



MEETING MATERIALS

December 7, 2011

San Jacinto River Authority

Agenda Item 2

Review and approve minutes of August 3, 2011 meeting.

MINUTES
REGION H WATER PLANNING GROUP MEETING
10:00 A.M.
August 3, 2011
SAN JACINTO RIVER AUTHORITY
GENERAL AND ADMINISTRATION BUILDING
1577 DAM SITE ROAD
CONROE, TEXAS

MEMBERS PRESENT: John Bartos, John Blount, Jun Chang, Reed Eichelberger, Mark Evans, Bob Hebert, Art Henson, John Hofmann, John Howard, Gena Leathers, Glynn Leiper, Ted Long, Marvin Marcell, James Morrison, Ron Neighbors, Jimmie Schindewolf, William Teer, Steve Tyler, Danny Vance, C. Harold Wallace, and Pudge Willcox

DESIGNATED ALTERNATES: Robert D. Pierce for Robert Bruner

MEMBERS ABSENT: Robert Istre

NON-VOTING MEMBERS PRESENT: Wayne Ahrens, Temple McKinnon, and Melinda Silva

PRESIDING: Mark Evans, Chair

CALL TO ORDER REGULAR MEETING AT 10:03 A.M.

A quorum was present.

INTRODUCTIONS

Mr. Evans welcomed everyone and alternates were announced.

REVIEW AND APPROVE MINUTES OF MAY 4, 2011 MEETING

The minutes for the May 4, 2011 meeting were presented. Motion was made by Mr. Vance, seconded by Mr. Blount, to approve the minutes with the spelling correction to Mr. Chang's name. The motion carried unanimously.

RECEIVE PUBLIC COMMENTS ON SPECIFIC ISSUES RELATED TO AGENDA ITEMS 4 THROUGH 12

Mr. Dan Davis with Lake Conroe Communities Network updated the Group on the socioeconomic impact study focused on the withdrawal of surface water from Lake Conroe, which is being conducted by Texas A&M University. He stated that seventeen hundred surveys have been mailed out and that he would keep the Group updated on same.

RECEIVE PRESENTATION FROM CONSULTANT TEAM REGARDING THE STATUS AND SCHEDULE RELATED TO THE APPLICATION FOR A REGIONAL WATER PLANNING GRANT SUBMITTED TO THE TEXAS WATER DEVELOPMENT BOARD FOR FUNDING OF THE FOURTH ROUND OF REGIONAL WATER PLANNING FOR REGION H

Mr. Mike Reedy with Freese and Nichols stated that contracts between the San Jacinto River Authority and the Texas Water Development Board and between the San Jacinto River Authority and Freese and Nichols have been executed. He stated work is being done to get subcontracts prepared and in place.

RECEIVE AND DISCUSS PRESENTATION FROM CONSULTANT TEAM REGARDING THE POTENTIAL ROLE OF STANDING COMMITTEES IN THE CONSIDERATION OF TARGETED ISSUES WITH THE 2016 REGION H REGIONAL WATER PLAN

Mr. Reedy continued by discussing a proposal to utilize committees for the 2016 Regional Water Plan and the interest of the Group in forming committees on specific topics, such as population, water demands, WMS selection, regional issues, non-population water demands, and public outreach. He asked the Group to consider whether or not committees would be appropriate, and if so, he requested recommendations on the structuring of same. Mr. Houston briefly discussed the bylaws and discussed the formation of committees in the past. Mr. Marcell and Mr. Vance briefly discussed the benefits of using committees; a consensus was reached among the Group to utilize committees in the future. Mr. Reedy stated that he would further discuss the structuring of the committees with the Group at the next meeting.

Ms. McKinnon reminded the Group of the schedule and milestones for the development of the 2016 Regional Water Plan.

RECEIVE AND DISCUSS PRESENTATION FROM CONSULTANT TEAM REGARDING THE COMMUNICATION PLAN FOR MEETINGS AND MATERIALS OF THE REIGON H PLANNING GROUP FOR THE DEVELOPMENT OF THE 2016 REGION H REGIONAL WATER PLAN

Mr. Reedy discussed the current communication of meeting materials to the Group. He discussed the current practice of providing hardcopies of meeting materials and the options for consideration that will assist in reducing the use of paper, while also streamlining the distribution of meeting materials. Discussion followed regarding the availability of materials on Region H's website and the formatting of files to allow for the manipulation of data. The consensus of the Group was to downsize on the distribution of paper documents for the meetings, with the understanding that detailed data will still be available to the Group members in hardcopy format.

RECEIVE AND DISCUSS PRESENTATION FROM CONSULTANT TEAM REGARDING THE SCHEDULE AND MILESTONES FOR THE FIRST PHASE OF DEVELOPMENT OF THE 2016 REGION H REGIONAL WATER PLAN

Mr. Afinowicz with Freese and Nichols discussed the schedule and various milestones for the Fourth Cycle of Regional Water Planning, including the scheduled tasks.

RECEIVE REPORT FROM CONSULTANT TEAM AND PLANNING GROUP MEMBERS REGARDING RECENT AND UPCOMING ACTIVITIES RELATED TO COMMUNICATIONS AND OUTREACH EFFORTS ON BEHALF OF THE REGION H PLANNING GROUP

Mr. Afinowicz continued by discussing recent community outreach activities. He stated that Mr. Evans recently presented *Region H and the Regional Approach to Water Planning in Texas* for the National League of Cities. He then announced that he (Mr. Afinowicz) would be attending and presenting at *Civic Forum: Water the Challenges Facing the Houston Region* for the Rice Design Alliance on August 24, 2011.

Ms. McKinnon briefly discussed the drought and the planning process, including the submittal of water use surveys and the establishment of demand projections.

CONSIDER AND TAKE ACTION ON REQUESTING APPROVAL FROM THE TEXAS WATER DEVELOPMENT BOARD (TWDB) FOR POTENTIAL USE OF ALTERNATIVES TO USING WAM RUN 3 MODELS AND POTENTIAL USE OF ALTERNATIVES TO FIRM YIELD FOR DEFINING REGIONAL WATER SUPPLIES IN REGION H

Mr. Afinowicz stated that this was a routine item for consideration. He discussed the use of alternatives to the WAM Run 3, including the modified Run 3 model for determining firm yield in the lower Trinity River Basin and the Brazos River Basin. He discussed adaption and utilization of models in the past. Mr. Vance briefly discussed the assumption of return flows and reuse and emphasized the need to clarify the various assumptions. Concerns related to the WAM, including return flows and reuse were discussed. Motion was made by Mr. Neighbors, seconded by Mr. Hebert and unanimously approved, to request approval from the TWDB for the potential use of alternatives to using WAM Run 3 Models and the potential use of alternatives to firm yield for defining regional water supplies in Region H.

RECEIVE PRESENTATION FROM TEXAS WATER DEVELOPMENT BOARD ON THE ADDITION OF NEW MEMBERS TO THE REGION H PLANNING GROUP REPRESENTING LOCAL GMAs AS A RESULT OF RECENT LEGISLATION

Ms. Temple McKinnon with the TWDB discussed the additional Regional Water Planning Group members required by Senate Bill 660 to represent various Groundwater Management Areas (GMAs). She stated that the new legislation is effective September 1, 2011. Potential representatives from GMAs 12 and 14 were discussed. Ms. McKinnon stated no action was currently required but that the item would be revisited at the next meeting.

RECEIVE STATUS REPORT FROM THE REGION H REGIONAL WATER PLANNING GROUP NOMINATIONS COMMITTEE

Mr. Schindewolf stated that the Nominations Committee met prior to the Region H meeting and that a recommendation for the replacement of Mr. Alexander will be recommended at the next meeting. He stated that currently a couple of applicants are being considered for the position and that the solicitation for applicants is still taking place.

AGENCY COMMUNICATIONS AND GENERAL INFORMATION

Ms. McKinnon updated the Group on the draft of the State Water Plan, including the dates and locations of public meetings and the timeline for submittal of the final document.

RECEIVE PUBLIC COMMENTS

Mr. Dan Davis inquired as to the status of Judge Sadler's previous request related to water management strategies (WMS). Mr. Reedy stated that a technical memorandum will identify feasible WMS that the Group recommends should be studied further. He stated that the technical memorandum is due in 2013. Ms. McKinnon stated that the planning process is the same; however the process is now task targeted, but that the same rules and parameters apply as in previous planning cycles. The consensus of the Group was that Judge Sadler's recommendations are worthy of further study.

NEXT MEETING

December 7, 2011
San Jacinto River Authority
General and Administration Building
1577 Dam Site Road
Conroe, Texas 77304

ADJOURNED AT 11:04 A.M.

Agenda Item 4

Consider and take action on the selection of Kathy Jones as voting member of the Region H Water Planning Group representing GMA 14.



PO Box 2467 • Conroe, Texas 77305
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Kathy Turner Jones
General Manager

Board of
Directors

Richard J. Tramm
President

Sam W. Baker
Vice -President

Jim Stinson, PE
Treasurer

M. Scott Weisinger, PG
Secretary

John D. Bleyl, PE

Reed Eichelberger, PE

Roy McCoy, Jr.

Rick J. Moffatt

W. B. Wood

July 25, 2011

Mr. Mark Evans
Chairman, Region H Planning Group
1577 Dam Site Road
Conroe, Texas 77304

Dear Chairman Evans:

I am writing regarding the appointment of a representative of Groundwater Management Area 14 ("GMA 14") to the Region H Planning Group.

On June 6, 2011, Governor Perry signed into law Senate Bill 660, relating to the review and functions of the Texas Water Development Board.

In part, Senate Bill 660 amended Section 9; Subsection 9 (c) of the Water Code as follows:

"In addition, the groundwater conservation districts located in each management area, as defined by Section 36.001, located in the regional water planning area shall appoint one representative of a groundwater conservation district located in the management area and in the regional water planning area to serve on the regional water planning group"

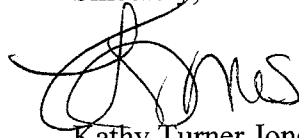
With respect to the Region H Planning Group, there are four (4) groundwater conservation districts ("GCD") that meet the description contained in the above amendment; Lone Star GCD, Bluebonnet GCD, Brazoria GCD and Lower Trinity GCD.

The representatives of the above districts have selected myself to serve on the Region H Planning Group.

In light of the facts that Senate Bill 660 will become law on September 1st and that there is an item pertaining to this matter on the Region H agenda for August 3rd, I felt it advisable that I relate to you the GMA's intent to select and appoint a member GCD to the group pursuant to the recently approved legislation.

I appreciate your consideration of the above matter and look forward to seeing you in August. Please feel free to contact me at kjones@lonestargcd.org, or call at 936/494-3436 if you have questions or would like to discuss this matter prior to the Region H meeting.

Sincerely,

A handwritten signature in black ink, appearing to read "Kathy Turner Jones". The signature is fluid and cursive, with the first letter of each name being capitalized and prominent.

Kathy Turner Jones
Chair, GMA 14

Agenda Item 5

Consider and take action on the selection of David Bailey as voting member of the Region H Water Planning Group representing GMA 12.

RESOLUTION TO APPOINT REPRESENTATIVES FROM GROUNDWATER CONSERVATION DISTRICTS IN GROUNDWATER MANAGEMENT AREA 12 TO SERVE ON REGIONAL WATER PLANNING GROUPS C, G, H, AND K ACCORDING TO REQUIREMENTS OF SB660 OF THE 82ND LEGISLATURE

THE STATE OF TEXAS

§
§
§
§
§

GROUNDWATER MANAGEMENT AREA 12

GROUNDWATER CONSERVATION DISTRICTS

WHEREAS, the groundwater conservation districts located wholly or partially within Groundwater Management Area 12 (“GMA 12”), as designated by the Texas Water Development Board, as of the date of this resolution are as follows: Mid-East Texas Groundwater Conservation District, Brazos Valley Groundwater Conservation District, Post Oak Savannah Groundwater Conservation District, Lost Pines Groundwater Conservation District, and Fayette County Groundwater Conservation District (collectively hereinafter “the GMA 12 Districts”);

WHEREAS, the GMA 12 Districts are each governmental agencies and bodies politic and corporate operating under Chapter 36, Water Code;

WHEREAS, GMA 12 Districts held a meeting, which was properly noticed and open to the public, at 10:00 a.m. on Tuesday, November 15, 2011, in the Milano Community Center located at 303 West Avenue E, Milano, Texas;

WHEREAS, at least two-thirds of the GMA 12 Districts had a voting representative in attendance at said November 15, 2011, meeting in accordance with Section 36.108, Texas Water Code; to wit, the following districts had a voting representative in attendance at said meeting: Mid-East Texas Groundwater Conservation District, Brazos Valley Groundwater Conservation District, Post Oak Savannah Groundwater Conservation District, Lost Pines Groundwater Conservation District, and Fayette County Groundwater Conservation District;

WHEREAS, it is the intent and purpose of the GMA 12 Districts by adoption of this resolution to fulfill the requirements of SB660, 82nd Legislature of the State of Texas, requiring the appointment of representatives from Groundwater Conservation Districts in Groundwater Management Area 12 to serve as voting members of Regional Water Planning Groups C, G, H, and K;

WHEREAS, at said November 15, 2011, meeting, after a motion was duly made by Nathan Ausley, and seconded by Wayne Wilson, that the GMA 12 Districts adopt this resolution to appoint the following persons to serve on the following Regional Water Planning Groups:

GMA 12 Representative to Region C shall be David Bailey,

GMA 12 Representative to Region G shall be Gary Westbrook,

GMA 12 Representative to Region H shall be David Bailey,

GMA 12 Representative to Region K shall be Joe Cooper;

WHEREAS, the motion prevailed by the following vote: 5 Ayes, 0 Nay;

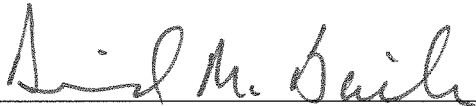
NOW, THEREFORE, BE IT RESOLVED BY THE AUTHORIZED VOTING REPRESENTATIVES OF THE GMA 12 DISTRICTS AS FOLLOWS:

1. The above recitals are true and correct.
2. The authorized voting representatives of the GMA 12 Districts hereby appoint the identified persons as voting representatives for the Groundwater Conservation Districts in GMA 12 to serve on the identified Regional Water Planning Groups.
3. The GMA 12 Districts and their agents and representatives, individually and collectively, are further authorized to take any and all actions necessary to implement this resolution.

AND IT IS SO ORDERED.

PASSED AND ADOPTED on this 15th day of November, 2011.

ATTEST:



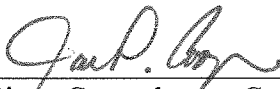
Mid-East Texas Groundwater Conservation District



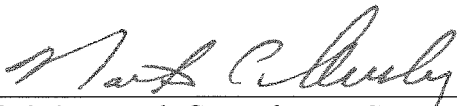
Fayette County Groundwater Conservation District



Brazos Valley Groundwater Conservation District



Lost Pines Groundwater Conservation District



Post Oak Savannah Groundwater Conservation District

Agenda Items 6-11

Discuss and take action on selection of standing committees and appointment of committee members for the 2016 Region H Regional Water Plan.

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

Receive update from Consultant Team regarding the progress of the ongoing Regional Groundwater Update Study and preliminary population projections to be incorporated into the 2016 Region H Regional Water Plan.

Receive update from Consultant Team regarding Non-Population Demand Projections produced by Texas Water Development Board for the 2016 Region H Regional Water Plan.

Receive update from Consultant Team regarding development of water supply projections for the 2016 Region H Regional Water Plan.

Receive presentation from Consultant Team and TWDB regarding potential for accelerating schedule for Task 4D (Management Strategy Evaluation) for the current phase of planning of the 2016 Region H Regional Water Plan.





REGION H WATER PLANNING GROUP

December 7, 2011
San Jacinto River Authority



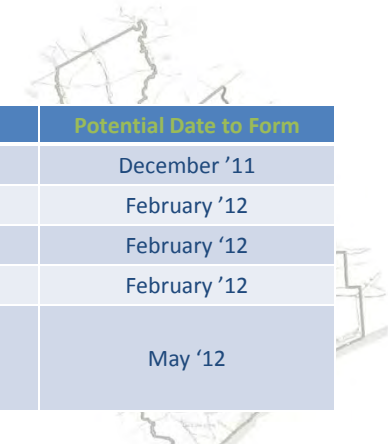
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Agenda Item 6 Committees for 2016 RWP Development

- Discussed at August 3rd RWPG meeting
- Potential Committees:

Committee Focus	Potential Date to Form
Non-Municipal Water Demand	December '11
Municipal Population and Water Demand	February '12
Groundwater Supply	February '12
Surface Water Supply	February '12
Water Management Strategies <ul style="list-style-type: none"> • County Committees • River Basin Committees • Groundwater/Surface Water Committees 	May '12



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Agenda Item 7
2016 RWP Schedule and Milestones

Date	Event	Scheduled Tasks
08/2011	RWPG Meeting	No Scheduled Tasks
12/2011	RWPG Meeting	No Scheduled Tasks
02/2012	RWPG Meeting	Review Non-Population Demands
05/2012	RWPG Meeting	Review Population Demands
08/2012	RWPG Meeting	Review Supply Allocations
11/2012	RWPG Meeting	Review Water Needs and WMS
02/2013	RWPG Meeting	Approve Technical Memorandum
2/28/2013	Due Date	Technical Memorandum to TWDB


Agenda Item 8
Update for Water Supply Projections

Receive update from Consultant Team regarding the progress of the ongoing Regional Groundwater Update Study and preliminary population projections to be incorporated into the 2016 Region H Regional Water Plan.




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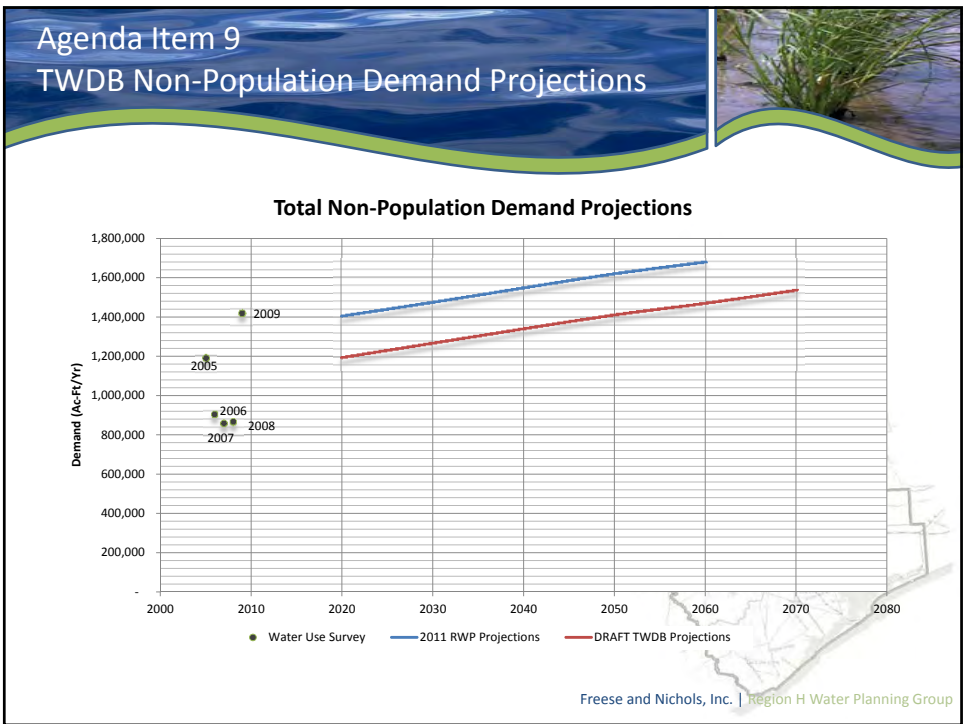
Agenda Item 9 TWDB Non-Population Demand Projections




- TWDB Distributed Draft Non-Population Demands in October 2011
 - Irrigation
 - Livestock
 - Manufacturing
 - Mining
 - Steam-Electric Generation
- Planning groups and consultants review and submit revisions
- Final adoption by TWDB in Summer, 2012



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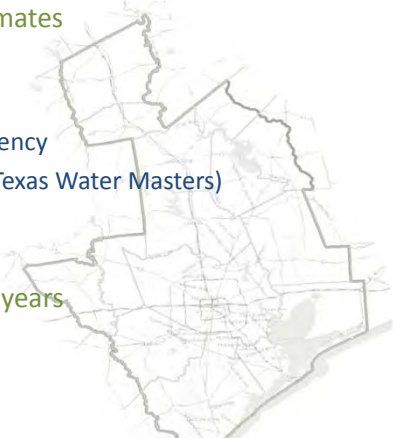


Agenda Item 9
TWDB Non-Population Demand Projections

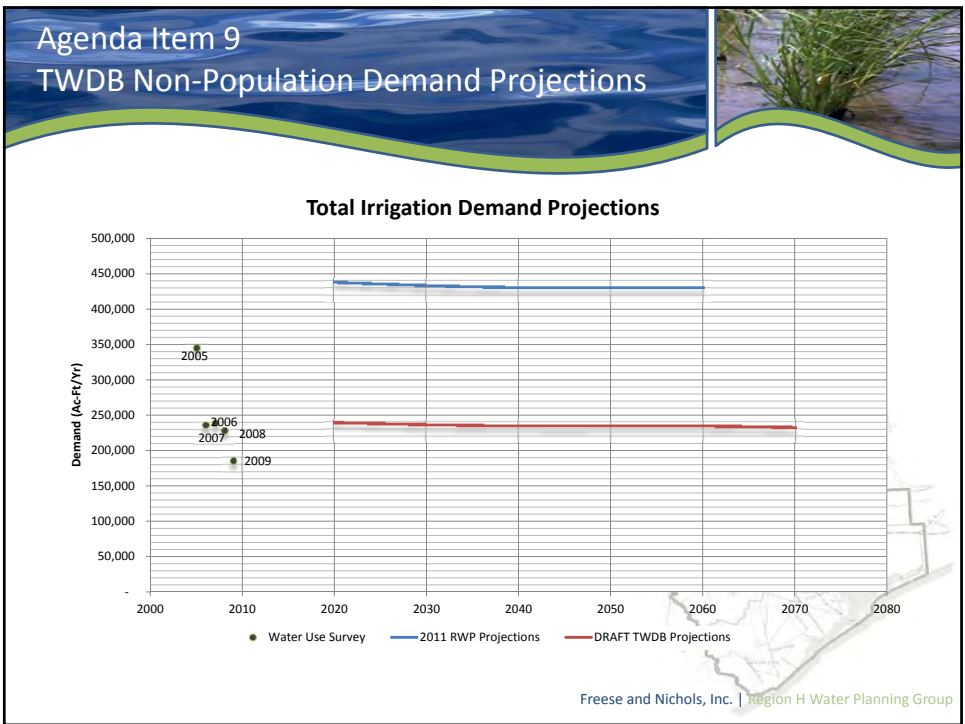


Irrigation Demands


- Base-TWDB 2005-2009 Water Use Estimates
- Adjust base
 - Crop water need from Farm Service Agency
 - Surface water release data (TCEQ and Texas Water Masters)
 - Groundwater Conservation Districts
- Use 2011 RWP escalation rate for later years




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Agenda Item 9 TWDB Non-Population Demand Projections




Region H Irrigation Demands												
Draft Projections for 2017 SWP (TWDB)							2012 SWP Projections (Region H)					
County Name	2020	2030	2040	2050	2060	2070	County Name	2020	2030	2040	2050	2060
Austin	3,932	3,932	3,932	3,932	3,932	3,932	Austin	10,617	10,617	10,617	10,617	10,617
Brazoria	77,121	74,258	72,532	72,532	72,532	70,465	Brazoria	123,115	118,544	115,788	115,788	115,788
Chambers	55,059	55,059	55,059	55,059	55,059	55,059	Chambers	117,777	117,777	117,777	117,777	117,777
Fort Bend	32,091	32,091	32,091	32,091	32,091	32,091	Fort Bend	53,455	53,455	53,455	53,455	53,455
Galveston	3,565	3,565	3,565	3,565	3,565	3,565	Galveston	10,342	10,342	10,342	10,342	10,342
Harris	3,397	3,397	3,397	3,397	3,397	3,397	Harris	15,300	15,300	15,300	15,300	15,300
Leon	169	169	169	169	169	169	Leon	542	542	542	542	542
Liberty	43,632	43,632	43,632	43,632	43,632	43,632	Liberty	82,901	82,901	82,901	82,901	82,901
Madison	12	12	12	12	12	12	Madison	19	19	19	19	19
Montgomery	575	575	575	575	575	575	Montgomery	66	66	66	66	66
Polk	0	0	0	0	0	0	Polk	0	0	0	0	0
San Jacinto	0	0	0	0	0	0	San Jacinto	667	667	667	667	667
Trinity	0	0	0	0	0	0	Trinity	467	467	467	467	467
Walker	353	353	353	353	353	353	Walker	11	11	11	11	11
Waller	19,197	19,197	19,197	19,197	19,197	19,197	Waller	22,978	22,978	22,978	22,978	22,978
Total	239,103	236,240	234,514	234,514	234,514	232,447	Total	438,257	433,686	430,930	430,930	430,930




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Agenda Item 9 TWDB Non-Population Demand Projections

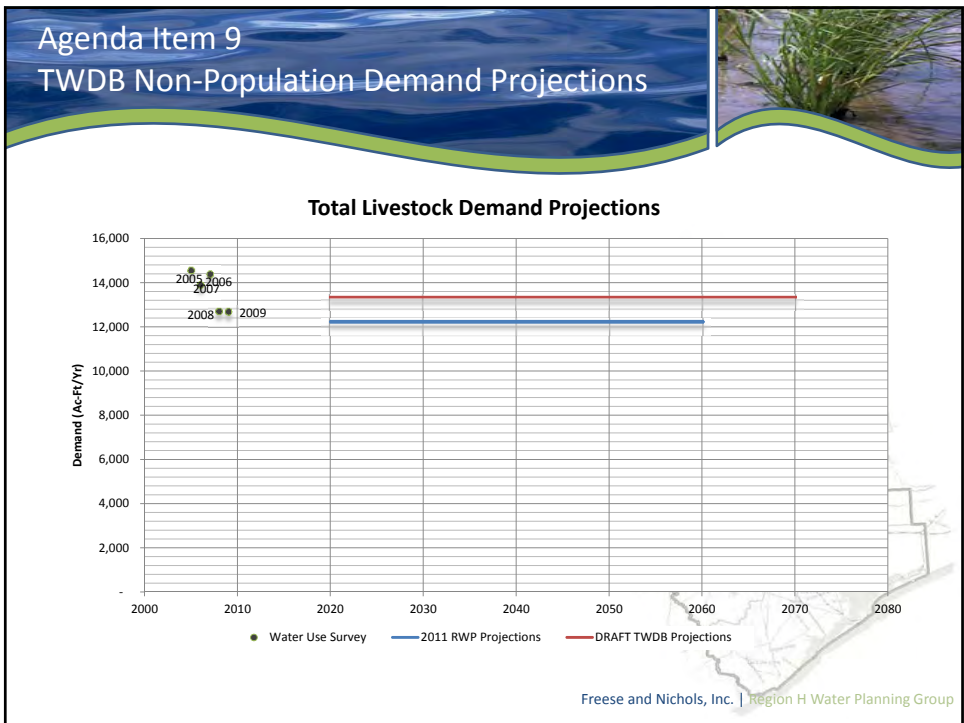


Livestock Demands

- Base-TWDB 2005-2009 Water Use Estimates
- Adjust base
 - Texas Agricultural Statistics Service
 - Water use coefficient per livestock category
 - Many counties held base constant
- Use 2011 RWP escalation rate for later years



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Agenda Item 9 TWDB Non-Population Demand Projections

Region H Livestock Demands												
Draft Projections for 2017 SWP (TWDB)							2012 SWP Projections (Region H)					
County Name	2020	2030	2040	2050	2060	2070	County Name	2020	2030	2040	2050	2060
Austin	1,523	1,523	1,523	1,523	1,523	1,523	Austin	1,615	1,615	1,615	1,615	1,615
Brazoria	1,650	1,650	1,650	1,650	1,650	1,650	Brazoria	1,614	1,614	1,614	1,614	1,614
Chambers	554	554	554	554	554	554	Chambers	462	462	462	462	462
Fort Bend	1,052	1,052	1,052	1,052	1,052	1,052	Fort Bend	1,171	1,171	1,171	1,171	1,171
Galveston	254	254	254	254	254	254	Galveston	325	325	325	325	325
Harris	1,667	1,667	1,667	1,667	1,667	1,667	Harris	1,133	1,133	1,133	1,133	1,133
Leon	1,728	1,728	1,728	1,728	1,728	1,728	Leon	1,691	1,691	1,691	1,691	1,691
Liberty	873	873	873	873	873	873	Liberty	757	757	757	757	757
Madison	1,024	1,024	1,024	1,024	1,024	1,024	Madison	750	750	750	750	750
Montgomery	521	521	521	521	521	521	Montgomery	510	510	510	510	510
Polk	144	144	144	144	144	144	Polk	134	134	134	134	134
San Jacinto	386	386	386	386	386	386	San Jacinto	284	284	284	284	284
Trinity	249	249	249	249	249	249	Trinity	211	211	211	211	211
Walker	652	652	652	652	652	652	Walker	632	632	632	632	632
Waller	1,069	1,069	1,069	1,069	1,069	1,069	Waller	939	939	939	939	939
Total	13,346	13,346	13,346	13,346	13,346	13,346	Total	12,228	12,228	12,228	12,228	12,228

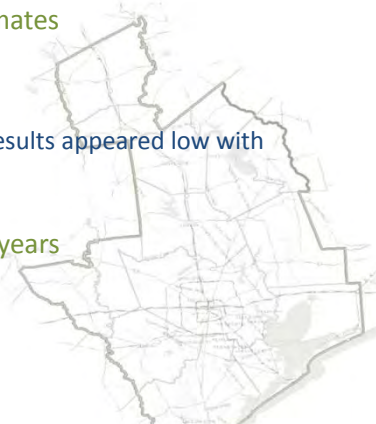
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Agenda Item 9
TWDB Non-Population Demand Projections

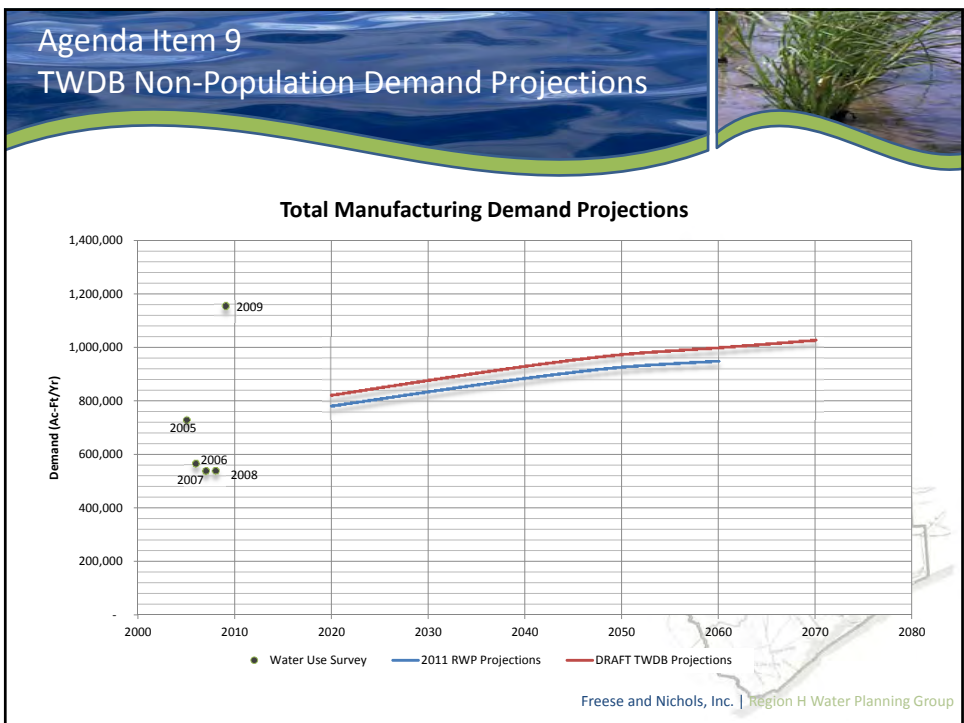


Manufacturing Demands

- Base-TWDB 2004-2008 Water Use Estimates
- Adjust base
 - Accounted for counties where survey results appeared low with Bureau of Economic Analysis data
- Use 2011 RWP escalation rate for later years



Freese and Nichols, Inc. | Region H Water Planning Group



Agenda Item 9
TWDB Non-Population Demand Projections



Region H Manufacturing Demands													
Draft Projections for 2017 SWP (TWDB)							2012 SWP Projections (Region H)						
County Name	2020	2030	2040	2050	2060	2070	County Name	2020	2030	2040	2050	2060	2070
Austin	108	117	126	133	145	158	Austin	233	253	272	288	313	333
Brazoria	286,554	309,841	333,348	354,093	379,241	406,175	Brazoria	286,554	309,841	333,348	354,093	379,241	406,175
Chambers	11,043	11,919	12,792	13,577	14,591	15,681	Chambers	12,959	13,987	15,011	15,932	17,122	18,312
Fort Bend	8,971	9,306	9,576	9,755	9,233	8,739	Fort Bend	7,199	7,468	7,685	7,829	7,410	7,000
Galveston	84,870	90,070	95,136	99,492	106,239	113,444	Galveston	44,330	47,046	49,692	51,967	55,491	59,215
Harris	424,761	449,218	470,881	487,094	478,957	470,956	Harris	424,761	449,218	470,881	487,094	478,957	470,956
Leon	834	958	1,083	1,196	1,301	1,415	Leon	842	967	1,093	1,207	1,313	1,419
Liberty	440	508	578	641	696	756	Liberty	465	537	611	678	736	794
Madison	226	247	268	287	311	337	Madison	289	316	343	367	398	429
Montgomery	2,135	2,388	2,640	2,863	3,107	3,372	Montgomery	2,332	2,608	2,883	3,126	3,392	3,658
Polk	0	0	0	0	0	0	Polk						
San Jacinto	11	12	13	14	15	16	San Jacinto	52	56	60	63	68	72
Trinity	0	0	0	0	0	0	Trinity						
Walker	3,718	4,188	4,666	5,083	5,517	5,988	Walker	3,718	4,188	4,666	5,083	5,517	5,988
Waller	134	149	164	177	192	208	Waller	101	112	123	133	144	155
Total	823,805	878,921	931,271	974,405	999,545	1,027,245	Total	783,835	836,597	886,668	927,860	950,102	982,360

Freese and Nichols, Inc. | Region H Water Planning Group

Agenda Item 9
TWDB Non-Population Demand Projections

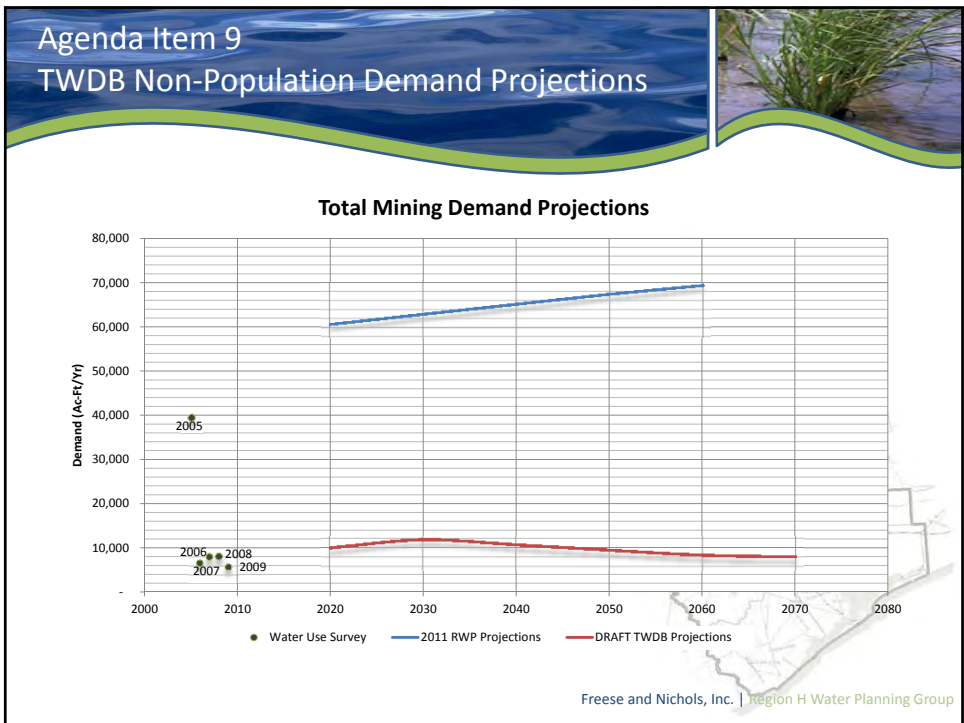


Mining Demands

- Bureau of Economic Geology (BEG) Study
 - Estimated current mining water use
 - Data from trade organizations, government agencies, and other industry representatives
 - County level compilation of sectors:
 - Oil and gas
 - Aggregates
 - Coal and lignite
 - Other



Freese and Nichols, Inc. | Region H Water Planning Group



Agenda Item 9 TWDB Non-Population Demand Projections

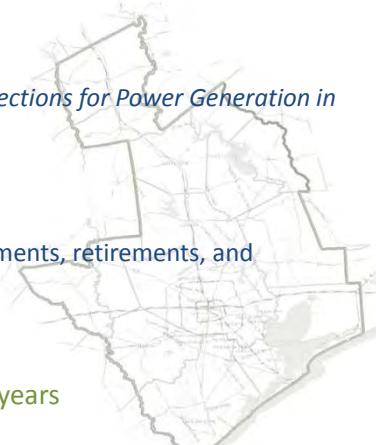
Region H Mining Demands														
Draft Projections for 2017 SWP (TWDB)								2012 SWP Projections (Region H)						
County Name	2020	2030	2040	2050	2060	2070	2080	County Name	2020	2030	2040	2050	2060	2070
Austin	198	391	304	217	130	78	78	Austin	56	59	62	65	67	67
Brazoria	981	1,184	1,380	1,599	1,833	2,121	2,121	Brazoria	4,502	4,737	4,969	5,201	5,419	5,419
Chambers	9	9	9	9	9	9	9	Chambers	40,532	42,427	44,286	46,130	47,742	47,742
Fort Bend	72	75	57	42	28	21	21	Fort Bend	3,070	3,105	3,138	3,169	3,196	3,196
Galveston	381	407	450	486	519	549	549	Galveston	279	286	293	300	307	307
Harris	3,273	3,252	3,194	3,160	3,133	3,110	3,110	Harris	1,434	1,529	1,624	1,720	1,805	1,805
Leon	2,386	3,262	2,625	1,739	854	424	424	Leon	1,464	1,435	1,409	1,384	1,364	1,364
Liberty	436	457	446	468	496	539	539	Liberty	8,753	8,766	8,778	8,790	8,800	8,800
Madison	523	1,089	843	596	350	206	206	Madison	24	24	24	24	24	24
Montgomery	1,453	1,363	1,077	921	807	728	728	Montgomery	509	526	543	559	573	573
Polk	8	8	8	8	8	8	8	Polk	31	32	33	34	35	35
San Jacinto	8	8	9	9	9	9	9	San Jacinto	29	28	27	26	26	26
Trinity	5	5	5	5	5	5	5	Trinity	6	6	6	6	6	6
Walker	11	11	11	11	11	11	11	Walker	13	13	13	13	13	13
Waller	7	7	7	7	7	7	7	Waller	80	80	80	80	80	80
Total	9,751	11,528	10,425	9,277	8,199	7,825	7,825	Total	60,782	63,053	65,285	67,501	69,457	69,457

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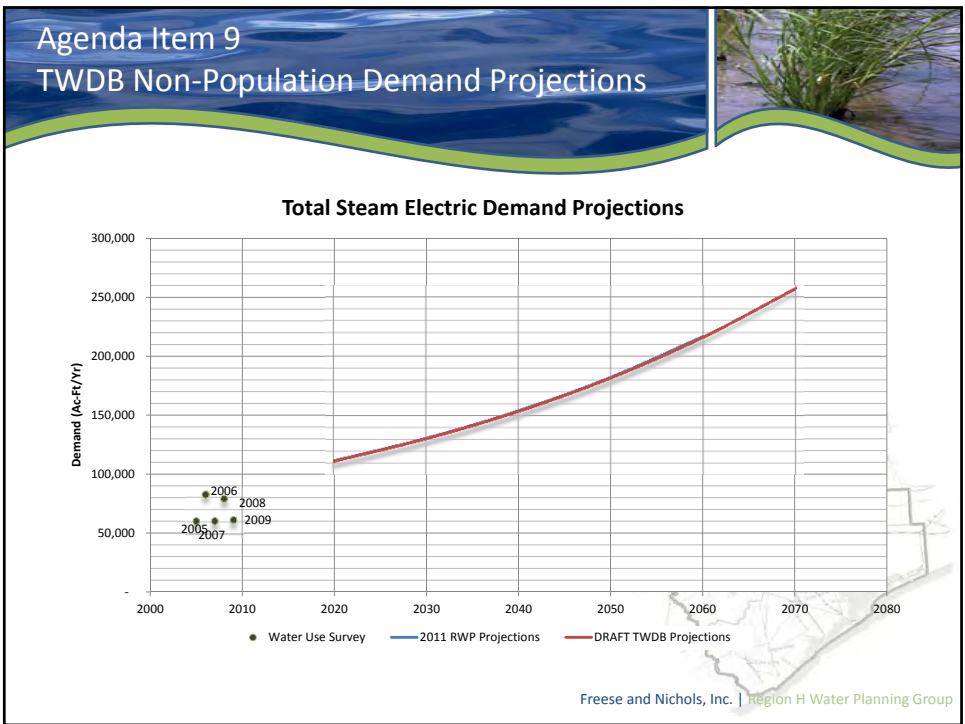
Agenda Item 9
 TWDB Non-Population Demand Projections

Steam Electric Demands


- **Base**
 - 2011 Regional Water Plans
 - 2008 TWDB report *Water Demand Projections for Power Generation in Texas*
- **Adjust Base**
 - Adjustments based on plant announcements, retirements, and capacity changes
 - Public Utilities Commission of Texas
- **Use 2011 RWP escalation rate for later years**



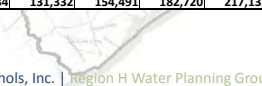
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Agenda Item 9
TWDB Non-Population Demand Projections




Region H Steam-Electric Demands													
Draft Projections for 2017 SWP (TWDB)							2012 SWP Projections (Region H)						
County Name	2020	2030	2040	2050	2060	2070	County Name	2020	2030	2040	2050	2060	2070
Austin	0	0	0	0	0	0	Austin	0	0	0	0	0	0
Brazoria	155	181	213	252	300	356	Brazoria	0	0	0	0	0	0
Chambers	3,536	4,134	4,863	5,751	6,834	7,573	Chambers	3,536	4,134	4,863	5,751	6,834	7,573
Fort Bend	67,762	79,220	93,191	110,219	130,977	156,964	Fort Bend	68,046	79,553	93,582	110,682	131,527	156,964
Galveston	4,013	4,692	5,519	6,528	7,757	8,596	Galveston	4,013	4,692	5,519	6,528	7,757	8,596
Harris	23,556	27,540	32,396	38,316	45,532	54,106	Harris	23,962	28,015	32,955	38,977	46,317	54,106
Leon	0	0	0	0	0	0	Leon	0	0	0	0	0	0
Liberty	4,240	4,957	5,831	6,896	8,195	9,739	Liberty	4,240	4,957	5,831	6,896	8,195	9,739
Madison	238	278	327	387	459	546	Madison	0	0	0	0	0	0
Montgomery	8,537	9,981	11,741	13,886	16,502	19,611	Montgomery	8,537	9,981	11,741	13,886	16,502	19,611
Polk	0	0	0	0	0	0	Polk	0	0	0	0	0	0
San Jacinto	0	0	0	0	0	0	San Jacinto	0	0	0	0	0	0
Trinity	0	0	0	0	0	0	Trinity	0	0	0	0	0	0
Walker	0	0	0	0	0	0	Walker	0	0	0	0	0	0
Waller	0	0	0	0	0	0	Waller	0	0	0	0	0	0
Total	112,037	130,983	154,081	182,235	216,556	257,491	Total	112,334	131,332	154,491	182,720	217,132	257,491




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Agenda Item 9
TWDB Non-Population Demand Projections



Non-Population Demands: Initial Review


- Irrigation
 - Decline in demand
- Livestock
 - Relatively consistent with 2011 RWP
- Manufacturing
 - Continued need for review
- Mining
 - More consistent with historical water use
- Steam-Electric Generation
 - Possible adjustments for some counties



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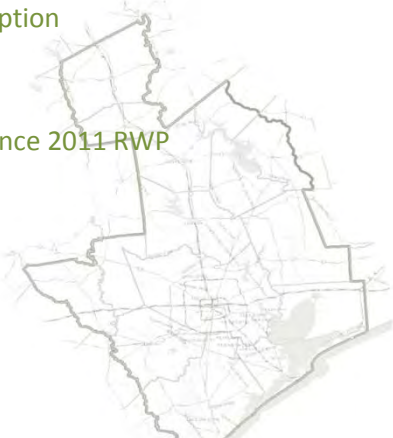
Agenda Item 10

Water Supply Projections



Status


- **Awaiting TWDB approval of Run 3 exception**
 - Additional information request
- **Reviewing TCEQ models for revisions since 2011 RWP**
 - New permits
- **Coordination with Regions C and G**
 - Return flows
 - Model development



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Agenda Item 11

Task 4D Schedule Acceleration



Task 4D

- **Intended as preliminary funds for WMS development**
 - \$225,604
- **Not yet authorized**
 - Requires development of scope and budget under Task 4C (Prepare and submit technical memorandum)
- **Opportunity for advanced access to funds**
 - Fast-track analysis of critical projects
 - Development of proposed scope and fee
 - Submittal to TWDB



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Agenda Item 11
Task 4D Schedule Acceleration



Process for Approval

- Receive RWPG approval at a public meeting
- Prepare a form detailing:
 - Task title
 - Scope of work
 - Deliverable
 - Budget
 - History of study
- Submit formal request to TWDB
 - Include justification for accelerated development
- TWDB considers amendment to contract





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Agenda Item 13

Receive report regarding recent and upcoming activities related to communications and outreach efforts on behalf of the Region H Planning Group.

Agenda Item 13
Community Outreach



- **Civic forum: Water - Challenges Facing the Houston Region**
Museum of Fine Arts Houston
August 24, 2011
- **Brazoria County Petrochemical Council**
Brazosport College
September 8, 2011



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Agenda Item 13
Community Outreach

- **Drought & Water Today: A Workshop for Galveston County**
South Shore Harbor Conference Center
September 13, 2011



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