



## **MEETING MATERIALS**

**February 29, 2012**

**San Jacinto River Authority**



**Region H Water Planning Group**  
**10:00 AM Wednesday**  
**February 29, 2012**  
**San Jacinto River Authority Office**  
**1577 Dam Site Rd, Conroe, Texas**

**AGENDA**

1. Introductions.
2. Review and approve minutes of December 7, 2011 meeting.
3. **Receive public comments on specific issues related to agenda items 4 through 13.** (Public comments limited to 3 minutes per speaker)
4. Accept the resignation of Reed Eichelberger as a voting member of the Region H WPG representing river authorities.
5. Consider and take action on the selection of Jace Houston as a voting member of the Region H WPG representing river authorities.
6. Receive update on status of committees and appointment of committee members for the 2016 Region H Regional Water Plan.
7. Receive update from Consultant Team regarding the schedule and milestones for the first phase of development of the 2016 Region H Regional Water Plan.
8. Receive update from Consultant Team and Non-Population Demands Subcommittee regarding Non-Population Demand Projections recommended for the 2016 Region H Regional Water Plan and consider approving submittal to TWDB.
9. Receive presentation from Jace Houston, Consultant Team, and TWDB on the Regional Planning process.
10. Receive presentation from TWDB on Draft Rule Revisions related to Regional Water Planning.
11. Receive presentation from Tom Michel on progress and status of the Brazos Basin and Bay Area Stakeholder Committee and take action as necessary.
12. Receive report regarding recent and upcoming activities related to communications and outreach efforts on behalf of the Region H Planning Group.
13. Agency communications and general information.
14. **Receive public comments.** (Public comments limited to 3 minutes per speaker)
15. Next Meeting: May 2, 2012.
16. Adjourn



## Agenda Item 2

Review and approve minutes of December 7, 2011 meeting.



**MINUTES**  
**REGION H WATER PLANNING GROUP MEETING**  
**10:00 A.M.**  
**December 7, 2011**  
**SAN JACINTO RIVER AUTHORITY**  
**GENERAL AND ADMINISTRATION BUILDING**  
**1577 DAM SITE ROAD**  
**CONROE, TEXAS**

**MEMBERS PRESENT:** David Bailey, John Bartos, Robert Bruner, Reed Eichelberger, Mark Evans, Art Henson, John Howard, Robert Istre, Kathy Jones, Gena Leathers, Ted Long, Carl Masterson, Jimmie Schindewolf, Steve Tyler, C. Harold Wallace, and Pudge Willcox

**DESIGNATED ALTERNATES:** Lisa Lattu for Jun Chang, Brad Brunett for John Hofmann, Jace Houston for Marvin Marcell, Tom Michel for Ron Neighbors, and Robert Stevens for Danny Vance

**MEMBERS ABSENT:** John Blount, Bob Hebert, Glynn Leiper, James Morrison, and William Teer

**NON-VOTING MEMBERS PRESENT:** Temple McKinnon and Melinda Silva

**PRESIDING:** Mark Evans, Chair

**CALL TO ORDER REGULAR MEETING AT 10:06 A.M.**

A quorum was present.

**INTRODUCTIONS**

Mr. Evans welcomed everyone and alternates were announced.

**REVIEW AND APPROVE MINUTES OF August 3, 2011 MEETING**

The minutes for the August 3, 2011 meeting were presented. Motion was made by Mr. Tyler, seconded by Mr. Howard, to approve the minutes. The motion carried unanimously.

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

There were no public comments.

**CONSIDER AND TAKE ACTION ON THE SELECTION OF KATHY JONES AS VOTING MEMBER OF THE REGION H WATER PLANNING GROUP REPRESENTING GMA 14 & CONSIDER AND TAKE ACTION ON THE SELECTION OF DAVID BAILEY AS A VOTING MEMBER OF THE REGION H WATER PLANNING GROUP REPRESENTING GMA 12**

Mr. Jace Houston mentioned that although the Agenda stated that an action from the Group was anticipated, no vote was necessary because the new voting members representing local GMAs were assigned to the planning group by statute. Mr. Houston also stated that he will work on a Bylaws amendment to incorporate the changes to the Group's membership.

Mr. Robert Istre asked for comments from Kathy Jones and David Bailey on the area they represent. Ms. Kathy Jones thanked the group and stated that GMA 14 covers the area of southeast Texas from Houston to Louisiana and includes four groundwater conservation districts and two subsidence districts. Mr. David Bailey stated that he looks forward to serving on Region H and mentioned that GMA 12 covers an area north of GMA 14 overlying the Carrizo Wilcox aquifer, including Madison, Leon, and Freestone counties.

#### **DISCUSS AND TAKE ACTION ON SELECTION OF STANDING COMMITTEES AND APPOINTMENT OF COMMITTEE MEMBERS OF 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 formation of committees in the past and the benefits to forming such committees. Mr. Evans stated that the Group does not have to make a final decision at the meeting. Discussion ensued regarding the formation of committees and restrictions based on the open meetings act.

Mr. Burnett asked Mr. Evans if it would be appropriate for members to email the consultants or Mr. Houston with recommendations of committees the members would like to serve on. Mr. Istre suggested that some consideration be given to alignment of the committees with river basins.

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

Mr. Houston asked several questions regarding the technical memorandum. Ms. McKinnon and Mr. Afinowicz answered the questions and explained the connection between the technical memorandum and funding. Discussion ensued regarding public hearings.

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



**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**

Mr. Reedy discussed the project to develop updated groundwater and subsidence models, population projections, and water demand projections. He stated that they have hired two organizations to help with the population projections – Metro Study Group (Housing Surveys) and University of Houston, Dr. Steven Craig (long-term growth modeling). Discussion ensued regarding past issues with changing population projections.

**RECEIVE UPDATE FROM CONSULTANT TEAM REGARDING NON-POPULATION DEMAND PROJECTIONS PRODUCED BY TEXAS WATER DEVELOPMENT BOARD FOR THE 2016 REGION H REGIONAL WATER PLAN**

Mr. Afinowicz continued by discussing non-population water demand projections. He discussed irrigation, livestock, manufacturing, mining, and steam electric demand projections. He also stated that all numbers and graphs are on the Region H website. Mr. Tom Michel asked if the projections take into account drought conditions. Ms. McKinnon answered by describing the data sets included in the report. Discussion ensued regarding non-population water demand projections.

**RECEIVE UPDATE FROM CONSULTANT TEAM REGARDING DEVELOPMENT OF WATER SUPPLY PROJECTIONS FOR THE 2016 REGION H REGIONAL WATER PLAN**

Mr. Afinowicz stated that the consultant team is working on the development of water supply projections for the 2016 Region H Regional Water Plan. He further stated that the consultants are awaiting TWDB approval of a Region H request to use alternate WAM runs, reviewing TCEQ models for revisions since the 2011 RWP, and coordinating with Regions C and G regarding return flows and model development.

**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**

Mr. Reedy discussed Task 4D Management Strategy Evaluation Schedule Acceleration including submittal to TWDB for approval. Mr. Houston suggested that the agenda item be placed on the agenda for the next meeting.

**RECEIVE RECOMMENDATION FROM THE NOMINATIONS COMMITTEE AND TAKE ACTION ON THE SELECTION OF A NEW VOTING MEMBER OF THE REGION H WATER PLANNING GROUP REPRESENTING THE PUBLIC**

Mr. Jimmie Schindewolf stated that the Nominations Committee met prior to the Region H meeting and that Mr. Carl Masterson has been nominated for the replacement of Mr.

Alexander. He stated that the Nominations Committee received a number of outstanding candidates for the position. Motion was made by C. Harold Wallace, seconded by Robert Bruner, to approve the nomination of Mr. Carl Masterson as the replacement of Mr. Alexander. The motion carried unanimously.

Mr. Steve Tyler asked for clarification on qualifications for the person that fills the public seat for the group. Discussion ensued regarding the rather broad statutory definition for representation of this interest group.

#### **RECEIVE REPORT 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 the consultant team spoke at the following events: *Civic Forum: Water – Challenges Facing the Houston Region; Brazoria County Petrochemical Council; and Drought & Water Today: A Workshop for Galveston County.*

#### **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**

There were no public comments.

#### **NEXT MEETING**

February 29, 2012  
San Jacinto River Authority  
General and Administration Building  
1577 Dam Site Road  
Conroe, Texas 77304

**ADJOURNED AT 12:08 P.M.**

## Agenda Item 4

Accept the resignation of Reed Eichelberger as a voting member of the Region H WPG representing river authorities.





# San Jacinto River Authority

ADMINISTRATIVE OFFICE  
P.O. Box 329 • Conroe, Texas 77305  
(T) 936.588.3111 • (F) 936.588.3043

February 9, 2012

Mark Evans, Chairman  
Region H Water Planning Group  
c/o San Jacinto River Authority  
PO Box 329  
Conroe, TX 77305

Re: Submittal of Resignation from the Region H Water Planning Group and Recommendation of Jace Houston to Fill the Vacated Position

~~Chairman Evans:~~

*Mark*

I have had the privilege of serving with you on the Region H planning group for over five years, and at this time I would like to announce my resignation from the group. It is most likely that I will retire from the San Jacinto River Authority (SJRA) in the next year or two, and most certainly before the end of this current planning cycle. Since we are in the very early stages of this cycle, it seems appropriate to step down at this time and allow my replacement the benefit of participating in the complete planning cycle.

I would also like to strongly endorse Jace Houston as my replacement. While not a member of the Region H WPG, Jace has, nonetheless, been extremely active in a variety of unofficial roles with Region H since its inception almost 14 years ago. Everyone on the group is well aware of his enthusiasm and energy, and I am excited for Jace to officially represent the SJRA in this worthwhile effort.

Thank you for your continued service as Chair of the group. I value my time spent working with you and the other members and am thankful for the friendships that have evolved.

Best of luck in the future.

Sincerely,

Reed Eichelberger, P.E.  
General Manager  
San Jacinto River Authority



## Agenda Items 6

Receive update on status of committees and appointment of committee members for the 2016 Region H Regional Water Plan.





## Agenda Item 6 Committees for 2016 RWP Development



- Discussed at August 3<sup>rd</sup> and December 7<sup>th</sup> RWPG meetings
- Appointed Committees:

Committee Focus
Non-Municipal Water Demand
Municipal Population and Water Demand
Groundwater Supply
Surface Water Supply
Water Management Strategies

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## Agenda Item 6 Committees for 2016 RWP Development



- Chair of Region H RWPG appoints members
  - Serves as non-voting member on all committees
- Meetings
  - Governed by Region H WPG Bylaws

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# Committee Appointments

## Non-Population Demands Committee

**Chair:** Gená Leathers

John Howard

Robert Istre

Glynn Leiper

Ted Long

Pudge Wilcox

Mark Evans (Non-Voting Member)

# Committee Appointments

## Population Demands Committee

**Chair:** Marvin Marcell

John Blount  
Reed Eichelberger  
Art Henson  
Carl Masterson  
Ron Neighbors  
Steve Tyler  
Harold Wallace

Mark Evans (Non-Voting Member)

# **Committee Appointments**

## **Groundwater Supply Committee**

**Chair:** Ron Neighbors

David Bailey

Kathy Jones

James Morrison

Bill Teer

Mark Evans (Non-Voting Member)

# **Committee Appointments**

## **Surface Water Supply Committee**

**Chair:** Reed Eichelberger

Jun Chang

John Hofmann

Danny Vance

Pudge Wilcox

Mark Evans (Non-Voting Member)

# Committee Appointments

## Water Management Strategies Committee

**Co-Chair:** John Bartos

**Co-Chair:** Bob Hebert

Robert Bruner

Jun Chang

Reed Eichelberger

John Hofmann

Gená Leathers

Ron Neighbors

Jimmie Schindewolf

Danny Vance

Mark Evans (Non-Voting Member)





## Agenda Items 7

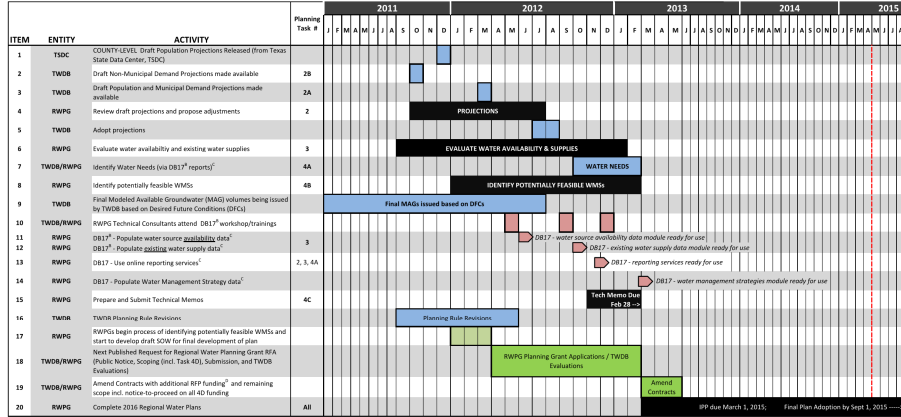
Receive update from Consultant Team regarding the schedule and milestones for the first phase of development of the 2016 Region H Regional Water Plan.



# Agenda Item 7 2016 RWP Schedule and Milestones



Estimated Working Schedule: Fourth Cycle of Regional Water Planning<sup>A</sup>



Note A: Estimated timeline based on currently available agency resources and subject to change. Note B: DB17 is the updated, online water planning database for the 2017 cycle Water Plan. Note C: Anticipated database availability dates are estimates based on currently available agency resources. Note D: Subject to available funding.

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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 Available Supplies
08/2012	RWPG Meeting	Review Population Demands 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 Items 8

Receive update from Consultant Team and Non-Population Demands Subcommittee regarding Non-Population Demand Projections recommended for the 2016 Region H Regional Water Plan and consider approving submittal to TWDB.



## Non-Population Demand Projections: Presentation Outline



- Modification Process
- Non-Population Demand Committee
- Recommended Non-Pop. Demand Projections



## Modifications Process



## Non-Population Committee



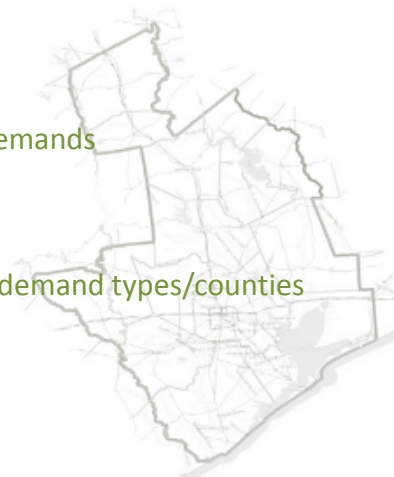
- **Committee Members**
  - Gená Leathers, Chair
  - John Howard
  - Ted Long
  - Robert Istre
  - Pudge Wilcox
  - Mark Evans (non-voting)



## Non-Population Committee



- **Committee Meetings**
  - January 11, 2012
    - Initial Review of Non-Pop. Demands
  - February 6, 2012
    - Additional analysis of noted demand types/counties

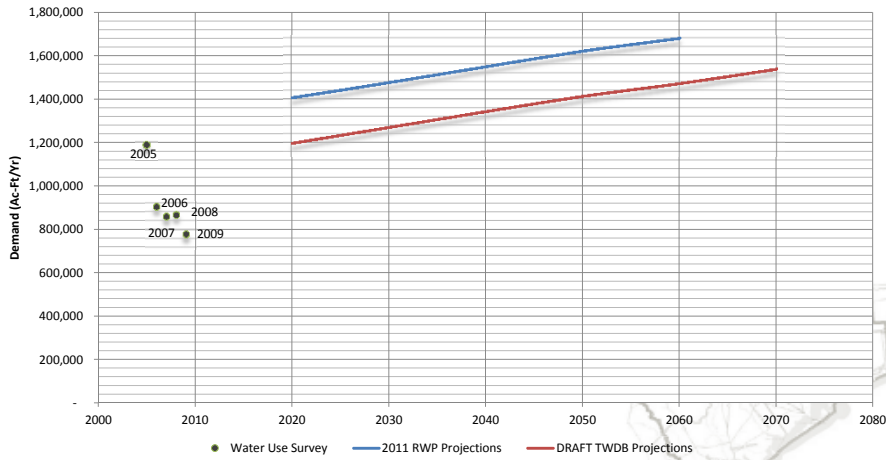




## TWDB Draft Projections



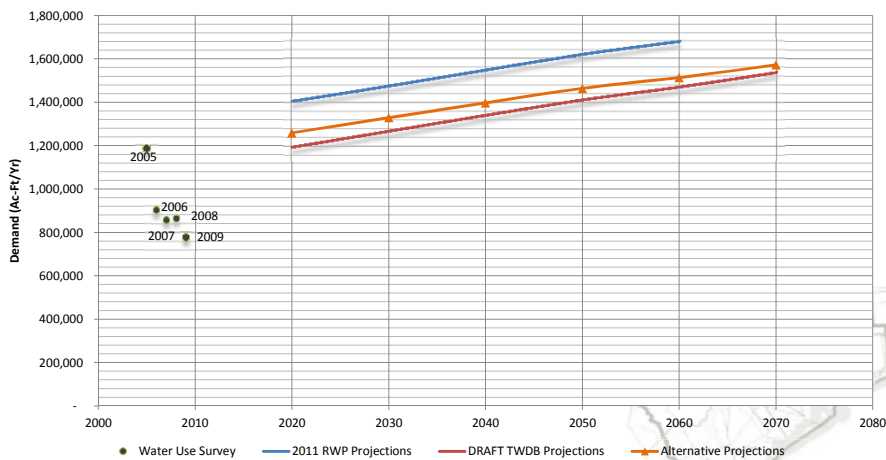
### Total Non-Population Demand Projections



## Non-Pop Demand Committee: Alternative Projections



### Total Non-Population Demand Projections

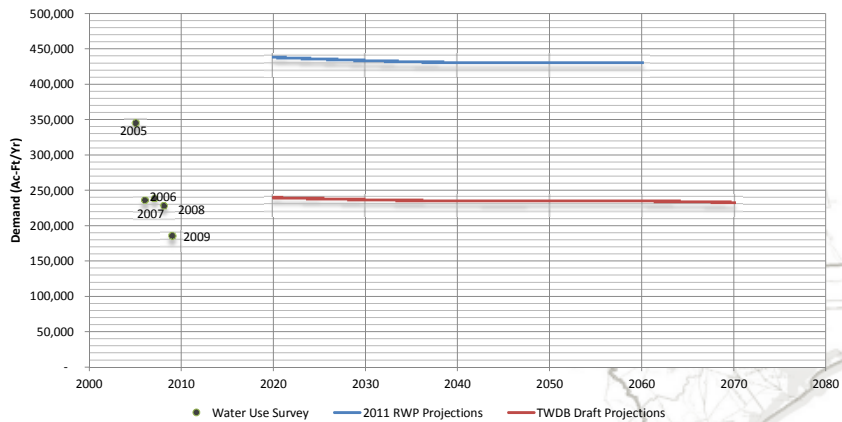


## Reasons for changes

- Increase in irrigation demands
  - Alternative “maximum use” projections
- Adjust manufacturing demand for some counties
  - Reflective of water use survey analysis
- Verify steam-electric projections
  - Move co-generation facilities to manufacturing

## Irrigation Demand Projections: TWDB Draft Projections

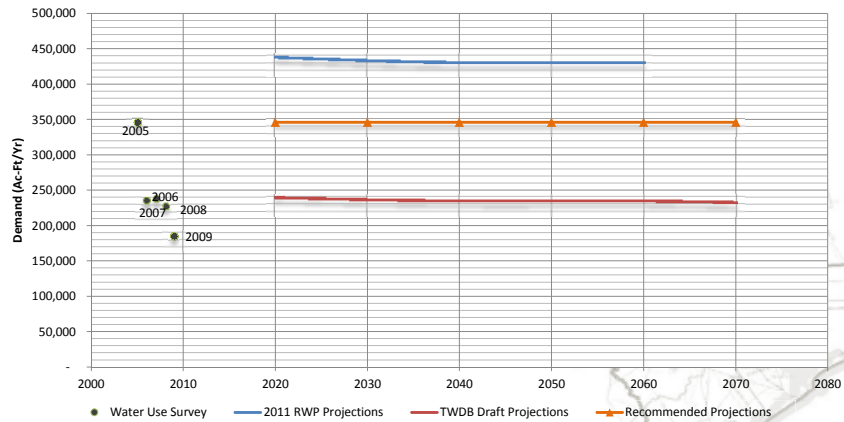
Total Irrigation Demand Projections



## Irrigation Demand Projections: Alternative Projections



**Total Irrigation Demand Projections**



## Irrigation Demand Projections: By County



**Region H Irrigation Demands**

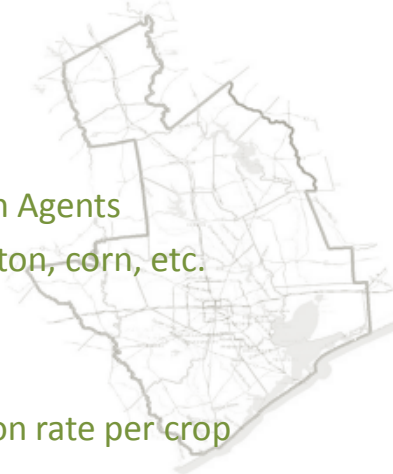
**Proposed Draft Projections for 2017 SWP (to TWDB)**

County Name	2020	2030	2040	2050	2060	2070
Austin	6,478	6,478	6,478	6,478	6,478	6,478
Brazoria	109,803	109,803	109,803	109,803	109,803	109,803
Chambers	84,266	84,266	84,266	84,266	84,266	84,266
Fort Bend	46,800	46,800	46,800	46,800	46,800	46,800
Galveston	6,300	6,300	6,300	6,300	6,300	6,300
Harris	7,240	7,240	7,240	7,240	7,240	7,240
Leon	284	284	284	284	284	284
Liberty	61,885	61,885	61,885	61,885	61,885	61,885
Madison	16	16	16	16	16	16
Montgomery	737	737	737	737	737	737
Polk	0	0	0	0	0	0
San Jacinto	259	259	259	259	259	259
Trinity	0	0	0	0	0	0
Walker	675	675	675	675	675	675
Waller	21,096	21,096	21,096	21,096	21,096	21,096
<b>Total</b>	<b>345,839</b>	<b>345,839</b>	<b>345,839</b>	<b>345,839</b>	<b>345,839</b>	<b>345,839</b>

## Irrigation Alternative Projection Methods



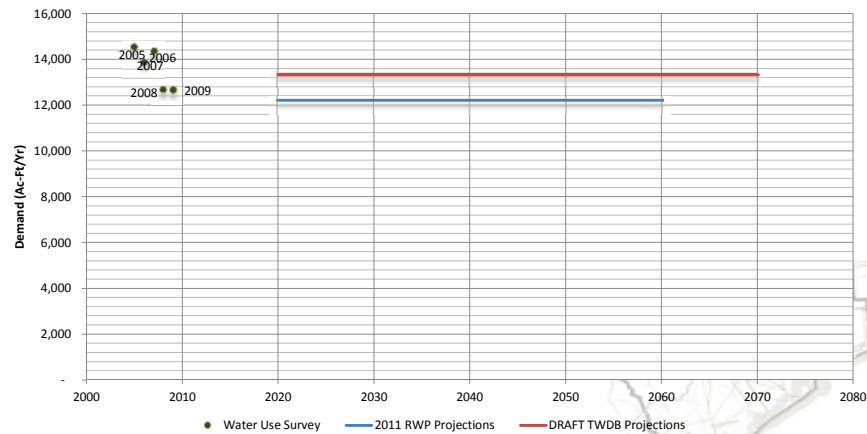
- Demand=Crop Acreage x Irrigation Rate
- Irrigated crop acreages
  - State Data Center Data
  - Contacted County Extension Agents
  - Primarily driven by rice, cotton, corn, etc.
- Crop irrigation rates
  - Assumed maximum irrigation rate per crop



## Livestock Demand Projections



Total Livestock Demand Projections



## Livestock Demands



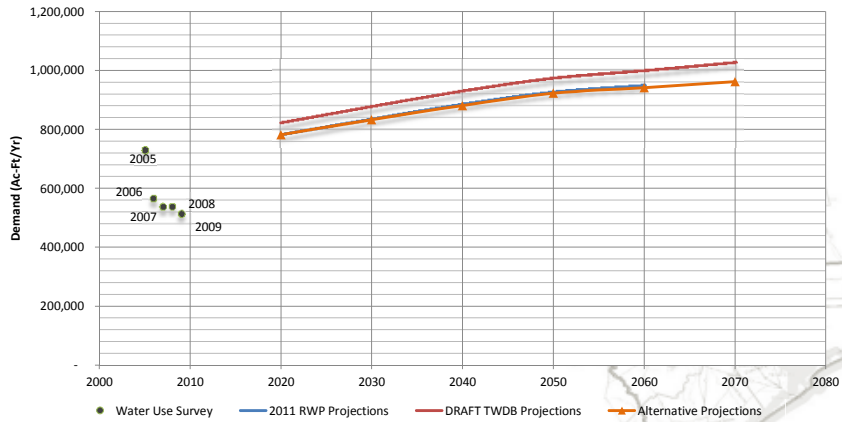
Region H Livestock Demands						
Proposed Draft Projections for 2017 SWP (to TWDB)						
County Name	2020	2030	2040	2050	2060	2070
Austin	1,523	1,523	1,523	1,523	1,523	1,523
Brazoria	1,650	1,650	1,650	1,650	1,650	1,650
Chambers	554	554	554	554	554	554
Fort Bend	1,052	1,052	1,052	1,052	1,052	1,052
Galveston	254	254	254	254	254	254
Harris	1,667	1,667	1,667	1,667	1,667	1,667
Leon	1,728	1,728	1,728	1,728	1,728	1,728
Liberty	873	873	873	873	873	873
Madison	1,024	1,024	1,024	1,024	1,024	1,024
Montgomery	521	521	521	521	521	521
Polk	144	144	144	144	144	144
San Jacinto	386	386	386	386	386	386
Trinity	249	249	249	249	249	249
Walker	652	652	652	652	652	652
Waller	1,069	1,069	1,069	1,069	1,069	1,069
<b>Total</b>	<b>13,346</b>	<b>13,346</b>	<b>13,346</b>	<b>13,346</b>	<b>13,346</b>	<b>13,346</b>

NO CHANGES FROM  
TWDB Draft

## Manufacturing Demand Projections



Total Manufacturing Demand Projections



## Manufacturing Demand Projections by County

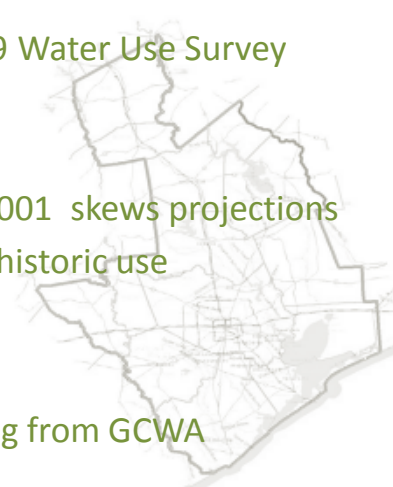


Region H Manufacturing Demands						
Proposed Draft Projections for 2017 SWP (to TWDB)						
County Name	2020	2030	2040	2050	2060	2070
Austin	108	117	126	133	145	158
Brazoria	247,938	267,567	287,195	306,824	326,452	346,081
Chambers	11,043	11,919	12,792	13,577	14,591	15,681
Fort Bend	8,971	9,306	9,576	9,755	9,233	8,739
Galveston	84,870	90,070	95,136	99,492	106,239	113,444
Harris	424,761	449,218	470,881	487,094	478,957	470,956
Leon	834	958	1,083	1,196	1,301	1,415
Liberty	440	508	578	641	696	756
Madison	226	247	268	287	311	337
Montgomery	2,135	2,388	2,640	2,863	3,107	3,372
Polk	0	0	0	0	0	0
San Jacinto	11	12	13	14	15	16
Trinity	0	0	0	0	0	0
Walker	312	312	312	312	312	312
Waller	134	149	164	177	192	208
<b>Total</b>	<b>781,783</b>	<b>832,771</b>	<b>880,764</b>	<b>922,365</b>	<b>941,551</b>	<b>961,475</b>

## Manufacturing Alternative Projection Methods



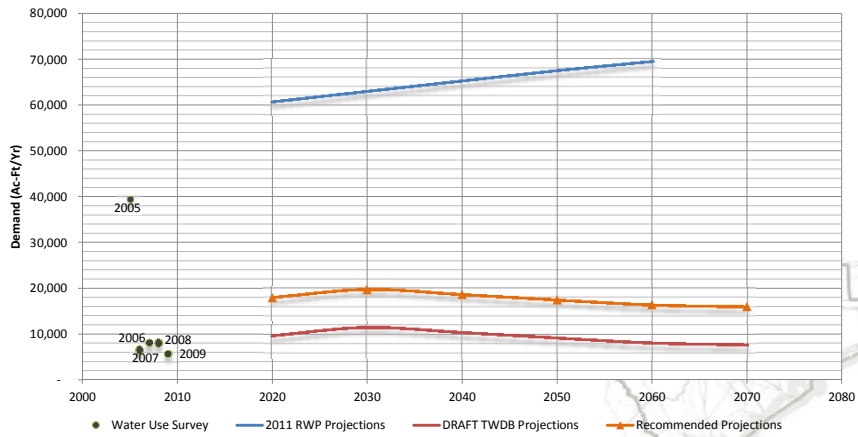
- **Brazoria County**
  - Follow trends of 2001-2009 Water Use Survey
- **Walker County**
  - Single-user spike in 2000-2001 skews projections
  - Use average of 1968-2008 historic use
- **Galveston County**
  - Additional data forthcoming from GCWA



## Mining Demand Projections



**Total Mining Demand Projections**



## Mining Demand Projections by County

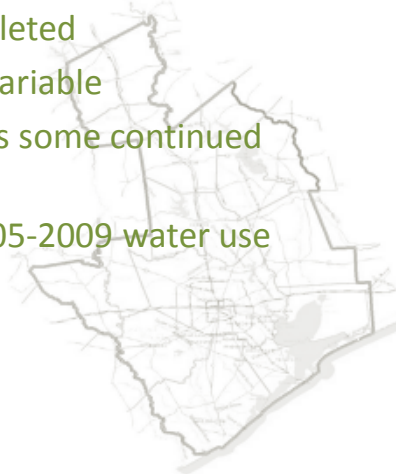


Region H Mining Demands						
Proposed Draft Projections for 2017 SWP (to TWDB)						
County Name	2020	2030	2040	2050	2060	2070
Austin	198	391	304	217	130	78
Brazoria	981	1,184	1,380	1,599	1,833	2,121
Chambers	8,201	8,201	8,201	8,201	8,201	8,201
Fort Bend	72	75	57	42	28	21
Galveston	381	407	450	486	519	549
Harris	3,273	3,252	3,194	3,160	3,133	3,110
Leon	2,386	3,262	2,625	1,739	854	424
Liberty	436	457	446	468	496	539
Madison	523	1,089	843	596	350	206
Montgomery	1,453	1,363	1,077	921	807	728
Polk	8	8	8	8	8	8
San Jacinto	8	8	9	9	9	9
Trinity	5	5	5	5	5	5
Walker	11	11	11	11	11	11
Waller	7	7	7	7	7	7
<b>Total</b>	<b>17,943</b>	<b>19,720</b>	<b>18,617</b>	<b>17,469</b>	<b>16,391</b>	<b>16,017</b>

## Mining Alternative Projection Methods

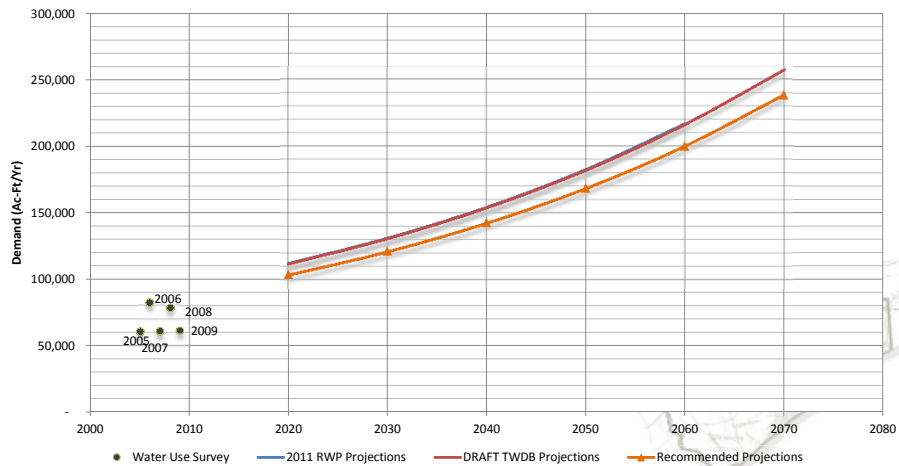
- Chambers County

- Major sulfur extraction depleted
- Historical demands highly variable
- Water User Survey indicates some continued activity
- Recommend average of 2005-2009 water use



## Steam-Electric Demand Projections

Total Steam Electric Demand Projections





## Steam-Electric Demand Projections by County



Region H Steam-Electric Demands						
Proposed Draft Projections for 2017 SWP (to TWDB)						
County Name	2020	2030	2040	2050	2060	2070
Austin	0	0	0	0	0	0
Brazoria	0	0	0	0	0	0
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
Galveston	0	0	0	0	0	0
Harris	23,556	27,540	32,396	38,316	45,532	54,106
Leon	0	0	0	0	0	0
Liberty	0	0	0	0	0	0
Madison	238	278	327	387	459	546
Montgomery	8,537	9,981	11,741	13,886	16,502	19,611
Polk	0	0	0	0	0	0
San Jacinto	0	0	0	0	0	0
Trinity	0	0	0	0	0	0
Walker	0	0	0	0	0	0
Waller	0	0	0	0	0	0
<b>Total</b>	<b>103,629</b>	<b>121,153</b>	<b>142,518</b>	<b>168,559</b>	<b>200,304</b>	<b>238,800</b>

## Steam-Electric Alternative Projection Methods



- Removed demands from co-generation
  - Brazoria County
  - Galveston County
- Removed demands from air-cooled facilities
  - Liberty County

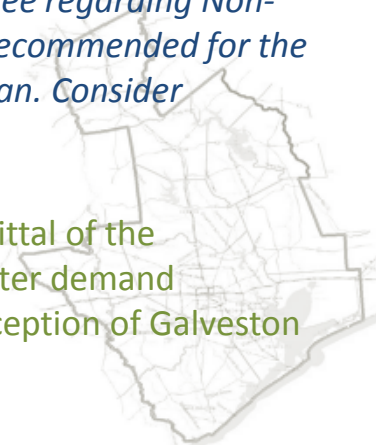


Agenda Item 8  
Non-Pop. Demand Projections Update



*Item 8: Receive update from Consultant Team and Non-Population Demands Subcommittee regarding Non-Population Demand Projections recommended for the 2016 Region H Regional Water Plan. Consider approving submittal to TWDB.*

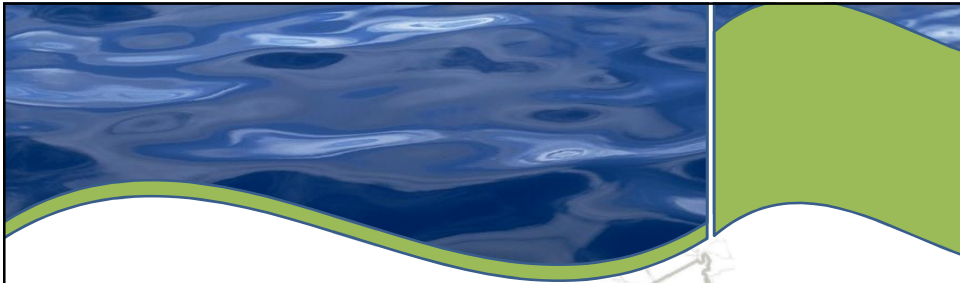
Consider action to approve submittal of the recommended non-municipal water demand projections to TWDB with the exception of Galveston County manufacturing demands.



## Agenda Items 9

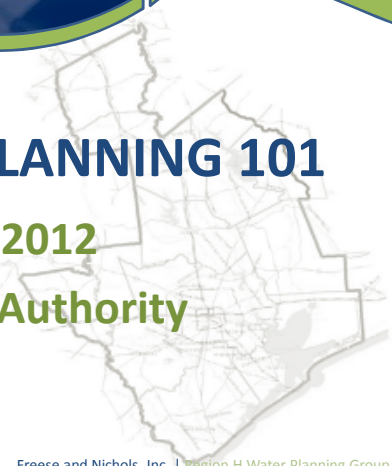
Receive presentation from Jace Houston, Consultant Team,  
and TWDB on the Regional Planning process.






# **REGIONAL WATER PLANNING 101**


**February 29, 2012**  
**San Jacinto River Authority**



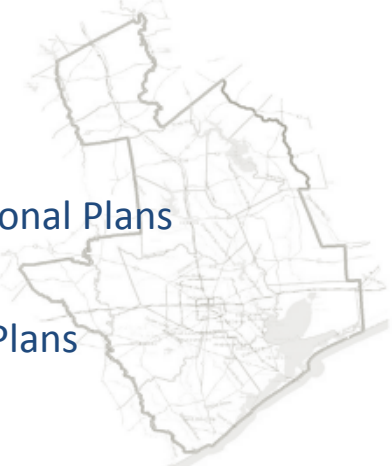
Freese and Nichols, Inc. | Region H Water Planning Group



## RWP 101: Presentation Outline



- History of Regional Water Planning in Texas
- Planning Levels
- Process of Developing Regional Plans
- Output of Regional Water Plans



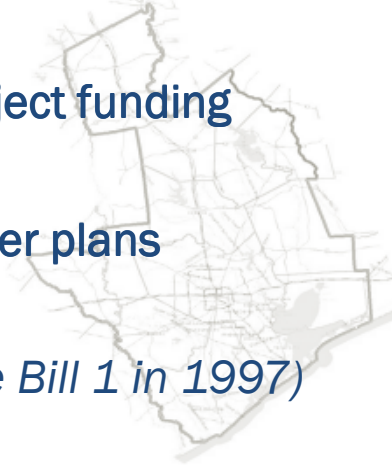


## HISTORY OF THE REGIONAL WATER PLANNING PROCESS

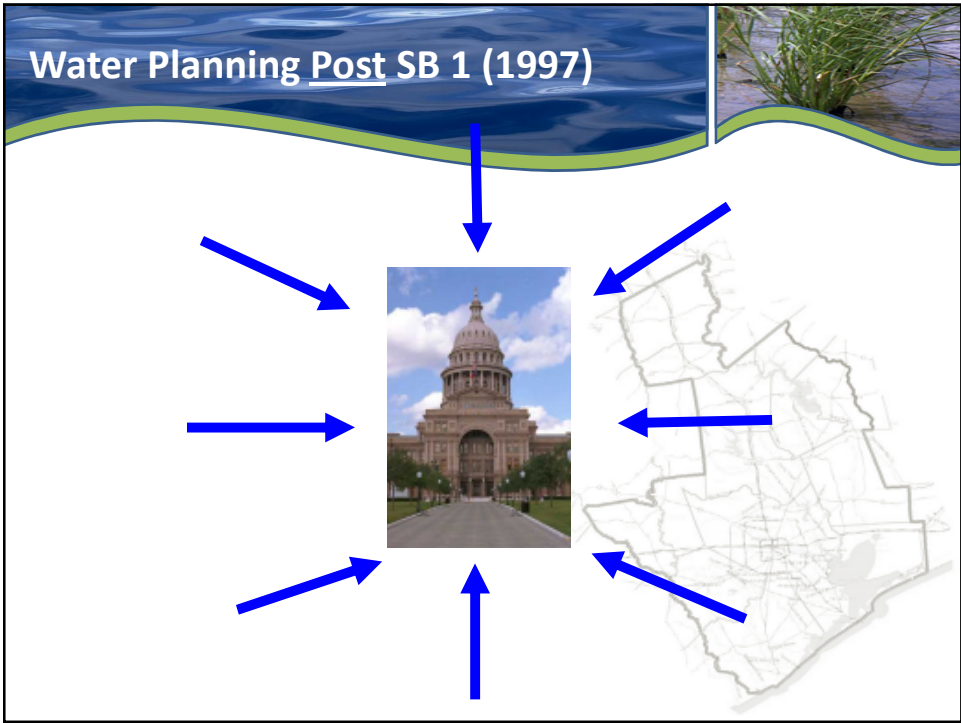
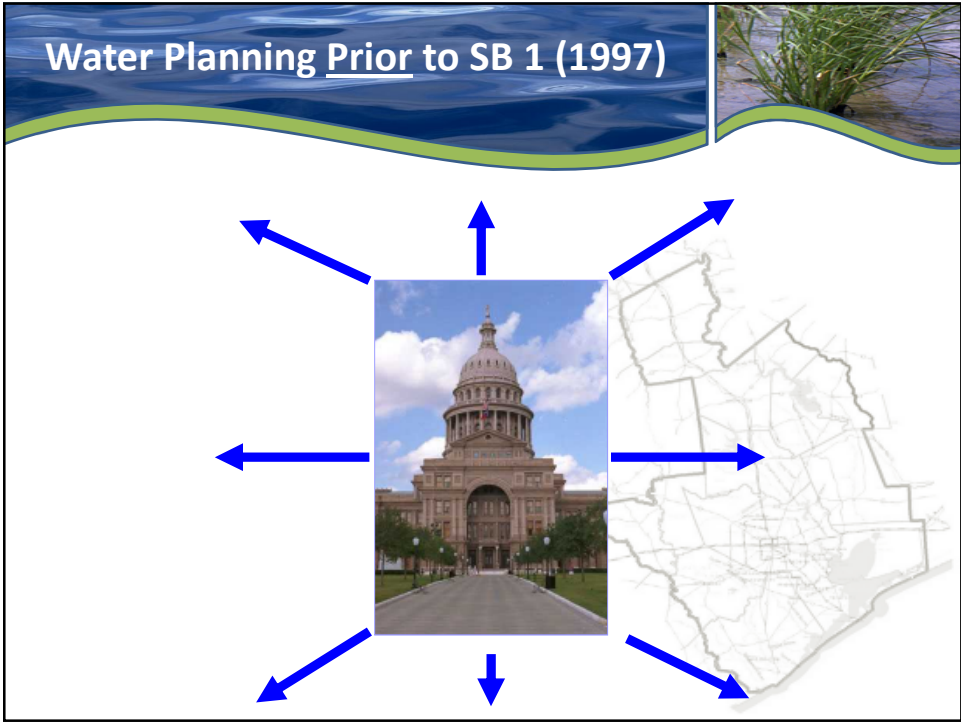
How did the planning process start?



TWDB was created in 1957 to:

- Provide water project funding
  - Prepare state water plans
- 

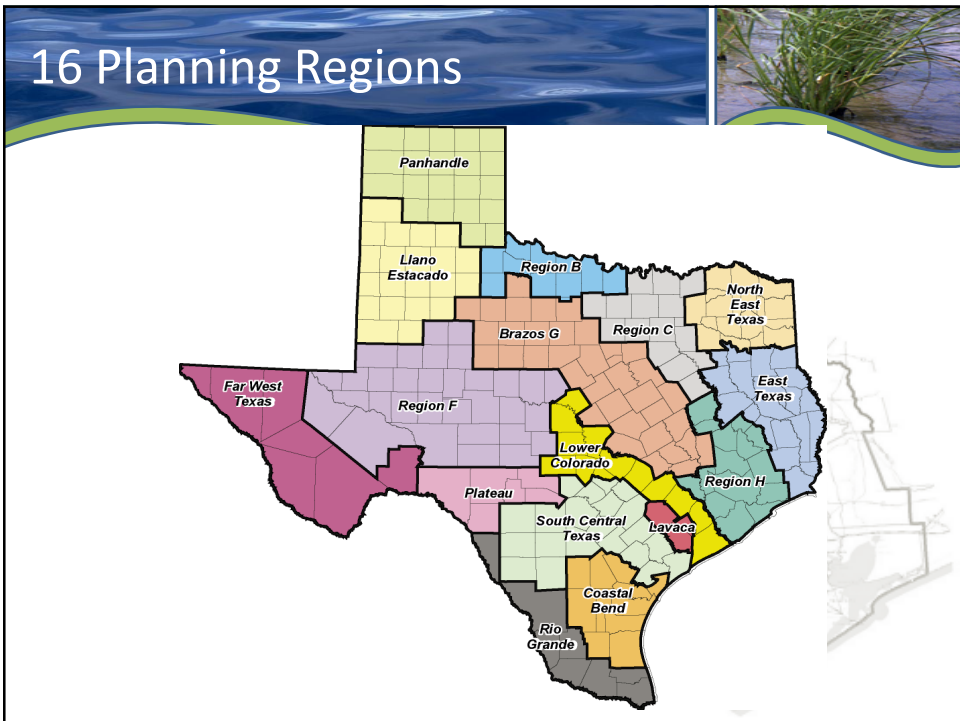
*(Major shift with Senate Bill 1 in 1997)*



**PLANNING LEVELS**  
To what detail is planning conducted?



**16 Planning Regions**





## Regional Planning Level

- Break regions into Water User Groups (WUGs)
  - Subdivision of significant measureable water users
- Population Demands
  - Sub-county level
- Non-Population Demands
  - County Level



## Texas Water User Groups

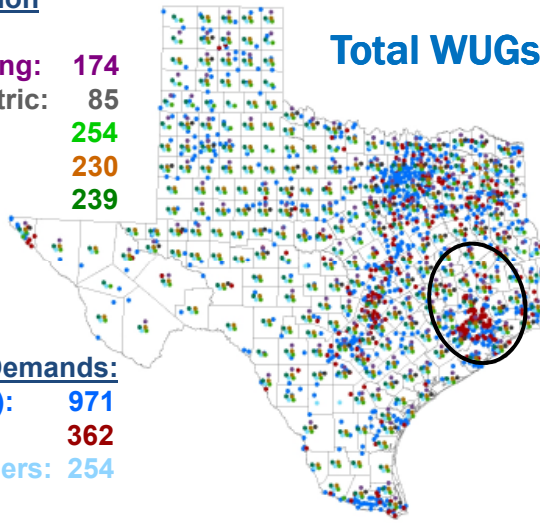
### Non-Population Demands:

- Manufacturing: 174
- Steam Electric: 85
- Livestock: 254
- Mining: 230
- Irrigation: 239

**Total WUGs ≈ 2,600**

### Population Demands:

- Cities (>500): 971
- Utilities: 362
- County-Others: 254



Regional Planning:  
*What it is vs. What it isn't*

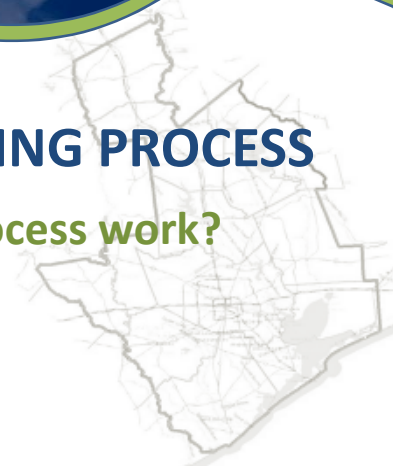


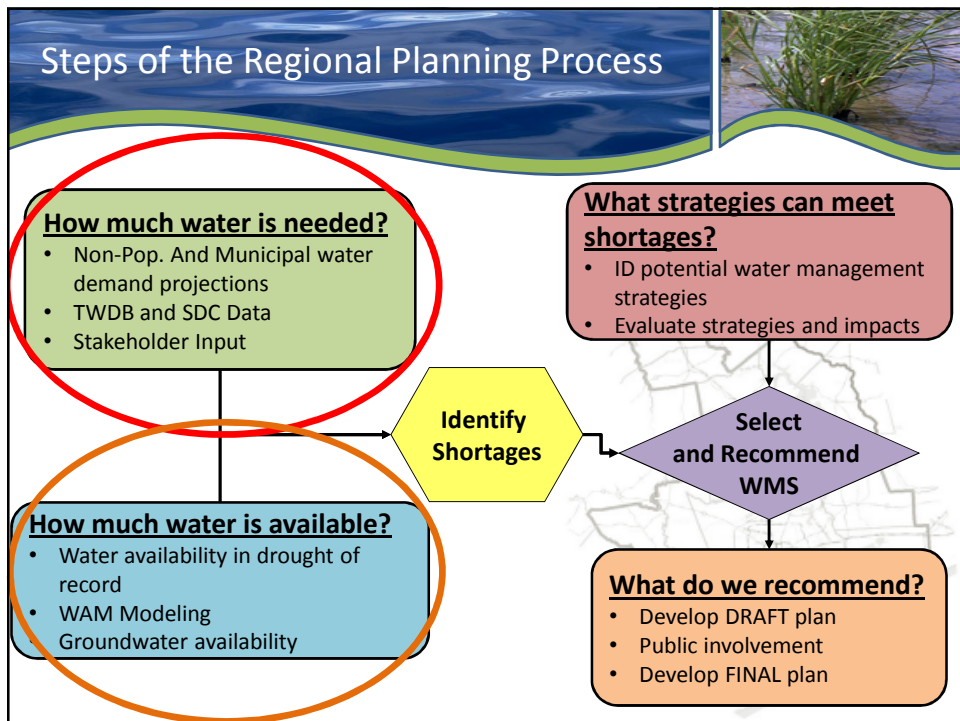
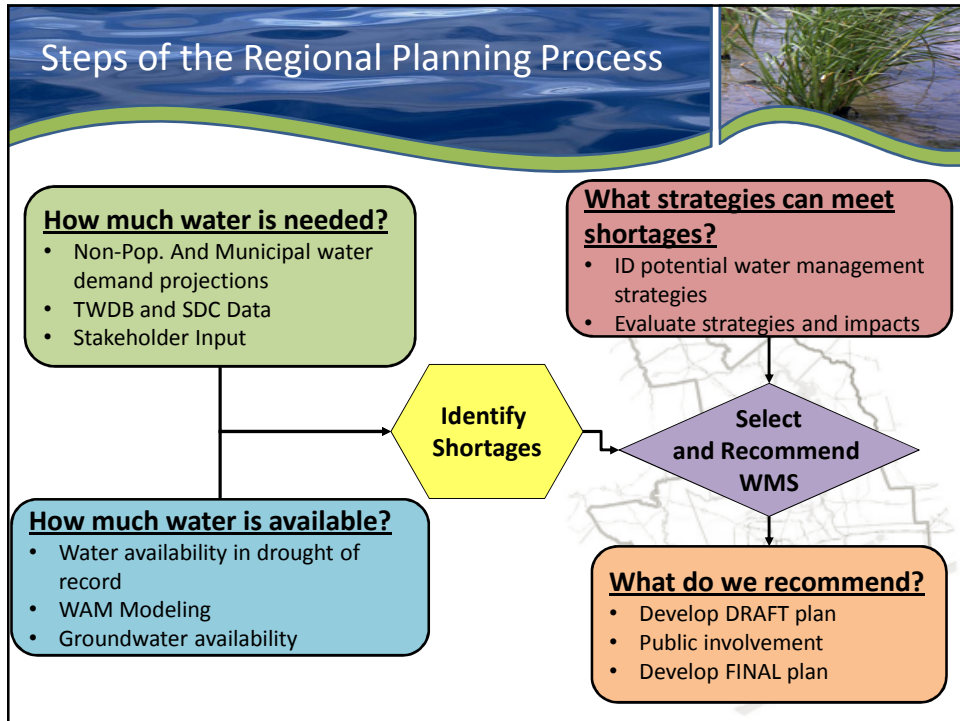
- What regional planning is:
  - Builds upon local planning
  - Coordinated grassroots effort
  - Long-range regional direction
  - Opportunity for public communication, outreach, and feedback
- What regional planning is NOT:
  - Replacement for local-level planning
  - Mandate to implement strategies
  - Means to fund or implement strategies

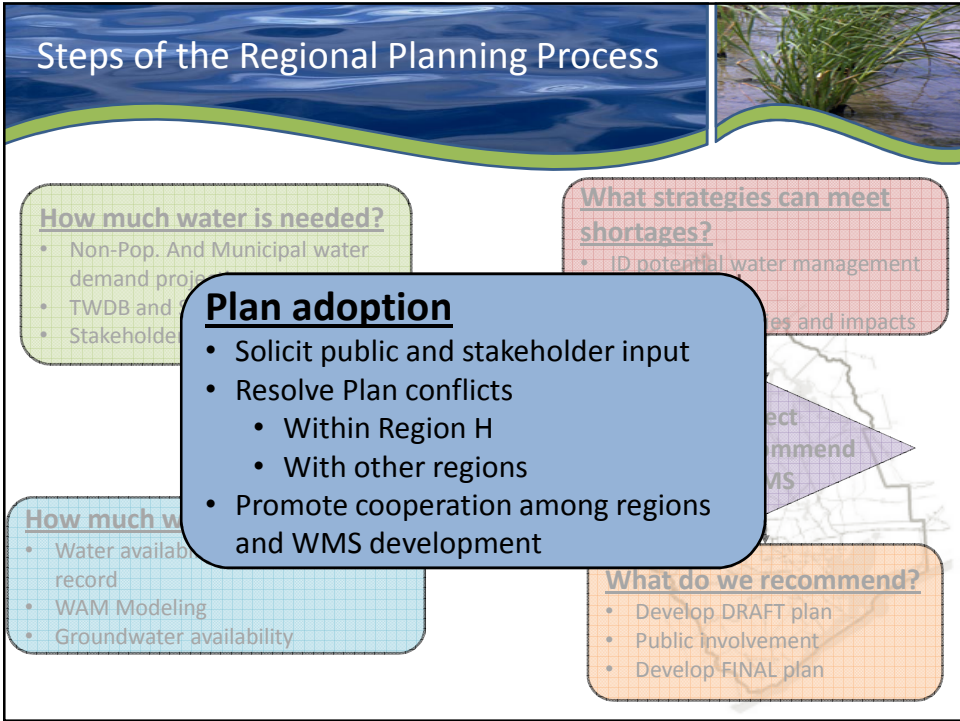


**REGIONAL PLANNING PROCESS**

How does the process work?







## REGIONAL PLANNING OUTPUTS

What comes out of the regional planning process?

## Regional Planning Outputs

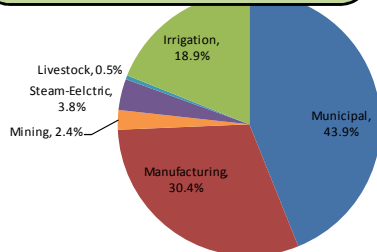
- 50 year plan
  - Demand projections
  - Supply projections
  - Shortages
  - Strategies to meet shortages
- Uncertainty increases over time
- No mandate to implement strategies
  - Project sponsors conduct detailed studies and complete projects
  - Strategies must be included in plan for TWDB project funding
- Repeated every 5 years



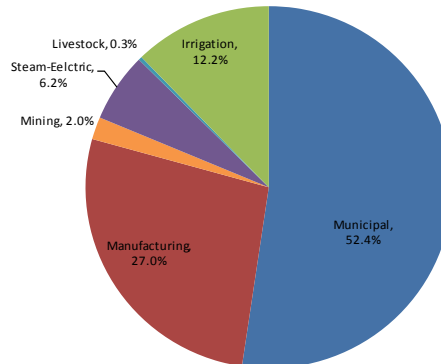
## 2011 Region H Plan Output: Demand Comparison – 2010 and 2060

### How much water is needed?

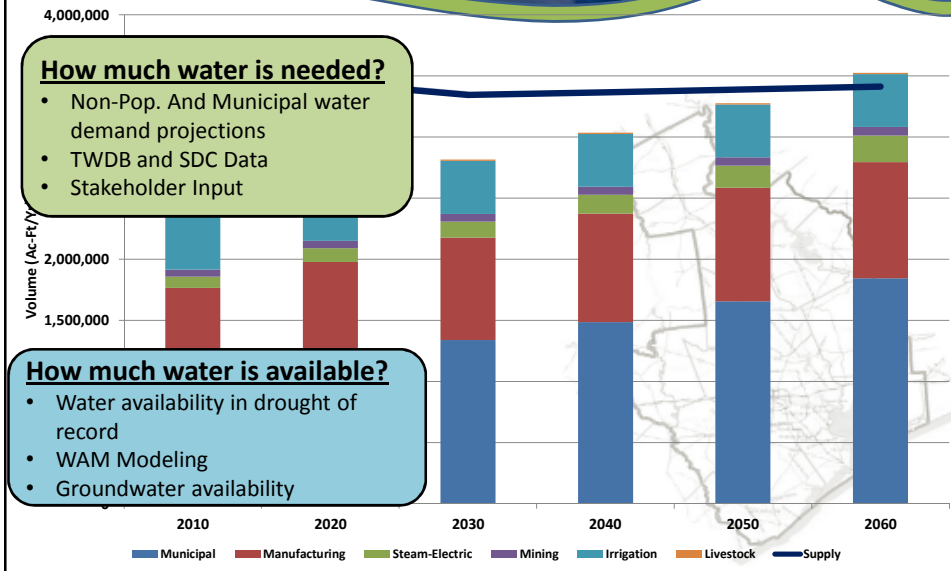
- Non-Pop. And Municipal water demand projections
- TWDB and SDC Data
- Stakeholder Input



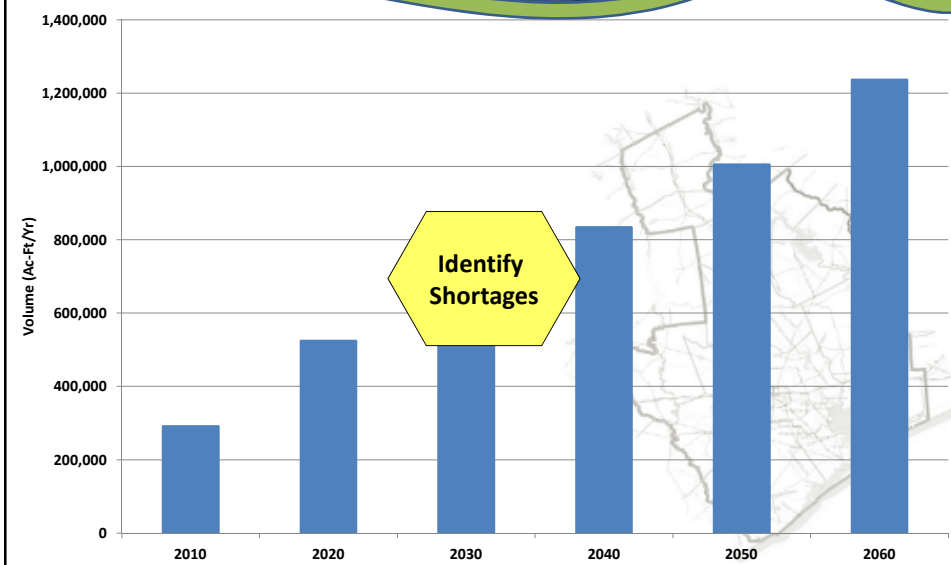
### Year 2060 Demand Total Demand of 3.53 Mil. Ac-Ft/Yr



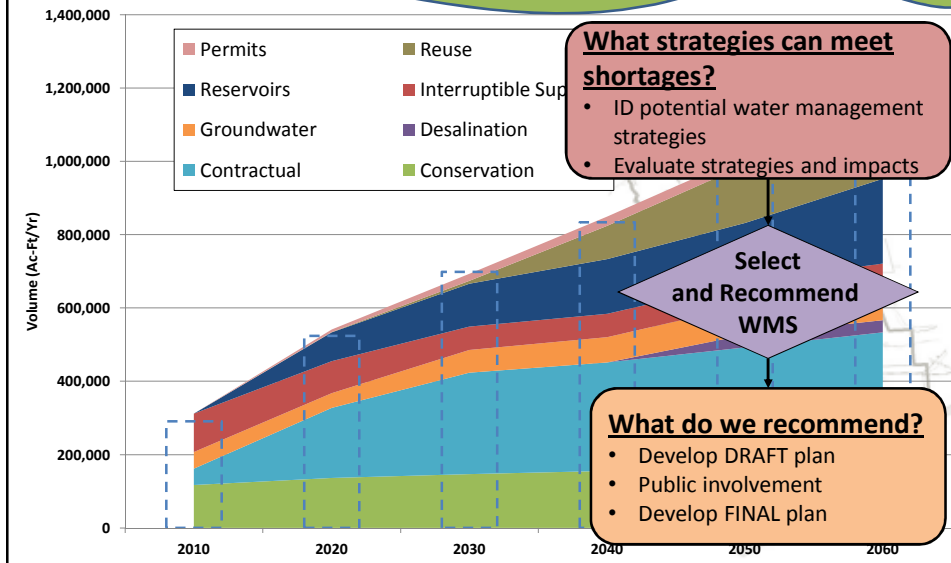
## 2011 Region H Plan Output: Water Demand and Supply Projections



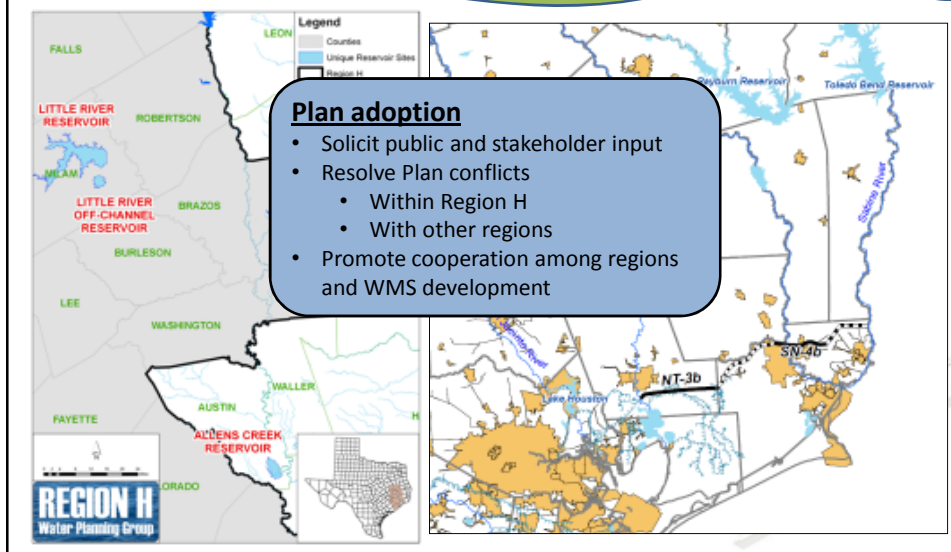
## 2011 Region H Plan Output: Shortages and Management Strategies



## 2011 Region H Plan Output: Shortages and Management Strategies



## 2011 Region H Plan Output: Plan Adoption







## Agenda Items 10

Receive presentation from TWDB on Draft Rule Revisions related to Regional Water Planning.



# Texas Regional Water Planning Prepublication Rule Revisions

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February 2012 | Temple McKinnon

TWDB Regional Water Planning



## Texas Statute and Administrative Rules

### Texas Water Code, Ch. 16, SubCh. C:

- Section 16.051: State Water Plan
- Section 16.053: Regional Water Planning

### Texas Admin Code, Title 31, Part 10:

- \*Chapter 357: Regional Water Planning
- Chapter 358: State Water Planning
- Chapter 355: Research & Planning Funding

\*prepublication draft sent to stakeholders in Dec.

## Rule Revision Process

Obtain initial input for early draft from:

- State agencies
- RWPG members
- Other stakeholders

Develop formal draft rule revisions for publication

- Obtain Board Approval to publish
- Publish and accept comment (30 days)

Revise and adopt final rules

### In drafting rule revisions TWDB staff...

- began by reorganizing current rule content
- retaining original language where possible

#### then:

- made substantive revisions to language
- removed statutory and other language where possible

## Existing Rules

- §357.1. General
- §357.2. Definitions
- §357.3. Designation of Regional Water Planning Areas
- §357.4. Designation of Regional Water Planning Groups
- §357.5. Guidelines for Development of Regional Water Plans
- §357.6. Preplanning
- §357.7. Regional Water Plan Development
- §357.8. Ecologically Unique River and Stream Segments
- §357.9. Unique Sites for Reservoir Construction
- §357.10. Format of Information to be Presented in Regional Water Plans
- §357.11. Adoption of Regional Water Plans by Regional Water Planning Groups
- §357.12. Notice and Public Participation
- §357.13. Consistency with Regional Water Plan
- §357.14. Approval of Regional Water Plans by the Board
- §357.15. Interaction with Groundwater Conservation District Management Plans
- §357.16. Minor Amendments and Clean Coal Project Amendments to Regional Water Plans and State Water Plan

## Prepublications Rule Revisions

- §357.A. Definitions and Acronyms
- 357.B. Designations
- §357.C. General Regional Water Planning Group Responsibilities and Procedures
- §357.D. Guidance Principles for State and Regional Water Planning
- §357.E. Notice and Public Participation
- §357.F. General Considerations for Development of Regional Water Plans
- §357.G. Description of the Regional Water Planning Area
- §357.H. Projected Population and Water Demands
- §357.I. Water Supply Analysis
- §357.J. Comparison of Water Supplies and Demands (Needs analysis)
- §357.K. Identification and Evaluation of Potentially Feasible Water Management Strategies
- §357.L. Drought Response Information, Activities, and Recommendations**
- §357.M. Recommended Water Management Strategies and Alternative Water Management Strategies
- §357.N. Regulatory, Administrative, or Legislative Recommendations
- §357.O. Infrastructure Financing Analysis
- §357.P. Consistency with Long-term Protection of water resources, agricultural resources, and Natural Resources
- §357.Q. Changes to the Regional Water Plan**
- §357.R. Adoption, Submittal, and Approval of Regional Water Plans
- §357.S. Consistency of Regional Water Plans
- §357.T. Intraregional Conflicts in Development of Regional Water Plans
- §357.U. Failure of a Regional Water Plan to Meet Regional Water Planning Requirements
- §357.V. Interregional Conflicts
- §357.W. Conflicts Between Regional Water Plans and Groundwater Management Plans
- §357.X. Amendments to Regional Water Plans

## Purpose of Revisions

### Align with statute:

- Related to GMA representation
- Use of MAGs
- Obtain information on implementation of water management strategies

## Purpose of Revisions

### Consolidate and organize existing rules:

- Eliminate redundancy
- Simplify & shorten sections
- Provide logical order that aligns with practice

## Purpose of Revisions

### Update planning process:

- To support other state agency drought activities
- Improve planning process and plan content
- To elevate certain existing guidance requirements

## New Proposed Plan Sections or Chapters

- Consolidation of drought plans/activities
- Summary of changes since last plan  
(TWDB would assist with data summaries)

## Significant New Proposed Analyses/Content

- Identification of potential emergency sources for smaller entities
- Evaluate implementation of last plan

## Significant New Proposed Analyses/Content *(to be provided by TWDB)*

- Secondary needs analysis
- 'Planning safety factor'





## Additional Significant Proposed Revisions

- Simplified public notice requirements
- Clarified water availability & supply analyses to better align with practice

## Questions?

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**Texas Water Development Board**

Temple McKinnon [temple.mckinnon@twdb.texas.gov](mailto:temple.mckinnon@twdb.texas.gov)





## Agenda Items 12

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



Agenda Item 12  
Community Outreach



- **Brazoria County Water for Our Future Task Force**  
Brazoria County Commissioners Court  
January 24, 2012
- **Houston Land Water Sustainability Forum**  
March 27, 2012



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





