

**HANDOUT C: DRAFT - CONCEPTUAL 5th PLANNING CYCLE SCHEDULE**

TASK	MONTHS	2016					2017					2018					2019					2020													
		J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O
1 <b>31 TAC 357, 358 RULE AND GUIDANCE REVISIONS</b>	8	■	■	■	■	■	■	■																											
2 * Take final rules for adoption to Board	1																																		
3	0																																		
4 <b>CONTRACT AMENDMENTS FOR 5TH CYCLE</b>	0																																		
5 Contract amds to complete SOW and partial funds	5							■	■	■	■	■																							
6 85th Legislative session	5										■	■	■	■	■																				
7 Contract amendment to extend 5th cycle funding	4																																		
8 86th Legislative session	5																																		
9 Contract amendment to complete 5th cycle funding	4																																		
10	0																																		
11 <b>PROJECTIONS</b>	27	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■		
12 Take projections to Board for approval	0																																		
13	0																																		
14 Tech memo due 9/10/2018	1																																		
15 IPPs due 3/3/2020	1																																		
16 Final plans due 9/2/2020	1																																		

RWPs DUE



**RWPG CHAIRS CONFERENCE CALL, JANUARY 26, 2016**  
**Handout E - Potential Projection Distribution to RPWGs for the 2021**  
**Regional Water Plans and 2022 State Water Plan (5<sup>th</sup> Cycle)**

<b>Deliver-able</b>	<b>Date</b>	<b>Activity</b>	<b>Months Prior To IPP Due Date</b>
	January 6, 2016	Beginning of planning period	50
A	July 1, 2016	Release to RWPGs for Review: <ul style="list-style-type: none"> <li>• List of new Municipal WUGs under the new utility-planning process.</li> </ul>	44
B	Oct. 1, 2016 – Dec. 31, 2016	Release to RWPGs for Review: <ul style="list-style-type: none"> <li>• Draft Pop Projections (2017SWP projections adjusted to utility boundaries)</li> <li>• Draft Mun Projections (2017SWP Base GPCD and water efficiency savings)<sup>2</sup></li> <li>• Draft Livestock Projections</li> <li>• Draft Mining Projections</li> </ul>	36-39
	January – June, 2017	LEGISLATIVE SESSION	
C	June 2017	Release to RWPGs for Review: <ul style="list-style-type: none"> <li>• Draft Irrigation Projections (new)?</li> <li>• Draft Manufacturing Projections (new)?</li> <li>• Draft Steam-Electric Power Projections (new)?</li> </ul>	33
D	July, 2017	Release historical (2011 – 2015) utility GPCD to use as alternate base values.	32
E	January, 2018 (6 months after last draft posting)	Deadline for projections adjustment requests.	26
F	March 2018	Take projections to the Board for approval	24
	<b>March 2020</b>	<b>2021 IPPs Due to TWDB</b>	<b>0</b>

Exhibit A

Fifth Cycle of Regional Water Planning

Initial Scope of Work

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## **Task 2A- Non-Population Related Water Demand Projections<sup>1</sup>**

Texas Water Development Board (TWDB) staff will provide draft water demand and projections for 2020- 2070 for all water demands unrelated to population (e.g. mining, manufacturing, irrigation, steam-electric power, and livestock) based on the projections from the 2017 State Water Plan updated in some cases based on the most recent TWDB historical water use estimates.

TWDB staff will update water demand projections for all associated Water User Groups (WUGs) and provide draft estimates to RWPGs for their review and input.

Each RWPG will then review the draft projections and may provide input to TWDB or request specific changes to the projections from TWDB.<sup>2</sup> The emphasis of this effort will be on identifying appropriate modifications based on relevant changed conditions that have occurred since the development of the projections used in the 2017 State Water Plan.

If adequate justification is provided by the RWPG to TWDB, water demand projections may be adjusted by the TWDB in consultation with TDA, TCEQ, and TPWD. Once RWPG input and requested changes are considered, final water demand projections will be adopted by the TWDB's governing Board (Board). The adopted projections will then be provided to each RWPG. RWPGs must use the Board-adopted projections when preparing their regional water plans.

TWDB will directly populate DB22 with all WUG-level projections and make related changes to DB22 based on Board-adopted projections.

This Task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to:

- a) In addition to generally meeting all applicable rules and statute requirements governing regional and state water planning under 31 TAC Chapters 357 and 358, this portion of work shall, in particular, include all work necessary to meet all the requirements of 31 TAC §357.31.<sup>3</sup>
- b) Prepare a stand-alone chapter<sup>4</sup> (including work from both Tasks 2A & 2B) to be included in the 2021 adopted final Regional Water Plan (RWP) that also incorporates all required TWDB DB22 reports into the document.

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<sup>1</sup> Requirements are further explained in the guidance document *General Guidelines for Fifth Cycle of Regional Water Plan Development*.

<sup>2</sup> All requests to adjust draft population or water demand projections must be submitted along with associated data in an electronic format determined by TWDB (e.g., fixed format spreadsheets)

<sup>3</sup> Requirements are further explained in the guidance document *General Guidelines for Fifth Cycle of Regional Water Plan Development*.

<sup>4</sup> This shall be a separate chapter as required by 31 TAC §357.22(b).

- c) Receive and make publicly available the draft water demand projections provided by TWDB.
- d) Evaluate draft water demand projections provided by TWDB.
- e) Review comments received from local entities and the public for compliance with TWDB requirements.
- f) Provide detailed feedback to TWDB on water demand projections, as necessary, including justification and documentation supporting suggested changes with a focus on relevant changed conditions that have occurred since the development of the projections used in the 2017 State Water Plan.
- g) Prepare and submit numerical requests for revisions, in tabular format in accordance with TWDB guidance, of draft water demand projections and process such requests based on, for example, requests from local entities within the region. The RWPG and/or local entities should provide required documentation and justification of requested revisions.
- h) Communicate and/or meet with TWDB staff and/or local entities requesting revisions, as necessary.
- i) Assist TWDB, as necessary, in resolving final allocations of water demands to water user groups to conform with any control totals defined by TWDB, for example, by county and/or region.
- j) Prepare water demand projection summaries for WUGs using final, Board-adopted projections to be provided by the TWDB, as necessary.
- k) Modify any associated water demand projections for Wholesale Water Providers (WWPs), as necessary based on final, Board-adopted projections.
- l) Review the *TWDB DB22 Non-Population Related<sup>5</sup> Water Demand* report from the DB22 and incorporate this planning database report into any Technical Memoranda and Initially Prepared Plan (IPP) and adopted regional water plans (labeled as such and with source reference).
- m) Modify any aggregated water demand summaries, for example, for Wholesale Water Providers (WWPs) or irrigation districts, accordingly incorporate this planning database report into any Technical Memoranda and IPP and adopted regional water plans (labeled as such and with source reference).
- n) Update WWP contractual obligations and WUG 'seller' obligations to supply water to other entities and report this information along with projected demands including within the DB22

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<sup>5</sup> All 'TWDB DB22...' reports will be provided by TWDB through the online planning database web interface as a customizable report that can be downloaded by RWPGs and must be included as part of any Technical Memoranda and water plan.

and within any planning memorandums or reports, as appropriate.

## **Task 2B- Population and Population-Related Water Demand Projections<sup>6</sup>**

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TWDB staff will prepare draft population and associated water demand projections for 2020-2070 for all population-related water user groups using data based on the population projections in the 2017 State Water Plan as reassembled by utility service areas.

TWDB staff will develop population projections and associated water demand projections for all Water User Groups (WUGs) based on utility service areas and provide them to RWPGs for their review and input.

Because there won't be new U.S. Census data available in time to incorporate into the 2021 adopted final Regional Water Plans, the emphasis of this work will be on the transition of the 2017 State Water Plan population projections and the associated water demand projections from political boundaries to utility service area boundaries and to making limited modifications based on relevant changed conditions that have occurred since the development of the projections used in the 2017 State Water Plan.

RWPGs shall then review the draft projections and may provide input to TWDB or request specific changes to the projections from TWDB. If adequate justification is provided by the RWPGs to TWDB, population and/or water demand projections may be adjusted by the TWDB in consultation with TDA, TCEQ, and TPWD. Once RWPG input and requested changes are considered, final population and associated water demand projections will be adopted by the Board. The adopted projections, based on utility service areas, will then be provided to RWPGs. RWPGs must use the Board-adopted projections when preparing their regional water plans and identify WUGs with associated utility service areas.

TWDB will directly populate the DB22 with all WUG-level projections and make related changes to the DB22 if revisions are made.

This Task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to:

- a) In addition to generally meeting all applicable rules and statute requirements governing regional and state water planning under 31 TAC Chapters 357 and 358, this portion of work shall, in particular, include all work necessary to meet all the requirements of 31 TAC §357.31<sup>7</sup>.

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<sup>6</sup> Requirements are further explained in the guidance document *General Guidelines for Fifth Cycle of Regional Water Plan Development*.

<sup>7</sup> Requirements are further explained in the guidance document *General Guidelines for Fifth Cycle of Regional Water Plan Development*

- b) Prepare a stand-alone chapter<sup>8</sup> (including work from both Tasks 2A & 2B) to be included in the 2021 adopted final Regional Water Plan (RWP) that also incorporates all of required TWDB DB22 reports into the document.
- c) Receive and make publicly available the draft population and associated water demand projections provided by TWDB and that are based on utility service areas rather than political boundaries.
- d) Evaluate draft population and associated water demand projections provided by TWDB.
- e) Review comments received from local entities and the public for compliance with TWDB requirements.
- f) Provide detailed feedback to TWDB on both population and associated water demand projections, as necessary, including justification and documentation supporting suggested changes with a focus on the transition to utility service areas and, more generally, relevant changed conditions that have occurred since the development of the projections used in the 2017 State Water Plan.
- g) Prepare and submit numerical requests, in tabular format in accordance with TWDB guidance, for revisions of draft population and/or water demand projections and process such requests based on, for example, requests from local entities within the region. The RWPG and/or local entities should provide required documentation and justification of requested revisions.
- h) Communicate and/or meet with TWDB staff and/or local entities requesting revisions, as necessary.
- i) Assist TWDB, as necessary, in resolving final allocations of population and water demands to water user groups to conform with any control totals defined by TWDB, for example, by county and/or region.
- j) Prepare population and water demand projection summaries for WUGs using final, adopted projections to be provided by the TWDB, as necessary for presentation in documents.
- k) Consider and include in all appropriate planning documents the projections of population and associated water demands for any new WUGs to be provided by the TWDB.
- l) Modify any associated water demand projections for Wholesale Water Providers (WWP), as necessary based on final, adopted projections.
- m) Review the TWDB DB22 Population and associated TWDB DB22 Population-Related Water

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<sup>8</sup> This shall be a separate chapter as required by 31 TAC §357.22(b).

Demand reports from the DB22<sup>9</sup> and incorporate these planning database reports into any Technical Memoranda, the IPP and adopted final regional water plans (labeled as such and with source reference).

- n) Modify any aggregated water demand summaries. For example, for WWPs, accordingly and present in planning documents.
- o) Update WWP contractual obligations and WUG 'seller' obligations to supply water to other entities and report this information along with projected demands including within DB22 and within any planning memorandums or reports, as appropriate.

### **Task 10- Public Participation and Plan Adoption<sup>10</sup>**

The objective of this task is to address public participation, public meetings, eligible administrative and technical support activities, and other requirements and activities eligible for reimbursement and necessary to complete and submit an IPP and final RWP and obtain TWDB approval of the RWP.

Work shall include but not be limited to the following:

- a) In addition to generally meeting all applicable statute requirements governing regional and state water planning this portion of work shall, in particular, include all technical and administrative support activities necessary to meet all the requirements of 31 TAC Chapters 355, 357, and 358 that are not already addressed under the scope of work associated with other contract Tasks but that are necessary and or required to complete and deliver an IPP and final, adopted RWP to TWDB and obtain approval of the adopted RWP by TWDB<sup>11</sup>
- b) Organization, support, facilitation, and documentation of all meetings/hearings associated with: preplanning meeting; meetings associated with revision of projections; consideration of a substitution of alternative water management strategies; public hearing after adoption of the IPP and prior to adoption of the final RWP: and consideration of a Minor Regional Water Plan Amendments.

### **Technical Support and Administrative Activities**

- c) Attendance and participation of technical consultants at RWPG, subgroup, subcommittees, special and or other meetings and hearings including preparation and follow-up activities.
- d) Developing technical and other presentations and handout materials for regular and special meetings to provide technical and explanatory data to the RWPG and its

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<sup>9</sup> RWPG technical consultants must attend mandatory training on the Regional Water Planning Application (DB22).

<sup>10</sup> Requirements are further explained in the guidance document *General Guidelines for Fifth Cycle of Regional Water Plan Development*.

<sup>11</sup> Requirements are further explained in the guidance document *General Guidelines for Fifth Cycle of Regional Water Plan Development*.



subcommittees, including follow-up activities.

- e) Collecting and evaluating information, including any information gathering surveys from water suppliers or WUGs, (e.g., on existing infrastructure: existing water supplies; potentially feasible WMSs) and or maintenance of contact lists for regional planning information in the region.
- f) Administrative and technical support and participation in RWPG activities, and documentation of any RWPG workshops, work groups, subgroup and/or subcommittee activities.
- g) Technical support and administrative activities associated with periodic and special meetings of the RWPG including developing agendas and coordinating activities for the RWPG.
- h) Provision of status reports to TWDB for work performed under this Contract.
- i) Development of draft and final responses for RWPG approval to public questions or comments as well as approval of the final responses to comments on RWP documents.
- j) Intraregional and interregional coordination and communication, and or facilitation required within the RWPA and with other RWPGs to develop a RWP including with water suppliers or other relevant entities such as groundwater conservation districts, WUGs, and or WWPs.
- k) Incorporation of all required DB22 reports into RWP document.
- l) Modifications to the RWP documents based on RWPG, public, and or agency comments.
- m) Preparation of a RWP chapter summarizing Task 10 activities including review by RWPG and modification of document as necessary.
- n) Development and inclusion of Executive Summaries in both IPP and final RWP.
- o) Production, distribution, and submittal of all draft and final RWP-related planning documents for RWPG, public and agency review, including in hard-copy format when required.
- p) Assembling, compiling, and production of the completed IPP and adopted final Regional Water Plan document(s) that meet all requirements of statute, 31 TAC Chapters 355, 357 and 358, Contract and associated guidance documents.
- q) Submittal of the RWP documents in both hard copy and electronic formats to TWDB

for review and approval; and all effort required to obtain final approval of the RWP by TWDB.

### **Other Activities**

- r) Review of all RWP-related documents by RWPG members.
- s) Limited non-labor, direct costs associated with maintenance of the RWPG website.
- t) Development of agendas, presentations, and handout materials for the public meetings and hearings to provide to the general public.
- u) Documentation of meetings and hearings to include recorded minutes and or audio recordings as required by the RWPG bylaws and archiving and provision of minutes to public.
- v) Preparation and transmission of correspondence, for example, directly related to public comments on RWP documents.
- w) Promoting consensus decisions through conflict resolution efforts including monitoring and facilitation required to resolve issues between and among RWPG members and stakeholders in the event that issues arise during the process of developing the RWP, including mediation between RWPG members, if necessary.
- x) RWPG membership solicitation activities.
- y) Meeting all posting, meeting, hearing and other public notice requirements in accordance with the open meetings act, statute, and 31 TAC §357.21 and 31 TAC Chapter 355 and any other applicable public notice requirements.
- z) Solicitation, review, and dissemination of public input, as necessary.

**Deliverables:** Complete IPP and final, adopted RWP documents shall be delivered as work products. This includes a completed Chapter 10 summarizing public participation activities and appendices with public comments and RWPG responses to comments.

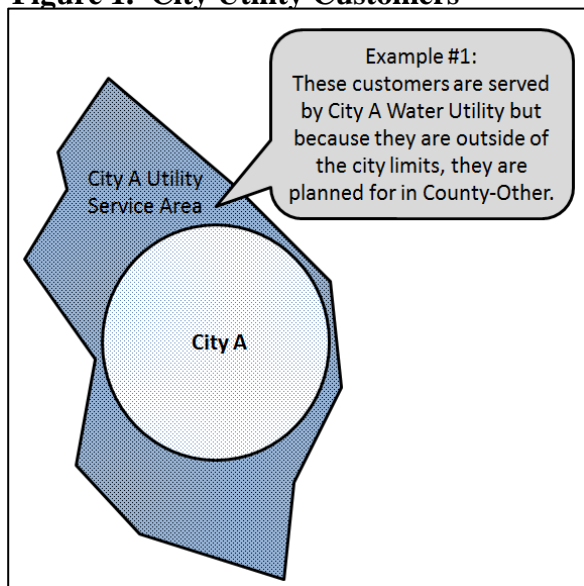
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## **RWPG CHAIRS CONFERENCE CALL, JANUARY 26, 2016 HANDOUT D - UTILITY BOUNDARY PLANNING IN THE 2022 STATE WATER PLAN**

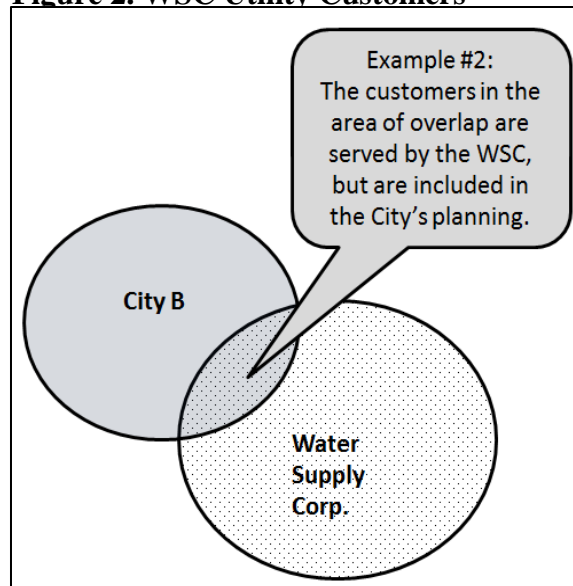
In an effort to better align regional and state water planning with water project sponsors and actual project implementation, as well as with water use data reporting, TWDB will be developing the next population and municipal water demand projections based upon water provider service areas rather than political boundaries. These projections will be the basis for the development of the 2021 regional water plans and 2022 state water plan.

Previous regional and state water plans have been aligned with political boundaries rather than water provider service areas, although many of these may coincide. The emphasis on political boundaries such as city limits rather than utility boundaries created plan configurations that often do not reflect the reality of water supply management and project implementation (Figure 1 and 2).

**Figure 1. City Utility Customers**



**Figure 2. WSC Utility Customers**



In the first figure, rather than the utility's customers being split between the city and county-other, under this new approach all of the City A Utility customers will be planned for together. In the second figure, instead of the population served by the Water Supply Corporation (WSC) being counted as part of the city, these customers will now be counted with the WSC and planned for accordingly.

Developing water plans based on water provider boundaries will allow for a more realistic portrayal of water needs and project sponsors in the water plans. Annual water use data (including water sources) is already reported to TWDB by each water utility as a whole and is

used to calculate the gallons-per-capita-per-day (gpcd) estimates for regional water planning. Developing the utility-based population projections that, combined with the gpcd, will provide water demand projections for each water utility is made feasible through more recently available mapping techniques as well as more accurate local data.

**Benefits:**

- Better integration and continuity of information flowing from local water providers through to implementation of regional and state water plan projects serving the customers of those same providers.
- More direct relationship between annually submitted water use data and planning data used to develop water demand projections.

<b>Utility information reported annually to TWDB</b>		<b>Related regional water planning information</b>
annual water use volumes	-	water demand projections
current water sources	-	existing water supplies
water loss audit & conservation plan	-	water management strategies

- More straightforward organization of regional water plan information with better one-to-one relationships between historically reported data, projected water demands, existing supplies, identified water needs, and recommended strategies. This should result in less confusion and less effort and expense required to organize, evaluate and clearly present the planning information.
- More direct relationship between financial-assistance applications and state water planning strategy projects, sponsors, and beneficiaries.
- More opportunity to include individual rural water systems into the regional and state water planning process.

**Changes:**

- The names of the municipal water user groups will vary slightly from previous plans, for example, by specifying the city’s water utility rather than a city itself.
- Approximately 40 municipal water user groups that do not have a city-owned water utility will be represented in the plan by the water utility serving that city.
- Additional work by TWDB staff will be necessary to develop population estimates for water utilities and to update a statewide map of utility/public water system service areas.

**Some things that won’t change:**

- Non-municipal water user groups won’t change or otherwise be impacted.
- The types of fundamental data and the basic process and steps required to develop the regional water plans will remain similar to previous cycles.
- The use of combined utilities for planning (as collective reporting units) by some regions will continue.

The TWDB staff will be providing additional information in the coming months. For more information, please contact Kevin Kluge ([kevin.kluge@twdb.texas.gov](mailto:kevin.kluge@twdb.texas.gov) or 512-936-0829).