



MEETING MATERIALS

July 1, 2009

San Jacinto River Authority

Region H Water Planning Group
10:00 AM Wednesday
July 1, 2009
San Jacinto River Authority Office
Lake Conroe Dam, 1577 Dam Site Rd.
Conroe, Texas

Agenda

1. Introductions.
2. Review and approve minutes of May 6, 2009 meeting.
3. **Receive public comments on specific issues related to agenda items 4 through 19**
(Public comments to be limited to 3 minutes per speaker).
4. Receive presentation from consultant regarding TWDB comments to Environmental Flows Study Draft Report.
5. Consider and take action on approving the Environmental Flows Study Final Report for submittal to the Texas Water Development Board (TWDB) on or before July 31, 2009.
6. Receive presentation from consultant regarding TWDB comments to Drought Management Study Draft Report.
7. Consider and take action on approving the Drought Management Study Final Report for submittal to the Texas Water Development Board (TWDB) on or before July 31, 2009.
8. Receive presentation from consultant regarding TWDB comments to Interruptible Supply Study Draft Report.
9. Consider and take action on approving the Interruptible Supply Study Final Report for submittal to the Texas Water Development Board (TWDB) on or before July 31, 2009.
10. Receive presentation from consultant regarding updates to the population and water demand projection analysis (Task 2) and the completed Chapter 2.
11. **Receive public comment on Item 10.**
12. Consider and take action on approving the submittal of revised population and water demand projections to the Texas Water Development Board (TWDB).
13. Consider and take action on approving the Draft Chapter 2 made available on the Region H website prior to the meeting.
14. Receive presentation from Consultant on the status of water supply analysis (Task 3).
15. Consider and take action on approving the Draft Chapter 3 made available on the Region H website prior to the meeting.
16. 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.
17. Receive updates by local water agencies or other interested parties regarding any

water-related initiatives or projects currently underway or planned.

18. Agency communications
19. **General public comments.** (Public comments to be limited to 3 minutes per speaker).
20. Next Meeting: September 2, 2009 regular meeting.
21. Adjourn.

Agenda Item 2

Review and approve minutes of May 6, 2009 meeting.

**MINUTES
REGION H WATER PLANNING GROUP MEETING
10:00 A.M.
MAY 6, 2009
SAN JACINTO RIVER AUTHORITY OFFICE
LAKE CONROE DAM
1577 DAMSITE ROAD
CONROE, TEXAS**

MEMBERS PRESENT: Roosevelt Alexander, John R. Bartos, John Blount, Robert Bruner, Jun Chang, Reed Eichelberger, John Hofmann, John Howard, Robert Istre, Ted Long, James Morrison, Ronald J. Neighbors, William Teer, Steve Tyler, Danny Vance, C. Harold Wallace, Pudge Willcox

DESIGNATED ALTERNATES: Mike O'Connell for Bob Hebert, Tom Michel for Marvin Marcell, and Paul L. Nelson for Jimmie Schindewolf

MEMBERS ABSENT: Mark Evans, Glynn Leiper, and Mike Uhl

NON-VOTING MEMBERS PRESENT: Temple McKinnon and Melinda Silva

PRESIDING: Ron Neighbors, Vice-Chair

CALL TO ORDER PUBLIC MEETING AT 10:05 A.M.

MINUTES OF FEBRUARY 4, 2009 MEETING

Motion was made by Danny Vance to approve the minutes of the February 4, 2009 meeting; seconded by Harold Wallace. The motion carried unanimously.

PUBLIC COMMENTS ON AGENDA ITEMS 6 – 13

Dan Davis with Montgomery County MUD 8 and 9 gave an update on their recycled water project. He requested that a resolution be considered at the next Region H meeting in support of their efforts, which would allow for funding from the Texas Water Development Board and for their reuse project to be included in the planning for Region H.

RECEIVE PRESENTATION FROM CONSULTANT ON THE RESULTS OF THE POPULATION AND WATER DEMAND PROJECTION ANALYSIS (TASK 2) INCLUDING REVISED MUNICIPAL AND STEAM-ELECTRIC DEMANDS

Mike Reedy with AECOM reviewed the current schedule for preparing the 2011 Regional Water Plan. He then turned the presentation over to Jason Afinowicz with AECOM to present the results of the population and water demand projection analysis (Task 2), including the steam-electric demands, population projections, and municipal water demands.

RECEIVE PUBLIC COMMENT ON ITEM 4

Brandt Mannchen commented on the proposed population and water demand projections that will be used in preparing the revised Region H Water Plan. He distributed a written summary of his comments and then briefly summarized his thoughts on the availability and clarity of the information, the public comment period, and the process in general. Mr. Mannchen encouraged the group to withdraw the submittal of revised population and water demand projections until the public policy issues of population growth and economic growth can be debated. Harold Wallace inquired as to what evidence was available to reflect that the information that the consultant provided was inaccurate, and Mr. Mannchen responded that more time was needed to evaluate the available information.

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

Discussion ensued regarding questions and concerns related to the population projections for the City of Richmond, the City of Huntsville, and the information related to the demand projections for steam electric power. Ron Neighbors asked about the process for partially approving the population and water demand projections and approving the modifications in the future. Temple McKinnon stated that modifications would require the same process for approval if excluded. Ted Long commented on the steam electric power numbers for Fort Bend County and Galveston County; he will review historical records and get back with Mike Reedy with his findings. Robert Istre inquired as to the source of the information presented, and Temple McKinnon responded that the regional and county totals are based on the State Data Center's information. John Bartos encouraged the consultants to comment on Mr. Mannchen's questions and concerns, and Mike Reedy confirmed that this would be done. Steve Tyler inquired as to how the projected population and demand numbers compared to the availability of water. Carol Reed with the City of Huntsville briefly discussed the potential growth of the Huntsville area. She stated that Huntsville has already exceeded the 2010 projected water demand numbers and the per capita use is increasing.

Mike Reedy made the recommendation that approval be given for the submittal of revised population and water demand projections to the TWDB as presented, excluding those for the City of Huntsville, City of Richmond, and the steam electric demands. Motion was made by Roosevelt Alexander to approve the population and water demand projections as presented, excluding those for the City of Huntsville, City of Richmond, and steam electric demands for Fort Bend and Galveston counties; seconded by Robert Bruner. The motion was approved with one nay vote. Steve Tyler voted nay.

RECEIVE PRESENTATION FROM CONSULTANT ON THE STATUS OF WATER SUPPLY ANALYSIS (TASK 3), INCLUDING THE APPROVAL OF ALTERNATIVES TO WAM 3 FIRM YIELDS FOR DETERMINING REGIONAL SUPPLIES

Mike Reedy continued the presentation on Task 3. Discussion on the Firm Yield Determinations was led by Danny Vance and Robert Istre. Robert Istre inquired as to why and when return

flows are taken into consideration. Mike Reedy responded that return flows have always been used. Danny Vance explained the potential effects of ignoring return flows, including outcomes that could reflect shortages of water. Robert Istre proposed that AECOM come back to the group with an analysis on the yield of the Brazos River with and without reuse.

RECEIVE PRESENTATION FROM CONSULTANT ON THE PROPOSED METHODOLOGY FOR SELECTION OF WATER MANAGEMENT STRATEGIES (WMS) (TASK 4)

Mike Reedy continued with the presentation on the Water Management Strategy Selection and criteria set for same. Robert Istre inquired as to the methodology used in Water Management Strategies (WMS) for new projects and the use of alternative strategies. John Bartos commented on alternative strategies and limitations of same. Temple McKinnon touched on new provisions that would allow for substitutions in the plan and the process for evaluating and identifying water management and alternative strategies.

CONSIDER AND TAKE ACTION APPROVING THE WMS SELECTION APPROACH DESCRIBED UNDER ITEM 8

After discussion, motion was made by James Morrison to approve the WMS selection approach as presented; seconded by John Blount. The motion was approved with one nay vote. John Bartos voted nay.

RECEIVE PRESENTATION FROM DAVID KASPER, HDR/CLAUNCH & MILLER, REGARDING THE CONSISTENCY OF THE 2006 REGIONAL WATER PLAN REGARDING HARRIS COUNTY WCID 21

David Kasper with HDR explained that the tables in the 2006 Regional Water Plan reflect Harris County WCID 21 as being on groundwater from the City of Houston. Jason Afinowicz with AECOM explained that another section of the 2006 Plan correctly reflects their usage as a mix of surface water and groundwater, and he recommended that a consistency waiver be requested.

CONSIDER AND TAKE ACTION AS NECESSARY REGARDING ITEM 10

Motion was made by Tom Michel to recommend a consistency waiver for Harris County WCID 21; seconded by Paul Nelson. The motion carried unanimously.

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

None.

AGENCY COMMUNICATIONS

Cindy Loeffler with Texas Parks and Wildlife Department announced that she brought with her extra copies of the Texas Parks and Wildlife Department's documentary *Texas: The State of Flowing Water* that aired on PBS on February 12, 2009 for the members and audience.

Temple McKinnon updated everyone on the draft report and that formal communication is in the mail. She stated that final reports are due in July.

GENERAL PUBLIC COMMENTS

No comments received.

NEXT MEETING:

July 1, 2009
San Jacinto River Authority
Lake Conroe Dam
1577 Damsite Road
Conroe, Texas 77305

ADJOURNED AT 11:55 A.M.

Agenda Items 4 - 9

Receive presentation from consultant regarding TWDB comments to Environmental Flows Study Draft Report.

Consider and take action on approving the Environmental Flows Study Final Report for submittal to the Texas Water Development Board (TWDB) on or before July 31, 2009.

Receive presentation from consultant regarding TWDB comments to Drought Management Study Draft Report.

Consider and take action on approving the Drought Management Study Final Report for submittal to the Texas Water Development Board (TWDB) on or before July 31, 2009.

Receive presentation from consultant regarding TWDB comments to Interruptible Supply Study Draft Report.

Consider and take action on approving the Interruptible Supply Study Final Report for submittal to the Texas Water Development Board (TWDB) on or before July 31, 2009.



2011 Regional Water Plan Schedule

REGION H
Water Planning Group

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
10/07/09	RWPG Meeting	Draft Chapters 1, 6, 7, and 9
12/02/09	RWPG Meeting	Draft Initially Prepared Plan
03/01/10	Due Date	Draft Final Initially Prepared Plan
09/01/10	Due Date	Regional Water Plan

Focus for Today's Meeting

REGION H
Water Planning Group

- **1st Biennium Studies**
 - Review TWDB comments to Draft reports
- **Task 2 – Population and Water Demands**
 - New proposed demands for Huntsville, Richmond, and Fort Bend County Steam-Electric
 - Draft Chapter 2
- **Task 3 – Water Supply Analysis**
 - Review firm yield analysis for water supplies
 - Review resource allocation and shortage analysis
 - Draft Chapter 3
- **Task 4 – Water Management Strategy Selection**
 - Discuss WMS considered in 2006 RWP.



REGION H
Water Planning Group

1st Biennium Special Studies
Environmental Flows Study
Drought Management Study
Interruptible Supply Study

Environmental Flows Study

- Additional text to describe Frequency of Target Attainment (FTA) in Executive Summary
- Clarification of Instream Flows Conclusion 3
 - Added data regarding the period of flow below Lyons
 - Criteria used were not clear indicators of degradation at locations examined
 - Detailed instream flow analysis not included in scope
- Clarification of assessing Max H attainment
 - In reality flows can be too high as well
 - Optimal conditions when all 12 months in a year are at or near monthly targets
- Minor editorial changes

Drought Management Study

- Clarification on non-seasonal (indoor) water use assumption.
 - Assumption does not consider variations in city size and socioeconomic conditions
 - Assumption does not include influence of commercial and institutional water use.
 - Included text to clarify that figure was for illustration purposes only
- Explanation of “months of remaining supply”
 - Based on formula below, not directly from WAM output
 - Projected Demand / Minimum Reservoir Storage
- Clarification of Conclusion 6
 - Supply is made available on an interruptible basis
 - Not necessarily available every year or every month during the drought of record
- Minor editorial changes

1st Biennium Special Studies

Interruptible Supply Study

- Added text to clarify that TWDB guidelines allow the use of “safe yield” if approved by the Executive Administrator.
- Clarification of monthly diversion test
 - “does not consider the magnitude of monthly diversions”
 - Monthly test only tests if a monthly diversion target is met
 - Does not consider the annual shortage
- Added text to clarify that over appropriation when considering drought of record conditions is indicated by the presence of:
 - large interruptible supplies
 - firm yields significantly lower than permitted diversions
- Included permitted amounts for water rights in the Colorado-Brazos Basin
 - Clarified that the “firm yield” is equal to the amount contracted to entities in Region H
- Minor editorial changes

1st Biennium Special Studies

- **Item 5:** Consider and take action on approving the Environmental Flows Study Final Report for submittal to the Texas Water Development Board (TWDB) on or before July 31, 2009.
- **Item 7:** Consider and take action on approving the Drought Management Study Final Report for submittal to the Texas Water Development Board (TWDB) on or before July 31, 2009.
- **Item 9:** Consider and take action on approving the Interruptible Supply Study Final Report for submittal to the Texas Water Development Board (TWDB) on or before July 31, 2009.

Agenda Items 10 - 13

Receive presentation from consultant regarding updates to the population and water demand projection analysis (Task 2) and the completed Chapter 2.

Receive public comment on Item 10.

Consider and take action on approving the submittal of revised population and water demand projections to the Texas Water Development Board (TWDB).

Consider and take action on approving the Draft Chapter 2 made available on the Region H website prior to the meeting.



Task 2

Population and Water Demands

A slide with a blue header and white body. The header contains the text 'Task 2 – Population and Water Demands' and the 'REGION H Water Planning Group' logo. The body contains a section titled 'Items for Consideration' followed by a bulleted list of items.

Task 2 – Population and Water Demands

REGION H
Water Planning Group

Items for Consideration

- General Comments
 - Brandt Mannchen
 - City of Sugar Land
- Revised Population and Demand Projections
 - City of Huntsville (Walker)
 - City of Richmond (Fort Bend)
 - North Fort Bend Water Authority
 - Steam-Electric Demands (Fort Bend)
- Approval of Population and Water Demands
- Approval of Draft Chapter 2

Task 2 – Population and Water Demands



General Comments – Brandt Mannchen

- Methods used for showing the population and water demands for 2011 RWP
 - Addressed on Region H website with supporting material
- Power generation demands growing in direct proportion to population growth
 - RWPG agreed to adopt 2006 projections
- Sustainable growth of Region H
- Impacts of socio-economic factors on population growth

Task 2 – Population and Water Demands



General Comments – City of Sugar Land

- Concerns over methods used in showing City annexation
 - Requested that areas proposed to be annexed into the City, such as MUDs, be shown as having a zero population and water demand projections in the decades following annexation while the City's projections would increase accordingly.
- Will be working with Sugar Land and other WUGs to account for future plans, including annexation.

Task 2 – Population and Water Demands

City of Huntsville

- **Outstanding Issues**
 - *Insufficient population in County-Other to reallocate*
 - *SDC estimates for Walker County below 2006 RWP projection*
- **Prepared revised projections**
 - Retain City projections for near-term growth
 - Adopt growth from 2006 RWP for 2030 and beyond
 - Revised per capita based on service area (160 gpcd)

Huntsville Population						
Projection	2010	2020	2030	2040	2050	2060
Draft	40,141	44,255	46,236	45,750	45,858	45,858
WUG	42,888	52,424	54,405	54,405	54,405	54,405

Task 2 – Population and Water Demands

City of Richmond

- **Outstanding Issues**
 - *WUG projections below SDC 2007 estimate*
- **Prepared revised projections**
 - Census growth rate from 2000-2007 is 2%, vs. 4.2% from SDC
 - Used Census growth rate for initial projection and adjusted based on changes in TWDB recommended population growth trend

Richmond Population						
Projection	2010	2020	2030	2040	2050	2060
Draft	15,891	19,713	24,386	29,191	35,492	42,692
WUG	13,493	14,212	17,257	20,334	25,149	30,295

Task 2 – Population and Water Demands

North Fort Bend Water Authority

- **Outstanding Issues**
 - Revised per capita demand for 210 gpcd had not yet been applied to demands
- Worked with TWDB to have the 210 gpcd considered and applied as a base per capita demand

NFBWA Water Demand (Ac-Ft/Yr)						
Projection	2010	2020	2030	2040	2050	2060
Draft	1,636	1,597	1,537	1,458	1,361	1,254
WUG	1,636	1,566	1,557	1,626	1,660	1,640

Task 2 – Population and Water Demands

Fort Bend County Steam-Electric

- **Outstanding Issues**
 - Projections seem high for current operation of W.A. Parish Plant
- Reviewed and confirmed current demands
 - Demands represent worst-case scenario for diversions

Fort Bend County Steam-Electric Demands (Ac-Ft/Yr)						
Projection	2010	2020	2030	2040	2050	2060
Draft	66,026	68,046	79,553	93,582	110,682	131,527

Task 2 – Population and Water Demands

Water Demand – Fort Bend County

Type		RWP	2010	2020	2030	2040	2050	2060
Municipal Population		2006	490,072	630,624	802,486	979,196	1,210,945	1,475,761
		2011	545,883	715,275	893,875	1,090,710	1,348,851	1,643,825
Water Demand (Ac-Ft/Yr)	Municipal	2006	89,579	111,680	138,770	165,904	202,470	245,404
		2011	109,869	143,023	174,552	208,691	251,533	300,689
	Irrigation	2006	53,455	53,455	53,455	53,455	53,455	53,455
		2011	53,455	53,455	53,455	53,455	53,455	53,455
	Livestock	2006	1,171	1,171	1,171	1,171	1,171	1,171
		2011	1,171	1,171	1,171	1,171	1,171	1,171
	Manufacturing	2006	6,863	7,199	7,468	7,685	7,829	7,410
		2011	6,863	7,199	7,468	7,685	7,829	7,410
	Mining	2006	3,010	3,070	3,105	3,138	3,169	3,196
		2011	3,010	3,070	3,105	3,138	3,169	3,196
	Steam Electric Power	2006	66,026	68,046	79,553	93,582	110,682	131,527
		2011	66,026	68,046	79,553	93,582	110,682	131,527
	TOTAL	2006	220,104	244,621	283,522	324,935	378,776	442,163
		2011	240,394	275,964	319,304	367,722	427,839	497,448

Task 2 – Population and Water Demands

Water Demand – Harris County

Type		RWP	2010	2020	2030	2040	2050	2060
Municipal Population		2006	3,951,682	4,502,786	5,053,890	5,604,994	6,156,098	6,707,202
		2011	4,078,231	4,629,335	5,180,439	5,731,543	6,282,647	6,833,751
Water Demand (Ac-Ft/Yr)	Municipal	2006	677,684	756,765	834,747	915,339	999,189	1,089,188
		2011	709,300	789,397	868,320	948,412	1,030,899	1,119,593
	Irrigation	2006	15,300	15,300	15,300	15,300	15,300	15,300
		2011	15,300	15,300	15,300	15,300	15,300	15,300
	Livestock	2006	1,133	1,133	1,133	1,133	1,133	1,133
		2011	1,133	1,133	1,133	1,133	1,133	1,133
	Manufacturing	2006	395,997	424,761	449,218	470,881	487,094	478,957
		2011	395,997	424,761	449,218	470,881	487,094	478,957
	Mining	2006	1,282	1,434	1,529	1,624	1,720	1,805
		2011	1,282	1,434	1,529	1,624	1,720	1,805
	Steam Electric Power	2006	7,728	23,962	28,015	32,955	38,977	46,317
		2011	7,728	23,962	28,015	32,955	38,977	46,317
	TOTAL	2006	1,099,124	1,223,355	1,329,942	1,437,232	1,543,413	1,632,700
		2011	1,130,740	1,255,987	1,363,515	1,470,305	1,575,123	1,663,105

Task 2 – Population and Water Demands

Water Demand – Walker County

Type	RWP	2010	2020	2030	2040	2050	2060	
Municipal Population	2006	70,672	77,915	81,402	80,547	80,737	80,737	
	2011	70,672	77,915	81,402	80,547	80,737	80,737	
Water Demand (Ac-Ft/Yr)	Municipal	2006	16,512	17,941	18,516	18,146	18,097	18,097
		2011	16,920	16,607	17,244	16,240	16,042	15,786
	Irrigation	2006	11	11	11	11	11	11
		2011	11	11	11	11	11	11
	Livestock	2006	632	632	632	632	632	632
		2011	632	632	632	632	632	632
	Manufacturing	2006	3,208	3,718	4,188	4,666	5,083	5,517
		2011	3,208	3,718	4,188	4,666	5,083	5,517
	Mining	2006	13	13	13	13	13	13
		2011	13	13	13	13	13	13
	Steam Electric Power	2006	0	0	0	0	0	0
		2011	0	0	0	0	0	0
	TOTAL	2006	20,376	22,315	23,360	23,468	23,836	24,270
		2011	20,784	20,981	22,088	21,562	21,781	21,959

Task 2 – Population and Water Demands

Population and Water Demand Approval

- Approval of population and water demands by the RWPG is required before submittal for TWDB approval
- Projections were posted 14 days in advance of this meeting, per 31 TAC 357.5 (d) (2)
- Once approved, projections will be submitted to TWDB for consideration and approval, unless valid requests for revisions are made within next 14 days
- A valid request for a demand revision will require a revised set of projections to be re-approved at a subsequent meeting following another posting of no less than 14 days

Task 2 – Population and Water Demands

REGION H
Water Planning Group

Public Comment

- **Item 11:** *Receive public comment on Item 10 (Population and water demand projections)*

Task 2 – Population and Water Demands

REGION H
Water Planning Group

Approval of Population and Water Demands

- **Item 12:** *Consider and take action on approving the submittal of revised population and water demand projections to the Texas Water Development Board.*
 - *Approval of Draft posted numbers, City of Huntsville and City of Richmond. If not approved, the projections for Huntsville and Richmond will reflect 2006 RWP projections.*
 - *Approval of comments received since posting*
 - *Comments may be approved individually by group*

Draft Chapter 2

- Prepared to summarize the development of population and water demand projections
- Informal approval to move forward from these tasks
 - Will be reviewed again in IPP
- Posted to Region H Website on June 17th
- **Item 13:** *Consider and take action on approving the Draft Chapter 2 made available on the Region H website prior to the meeting*

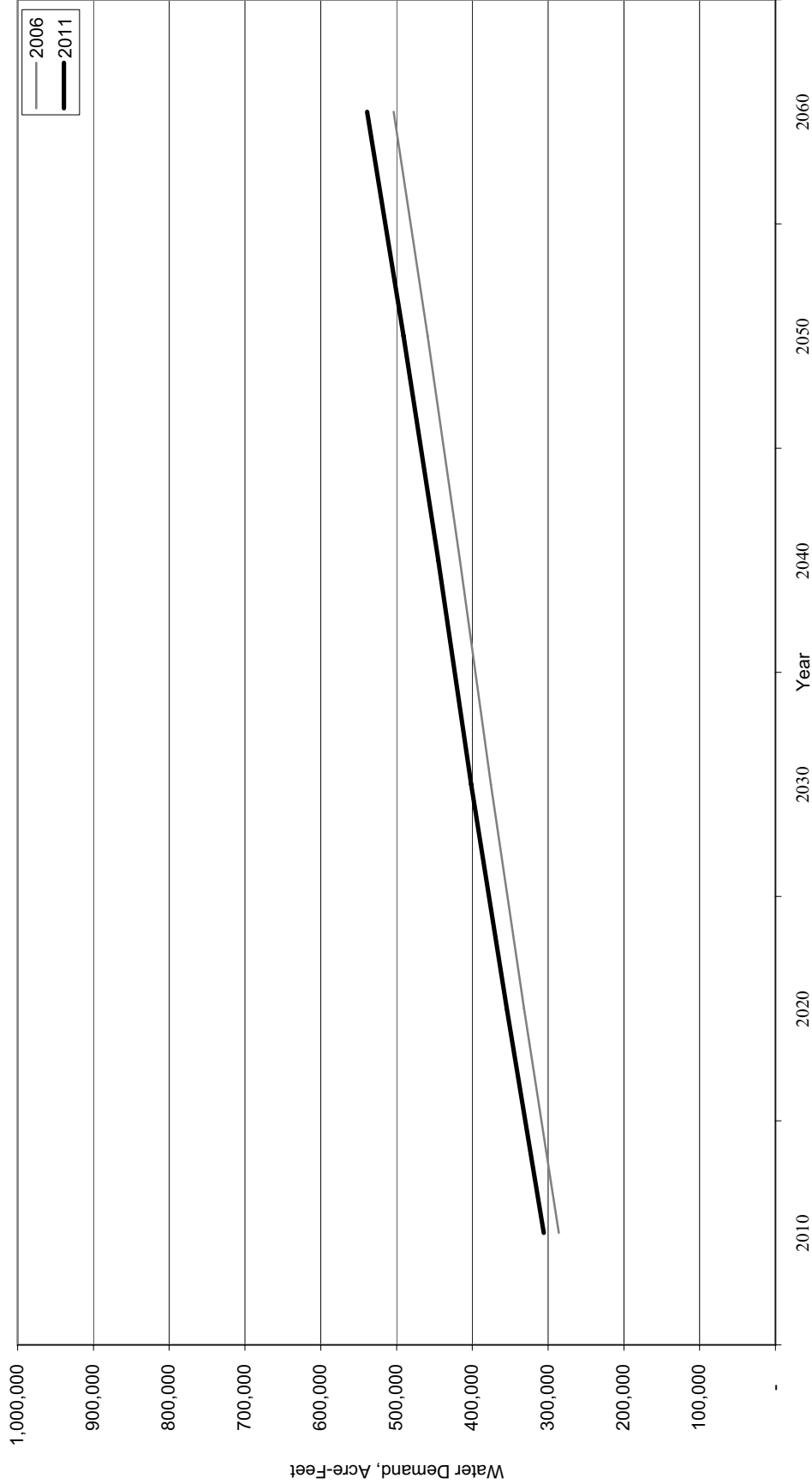
Population and Water Demand Projections
I. Revised Projections

NAME	COUNTY	BASIN	2006 RWP Population Projections								Proposed Populations for 2011 RWP								2006 RWP Water Demands								Proposed Demands for 2011 RWP							
			P2010	P2020	P2030	P2040	P2050	P2060	2010	2020	2030	2040	2050	2060	P2010	P2020	P2030	P2040	P2050	P2060	2010	2020	2030	2040	2050	2060								
COUNTY-OTHER	FORT BEND	BRAZOS	45,638	77,762	116,808	157,164	210,218	270,489	16,676	6,702	29,729	60,333	121,120	192,569	7,498	12,784	18,094	25,150	33,407	43,096	2,728	1,102	4,655	9,655	19,248	30,656								
COUNTY-OTHER	WALKER	SAN JACINTO	10,396	11,461	11,973	11,948	11,876	11,876	8,148	4,780	5,292	4,769	4,685	4,685	5,752	6,303	6,958	6,463	6,463	6,465	4,509	2,699	2,699	2,607	2,659	2,659								
COUNTY-OTHER	WALKER	SAN JACINTO	6,712	7,400	7,732	7,687	7,687	7,687	5,224	5,072	5,244	5,233	5,008	4,361	3,714	4,070	4,235	4,174	4,174	4,174	2,779	3,252	3,220	2,689	2,671	2,372								
COUNTY-OTHER	HUNT	SAN JACINTO	32,831	38,406	37,618	37,819	37,967	37,967	39,116	42,847	46,568	49,889	49,889	49,889	49,889	49,889	49,889	49,889	49,889	49,889	4,480	4,249	4,249	4,249	4,480	4,480								
COUNTY-OTHER	HUNT	SAN JACINTO	7,510	8,058	8,416	8,416	8,416	8,416	8,416	8,416	8,416	8,416	8,416	8,416	8,416	8,416	8,416	8,416	8,416	8,416	1,062	1,062	1,062	1,062	1,062	1,062								
NFBWA	FORT BEND	BRAZOS	0	0	0	0	0	0	5,502	8,888	13,469	18,022	26,625	37,064	0	0	0	0	0	0	1,294	2,063	3,100	4,104	5,962	6,010								
NFBWA	FORT BEND	SAN JACINTO	0	0	0	0	0	0	80,729	110,414	134,155	151,076	167,898	176,115	0	0	0	0	0	0	18,990	25,342	30,377	33,500	34,838	34,633								
NFBWA	FORT BEND	SAN JACINTO-BRAZOS	0	0	0	0	0	0	84,154	119,372	170,729	217,834	261,309	302,363	0	0	0	0	0	0	12,739	27,399	38,659	48,381	58,079	66,749								
NFBWA	HARRIS	SAN JACINTO	0	0	0	0	0	0	6,954	6,824	6,575	7,244	7,469	7,429	0	0	0	0	0	0	1,636	1,997	2,324	2,764	3,151	4,717								
RICHMOND	FORT BEND	BRAZOS	12,173	13,305	14,689	16,112	17,978	20,110	13,493	14,812	17,257	20,334	25,149	30,295	2,032	2,176	2,853	2,853	2,853	2,853	2,032	2,252	2,764	3,151	3,915	4,717								
STEAM ELECTRIC POWER	FORT BEND	BRAZOS	--	--	--	--	--	--	66,026	68,046	68,046	68,046	68,046	68,046	66,026	68,046	68,046	68,046	68,046	68,046	66,026	68,046	68,046	68,046	68,046	68,046								

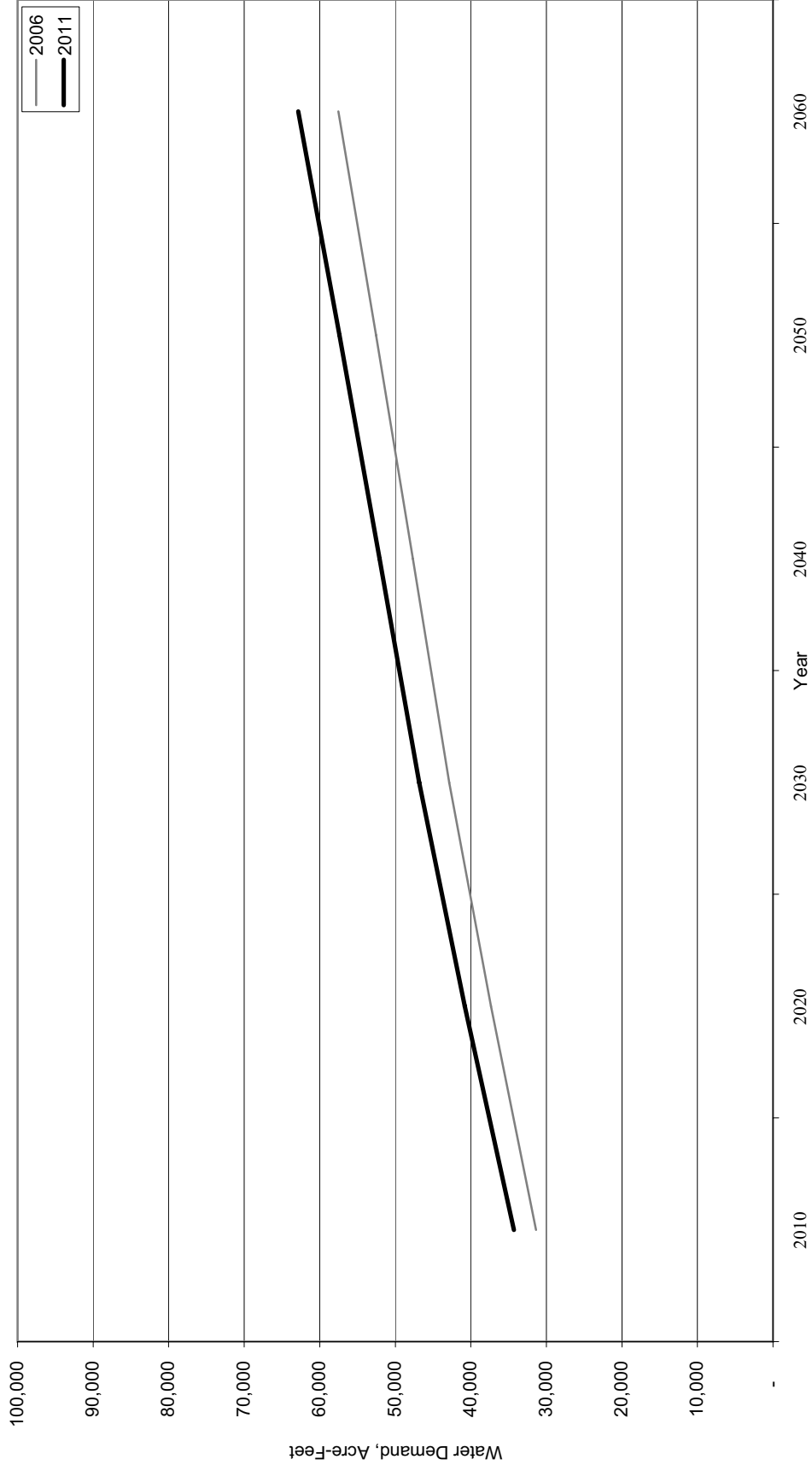
COUNTY SUMMARY

COUNTY	2006 RWP Population Projections								Proposed Populations for 2011 RWP								2006 RWP Net Demands								Proposed Demands for 2011 RWP							
	P2010	P2020	P2030	P2040	P2050	P2060	2010	2020	2030	2040	2050	2060	P2010	P2020	P2030	P2040	P2050	P2060	D2010	D2020	D2030	D2040	D2050	D2060	2010	2020	2030	2040	2050	2060		
AUSTIN	27,173	30,574	32,846	34,355	35,031	35,998	27,173	30,574	32,846	34,355	35,031	35,998	16,411	16,779	17,038	17,156	17,224	17,224	17,398	16,616	17,179	17,571	17,757	17,863	18,058							
BRAZORIA	286,850	331,731	375,664	415,157	459,078	503,894	306,649	354,708	401,684	444,381	498,375	538,795	589,607	491,480	517,411	544,988	577,029	588,704	588,704	577,029	448,174	469,308	494,392	520,453	548,263	580,660						
CHAMBERS	31,375	37,329	42,867	47,867	52,535	57,521	34,282	40,796	46,638	52,083	57,402	62,850	68,867	70,704	72,489	74,163	75,729	77,194	78,460	76,883	81,120	85,433	89,737	94,119	98,900							
COMAL	3,951,692	4,892,746	5,053,890	5,624,884	6,149,868	6,702,232	4,078,231	4,529,135	5,180,435	5,731,443	6,282,447	6,833,751	7,385,055	7,936,359	8,487,663	9,038,967	9,590,271	10,141,575	10,692,879	11,244,183	1,244,421	1,543,413	1,842,405	2,141,397	2,440,389	2,739,381						
HARRIS	18,231	21,137	22,863	22,871	22,868	23,028	18,231	21,137	22,863	22,871	22,868	23,028	23,187	23,346	23,505	23,664	23,823	23,982	24,141	24,300	1,208,104	1,244,421	1,280,738	1,317,055	1,353,372	1,389,689						
LEON	81,930	94,889	107,335	119,519	132,875	147,845	81,930	94,889	107,335	119,519	132,875	147,845	163,026	178,207	193,388	208,569	223,750	238,931	254,112	269,293	6,592	6,975	7,358	7,741	8,124	8,507						
LIBERTY	13,905	14,873	15,644	16,384	17,022	17,590	13,905	14,873	15,644	16,384	17,022	17,590	18,158	18,726	19,294	19,862	20,430	21,000	21,568	22,136	106,213	112,333	118,453	124,573	130,693	136,813						
MADISON	417,892	542,051	692,548	859,410	1,077,190	1,331,286	453,369	588,351	751,702	911,722	1,109,189	1,444,999	1,844,809	2,244,619	2,644,429	3,044,239	3,444,049	3,843,859	4,243,669	4,643,479	83,018	110,901	135,883	162,727	198,439	240,475						
MONTGOMERY	27,443	32,541	38,617	44,693	50,769	56,845	27,443	32,541	38,617	44,693	50,769	56,845	62,921	69,000	75,079	81,158	87,237	93,316	99,395	105,474	5,224	5,797	6,370	6,943	7,516	8,089						
POLK	17,415	18,408	19,399	20,390	21,381	22,372	17,415	18,408	19,399	20,390	21,381	22,372	23,363	24,354	25,345	26,336	27,327	28,318	29,309	30,300	20,754	20,984	21,214	21,444	21,674	21,904						
SAN JACINTO	70,872	77,915	81,402	86,647	92,547	98,447	70,872	77,915	81,402	86,647	92,547	98,447	104,347	110,247	116,147	122,047	127,947	133,847	139,747	145,647	20,799	21,101	21,403	21,705	22,007	22,309						
WALKER	41,137	51,175	62,352	74,789	89,598	106,608	41,137	51,175	62,352	74,789	89,598	106,608	124,618	142,628	160,638	178,648	196,658	214,668	232,678	250,688	31,101	32,576	34,051	35,526	37,001	38,476						
WALLER	41,137	51,175	62,352	74,789	89,598	106,608	41,137	51,175	62,352	74,789	89,598	106,608	124,618	142,628	160,638	178,648	196,658	214,668	232,678	250,688	31,101	32,576	34,051	35,526	37,001	38,476						

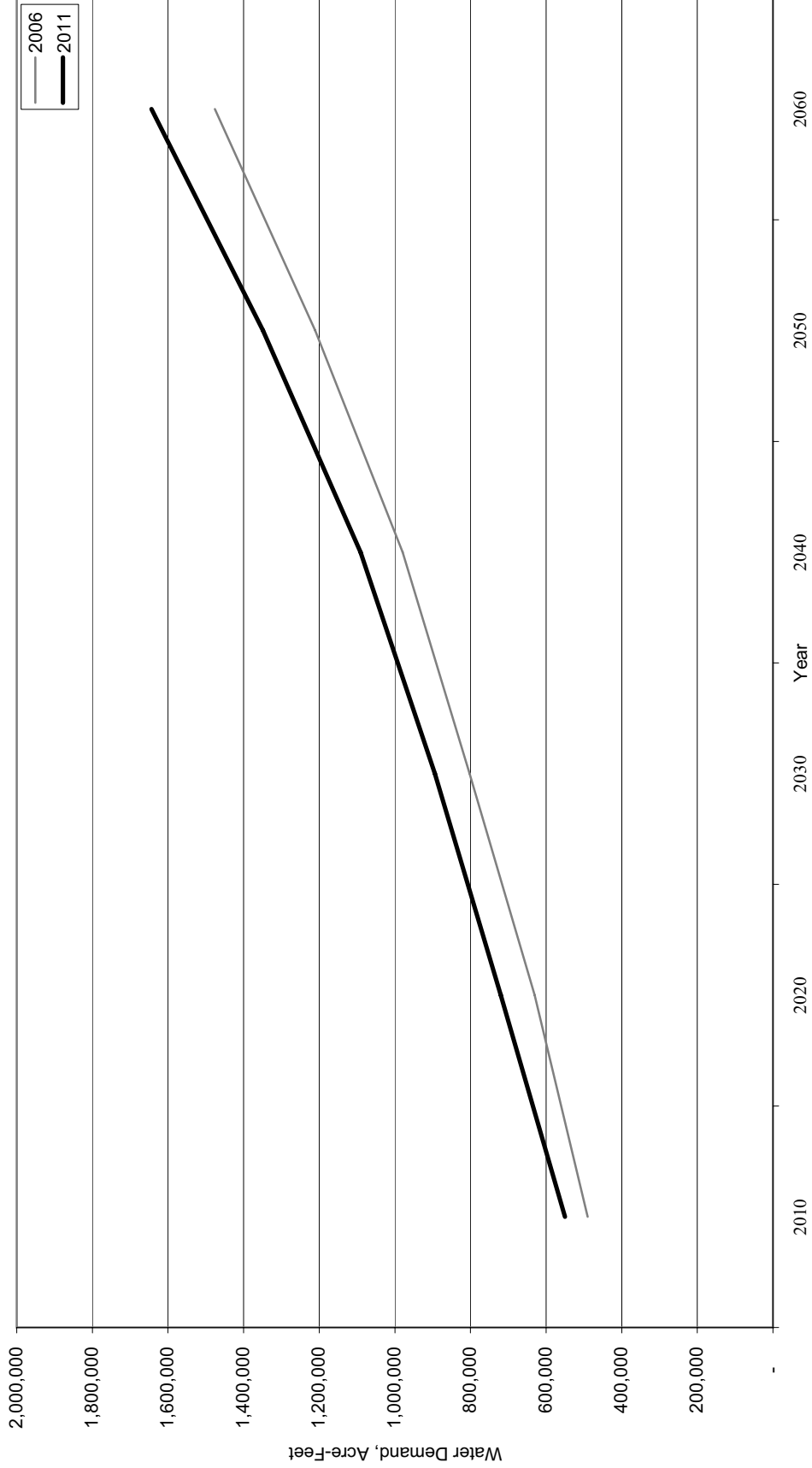
**Brazoria County Total Population Projections
2006 RWP vs 2011 RWP**



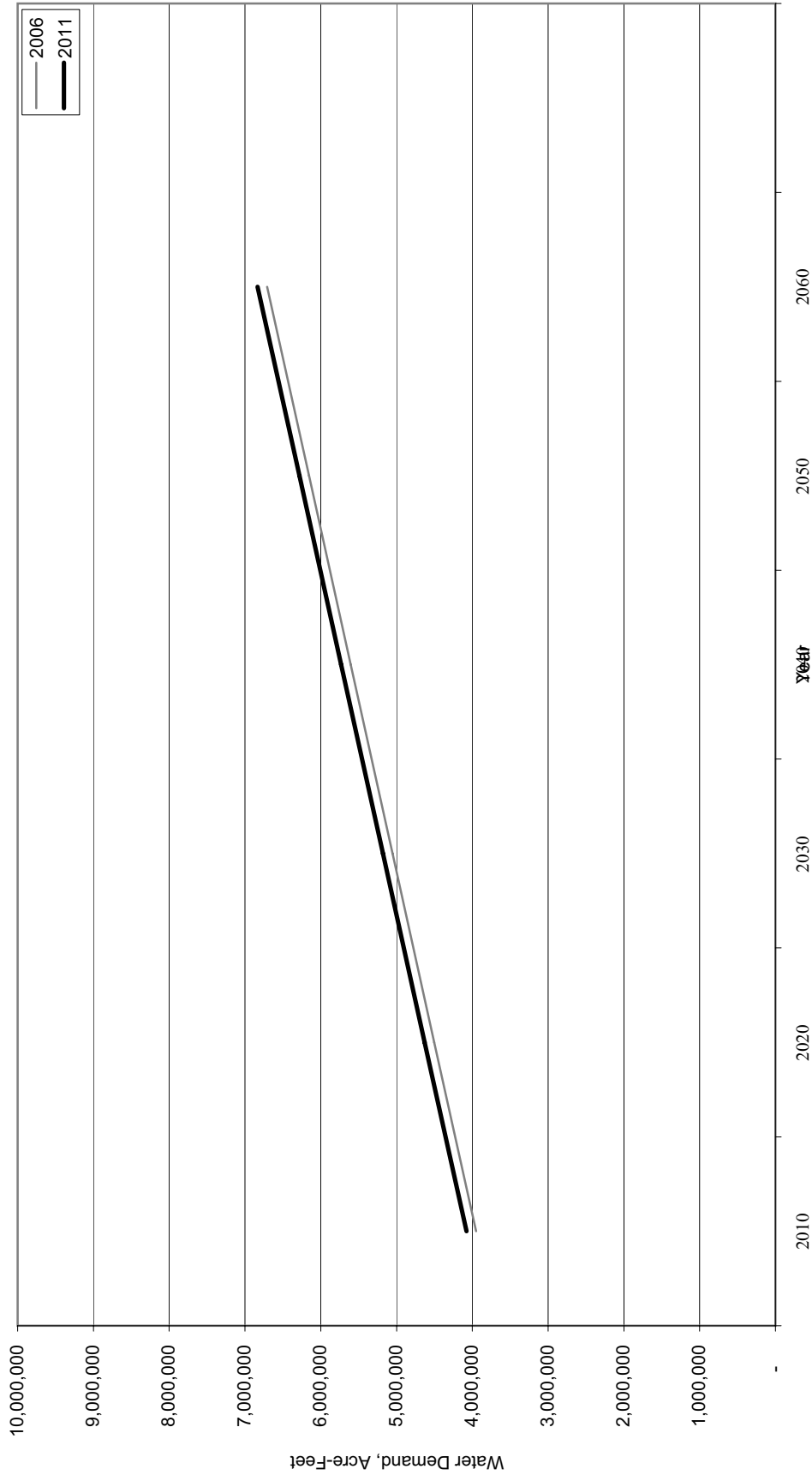
**Chambers County Total Population Projections
2006 RWP vs 2011 RWP**



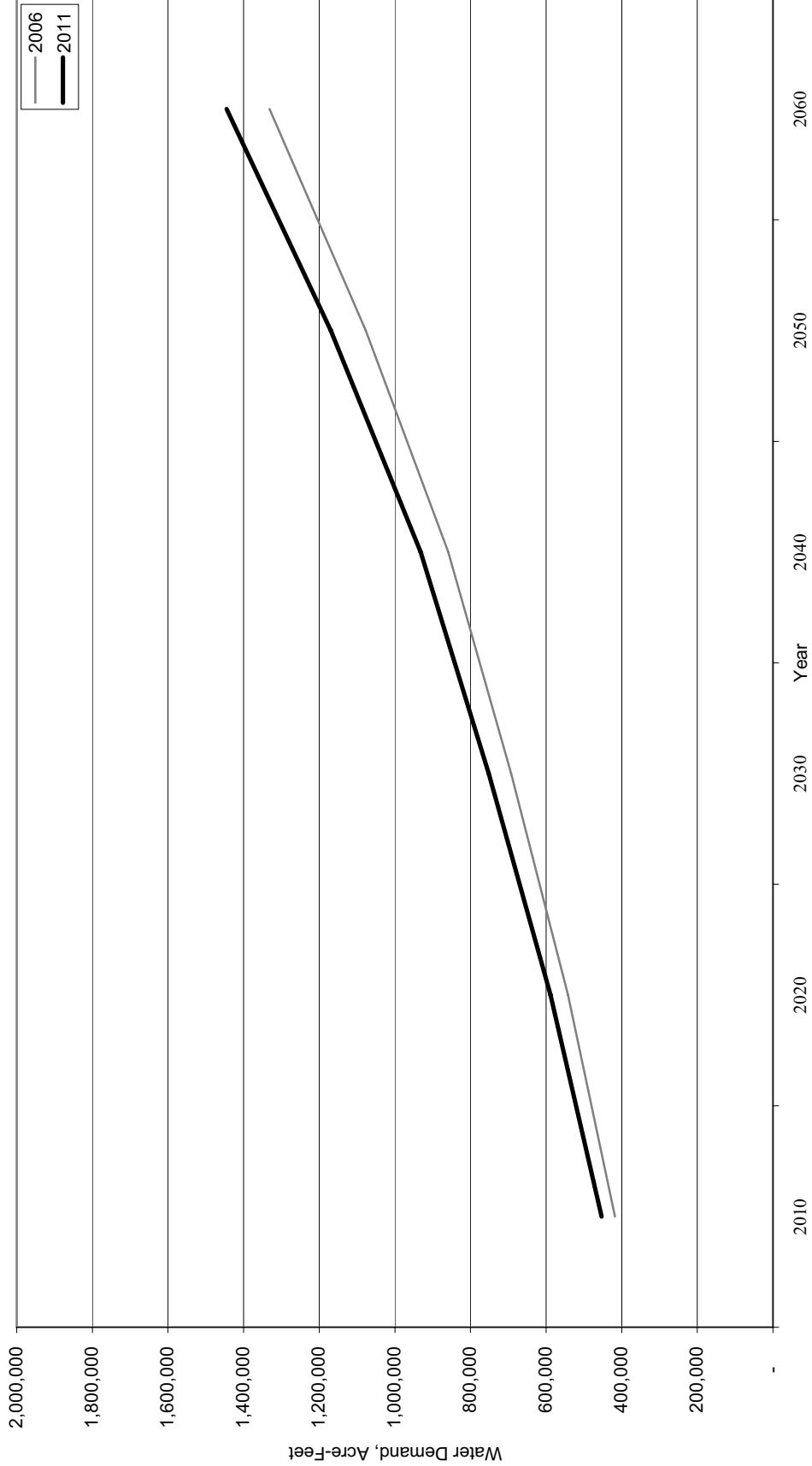
**Fort Bend County Total Population Projections
2006 RWP vs 2011 RWP**



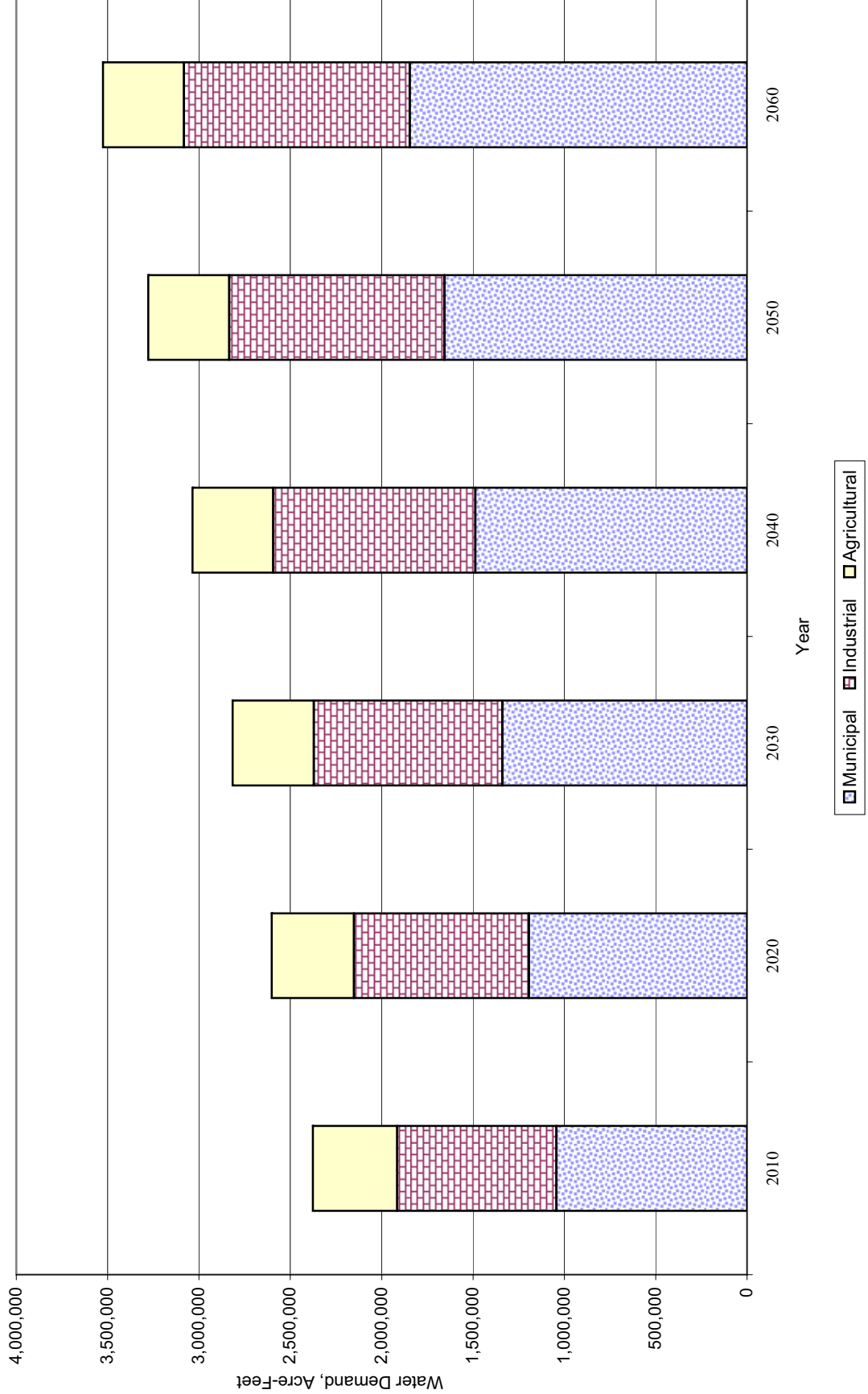
**Harris County Total Population Projections
2006 RWP vs 2011 RWP**



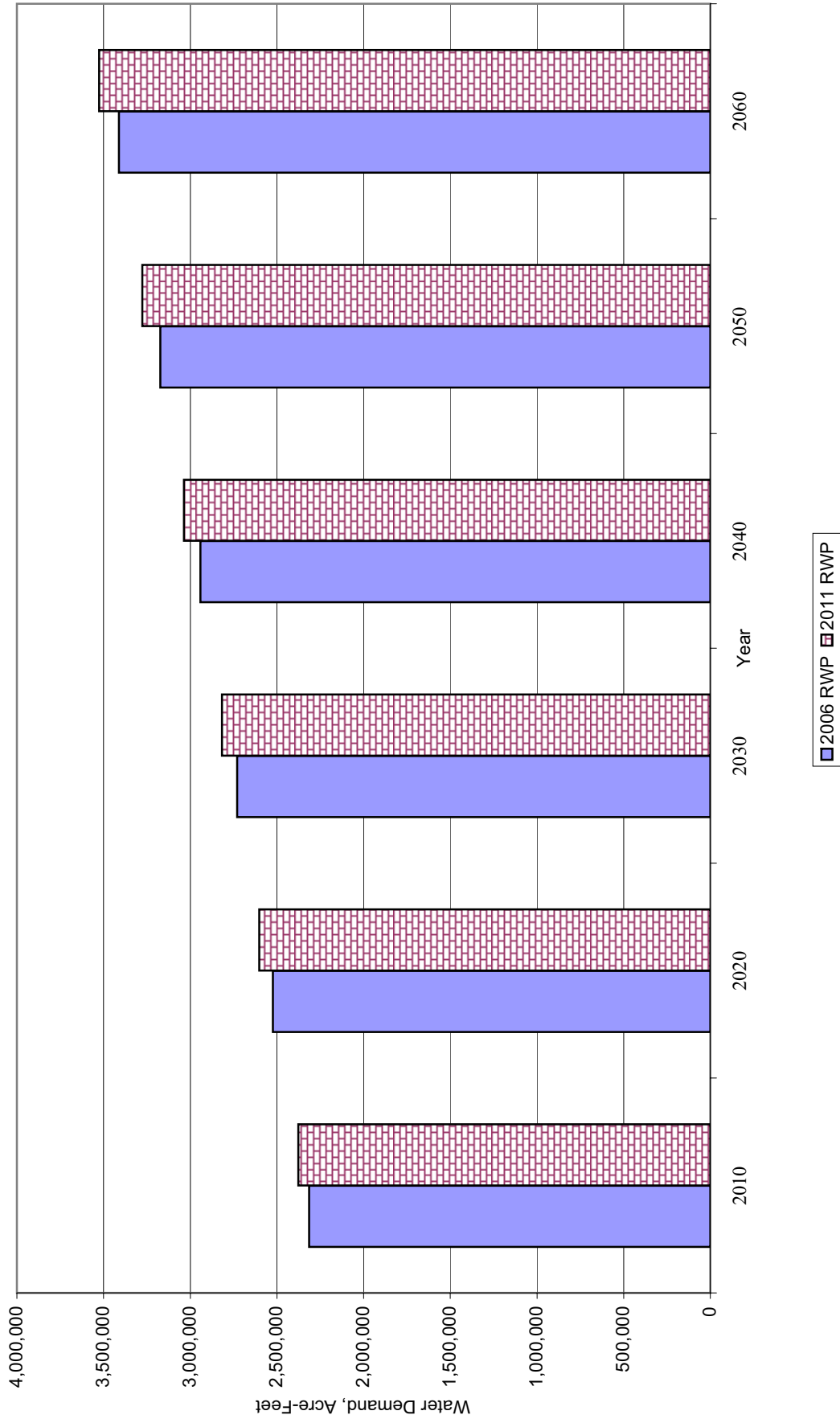
Montgomery County Total Population Projections 2006 RWP vs 2011 RWP



**Total Water Demands by Category
2011 RWP**



Comparison of Water Demand Estimates 2006 RWP vs 2011 RWP



WUG	COUNTY	BASIN	2011 POPULATIONS						
			2010	2020	2030	2040	2050	2060	
20	OAK RIDGE NORTH	MONTGOMERY	SAN JACINTO	3,743	4,202	5,100	6,144	7,521	9,120
21	PANORAMA VILLAGE	MONTGOMERY	SAN JACINTO	2,160	2,281	2,402	2,523	2,644	2,765
22	PATTON VILLAGE	MONTGOMERY	SAN JACINTO	1,721	1,923	2,318	2,777	3,382	4,085
23	POINT AQUARIUS MUD	MONTGOMERY	SAN JACINTO	3,558	4,429	6,388	8,686	11,722	15,250
24	PORTER WSC	MONTGOMERY	SAN JACINTO	15,087	17,179	21,887	27,412	27,412	27,412
25	RAYFORD ROAD MUD	MONTGOMERY	SAN JACINTO	18,237	18,237	18,237	18,237	18,237	18,237
26	RIVER PLANTATION MUD	MONTGOMERY	SAN JACINTO	3,310	3,310	3,310	3,310	3,310	3,310
27	ROMAN FOREST	MONTGOMERY	SAN JACINTO	4,372	6,934	10,035	13,452	17,959	23,194
28	SHENANDOAH	MONTGOMERY	SAN JACINTO	5,123	5,999	7,059	8,228	9,770	11,560
29	SOUTHERN MONTGOMERY COUNTY MUD	MONTGOMERY	SAN JACINTO	11,087	14,196	14,481	15,034	15,213	15,568
30	SOUTHWEST UTILITIES	MONTGOMERY	SAN JACINTO	2,263	2,582	3,299	4,141	5,253	6,545
31	SPLENDORA	MONTGOMERY	SAN JACINTO	2,017	2,470	3,356	4,386	5,745	7,323
32	SPRING CREEK UD	MONTGOMERY	SAN JACINTO	5,326	6,271	8,397	10,892	14,186	18,015
33	STAGECOACH	MONTGOMERY	SAN JACINTO	626	861	1,185	1,630	2,243	3,086
34	STANLEY LAKE MUD	MONTGOMERY	SAN JACINTO	4,256	5,201	5,201	5,201	5,201	5,201
35	THE WOODLANDS	MONTGOMERY	SAN JACINTO	60,080	111,470	119,300	119,300	119,300	119,300
36	WILLIS	MONTGOMERY	SAN JACINTO	5,695	6,739	8,780	11,153	14,283	17,918
37	WOODBANCH	MONTGOMERY	SAN JACINTO	1,567	1,784	2,047	2,336	2,718	3,161
MONTGOMERY TOTAL				453,369	588,351	751,702	931,732	1,169,199	1,444,999
1	COUNTY-OTHER	POLK	TRINITY	11,800	12,789	13,538	14,167	14,984	15,747
2	LAKE LIVINGSTON WATER SUPPLY & SEWER SERVICE COM	POLK	TRINITY	13,706	15,319	16,590	17,577	18,632	19,641
3	LIVINGSTON	POLK	TRINITY	6,740	8,025	9,061	9,829	10,539	11,232
4	ONALASKA	POLK	TRINITY	1,562	1,944	2,252	2,480	2,691	2,897
5	ONALASKA WSC	POLK	TRINITY	3,764	4,029	4,238	4,400	4,573	4,739
6	TRINITY RURAL WSC	POLK	TRINITY	78	90	100	108	116	124
POLK TOTAL				37,650	42,196	45,779	48,561	51,535	54,380
1	COLDSRING	SAN JACINTO	SAN JACINTO	177	205	228	242	250	254
2	COLDSRING	SAN JACINTO	TRINITY	649	753	836	888	918	932
3	COUNTY-OTHER	SAN JACINTO	SAN JACINTO	7,109	8,130	8,946	9,455	9,750	9,884
4	COUNTY-OTHER	SAN JACINTO	TRINITY	4,076	4,490	4,718	4,303	4,038	3,635
5	LAKE LIVINGSTON WATER SUPPLY & SEWER SERVICE COM	SAN JACINTO	SAN JACINTO	1,467	1,844	2,145	2,333	2,442	2,491
6	LAKE LIVINGSTON WATER SUPPLY & SEWER SERVICE COM	SAN JACINTO	TRINITY	3,165	3,978	4,628	5,033	5,268	5,375
7	MERCY WSC	SAN JACINTO	SAN JACINTO	1,820	2,211	2,523	2,718	2,831	2,882
8	POINT BLANK	SAN JACINTO	TRINITY	662	763	843	893	922	935
9	RIVERSIDE WSC	SAN JACINTO	TRINITY	2,017	2,542	3,066	3,950	4,485	5,011
10	SAN JACINTO WSC	SAN JACINTO	TRINITY	3,697	4,457	5,065	5,444	5,663	5,763
11	SHEPHERD	SAN JACINTO	TRINITY	2,604	3,168	3,619	3,900	4,063	4,137
SAN JACINTO TOTAL				27,443	32,541	36,617	39,159	40,630	41,299
1	COUNTY-OTHER	TRINITY	TRINITY	2,866	3,092	3,167	3,129	3,005	2,891
2	GROVETON	TRINITY	TRINITY	630	680	696	688	660	635
3	LAKE LIVINGSTON WATER SUPPLY & SEWER SERVICE COM	TRINITY	TRINITY	1,673	1,805	1,849	1,826	1,754	1,688
4	TRINITY	TRINITY	TRINITY	3,033	3,273	3,352	3,311	3,180	3,060
5	TRINITY RURAL WSC	TRINITY	TRINITY	3,369	3,635	3,722	3,677	3,532	3,399
TRINITY TOTAL				11,571	12,485	12,786	12,631	12,131	11,673
1	CONSOLIDATED WSC	WALKER	TRINITY	100	110	115	113	114	114
2	COUNTY-OTHER	WALKER	SAN JACINTO	8,148	4,780	5,292	4,769	4,885	4,885
3	COUNTY-OTHER	WALKER	TRINITY	5,924	5,912	6,244	5,293	4,906	4,361
4	HUNTSVILLE	WALKER	SAN JACINTO	35,078	42,877	44,497	44,498	44,498	44,498
5	HUNTSVILLE	WALKER	TRINITY	7,810	9,547	9,908	9,907	9,907	9,907
6	LAKE LIVINGSTON WATER SUPPLY & SEWER SERVICE COM	WALKER	TRINITY	439	484	506	501	502	502
7	NEW WAVERLY	WALKER	SAN JACINTO	1,087	1,199	1,252	1,239	1,242	1,242
8	RIVERSIDE WSC	WALKER	TRINITY	4,472	4,612	4,819	5,550	5,985	6,530
9	TRINITY RURAL WSC	WALKER	TRINITY	267	294	307	304	305	305
10	WALKER COUNTY RURAL WSC	WALKER	TRINITY	7,347	8,100	8,462	8,373	8,393	8,393
WALKER TOTAL				70,672	77,915	81,402	80,547	80,737	80,737
1	BROOKSHIRE	WALLER	BRAZOS	4,616	5,997	7,535	9,246	11,284	13,624
2	COUNTY-OTHER	WALLER	BRAZOS	8,859	9,572	10,366	11,251	12,303	13,512
3	COUNTY-OTHER	WALLER	SAN JACINTO	10,878	13,699	16,840	20,334	24,494	29,275
4	HEMPSTEAD	WALLER	BRAZOS	7,389	10,585	14,143	18,102	22,817	28,232
5	KATY	WALLER	SAN JACINTO	1,462	2,241	3,109	4,074	5,224	6,544
6	PINE ISLAND	WALLER	BRAZOS	1,102	1,402	1,736	2,107	2,549	3,057
7	PRAIRIE VIEW	WALLER	BRAZOS	4,306	4,700	5,139	5,628	6,210	6,878
8	PRAIRIE VIEW	WALLER	SAN JACINTO	474	517	565	619	683	756
9	WALLER	WALLER	SAN JACINTO	2,051	2,462	2,919	3,428	4,034	4,730
WALLER TOTAL				41,137	51,175	62,352	74,789	89,598	106,608
REGION H TOTAL				6,020,078	6,995,442	7,986,480	8,998,002	10,132,237	11,346,082

WUG	COUNTY	BASIN	2011 DEMANDS (ac-ft/yr)						
			2010	2020	2030	2040	2050	2060	
1	BAYTOWN	HARRIS	SAN JACINTO	624	625	628	631	643	659
2	BAYTOWN	HARRIS	TRINITY-SAN JACINTO	10,531	10,537	10,599	10,645	10,841	11,114
3	BELLAIRE	HARRIS	SAN JACINTO	3,734	3,993	4,254	4,527	4,817	5,131
4	BLUE BELL MANOR UTILITY COMPANY	HARRIS	SAN JACINTO	572	563	555	546	540	540
5	BRITMOORE UTILITIES	HARRIS	SAN JACINTO	471	550	626	705	783	864
6	BUNKER HILL VILLAGE	HARRIS	SAN JACINTO	1,504	1,491	1,479	1,466	1,462	1,462
7	CANDLELIGHT HILLS SUBDIVISION	HARRIS	SAN JACINTO	451	530	610	691	770	853
8	CHCRWA	HARRIS	SAN JACINTO	4,637	6,433	6,433	6,433	6,433	6,433
9	CHIMNEY HILL MUD	HARRIS	SAN JACINTO	668	646	625	618	611	611
10	CLEAR BROOK CITY MUD WOODMEADOWS	HARRIS	SAN JACINTO	1,003	1,089	1,189	1,281	1,384	1,503
11	CONSUMERS WATER INC	HARRIS	SAN JACINTO	399	524	653	767	897	1,026
12	COUNTY-OTHER	HARRIS	SAN JACINTO	6,030	5,971	14,834	34,063	60,356	88,146
13	COUNTY-OTHER	HARRIS	SAN JACINTO-BRAZOS	2,621	2,045	2,512	2,030	1,966	2,014
14	COUNTY-OTHER	HARRIS	TRINITY-SAN JACINTO	2,373	1,776	1,997	1,370	969	645
15	CROSBY MUD	HARRIS	SAN JACINTO	897	964	1,028	1,091	1,157	1,237
16	CRYSTAL SPRNGS WATER COMPANY	HARRIS	SAN JACINTO	21	27	33	39	45	51
17	DEER PARK	HARRIS	SAN JACINTO	1,723	1,725	1,737	1,746	1,782	1,832
18	DEER PARK	HARRIS	SAN JACINTO-BRAZOS	2,641	2,645	2,664	2,678	2,732	2,809
19	EL DORADO UD	HARRIS	SAN JACINTO	465	507	544	584	627	675
20	EL LAGO	HARRIS	SAN JACINTO-BRAZOS	534	524	513	503	496	496
21	FOUNTAINVIEW SUBDIVISION	HARRIS	SAN JACINTO	341	389	438	483	532	585
22	FRIENDSWOOD	HARRIS	SAN JACINTO-BRAZOS	1,031	1,005	979	952	944	944
23	GALENA PARK	HARRIS	SAN JACINTO	1,231	1,234	1,245	1,252	1,285	1,332
24	GREEN TRAILS MUD	HARRIS	SAN JACINTO	917	1,036	1,158	1,276	1,396	1,520
25	HARRIS COUNTY FWSD #47	HARRIS	SAN JACINTO	423	408	394	380	370	370
26	HARRIS COUNTY FWSD #51	HARRIS	SAN JACINTO	2,536	2,473	2,451	2,409	2,409	2,409
27	HARRIS COUNTY FWSD #6	HARRIS	SAN JACINTO	346	396	441	494	544	601
28	HARRIS COUNTY MUD #11	HARRIS	SAN JACINTO	417	470	523	574	627	686
29	HARRIS COUNTY MUD #119 INWOOD NORTH	HARRIS	SAN JACINTO	878	919	899	880	870	870
30	HARRIS COUNTY MUD #132	HARRIS	SAN JACINTO	1,755	2,176	2,579	2,986	3,385	3,801
31	HARRIS COUNTY MUD #151	HARRIS	SAN JACINTO	1,275	1,267	1,259	1,250	1,250	1,250
32	HARRIS COUNTY MUD #152	HARRIS	SAN JACINTO	787	1,014	1,228	1,444	1,670	1,895
33	HARRIS COUNTY MUD #153	HARRIS	SAN JACINTO	1,227	1,669	2,106	2,533	2,971	3,406
34	HARRIS COUNTY MUD #154	HARRIS	SAN JACINTO	676	830	974	1,122	1,265	1,421
35	HARRIS COUNTY MUD #158	HARRIS	SAN JACINTO	486	597	589	574	574	574
36	HARRIS COUNTY MUD #180	HARRIS	SAN JACINTO	616	741	864	990	1,113	1,245
37	HARRIS COUNTY MUD #189	HARRIS	SAN JACINTO	804	970	1,133	1,299	1,462	1,636
38	HARRIS COUNTY MUD #261	HARRIS	SAN JACINTO	870	867	867	865	865	865
39	HARRIS COUNTY MUD #345	HARRIS	SAN JACINTO	1,415	1,403	1,403	1,397	1,397	1,397
40	HARRIS COUNTY MUD #46	HARRIS	SAN JACINTO	836	822	808	801	801	801
41	HARRIS COUNTY MUD #5	HARRIS	SAN JACINTO	655	642	628	614	605	605
42	HARRIS COUNTY MUD #50	HARRIS	SAN JACINTO	620	655	696	731	773	820
43	HARRIS COUNTY MUD #53	HARRIS	SAN JACINTO	1,933	2,384	2,806	3,238	3,658	4,111
44	HARRIS COUNTY MUD #55	HARRIS	SAN JACINTO-BRAZOS	1,502	1,463	1,424	1,385	1,359	1,359
45	HARRIS COUNTY MUD #8	HARRIS	SAN JACINTO	697	756	809	866	929	1,001
46	HARRIS COUNTY UD #14	HARRIS	SAN JACINTO	582	635	686	737	790	845
47	HARRIS COUNTY UD #15	HARRIS	SAN JACINTO	427	484	541	596	653	716
48	HARRIS COUNTY WCID #1	HARRIS	SAN JACINTO	1,115	1,264	1,413	1,554	1,704	1,870
49	HARRIS COUNTY WCID #133	HARRIS	SAN JACINTO	754	750	747	737	743	743
50	HARRIS COUNTY WCID #21	HARRIS	SAN JACINTO	1,417	1,466	1,509	1,547	1,609	1,684
51	HARRIS COUNTY WCID #36	HARRIS	SAN JACINTO	1,346	1,452	1,547	1,650	1,763	1,891
52	HARRIS COUNTY WCID #50	HARRIS	SAN JACINTO	605	663	715	770	830	897
53	HARRIS COUNTY WCID #76	HARRIS	SAN JACINTO	296	290	284	278	274	274
54	HARRIS COUNTY WCID #84	HARRIS	SAN JACINTO	602	604	606	604	611	621
55	HEDWIG VILLAGE	HARRIS	SAN JACINTO	831	824	816	808	803	803
56	HILSHIRE VILLAGE	HARRIS	SAN JACINTO	191	188	185	183	182	182
57	HOUSTON	HARRIS	SAN JACINTO	361,804	398,796	433,343	468,951	506,649	547,381
58	HOUSTON	HARRIS	SAN JACINTO-BRAZOS	20,163	22,225	24,150	26,134	28,235	30,505
59	HUMBLE	HARRIS	SAN JACINTO	3,664	4,062	4,456	4,857	5,274	5,715
60	HUNTERS CREEK VILLAGE	HARRIS	SAN JACINTO	1,747	1,866	1,981	2,091	2,212	2,340
61	IRRIGATION	HARRIS	SAN JACINTO	9,883	9,883	9,883	9,883	9,883	9,883
62	IRRIGATION	HARRIS	TRINITY-SAN JACINTO	5,417	5,417	5,417	5,417	5,417	5,417
63	JACINTO CITY	HARRIS	SAN JACINTO	1,301	1,346	1,410	1,455	1,526	1,612
64	JERSEY VILLAGE	HARRIS	SAN JACINTO	1,586	1,880	2,170	2,464	2,753	3,056
65	KATY	HARRIS	SAN JACINTO	3,197	3,867	4,544	5,230	5,902	6,604
66	LA PORTE	HARRIS	SAN JACINTO	287	306	328	346	369	394
67	LA PORTE	HARRIS	SAN JACINTO-BRAZOS	5,036	5,367	5,750	6,066	6,461	6,904
68	LEAGUE CITY	HARRIS	SAN JACINTO-BRAZOS	26	26	26	26	27	27
69	LIVESTOCK	HARRIS	SAN JACINTO	951	951	951	951	951	951
70	LIVESTOCK	HARRIS	SAN JACINTO-BRAZOS	91	91	91	91	91	91
71	LIVESTOCK	HARRIS	TRINITY-SAN JACINTO	91	91	91	91	91	91
72	LONGHORN TOWN UD	HARRIS	SAN JACINTO	596	857	1,112	1,368	1,622	1,875
73	MANUFACTURING	HARRIS	SAN JACINTO	256,465	275,094	290,934	304,964	315,464	310,194
74	MANUFACTURING	HARRIS	SAN JACINTO-BRAZOS	66,918	71,779	75,911	79,572	82,312	80,937
75	MANUFACTURING	HARRIS	TRINITY-SAN JACINTO	72,614	77,888	82,373	86,345	89,318	87,826
76	MASON CREEK UD	HARRIS	SAN JACINTO	2,352	2,321	2,291	2,271	2,261	2,261
77	MINING	HARRIS	SAN JACINTO	1,258	1,407	1,500	1,593	1,688	1,771
78	MINING	HARRIS	SAN JACINTO-BRAZOS	24	27	29	31	32	34
79	MISSOURI CITY	HARRIS	SAN JACINTO	1,306	1,540	1,786	2,035	2,296	2,554
80	NASSAU BAY	HARRIS	SAN JACINTO-BRAZOS	1,028	1,014	1,000	986	976	976
81	NFBWA	HARRIS	SAN JACINTO	1,636	1,597	1,537	1,458	1,361	1,254
82	NHCRWA	HARRIS	SAN JACINTO	116,062	136,903	152,789	161,456	164,968	169,178
83	NORTH BELT UD	HARRIS	SAN JACINTO	461	600	731	863	1,002	1,140
84	NORTH GREEN MUD	HARRIS	SAN JACINTO	349	379	405	434	466	503
85	NORTHWEST HARRIS COUNTY MUD #23	HARRIS	SAN JACINTO	587	728	873	1,005	1,152	1,298
86	NORTHWEST PARK MUD	HARRIS	SAN JACINTO	2,909	3,423	3,427	3,359	3,326	3,326
87	PARKWAY UD	HARRIS	SAN JACINTO	303	296	288	280	275	277
88	PASADENA	HARRIS	SAN JACINTO	15,990	17,440	18,759	20,151	21,674	23,383
89	PASADENA	HARRIS	SAN JACINTO-BRAZOS	4,475	4,881	5,250	5,639	6,066	6,544
90	PEARLAND	HARRIS	SAN JACINTO-BRAZOS	445	513	579	646	717	788
91	PINE TRAILS UTILITY	HARRIS	SAN JACINTO	939	1,008	1,070	1,137	1,210	1,292
92	PINEY POINT VILLAGE	HARRIS	SAN JACINTO	1,275	1,317	1,360	1,402	1,451	1,506
93	ROLLING FORK PUD	HARRIS	SAN JACINTO	706	729	753	777	806	839

WUG	COUNTY	BASIN	2011 DEMANDS (ac-ft/yr)						
			2010	2020	2030	2040	2050	2060	
94	SEABROOK	HARRIS	SAN JACINTO-BRAZOS	2,421	2,867	3,288	3,731	4,166	4,620
95	SHOREACRES	HARRIS	SAN JACINTO-BRAZOS	204	217	229	239		237
96	SOUTH HOUSTON	HARRIS	SAN JACINTO	2,288	2,393	2,528	2,631	2,775	2,942
97	SOUTHSIDE PLACE	HARRIS	SAN JACINTO	406	433	458	482	510	540
98	SOUTHWEST UTILITIES	HARRIS	SAN JACINTO	710	795	882	962	1,050	1,147
99	SPRING VALLEY	HARRIS	SAN JACINTO	888	915	944	972	1,008	1,049
100	STAFFORD	HARRIS	SAN JACINTO	23	23	23	22		23
101	STEAM ELECTRIC POWER	HARRIS	SAN JACINTO	7,284	22,585	26,405	31,062	36,738	43,656
102	STEAM ELECTRIC POWER	HARRIS	SAN JACINTO-BRAZOS	444	1,377	1,610	1,893	2,239	2,661
103	SUNBELT FWSD	HARRIS	SAN JACINTO	4,489	5,227	5,922	6,663	7,389	8,154
104	TAYLOR LAKE VILLAGE	HARRIS	SAN JACINTO-BRAZOS	908	889	871	852	846	846
105	TOMBALL	HARRIS	SAN JACINTO	2,621	3,301	3,842	4,834	5,562	6,630
106	TRAIL OF THE LAKES MUD	HARRIS	SAN JACINTO	1,413	1,376	1,364	1,339	1,339	1,339
107	WALLER	HARRIS	SAN JACINTO	119	154	190	225	260	296
108	WEBSTER	HARRIS	SAN JACINTO-BRAZOS	2,417	3,097	3,772	4,432	5,110	5,786
109	WEST HARRIS COUNTY MUD #6	HARRIS	SAN JACINTO	565	561	561	549	541	541
110	WEST UNIVERSITY PL.	HARRIS	SAN JACINTO	3,101	3,275	3,438	3,591	3,780	3,989
111	WHCRWA	HARRIS	SAN JACINTO	60,067	67,747	73,904	78,344	79,642	80,217
112	WILLOW RUN SUBDIVISION	HARRIS	SAN JACINTO	665	652	640	628	620	620
113	WINDFERN FOREST UD	HARRIS	SAN JACINTO	804	1,033	1,014	1,004	1,004	1,004
114	WOODCREEK MUD	HARRIS	SAN JACINTO	622	815	999	1,184	1,374	1,564
HARRIS TOTAL				1,130,740	1,256,018	1,363,495	1,470,137	1,574,824	1,662,719
1	BUFFALO	LEON	TRINITY	348	384	401	397	392	395
2	CENTERVILLE	LEON	TRINITY	189	203	210	207	205	206
3	COUNTY-OTHER	LEON	BRAZOS	395	416	421	412	405	408
4	COUNTY-OTHER	LEON	TRINITY	428	448	452	443	436	439
5	FLO COMMUNITY WSC	LEON	TRINITY	418	525	578	574	559	567
6	IRRIGATION	LEON	TRINITY	542	542	542	542	542	542
7	JEWETT	LEON	BRAZOS	51	60	64	64	63	64
8	JEWETT	LEON	TRINITY	151	177	192	191	188	190
9	LIVESTOCK	LEON	BRAZOS	423	423	423	423	423	423
10	LIVESTOCK	LEON	TRINITY	1,268	1,268	1,268	1,268	1,268	1,268
11	MANUFACTURING	LEON	TRINITY	714	842	967	1,093	1,207	1,313
12	MINING	LEON	BRAZOS	221	213	209	205	201	198
13	MINING	LEON	TRINITY	1,296	1,251	1,226	1,204	1,183	1,166
14	NORMANGEE	LEON	BRAZOS	42	46	49	48	47	48
15	NORMANGEE	LEON	TRINITY	106	117	122	120	119	120
LEON TOTAL				6,592	6,915	7,124	7,191	7,238	7,347
1	AMES	LIBERTY	TRINITY	137	159	179	197	221	250
2	CLEVELAND	LIBERTY	SAN JACINTO	1,341	1,365	1,392	1,416	1,464	1,529
3	COUNTY-OTHER	LIBERTY	NECHES	154	179	203	228	255	288
4	COUNTY-OTHER	LIBERTY	NECHES-TRINITY	11	12	14	16	18	20
5	COUNTY-OTHER	LIBERTY	SAN JACINTO	1,294	1,504	1,707	1,918	2,145	2,427
6	COUNTY-OTHER	LIBERTY	TRINITY	2,787	3,116	3,441	3,786	4,157	4,628
7	COUNTY-OTHER	LIBERTY	TRINITY-SAN JACINTO	187	217	247	277	310	350
8	DAISETTA	LIBERTY	NECHES	58	59	60	61	62	65
9	DAISETTA	LIBERTY	TRINITY	91	93	94	95	98	102
10	DAYTON	LIBERTY	TRINITY	1,737	2,161	2,553	2,924	3,355	3,855
11	HARDIN	LIBERTY	TRINITY	136	155	172	191	211	235
12	HARDIN WSC	LIBERTY	TRINITY	567	669	767	865	973	1,099
13	IRRIGATION	LIBERTY	NECHES	3,317	3,317	3,317	3,317	3,317	3,317
14	IRRIGATION	LIBERTY	NECHES-TRINITY	8,289	8,289	8,289	8,289	8,289	8,289
15	IRRIGATION	LIBERTY	SAN JACINTO	830	830	830	830	830	830
16	IRRIGATION	LIBERTY	TRINITY	53,056	53,056	53,056	53,056	53,056	53,056
17	IRRIGATION	LIBERTY	TRINITY-SAN JACINTO	17,409	17,409	17,409	17,409	17,409	17,409
18	KENEFICK	LIBERTY	TRINITY	94	112	128	144	162	183
19	LAKE LIVINGSTON WATER SUPPLY & SEWER SERVICE COMPANY	LIBERTY	TRINITY	108	116	124	130	140	153
20	LIBERTY	LIBERTY	TRINITY	1,509	1,527	1,532	1,543	1,578	1,628
21	LIVESTOCK	LIBERTY	NECHES	104	104	104	104	104	104
22	LIVESTOCK	LIBERTY	NECHES-TRINITY	35	35	35	35	35	35
23	LIVESTOCK	LIBERTY	SAN JACINTO	140	140	140	140	140	140
24	LIVESTOCK	LIBERTY	TRINITY	446	446	446	446	446	446
25	LIVESTOCK	LIBERTY	TRINITY-SAN JACINTO	32	32	32	32	32	32
26	MANUFACTURING	LIBERTY	SAN JACINTO	331	391	452	514	570	619
27	MANUFACTURING	LIBERTY	TRINITY	62	74	85	97	108	117
28	MERCY WSC	LIBERTY	SAN JACINTO	75	88	100	113	126	142
29	MINING	LIBERTY	NECHES	32	32	32	32	32	33
30	MINING	LIBERTY	NECHES-TRINITY	23	23	23	24	23	22
31	MINING	LIBERTY	SAN JACINTO	34	34	34	34	35	35
32	MINING	LIBERTY	TRINITY	4,924	4,937	4,945	4,951	4,958	4,963
33	MINING	LIBERTY	TRINITY-SAN JACINTO	3,717	3,727	3,732	3,737	3,742	3,747
34	PLUM GROVE	LIBERTY	SAN JACINTO	141	176	207	240	277	319
35	SOUTHWEST UTILITIES	LIBERTY	SAN JACINTO	14	16	18	20	23	26
36	STEAM ELECTRIC POWER	LIBERTY	TRINITY	2,962	4,240	4,957	5,831	6,896	8,195
37	WEST HARDIN WSC	LIBERTY	NECHES	29	35	42	47	54	63
LIBERTY TOTAL				106,213	108,875	110,898	113,089	115,651	118,751
1	COUNTY-OTHER	MADISON	BRAZOS	106	110	113	115	118	122
2	COUNTY-OTHER	MADISON	TRINITY	896	931	959	971	998	1,032
3	IRRIGATION	MADISON	TRINITY	19	19	19	19	19	19
4	LIVESTOCK	MADISON	BRAZOS	120	120	120	120	120	120
5	LIVESTOCK	MADISON	TRINITY	630	630	630	630	630	630
6	MADISONVILLE	MADISON	TRINITY	781	815	837	856	881	908
7	MANUFACTURING	MADISON	TRINITY	260	289	316	343	367	398
8	MINING	MADISON	BRAZOS	9	9	9	9	9	9
9	MINING	MADISON	TRINITY	15	15	15	15	15	15
10	NORMANGEE	MADISON	TRINITY	10	11	12	12	13	13
MADISON TOTAL				2,846	2,949	3,030	3,090	3,170	3,266
1	CONROE	MONTGOMERY	SAN JACINTO	11,262	14,588	18,512	22,987	28,860	35,846
2	CONSUMERS WATER INC	MONTGOMERY	SAN JACINTO	222	243	305	371	470	583
3	COUNTY-OTHER	MONTGOMERY	SAN JACINTO	22,913	27,163	38,401	51,881	71,391	94,064
4	CRYSTAL SPRNGS WATER COMPANY	MONTGOMERY	SAN JACINTO	606	704	933	1,208	1,586	2,026
5	CUT AND SHOOT	MONTGOMERY	SAN JACINTO	210	235	285	348	430	529

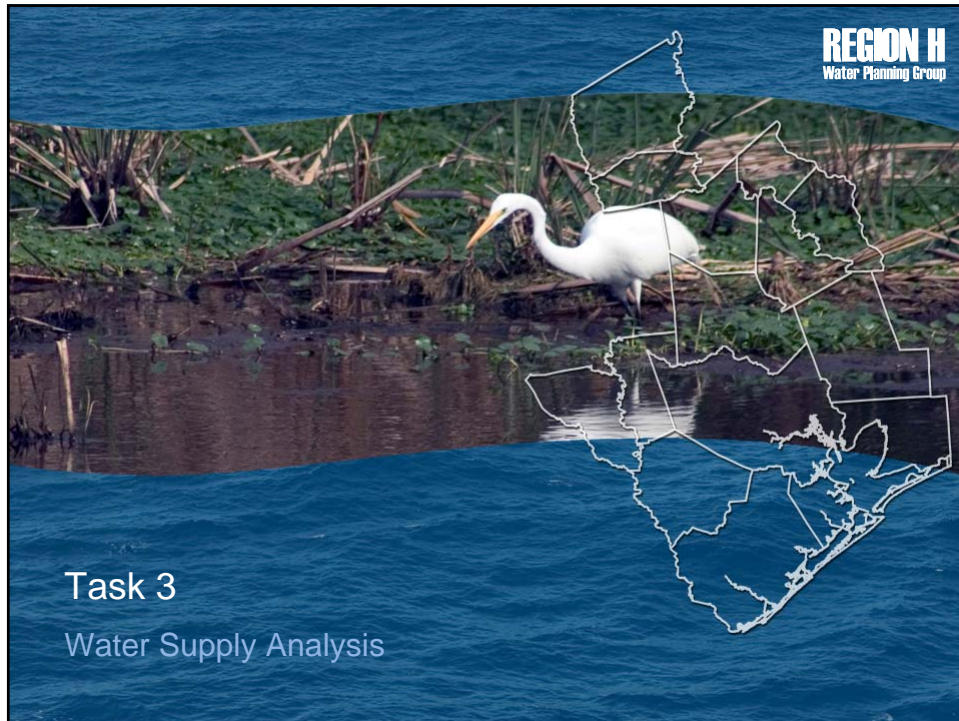
WUG	COUNTY	BASIN	2011 DEMANDS (ac-ft/yr)						
			2010	2020	2030	2040	2050	2060	
6	EAST PLANTATION UD	MONTGOMERY	SAN JACINTO	471	551	734	952	1,244	1,584
7	H M W SUD	MONTGOMERY	SAN JACINTO	1,696	1,864	2,282	2,768	3,434	4,208
8	HOUSTON	MONTGOMERY	SAN JACINTO	190	253	375	516	704	926
9	IRRIGATION	MONTGOMERY	SAN JACINTO	66	66	66	66	66	66
10	LIVESTOCK	MONTGOMERY	SAN JACINTO	510	510	510	510	510	510
11	MAGNOLIA	MONTGOMERY	SAN JACINTO	439	604	800	1,015	1,302	1,643
12	MANUFACTURING	MONTGOMERY	SAN JACINTO	2,045	2,332	2,608	2,883	3,126	3,392
13	MINING	MONTGOMERY	SAN JACINTO	480	509	526	543	559	573
14	MONTGOMERY	MONTGOMERY	SAN JACINTO	249	1,019	1,497	1,970	2,442	2,927
15	MONTGOMERY COUNTY MUD #18	MONTGOMERY	SAN JACINTO	1,871	2,377	3,518	4,869	6,653	8,726
16	MONTGOMERY COUNTY MUD #19	MONTGOMERY	SAN JACINTO	459	452	448	444	444	444
17	MONTGOMERY COUNTY MUD #8	MONTGOMERY	SAN JACINTO	842	1,095	1,325	1,397	1,381	1,369
18	MONTGOMERY COUNTY MUD #9	MONTGOMERY	SAN JACINTO	796	1,074	1,369	1,504	1,526	1,541
19	MONTGOMERY COUNTY UD #2	MONTGOMERY	SAN JACINTO	559	552	545	538	538	538
20	MONTGOMERY COUNTY UD #3	MONTGOMERY	SAN JACINTO	485	504	560	629	728	849
21	MONTGOMERY COUNTY UD #4	MONTGOMERY	SAN JACINTO	981	970	958	947	947	947
22	MONTGOMERY COUNTY WCID #1	MONTGOMERY	SAN JACINTO	499	519	577	651	756	885
23	NEW CANEY MUD	MONTGOMERY	SAN JACINTO	1,460	1,647	2,156	2,708	3,507	4,436
24	OAK RIDGE NORTH	MONTGOMERY	SAN JACINTO	683	748	897	1,067	1,297	1,573
25	PANORAMA VILLAGE	MONTGOMERY	SAN JACINTO	654	682	710	743	776	811
26	PATTON VILLAGE	MONTGOMERY	SAN JACINTO	87	88	101	115	136	165
27	POINT AQUARIUS MUD	MONTGOMERY	SAN JACINTO	734	908	1,303	1,762	2,377	3,092
28	PORTER WSC	MONTGOMERY	SAN JACINTO	1,944	2,156	2,697	3,347	3,317	3,317
29	RAYFORD ROAD MUD	MONTGOMERY	SAN JACINTO	2,309	2,288	2,268	2,268	2,268	2,268
30	RIVER PLANTATION MUD	MONTGOMERY	SAN JACINTO	835	824	812	801	798	798
31	ROMAN FOREST	MONTGOMERY	SAN JACINTO	544	839	1,192	1,568	2,073	2,677
32	SHENANDOAH	MONTGOMERY	SAN JACINTO	1,746	2,024	2,358	2,721	3,205	3,792
33	SOUTHERN MONTGOMERY COUNTY MUD	MONTGOMERY	SAN JACINTO	1,901	2,402	2,417	2,493	2,523	2,581
34	SOUTHWEST UTILITIES	MONTGOMERY	SAN JACINTO	254	281	352	432	542	675
35	SPLENDORA	MONTGOMERY	SAN JACINTO	188	224	297	383	502	640
36	SPRING CREEK UD	MONTGOMERY	SAN JACINTO	537	612	800	1,025	1,335	1,696
37	STAGECOACH	MONTGOMERY	SAN JACINTO	79	106	144	194	265	365
38	STANLEY LAKE MUD	MONTGOMERY	SAN JACINTO	744	904	898	892	892	892
39	STEAM ELECTRIC POWER	MONTGOMERY	SAN JACINTO	5,046	8,537	9,981	11,741	13,886	16,502
40	THE WOODLANDS	MONTGOMERY	SAN JACINTO	14,671	26,596	28,330	28,197	28,063	28,063
41	WILLIS	MONTGOMERY	SAN JACINTO	568	649	816	1,024	1,296	1,626
42	WOODBANCH	MONTGOMERY	SAN JACINTO	183	202	225	249	284	330
MONTGOMERY TOTAL				83,018	110,901	135,888	162,727	198,439	240,475
1	COUNTY-OTHER	POLK	TRINITY	1,600	1,691	1,744	1,794	1,880	1,976
2	LAKE LIVINGSTON WATER SUPPLY & SEWER SERVICE CO	POLK	TRINITY	890	944	985	1,004	1,044	1,100
3	LIVESTOCK	POLK	TRINITY	134	134	134	134	134	134
4	LIVINGSTON	POLK	TRINITY	2,137	2,517	2,802	3,006	3,212	3,423
5	MINING	POLK	TRINITY	29	31	32	33	34	35
6	ONALASKA	POLK	TRINITY	189	229	260	281	302	325
7	ONALASKA WSC	POLK	TRINITY	240	244	247	242	246	255
8	TRINITY RURAL WSC	POLK	TRINITY	6	7	8	8	9	9
POLK TOTAL				5,225	5,797	6,212	6,502	6,861	7,257
1	COLDSRING	SAN JACINTO	SAN JACINTO	44	51	56	59	60	61
2	COLDSRING	SAN JACINTO	TRINITY	163	186	205	216	222	225
3	COUNTY-OTHER	SAN JACINTO	SAN JACINTO	868	974	1,052	1,091	1,114	1,129
4	COUNTY-OTHER	SAN JACINTO	TRINITY	1,339	1,513	1,607	1,463	1,372	1,240
5	IRRIGATION	SAN JACINTO	TRINITY	667	667	667	667	667	667
6	LAKE LIVINGSTON WATER SUPPLY & SEWER SERVICE CO	SAN JACINTO	SAN JACINTO	95	114	127	133	137	140
7	LAKE LIVINGSTON WATER SUPPLY & SEWER SERVICE CO	SAN JACINTO	TRINITY	206	245	275	288	295	301
8	LIVESTOCK	SAN JACINTO	SAN JACINTO	142	142	142	142	142	142
9	LIVESTOCK	SAN JACINTO	TRINITY	142	142	142	142	142	142
10	MANUFACTURING	SAN JACINTO	SAN JACINTO	48	52	56	60	63	68
11	MERCY WSC	SAN JACINTO	SAN JACINTO	338	404	455	487	504	513
12	MINING	SAN JACINTO	SAN JACINTO	23	23	22	21	20	20
13	MINING	SAN JACINTO	TRINITY	7	6	6	6	6	6
14	POINT BLANK	SAN JACINTO	TRINITY	85	96	104	108	111	112
15	RIVERSIDE WSC	SAN JACINTO	TRINITY	150	179	213	270	302	337
16	SAN JACINTO WSC	SAN JACINTO	TRINITY	406	474	528	561	577	587
17	SHEPHERD	SAN JACINTO	TRINITY	301	355	394	411	424	431
SAN JACINTO TOTAL				5,024	5,623	6,051	6,125	6,158	6,121
1	COUNTY-OTHER	TRINITY	TRINITY	526	558	561	547	522	502
2	GROVETON	TRINITY	TRINITY	119	126	127	123	118	113
3	IRRIGATION	TRINITY	TRINITY	467	467	467	467	467	467
4	LAKE LIVINGSTON WATER SUPPLY & SEWER SERVICE CO	TRINITY	TRINITY	109	111	110	104	98	95
5	LIVESTOCK	TRINITY	TRINITY	211	211	211	211	211	211
6	MINING	TRINITY	TRINITY	6	6	6	6	6	6
7	TRINITY	TRINITY	TRINITY	170	172	165	152	142	137
8	TRINITY RURAL WSC	TRINITY	TRINITY	279	293	292	280	265	255
TRINITY TOTAL				1,887	1,944	1,939	1,890	1,829	1,786
1	CONSOLIDATED WSC	WALKER	TRINITY	8	9	9	8	8	8
2	COUNTY-OTHER	WALKER	SAN JACINTO	4,509	2,629	2,899	2,601	2,659	2,659
3	COUNTY-OTHER	WALKER	TRINITY	3,278	3,252	3,420	2,888	2,671	2,374
4	HUNTSVILLE	WALKER	SAN JACINTO	6,287	7,529	7,659	7,512	7,469	7,472
5	HUNTSVILLE	WALKER	TRINITY	1,400	1,676	1,706	1,673	1,663	1,664
6	IRRIGATION	WALKER	SAN JACINTO	5	5	5	5	5	5
7	IRRIGATION	WALKER	TRINITY	6	6	6	6	6	6
8	LAKE LIVINGSTON WATER SUPPLY & SEWER SERVICE CO	WALKER	TRINITY	29	30	30	29	28	28
9	LIVESTOCK	WALKER	SAN JACINTO	310	310	310	310	310	310
10	LIVESTOCK	WALKER	TRINITY	322	322	322	322	322	322
11	MANUFACTURING	WALKER	SAN JACINTO	577	669	753	839	914	993
12	MANUFACTURING	WALKER	TRINITY	2,631	3,049	3,435	3,827	4,169	4,524
13	MINING	WALKER	SAN JACINTO	7	7	7	7	7	7
14	MINING	WALKER	TRINITY	6	6	6	6	6	6
15	NEW WAVERLY	WALKER	SAN JACINTO	218	235	243	236	235	235
16	RIVERSIDE WSC	WALKER	TRINITY	330	325	335	379	402	439
17	TRINITY RURAL WSC	WALKER	TRINITY	22	24	24	23	23	23
18	WALKER COUNTY RURAL WSC	WALKER	TRINITY	839	898	919	891	884	884
WALKER TOTAL				20,784	20,981	22,088	21,562	21,781	21,959

WUG	COUNTY	BASIN	2011 DEMANDS (ac-ft/yr)						
			2010	2020	2030	2040	2050	2060	
1	BROOKSHIRE	WALLER	BRAZOS	673	847	1,039	1,254	1,517	1,832
2	COUNTY-OTHER	WALLER	BRAZOS	685	708	755	794	869	954
3	COUNTY-OTHER	WALLER	SAN JACINTO	841	1,013	1,227	1,435	1,729	2,066
4	HEMPSTEAD	WALLER	BRAZOS	1,457	2,052	2,694	3,427	4,294	5,313
5	IRRIGATION	WALLER	BRAZOS	4,825	4,825	4,825	4,825	4,825	4,825
6	IRRIGATION	WALLER	SAN JACINTO	18,153	18,153	18,153	18,153	18,153	18,153
7	KATY	WALLER	SAN JACINTO	271	405	554	722	919	1,151
8	LIVESTOCK	WALLER	BRAZOS	676	676	676	676	676	676
9	LIVESTOCK	WALLER	SAN JACINTO	263	263	263	263	263	263
10	MANUFACTURING	WALLER	BRAZOS	17	19	21	24	25	28
11	MANUFACTURING	WALLER	SAN JACINTO	72	82	91	99	108	116
12	MINING	WALLER	BRAZOS	9	9	9	9	9	9
13	MINING	WALLER	SAN JACINTO	71	71	71	71	71	71
14	PINE ISLAND	WALLER	BRAZOS	117	146	177	210	254	305
15	PRAIRIE VIEW	WALLER	BRAZOS	1,129	1,211	1,307	1,418	1,558	1,726
16	PRAIRIE VIEW	WALLER	SAN JACINTO	124	133	144	156	171	190
17	WALLER	WALLER	SAN JACINTO	416	488	572	668	782	917
WALLER TOTAL				29,799	31,101	32,578	34,204	36,223	38,595
REGION H TOTAL				2,377,255	2,601,351	2,816,513	3,036,242	3,277,110	3,525,104

Agenda Items 14 - 15

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

Task 3 Items

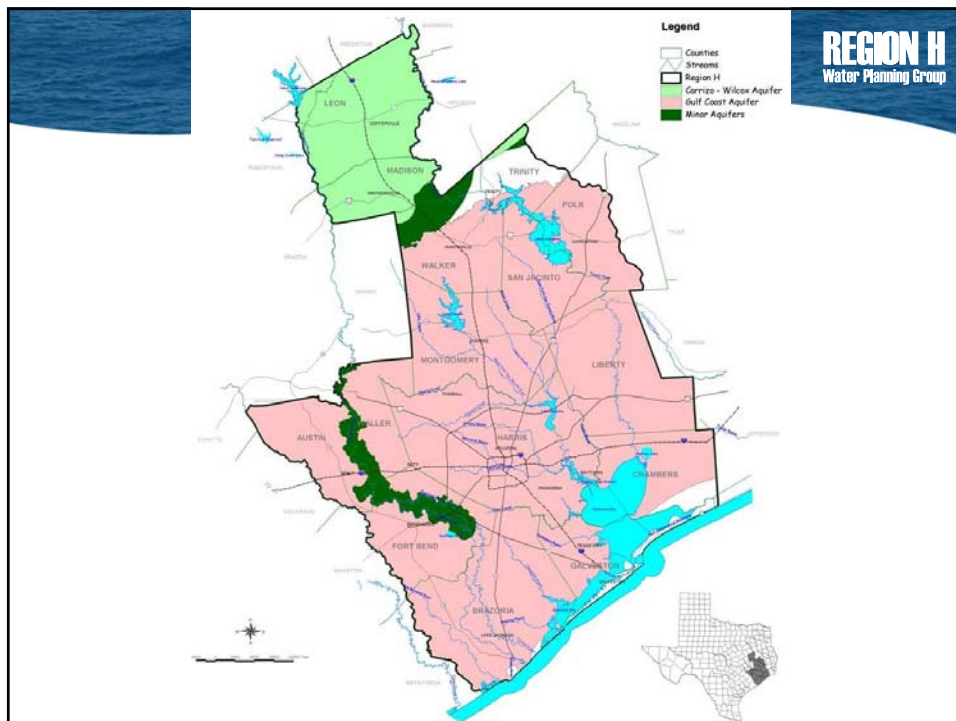
- Groundwater Supply
- Surface Water Supply
- Resource Allocation and Shortage Analysis
- Development of Chapter 3

Task 3 – Groundwater Supply

REGION H
Water Planning Group

Groundwater Supply

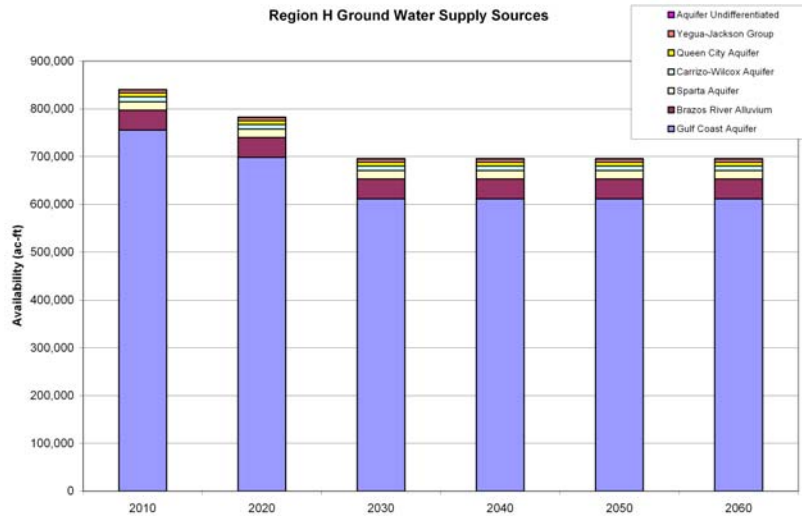
- Major Aquifers
 - Gulf Coast
 - Carrizo-Wilcox
- Minor Aquifers
 - Queen City
 - Sparta
 - Yegua-Jackson
 - Brazos River Alluvium



Task 3 – Groundwater Supply

County	Source	2000	2010	2020	2030	2040	2050	2060
		(acre-feet)						
Madison	Aquifer Undifferentiated	334	334	334	334	334	334	334
	Carrizo-Wilcox Aquifer	1,733	1,687	1,648	1,609	1,551	1,518	1,518
	Queen City Aquifer	2,770	2,770	2,770	2,770	2,770	2,770	2,770
	Sparta Aquifer	8,017	8,017	8,017	8,017	8,017	8,017	8,017
	County Total	12,854	12,808	12,769	12,730	12,672	12,639	12,639
Montgomery	Gulf Coast Aquifer	64,000	64,000	64,000	64,000	64,000	64,000	64,000
	County Total	64,000	64,000	64,000	64,000	64,000	64,000	64,000
Polk	Gulf Coast Aquifer	19,117	19,117	19,117	19,117	19,117	19,117	19,117
	County Total	19,117	19,117	19,117	19,117	19,117	19,117	19,117
San Jacinto	Gulf Coast Aquifer	21,869	21,869	21,869	21,869	21,869	21,869	21,869
	County Total	21,869	21,869	21,869	21,869	21,869	21,869	21,869
Trinity	Aquifer Undifferentiated	416	416	416	416	416	416	416
	Carrizo-Wilcox Aquifer	249	249	249	249	241	241	241
	Gulf Coast Aquifer	3,714	3,714	3,714	3,714	3,714	3,714	3,714
	Sparta Aquifer	245	245	245	245	245	245	245
	County Total	4,624	4,624	4,624	4,624	4,616	4,616	4,616
Walker	Aquifer Undifferentiated	200	200	200	200	200	200	200
	Carrizo-Wilcox Aquifer	2293	2293	2293	2293	2293	2293	2293
	Gulf Coast Aquifer	18,279	18,279	18,279	18,279	18,279	18,279	18,279
	Queen City Aquifer	75	75	75	75	75	75	75
	Sparta Aquifer	1760	1760	1760	1760	1760	1760	1760
	Yegua-Jackson Group	6,400	6,400	6,400	6,400	6,400	6,400	6,400
	County Total	29,007	29,007	29,007	29,007	29,007	29,007	29,007
Waller	Brazos River Alluvium	9480	9480	9480	9480	9480	9480	9480
	Gulf Coast Aquifer	28,502	28,502	28,502	28,502	28,502	28,502	28,502
County Total	37,982	37,982	37,982	37,982	37,982	37,982	37,982	

Task 3 – Groundwater Supply



Task 3 – Groundwater Supply

Groundwater Supply Summary

- Gulf Coast Aquifer Provides Vast Majority of Water
- Approximately 70 Percent of Groundwater Availability Is In The Six Most Coastward Counties
- Carrizo – Wilcox and Sparta Aquifers Are Important Water Resources in Leon and Madison Counties
- Groundwater Continues to Provide a Sustainable and Locally Available Water Supply

Task 3 – Surface Water Supply

Update of Surface Water Supplies

- Pre Modeling
 - Coordination with Region C (Freese & Nichols)
 - Coordination with HDR (Region G)
- Post Modeling
 - Presented Modeling Results to WWP's:
 - COH, SJRA, TRA, GCWA & CLCND
- Major Basins:
 - Trinity, San Jacinto, Brazos & Neches River Basins
 - Trinity-San Jacinto, Neches-Trinity, Brazos-Colorado & San Jacinto-Brazos Coastal Basin

Task 3 – Surface Water Supply

Update of Surface Water Supplies

- Firm Yield Determination (Task 3.13)
 - Evaluation of surface water rights on a monthly basis for each planning decade (2010 to 2060)
- Methodology
 - Perform Monthly Firm Yield Analysis for all basins
 - Perform Minimum Annual Diversion Analysis
 - Similar Methodology as 2006 Plan
 - Compare Results with 2006 Availability
- WAM Models
 - TCEQ WAM Run 3 (Full Permitted Diversion, No Return Flows)
 - Brazos and Trinity Basin Models assume limited return flows

Task 3 – Surface Water Supply

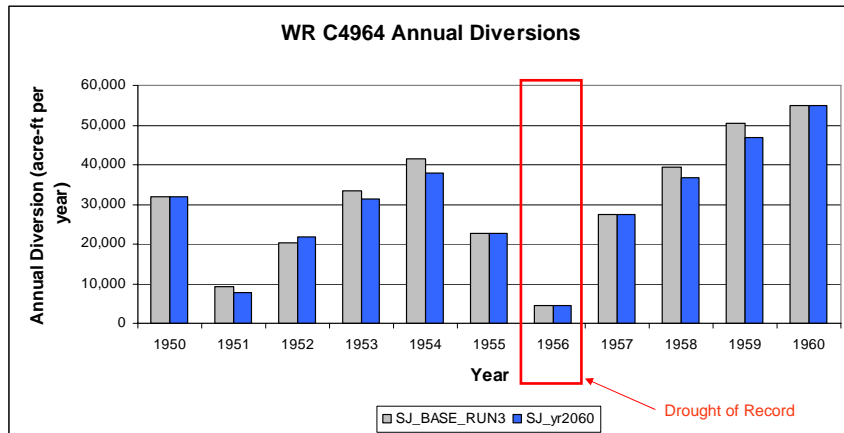
SAN JACINTO BASIN

Source	Owner	2006 Plan (afy)	2011 Analysis (afy)	Change (afy)
10030	COH & SJRA - Lake Conroe	74,300	74,300 ¹	0
3461004964	SJRA – RoR	55,000	55,000 ²	0
10060	COH - Lake Houston	168,000	168,000 ²	0
10060	COH & SJRA - Lake Houston Additional Yield	2,000	10,000 ¹	8,000
3510170	SJRA - Indirect Reuse	14,944	14,944	0
TOTAL		314,244	322,244	8,000

1) Table shows 2060 Availability

2) Based on agreed coordination between City of Houston and SJRA

- Note: WAM Run3 does not firm up diversions with releases from Lake Houston
- [SJ_yr2060 model](#) assumes 2060 reservoir capacity due to projected sedimentation



Supply Agreement for Lower San Jacinto Rights

- Held Meetings with City of Houston & SJRA
 - June, 2009
 - Discussed WR reliability and options for firming up both SJRA ROR and COH water rights in Lake Houston
- Recommended WR Availability
 - Recommend 55,000 acre-ft per year for SJRA ROR and 168,000 acre-feet per year for COH-Lake Houston
 - Based on agreement between COH and SJRA and available options for firming up rights
 - No change from 2006 Plan

Source: 10060 – Lake Houston Add. Yield

- Permitted in Dec, 2008 by COH and SJRA
- Permitted Diversion: 28,200 acre-ft per year
- 2006 Plan: recommended 2,000 acre-ft per year (2060)
- 2011 Plan: **10,000** acre-ft per year (2060)

2011 Analysis

Decade	2010	2020	2030	2040	2050	2060
Minimum Annual Diversion	-	-	-	-	-	-
Firm Yield	17,500	16,000	14,500	13,000	11,500	10,000
Recommended Availability	17,500	16,000	14,500	13,000	11,500	10,000

Task 3 – Surface Water Supply

TRINITY – SAN JACINTO BASIN

- TCEQ WAM Run 3 (full permitted use, no return flows)
- No significant change in total basin supply

Source	Owner	2006 Plan (afy)	2011 Analysis (afy)	Change (afy)
60903909	PVT IRR	685	769	84
60903918	PVT IRR	1,084	976	-108
60903922	PVT IRR	628	661	33
60903923	PVT IRR	626	694	68
60903924	PVT IRR	1,209	1,213	4
60903926	MFR	30,000	30,000	0
TOTAL		34,232	34,313	81

Task 3 – Surface Water Supply

TRINITY BASIN

Source	Owner	2006 Plan	2011 Analysis	Change
3410805271A	DEVERS	2,500	2,500	0
3410805271B	SJRA	56,000	56,000	0
084H0¹	TRA - LIVINGSTON- WALLISVILLE	403,200	403,200	0
084H0¹	COH - LIVINGSTON- WALLISVILLE	940,800	940,800	0
3460804261	COH - OLD RIVER	26,510	26,510	0
3460804277	COH	33,000	33,000	0
3460804279B	CLCND	79,020	76,520	2,500
3460804279	SJRA	30,000	30,000	0
TOTAL		1,568,530	1,566,030	2,500

1) 2060 Firm Yield shown, Trinity Firm Yield Analysis was performed for each decade.

Task 3 – Surface Water Supply

Lake Livingston Firm Yield

- Desktop Analysis
 - Review 2006 Region C Plan
 - Identify WMSs That May Reduce Return Flows
 - Estimate Annual Return Flow Available to Region H
- Firm Yield Analysis
 - Update WAM with Projected Return Flows
 - Determine Firm Yield of Lake Livingston
 - Determine Necessary Level of Return Flows
 - Evaluate Excess or Shortfall of Return Flows

Task 3 – Surface Water Supply

Desktop Analysis of Projected Return Flows

- Region C Reports:
 - 2006 Region C Water Plan
 - 2008 Region C Water Conservation and Reuse Study
 - Updated with information collected from WW dischargers
 - More consumptive use of existing supplies
 - Resulted in a lower return flow factor (RF)
- Comparison of Estimated Return Flows
 - Minimum Return Flow of 253,055 acre-ft per year in 2030

Estimated Net Upper Basin Return Flows (acre-ft/year)

	RF	2010	2020	2030	2040	2050	2060
2006 Net Return Flows	69%	650,280	579,730	583,825	693,744	815,218	992,905
2008 Net Return Flows	51%	415,185	282,886	253,055	333,844	430,092	572,491
Reduction		235,095	296,844	330,770	359,900	385,126	420,414

Task 3 – Surface Water Supply

Upper Basin WAM Models

- Coordination with Region C
 - March, 2009
 - Freese & Nichols
 - Received Trinity WAMs to estimate projected Net Upper Basin Return Flows March & April, 2009.
- Upper Basin Models
 - Future condition model runs
 - Based on TCEQ WAM RUN 8 models
 - Upper basin updated with projected diversions, return flows and reuse diversions
 - Recorded model output at Oakwood USGS gage

Task 3 – Surface Water Supply

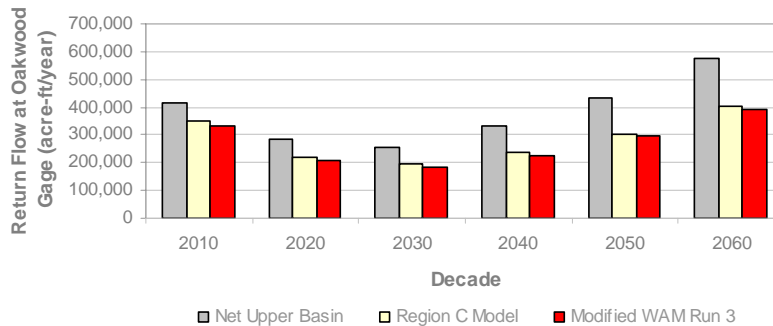
Lake Livingston Firm Yield

- Updated WAM Run3
 - Similar methodology as Region C WAMs
 - TCEQ WAM Run 3 (full permitted diversions, no return flows)
 - Added projected return flows and reuse diversions
 - Updated WAMs with Livingston Storage Capacity for 2000, 2030 & 2060
- Results
 - Lake Livingston Storage Tables
 - Regulated Flow at Oakwood Gage
 - Compared to Region C WAMs

Task 3 – Surface Water Supply

Return Flow at Oakwood Gage (CP 8TROA)

Projected vs Modeled Upper Basin Return Flows



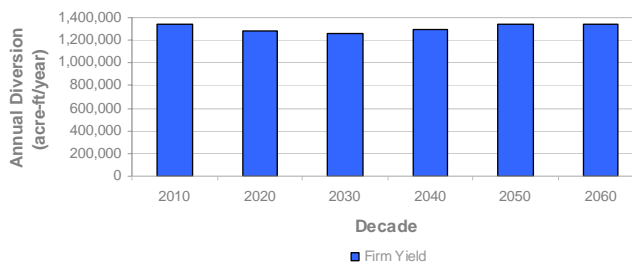
Task 3 – Surface Water Supply

Lake Livingston Firm Yield – Modified WAM RUN3

Lake Livingston Firm Yield (acre-ft/year)

Return Flows	2010	2020	2030	2040	2050	2060
Firm Yield	1,344,000	1,289,000	1,265,000	1,294,000	1,344,000	1,344,000
Reduction in Firm Yield	0	-55,000	-79,000	-50,000	0	0

Lake Livingston Firm Yield

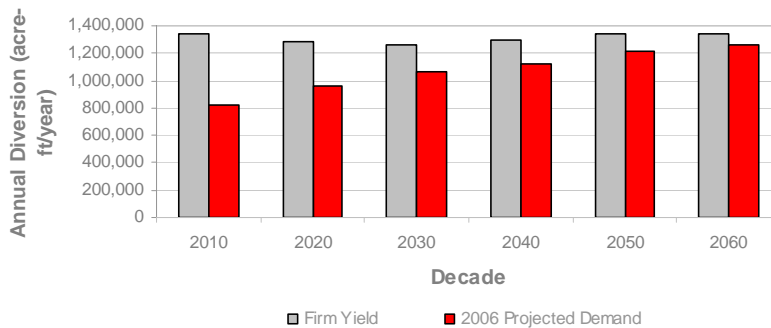


Task 3 – Surface Water Supply

Comparison to 2006 RWP Projected Demands

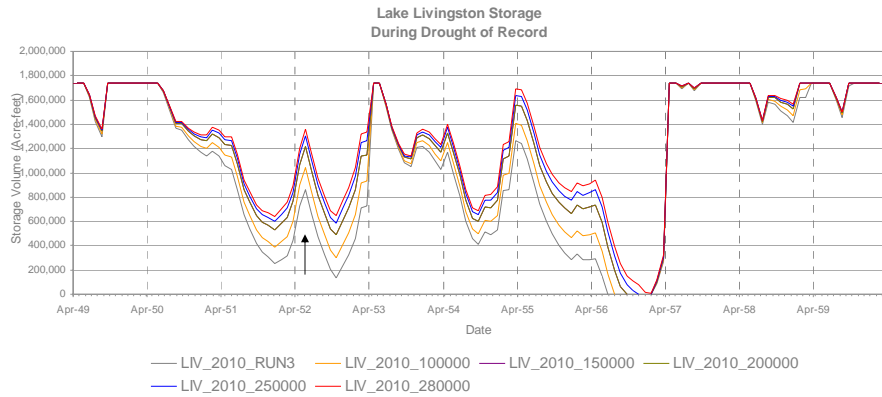
- Surplus supplies available in Lake Livingston in 2020, 2030 and 2040

Lake Livingston Firm Yield



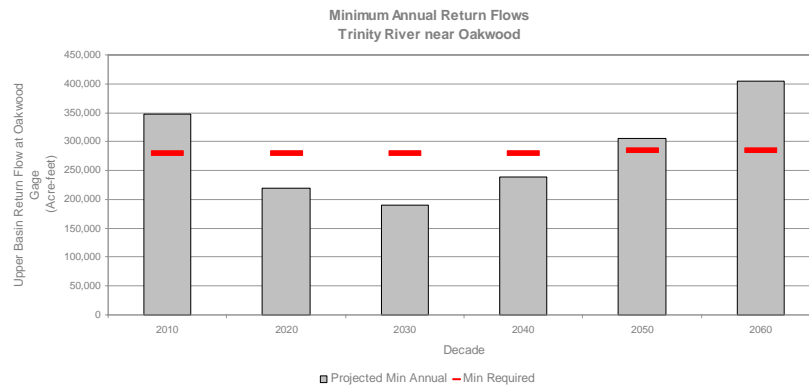
Task 3 – Surface Water Supply

- Necessary Level of Return Flows – Iterative Approach



Task 3 – Surface Water Supply

- Excess or Shortfall?



Task 3 – Surface Water Supply

NECHES - TRINITY BASIN

Source	Owner	2006 Plan	2011 Analysis	Change
3410704290	PVT IRR	1,069	1,037	-32
3410704291	PVT IRR	1,078	1,078	-1
3410705016	PVT IRR	901	1,012	111
3460704287	PVT IRR	2,528	2,528	0
3460704293	PVT IRR	1,626	1,626	0
3460704294	PVT IRR	573	573	0
3410704295	PVT IRR	1,205	1,199	-6
3410704299	PVT IRR	1,173	1,173	-1
3460704300	PVT IRR	805	805	0
3460704304	MFR	2,663	2,663	0
3460704304B	PVT IRR	1,997	1,997	0
3410704306	PVT IRR	1,818	1,818	-1
3460704308	PVT IRR	771	771	0
3460704309	PVT IRR	711	711	0
3410704311	PVT IRR	2,093	2,072	-21
3460704312	PVT IRR	691	691	0
TOTAL		21,702	21,753	50

Task 3 – Surface Water Supply

BRAZOS BASIN

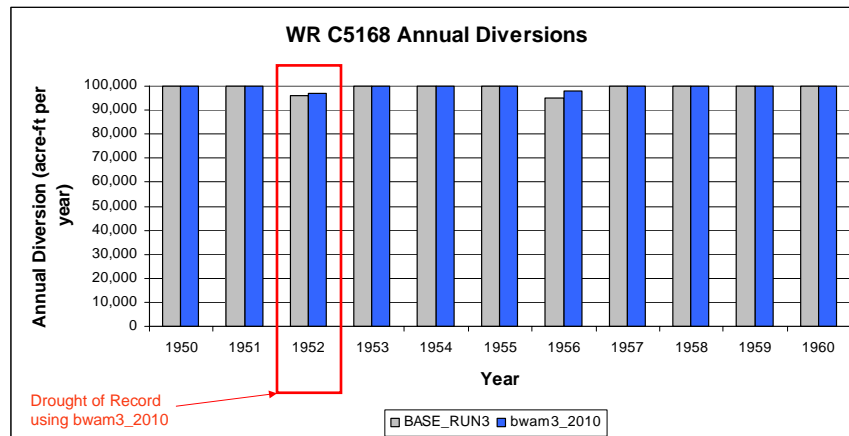
Source	Owner	2006 Plan (afy)	2011 Analysis (afy)	Change (afy)
120E0 ¹	BRA	138,913	155,030	16,117
3461205168	GCWA	98,805	97,225	-1,580
3461205171	GCWA	72,388	64,159	-8,229
3461205320	Rich Irr. / HL&P	29,920	29,920	0
3461205322B	GCWA	63,812	68,402	4,590
3461205325	HL&P	34,300	34,300	0
3461205328B	DOW	148,052	137,475	-10,577
3461205366	BWA	23,017	16,492	-6,525
3461205492	Eagle Nest Lake	1,800	1,800	0
TOTAL		611,007	604,803	-6,204

1) Existing Contracts from BRA System

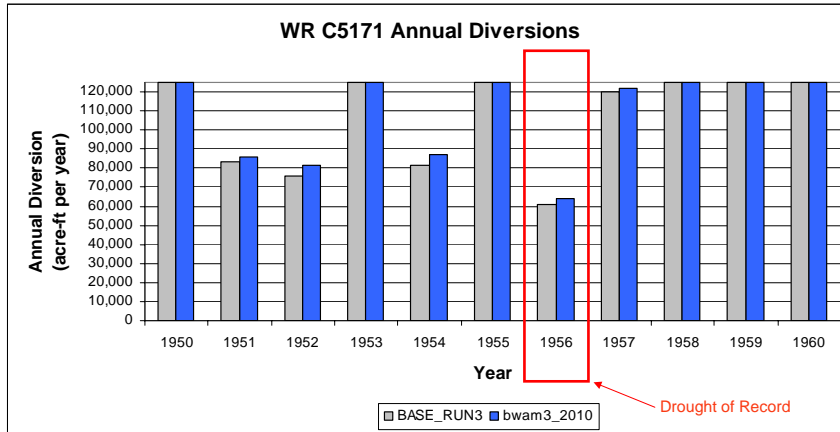
Task 3 – Surface Water Supply

- Coordination with Region G
- Received Region G WAMs in May from HDR
 - bwam3_2010
 - bwam3_2060
- Following Results
 - Base Line: TCEQ WAM RUN3 (BASE_RUN3)
 - Projected: Brazos WAM (bwam3_2010)

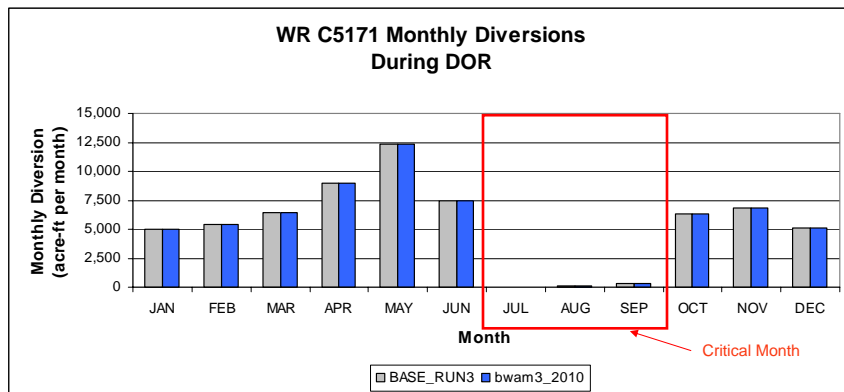
Source: 3461205168 – GCWA RoR



Source: 3461205171 – GCWA RoR



Source: 3461205171 – GCWA RoR



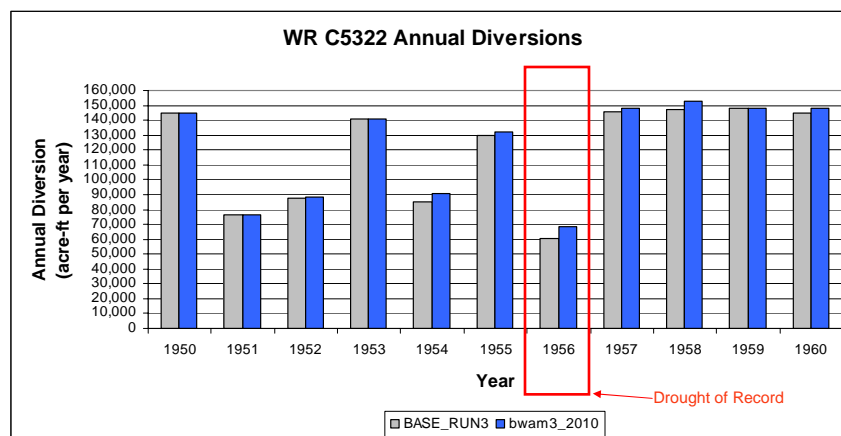
Source: 3461205171 - Summary

- Permitted Diversion: 125,000 acre-ft per year
- 2006 Plan Recommended: 72,388 acre-ft per year
- 2011 Plan: 64,159 acre-ft per year recommended

2011 Analysis
(acre-ft per year)

Decade	BASE RUN3	2010	2020	2030	2040	2050	2060
Minimum Annual Diversion	60,892	64,159	-	-	-	-	69,204
Firm Yield	0	0	-	-	-	-	0
Recommended Availability	-	64,159	64,159	64,159	64,159	64,159	64,159

Source: 3461205322B – GCWA RoR

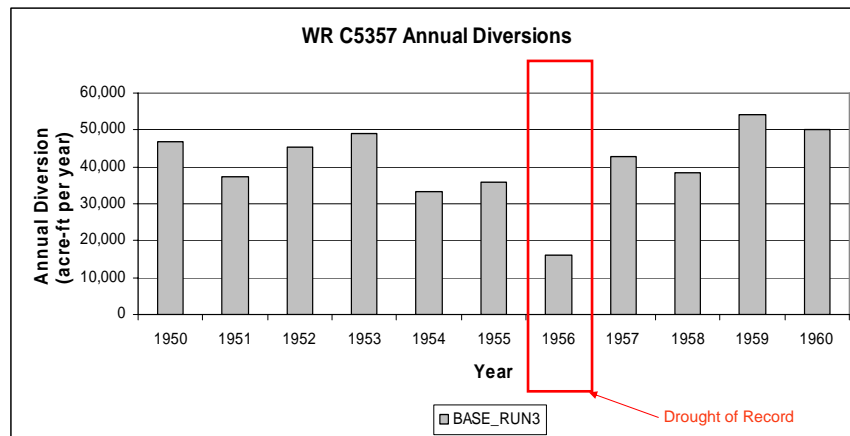


Task 3 – Surface Water Supply

SAN JACINTO - BRAZOS BASIN

Source	Owner	2006 Plan (afy)	2011 Analysis (afy)	Change (afy)
3411104449	PVT IRR	558	1,200	642
3411104509	PVT IRR	1,025	2,028	1,003
3461105350	HL&P - Webster Plant	2,120	2,120	0
3461105357A	GCWA	17,600	15,930	-1,670
3461105357B	GCWA	0	0	0
3461105357C	GCWA	0	0	0
3461105169	GCWA	3,842	0	-3,842
3461105170	FBC WCID #1	6,890	5,634	-1,256
3461105343	PVT IRR	711	720	9
3461105344	PVT IRR	962	1,320	358
3461105346	PVT IRR	1,360	2,214	854
3461105352	PVT IRR	3,347	3,271	-76
3461105364	PVT IRR	766	734	-32
TOTAL		39,181	35,171	-4,010

Source: 3461205357 – GCWA RoR



Task 3 – Surface Water Supply

Colorado – Brazos Basin

- Available supplies are equal to contracts from Philips Petroleum (12,019 acre-ft per year)

Neches Basin

- Available supplies are equal to contracts from LNVA (60,727 acre-ft per year)

Task 3 – Resource Allocation

General Methodology

- Allocate groundwater supplies according to local restrictions
- Allocate surface water supplies according to WWP contracts and water rights
 - If WUG is found in multiple counties, the supply was split according to surface water demand
- Assumed Livestock entries were provided by local supply sources
- 2006 Plan: Mining WUGs with shortages in 2000 were assumed to be supplied from local surface supplies equal to their shortage.
 - 2011 Plan will adopt the local supply numbers identified in 2006 Plan

Task 3 – Resource Allocation

Groundwater Supplies by County

Adequate Supplies

- Austin County
- Leon County
- Madison County
- Polk County
- San Jacinto County
- Trinity County
- Walker County

Inadequate Supplies

- Brazoria County
- Chambers County
- Galveston County
- Harris County
- Fort Bend County
- Liberty County
- Montgomery County
- Waller County

Task 3 – Shortage Analysis

Shortage Analysis

All values are in acre-ft per year

County	2010	2020	2030	2040	2050	2060
AUSTIN	0	-739	-1,240	-1,496	-1,635	-1,865
BRAZORIA	-142,511	-167,318	-196,542	-226,084	-255,793	-290,333
CHAMBERS	-42,895	-47,773	-51,179	-54,488	-57,696	-60,950
FORT BEND	-34,266	-33,232	-73,678	-102,519	-142,195	-187,241
GALVESTON	-18,292	-18,162	-19,485	-22,677	-26,104	-31,036
HARRIS	-94,318	-222,282	-287,798	-341,446	-393,772	-441,923
LEON	-64	-436	-671	-765	-838	-966
LIBERTY	-11,846	-14,761	-18,124	-21,805	-26,134	-31,378
MADISON	-1	-130	-228	-239	-323	-450
MONTGOMERY	-17,244	-47,319	-69,460	-95,749	-134,675	-179,198
POLK	0	-187	-313	-404	-552	-728
SAN JACINTO	-492	-850	-1,131	-1,317	-1,426	-1,511
TRINITY	0	-2	-1	0	0	0
WALKER	0	-816	-1,651	-1,963	-2,374	-2,843
WALLER	0	-1,776	-2,964	-4,479	-6,786	-9,959
TOTAL SHORTAGE	-361,929	-555,783	-724,465	-875,431	-1,050,303	-1,240,380

Draft Chapter 3

~~• **Item 15:** Consider and take action on approving the Draft Chapter 3 made available on the Region H website prior to the meeting~~

- Informal approval to be requested at next meeting.
- Posted to Region H website by July 8th.

Agenda Item 16

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.



REGION H
Water Planning Group

Task 4 – WMS Selection

Strategies Considered in 2006 RWP

- Conservation Strategies
- Expand/Continue Contracts
- Reservoir Strategies
- Water Rights Strategies
- Reuse Strategies
- Allocation/Transfer Strategies
- Other Strategies

Task 4 – WMS Selection

2006 Conservation Strategies

- ✔ • Municipal Conservation
- ✔ • Irrigation Conservation
- ✔ • Industrial Conservation

Task 4 – WMS Selection

2006 Reservoir Strategies

- ✔ • Allens Creek
- Bedias
- Little River
- ✔ • Little-River Off-Channel

Task 4 – WMS Selection

2006 Water Rights Strategies

- ✔ • Houston/SJRA Lake Houston Permit
- ✔ • Houston/SJRA ROR Permit
- ✔ • Re-designation of Existing Permits

Task 4 – WMS Selection

2006 Reuse Strategies

- ✔ • Wastewater Reclamation for Industry
- ✔ • Houston Indirect Wastewater Reuse
- ✔ • NHCRWA Indirect Wastewater Reuse

Task 4 – WMS Selection

2006 Allocation/Transfer Strategies

- ✔✔ • Contractual Transfers
 - BRA Voluntary Redistribution
- ✔✔ • Houston to GCWA Transfer
- ✔✔ • Increase Current Contracts
 - Bedias to SJRA Transfer
- ✔✔ • TRA to Houston Contract
- ✔✔ • Luce Bayou Transfer
 - Sabine to Region H Transfer
- ✔✔ • TRA to SJRA Contract

Task 4 – WMS Selection

2006 Other Strategies

- ✔✔ • BRA System Operations Permit
- ✔✔ • Expanded Use of Groundwater
- ✔✔ • Freeport Desalination
- ✔✔ • Brazos Salt Water Barrier

Water Provider Survey

- Survey sent to:
 - Systems responsible for providing water to other in 2006 RWP
 - Other parties that may play a key role in future water supply for the region
- Received three responses:
 - BRA
 - NFBWA
 - WHCRWA
- Encourage input in order to incorporate strategies into Plan
 - Jason Afinowicz: jason.afinowicz@aecom.com

Agenda Item 18

Agency communications.



TEXAS WATER DEVELOPMENT BOARD



James E. Herring, *Chairman*
Lewis H. McMahan, *Member*
Edward G. Vaughan, *Member*

J. Kevin Ward
Executive Administrator

Jack Hunt, *Vice Chairman*
Thomas Weir Labatt III, *Member*
Joe M. Crutcher, *Member*

April 22, 2009

To: Agencies, Organizations, and Other Parties Interested in
Water Conservation Activities in Texas

Re: Water Conservation Advisory Council Nominations

Senate Bill 3 and House Bill 4, as passed by the 80th Texas Legislature in 2007, direct the Texas Water Development Board (TWDB) to appoint a Water Conservation Advisory Council (Council) to serve as an expert resource in water conservation to state government and the public. A copy of the sections of Senate Bill 3 and House Bill 4 that created the Council is enclosed for your review. Seven of the initial members selected in 2007 have terms which expire on August 31, 2009. To assist the TWDB in selecting the most appropriate individuals for membership on the Council, I am requesting your consideration of providing nominations for individuals to represent the interest groups whose members terms expire this year.

Only one individual will be selected for each of the seven interest groups. Members will be selected based on their individual commitment to and expertise in water conservation in addition to their affiliation with an interest group. Availability of time to devote to Council activities should be an important consideration in your nominations for membership. The Council needs to meet on at least a quarterly basis and at times may meet on a monthly or bi-monthly basis. The majority of meetings will take place in Austin, although meetings may be held in other locations. In addition, Council members will need to devote time to Council activities outside of the meetings.

The seven interest groups for which nominations are required are:

- 1) Texas Parks and Wildlife Department
- 2) Regional Water Planning Groups
- 3) River Authorities
- 4) Environmental Groups
- 5) Higher Education
- 6) Electric Generation
- 7) Rural Water Users

Please provide your nomination information, including a brief bio on each individual and their contact information to Ms. Vanessa Escobar, TWDB Council Support, at the mailing address

Our Mission

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

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Interested Parties-Council Nominations
April 22, 2009
Page 2

given at the bottom of page one or by e-mail at vanessa.escobar@twdb.state.tx.us. Please submit your nominations by June 26, 2009. The selection of these Council Members will be considered at the August 2009 meeting of our Board.

If you have questions about the definitions of the interest groups or the eligibility of a potential nominee, please contact Mr. Kenneth Petersen, TWDB General Counsel, at ken.petersen@twdb.state.tx.us.

Thank you in advance for your careful consideration of this very important request.

Sincerely,

A handwritten signature in blue ink, appearing to read "J. Kevin Ward". The signature is stylized and cursive.

J. Kevin Ward
Executive Administrator

Enclosure

TEXAS WATER CODE: CHAPTER 10

WATER CONSERVATION ADVISORY COUNCIL

Sec. 10.001. DEFINITIONS. In this chapter:

- (1) "Best management practices" has the meaning assigned by Section 11.002.
- (2) "Board" means the Texas Water Development Board.
- (3) "Commission" means the Texas Commission on Environmental Quality.
- (4) "Council" means the Water Conservation Advisory Council.

Sec. 10.002. PURPOSE. The Council is created to provide the Governor, Lieutenant Governor, Speaker of the House of Representatives, Legislature, Board, Commission, political subdivisions, and public with the resource of a select council with expertise in water conservation.

Sec. 10.003. CREATION AND MEMBERSHIP. (a) The Council is composed of 23 members appointed by the board. The Board shall appoint one member to represent each of the following entities or interest groups:

- (1) Texas Commission on Environmental Quality;
- (2) Texas Department of Agriculture;
- (3) Texas Parks and Wildlife Department;
- (4) Texas State Soil and Water Conservation Board;
- (5) Texas Water Development Board;
- (6) regional water planning groups;
- (7) federal agencies;
- (8) municipalities;
- (9) groundwater conservation districts;
- (10) river authorities;
- (11) environmental groups;
- (12) irrigation districts;
- (13) institutional water users;
- (14) professional organizations focused on water conservation;
- (15) higher education;
- (16) agricultural groups;
- (17) refining and chemical manufacturing;
- (18) electric generation;
- (19) mining and recovery of minerals;
- (20) landscape irrigation and horticulture;
- (21) water control and improvement districts;
- (22) rural water users; and
- (23) municipal utility districts.

(b) Each entity or interest group described by Subsection (a) may recommend one or more persons to fill the position on the Council held by the member who represents that entity or interest group. If one or more persons are recommended for a position on the Council, the Board shall appoint one of the persons recommended to fill the position.

Sec. 10.004. TERMS. (a) Members of the Council serve staggered terms of six years, with seven or eight members' terms, as applicable, expiring August 31 of each odd-numbered year.

(b) The Board shall fill a vacancy on the Council for the unexpired term by appointing a person who has the same qualifications as required under Section 10.003 for the person who previously held the vacated position.

Sec. 10.005. PRESIDING OFFICER. The Council Members shall select one member as the presiding officer of the Council to serve in that capacity until the person's term as a Council Member expires.

Sec. 10.006. COUNCIL STAFF. On request by the Council, the Board shall provide any necessary staff to assist the Council in the performance of its duties.

Sec. 10.007. PUBLIC MEETINGS AND PUBLIC INFORMATION.

(a) The Council may hold public meetings as needed to fulfill its duties under this chapter.

(b) The Council is subject to Chapters 551 and 552, Government Code.

Sec. 10.008. INAPPLICABILITY OF ADVISORY COMMITTEE LAW. Chapter 2110, Government Code, does not apply to the size, composition, or duration of the Council.

Sec. 10.009. COMPENSATION OF MEMBERS. (a) Members of the Council serve without compensation but may be reimbursed by legislative appropriation for actual and necessary expenses related to the performance of council duties.

(b) Reimbursement under Subsection (a) is subject to the approval of the presiding officer of the Council.

Sec. 10.010. POWERS AND DUTIES OF COUNCIL. The Council shall:

(1) monitor trends in water conservation implementation;

(2) monitor new technologies for possible inclusion by the Board as best management practices in the best management practices guide developed by the water conservation implementation task force under Chapter 109, Acts of the 78th Legislature, Regular Session, 2003;

(3) monitor the effectiveness of the statewide water conservation public awareness program developed under Section 16.401 and associated local involvement in implementation of the program;

(4) develop and implement a state water management resource library;

(5) develop and implement a public recognition program for water conservation;

(6) monitor the implementation of water conservation strategies by water users included in regional water plans; and

(7) monitor target and goal guidelines for water conservation to be considered by the Board and Commission

Sec. 10.011. REPORT. Not later than December 1 of each even-numbered year, the Council shall submit to the Governor, Lieutenant Governor, and Speaker of the House of Representatives a report on progress made in water conservation in this state.

Sec. 10.012. DESIGNATION OF CERTIFIED WATER CONSERVATION TRAINING FACILITIES STUDY. (a) The council shall conduct a study to evaluate the desirability of requiring the Board to:

(1) designate as certified water conservation training facilities entities and programs that provide assistance to retail public utilities in developing water conservation plans under Section 13.146; and

(2) give preference to certified water conservation training facilities in making loans or grants for water conservation training and education activities.

(b) Not later than December 1, 2008, the Council shall submit a written report containing the findings of the study and the recommendations of the council to the Governor, Lieutenant Governor, and Speaker of the House of Representatives.

(c) This section expires June 1, 2009.

SECTION 16. As soon as practicable on or after the effective date of this Act, the Texas Water Development Board shall appoint the initial members of the Water Conservation Advisory Council, as required by Section 10.003, Water Code, as added by this Act. In making the initial appointments, the Board shall designate seven members to serve terms expiring August 31, 2009, eight members to serve terms expiring August 31, 2011, and eight members to serve terms expiring August 31, 2013.



TEXAS WATER DEVELOPMENT BOARD



James E. Herring, *Chairman*
Lewis H. McMahan, *Member*
Edward G. Vaughan, *Member*

J. Kevin Ward
Executive Administrator

Jack Hunt, *Vice Chairman*
Thomas Weir Labatt III, *Member*
Joe M. Crutcher, *Member*

June 3, 2009

The Honorable Mark Evans
Trinity County Judge
Chairman, Region H Regional Water Planning Group
P.O. Box 457
Groveton, Texas 75845-0457

Dear Judge Evans:

Thank you for your May 11, 2009 letter on behalf of the Region H Regional Water Planning Group (RHWPG). The group's support of a consistency waiver for a project by the Harris County WCID 21 will be noted by Texas Water Development Board (TWDB) staff when taking a loan request from the WCID to our Board.

If you have any questions, please contact Ms. Temple McKinnon of my staff at (512) 475-2057.

Sincerely,

for J. Kevin Ward
Executive Administrator

c: Reed Eichelberger, SJRA
Jason Afinowicz, AECOM
Temple McKinnon, TWDB

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REGION H WATER PLANNING GROUP
Senate Bill 1 - Texas Water Development Board
 c/o San Jacinto River Authority
 P. O. Box 329, Conroe, Texas 77305
 Telephone 936-588-1111 Facsimile 936-588-3043

May 11, 2009

RECEIVED

MAY 26 2009

TWDB

Agricultural
 Robert Bruner
 Pudge Wilcox

Mr. J. Kevin Ward
 Executive Administrator
 Texas Water Development Board
 1700 North Congress Avenue
 Austin, TX 78711-3231

Counties
 John Blount
 Judge Mark Evans, Chair

Subject: Consistency Waiver for Harris County WCID No. 21
 Request from Region H Water Planning Group

Electric Generating Utilities
 Ted Long

Dear Mr. Ward:

Environmental
 John R. Bartos,
 Executive Committee

At the May 6, 2009 Region H Regional Water Planning Group (RWPG) meeting, an item was included on the agenda to consider and take action on a request from Harris County Water Conservation and Improvement District No. 21 (WCID21) for a waiver to the Texas Water Development Board's (TWDB) consistency provisions. At this meeting, a representative from WCID21 made a presentation to the RWPG outlining the background and reasons for requesting this waiver. Following this presentation, a motion was passed by the RWPG unanimously approving a recommendation for the requested waiver.

Industries
 Glynda Leiper
 Mike Uhl

This letter serves as the official recommendation from the Region H RWPG to the TWDB for consideration of a waiver to the consistency rules for WCID21 so that adequate funding can be obtained by the WCID21 to implement infrastructure for their future needs. Our recommendation is based on the following:

Municipalities
 Jun Chang
 Robert Istre

1. WCID 21 is shown in the 2006 RWP as a recipient of groundwater from the City of Houston (COH) by way of their Wholesale Water Provider (WWP), the North Channel Water Authority (NCWA).
2. The COH system consists of many water sources that may result in the delivery of water from one or more of these sources.
3. It is reaffirmed that NCWA does receive water under contract from the COH. However, this supply is from one of the COH surface water supplies rather than a groundwater supply.
4. Regardless of specific source, the supply for WCID 21 is contract water from the COH.

Public
 Roosevelt Alexander

River Authorities
 John Hoffman
 Danny F. Vance
 Reed Eichelberger, Secretary

Based on the above, the Region H RWPG does not recommend a formal plan amendment be required for WCID21 and instead recommends that a waiver to the consistency rules be granted and that the TWDB continue to process and grant to WCID21 the funding requested. On behalf of the entire Region H RWPG membership, we appreciate your consideration of these matters. Please feel free to contact me at (936) 642-1746 or the Region H consultant, Jason Afinowicz, P.E. at (713) 267-3122 if you have any questions or require additional information.

Small Businesses
 Judge Bob Hebert
 John Howard
 Steve Tyler

Water Districts
 Marvin Marcell
 Ron Neighbors, Vice-Chair
 Jimmy Schindewolf

Sincerely,

Mark Evans
 Region H Chair
 Trinity County Judge

Water Utilities
 James Morrison
 William Teer
 C. Harold Wallace,
 Executive Committee

TWDB Liaison
 Temple McKinnon



The Dow Chemical Company

June 19, 2009

Mr. Stephen L. Smith
Water Section Manager
Field Operations Division
Texas Commission on Environmental Quality
5425 Polk Avenue, Suite H
Houston, Texas 77023-1486

VIA E-MAIL stsmith@tceq.state.tx.us

RECEIVED

JUN 19 2009

Re: Water Shortage on the lower Brazos River

TWDB

Dear Mr. Smith:

As TCEQ is aware, there are serious water issues across many parts of Texas. We note that TCEQ has taken action on the Guadalupe River in reducing surface water diversion. This is documented in a TCEQ press release yesterday.

I write to raise a serious situation on the lower Brazos River. The flow at the Rosharon gage, which is upstream of The Dow Chemical Company's ("Dow") diversion point under Certificate of Adjudication No. 12-5328, is averaging about 50 cfs. It takes a minimum river flow of about 225 cfs to satisfy Dow's water rights. It takes 111 cfs for Dow to operate its smallest pump.

Dow requests that the Texas Commission on Environmental Quality ("TCEQ") notify upstream junior water right holders of the situation, and have them ensure that their diversions are not preventing Dow from exercising its water right, and whatever other actions available for TCEQ to help Dow obtain more water flow on the lower Brazos River for Dow to have the ability to exercise more of its water rights.. Dow can be contacted at the following telephone number: 979-238-1726. Dow also asks that TCEQ take any other appropriate actions to address this situation.

Very truly yours,

Julie Woodard

Mr. Stephen L. Smith
June 18, 2009
Page 2

cc: Mr. Carlos Rubinstein
Texas Commission on Environmental Quality
P.O. Box 13087, MC-109
Austin, Texas 78711-3087

VIA _____

Mr. John Hoffman
Brazos River Authority
P.O. Box 7555
Waco, Texas 76714-7555

VIA FACSIMILE (254) 761-3205

Mr. Robert Istre
General Manager
Gulf Coast Water Authority
3630 FM 1764
Texas City, Texas 77591

VIA FACIMILE (409) 935-2438

Ted Long, P.E., Manager, Water Resources
NRG Texas Power LLC
1301 McKinney Street, Suite 2300
Houston, Texas 77010-3035

VIA E-MAIL ted.long@nrgenergy.com

Kevin Ward
Executive Director
Water Development Board
1700 N. Congress Ave. Ste. 513
P.O. Box 13231,
Austin, TX 78711