

APPENDIX BB

RESPONSE TO COMMENTS

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This appendix includes responses to written comments on the *Initially Prepared 2011 Region C Water Plan* (IPP) that were received by the Region C Water Planning Group (RCWPG). This appendix also includes summaries of public comments provided at the May 25, 2010 Region C Water Planning Group Public Hearing on the Initially Prepared Plan and responses to those comments. Comments from state agencies (Texas Water Development Board and Texas Parks and Wildlife Department) are presented in full. Other comments are summarized. The full version of all comments is included in Appendix AA. A full transcript of the comments from the public meeting may be found at the end of Appendix AA and on the Region C web site.

**TWDB Comments on Initially Prepared 2011 Region C
Regional Water Plan**

<p style="text-align:center">LEVEL 1: Comments and questions must be satisfactorily addressed in order to meet statutory, agency rule, and/or contract requirements.</p>

General Comments

1. Please confirm that the hydrologic and climate data was updated in the plan and whether the data used (2006-2007) is the most recently available. [*Contract Exhibit "A", Task 1.b*]

Response: The precipitation data was updated in Figure 1.2 and the data used for Figures 1.5 and 1.6 were updated. The average annual runoff and average annual gross evaporation data for Figures 1.3 and 1.4 were not readily available and thus were not updated.

Chapter 2

2. Please include categories of water use by river basin for water user groups and wholesale water providers. [*Title 31 Texas Administrative Code (TAC) §357.7(a)(2)(A)(iv) and §357.7(a)(2)(B)*]

Response: Summary tables of demand split by county and basin were added to the end of Appendix G (for WUGs) and Appendix H (for WWP).

3. Page 2.13, Table 2.4: The total of 501,886 acft/yr in 2060 appears to incorrectly total the data contained within the table for Collin County. Livestock demand has apparently

been excluded from all totals. Please revise table to show correct totals in each decade (e.g. 502,770 acft/yr in 2060).

Response: Totals in Table 2.4 were corrected.

Chapter 3

4. Please provide a statement regarding any water availability requirements promulgated by a county commissioners court pursuant to TWC §35.019, which in Region C applies to the Northern Trinity and Woodbine Aquifers Priority Groundwater Management Area. [31 TAC §357.5(k)(1)(H)]

Response: Statement has been added in the “Groundwater Availability” section of Chapter 3

5. Page 3.8, paragraph 5; page 3.12, paragraph 1 and others: The text indicates that the Sparta Aquifer supplies water to users in Region C, but the aquifer does not actually occur in the region. Please correct or remove references to the Sparta Aquifer.

Response: References to the Sparta Aquifer have been removed from Chapter 3 and Appendix I.

Chapter 4

6. Please explain how the region considered emergency transfers of non-municipal use surface water without causing unreasonable damage to the property of the non-municipal water rights holder pursuant to Texas Water Code §11.139. [31 TAC §357.5(i)]

Response: Clarification was added on page 4C.9, paragraph 3.

7. Please describe how third party impacts from voluntary redistributions of water and moving water including from rural and agricultural areas were considered, if applicable. [31 TAC §357.7(a)(8)(G)]

Response: Clarification was added on page 4C.9, paragraph 3.

8. Please include in the final plan quantitative reporting of impacts of potentially feasible water management strategies on agricultural resources, as appropriate. [31 TAC §357.7(a)(8)(A)(iii)]

Response: Clarification was added on page 4C.5, paragraph 1.

Chapter 6

9. Please include a summary of information regarding water loss audits specific to Region C. [31 TAC§357.7 (a)(1)(M)]

Response: Added Section 6.12 “Water Loss and Water Audit”

Chapter 7

10. Please clarify in the plan whether or not water management strategies were adjusted for potential impacts to threatened or endangered species and those instances when mitigation of potential effects was selected instead. [31 TAC §357.5(e)(1)]

Response: Page 7.5 of the plan states, “All recommended strategies in Region C have been chosen with the possible effects on these threatened and endangered species in mind. For example, strategies that are likely to disturb threatened or endangered species habitat include mitigation allowances that set aside additional land for that habitat.” Additional information on the impacts of water management strategies can be found in Appendix P.

Appendix Q

11. Page Q.14: Please revise cost estimates or justify why a 30-year debt service period rather than the TWDB-recommended 20-year debt service period was used for evaluating water management strategies other than reservoirs. [Contract Exhibit “C” Section 4.1.2]

Response: Justification has been added in Section Q-3, first bullet item.

12. (Attachment B) Based on the information provided to date by the regional water planning groups, TWDB has also attached a summary, in spreadsheet format, of potential interregional conflicts, apparent water source over allocations, and apparent unmet water needs that were identified during the review of the online planning database and Initially Prepared Regional Water Plan. [Additional TWDB comments regarding the general conformance of the online planning database (DB12) format and content to the Guidelines for Regional Water Planning Data Deliverables (Contract Exhibit D) are being provided by TWDB staff under separate cover as ‘Exception Reports’]

Response: Initial Level 1 database comments have been resolved. Additional comments will continue to be addressed after this report is published.

LEVEL 2: Comments and suggestions that might be considered to clarify or enhance the plan.

Chapter 1

1. Page 1.96, paragraph 2: Please consider referencing Appendix M for baseline water quality conditions used to evaluate water management strategies.

Response: A reference to Appendix M has been added to page 1.98, paragraph 2.

Texas Parks & Wildlife Comments on Initially Prepared 2011 Region C Regional Water Plan

1. Does the IPP include a quantitative reporting of environmental factors including the effects on environmental water needs and habitat?

Response: Qualitative impacts of strategies on environmental factors are presented in Appendix P. Where available, quantitative data was used to determine those qualitative impacts listed.

2. Does the IPP include a description of natural resources and threats to natural resources due to water quantity or quality problems?

Response: Yes. Section 1.8 is a Summary of Threats and Constraints to Water Supply, and Section 1.9 is a summary of Water-Related Threats to Agricultural and Natural Resources.

3. Does the IPP discuss how these threats will be addressed?

Response: Chapter 7 presents, in general terms, a description of how the Plan is consistent with long-term protection of natural resources.

4. Does the IPP describe how it is consistent with long-term protection of natural resources?

Response: Chapter 7 presents, in general terms, a description of how the Plan is consistent with long-term protection of natural resources.

5. Does the IPP include water conservation as a water management strategy? Reuse?

Response: Conservation and Reuse strategies account for 25% of the future water demand in Region C. Water conservation strategies were recommended for every municipal water user and for many of the non-municipal users. Reuse strategies are outlined in Table 6.6.

6. Does the IPP recommend any stream segments be nominated as ecologically unique?

Response: No. Region C recommends the formation of a Work Group to further clarify unresolved issues surrounding unique stream segments.

7. If the IPP includes strategies identified in the 2006 regional water plan, does it address concerns raised by TPWD in connection with the 2006 Water Plan.

Response: This appendix of the Final *2011 Region C Water Plan* only addresses specific comments made on the *2011 Initially Prepared Region C Water Plan*, not comments on any previous reports.

8. Some amount of quantitative report of impacts to environmental factors for the major water management strategies is included in the plan. However, it appears the quantitative reporting has changed little from the 2006 plan. TPWD recognizes that this is likely due to different priorities and funding allocations during this planning cycle. Nevertheless, in the future, there is a need to update the quantitative reporting in the plan by incorporating available environmental data for each water management strategy. The Ralph Hall Reservoir and the Lower Bois d'Arc Creek Reservoir are both in the permitting phase of development. When environmental data becomes available for these projects it should be included in the quantitative analysis. This may include detailed biological and habitat information, as well as changes to water quantity and water quality.

Response: To the extent that information was available, Appendix P was updated to show qualitative information for Ralph Hall and Lower Bois D' Arc Reservoir.

9. The plan describes the natural resources in the region and briefly discusses threats to those resources from water management strategies in Chapters 1, 5 and 7. No detailed information is provided on how these threats will be addressed. Even though many of the threats will likely not be addressed until the permitting processes. However, there is

a need to understand the threats to natural resources prior to the permitting process in order to better evaluate which water management strategies to include in the plan.

Response: The information presented in the plan fulfills the requirements of the planning regulations and is sufficient to provide understanding of the threats to natural resources for the evaluation of strategies. More detailed analysis will be developed during the permitting process, and the cost of developing such information is included in cost estimates.

10. The transport of invasive species and toxic algae through interbasin transfers is not included as a threat to natural resources. Golden alga (*Prymnesium parvum*) and zebra mussels (*Dreissana polymorpha*) are both found in Lake Texoma. Zebra mussels have already been identified in West Prong Sister Grove Creek upstream of Lake Lavon due to an interbasin transfer from Lake Texoma. Fish kills from golden alga toxin are increasing throughout the Brazos River Basin and portion of Lake Texoma in the Red River Basin. For this reason, the importation of invasive species and toxic algae through interbasin transfers should be included as threats to natural resources. There is also a need to develop strategies for minimizing the impacts associated with transporting water from areas that are known to have invasive species or toxic algal species.

Response: A discussion on invasive species has been added on page 1.86

11. Marvin Nichols Reservoir is a recommended Water Management Strategy, but it covers a slightly different footprint than in the 2006 Regional Water Plan. This new footprint is qualitatively described as causing fewer impacts to bottomland hardwoods (page 4D.8). However, the new footprint does not appear to be reflected in the map (Figure 4D.1) or the quantification of inundated acreage on page 4D.8 (both of which are identical to the 2006 plan). TPWD supports the avoidance of bottomland hardwoods, but, pending additional details on the new footprint, continues to have significant concerns regarding the impacts to fish and wildlife posted by Marvin Nichols Reservoir.

Response: The IPP was in error when it stated that the footprint of Marvin Nichols Reservoir had changed since the last plan. That statement was inadvertently left in from the text of the 2006 Region C Plan. To clarify, Marvin Nichols Reservoir footprint did change between the 2001 Region C Plan and the 2006 Region C Plan, but has not change since the 2006 Region C Plan. We apologize for this error and the confusion it caused, and we appreciate TPWD for pointing this out so it could be corrected in the final 2011 Region C Plan.

12. Much of this planning cycle was devoted to advancing water conservation in Region C. TPWD is pleased to see Region C play an active role in the Water Conservation Advisory

council, funding water conservation awareness campaigns and implementing the water conservation strategies in the 2006 plan. It is even more encouraging to see that the basic and expanded water conservation packages have been enhanced for the 2011 plan and the region continues to plan to meet the 140 gpcd goal (with reuse) by 2020.

Response: Comment acknowledged.

13. With Region C projected to have 29% of the state's population by 2060 and the majority of water being used is for municipal supply, the region has a great opportunity to conserve water beyond the planned 135 gpcd by 2060. TPWD staff encourages the region to continue to pursue advanced strategies to conserve water.

Response: Comment acknowledged.

14. Tables 4B.3 and 6.7 project the total Region C demands at 2,924,157 acre-feet per year in 2060 which differs from the total demand of 3,273,461 acre-feet per year listed in Chapter 2. The 2,924,157 acre-feet per year appears to only be the 2060 municipal demand as shown in Table 2.3. You may wish to rectify this discrepancy in the final water plan.

Response: Tables 4B.3 and 6.7 were clarified to state that the demands are municipal demands not total demands.

15. TPWD staff appreciates the time the planning group gave to evaluating whether to recommend stream segments as ecologically unique. Although TPWD would have preferred to see stream segments be recommended as unique segments, it supports the planning group's legislative recommendation to form a working group comprised of representatives of TWDB, TPWD, TCEQ and the sixteen water planning regions to bring clarity, purpose, and direction to designating streams as ecologically unique.

Response: Comment acknowledged

16. The plan calls for an approximate 25% surplus of water supply above the projected demand of 3.3 million acre-feet per year for 2060. This amount of surplus (about 840,000 acre-feet per year) represents significant potential oversupply with corresponding significant potential impacts to natural resources.

Response: The surplus supplies in the plan are intended to guard against reduced supplies from droughts worse than the drought of record, projects that

cannot be developed or that are delayed, faster than projected growth, and needs beyond the planning period.

Summary of and Responses to Other Comments

Sierra Club

- Surplus supplies are not justified. **Response:** The surplus supplies in the plan are intended to guard against reduced supplies from droughts worse than the drought of record, projects that cannot be developed or that are delayed, faster than projected growth, and needs beyond the planning period.
- Approach ignores drought contingency plans. **Response:** Drought contingency plans are discussed on 4B.9 in Section 4B.
- Region C should not credit reuse as a conservation measure in considering the goal of 140 gallons per capita per day water use. **Response:** The goal of 140 gallons per capita per day water use was set in 2004 by the state's Water Implementation Task Force. In their report, it was clearly stated that the 140 gallons per capita per day was intended to include credit for indirect reuse.

Other Comments

- North Texas Commission
 - Support for plan. **Response:** Comments noted.
- Dallas Regional Chamber
 - Support for plan. **Response:** Comments noted.
- Arlington
 - Numerous questions and suggestions
 - Editorial changes regarding Lake Arlington supply and John F. Kubala Treatment Plant. **Response:** Changes incorporated throughout report.
 - Suggest adding 10 am – 6 pm watering restrictions to the model plan. **Response:** Added option of year round watering restrictions to Section 5.4 of the Model Conservation Plan in Appendix L.
- Athens MWA
 - Move new groundwater well strategy from City of Athens to Athens MWA. **Response:** Changes made to both Athens and Athens MWA to reflect this.
- Bois D' Arc MUD
 - Various comments on Fannin County Water Supply Study. **Response:** See responses incorporated directly into comments in section in Appendix AA.

- Celina
 - Show timing of supply from NTMWD to be between 2010 and 2020 rather than 2020. **Response:** In the plan, all projects listed for 2020 are assumed to be developed between 2010 and 2020.
- Copeville SUD
 - No mention of Copeville SUD in the plan. **Response:** Responded to Copeville SUD that they are included in Collin County Other.
- Crandall
 - Adjustments to the amount needed from NTMWD and from Dallas Water Utilities (through Seagoville) **Response:** Unable to change approved demand projections. Discussed adjustments with Crandall’s engineer, but were unable to reconcile changes into final plan. This WUG has been noted for further refinement in next planning round update (See Table 2.20).
- Dallas Water Utilities
 - Lake Fastrill Replacement omitted from list of recommended strategies for DWU **Response:** Lake Fastrill Replacement has been added to the list of recommended strategies for DWU.
- Danville WCS
 - Population projections too high (comments made via phone). **Response:** Unable to change approved demand projections. This WUG has been noted for further refinement in next planning round update (See Table 2.20).
- Denison
 - Provided cost estimates for various planned water supply infrastructure projects. **Response:** Incorporated these costs into the Plan.
- East Cedar Creek FWSD
 - Population projections adjustment (comments made via phone). **Response:** Unable to change approved demand projections. This WUG has been noted for further refinement in next planning round update (See Table 2.20).
- Ennis
 - Numerous comments – **Response:** After discussions with City staff, comments were addressed through footnotes to Table 4E.42.
- Garland
 - Questions reuse as a supply for Garland (comments made via phone) – **Response:** After discussions with City staff, comments were addressed through changes made to Table 4E.49.
- Grand Prairie
 - Provided information on timing and cost of strategies – **Response:** After discussions with City staff, comments were addressed by incorporating

suggested text changes and cost of groundwater wells. The cost of the Arlington project was incorporated as a footnote to Table 4E.52. Grand Prairie staff concurred that the additional Dallas supply originally suggested was not needed due to additional supplies from Midlothian, Mansfield, and Arlington. Dates of project development were not changed because in the plan, all projects listed for 2020 are assumed to be developed between 2010 and 2020.

- Greater Texas Utility Authority
 - Include new Lake Texoma water right. **Response:** This new water right has been included throughout the plan.
 - Include Lake Texoma pump station expansion as a water management strategy for GTUA and NTNWD. **Response:** This strategy has been included for both GTUA and NTMWD in Section 4E.
 - Various other questions and comments specific to individual entities in Cooke and Fannin Counties. **Response:** Melissa – Costs mentioned are for supplemental wells to replace existing wells as necessary, not for expansion of groundwater use; Muenster – Cooke County Water Supply Project has been added as an Alternate Strategy.
- Haltom City
 - Demand projections should be lower (comments made via phone). **Response:** Unable to change approved demand projections. This WUG has been noted for further refinement in next planning round update (See Table 2.20).
- Irving (comments made via multiple phone conversations)
 - Include Chapman Booster Pump Station as a strategy for Irving as well as NTMWD – **Response:** This strategy has been included for Irving in Section 4F and NTMWD in Section 4E (as well as other sections throughout the report).
 - Include alternative strategies for Irving (Marvin Nichols Reservoir, George Parkhouse North, George Parkhouse South, Ralph Hall, Wright Patman, and indirect reuse) **Response:** These strategies have been included for Irving in Section 4F as well as other sections throughout the report.
 - Listed sponsors for Oklahoma water in Tables 4C.3 and 4C.5 do not match. Irving is a sponsor. **Response:** These tables have been reconciled to show Irving as a sponsor for Oklahoma water.
- Ladonia
 - Supports creation of Lake Ralph Hall and adoption of *2011 Initially Prepared Region C Water Plan*; City of Ladonia needs dependable source of future water supply; Lake Ralph Hall will have positive economic impact, unify currently fragmented Caddo National Grasslands, and prevent further erosion and channelization of North Sulphur River. **Response:** Comments noted.

- Melissa
 - Provided information on new water supply connection to North Texas Municipal Water District. **Response:** Incorporated this project and cost estimate into the Plan.
- Midlothian
 - Comments on current and potential wholesale supplies from the city. **Response:** Adjusted the amount of supply from Midlothian to Rockett SUD throughout the report.
- Runaway Bay
 - Questions about planning process (via phone) – **Response:** Consultants contact city and answered general questions. No change to the report necessary.
- Upper Trinity Regional WD
 - Support for plan. **Response:** Comment noted.
 - Suggested wording changes – **Response:** Incorporated suggested changes.
 - Comments on cost estimates – **Response:** Updated cost estimate for Lake Ralph Hall.
- Written comments from individuals not representing public entities:
 - Concern over water taste. **Response:** Forwarded comments to supplier.
 - Need for more conservation and opposition to reservoirs. **Response:** Comments noted.
 - Concern over placement of wastewater treatment plant on Mary’s Creek. **Response:** RCWPD does not make recommendations regarding placement of wastewater treatment plants. No change made to report.
 - Suggested changes to rainfall and runoff measurement units; Desalination of groundwater not cost effective; specific comments regarding water quality; support of brush control as water management strategy; advocate population control. **Response:** Comments noted.
 - Need more conservation and less wasting of water; no need to spend taxpayer money on new reservoirs. **Response:** Comments noted.
 - Several specific comments and advocacy for slowing population growth until additional water resources are in place. **Response:** Considered individual comments. RCWPG does not control population growth.

Other Changes to the IPP

- Rewrite of Section 4F to include a separate discussion for each supplier.
- Addition of Socio-Economic Analysis by TWDB
- Addition of Infrastructure Funding report generated from Survey of Water Suppliers

- Addition of newly acquired water right (56,500 acre-feet per year from Lake Texoma) by the Greater Texoma Utility Authority.
- Year 2060 total existing reuse from Chapter 6 of Initially Prepared Plan was not carried through in all calculations in Chapter 3 and Executive Summary of Initially Prepared Plan. This error was corrected.
- Editorial changes
- Addition of Tables required by Texas Water Development Board.
- Revision of some cost estimates.