



MEETING MATERIALS

September 2, 2009

San Jacinto River Authority

Region H Water Planning Group
9:00 AM Wednesday
September 2, 2009
San Jacinto River Authority Office
1577 Dam Site Rd, Conroe, Texas

Agenda

1. Introductions.
2. Review and approve minutes of July 1, 2009 meeting.
3. **Receive public comments on specific issues related to agenda items 4 through 19**
(Public comments limited to 3 minutes per speaker).
4. Consider reappointment of voting members of the Region H Water Planning Group whose terms are expiring.
5. Consider accepting and take action on the resignation of Mike Uhl as a voting member of the Region H Water Planning Group representing industry.
6. Consider and take action on the selection of Gena Leathers as a voting member of the Region H Water Planning Group representing industry.
7. Receive presentation from San Jacinto River Authority regarding annual financial report for Region H Planning Group.
8. Consider and take action on amending the Phase 1 budget for the 2011 Regional Water Plan cycle related to specific studies.
9. Receive presentation from Gwen Richardson, ESPA CORP, regarding a consistency issue related to Harris County MUD 50 and consider taking action to recommend a consistency waiver or initiate an amendment to the 2006 Region H Water Plan.
10. Receive presentation from Consultant on the status of region description (Task 1).
11. Consider and take action on approving the Draft Chapter 1 made available on the Region H website prior to the meeting.
12. Receive presentation from Consultant on the status of population and water demand analysis (Task 2).
13. Receive presentation from Consultant on the status of water supply analysis (Task 3).
14. Consider and take action on approving the Draft Chapter 3 made available on the Region H website prior to the meeting.
15. Receive presentation from Consultant on the status of water management strategy (WMS) analysis (Task 4).
16. Receive presentation from Consultant on the status of water conservation and drought management recommendations (Task 6).
17. Consider and take action on approving the Draft Chapter 6 made available on the Region H website prior to the meeting.
18. Receive updates by local water agencies or other interested parties regarding any water-related initiatives or projects currently underway or planned.
19. Agency communications and general information.
20. **General public comments.** (Public comments limited to 3 minutes per speaker)
21. Next Meeting: Proposed for October 28, 2009
22. Adjourn

Agenda Item 2

Review and approve minutes of July 1, 2009 meeting.

MINUTES
REGION H WATER PLANNING GROUP MEETING
10:00 A.M.
JULY 1, 2009
SAN JACINTO RIVER AUTHORITY OFFICE
LAKE CONROE DAM
1577 DAMSITE ROAD
CONROE, TEXAS

MEMBERS PRESENT: John R. Bartos, John Blount, Robert Bruner, Reed Eichelberger, Mark Evans, Bob Hebert, John Hofmann, Robert Istre, Glynn Leiper, Ted Long, Marvin Marcell, James Morrison, Ron Neighbors, Jimmie Schindewolf, William Teer, Steve Tyler, Danny Vance, C. Harold Wallace, Pudge Willcox

DESIGNATED ALTERNATES: Lisa Lattu for Jun Chang, Lloyd Behm for John Howard, and Gena Leathers for Mike Uhl

MEMBERS ABSENT: Roosevelt Alexander

NON-VOTING MEMBERS PRESENT: Temple McKinnon and Melinda Silva

PRESIDING: Mark Evans, Chair

CALL TO ORDER PUBLIC MEETING AT 10:07 A.M.

MINUTES OF MAY 6, 2009 MEETING

Motion was made by Danny Vance to approve the minutes of the May 6, 2009 meeting; seconded by John Blount. The motion carried unanimously.

PUBLIC COMMENTS ON AGENDA ITEMS 4 – 18

Brandt Mannchen commented on the population and water demand projections (Item No. 10). Mr. Mannchen distributed a summary of his personal comments related to water planning and management. He urged Region H to reduce water demand through conservation, and he emphasized the need to determine the sustainable population in each watershed and to provide water for same.

David Parkhill, Vice-President of AECOM, introduced himself and commented on Mike Reedy's departure from AECOM. Mr. Parkhill updated the group on AECOM's transition plan and his involvement with the group. He discussed the roles of the various team members.

RECEIVE PRESENTATION FROM CONSULTANT REGARDING TWDB'S COMMENTS TO THE ENVIRONMENTAL FLOWS STUDY DRAFT REPORT (AGENDA ITEM NO. 4), COMMENTS TO THE DROUGHT MANAGEMENT STUDY DRAFT REPORT (AGENDA ITEM NO. 6), AND COMMENTS TO THE INTERRUPTIBLE SUPPLY STUDY DRAFT REPORT (AGENDA ITEM NO. 8)

Jason Afinowicz presented the Texas Water Development Board's comments on the Specific Studies Reports related to environmental flows, drought management, and interruptible water supplies. Mr. Afinowicz distributed a summary of those comments, including TWDB's proposed changes to same.

CONSIDER AND TAKE ACTION ON THE ENVIRONMENTAL FLOWS STUDY FINAL REPORT (AGENDA ITEM NO. 5), THE DROUGHT MANAGEMENT STUDY FINAL REPORT (AGENDA ITEM NO. 7), AND THE INTERRUPTIBLE SUPPLY STUDY FINAL REPORT (AGENDA ITEM NO. 9) FOR SUBMITTAL TO THE TEXAS WATER DEVELOPMENT BOARD (TWDB) ON OR BEFORE JULY 31, 2009

After discussion, motion was made by Ron Neighbors to approve the Environmental Flows Study Final Report, the Drought Management Study Final Report, and the Interruptible Supply Study Final Report for submittal to the Texas Water Development Board; seconded by Danny Vance. The motion carried unanimously.

RECEIVE PRESENTATION FROM CONSULTANT REGARDING UPDATES TO THE POPULATION AND WATER DEMAND PROJECTION ANALYSIS (TASK 2) AND THE COMPLETED CHAPTER 2

A presentation by Jason Afinowicz covered the revised population and demand projections for the City of Huntsville, the City of Richmond, North Fort Bend Water Authority, and steam-electric demands for Fort Bend County. Mr. Afinowicz discussed the outstanding issues with each and efforts made to address each of them. Discussion ensued regarding the Texas Water Development Board's consistent under-projection of population in Fort Bend County. Discussion was led by Ron Neighbors, Marvin Marcell, John Hofmann, and David Parkhill on the planning process and the need to be able to address concerns as part of the planning process. A suggestion was made by the group and confirmed by Mark Evans that language needed to be included in the Chapter 2 narrative to clearly state the group's reasons for preferring a higher number for Fort Bend's population and also to state the group's disagreement with the TWDB's required population number. An additional suggestion was made to include alternative management strategies to address the under-projections. Temple McKinnon commented that TWDB is bound to statewide numbers provided by the State Data Center, which does not allow for county increases. She continued to explain TWDB's approach and that 2010 will be the next opportunity for changes to be made. Mr. Afinowicz continued with his presentation by responding to Brandt Mannchen's previous request for more information related to population and water demand projections.

RECEIVE PUBLIC COMMENT ON REVISED WUG PROJECTIONS FROM ITEM 10

Brandt Mannchen stated that he was in agreement with Marvin Marcell's comments during the discussion related to population projections. He commented on the need to look back at previous projections and ways to improve in the future.

CONSIDER AND TAKE ACTION ON APPROVING THE SUBMITTAL OF REVISED POPULATION AND WATER DEMAND PROJECTIONS TO THE TEXAS WATER DEVELOPMENT BOARD (TWDB)

Motion was made by Ron Neighbors to approve the recommended population and water demand projections with direction to the consultant team to include the language as stated above (in Item No. 10) as a caveat on the Fort Bend numbers; seconded by Harold Wallace. The motion was approved with two nay votes. Marvin Marcell and Bob Hebert voted nay.

CONSIDER AND TAKE ACTION ON APPROVING THE DRAFT CHAPTER 2 MADE AVAILABLE ON THE REGION H WEBSITE PRIOR TO THE MEETING

Jason Afinowicz explained the Draft Chapter 2 and the reason for early approval. He explained that the final language will come back to the group for additional review. Motion was made by John Hofmann to approve the Draft Chapter 2 with guidance to consultant to add the needed language. After further discussion Mr. Hofmann withdrew his motion. Discussions continued and motion was made by Danny Vance to direct consultant to continue in development of the Chapter 2 language as authorized; seconded by Lloyd Behm. Motion was approved.

RECEIVE PRESENTATION FROM CONSULTANT ON THE STATUS OF WATER SUPPLY ANALYSIS (TASK 3)

Jason Afinowicz introduced John Seifert to discuss the Water Supply Analysis (Task 3). Mr. Seifert discussed the current groundwater supplies and the availability of same. Karim El Kheishy continued with the presentation and discussed pre-modeling, post-modeling, and the major basins. He explained the firm yield determinations, general methodology, and WAM modeling used in the analysis. In summary he discussed the resource allocation, including counties with adequate and inadequate water supplies. He stated that the Draft Chapter 3 will be posted on Region H's website on July 8, 2009.

CONSIDER AND TAKE ACTION ON APPROVING THE DRAFT CHAPTER 3 MADE AVAILABLE ON THE REGION H WEBSITE PRIOR TO THE MEETING

No action taken. An informal approval of Draft Chapter 3 will be requested at the next Region H meeting.

RECEIVE PRESENTATION FROM CONSULTANT ON THE STATUS OF WATER MANAGEMENT STRATEGY (WMS) ANALYSIS (TASK 4) AND GATHER INPUT ON THE STATUS OF PROJECTS CONSIDERED IN THE 2006 RWP

Jason Afinowicz presented a general overview of Water Management Strategies (WMS) considered in the 2006 RWP. One core strategy he discussed was conservation, which can be utilized by municipal, irrigation, and industrial uses. Reservoir strategies from the 2006 plan included Allens Creek, Bedias, Little River, and Little River Off-Channel, of

which Allens Creek and Little River Off-Channel were still being considered for the current round of planning. Water rights strategies were presented, and included discussion of the Houston/SJRA Lake Houston Permit and utilization of Lake Houston Additional Yield, and Hosuton/SJRA Run-of-River Permit and the possibility of allowing for the use of interruptible water. Wastewater reclamation and reuse were presented as still-viable strategies in the current planning round. Jason then presented 2006 allocation and transfer strategies consisting of various contractual transfers, redistribution, and increasing current contracts to use non-allocated supplies. Finally, Jason briefly discussed other 2006 RWP strategies, including the BRA Systems Operations Permit, expanded use of groundwater, Freeport desalination, and the Brazos Salt Water Barrier.

Jason talked about the water provider survey which was sent to systems who were responsible for providing water to water users listed in the 2006 RWP, as well as parties that may play an important role in future water supplies within the region. Of the surveys which were sent, three responses were received, from Brazos River Authority, North Fort Bend Water Authority, and West Harris County Regional Water Authority. Jason encouraged participant input and stated that such input allows for the incorporation of strategies into the Regional Water Plan. Jason directed comments or questions to his email, Jason.Afinowicz@aecom.com.

RECEIVE UPDATES BY LOCAL WATER AGENCIES OR OTHER INTERESTED PARTIES REGARDING ANY WATER-RELATED INITIATIVES OR PROJECTS CURRENTLY UNDERWAY OR PLANNED

None.

AGENCY COMMUNICATIONS

Correspondence from the Texas Water Development Board was presented regarding the Water Conservation Advisory Council nominations and appointment of same. Also, presented was a letter from the TWDB to acknowledge Region H's support of a consistency waiver for Harris County WCID No. 21.

The Dow Chemical Company submitted a request to TCEQ regarding the water shortage on the lower Brazos River. They are requesting that TCEQ take the necessary steps to ensure the availability of water under their water right.

GENERAL PUBLIC COMMENTS

No Comments Received.

NEXT MEETING:

September 2, 2009
San Jacinto River Authority
Lake Conroe Dam
1577 Damsite Road
Conroe, Texas 77305

ADJOURNED AT 12:00 P.M.

Agenda Item 7

Receive presentation from San Jacinto River Authority regarding annual financial report for Region H Planning Group.

**REGION H WATER PLANNING GROUP
UNAUDITED SOURCES AND USES OF FUNDS
THROUGH DECEMBER 31, 2008**

	TOTAL	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998
WATER USER CONTRIBUTIONS	\$ 165,810								1,800		73,450	90,560
INTEREST EARNED	\$ 47,589	4,482	9,131	10,548	4,031	1,479	1,475	2,215	5,568	6,153	2,507	
TOTAL REVENUES	<u>213,399</u>											
EXPENSES												
PUBLIC NOTICE ADS	\$ 7,053			1,653	326				5,074			
LIABILITY INSURANCE	\$ 4,140						1,080	1,080	1,080	900		
MEETING EXPENSES ²	\$ 7,256	371			575		2,631		2,302	1,377		
TRAVEL EXPENSES ³	\$ 312						312					
BANK FEES	\$ 120									67	53	
SJRA DIRECT EXPENSES ¹	\$ 6,825	6,825										
TOTAL EXPENSES	<u>25,706</u>	<u>7,196</u>	<u>0</u>	<u>1,653</u>	<u>901</u>	<u>0</u>	<u>4,023</u>	<u>1,080</u>	<u>8,456</u>	<u>2,344</u>	<u>53</u>	<u>0</u>
ENDING BALANCE	<u>\$ 187,693</u>	<u>\$ 187,693</u>	<u>\$ 190,407</u>	<u>\$ 181,276</u>	<u>\$ 172,381</u>	<u>\$ 169,250</u>	<u>\$ 167,772</u>	<u>\$ 170,320</u>	<u>\$ 169,185</u>	<u>\$ 170,273</u>	<u>\$ 166,464</u>	<u>\$ 90,560</u>
TWDB FUNDS												
TWDB GRANTS	\$ 3,325,492	\$ 248,627	\$ -	\$ 428,861	\$ 549,856	\$ 382,013	\$ 359,931	\$ 4,140	\$ 618,150	\$ 370,278	\$ 363,636	
INTEREST EARNED	\$ 14,409	161	225	4,785	3,438	895	1,227	28	898	1,871	881	
TOTAL REVENUES	<u>3,339,901</u>											
EXPENSES												
WATER PLANNING STUDIES	\$ 3,315,101	250,040	0	460,137	653,943	261,856	335,896	4,553	618,982	484,044	245,649	
OTHER EXPENSES												
PUBLIC NOTICE ADS	\$ 5,335				5,161		174					
LIABILITY INSURANCE	\$ 6,983	1,379	1,379	1,403	1,539	1,283						
TRAVEL EXPENSES	\$ 1,718	497	200	522	337	162						
BANK FEES	\$ 99						25		20		54	
TOTAL OTHER EXPENSES	<u>14,135</u>	<u>1,876</u>	<u>1,579</u>	<u>1,925</u>	<u>7,037</u>	<u>1,445</u>	<u>199</u>	<u>0</u>	<u>20</u>	<u>0</u>	<u>54</u>	
ENDING BALANCE	<u>\$ 10,665</u>	<u>\$ 10,665</u>	<u>\$ 13,793</u>	<u>\$ 15,147</u>	<u>\$ 43,562</u>	<u>\$ 151,249</u>	<u>\$ 31,642</u>	<u>\$ 6,579</u>	<u>\$ 6,965</u>	<u>\$ 6,919</u>	<u>\$ 118,814</u>	<u>\$ -</u>
SJRA DIRECT EXPENSES												
LEGAL FEES	\$ 729											729
LIABILITY INSURANCE	\$ 1,579										1579	
POSTING NOTICES	\$ 4,598	280	357	264	863	466	233	387	271	826	651	
MEETING EXPENSES	\$ 199									199		
RECEIVED FROM RH WATER USER CONTRIBUTION		(6,825)										
TOTAL SJRA EXPENSES	<u>\$ 280</u>	<u>\$ (6,545)</u>	<u>\$ 357</u>	<u>\$ 264</u>	<u>\$ 863</u>	<u>\$ 466</u>	<u>\$ 233</u>	<u>\$ 387</u>	<u>\$ 271</u>	<u>\$ 1,025</u>	<u>\$ 2,230</u>	<u>\$ 729</u>

(1) The planning group reimbursed SJRA direct expenses (1998-2007) from the water user contribution fund in the month of April, 2008.

(2) Meeting expenses covered the legislative forum, lunches, public hearings, and misc. meeting expenses.

(3) Travel expenses incurred from the reimbursement of Region H members.

Agenda Item 8

Consider and take action on amending the Phase 1 budget for the 2011 Regional Water Plan cycle related to specific studies.



REGION H
Water Planning Group

1st Biennium Budget Amendment

- Completed and submitted FINAL reports for 1st Biennium Studies
 - Environmental Flows
 - Drought Management
 - Interruptible Supply
- Some adjustments to budget
 - Additional costs for some tasks, less for others
 - Total authorization remains the same

1st Biennium Budget Amendment

	Task	Original Authorization	Requested Revision
1	Environmental Flows	\$ 209,720.00	\$ 203,290.78
2	Drought Management	\$ 110,550.00	\$ 108,918.67
3	Interruptible Supply	\$ 97,730.00	\$ 117,328.23
0	Participation and Administration	\$ 132,400.00	\$ 120,862.32
	Total	\$ 550,400.00	\$ 550,400.00

Item 8: Consider and take action on amending budget for Phase 1 of Planning.

**Attachment I
Third Amended Exhibit D**

**Revised Task and Expense Budgets
2007 - 2009 Regional Water Planning**

Task		Task Description	Original Amount	Revised Amount
1 Environmental Flows Investigations				
	A	Impacts of Future Water Management Strategy on Galveston Estuary		
	A.1	Water Availability Modeling	\$0	\$0
	A.1.1	Establish base conditions for WAM's	6,550	6,349.20
	A.1.2	Conduct conference call or meeting with TWDB to present WAM assumptions and methodologies	4,280	4,148.79
	A.1.3	Develop WAM runs for each individual future water management strategy	11,080	10,740.33
	A.1.4	Develop summary tables and graphs to demonstrate the impacts of each individual water management strategy	8,680	8,413.90
	A.2	Management Scenarios	0	0
	A.2.1	Identify possible alternative methods to provide potential mitigation of identified shortages in desired freshwater inflows	18,590	18,020.10
	A.2.2	Conduct conference call or meeting with TWDB to present WAM assumptions and methodologies	4,280	4,148.79
	A.2.3	Compare the effectiveness of the various mitigation methods using the WAMs	11,880	11,515.80
	A.2.4	Prepare preliminary planning information to qualitatively define cost and benefits of the various alternative methods	7,880	7,638.43
	A.3	Presentation of Results	0	0
	A.3.1	Meet with the Stakeholder group and discuss scope of work and interim results	10,570	10,245.96
	A.3.2	Develop interim data to share with stakeholders and RHRWPG	13,770	13,347.86
SUBTOTAL TASK 1A			\$97,560	\$94,569.16
	B	Evaluation of Instream Flow Requirements for Future Water Management Strategies		
	B.1	Lyons Method	\$0	\$0
	B.1.1	Identify the likely critical stream segment for instream flow considerations	7,750	7,512.41

	B.1.2	Determine the allowable diversions under the default Lyons Methodology	8,150	7,900.15
	B.1.3	Conduct a field windshield/walking survey of the stream segment	14,270	13,832.54
	B.2	Other Desktop Methodologies	0	0
	B.2.1	Collect available information on each critical stream reach such as TPWD surveys, aerial photography, etc.	5,710	5,534.95
	B.3	Presentation of Results and Preparation of Summary Report	0	0
	B.3.1	Meet with the RWPG and discuss scope of work and interim results	9,970	9,664.36
	B.3.2	Develop interim data to share with stakeholders and RHRWPG	13,770	13,347.86
	B.3.3	Summarize all findings from Tasks A.3.2 and B.3.2 in a suitable draft and final report and submit for stakeholder and RHRWPG review	52,540	50,929.35
SUBTOTAL TASK 1 B			\$112,160	\$108,721.62
Total Task 1			\$209,720	\$203,290.78
2 Drought Management Impact of Drought Management Strategies on Surface Water Resources in Region H			Original Amount	Revised Amount
	A. Assess the scope and efficacy of Drought Contingency planning in Region H			
	A.1	Obtain listing of specific systems from tea drought impact list	\$2,460	\$2,423.70
	A.2	Use TCEQ Water Utility Database to determine system size in terms of connections and population as well as peak day and average day usage information, if available	3,780	3,724.22
	A.3	Use information from TCEQ database and/or from TCEQ drought listing to contact system officials for drought impacted systems and request updated connection and water usage records. Records of drought contingency measures implemented will also be requested	5,300	5,221.79
	A.4	Use records of water usage during implementation of drought contingency measures as well as for times when measures were not in place and compare per capita usages	6,420	6,325.26
	A.5	Research national publications for information on efficacy of drought contingency measure sin other climates	4,900	4,827.69

A.6	Develop a summary listing of commonly used Drought Contingency measures and the corresponding estimates of water savings associates with implementing these measures	2,180	2,147.83
A.7	For each WUG projected to receive water supply from Lake Livingston, Lake Conroe, Lake Houston, and future Allens Creek Reservoir, use the estimates for water savings associated with implementing Drought Contingency measures developed in Task A.6 to estimate projected water demands under drought conditions	1,040	1,024.65
Subtotal Task A		\$26,080	\$25,695.14
B. Evaluate the relative impact of drought management strategies to existing and future water supplies in Region H			
B.1	Using the TCEQ WAM, evaluate the impact of drought conditions on existing Lake Livingston, Lake Conroe, and Lake Houston reservoirs and future Allens Creek reservoir supplies in the absence of drought management measures	\$7,160	\$7,054.34
B.1.1	Develop graphs summarizing lake level and/or capacity under various hydrologic conditions (i.e., with and without return flows) and demands	7,490	7,379.47
B.1.2	Develop summary tables calculating the frequency, extend, and duration of low lake level and/or capacity under various hydrologic conditions (i.e., with and without return flows) and demands	7,110	7,005.08
B.1.3	Assess impacts on water supplies as a result of drought conditions extending beyond the current drought of record by estimating how many months the supply remaining at the end of the drought of record will meet demands	7,610	7,497.70
B.2	Using the TCEQ WAM, evaluate the impact of drought conditions on existing Lake Livingston, Lake Conroe, Lake Houston reservoirs and future Allens Creek reservoir supplies in the presence of drought management measures and expected water savings as estimated in Task B, above	7,160	7,054.34
B.2.1	Develop graphs summarizing lake level and/r capacity under various hydrologic conditions (i.e., with and without return flows), demands, and drought management strategies and triggers	7,490	7,379.47

	B.2.2	Develop summary tables calculating the frequency, extent, and duration of low lake level and/or capacity under various hydrologic conditions (i.e., with and without return flows), demands, and drought management strategies and triggers	7,110	7,005.08
	B.2.3	Assess impacts on water supplies as a result of drought conditions extending beyond the current drought of record by estimating how many months the supply remaining at the end of the drought of record will meet demands	7,610	7,497.70
Subtotal Task B			\$58,740	\$57,873.18
	C. Evaluate the impacts, if any, of drought management on the size and timing of other future water management strategies in Region H		\$4,810	4,739.02
	D. Prepare a summary technical report documenting the results including tables, graphs, and figures in accordance with guidelines in Exhibit B of the Drought Management task and present to the Region H RWP		\$20,920	20,611.33
Total Task 2			\$110,550	\$108,918.67
3 Interruptible Water Supplies			Original Amount	Revised Amount
A. Evaluate and quantify the availability and dependability of existing permitted interruptible supplies in Region H				
	A.1	Perform an analysis of the “75-75” rule to all permitted water rights in Region H with agricultural uses	\$5,560	\$6,674.97
	A.2	Calculate the amount of interruptible supply available for each water right	5,560	6,674.97
SUBTOTAL TASK 3A			\$11,120	13,349.94
B. Evaluate and quantify the availability and dependability of existing permitted interruptible supplies in Region H				
	B.1	Conduct conference call or meeting with TWDB to present WAM assumptions and methodologies	\$4,280	5,138.29
	B.2	Perform an analysis of the “75-75” rule using the WAM to all permitted water rights in Region H	10,710	12,857.72
	B.3	Calculate the amount of interruptible supply available for each water right	10,710	12,857.72
SUBTOTAL TASK 3B			\$25,700	30,853.73

C. Evaluate and quantify the availability and dependability of new unpermitted interruptible supplies in Region H				
	C.1	Conduct conference call or meeting with TWDB to present WAM assumptions and methodologies	\$4,280	5,138.29
	C.2	Perform analysis of the "75-75" rule at specific points in the WAM near irrigation demands in Region H	5,090	6,110.72
	C.3	Evaluate the new un-permitted interruptible supplies	5,090	6,110.72
SUBTOTAL TASK 3C			\$14,460	17,359.73
D. Evaluate and quantify potential uses for interruptible water supplies within Region				
	D.1	Evaluate predominant regional crop types and seasonal irrigation requirements and patterns.	10,650	12,785.69
	D.2	Deleted	0	
SUBTOTAL TASK D			\$16,190	12,785.69
E. Compare amounts and locations of interruptible supplies to amounts and locations of demands			\$7,650	9,184.09
F. Deleted			0	0
G. Evaluate and quantify additional firm yield supplies made available			\$7,440	8,931.98
H. Evaluate the impacts of the use of interruptible supplies on other water management strategies			\$6,340	7,611.39
I. Deleted			0	0
J. Evaluate and quantify the economic impacts of this strategy				0
	J.1-5	Deleted	0	0
K. Deleted			0	0
L. Prepare a summary report of the potential use of interruptible supplies in Region H			\$14,370	17,251.68
Total Task 3			\$97,730	\$117,328.23
0 Public Participation and Administration			Original Amount	Revised Amount
	A	Develop scopes of work and budgets for the first biennium regional planning	\$23,790	21,716.88
	B	Prepare materials for and attend meetings of the RHWPG	\$16,880	15,409.03
	C	Prepare materials for and attend subcommittee meetings of the RHWPG	\$14,420	13,163.40
	D	Provide logistics, public announcements, prepare materials for and attend public meetings	\$14,600	13,327.72
	E	Prepare public notices of meetings/hearings in newspapers of general circulation in each of the counties in the region	\$7,270	6,636.47

F	Provide direct mail notices of meetings/hearings to elected officials, water rights holders and public utilities	\$4,680	4,272.17
G	Provide for copying and/or publication of reports as needed for RHWPG and public review and comment	\$4,080	3,724.46
H	Establish a Region H Website for posting of Region H documents and information	\$16,600	15,153.43
I	Prepare a Work Plan for the third round of planning including scopes, schedules, and budgets	\$15,760	14,386.63
J	Prepare recommendations for items which should be amended in the Region H Water Plan	\$14,320	13,072.13
SUBTOTAL TASK 0		\$132,400	\$120,862.32
Total Funds		\$550,400	\$550,400.00

Expense Budgets

Task 1 - Environmental Flows Investigations

Category	Original Total Amount	Revised Total Amount
Salaries & Wages ¹	\$ 56,324	\$60,318.02
Fringe ²	29,513	31,606.50
Travel	700	1,172.31
Other Expenses ³	2,500	6.41
Subcontract Services	20,652	3,062.40
Voting Planning Member Travel ⁵	0	0
Overhead ⁴	62,914	67,375.08
Profit	37,117	39,750.06
Total	\$ 209,720	\$203,290.78

Task 2 - Drought Management

Category	Original Total Amount	Revised Total Amount
Salaries & Wages ¹	\$25,445	\$3,525.74
Fringe ²	13,334	1,847.45
Travel	0	74.86
Other Expenses ³	500	0
Subcontract Services	26,080	97,208.87
Voting Planning Member Travel ⁵	0	0
Overhead ⁴	28,422	3,938.26
Profit	16,769	2,323.49
Total	\$110,550	\$108,918.67

Task 3 - Interruptible Water Supplies

Category	Original Total Amount	Revised Total Amount
Salaries & Wages ¹	\$2,916	\$3,924.24
Fringe ²	1,528	2,056.29
Travel	0	47.14
Other Expenses ³	0	0
Subcontract Services	88,107	104,331.11
Voting Planning Member Travel ⁵	0	0
Overhead ⁴	3,257	4,383.35
Profit	1,922	2,586.11
Total	\$97,730	\$117,328.24

Task 0 - Public Participation and Administration

Category	Original Total Amount	Revised Total Amount
Salaries & Wages ¹	\$13,825	\$19,991.77
Fringe ²	7,244	10,475.63
Travel	1,500	539.00
Other Expenses ³	13,190	6,344.27
Subcontract Services	70,089	46,006.18
Voting Planning Member Travel ⁵	2,000	2,000.00
Overhead ⁴	15,442	22,330.74
Profit	9,110	13,174.73
Total	\$132,400	\$120,862.32

¹ Salaries and Wages is defined as the cost of salaries of engineers, draftsmen, stenographers, survey men, clerks, laborers, etc., for time directly chargeable to this contract.

² Fringe is defined as the cost of social security contributions, unemployment, excise, and payroll taxes, employment compensation insurance, retirement benefits, medical and insurance benefits, sick leave, vacation, and holiday pay applicable thereto.

³ Other Expenses is defined to include expendable supplies, communications, reproduction, postage, and costs of public meetings.

⁴ Overhead is defined as the costs incurred in maintaining a place of business and performing professional services similar to those specified in this contract. These costs shall include the following:

- Indirect salaries, including that portion of the salary of principals and executives that is allocable to general supervision;
- Indirect salary fringe benefits;
- Accounting and legal services related to normal management and business operations;
- Travel costs incurred in the normal course of overall administration of the business;
- Equipment rental;
- Depreciation of furniture, fixtures, equipment, and vehicles;
- Dues, subscriptions, and fees associated with trade, business, technical, and professional organizations;
- Other insurance;
- Rent and utilities; and
- Repairs and maintenance of furniture, fixtures, and equipment.

⁵ Voting Planning Member Travel Expenses is defined as eligible travel expenses incurred by regional water planning members that cannot be reimbursed by any other entity, political subdivision, etc.

Agenda Items 10 - 11

Receive presentation from Consultant on the status of region description (Task 1).

Consider and take action on approving the Draft Chapter 1 made available on the Region H website prior to the meeting.



2011 Regional Water Plan Schedule		
Date	Event	Items Due
02/04/09	RWPG Meeting	No Deliverables
05/06/09	RWPG Meeting	Population and Water Demand Projections for Consideration by RWPG
07/01/09	RWPG Meeting	Draft Chapters 2 and 3; Proposed Recommendations and Strategies for Consideration by RWPG
09/02/09	RWPG Meeting	Draft Chapters 4, 5, and 8 Draft Chapters 1 and 6

Focus for Today's Meeting

- Task 1 – Description of the Region
 - Approval of DRAFT Chapter 1

- Task 2 – Population and Water Demands
 - Review of historical population projections for Fort Bend County
 - Resolution for Group consideration

- Task 3 – Water Supply Analysis
 - Update to final shortage analysis
 - Approval of DRAFT Chapter 3

Focus for Today's Meeting

- Task 4 – Water Management Strategy Selection
 - Environmental flows study
 - Allocation of unmet needs to WWPs
 - Major WMD recommendations

- Task 6 – Water Conservation and Drought Management Recommendations
 - Results of WUG survey and updates to conservation strategies
 - Approval of DRAFT Chapter 6



Task 1 – Planning Area Description

REGION H
Water Planning Group

- Population and Water Demands
- Threatened and Endangered Species
- Drought Preparations
- TWDB Water Loss Audit
- Recommendations from 2006 Region H Plan

Task 1 – Planning Area Description

Change in County Populations

County	2000 Census Population	2006 Population ¹	% Increase
Austin	23,590	26,928	14%
Brazoria	241,767	286,773	19%
Chambers	26,031	32,383	24%
Fort Bend	354,452	487,047	37%
Galveston	250,158	282,126	13%
Harris	3,400,578	3,830,130	13%
Leon	15,335	16,218	6%
Liberty	70,154	77,176	10%
Madison	12,940	13,534	5%
Montgomery	298,768	399,941	34%
Polk ²	33,098	37,295	13%
San Jacinto	22,246	24,739	11%
Trinity ²	10,380	10,733	3%
Walker	61,758	64,026	4%
Region H Total	4,848,918	5,627,524	16%

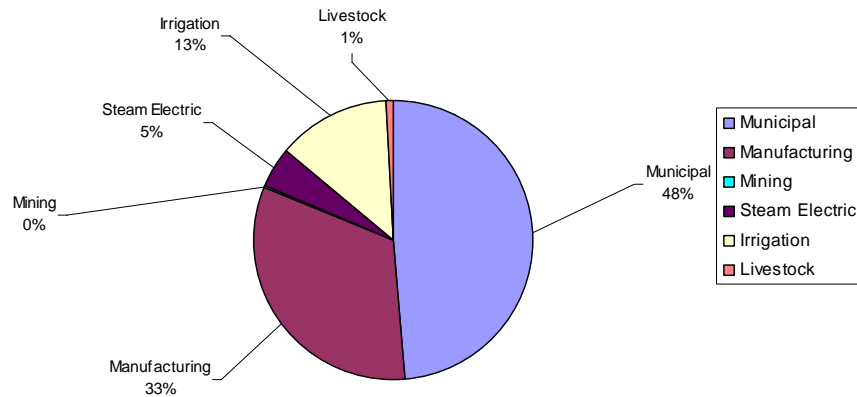
Source: Texas Water Development Board

¹2006 Total Population Estimates for Texas counties as of July 1, 2006 from the Texas State Data Center.

² Includes portion of the county in the Region H area

Task 1 – Planning Area Description

2006 Water Use Survey Summary Estimates Region H



Source: Texas Water Development Board

Task 1 – Planning Area Description

Changes to list of threatened and endangered species

County	2006 Plan Species	New Species	Endangered Species Current Total
Austin County	4	4	8
Brazoria County	3	13	16
Chambers County	3	13	16
Fort Bend County	3	2	5
Galveston County	4	11	15
Harris County	4	11	15
Leon County	4	4	8
Liberty County	7	5	12
Madison County	3	3	6
Montgomery County	6	4	10
Polk County	6	4	10
San Jacinto County	6	4	10
Trinity County	0	7	7
Walker County	5	4	9
Waller County	5	5	10

Texas Parks and Wildlife, last updated: 2/3/2009

Task 1 – Planning Area Description

Drought Preparations

- Incorporated Region H Drought Study
 - Systems implementing DCPs are typically small, groundwater-based systems
 - Difficult to quantify efficacy

Task 1 – Planning Area Description

TWDB Water Loss Audit

- Perform water loss audits every five years
- 1st Set of Data to TWDB March 31, 2006
 - 638 Utilities in Region H
- Follow a recommended water reporting methodology

Utility Type	Number	Total Apparent Loss (acre-ft/year)	Total Real Loss (acre-ft/year)	Total Loss (acre-ft/year)
City	49	13,201	5,974	19,174
MUD	281	5,120	2,778	7,899
SUD	36	79	350	429
WCID	24	675	333	1,008
WSC	147	474	666	1,140
Other	101	1,967	1,169	3,136
Total	638	21,516	11,270	32,786

Task 1 – Planning Area Description

Recommendations

- Updated section of Chapter 1 summarizing recommendations made in the 2006 Plan pertaining to:
 - Regulatory and Administrative Recommendations
 - Legislative Recommendations
 - Infrastructure Financing

Task 1 – Planning Area Description

Draft Chapter 1

- Informal approval to move forward from these tasks
 - Will be reviewed again in IPP
- Latest version posted to the Region H Website on August 24th
- **Item 11:** *Consider and take action on approving the Draft Chapter 1 made available on the Region H website prior to the meeting*

Agenda Item 12

Receive presentation from Consultant on the status of population and water demand analysis (Task 2).



Task 2 – Population and Water Demands

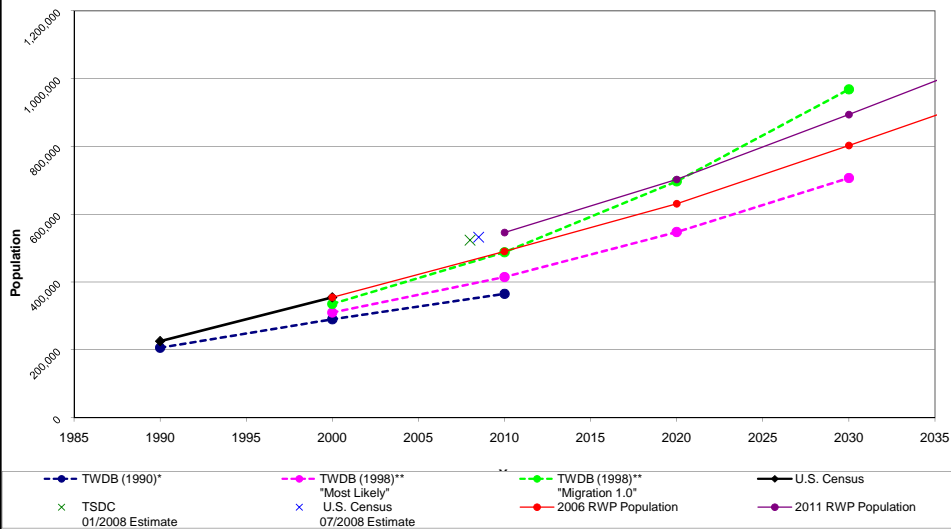


Items from Last Meeting

- Approval of population and water demands
- Approval of Draft Chapter 2
- Request to examine historical projections for Fort Bend County
 - Performed a study of past projections
 - Drafted a resolution for Planning Group review regarding historical issues with Fort Bend projections

Task 2 – Population and Water Demands

REGION H
Water Planning Group



*Source: Texas Water Development Board Report 321: Evaluation of Water Resources for Fort Bend County, TX (January 1990)
 **Source: Fort Bend Subsidence District Management Plan (August 1998)

Task 2 – Population and Water Demands

REGION H
Water Planning Group

Draft Resolution

- Included in handout packet
- States that:
 - RWPG has approved population and demand projections understanding there is limited potential for requesting additional growth for Fort Bend County
 - RWPG feels there is compelling evidence that population for Fort Bend County will grow beyond the levels forecast by these projections
 - RWPG recommends adequate time to study 2010 Census results in the development of 2016 RWP
- Consider approval at next meeting

Resolution by the Region H Regional Water Planning Group Regarding
Population Projections for the 2011 Regional Water Planning Cycle
Adoption Pending

WHEREAS, the Region H Regional Water Planning Group (Region H) is charged with developing and adopting, with broad public input, a regional water plan every five years; and

WHEREAS, Region H received guidance from the Texas Water Development Board (TWDB) in a letter dated December 3, 2008 that indicated with the exception of steam-electric water demands, the TWDB (also referred to as the Board) is not generating new 2011 plan projections for approval by the Board; and

WHEREAS, TWDB indicated that planning groups may request that the Board consider revisions to 2006 Regional Water Plan and 2007 State Water Plan population and water demand projections if conditions in a given planning area have changed sufficiently to warrant revisions. The TWDB further indicated:

- The January 2007 population estimates from the Texas State Data Center will be used as the primary standard to determine if changed conditions warrant any revisions to population projections, both at the local and regional level; and
- The Texas State Data Center estimates indicate that current population growth is exceeding projected growth rates for Region H as a whole. Increased regional totals, commensurate with growth which has occurred, are likely justified for this region, subject to TWDB approval; and

WHEREAS, Region H in conjunction with its consultant, AECOM, reviewed available data and information from various sources, including the Texas State Data Center, Houston-Galveston Area Council, U.S. Census Bureau, Region H's 2006 population and water demand projections, and input from various regional water planning group members; and

WHEREAS, Region H developed a set of recommended population and water demand projections for each county in Region H based on three methods; and

WHEREAS, TWDB selected Method 2 as the preferred method for altering the population projections for Brazoria, Chambers, Fort Bend, and Montgomery Counties and Method 1 for Harris County. A county-level comparison summary of differences between the Method 2 projections and the Method 3 projections for Fort Bend County is attached (Attachment 1); and

WHEREAS, at a regularly scheduled meeting on February 4, 2009 in Conroe, Region H reviewed these projections for counties and AECOM proceeded to develop population projections for Water User Groups (WUGs); and

WHEREAS, after developing initial population projections, AECOM mailed documentation to the Water User Groups (WUGs) soliciting their input on their population and water demand projections; and

WHEREAS, through correspondence with TWDB, the TWDB demographers indicated that the overall projections of State population and State growth rate was a prime motivator for the TWDB staff limiting the population projections for Fort Bend County; and

WHEREAS, at a regularly scheduled meeting on May 6, 2009 in Conroe, Region H adopted these projections, excluding the City of Richmond, the City of Huntsville, and steam electric demand projections for Fort Bend and Galveston County, as its initially prepared projections for Water User Groups (WUGs), TWDB and the public to review and comment on; and

WHEREAS, after considerable debate and discussion among the group at its regular meeting on July 1, 2009 in Conroe, Region H decided to use the TWDB recommended population projections for Fort Bend County. During this discussion, planning group members expressed their concern that to continue forward and challenge the TWDB's staff recommendation on population projections for Fort Bend County may not be successful, but most importantly would put at risk the ability to develop a regional plan within the deadlines established by the TWDB; and

WHEREAS, Region H conducted two public meetings on May 6, 2009 and July 1, 2009 to receive comments from the public and WUGs; and

WHEREAS, Region H planning group members drafted a resolution for its consideration at its September 2, 2009 meeting as a method to express and document its concerns regarding the use of the TWDB recommended population projections for Fort Bend County for the 2011 plan. The planning group has expressed concerns that the adopted TWDB recommended population projections for Fort Bend County do not reflect the actual growth that it is seeing in the planning region over the recent past and expects to experience in the near future; and

WHEREAS, Region H planning group has compiled a comparison of population projections for Fort Bend County (Attachment 2) that illustrates the estimates and actual population projections for Fort Bend County since 1990;

THEREFORE BE IT RESOLVED that:

- (1) Region H desires to express its appreciation to the TWDB for recognizing that the region is seeing increased demands for water and has experienced significant population growth at a rate greater than expected in the approved 2006 Region H Plan. However, the planning group does not believe that the population projections developed with TWDB guidance described above and informally reviewed by the TWDB for the 2011 planning process for Region H captures all of the population growth that is being experienced in Fort Bend County and what is expected to be seen in the near future.
- (2) Region H's data review has shown that Fort Bend County is currently experiencing growth beyond what is projected in the submitted projections for the 2011 planning process but is aware that higher levels of growth will not be permitted by TWDB.
- (3) Given the tight plan development timeline requirements, Region H decided to move forward with adopting the population projections developed with TWDB guidance for Fort Bend County for the 2011 planning process in order to assure that Region H could develop and approve a regional plan that would meet the required TWDB planning process deadlines.
- (4) Region H urges the TWDB to consider starting the 2016 planning cycle population and water demand projection development as early as possible in order to provide additional time to consider new information at that time, including 2010 census data.

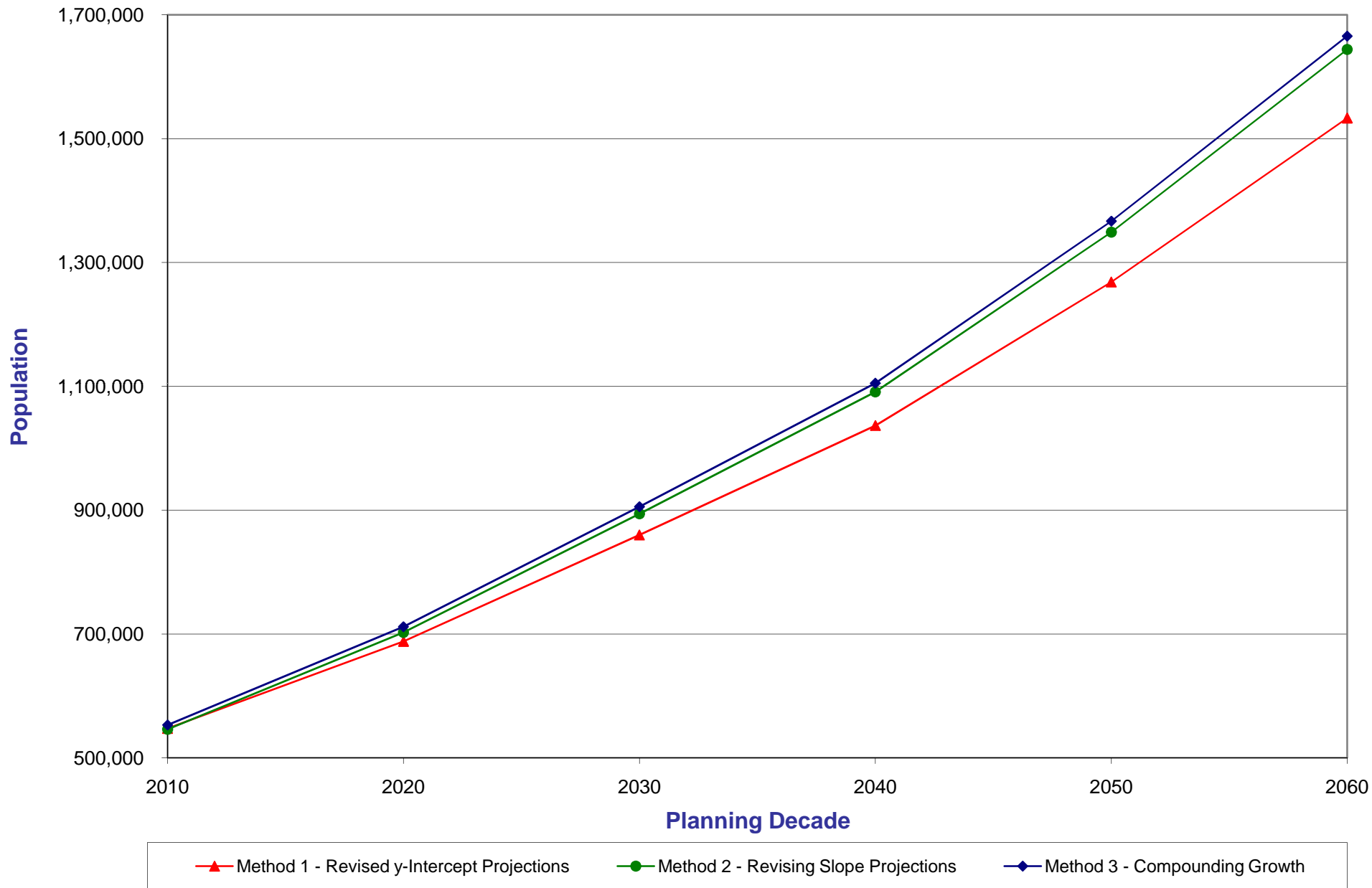
Judge Mark Evans, CHAIRMAN
Region H Regional Water Planning Group

DATE

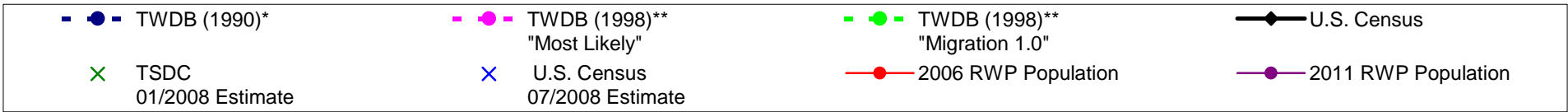
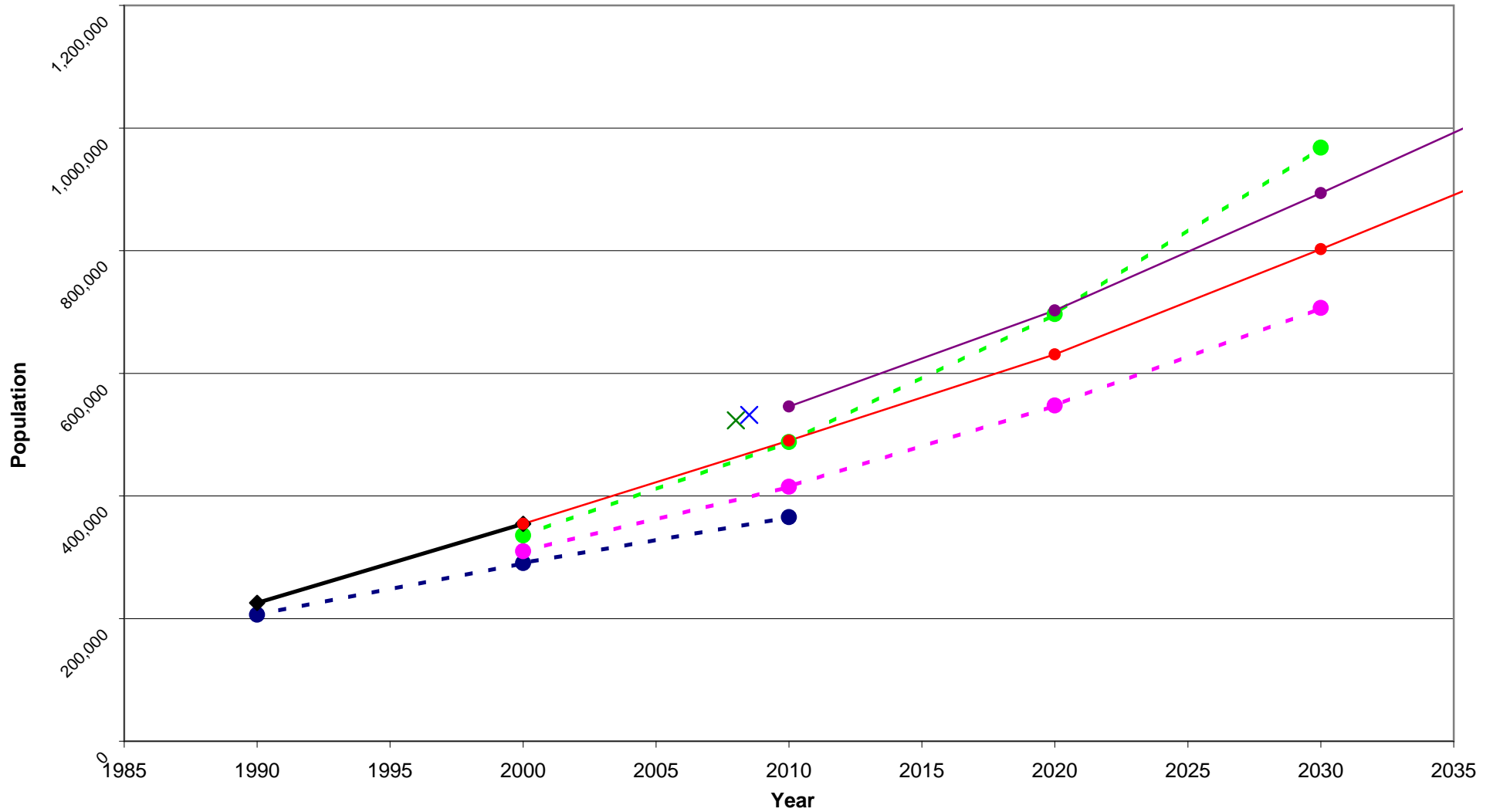
ATTEST:

Secretary

Date



Comparison of Population Projections for Fort Bend County



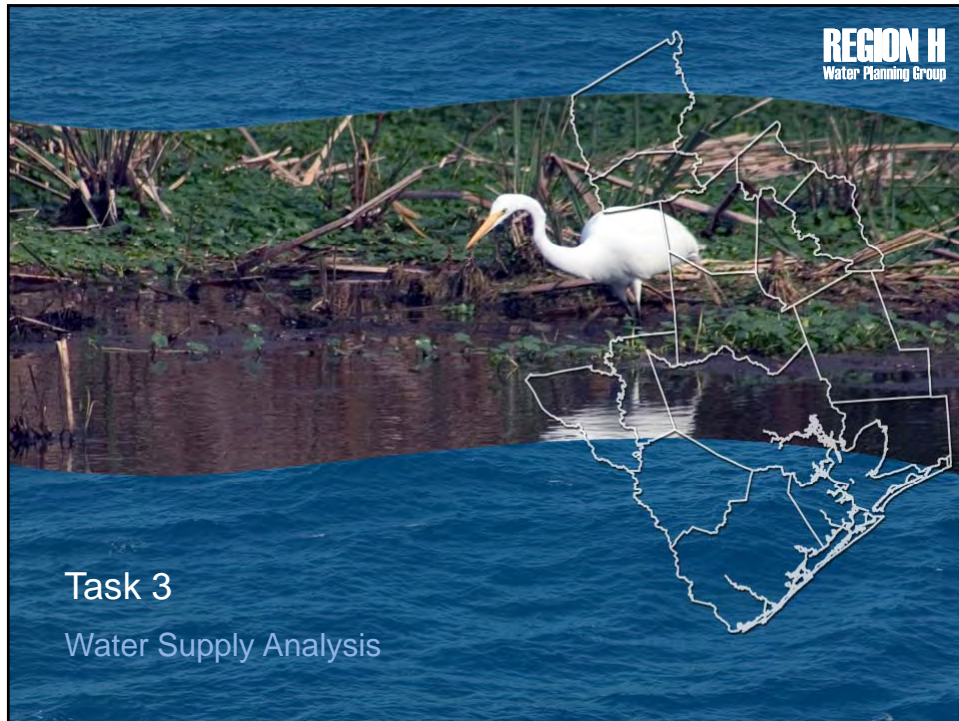
*Source: Texas Water Development Board Report 321: Evaluation of Water Resources for Fort Bend County, TX (January 1990)

**Source: Fort Bend Subsidence District Management Plan (August 1998)

Agenda Items 13 - 14

Receive presentation from Consultant on the status of water supply analysis (Task 3).

Consider and take action on approving the Draft Chapter 3 made available on the Region H website prior to the meeting.



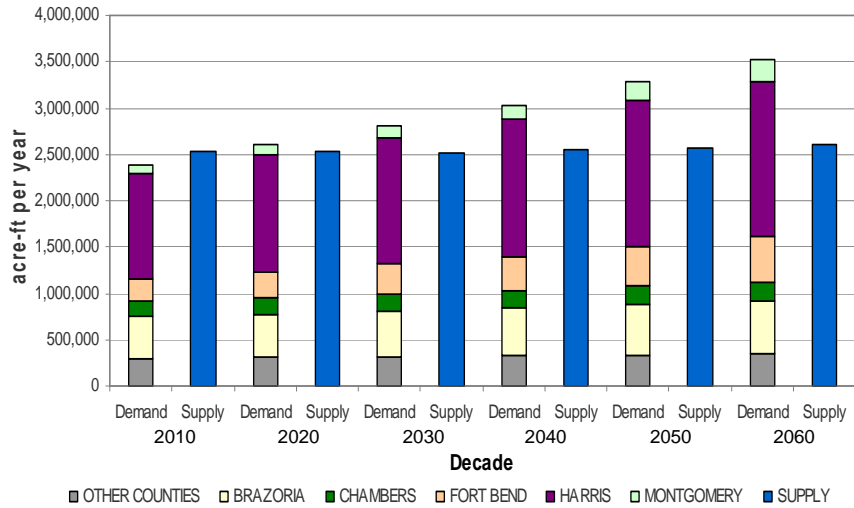
Task 3 – Water Supply Analysis

REGION H
Water Planning Group

- Last Meeting
 - Development of available water supplies
 - Groundwater
 - Surface Water
 - Preliminary allocations of available supplies to WUGs
- This Meeting
 - Updates to supply allocations and shortages
 - Approval of Draft Chapter 3

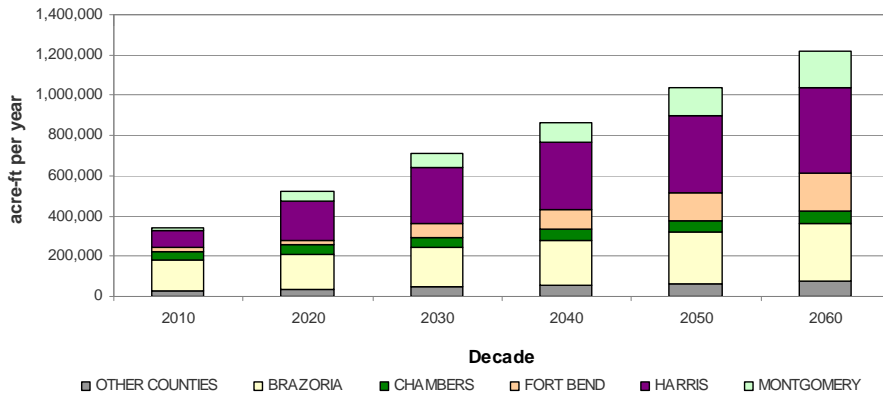
Task 3 – Shortage Analysis

Shortage Analysis (Demand vs Current Supply)



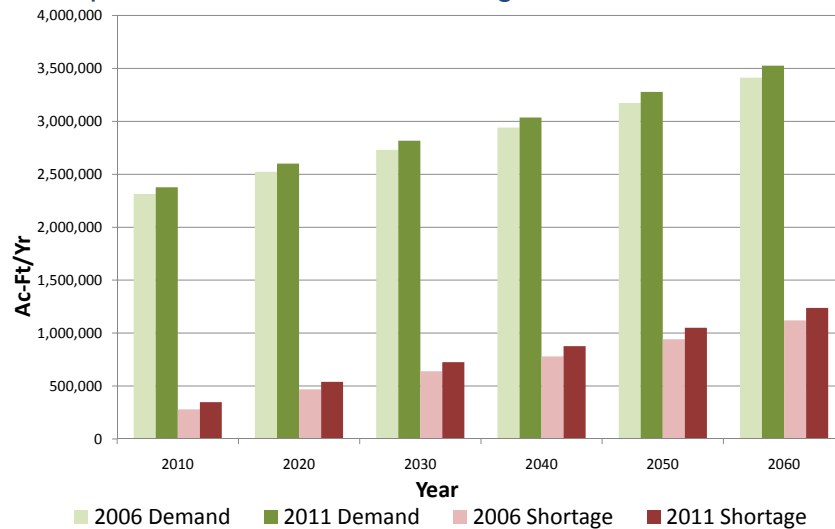
Task 3 – Shortage Analysis

Total WUG Shortages by Decade



Task 3 – Shortage Analysis

Comparison to 2006 RWP Shortages



Task 3 – Water Supply Analysis

Draft Chapter 3

- Prepared to summarize the development and allocation of water supplies within the Region
- Informal approval to move forward from these tasks
 - Will be reviewed again in IPP
- Latest version posted to the Region H Website on August 24th
- **Item 14:** Consider and take action on approving the Draft Chapter 3 made available on the Region H website prior to the meeting

Agenda Item 15

Receive presentation from Consultant on the status of water management strategy (WMS) analysis (Task 4).



Task 4 – Water Management Strategies

REGION H
Water Planning Group

Items for Today

- Environmental Flows Special Study Item
- Locations of Identified Shortages
- Ongoing Efforts

Task 4 – Water Management Strategies



Environmental Flows Special Study Item

- 1st Phase Study
 - Investigated Bay and Estuary (B&E) inflows and instream flows at a Year 2060 condition
 - Investigated methods for increasing frequency for attainment of inflow targets
 - Identified minor impacts from individual Region H strategies

- 2nd Phase Study
 - Scope of Work item to investigate impacts to Bay and Estuary (B&E) inflows over time
 - Models all 2006 RWP strategies and upstream impacts in 2010, 2020, 2030, 2040, 2050, and 2060 decades

Task 4 – Water Management Strategies



Environmental Flows Model Development

- Developed models from TCEQ Run 8 (Current Conditions) for basins contributing to Galveston Bay
 - Neches-Trinity
 - Trinity
 - Trinity-San Jacinto
 - San Jacinto
 - San Jacinto-Brazos

- Incorporated upstream impacts over time
 - *Region C Water Conservation and Reuse Study*

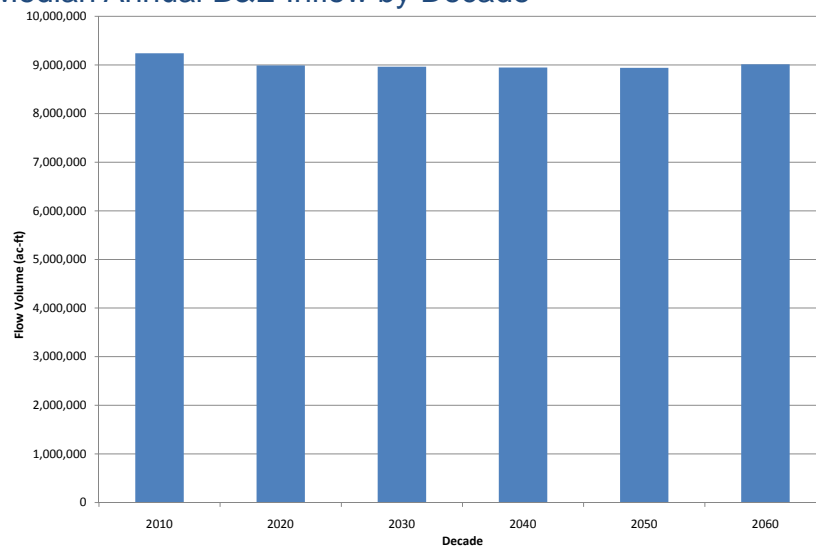
Task 4 – Water Management Strategies

Environmental Flows Model Development

- Modify models to reflect temporal conditions of each decade
 - Increase diversions based on demands
 - Increase return flows based on demands
 - Implement strategies on the anticipated schedule
 - Modify reservoir capacity based on sedimentation
- Observe and report results of model simulations

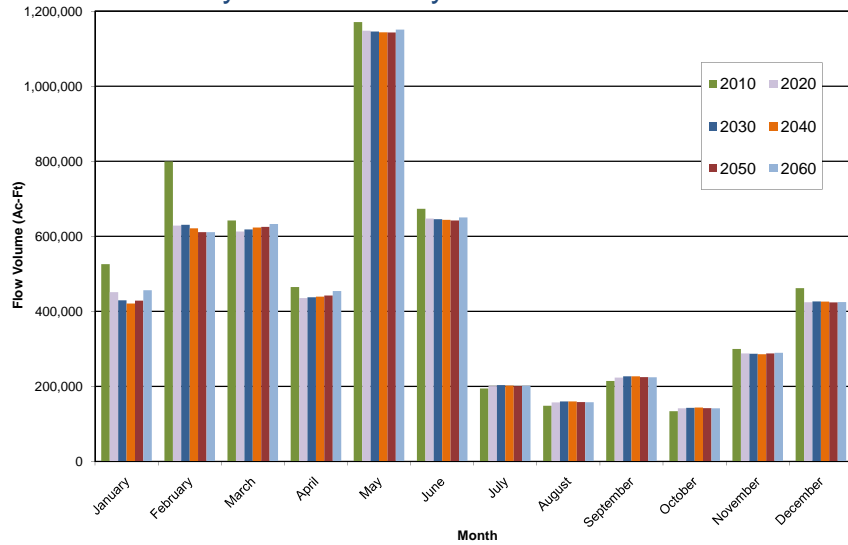
Task 4 – Water Management Strategies

Median Annual B&E Inflow by Decade



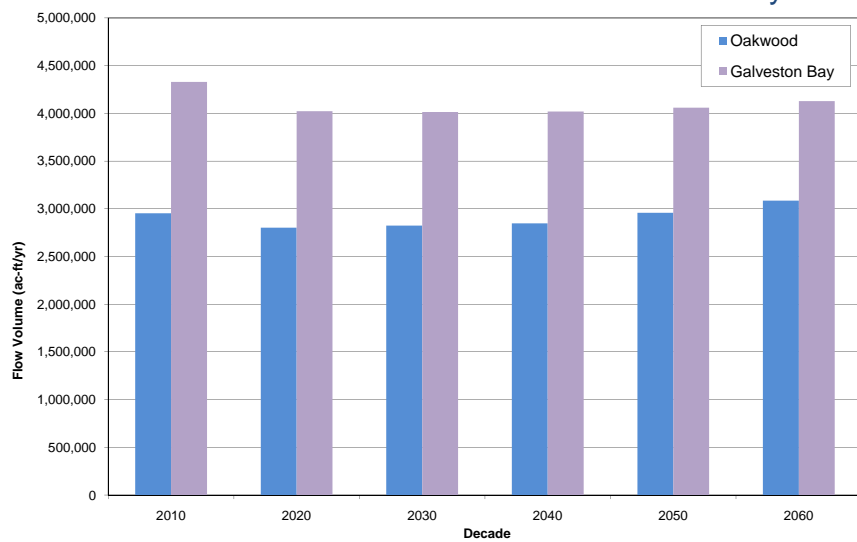
Task 4 – Water Management Strategies

Median Monthly B&E Inflow by Decade



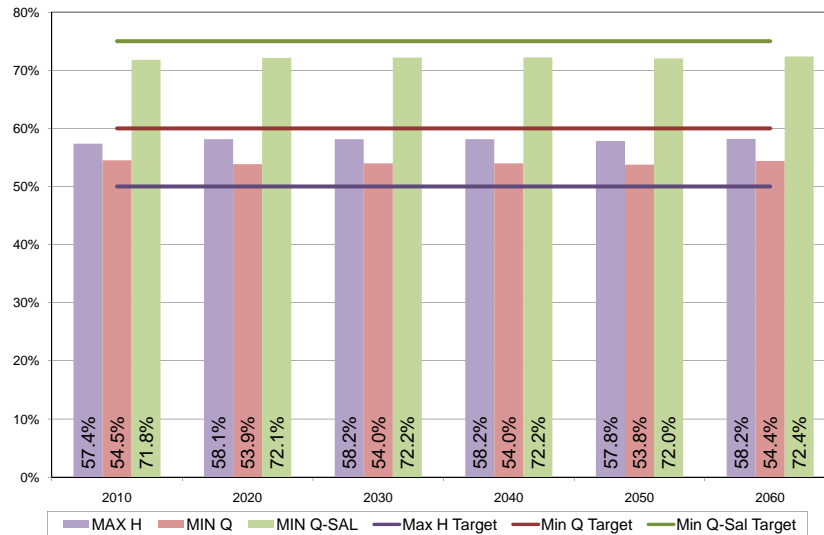
Task 4 – Water Management Strategies

Median Annual Flows at Oakwood and Galveston Bay



Task 4 – Water Management Strategies

GBFIG Frequency of Target Attainment



Task 4 – Water Management Strategies

Conclusions

- Noticeable impacts occur as a result of decadal changes in:
 - Upstream return flows
 - Gradual increase in use of existing and future water supplies
- Median flows
 - Reduce most significantly in 2020
 - Begin to recover late in 2060 as upstream return flows start to outpace Region H consumption
- Inflow target attainment is not significantly impacted
 - Driven by frequency of meeting targets

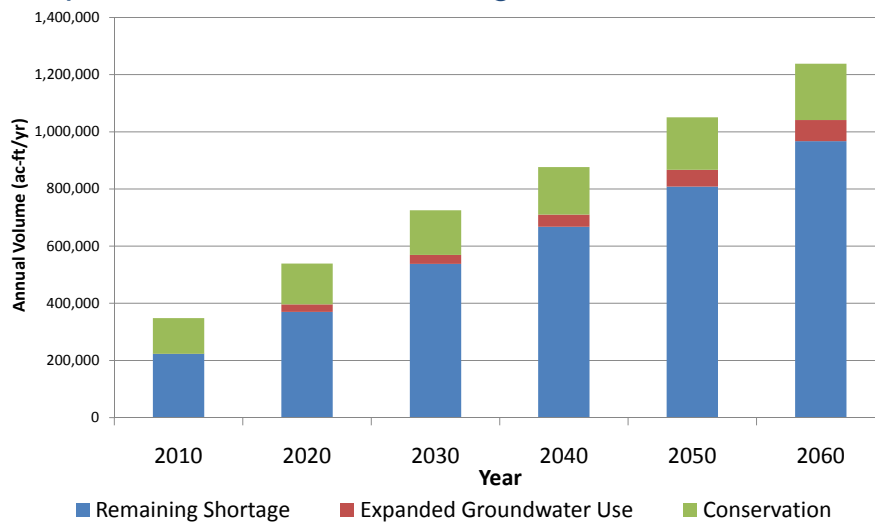
Task 4 – Water Management Strategies

Location and Magnitude of Shortages

- Incorporated WUG-level Strategies
 - Conservation
 - Additional groundwater usage (where available)
- Locations of Remaining Shortages

Task 4 – Water Management Strategies

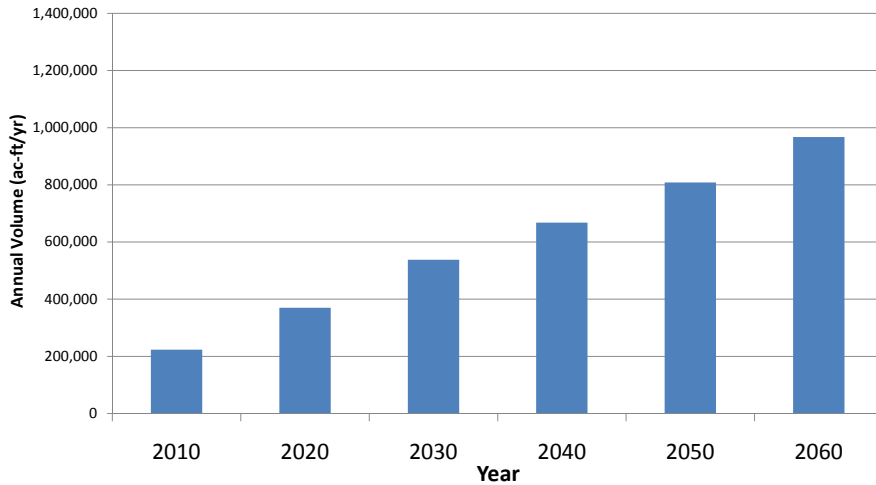
Impact of WUG-Level Strategies



Task 4 – Water Management Strategies

REGION H
Water Planning Group

Remaining Shortages

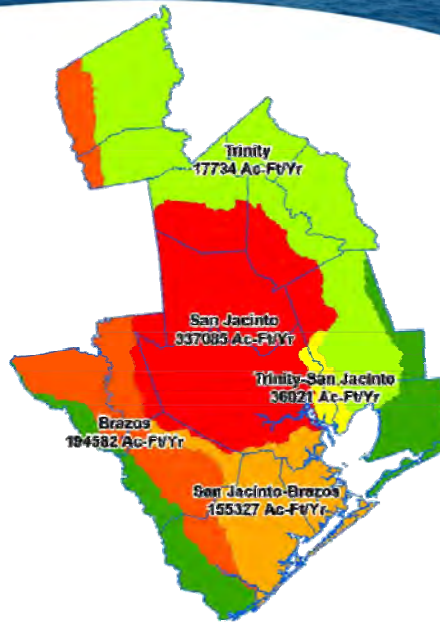


Task 4 – Water Management Strategies

REGION H
Water Planning Group

Remaining Shortages

- San Jacinto Basin
 - Harris County
 - Montgomery County
- Brazos Basin
 - Fort Bend County
- San Jacinto-Brazos Basin
 - Brazoria County



Task 4 – Water Management Strategies

Next Steps

- Expand Contracts
 - Utilize existing supplies

- Other “Local” Strategies
 - Small reuse projects
 - Interim groundwater use

- Evaluate Major Water Management Strategies
 - Reservoir, IBTs, large reuse projects, etc.

- Present Recommended Strategies in November
 - Workshop for late October?

Agenda Items 16 - 17

Receive presentation from Consultant on the status of water conservation and drought management recommendations (Task 6).

Consider and take action on approving the Draft Chapter 6 made available on the Region H website prior to the meeting.



Chapter 6 –Conservation/Drought Management

REGION H
Water Planning Group

Chapter 6

- Conservation Survey
- Revised Conservation Strategies
- Drought Management Study

Water Conservation Survey

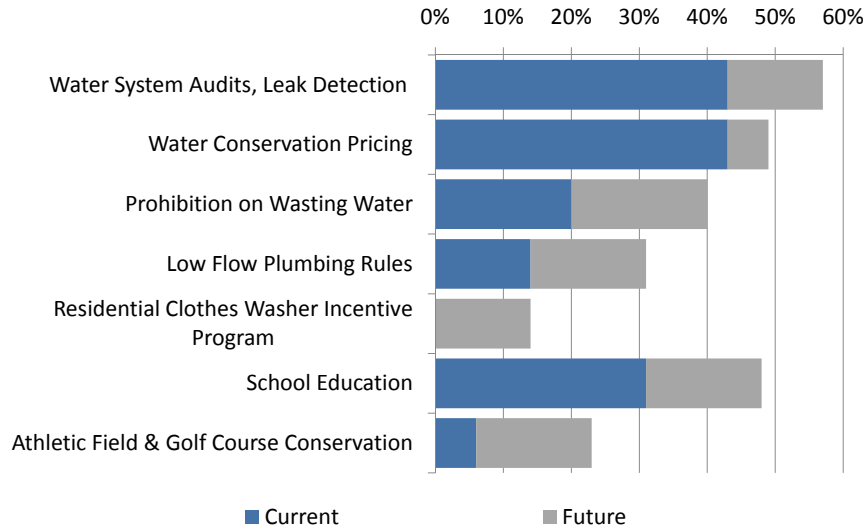
- Surveys Sent to:
 - 232 Water Utilities
 - 22 Wholesale Water Providers
- Surveys Returned by:
 - 35 Total
 - Including 7 Wholesale Water Providers
- Response of Approximately 14%

Water Conservation Survey

- Surveys requested information on:
 - Water Conservation Measures
 - Planned
 - Future
 - Efficacy of each measure
 - Observation
 - Measured/Calculated
 - Cost of each measure
 - Capital Costs
 - Annual Costs

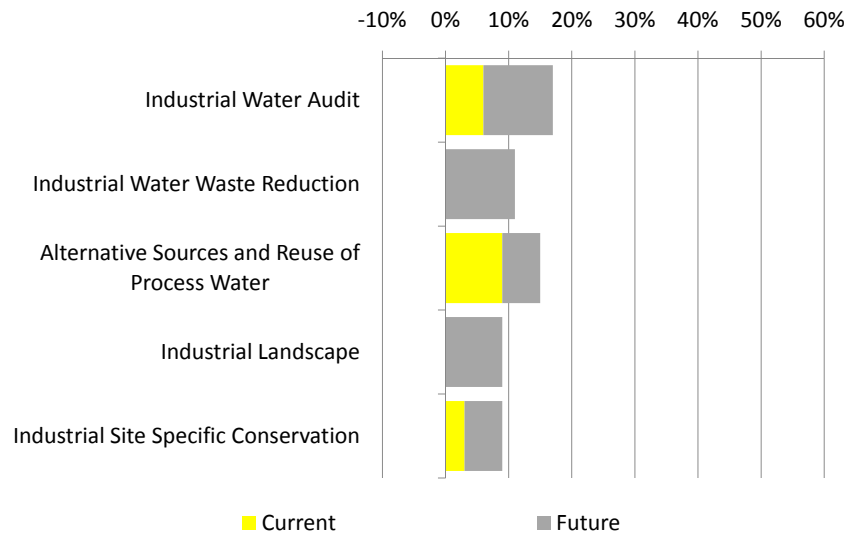
Chapter 6 –Conservation/Drought Management

Water Conservation Implementation - Municipal

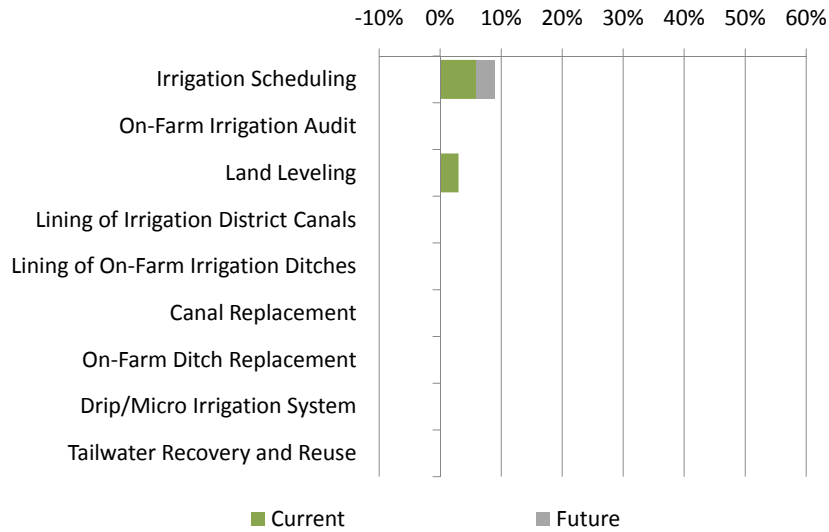


Chapter 6 –Conservation/Drought Management

Water Conservation Implementation - Industrial



Water Conservation Implementation - Irrigation



Revised Conservation Strategies

- Conservation in the 2006 RWP
 - Three-tiered system based on WUG size
 - Recommended “package” of conservation strategies
 - Costs associated with conservation package

- Revisions for the 2011 RWP
 - Three-tiered system
 - Retained recommendations in 2006 RWP
 - Applied to 195 WUGs
 - WUG Specific Strategy
 - Based on review of survey information and water conservation plans
 - Applied to 10 WUGs

Municipal Conservation Strategy Summary

Conservation WMS	WUG Size	Savings	Number of WUGs
WUG Specific Strategy	Varies	Varies	10
Type 1	<3,301	5.55%	81
Type 2	3,300 < Population < 10,001	5.96%	77
Type 3	Population >10,000	6.89%	37

Water Conservation Survey

- Few responses regarding use of Irrigation Conservation
- Responses were from WWPs
- On-farm conservation measures:
 - Irrigation Scheduling
 - Land Leveling
- 2006 Plan recommended:
 - On farm measures:
 - Land Leveling
 - Multiple irrigation inlets
 - Off farm measures:
 - Partial Canal Lining

Irrigation Conservation Strategy Summary by County

<u>Brazoria County</u>		<u>Galveston County</u>	
On-Farm	16,820 acre-ft per year	On-Farm	2,101 acre-ft per year
Off-Farm	1,972 acre-ft per year	Off-Farm	291 acre-ft per year
Total	18,792 acre-ft per year	Total	2,392 acre-ft per year
<u>Chambers County</u>		<u>Liberty County</u>	
On-Farm	21,239 acre-ft per year	On-Farm	18,998 acre-ft per year
Off-Farm	2,779 acre-ft per year	Off-Farm	1,879 acre-ft per year
Total	24,018 acre-ft per year	Total	20,877 acre-ft per year
<u>Fort Bend County</u>		<u>Waller County</u>	
On-Farm	4,636 acre-ft per year	On-Farm	6,606 acre-ft per year
Off-Farm	562 acre-ft per year	Off-Farm	0 acre-ft per year
Total	5,198 acre-ft per year	Total	6,606 acre-ft per year

Total Potential Irrigation Conservation: 77,883 acre-ft per year

Drought Management Study

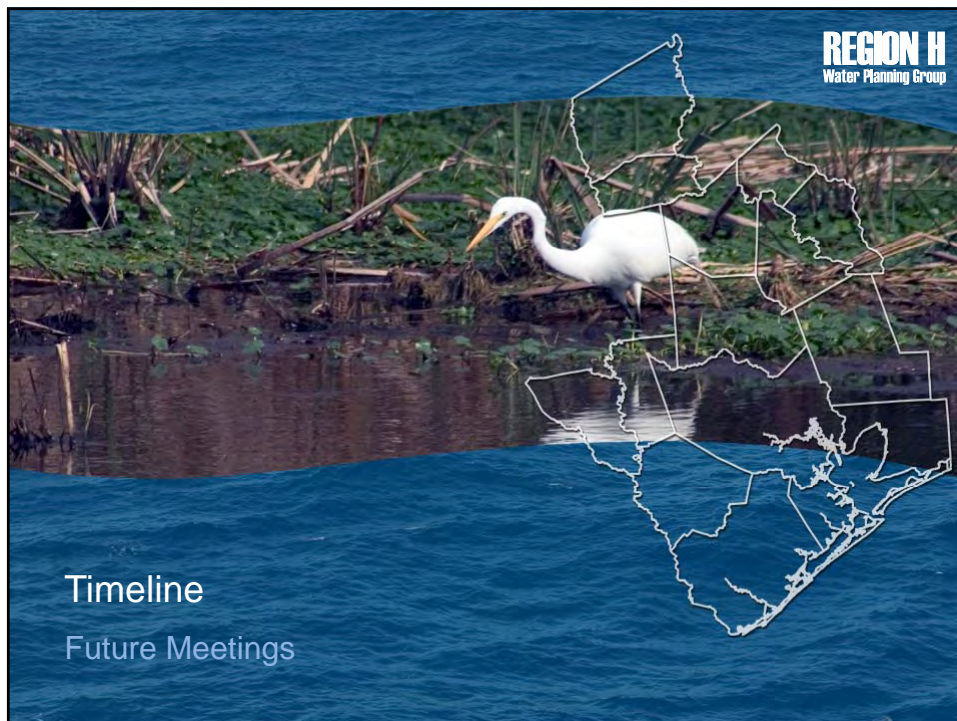
- Drought management alone will not replace any recommended long-term water management strategies
- Implementation of DCPs would not “free up” water supply for use by others on as long term strategy.
- DCPs were shown to be effective in “stretching” water supplies during drought conditions. However, this “stretching” of supplies during drought were measured in terms of months.
- Water saved by implementing DCPs would only be available on an interruptible basis during drought conditions.

Chapter 6 –Conservation/Drought Management

REGION H
Water Planning Group

Draft Chapter 6

- Prepared to summarize the water conservation and drought management within the Region and serve as a guide for developing plans
- Informal approval to move forward from these tasks
 - Will be reviewed again in IPP
- Latest version posted to the Region H Website on August 24th
- **Item 17:** Consider and take action on approving the Draft Chapter 6 made available on the Region H website prior to the meeting



Proposed Schedule

REGION H
Water Planning Group

Date	Event	Items Due
09/02/09	RWPG Meeting	Draft Chapters 1, 3, and 6
10/??/09	Executive Committee	Water Management Strategy Workshop
11/04/09	RWPG Meeting	Water Management Strategies and Recommendations
12/02/09	RWPG Meeting	Draft Chapters 4, 5, 7, 8, and 9
01/06/10	RWPG Meeting	Draft Initially Prepared Plan
02/03/10	RWPG Meeting	Approve Initially Prepared Plan
03/01/10	Due Date	Initially Prepared Plan
03/15/10 (Approx.)	Public Hearing	Public Comment on IPP
09/01/10	Due Date	Regional Water Plan

Agenda Item 19

Agency communications and general information.

FOR IMMEDIATE RELEASE **CONTACT: ANDREA MORROW**
THURSDAY, AUGUST 13, 2009 **PHONE: 512-239-5011** **PAGER: 512-896-3727**

TCEQ RESTRICTS JUNIOR WATER RIGHTS
Brazos River basin *affected*

The executive director of the Texas Commission on Environmental Quality notified non-municipal junior rights holders, with a priority date of 1980 and later, that their right to divert water from the Brazos River basin is immediately suspended.

The priority doctrine, according to Texas law, determines that the most senior water rights will be served first during times of drought regardless of the permitted water use. As a result, junior water rights, or those rights issued most recently, are suspended or curtailed before the senior water rights in the area.

The Texas Water Code requires that the flows of the Brazos River must be available for use by land owners with property adjacent to the Brazos River for domestic and livestock use as part of their inherent riparian rights. These D&L users have senior priority before any appropriated water rights.

The lack of significant rainfall in the area and the declining flow of the Brazos River means many junior water rights have already reached their permitted flow restrictions and have not been allowed to divert any surface water. All approved temporary water rights in the area have also been suspended. Should drought conditions continue to persist, additional suspensions or restrictions of remaining water rights may be necessary.

Individuals can take action to conserve water:

- water your lawn no more than twice a week and only during early morning hours,
- use a drip irrigation system instead of sprinklers,
- wash full loads of dishes or laundry,
- cut back on washing your vehicle,
- replace old plumbing with water saving fixtures,
- consider installing a cistern to catch rainwater for future use,
- plant native plants (that require less water).

Buddy Garcia, *Chairman*
Larry R. Soward, *Commissioner*
Bryan W. Shaw, Ph.D., *Commissioner*
Mark R. Vickery, P.G., *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

July 7, 2009

Re: Alert of Possible Curtailments/Suspensions of Permitted State Surface Water
Diversions on the Brazos River Basin

Dear Water Right Holder:

This letter is to alert you of potential diversion curtailments or possible suspensions of state surface water from the Brazos River Basin. The lack of significant rainfall in the area and the declining flow of the Brazos River may require action by the Texas Commission on Environmental Quality (TCEQ) to further curtail surface water diversions for the protection of senior water rights.

The priority doctrine determines that the most senior water rights will be served first during times of drought, regardless of the permitted water use. As a result, junior water rights, or those rights issued most recently, will be suspended or curtailed before the senior water rights in the area. Furthermore, in accordance with the Texas Water Code, the flows of the Brazos River must be available for use by land owners with property adjacent to the Brazos River for domestic and livestock (D&L) use as part of their inherent riparian rights. As such, D&L users have senior priority before any appropriated water rights.

The TCEQ has received a priority call on surface water from senior water rights downstream of your diversion point. Many junior water rights on the Brazos River have already reached their permitted flow restrictions and are currently not being allowed to divert any surface water. All approved temporary water rights in the area have also been suspended. At this time, the senior call has been met by suspension of surface water rights junior to yours, however, should drought conditions continue to persist, additional suspensions may be necessary.

With no immediate relief forecasted, the TCEQ requests that you please take appropriate steps to prepare for possible diversions from the Brazos River to be curtailed or even suspended as drought conditions persist in your area.

Please call your TCEQ Regional office or Ms. Tracy Miller, Water Rights Liaison, at the TCEQ Central Office in Austin at 512-239-4127 should you have any questions on this matter. We thank you for your cooperation.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark R. Vickery".

Mark R. Vickery, P.G.
Executive Director

Buddy Garcia, *Chairman*
Larry R. Soward, *Commissioner*
Bryan W. Shaw, Ph.D., *Commissioner*
Mark R. Vickery, P.G., *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

August 10, 2009

Re: Suspensions of Permitted State Surface Water Diversions in the Brazos River Basin

Dear Water Right Holder:

By letter dated July 7, 2009, you were alerted that diversions of state surface water from the Brazos River Basin may be suspended. This letter is to now inform you that the Texas Commission on Environmental Quality (TCEQ) has received a priority call on surface water from senior water rights downstream of your diversion point in the basin. In accordance with the Texas Water Code (TWC), Chapter 5.013(a)(1), the TCEQ is responsible for protecting senior surface water rights and must take action in response to the senior priority call.

The priority doctrine established in TWC, Chapter 11.027, determines that the most senior water rights will be served first during times of drought. As a result, junior water rights, or those rights issued most recently, will be suspended or curtailed before the senior water rights in the area. Furthermore, in accordance with the TWC, the flows of the Brazos River must be available for use by land owners with property adjacent to the Brazos River for domestic and livestock (D&L) use as part of their inherent riparian rights. As such, D&L users have superiority over any appropriated water rights.

The lack of significant rainfall in the area and the declining flow of the Brazos River have impacted many water rights written with permitted flow restrictions and these permittees are currently not being allowed to divert any surface water. In addition, all temporary water rights in the basin have been suspended, and no additional temporary permits are being approved at this time. The TCEQ continues to monitor the situation on a daily basis and strives to balance protection of the senior surface water rights while attempting to minimize the impact to junior water right holders within TCEQ's legal authority. However, should drought conditions continue to persist, additional suspensions of remaining junior water rights may be necessary.

With no immediate relief forecasted, the TCEQ requires that you take immediate action to suspend all **non-municipal** diversions from the Brazos River with a **priority date of 1980 and later** until further notice. Should your water right permit include authorization for impoundment of water, please note that you are **not** required to release any previously stored water; however, you are required by law under a senior call to pass any current inflows to your impoundment downstream in order to meet senior needs.

Should senior needs not be fulfilled as a result of suspension of these diversions, please be aware that TCEQ may take additional actions, including suspension of junior municipal diversions, in order to protect the senior priority call. You may find additional drought information on the TCEQ's drought web page, located at: <http://www.tceq.state.tx.us/agency/drought.html> or by contacting the TCEQ Drought Hotline at 800-447-2827 between 8:00 a.m. to noon, and 1:00 p.m. to 5:00 p.m., Monday through Friday. You may also contact your TCEQ Regional Office or Ms. Tracy Miller, Water Rights Liaison, at the TCEQ Central Office in Austin at 512-239-4127 should you have any additional questions on this matter. We thank you for your cooperation.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark R. Vickery", written over a large, stylized circular flourish.

Mark R. Vickery, P.G.
Executive Director

Buddy Garcia, *Chairman*
Larry R. Soward, *Commissioner*
Bryan W. Shaw, Ph.D., *Commissioner*
Mark R. Vickery, P.G., *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

August 14, 2009

Re: Possible Curtailments/Suspensions of Permitted State Surface Water Diversions in the Brazos River Basin

Dear County Extension Agent:

The lack of significant rainfall in the Brazos River Basin and the declining flow of the Brazos River have required the Texas Commission on Environmental Quality (TCEQ) to take action to suspend surface water diversions for the protection of senior water rights. This letter is to inform you of certain policy determinants and to solicit your help in disseminating appropriate information to affected parties in your community. In particular, we want to provide information for residents in rural areas of the Brazos Basin. If this drought cycle worsens, it will be very important that all residents living and working in the Brazos River Basin are well informed.


Multiple program areas at the TCEQ are actively engaged in the oversight of available water supplies statewide, and we are managing those supplies efficiently according to priorities that are established. Our established priorities dictate that the most senior water rights will be served first during times of drought, regardless of the permitted water use. As a result, junior water rights will be suspended or curtailed before the senior water rights in areas where there are shortfalls. Furthermore, in accordance with the Texas Water Code, the flows of the Brazos River Basin must be available for use by land owners with property adjacent to the river for domestic and livestock (D&L) use as part of their inherent riparian rights. As such, D&L users have superiority over any appropriated water rights.

The TCEQ is also continuing to closely monitor the situation in the Brazos River Basin, and we are working with the river authorities to ensure that accurate information is being used in the decision making process. We are monitoring drinking water supplies, both groundwater and surface water, and we are working with municipalities that face potential shortfalls of available drinking water. There is a common understanding in all of our programmatic efforts that our decisions have profound impacts on the people of Texas. We are weighing our decisions judiciously, paying particular attention to those potential impacts.

With no immediate relief forecasted, the TCEQ requests that you assist us in making residents in your community aware of the possibility of additional curtailments or suspensions. We ask that you make your community aware of the information available online and encourage them to seek answers to their questions or concerns on the TCEQ's drought web page located at the following website: <http://www.tceq.state.tx.us/agency/drought.html>, or by contacting the TCEQ Drought Hotline at 800-447-2827 between 8:00 a.m. to noon and 1:00 p.m. to 5:00 p.m., Monday through Friday.

You may also contact Ms. Tracy Miller, Water Rights Liaison, at the TCEQ Central Office in Austin at 512-239-4127, if there are additional questions. Thank you for your cooperation.

Sincerely,


Mark R. Vickery, P.G.
Executive Director

Buddy Garcia, *Chairman*
Larry R. Soward, *Commissioner*
Bryan W. Shaw, Ph.D., *Commissioner*
Mark R. Vickery, P.G., *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

August 19, 2009

The Honorable Carolyn Bilski
County Judge, Austin County
One E. Main Street
Bellville, Texas 77418

Re Possible Curtailment/Suspensions of Permitted State Surface Water Diversions
in the Brazos River Basin

Dear Judge Bilski:

The Texas Commission on Environmental Quality (TCEQ) is sending the enclosed letter to all County Extension Agents located within the Brazos River Basin, informing them of possible curtailment/suspensions of permitted state surface water diversions. The letter is intended to inform you and your constituents of certain policy determinants and to solicit your help in disseminating appropriate information to affected parties in your community.

The lack of significant rainfall in the Brazos River Basin and the declining flow of the Brazos River have required the TCEQ to take action to suspend surface water diversions for the protection of senior water rights. Those affected by this action are junior rights holders from 1980 and later, as the most senior rights are served first during times of drought. It is very important to the TCEQ that all residents living and working in the Brazos River Basin are well informed of the situation, especially if it worsens as it is predicted to do. In particular, we want to provide information for residents in rural areas of the Brazos River Basin.

I will keep you informed of any additional actions on this matter. In addition, if you have any questions or need additional information, you may contact Ms. Tracy Miller, Water Rights Liaison, at the TCEQ Central Office in Austin at 512-239-4127.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark Vickery".

Mark R. Vickery, P.G.
Executive Director

Enclosure

Buddy Garcia, *Chairman*
Larry R. Soward, *Commissioner*
Bryan W. Shaw, Ph.D., *Commissioner*
Mark R. Vickery, P.G., *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

August 24, 2009

The Honorable Norman Erskine
Mayor, City of Marlin
101 Fortune Street
P.O. Box 980
Marlin, Texas 76661-0980

Re: Senior Priority Call on Surface Water in the Brazos River Basin

Dear Mayor Erskine:

By letter dated July 7, 2009, you were alerted that diversions of state surface water from the Brazos River Basin may be suspended. By letter dated August 10, 2009, junior water right holders were informed that the Texas Commission on Environmental Quality (TCEQ) received a priority call on surface water rights downstream of your diversion point in the basin. In accordance with the Texas Water Code (TWC), Chapter 5.013(a)(1), the TCEQ is responsible for protecting senior surface water rights and is taking action in response to the senior call.

1,000 acre-feet of the water permitted to the City was authorized with a priority date of 1982 for municipal purposes. At this time, you are **not** required to suspend your municipal use of surface water even though this portion of your certificate is junior to the senior priority call. In order to continue your municipal diversions, you should be appropriately implementing your drought contingency plan (DCP). In accordance with your DCP, you are required to notify TCEQ when there are changes in your drought response stages. If you have any questions regarding implementation of your DCP, please visit the TCEQ website at the following link: http://www.tceq.state.tx.us/permitting/water_supply/water_rights/contingency.html.

You should also take any additional actions necessary to conserve water and require your customers to do the same. The TCEQ has established a website specifically related to drought information that provides tips for water conservation, as well as other helpful information at the following link: <http://www.tceq.state.tx.us/agency/drought.html>.

The TCEQ continues to monitor the situation on a daily basis and strives to balance protection of the senior surface water rights while attempting to minimize the impact to junior water right holders within TCEQ's legal authority. However, should drought conditions continue to persist, additional suspensions of remaining junior water rights, including municipal diversions, may be necessary.

If you have any questions, you may contact the TCEQ Drought Hotline at 800-447-2827 between 8:00 a.m. to noon, and 1:00 p.m. to 5:00 p.m., Monday through Friday.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark R. Vickery".

Mark R. Vickery, P.G.
Executive Director

Buddy Garcia, *Chairman*
Larry R. Soward, *Commissioner*
Bryan W. Shaw, Ph.D., *Commissioner*
Mark R. Vickery, P.G., *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

August 24, 2009

The Honorable Bryan Ferguson
Mayor, City of Robinson
111 W. Lyndale Avenue
Robinson, Texas 76706-5658

Re: Senior Priority Call on Surface Water in the Brazos River Basin

Dear Mayor Ferguson:

By letter dated July 7, 2009, you were alerted that diversions of state surface water from the Brazos River Basin may be suspended. By letter dated August 10, 2009, junior water right holders were informed that the Texas Commission on Environmental Quality (TCEQ) received a priority call on surface water rights downstream of your diversion point in the basin. In accordance with the Texas Water Code (TWC), Chapter 5.013(a)(1), the TCEQ is responsible for protecting senior surface water rights and is taking action in response to the senior call.

At this time, you are **not** required to suspend your municipal use of surface water even though your permit is junior to the senior priority call. In order to continue your municipal diversions, you should be appropriately implementing your drought contingency plan (DCP). In accordance with your DCP, you are required to notify TCEQ when there are changes in your drought response stages. If you have any questions regarding implementation of your DCP, please visit the TCEQ website at http://www.tceq.state.tx.us/permitting/water_supply/water_rights/contingency.html.

You should also take any additional actions necessary to conserve water and require your customers to do the same. The TCEQ has established a website specifically related to drought information that provides tips for water conservation, as well as other helpful information at <http://www.tceq.state.tx.us/agency/drought.html>.

The TCEQ continues to monitor the situation on a daily basis and strives to balance protection of the senior surface water rights while attempting to minimize the impact to junior water right holders within TCEQ's legal authority. However, should drought conditions continue to persist, additional suspensions of remaining junior water rights, including municipal diversions, may be necessary.

If you have any questions, you may contact the TCEQ Drought Hotline at 800-447-2827 between 8:00 a.m. to noon, and 1:00 p.m. to 5:00 p.m., Monday through Friday.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark R. Vickery", written over a large, stylized flourish that extends to the right and loops back under the signature.

Mark R. Vickery, P.G.
Executive Director

Buddy Garcia, *Chairman*
Larry R. Soward, *Commissioner*
Bryan W. Shaw, Ph.D., *Commissioner*
Mark R. Vickery, P.G., *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

August 17, 2009

Mr. Robert Istre, General Manager
Gulf Coast Water Authority
3630 F.M. 1765
Texas City, Texas 77591-3677

Re: Senior Priority Call on Surface Water in the Brazos River Basin

Dear Mr. Istre:

By letter dated July 7, 2009, you were alerted that diversions of state surface water from the Brazos River Basin may be suspended. By letter dated August 10, 2009, junior water right holders were informed that the Texas Commission on Environmental Quality (TCEQ) received a priority call on surface water rights downstream of your diversion point in the basin. In accordance with the Texas Water Code (TWC), Chapter 5.013(a)(1), the TCEQ is responsible for protecting senior surface water rights and is taking action in response to the senior call.

A 75,000 acre-feet portion of the water authorized in Certificate of Adjudication No. 12-5322 was issued in 1983 and therefore is subject to this priority call. The authorized purposes of use for this water are multiple: municipal, industrial and agricultural. Uses of the 1983 priority date water for any purpose other than municipal use should be suspended immediately. At this time, you are **not** required to suspend your **municipal** use of surface water even though this portion of your certificate is junior to the senior priority call. In order to continue your municipal diversions, you should be appropriately implementing your drought contingency plan (DCP). In accordance with your DCP, you are required to notify TCEQ when there are changes in your drought response stages. If you have any questions regarding implementation of your DCP, please visit the TCEQ website at the following link:
http://www.tceq.state.tx.us/permitting/water_supply/water_rights/contingency.html.

You should also take any additional actions necessary to conserve water and require your customers to do the same. The TCEQ has established a website specifically related to drought information that provides tips for water conservation, as well as other helpful information at the following link:
<http://www.tceq.state.tx.us/agency/drought.html>.

The TCEQ continues to monitor the situation on a daily basis and strives to balance protection of the senior surface water rights while attempting to minimize the impact to junior water right holders within TCEQ's legal authority. However, should drought conditions continue to persist, additional suspensions of remaining junior water rights, including municipal diversions, may be necessary.

If you have any questions, you may contact the TCEQ Drought Hotline at 800-447-2827 between 8:00 a.m. to noon, and 1:00 p.m. to 5:00 p.m., Monday through Friday.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark R. Vickery".

Mark R. Vickery, P.G.
Executive Director



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THE WALL STREET JOURNAL.

WSJ.com

JULY 15, 2009

'Water Hog' Label Haunts Dallas

In the South and West, Neighbors Resist Cities' Efforts to Siphon Resources

By ANA CAMPOY

DALLAS -- A reputation as a wasteful "water hog" is complicating Dallas's efforts to siphon water from nearby communities.

Local officials, who say they need to nearly double their water supply in coming decades to keep up with a fast-growing population, want to build new reservoirs and buy water from nearby Oklahoma. But these efforts are entangled in federal lawsuits as Dallas's neighbors see the city's love for emerald-green lawns and lush golf courses as rampant waste.

"It's not that they need the water to survive," said Michael Banks, an East Texas dentist who lives near a river Dallas wants to dam. "What they want is to destroy our wildlife so they'll have enough water for their grass."

City officials recognize they have an image problem. "We've been called water hogs," said Ramon Miguez, Dallas assistant city manager. But he said the city has made significant efforts to conserve water in recent years, including educating residents not to drench their lawns.

Spats between communities that sip and those that gulp are becoming increasingly common in the South and the West. Sprawling cities packed with houses featuring big lawns and many bathrooms typically don't use water very efficiently, experts and environmentalists say.

So when city officials scout for more water beyond their boundaries, they don't get much sympathy from their neighbors.

"It's an environmental equity issue," said David Feldman, chairman of the Department of Planning, Policy and Design at University of California, Irvine. "Before they give up their water, they want to make sure that the city isn't being wasteful."

In recent years, cities such as Los Angeles and Las Vegas have been forced to conserve water aggressively to meet their needs and persuade other communities to let them tap their supplies.

While other cities in drought-prone Texas started slashing water consumption decades ago, Dallas used increasing amounts until the late 1990s. From 1980 to 1999, per-capita water use in Dallas ballooned by 35%, even as Houston and Austin cut per-capita consumption by more than 15% and San Antonio by 32%, according to data from the Texas Water Development Board.

But, Mr. Miguez argues, Dallas residents have since changed their ways. In 2001, Dallas Water Utilities, the city's water provider, launched a conservation plan that reduced per-capita use 19% by 2008. The 16-county water-planning zone that encompasses Dallas and Fort Worth has several water-recycling projects operating or in the works.

Water planners project that reuse and conservation will cover 28% of the area's water needs by 2060. Still, with its population expected to expand to 13.1 million that year -- from more than six million currently -- the region also needs new water sources, they say.

"Conservation will not provide the water supply that is needed," said Jim Parks, chairman of the regional water planning group. "It is impossible."

His group's water plan proposes four new reservoirs, two of them outside the region's boundaries.

One of them would be on the Sulphur River, in a rural corner of northeast Texas. Max Shumake, a local resident, said that damming the river would flood thousands of acres of land, including some of his, and obliterate the local timber, hunting and ranching industries. Dallas's future growth, he said, shouldn't be an excuse for his neighbors to live beyond their liquid means.

Mr. Miguez contends that the area's economic importance necessitates the new reservoirs. "The north central Texas region is the economic engine of the state, bar none," he said. "The only way that this region can sustain its economic growth has to be working a mutually agreeable agreement with a region that is richer than we are and simply does not need the water as we do."

After Mr. Shumake and his neighbors protested at public meetings and to legislators, the state Legislature created a special study group to look at alternative water sources for the region. The group is expected to issue a recommendation by the end of next year.

Regional water planners also looked to Oklahoma, but the state Legislature refused to sell them water, and earlier this year passed a law that makes water purchases harder for out-of-state buyers.

"They have a terrible record," said Oklahoma state Sen. Jerry Ellis of Valliant. "They've got to prove that they have exhausted all avenues and they are truly doing conservation before they start taking their neighbors' precious resource."

With the support of neighboring water providers, the Tarrant Regional Water District, which serves Fort Worth, filed a lawsuit against Oklahoma, arguing that the state's behavior violates constitutional laws on interstate commerce. The trial is scheduled for December at the U.S. District Court for the Western District of Oklahoma.

On another front, the city of Dallas is fighting the U.S. Fish and Wildlife Service. In 2006, the federal agency designated the bottomland hardwood forests along a 38-mile stretch of the Neches River as a refuge for mallards, otters, alligators and other critters.

Dallas, which envisioned building a reservoir there, sued the agency, arguing it failed to conduct necessary environmental-impact studies. The U.S. District Court for the Northern District of Texas, as well as the U.S. Court of Appeals for the Fifth Circuit, ruled against Dallas. Last month the city filed a request for an appeal with the Supreme Court, which could accept or deny it as soon as October.

Write to Ana Campoy at ana.campoy@dowjones.com

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