRAZOS RIVER COMBINED RUN-OF-RIVER	\$0.00	2020
INCREASE EXISTING CONTRACT BY 1600 AC-FYR PINEY POINT VILLAGE	080700000	H	0700	0468	101	10	AND EXTEND THROUGH 2050	4E	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2010
PINEY POINT VILLAGE	080700000	H	0700	0468	101	10	RENEW CURRENT CONTRACT	4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030
PRAIRIE VIEW	080720000	H	0720	0485	237	12	ALLENS CREEK RESERVOIR CONTRACTS WITH BRAZOS RIVER	4J3	12900	ALLENS CREEK LAKE/RESERVOIR	\$10,754,000.00	2030
PRAIRIE VIEW	080720000	H	0720	0485	237	12	LITTLE RIVER RESERVOIR CONTRACTS WITH BRAZOS RIVER	4J3	12770	LITTLE RIVER LAKE/RESERVOIR	\$0.00	2040
PRAIRIE VIEW	080720000	H	0720	0485	237	12	MUNICIPAL CONSERVATION	4A1			\$0.00	2030
RICHMOND	080749000	H	0749	0500	079	12	ALLENS CREEK RESERVOIR CONTRACT WITH BRAZOS RIVER	4J1	12900	ALLENS CREEK LAKE/RESERVOIR	\$0.00	2030
RICHMOND	080749000	H	0749	0500	079	12	LITTLE RIVER RESERVOIR CONTRACTS WITH BRAZOS RIVER	4J3	12770	LITTLE RIVER LAKE/RESERVOIR	\$0.00	2050
RICHMOND	080749000	H	0749	0500	079	12	MUNICIPAL CONSERVATION	4A1			\$0.00	2020
The City would consider all possible options. \$3,000,000.00	080749000	H	0749	0500	079	12	NEW CONTRACT	4E	12080	SYSTEM	\$15,232,000.00	2020
City recently drilled two new wells and increased storage capacity. Based on growth rate over past 30 years, current capacity should be	080750000	H	0750	0500	020	11	RENEW CURRENT CONTRACT	4P	3461205366	BRAZOS RIVER RUN-OF-RIVER	\$4,333,000.00	2010
RICHWOOD	080750000	H	0750	0500	020	11	RENEW CURRENT CONTRACT	4P	3461205366	BRAZOS RIVER RUN-OF-RIVER	\$0.00	2050
ROSENBERG	080774000	H	0774	0518	079	12	ALLENS CREEK RESERVOIR CONTRACT WITH BRAZOS RIVER	4J1	12900	ALLENS CREEK LAKE/RESERVOIR	\$0.00	2030
ROSENBERG	080774000	H	0774	0518	079	12	LITTLE RIVER RESERVOIR CONTRACTS WITH BRAZOS RIVER	4J3	12770	LITTLE RIVER LAKE/RESERVOIR	\$0.00	2040
ROSENBERG	080774000	H	0774	0518	079	12	MUNICIPAL CONSERVATION	4A1			\$0.00	2020





TABLE A1: SUF  
Updated per Addendum

WUG NAME/ADDRESS	WUG ID	WUG RWFS	SEQ ID	CD	WUG COUNTY	D/WUG BASING	WUG/BRAS	WMS BRAS	SO ID	SO NAME	CAP COST	Strategy Implementation	Effective Date
COUNTY-OTHER	08092637	H	0996	0757	237	12	ALLENS CREEK RESERVOIR CONTRACT WITH BRA	4J1	12900	ALLENS CREEK LAKE/RESERVOIR	\$0.00	2030	2030
COUNTY-OTHER	08092637	H	0996	0757	237	12	LITTLE RIVER RESERVOIR CONTRACTS WITH BRA	4J3	12770	LITTLE RIVER LAKE/RESERVOIR	\$0.00	2040	2040
COUNTY-OTHER	08092637	H	0996	0757	237	12	MUNICIPAL CONSERVATION	4A1			\$0.00	2020	2020
COUNTY-OTHER	08092637	H	0996	0757	237	12	ALLENS CREEK RESERVOIR CONTRACTS WITH BRA	4A1	12090	ALLENS CREEK LAKE/RESERVOIR	\$53,845,110.00	2020	2020
MANUFACTURING	081001020	H	1001	1001	020	11	EXTEND EXISTING CONTRACT THROUGH 2050	4P	3412010	BRAZOS RIVER COMBINED RUN-OF-RIVER	\$0.00	2010	2010
MANUFACTURING	081001020	H	1001	1001	020	12	ALLENS CREEK RESERVOIR CONTRACT WITH BRA	4J1	12900	ALLENS CREEK LAKE/RESERVOIR	\$157,300,000.00	2020	2020
MANUFACTURING	081001020	H	1001	1001	020	12	EXTEND EXISTING CONTRACT THROUGH 2050	4P	12090	ALLENS CREEK LAKE/RESERVOIR	\$0.00	2030	2030
MANUFACTURING	081001020	H	1001	1001	020	12	BY BASIN	4P	3461205366	BRAZOS RIVER RUN-OF-RIVER	\$0.00	2050	2050
MANUFACTURING	081001020	H	1001	1001	020	12	LITTLE RIVER RESERVOIR CONTRACT WITH BRA	4J3	12770	LITTLE RIVER LAKE/RESERVOIR	\$381,065,000.00	2040	2040
MANUFACTURING	081001020	H	1001	1001	020	12	SUPPLY	4E	3461109357A	LITTLE RIVER LAKE/RESERVOIR	\$0.00	2010	2010
MANUFACTURING	081001020	H	1001	1001	020	12	NEW CONTRACTS	4E	12090	ALLENS CREEK LAKE/RESERVOIR	\$0.00	2010	2010
MANUFACTURING	081001020	H	1001	1001	020	13	LITTLE RIVER RESERVOIR CONTRACT WITH BRA	4J3	12770	LITTLE RIVER LAKE/RESERVOIR	\$0.00	2040	2040
MANUFACTURING	081001020	H	1001	1001	020	13	NEW CONTRACTS	4E	12090	ALLENS CREEK LAKE/RESERVOIR	\$0.00	2010	2010
MANUFACTURING	081001036	H	1001	1001	036	09	EXTEND EXISTING CONTRACT THROUGH 2050	4P	09400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030	2030
MANUFACTURING	081001036	H	1001	1001	036	09	EXTEND EXISTING CONTRACT THROUGH 2050	4P	09400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030	2030
MANUFACTURING	081001079	H	1001	1001	079	10	LITTLE RIVER RESERVOIR CONTRACTS WITH BRA	4J3	12770	LITTLE RIVER LAKE/RESERVOIR	\$0.00	2050	2050
MANUFACTURING	081001079	H	1001	1001	079	10	NEW CONTRACTS	4E	12090	ALLENS CREEK LAKE/RESERVOIR	\$0.00	2000	2000
MANUFACTURING	081001079	H	1001	1001	079	11	ALLENS CREEK RESERVOIR CONTRACT WITH BRA	4J1	12900	ALLENS CREEK LAKE/RESERVOIR	\$0.00	2030	2030
MANUFACTURING	081001079	H	1001	1001	079	11	LITTLE RIVER RESERVOIR CONTRACTS WITH BRA	4J3	12770	LITTLE RIVER LAKE/RESERVOIR	\$0.00	2040	2040
MANUFACTURING	081001079	H	1001	1001	079	11	NEW CONTRACTS	4E	12090	ALLENS CREEK LAKE/RESERVOIR	\$0.00	2000	2000
MANUFACTURING	081001079	H	1001	1001	079	11	CONSERVATION	4A2	36079	IRRIGATION CONSERVATION	\$0.00	2010	2010
MANUFACTURING	081001079	H	1001	1001	079	12	NEW CONTRACTS	4E	12090	ALLENS CREEK LAKE/RESERVOIR	\$0.00	2000	2000
MANUFACTURING	081001094	H	1001	1001	094	11	EXTEND EXISTING CONTRACT THROUGH 2050	4P	12090	ALLENS CREEK LAKE/RESERVOIR	\$0.00	2010	2010
MANUFACTURING	081001094	H	1001	1001	094	11	EXTEND EXISTING CONTRACT THROUGH 2050	4P	3461004964	SAN JACINTO RIVER RUN-OF-RIVER	\$0.00	2010	2010
MANUFACTURING	081001084	H	1001	1001	084	11	LITTLE RIVER RESERVOIR CONTRACTS WITH GOWA	4J3	12770	LITTLE RIVER LAKE/RESERVOIR	\$0.00	2040	2040
MANUFACTURING	081001084	H	1001	1001	084	11	NEW CONTRACTS WITH GOWA	4E	12090	ALLENS CREEK LAKE/RESERVOIR	\$0.00	2030	2030
MANUFACTURING	081001084	H	1001	1001	084	11	NEW CONTRACTS WITH GOWA	4E	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2050	2050
MANUFACTURING	081001101	H	1001	1001	101	09	BEDIAS RESERVOIR CONTRACTS WITH SUFA	4J2	08270	BEDIAS LAKE/RESERVOIR	\$0.00	2030	2030
MANUFACTURING	081001101	H	1001	1001	101	09	EXTEND EXISTING CONTRACT THROUGH 2050	4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030	2030
MANUFACTURING	081001101	H	1001	1001	101	09	EXTEND EXISTING CONTRACT THROUGH 2050	4P	341080527B	TRINITY RIVER RUN-OF-RIVER	\$0.00	2020	2020
MANUFACTURING	081001101	H	1001	1001	101	09	EXTEND EXISTING CONTRACT THROUGH 2050	4P	3461004964	SAN JACINTO RIVER RUN-OF-RIVER	\$0.00	2010	2010
MANUFACTURING	081001101	H	1001	1001	101	09	NEW CONTRACTS WITH SUFA	4E	341080527B	TRINITY RIVER RUN-OF-RIVER	\$0.00	2010	2010
MANUFACTURING	081001101	H	1001	1001	101	09	UNKNOWN	4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030	2030
MANUFACTURING	081001101	H	1001	1001	101	10	EXTEND EXISTING CONTRACT THROUGH 2050	4P	10030	HOUSTON LAKE/RESERVOIR	\$0.00	2030	2030
MANUFACTURING	081001101	H	1001	1001	101	10	EXTEND EXISTING CONTRACT THROUGH 2050	4P	3461004964	SAN JACINTO RIVER RUN-OF-RIVER	\$0.00	2030	2030
MANUFACTURING	081001101	H	1001	1001	101	10	EXTEND EXISTING CONTRACT THROUGH 2050	4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030	2030
MANUFACTURING	081001101	H	1001	1001	101	10	EXTEND EXISTING CONTRACT THROUGH 2050	4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030	2030
MANUFACTURING	081001101	H	1001	1001	101	10	EXTEND EXISTING CONTRACT THROUGH 2050	4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030	2030
MANUFACTURING	081001101	H	1001	1001	101	10	EXTEND EXISTING CONTRACT THROUGH 2050	4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030	2030
MANUFACTURING	081001101	H	1001	1001	101	10	NEW CONTRACT - TRA SUPPLY	4I	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2050	2050
MANUFACTURING	081001101	H	1001	1001	101	10	NEW CONTRACTS	4E	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2010	2010

Please do not alter populated fields.

TABLE A1: SUF  
Updated per Addendum

WUG_NAME	WUG_ID	WUG_RWPG	SEQ_ID	CITY_ID	WUG_COUNTY_ID	WUG_BASIN_ID	WMS_NAME	WMS_TYPE	SO_ID	SO_NAME	CAP_COST	Strategy Implementation Date	Hor affor re
<b>Please do not alter populated fields.</b>													
BRAZOS RIVER AUTHORITY MINING	081003020	H	1003	1003	020	11	NEW CONTRACTS	4E	12080	SYSTEM	\$0.00	2000	
BRAZOS RIVER AUTHORITY MINING	081003020	H	1003	1003	020	12	NEW CONTRACT	4E	12080	SYSTEM	\$0.00	2020	
BRAZOS RIVER AUTHORITY MINING	081003020	H	1003	1003	020	13	LITTLE RIVER RESERVOIR CONTRACT WITH BRA	4J3	12770	LITTLE RIVER LAKE/RESERVOIR	\$0.00	2050	
BRAZOS RIVER AUTHORITY MINING	081003020	H	1003	1003	020	13	NEW CONTRACTS	4E	12080	SYSTEM	\$0.00	2000	
BRAZOS RIVER AUTHORITY MINING	081003101	H	1003	1003	101	10	EXTEND EXISTING CONTRACT THROUGH 2050	4P	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030	
BRAZOS RIVER AUTHORITY MINING	081003101	H	1003	1003	101	11	NEW CONTRACT	4E	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2010	
BRAZOS RIVER AUTHORITY MINING	081003146	H	1003	1003	146	08	NEW CONTRACT WITH TRA	4E	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030	
BRAZOS RIVER AUTHORITY MINING	081003146	H	1003	1003	146	09	NEW CONTRACT WITH TRA	4E	08400	LIVINGSTON LAKE/RESERVOIR	\$0.00	2030	
BRAZOS RIVER AUTHORITY MINING	081003170	H	1003	1003	170	10	NEW CONTRACTS WITH SJRA	4E	10060	CONROE LAKE/RESERVOIR	\$0.00	2000	
CONTRACTUAL TRANSFER - REDESIGNATE MFG	081004020	H	1004	1004	SAN JACINTO-BRAZOS RIVER RUN-OF-RIVER	11	SUPPLY AS IRR (CONJ W/CONSER)	4E	3461105357A	OF-RIVER	\$0.00	2020	
IRRIGATION	081004020	H	1004	1004	020	11	EXTEND EXISTING CONTRACT THROUGH 2050	4P	3461206372B	BRAZOS RIVER RUN-OF-RIVER	\$0.00	2030	
IRRIGATION	081004020	H	1004	1004	020	11	IRRIGATION CONSERVATION	4A2	38020	IRRIGATION CONSERVATION	\$186,300.00	2010	
IRRIGATION	081004020	H	1004	1004	020	11	NEW CONTRACTS	4E	12080	SYSTEM	\$0.00	2000	
CONTRACTUAL TRANSFER - REDESIGNATE MFG	081004020	H	1004	1004	SAN JACINTO-BRAZOS RIVER RUN-OF-RIVER	12	SUPPLY AS IRR (CONJ W/CONSER)	4E	3461105357A	OF-RIVER	\$0.00	2020	
IRRIGATION	081004020	H	1004	1004	020	12	IRRIGATION CONSERVATION	4A2	38020	IRRIGATION CONSERVATION	\$7,400.00	2010	
IRRIGATION	081004020	H	1004	1004	020	13	IRRIGATION CONSERVATION	4A2	38020	IRRIGATION CONSERVATION	\$9,300.00	2010	
IRRIGATION	081004020	H	1004	1004	020	13	NEW CONTRACTS	4E	12080	SYSTEM	\$0.00	2000	
IRRIGATION	081004079	H	1004	1004	079	10	IRRIGATION CONSERVATION	4A2	38079	IRRIGATION CONSERVATION	\$80,700.00	2020	
IRRIGATION	081004079	H	1004	1004	079	12	IRRIGATION CONSERVATION	4A2	38079	IRRIGATION CONSERVATION	\$188,300.00	2020	
IRRIGATION	081004237	H	1004	1004	237	10	IRRIGATION CONSERVATION	4A2	38237	IRRIGATION CONSERVATION	\$0.00	2010	
IRRIGATION	081004237	H	1004	1004	237	10	LITTLE RIVER RESERVOIR CONTRACTS WITH BRA	4J3	12770	LITTLE RIVER LAKE/RESERVOIR	\$0.00	2050	
IRRIGATION	081004237	H	1004	1004	237	10	NEW CONTRACT	4E	12080	SYSTEM	\$0.00	2000	

TABLE A-2: MUNICIPALITY CONTACTS LOG

NAME	TITLE	ENTITY	TELEPHONE	FAX	MAIL DATE	FAX DATE	PHONE DATE	SURVEY REC'D	CONTACT PERSON
Hon. Troy Lewis	Mayor	City of Alvin	281-388-4200	281-331-7215	7-Mar-02	22-Apr-02	22 Apr 02; 15 May 02		Fred Mendoza
Hon. Bruce Corner	Mayor	City of Anahuac	409-267-6681	409-267-6839	7-Mar-02	22-Apr-02	15-May-02		
Hon. Gerald L. Roberts	Mayor	City of Angleton	979-849-4364	979-849-5561	7-Mar-02	22-Apr-02	15-May-02		
Hon. Joe Mims	Mayor	Village of Bayou Vista	409-935-8348	409-935-1205	7-Mar-02	22-Apr-02	22, 25, 29 Apr 02; 7, 15 May 02		Lydia Cook
Hon. Pete C. Alfaro	Mayor	City of Baytown	281-422-8281	281-420-6586	7-Mar-02	22-Apr-02	5, 11 Apr 02; 2 May 02	7-May-02	Donna Sams (Finance), Fred Pack (DPW)
Hon. Mary Ann Goode	Mayor	City of Bellaire	713-662-8222	713-668-4211	7-Mar-02		15, 22, 25 Mar 02; 9, 10, 11, 18 Apr 02	22-Apr-02	Richard L. Larsen, Dir. Public Works (713-662-8150); Robert Schuler, Claunch & Miller Inc
Hon. Keith Woods	Mayor	City of Brookshire	281-375-5050	281-375-5045	7-Mar-02	22-Apr-02	15-May-02		
Hon. Bill Marshall	Mayor	City of Bunker Hill Village	713-467-9762	713-827-8752	7-Mar-02			13-Mar-02	
Hon. Jerry Adkins	Mayor	City of Clute	979-265-2541	979-265-4551	7-Mar-02	22-Apr-02	15-May-02		
Hon. Carter Moore	Mayor	City of Conroe	936-539-4431	936-525-4777	7-Mar-02			26-Mar-02	
Hon. Wayne Riddle	Mayor	City of Deer Park	281-478-7247	281-478-7217	7-Mar-02	22-Apr-02	15-May-02		
Hon. Ken Hufstetler	Mayor	City of Dickinson	281-337-2489	281-337-6190	7-Mar-02		15-May-02		Survey returned blank. Referred to Galveston Co. WCID #1
Hon. Brad Emel	Mayor	City of El Lago	281-326-1951	281-326-1878	7-Mar-02	22-Apr-02	15-May-02		Per Jill in Mayor's Office call MUD at 281-326-5573 for 15 May follow-up
Hon. James A. Barnett, Jr.	Mayor	City of Freeport	979-233-3526	979-233-8867	7-Mar-02		11, 12 Mar 02	15-Apr-02	Ron Bottoms
Hon. Harold L. Whitaker	Mayor	City of Friendswood	281-996-3270	281-482-1634	7-Mar-02		5-Apr-02	15-Apr-02	Roger Roecker
Hon. Michael Dinges	Mayor	City of Fulshear	281-346-1796	281-346-2556	7-Mar-02	22-Apr-02	15-May-02		
Hon. Roger Quiroga	Mayor	City of Galveston	409-766-2104	409-797-3511	7-Mar-02			16-Apr-02	E-mailed information. Brandon E. Wade, Dir Public Works & Municipal Utilities
Hon. Hayden Berry	Mayor	City of Hempstead	979-826-2486	979-826-6703	7-Mar-02	22-Apr-02	15-May-02		
Hon. Kyle Campbell	Mayor	City of Hitchcock	409-986-5591	409-986-6903	7-Mar-02	22-Apr-02	15-May-02		
Hon. Wilson Archer	Mayor	City of Humble	281-446-3061	281-446-7843	7-Mar-02	22-Apr-02	15-May-02		
Hon. Bill Green	Mayor	City of Huntsville	936-295-6471	936-291-5409	7-Mar-02	22-Apr-02	12, 13 Mar 02; 15 May 02		Bill Doggett, Water Utility
Hon. Mike Jackson	Mayor	City of Jacinto City	713-674-8424	713-675-8525	7-Mar-02	22-Apr-02	15-May-02		
Hon. Ed Heathcott	Mayor	City of Jersey Village	713-466-2100	713-466-2134	7-Mar-02		27, 28 Mar 02	4-Apr-02	Rod Hainey, DPW
Hon. Doyle Callender	Mayor	City of Katy	281-391-4800	281-391-4813	7-Mar-02	22-Apr-02	23, 24 APR 02; 15 May 02		Johnny Nelson, City Admin.
Hon. Dennis Rygaard	Mayor	City of La Marque	409-938-9200	409-939-9216	7-Mar-02	22-Apr-02	15-May-02		
Hon. Norman Malone	Mayor	City of La Porte	281-471-5020	281-471-7168	7-Mar-02	22-Apr-02	15-May-02		
Hon. Shane Pirtle	Mayor	City of Lake Jackson	979-415-2400		7-Mar-02		15-Mar-02	15-Apr-02	Craig Nesbit
Hon. Ben R. Ogletree, Jr.	Mayor	City of Livingston	936-327-4311		7-Mar-02			28-Mar-02	
Hon. Jim McDonald	Mayor	City of Meadows Place	281-983-2950	281-983-2940	7-Mar-02	22-Apr-02	15-May-02		
Hon. Alien Owen	Mayor	City of Missouri City	281-261-4260	281-403-0683	7-Mar-02	22-Apr-02	1, 2, 3, 4 Apr 02; 15 May 02		Lee Dorger, DPW
Hon. Joe Michels	Mayor	City of Oak Ridge North	281-292-4648	281-367-7729	7-Mar-02		3-Apr-02	10-Apr-02	Paul Mendes
Hon. Howard L. Kravetz	Mayor	City of Panorama Village	936-856-2821	936-856-2547	7-Mar-02		11, 12, 13, 14 Mar 02; 8, 11 Apr 02	9-Apr-02	Dale Evans, Lisa Evans
Hon. John Maniove	Mayor	City of Pasadena	713-477-1511	713-472-0144	7-Mar-02	22-Apr-02	15-May-02		
Hon. Tom Reid	Mayor	City of Pearland	281-652-1600	281-652-1706	7-Mar-02		8, 11 Apr 02	16-Apr-02	Allen Mueller
Hon. Raymond Carreathers	Mayor	City of Prairie View	936-857-3711	936-857-5836	7-Mar-02	22-Apr-02	15-May-02		
Hon. Hillmar G. Moore	Mayor	City of Richmond	281-342-5456	281-232-8626	7-Mar-02			28-Mar-02	

TABLE A-2: MUNICIPALITY CONTACTS LOG

Hon. Peggy Gartman	Mayor	City of Richwood	979-265-2082	979-265-7345	7-Mar-02		12, 13 Mar 02	18-Mar-02	Karen Schrom
Hon. Joe Gurecky	Mayor	City of Rosenberg	832-595-3300	832-595-3333	7-Mar-02			25-Mar-02	
Hon. Robert Cheek	Mayor	City of Santa Fe	409-925-6412	409-316-1941	7-Mar-02	22-Apr-02	15-May-02		
Hon. David Vetter, Jr.	Mayor	City of Shenandoah	281-298-5522	281-367-2225	7-Mar-02	22-Apr-02	15-May-02		
Hon. Louise Richman	Mayor	City of Spring Valley	713-465-8308	713-461-7969	7-Mar-02	22-Apr-02	15-May-02		
Hon. Dean Allen Hrbacek	Mayor	City of Sugar Land	281-275-2700	281-275-2712	7-Mar-02		1, 2, Apr 02	16-Apr-02	Sue Ellen Staggs
Hon. H. G. Hap Harrington	Mayor	City of Tomball	281-351-5484	281-351-6256	7-Mar-02			8-Apr-02	
Hon. Ruth Castleschouldt	Mayor	City of Willis	936-856-4611	936-890-1246	7-Mar-02	22-Apr-02	24, 26 Apr 02, 15 May 02		Brenda in Mayor's office

	Survey returned.
	Follow-up needed; previous phone contact.
	Follow-up needed.

27-May-02

PROVIDER SURVEY RESULTS

Table A3: MAJOR WATER PF

Major Water Provider Name	Access/Program	Alpha Basin	Strategy	Source Region	Source Name	Strategy Name	Contact	Source ID	Source Name	Telephone	Capital Cost	Strategy Implementation Date	Supply 2050
How much from current utility revenue sources?	Program, how much can P.S. afford from current utility revenue sources?	Participation	Type	Region	Basin	Unable to pay for WMST?							
BRAZOS RIVER AUTHORITY	000331	12 4a	3		12	VOLUNTARY REDISTRIBUTION	Sheryl L. Franklin	2000	BRAZOS RIVER SYSTEM	254-761-8179	\$ 0	2000	75,000
State participation funds are being used. This is a joint project, with City of Houston a 70% share and BRAZOS RIVER AUTHORITY contribute to the State participation funds.													
BRAZOS RIVER AUTHORITY	000291	Franklin	10	Regional Manager	Lower	ALLENS CREEK RESERVOIR	Sheryl L. Franklin	12900	ALLENS CREEK RESERVOIR		\$ 47,190,000	2020	29,900
BRAZOS RIVER AUTHORITY	000331	12 4b	3			LITTLE RIVER RESERVOIR	Sheryl L. Franklin	2000	LITTLE RIVER RESERVOIR	254-761-8179	\$ 2,694,000	2000	71,000
CITY OF HOUSTON	396200	10 4e	4		204	HOUSTON / TRA CONTRACT	Dominic G. Benoit	08400	LAKE LIVINGSTON	713-837-6315	\$ 0	2000	200,000
CITY OF HOUSTON	396200	10 4i	4		146	LUCE BAYOU	Dominic G. Benoit	08400	LAKE LIVINGSTON	713-837-6315	\$ 0	2000	0
CITY OF HOUSTON	396200	11 4j	4		8	ALLENS CREEK RESERVOIR	Dominic G. Benoit	02500	ALLENS CREEK RESERVOIR	713-837-6315	\$ 110,000	2000	68,500
CITY OF HOUSTON	396200	10 4b	4		101	WASTEWATER RECLAMATION	Dominic G. Benoit	08170	REFUSE - BrazoCou	10-01-10	\$ 15,498,850	2000	90,000
GULF COAST WATER AUTHORITY	000325	11 4e	3		12	CREATE NEW CONTRACT - BRA	Robert Intra	12080	BRAZOS RIVER SYSTEM	(409) 335-2438	\$ 17,000,000	2000	35,000
This water is designated for industry in 2050. They are not willing to pay for water needed in 2050. The supply is not needed until 2040 and 2050.													
GULF COAST WATER AUTHORITY	000365	Intra	11 4e	General Manager	1063	LAKE LIVINGSTON	Robert Intra	09400	LAKE LIVINGSTON		\$ 63,270,000	2050	23,000
GULF COAST WATER AUTHORITY	000365	Intra	11 4b	General Manager	1078	LITTLE RIVER RESERVOIR	Robert Intra	12770	LITTLE RIVER RESERVOIR		\$ 78,371,000	2040	28,000
The customer base will not be in place when construction should take place. Hopefully contracts will be awarded by 2014.													
SAN JACINTO RIVER AUTHORITY	000299	PE10	12	General Manager	157	BEDIAS RESERVOIR	Jim Adams	08270	BEDIAS RESERVOIR		\$ 171,900,000	2030	75,000
TRA would participate in the development of the reservoir in a sponsorship role. TRA would provide the water.													
SAN JACINTO RIVER AUTHORITY	000299	10 4i	4		36	SJRA / CLCND CONTRACT	Jim Adams	04275	TRINITY RIVER ROR	936-588-1118	\$ 8,250,000	2000	30,000
SAN JACINTO RIVER AUTHORITY	000195	8 4j	General Manager	1322	BEDIAS RESERVOIR	Jim Adams	08270	BEDIAS RESERVOIR			\$ 22,440,000	2030	15,700

TABLE A4: MAJOR WATER PROVIDER CONTACT LOG

NAME	TITLE	ENTITY	TELEPHONE	FAX	MAIL DATE	FAX DATE	PHONE DATE	SURVEY REC'D	CONTACT PERSON
Sheryl L. Franklin, PE	Regional Manager, Lower Basin	Brazos River Authority	254-761-3179	254-772-5780	4-Jun	13-Jun-02	18-Jun-02	20-Jun-02	Sheryl L. Franklin, PE
Jeff Taylor	Director of Public Utilities	City of Houston	713-837-0448	713-837-0435	4-Jun	13-Jun-02	06/18, 6/25, 7/3, 7/10, 7/24, 8/7, 8/9		Dominic G'Benoba
Robert Istre	General Manager	Gulf Coast Water Authority	409-935-2438 x17	409-935-4156	4-Jun	13-Jun-02	18-Jun-02	15-Jul-02	Robert Istre
Jim Adams, PE	General Manager	San Jacinto River Authority	936-588-7111	936-588-3043	4-Jun	13-Jun-02	18-Jun-02	20-Jun-02	Jim Adams, PE
Danny Vance	General Manager	Trinity River Authority	817-467-4343	817-465-0970	4-Jun	13-Jun-02		16-Jun-02	Danny Vance

	Survey returned.
	Follow-up needed; previous phone contact.
	Follow-up needed.

12-Jun-02

WATER INFRASTRUCTURE FINANCING SURVEY

Instructions: For each of the recommended strategies in the Region H Regional Water Plan to meet your water needs, please answer the following questions. A separate sheet has been provided for each water management strategy.

Name of Major Water Provider: GULF COAST WATER AUTHORITY

Water Management Strategy Name: HOUSTON / GCWA TRANSFER

Capital Cost: \$ \$63,270,000

1. Using current utility revenue sources, including implementing necessary rate and tax increases, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above?

The political subdivision can afford to pay \$ ?

2. If you could access the State Participation Program, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above using current utility revenue sources, including implementing necessary rate and tax increases?

The political subdivision can afford to pay \$ 0

3. How much of the capital cost is the political subdivision unable to pay for the water management strategy identified above?

The political subdivision cannot afford to pay \$ \$63,270,000 (At this time)

4. For the costs the political subdivision cannot pay, what option(s) is proposed? What, if any, state funding sources would the political subdivision consider? (Please use additional sheets, if necessary.)

This water is designated for Industry in 2050.  
They are not willing to pay for water needed  
in 48 yrs, they do not know if they will be  
in business the next 20 yrs.

# WATER INFRASTRUCTURE FINANCING SURVEY

Instructions: For each of the recommended strategies in the Region H Regional Water Plan to meet your water needs, please answer the following questions. A separate sheet has been provided for each water management strategy.

Name of Major Water Provider: GULF COAST WATER AUTHORITY

Water Management Strategy Name: LITTLE RIVER RESERVOIR

Capital Cost: \$ \$78,371,000

1. Using current utility revenue sources, including implementing necessary rate and tax increases, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above?

The political subdivision can afford to pay \$ ?

2. If you could access the State Participation Program, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above using current utility revenue sources, including implementing necessary rate and tax increases?

The political subdivision can afford to pay \$ 0

3. How much of the capital cost is the political subdivision unable to pay for the water management strategy identified above?

The political subdivision cannot afford to pay \$ \$78,371,000 (At this time)

4. For the costs the political subdivision cannot pay, what option(s) is proposed? What, if any, state funding sources would the political subdivision consider? (Please use additional sheets, if necessary.)

The supply is not needed until 2040 & 2050.  
and the majority of the need is for entities which  
are not "currently" GCWA customers; therefore,  
GCWA is not able to project at this time what % of the  
cost a revenue contract would generate.

# WATER INFRASTRUCTURE FINANCING SURVEY

**Instructions:** For each of the recommended strategies in the Region H Regional Water Plan to meet the water needs of the listed Water User Group, please answer the following questions. A separate sheet has been provided for each water management strategy.

Name of Major Water Provider: Gulf Coast Water Authority

Name of Water User Group: COUNTY-OTHER *Barbora, Central Basin*

Water Management Strategy Name: New contracts with GCWA

Capital Cost: \$ \$25,595,190

1. Using current utility revenue sources, including implementing necessary rate and tax increases, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above?

The political subdivision can afford to pay \$ 0.

2. If you could access the State Participation Program, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above using current utility revenue sources, including implementing necessary rate and tax increases?

The political subdivision can afford to pay \$ 0.

3. How much of the capital cost is the political subdivision unable to pay for the water management strategy identified above?

The political subdivision cannot afford to pay \$ \$25,595,190

4. For the costs the political subdivision cannot pay, what option(s) is proposed? What, if any, state funding sources would the political subdivision consider? (Please use additional sheets, if necessary.)

• GCWA has no taxing Authority  
• Communities are not defined in the current  
Regional Plan. Understand next plan will  
define communities

# WATER INFRASTRUCTURE FINANCING SURVEY

**Instructions:** For each of the recommended strategies in the Region H Regional Water Plan to meet the water needs of the listed Water User Group, please answer the following questions. A separate sheet has been provided for each water management strategy.

Name of Major Water Provider: Gulf Coast Water Authority

Name of Water User Group: COUNTY-OTHER *St. Paul, S.J. Basin*

Water Management Strategy Name: New contracts with GCWA

Capital Cost: \$ \$5,877,414

1. Using current utility revenue sources, including implementing necessary rate and tax increases, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above?

The political subdivision can afford to pay \$ \_\_\_\_\_.

2. If you could access the State Participation Program, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above using current utility revenue sources, including implementing necessary rate and tax increases?

The political subdivision can afford to pay \$ \_\_\_\_\_.

3. How much of the capital cost is the political subdivision unable to pay for the water management strategy identified above?

The political subdivision cannot afford to pay \$ 5,877,414.

4. For the costs the political subdivision cannot pay, what option(s) is proposed? What, if any, state funding sources would the political subdivision consider? (Please use additional sheets, if necessary.)

• GCWA has no taxing authority  
• Communities are not defined in the current  
Regional Plan. Understand next plan will  
define communities.

# WATER INFRASTRUCTURE FINANCING SURVEY

**Instructions:** For each of the recommended strategies in the Region H Regional Water Plan to meet the water needs of the listed Water User Group, please answer the following questions. A separate sheet has been provided for each water management strategy.

Name of Major Water Provider: Gulf Coast Water Authority

Name of Water User Group: COUNTY-OTHER *Fort Bend, Coastal Bend*

Water Management Strategy Name: New contracts with GCWA

Capital Cost: \$ \$299,123,156

1. Using current utility revenue sources, including implementing necessary rate and tax increases, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above?

The political subdivision can afford to pay \$ 0.

2. If you could access the State Participation Program, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above using current utility revenue sources, including implementing necessary rate and tax increases?

The political subdivision can afford to pay \$ 0.

3. How much of the capital cost is the political subdivision unable to pay for the water management strategy identified above?

The political subdivision cannot afford to pay \$ \$299,123,156

4. For the costs the political subdivision cannot pay, what option(s) is proposed? What, if any, state funding sources would the political subdivision consider? (Please use additional sheets, if necessary.)

---

---

---

---

---

---

# WATER INFRASTRUCTURE FINANCING SURVEY

**Instructions:** For each of the recommended strategies in the Region H Regional Water Plan to meet the water needs of the listed Water User Group, please answer the following questions. A separate sheet has been provided for each water management strategy.

Name of Major Water Provider: Gulf Coast Water Authority

Name of Water User Group: COUNTY-OTHER *Galveston, Coastal Bend*

Water Management Strategy Name: New contracts with GCWA

Capital Cost: \$ \$315,990

1. Using current utility revenue sources, including implementing necessary rate and tax increases, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above?

The political subdivision can afford to pay \$ 0.

2. If you could access the State Participation Program, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above using current utility revenue sources, including implementing necessary rate and tax increases?

The political subdivision can afford to pay \$ 0.

3. How much of the capital cost is the political subdivision unable to pay for the water management strategy identified above?

The political subdivision cannot afford to pay \$ \$315,990.

4. For the costs the political subdivision cannot pay, what option(s) is proposed? What, if any, state funding sources would the political subdivision consider? (Please use additional sheets, if necessary.)

---

---

---

---

---

# WATER INFRASTRUCTURE FINANCING SURVEY

Instructions: For each of the recommended strategies in the Region H Regional Water Plan to meet the water needs of the listed Water User Group, please answer the following questions. A separate sheet has been provided for each water management strategy.

Name of Major Water Provider: Gulf Coast Water Authority

Name of Water User Group: COUNTY-OTHER *Galveston, Bolivar Peninsula*

Water Management Strategy Name: New contracts with GCWA

Capital Cost: \$ \$800,508

1. Using current utility revenue sources, including implementing necessary rate and tax increases, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above?

The political subdivision can afford to pay \$ 0.

2. If you could access the State Participation Program, how much of the capital cost is the political subdivision able to pay for the water management strategy identified above using current utility revenue sources, including implementing necessary rate and tax increases?

The political subdivision can afford to pay \$ 0.

3. How much of the capital cost is the political subdivision unable to pay for the water management strategy identified above?

The political subdivision cannot afford to pay \$ \$800,508.

4. For the costs the political subdivision cannot pay, what option(s) is proposed? What, if any, state funding sources would the political subdivision consider? (Please use additional sheets, if necessary.)

---

---

---

---

---

---