

November 4, 2005

Curtis W. Campbell, Chairman
Regional Water Planning Group – Area B
Red River Authority of Texas
900 8th Street
Hamilton Building, Suite 520
Wichita Falls, TX 76301-6894

RE: Comments/Responses to Initially Prepared Plan (IPP)
For Region B Regional Water Planning Area
Contract No. 2002-483-452

In accordance with the Texas Water Development Board (TWDB) requirements set forth in TAC Section 357.10 (a)(3) the Regional Water Planning Group (RWPG) Region B should consider approving certain revisions in the IPP based on the TWDB's written comments and other Public/Agency comments received relative to the IPP.

TWDB Comments – Letter Dated September 28, 2005

Executive Summary

1. Comment: The 2000 water use amounts for cities and non-city water utilities are not TWDB approved amounts.

Response: The 2000 water use demands in the IPP will be changed to match the TWDB numbers.

2. Comment: The year 2000 water use for six major categories, the total municipal demand projections and the total demand projections do not match TWDB numbers.

Response: The 2000 water use numbers in the IPP will be changed to match the TWDB numbers.

Chapter 1: Description of the Region

1. Comment: The year 2000 steam-electric power use number does not match the TWDB approved amount.

Response: The IPP 2000 steam-electric power use number will be changed to match the TWDB approved amount.

2. Comment: The year 2000 water use illustrated in the Chart Pg. 1-19, Fig. 5 does not match TWDB amount.

Response: The chart will be changed to match the TWDB number.

Chapter 2: Population and Water Use Projections

3. Comment: The per capita municipal water use for the year 2000 should be 165 not 182.

Response: The IPP will be changed to show 165.

4. Comment: The year 2000 and year 2060 municipal water demand does not match the approved TWDB number.

Response: The IPP will be changed to match the TWDB numbers for 2000 and 2060.

5. Comment: The year 2000 manufacturing water use does not match approved TWDB number.

Response: The IPP will be changed to match the TWDB number.

6. Comment: The year 2000 manufacturing water use, steam electric water use, and mining water use do not match the approved TWDB numbers.

Response: The IPP will be changed to match the TWDB numbers.

7. Comment: The year 2000 steam-electric water use does not match the approved TWDB number.

Response: The IPP will be changed to match the TWDB number.

8. Comment: The year 2000 mining water use does not match the approved TWDB use amount.

Response: The IPP year 2000 mining water use will be changed to match the approved TWDB number.

9. Comment: The year 2000 irrigation water use and the year 2000 livestock water use does not match approved TWDB amounts.

Response: The IPP year 2000 irrigation and livestock water use numbers will be changed to match approved TWDB numbers.

Attachment 2-1

10. Comment: In Table A-2 & A-3 the population projections for several non-city utilities differ from TWDB approved projections. Also Windthorst WSC is missing from Clay County.

Response: The population projections will be revised to match TWDB numbers and Windthorst WSC will be added to Clay County as requested.

11. Comment: In Tables A-6 and A-7 the water demand projections for several non-city utilities differ from the TWDB approved projections. Also Windthorst WSC is missing from Clay County.

Response: The water demands will be revised to match TWDB numbers as requested, and Windthorst WSC will be added.

12. Comment: "Wichita Co. Other" is missing from Table A-7.

Response: As requested "Wichita Co. Other" will be included in Table A-7.

13. Comment: In Tables A-8 & A-9 a number of water use category totals have incorrect year 2000 water use estimates.

Response: As requested, the year 2000 water use estimates in Tables A-8 & A-9 will be revised to match approved TWDB water demands.

14. Comment: In Tables A-8 & A-9 a number of water demand category totals have incorrect water demand projections.

Response: As requested, the water demand category totals will be revised to match the approved TWDB demand projections.

Chapter 3: Evaluation of Current Supplies

15. Comment: The plan needs to verify that the regional water plans protects water contracts, option agreements or special water resources.

Response: The plan protects water contracts, option agreements and special water resources. The list of contracts in Region B is shown on Table 3-5. These contracts were considered during the evaluation of current water supplies. An acknowledgment of the reservoirs that are designated as special resources in Region B will be added to Section 3.1.1.

16. Comment: Provide information on the effects of the plan on navigation.

Response: A brief description of the navigation activities in Region B will be added to Chapter 1. The effects of the plan on navigation will be addressed in Chapter 7.

17. Comment: Please provide the following information.

a. List of reservoirs with updated storage capacities.

Response: The list of reservoirs in Region B with updated storage-capacities is shown in Table 3-3 of the Initially Prepared Plan. In addition, the storage capacity for Greenbelt Reservoir in Region A was also updated for supply analysis in the Region B plan. No changes will be made to final plan based on this comment.

b. Version of WAM used to calculate yield of Amon Carter.

Response: The Trinity WAM was used to determine the yield of Amon Carter Lake. The original Trinity WAM does not have the correct permitted storage capacity. Amon Carter has a permitted storage capacity of 28,589 acre-feet. The Trinity WAM shows only 20,050 acre-feet. The yield of Amon Carter Lake in the Region B IPP considered the permitted storage capacity of 28,589 acre-feet in determining 2000 and 2060 storage conditions. No changes will be made to final plan based on this comment.

18. Comment: Include wholesale water provider allocations by category of use, county and river basin, and demands and contractual obligations to Table 3-14.

Response: Demands and contractual obligations on Wichita Falls are shown in Table 2-5. Distributions of supplies listed in Table 3-14 by category of use, county and river basin are included in the DB07 database. The comparison of supplies and demands for wholesale water providers is shown on Table 4-4 in Section 4.1.2.

19. Comment: Table 3-13 lists groundwater supplies available to Young County, but does not identify the source. Provide source of this water.

Response: Table 3-13 is a summary table of all supplies available to water user groups, not groundwater supplies. The supplies to users in Young County include water from Olney/Cooper Lake, local livestock supplies, and purchased water from Wichita Falls. No change in the plan will be made based on this comment.

Chapter 4: Identification, Evaluation and Selection of Water Management Strategies

20. Comment: Provide a quantification of environmental impacts.

Response: Attachment 4-1 will be expanded to include a summary table that lists the environmental categories considered during the evaluation. This table will include the total number of acres impacted by each water management strategy. The text will be modified as needed to correspond to the evaluation presented in Attachment 4-1.

21. Comment: Document adjustments to water management strategies to account for environmental flow needs.

Response: Lake Ringgold will be evaluated using the WAM with releases under the Consensus method to determine the yield. Unit costs will be adjusted as needed. Environmental releases are not required for the Lake Kemp strategy since this strategy will not require a new water right. Increasing the conservation elevation at Lake Kemp to compensate for storage reduction due to sedimentation will not increase the permitted storage of the lake. There should be no additional impacts to streamflows downstream of Lake Kemp. This discussion will be added to the Lake Kemp strategy in Chapter 4.

22. Comment: Document that irrigation conservation water management strategies were considered for all irrigation needs.

Response: The irrigation shortages in Region B are associated with the irrigation district that supplies water from Lake Kemp. Irrigation conservation strategies for supplies from a canal distribution system are limited to strategies that conserve water from the system. The canal study showed that losses in the main canals are small. Enclosing the canal laterals in pipe is a conservation strategy recommended in Region B. The reference to consideration of conservation for irrigation and steam electric power needs is on page 4-18 of the IPP. No changes will be made to final plan based on this comment.

23. Comment: Report costs of water management strategies in discounted present value.

Response: Discounted present value of strategy costs are calculated automatically in the DB07 database. Exhibit B, page 55, states "Discounted values will be automatically calculated on the web-based database application forms and based on the annual costs for each WMS as reported by the Planning Group." According to TWDB staff, this requirement will be completed by the TWDB. No changes will be made to final plan based on this comment.

24. Comment: Report impacts to agricultural and natural resources for strategies for Byers, Lakeside City and Wichita Falls

Response: These impacts are shown in Attachment 4-1 and will be added to the text in Chapter 4.

Attachment 4-2

25. Comment: Clarify that all cost components were included in the development of costs.

Response: Additional information on the cost methodology used in developing costs will be added to Attachment 4-2. All components necessary for the water management strategies were included in the cost calculations.

Attachment 4-4

26. Comment: Address security of the canal system and water savings.

Response: Improvements to canal security are addressed in the Conclusions and Recommendations chapter of the report. Protection of the canal from livestock intrusion and public dumping are continuing issues at the canal that need to be addressed. The report recommends fencing, as necessary, to limit access by livestock and public education to minimize public dumping in the canal. Water savings will be realized through canal system piping improvements, addressed in the Conclusions and Recommendations chapter of the report. The quantity of water savings through this strategy is addressed elsewhere in Chapter 4 of the Regional Water Plan Update. Additional clarification of water savings through piping improvements will be included in Chapter 4.

27. Comment: The canal study does not include prepared GIS maps for the canal system.

Response: The required maps are being prepared and will be included in the final Regional Water Plan Update.

28. Comment: Provide estimates of water saved and implementation costs for conservation strategies.

Response: Conservation savings associated with the canal system are discussed in Section 4.2.5. This discussion will be added to Attachment 4-4.

29. Comment: It is not evident that alternative strategies for implementing the preferred technical alternatives were identified in the study of Attachment 4-4. Also funding sources were not apparent.

Response: The canal study examined numerous areas of potential water losses and found that the primary source of water loss is in the laterals to the main canal. Prior efforts to line laterals or limit losses by alternative means were investigated and found to be unsuccessful. The piping of the laterals was found to be the most viable approach to water conservation in the canal system, as was explained in Attachment 4-4. The canal study will be supplemented to address potential funding sources for canal system improvements. Conservation savings associated with the canal system are discussed in Section 4.2.5. This discussion will be added to Attachment 4-4.

30. Comment: Provide results of seasonal pool for Lake Kemp.

Response: The seasonal pool is included as a recommended strategy for Lake Kemp, and is discussed on page 4-42 of the IPP. Additional discussion on the available yield will be added to Chapter 4.

31. Comment: Provide a description of process used to identify potentially feasible strategies.

Response: The process for screening and selecting potentially feasible water management strategies were discussed and approved by the Region B RWPG. This discussion will be added to Section 4.2.

Appendix A:

32. Comment: Year 2000 supplies in Appendix A do not match TWDB-approved numbers.

Response: The supply values will be changed to match the DB07 database.

33. Comment: Archer County-Other supplies appear to be switched for the Brazos and Trinity Basins.

Response: The values in the DB07 database were corrected.

34. Comment: Dean Dale WSC in Clay County data differ in Appendix A from the DB07.

Response: The data values in Appendix A were corrected..

LEVEL 2 – TWDB COMMENTS

Executive Summary

35. Comment: Include Young County in the Summary Tables, Page ES-3, Tables ES-1 and 1-1.

Response: Young County will be included in the Tables ES-1 and 1-1.

36. Comment: Clarify the constituent discussed in the last recommendation on page ES-22.

Response: The constituent discussed is nitrates and will be noted in the recommendation.

37. Comment: Correct the statement regarding one-acre foot of water to read 325,851 gallons shown on Page ES-5 and Chapter 2 page 2-3.

Response: The volume for one-acre foot will be corrected to state 325,851.

38. Comment: Consider adding unit "acre-feet per year" in the title of tables ES-5, ES-9, ES-6, ES-7, ES-10, ES-8, ES-9, ES-21, and ES-14, Page ES-6.

Response: The titles of each table will be modified to show "acre-feet per year".

Chapter 1: Description of Region

39. Comment: Suggest changing column title to "2000 Water Use AF/YR" for Table 1-15, Page 1-28 and Attachment 2-1, Table A-6, A-7, A-8, and A-9.

Response: The titles will be changed to "2000 Water Use AF/YR."

40. Comment: Consider using the term "Water System" for Red River Authority systems in instead of WSD, Table 1-15, Pg. 1-28 and Tables A-2, A-3, A-6, and A-7, Attachment 2-1.

Response: Red River Authority systems will be labeled as "Water System" instead of WSD.

41. Comment: Consider changing Montague WSC, Oak Shores WSC, and Sunset WSC to "Water System". Page 1-28, , Table 1-15 and Attachment 2-1, Tables A-2, A-3, A-6, and A-7.

Response: WSC will be changed to "Water System".

42. Comment: Consider changing names of some of the small water systems to accurately reflect the organization names, as shown on Page 1-28, Table 1-15 and Attachment 2-1, Tables A-2, A-3, A-6, and A-7.

Response: Water System names will be changed to match names suggested by TWDB.

43. Comment: Consider referencing "Game Fish present in the study area" instead of "Fish Species present in the study area" on page 1-23.

Response: Comment noted, but no change in plan due to this comment.

Chapter 2: Population and Water Use Projections

44. Comment: Consider revising the column heading to "Customers" on Table 2-5, Page 2-12.

Response: Column heading will be changed to "Customers".

Attachment 2-1:

45. Comment: Consider using term "County Other" in a manner consistent with other regional plans and state water plans.

Response: Region B prefers to leave the Table A-2, A-3, A-6, and A-7 as shown. No change will be made to these tables relative to this comment.

Chapter 3: Evaluation of Current Water Supplies

46. Comment: Reconsider statement about storage in unconfined and confined aquifers.

Response: Statement will be deleted.

Chapter 4: Identification, Evaluation, and Selection of Water Management Strategies

47. Comment: Consider including additional information on conservation strategies.

Response: A detailed explanation of the savings calculations and cost will be added as attachment to Chapter 4.

48. Comment: Consider including information that the City of Electra uses a reverse osmosis system to remove nitrates, Page 4-28.

Response: Information will be included.

49. Comment: Clarify basis for City of Vernon needed supply of 600 acre-feet per year.

Response: The needed water supply should be 664 acre-feet per year and will be corrected on Page 4-32, 4-60, and Page 12 of Attachment 4-2. Adjustments will be made to Appendix A as needed.

50. Comment: Explain the impacts of sedimentation on the strategy for Lake Kemp that increases the conservation pool elevation.

Response: Additional discussion on the storage volumes over time will be added to the discussion of this strategy in Section 4.2.5.

General

51. Comment: Consider referencing the occurrence of tables and figures in the Table of Contents.

Response: After due consideration, no changes will be made in the plan Table of Contents.

52. Comment: Consider updating the links for the Railroad Commission oil and gas data (references) to February 5, 2005.

Response: Railroad Commission links reference will be updated.

TWDB DB07 COMMENTS – LEVEL 1

Region-Wide

1. Comment: No sources show entry of the methodologies used for water availability.

Response: Methodology for water availability will be added.

Sources Module

2. Comment: Add water rights to aggregated run-of-the-river rights.

Response: Water right numbers will be added to aggregated run-of-the river supplies in the DB07 source module. If there are more than 10 water rights for one aggregated source, the water rights will be provided to the TWDB in a table. Water rights for run-of-the-river supplies identified in Table 3-6 will be updated. Water rights for run-of-the-river supplies in the Trinity and Brazos basins will be added to Table 3-6.

3. Comment: Source availability for “Other Aquifer” in Montague County is over allocated.

Response: Source availability for other aquifers is based on historical pumpage. We will adjust the supplies upward to reflect the new demand on the aquifer.

4. Comment: Enter name of Other Aquifer

Response: Subsequent correspondence from the TWDB clarified that only those individual formations that are known and are important local resources should be added to the database. For “Other Aquifer” designations in Region B, the requested information is not readily available. No changes will be made to the final plan based on this comment.

5. Comment: Data values missing

Response: Data is correct. The values are “0”.

6. Comment: Enter individual reservoir yield for systems in the Regional Comments Field.

Response: The Kemp-Diversion system is operated as a system and individual yields were not assessed. The Olney-Cooper System is a twin lake system. Individual yields were not assessed. Individual yields were assessed for the Wichita system. This information will be included in the Region B water plan.

7. Comment: County and Basin of the Source do not match the TCEQ database.

Response: The water right type will be corrected. The water right number used in the Source ID code is the Certificate of Adjudication 5152.

WUG Module

8. Comment: Unmet needs for Wilbarger SEP.

Response: Supplies from strategies were adjusted to meet need.

9. Comment: Missing limiting factors.

Response: Limiting factors will be added to all supply sources.

10. Comment: Add additional information for limiting factor J to regional comments.

Response: Limiting factors will be adjusted. Comments will be added as needed.

11. Comment: WUG supply source requires entry of water rights data.

Response: Water rights data are included in the source module. Information for the WUGs can be obtained from the source module.

12. Comment: Enter seller information.

Response: This will be added.

13. Comment: Verify that WUG supply volumes are "0".

Response: These values are "0".

WWP Module

14. Comment: Complete field for "Contract or Non-Contract Demand".

Response: This field was completed.

15. Comment: WWP Supply Source requires water right information.

Response: Water right data will be added to the source in the source module. Information for the WWP module can be obtained from the source module.

16. Comment: Verify supplies from Wichita Falls to Olney are an interbasin transfer.

Response: This is an interbasin transfer and the DB07 will be corrected.

17. Comment: Lake Ringgold is identified as a recommended strategy for Wichita Falls in the WUG module, but it is not recommended in the WWP module.

Response: Lake Ringgold is not a recommended strategy and the DB07 will be corrected to reflect this.

18. Comment: Add seller name to water management strategy, "Purchase water from Local Provider".

Response: Seller name will be added at the WUG level.

19. Comment: WUG supply source for water from the Wichita System to Archer County-Other in the Brazos Basin is not marked as an Interbasin Transfer.

Response: This supply will be identified as an interbasin transfer.

20. Comment: Capital Cost data is duplicated for the Lake Ringgold Project, wastewater reuse and conservation for Wichita Falls.

Response: Capital costs were deleted from the WUG module for Lake Ringgold and wastewater reuse, and capital costs were deleted from the WWP module for conservation.

21. Comment: WMS annual cost 2010 – 2060 data values are missing or confirm data values are "0".

Response: All data values are correct. Data values entered as "0" are "0".

22. Comment: WMS capital cost data values are missing or confirm data values are "0".

Response: All data values are correct. Data values entered as "0" are "0".

23. Comment: All cost data listed are "0" for Seasonal Conservation Pool.

Response: All data values are correct. Data values entered as "0" are "0".

24. Comment: Lake Ringgold is identified as a recommended strategy for Wichita Falls in the WUG module, but it is not recommended in the WWP module.

Response: Lake Ringgold is not a recommended strategy and the DB07 will be corrected to reflect this.

25. Comment: Capital Cost data is duplicated for the Lake Ringgold Project, wastewater reuse and conservation for Wichita Falls.

Response: Capital costs were deleted from the WUG module for Lake Ringgold and wastewater reuse, and capital costs were deleted from the WWP module for conservation.

26. Comment: WMS annual cost 2010 – 2060 data values are missing or confirm data values are "0".

Response: All data values are correct. Data values entered as "0" are "0".

27. Comment: WMS capital cost data values are missing or confirm data values are "0".

Response: All data values are correct. Data values entered as “0” are “0”.

Sources Module – Level 2

28. Comment: Source is not used by any WUG or WWP.

Response: The following changes will be made.

Run-of-River Industrial, Clay County: Supply is available according to Red River WAM. There is no manufacturing demand in Clay County. No changes made.

Other Aquifer, King County. This supply has historically been used for livestock. This supply will be considered for livestock use in King County.

Lake Iowa Park and Gordon. The Red River WAM shows a reliable supply from this source, but recent historical data shows this source to be unreliable. The supply available to Iowa Park from this source is “0”. No changes made.

National Wildlife Federation Comments-Letter Dated September 15, 2005

Having considered the Background and Overview information along with the Summary of Key Comments, Key Principles, and Page-Specific Comments, the following responses are being provided:

SUMMARY TABLE OF KEY COMMENTS

1. Comment: Use of "Safe Supply" results in unnecessary water supply strategies.

Response: State regulations (TAC §291.93(3)) require public water utilities to submit a report to the state identifying how the utility intends to meet the projected demands of its service area when the utility reaches 85 percent of its capacity. The regulations also require public water suppliers and wholesale water suppliers to have sufficient supplies to meet the maximum day and/or contractual demands of all their customers. Planning for a surplus of 15 to 20 percent above the demand projections is within reasonable planning guidelines for long-range water supply planning. Consideration of a "safe supply" does not represent an inflated demand. No changes will be made to the final report based on this comment.

2. Comment: Use of "Safe Yield" results in unnecessary water supply strategies.

Response: Region B lies in an area prone to drought. Often reservoir evaporation in the summer months can be greater than the monthly usage. Water providers in Region B operate their reservoir systems with a reserve water capacity. In addition to the concern about drought, the water quality of a reservoir is greatly diminished under very low storage conditions and the ability to use this water is limited. "Safe Yield" represents the supply available to the region under current operations. No changes will be made to the final report based on this comment.

3. Comment: Does not believe the plan maximizes water efficiency.

Response: The Region B Plan includes water conservation strategies as required by Senate Bill 1 and the Texas Water Development Board regulations and guidelines. No changes will be made to the final report based on this comment.

In addition, the Texas Parks and Wildlife Department commented that the IPP relies heavily on conservation measures to reduce the municipal water demand.

4. Comment: The plan does not consider drought management.

Response: Drought contingency strategies are short-term solutions to water shortages caused by drought or other emergencies. The Region B RWPG does not consider drought management strategies as a reliable long-term water supply. No changes will be made to the final report based on this comment.

5. Comment: There is an insufficient quantitative analysis of environmental impacts.

Response: The IPP does include quantitative analysis of the impacts of proposed water management strategies. There are no recommended water management strategies that propose to use additional streamflows, therefore, there are no impacts to environmental flows from water management strategies. No changes will be made to the final report based on this comment.

6. Comment: The IPP does not adequately characterize groundwater and spring flows.

Response: 1) A brief discussion of springs will be added to Section 3.2.1. No springs in Region B are currently used as a significant source of water supply. Groundwater availability in the plan was set at levels that minimize drawdowns to area aquifers, thus minimizing impacts on springs in the region. 2) The Region B RWPG does not set groundwater management policy. This is determined by groundwater conservation districts. 3) The Rolling Plains Groundwater Conservation District was the only district within Region B with an approved management plan at the time the IPP was published. Since then, the management plan for the Tri-County Groundwater Conservation District was approved (August 18, 2005). The Region B plan will be modified to recognize the presence of these two conservation districts. There are no recommended groundwater strategies in the counties with established groundwater conservation districts. Therefore, regulatory limits to pumping do not impact the Region B plan.

KEY PRINCIPLES

1. Comment: Maximize Water Efficiency

Response: The Region B Technical Committee reviewed and discussed water conservation and reuse for water user groups with needs in Region B. The water efficiency measures and recommended reuse represent the economically achievable level of conservation for users in Region B. The Region B water plan recommends several reuse strategies to meet future needs. Consistent with findings of the Water Conservation Implementation Task Force and state law, water reuse is one component of conservation. No changes will be made to the final report based on this comment.

2. Comment: Limit Non-Essential Use during Drought

Response: The Region B RWPG considered drought management measures, and concluded that drought management strategies are interim measures in response to drought and are not a reliable long-term water supply. There are no shortages due strictly to drought identified and drought management as a water management strategy would not resolve long term shortage. No changes will be made to the final report based on this comment.

3. Comment: Plan to Ensure Environmental Flows

Response: Texas Water Development Board regulations governing regional water planning do not require designation of environmental flows as a demand. Projected water use in Region B is expected to remain fairly constant through the 60-year planning period. There are no significant changes in water use that would impact environmental flows in the region. Clarification of how environmental impacts are

quantified will be provided in the final Plan Update. Quantified environmental impacts of strategies will correspond to quantification in Attachment 4-1.

4. Comment: Minimize New Reservoirs

Response: Comment noted. No changes will be made to the final report based on this comment.

5. Comment: Manage Groundwater Sustainably.

Response: Comment noted. No changes will be made to the final report based on this comment.

6. Comment: Facilitate Short-Term Transfers

Response: Voluntary redistribution of water resources is considered by Region B through the sale of water from a willing provider to water user group. In general, the Region B RWPG supports voluntary redistribution of water resources and supports such redistributions on a willing buyer/willing seller basis. Emergency transfers are considered short-term strategies and are not appropriate for long-range water supply planning. Lake Wichita and Lake Iowa Park are described on page 3-10 of the Initially Prepared Plan. Lake Iowa Park is owned and operated by the City of Iowa Park and is a source of water for the City. Recent droughts have shown this lake to be unreliable. The Region B water plan does include some water supply from this source to the City of Iowa Park. Lake Wichita is a very shallow lake that is no longer used for water supply. No changes will be made to the final report based on this comment.

PAGE SPECIFIC COMMENTS

Chapter 1: Description of Region

1. Comment: Include column for GPCD usage in Table 1-6 Page 1-5.

Response: Column for GPCD will be added.

2. Comment: Explain redundancy of Chloride Control Project and Wichita Falls reverse osmosis plant for Lake Kemp water.

Response: Lake Kemp water can only be utilized for potable water following reverse osmosis. This process is costly and can be dramatically reduced as the Lake Kemp water quality improves. In addition, Lake Kemp is utilized for irrigation and the better water quality from Kemp would provide for much more efficient use of the water for irrigation purposes. No changes will be made to the final report based on this comment.

3. Comment: Add a "total row" for Table 1-7.

Response: Comment noted, however no change will be made in Table 1-7, Page 1-7.

4. Comment: Modify the Chart 1-12 Page 1-9 to 1-14 to reflect Pre and Post-major development.

Response: These charts were prepared for general information and not for the level of detail being requested. No change to the final plan will be made based on this comment.

5. Comment: Information included on aquifers and springs (Page 1-15) is extremely superficial and is a duplicate of that provided in 2001 Plan.

Response: This information is sufficient to generally describe the Region B water supply. Additional discussion of groundwater supplies is included in Chapter 3. A brief description of springs will be added to Section 3.2.1. No changes will be made to Chapter 1.

6. Comment: Add totals column for Table 1-12, Page 1-22.

Response: Comment noted, however no change to the final plan will be made based on this comment.

7. Comment: Issues regarding freshwater mussels and minnow species native to the region, Page 1-23, should be considered in assessing the impacts of water management strategies with long-term protection of natural resources.

Response: Those issues will be considered and modifications to the plan made as required.

8. Comment: More information is needed on wetlands of the region on Page 1-23.

Response: The information provided for the level of this plan is sufficient. No change in the final plan will be made based on these comments.

9. Comment: Information provided on wildlife and endangered and threatened species as shown on page 1-24 has limited utility.

Response: This information is sufficient for this level of plan, however, your comment concerning habitats and species most likely to be affected by water management decisions being those dependent on seeps and springs or rivers will be considered when assessing long-term impacts on natural resources.

10. Comment: Updated information should be provided in Table 1-14, Page 1-25.

Response: An attempt will be made to update this Table.

11. Comment: If Region B will have adequate supplies throughout the planning period, then why is the Chloride Control Project recommended as a regional supply project, as noted on Page 1-26.

Response: The Chloride Control Project addresses the water quality of Lake Kemp, which enhances the efficient use of a major water source in Region B.

12. Comment: The discussion in Section 1.11, "Identification of Known Threats to Agriculture or Natural Resources" is far too general.

Response: A general discussion of groundwater drawdown and associated effects on water quality, wells, and spring flows will be added to this section. Also, a general discussion of threats to agriculture resources will be included.

13. Comment: The Table 1-15 page 1-27 to 1-29 is insufficient to provide the necessary information to get a comprehensive picture of water providers of Region B.

Response: Table 1-15, Page 1-27 to 1-29 is sufficient in providing an overview of listed water providers in Region B. More specific information is included in Chapters 2 and 3 of the plan. No changes to the final plan will be made based on this comment.

Chapter 2: Population and Water Use Projections

14. Comment: Discussion on Page 2-1 about the rural nature of the region affecting projected water conservation savings is confusing.

Response: Clarification will be included on Page 2-1.

15. Comment: Should discuss in the text on Page 2-1 that Region B filed a formal request to change the water demand figures provided in TWDB.

Response: Some discussion will be included in Section 2.1 regarding the requested water demand changes.

16. Comment: The discrepancy of 325,829 gallons per acre-foot or 325,851 gallons per acre-foot is confusing.

Response: The figure of 325,851 gallons for one-acre foot of water will be utilized in lieu of 325,829 gallons.

17. Comment: There is discrepancies in Table 2-2, Page 2-4 regarding water use.

Response: The discrepancies will be corrected and the TWDB numbers will be utilized.

18. Comment: Demand for Steam-Electric power as shown on Page 2-9 appears to be over-stated.

Response: Based on information received from American Electric Power (AEP) there is an anticipated expansion of the AEP facilities. In addition, there have been serious discussions concerning a new plant in Archer County area. Projections were based on the best available information. No change to the final plan will be made based on this comment.

19. Comment: The water demand figures in Table A-5 for the year 2000 are not consistent with the demand figures listed in Appendix "A".

Response: Corrections will be made to make Table A-5 and Appendix A water demand figures match.

20. Comment: Water demand figures between Tables A-6 to A-9 and Appendix "A" are inconsistent.

Response: Those inconsistencies will be corrected.

Chapter 3: Evaluation of Current Water Supplies

21. Comment: Advocate a sedimentation survey for Lake Kemp.

Response: Region B agrees that a sedimentation survey is needed for Lake Kemp, and the region recognizes the importance of this water source to meet water needs. A discussion of the impending sedimentation study will be added to Section 3.1.2.

22. Comment: Urges the RWPG to include an allowance for protection of spring flow.

Response: Comment noted. No changes will be made to the final report based on this comment.

23. Comment: Clarify the methodology used to determine groundwater supplies from the Trinity aquifer.

Response: In the last round of planning, the TWDB provided estimates of groundwater availabilities. During the development of the supply data for the IPP, the Trinity GAM was not available at the time to update the availability estimates. The Trinity GAM has been published. Groundwater availability estimates for the Trinity Aquifer in Region B will be updated using the Trinity GAM.

24. Comment: It is unclear whether Region B adopted a sustainable approach to groundwater.

Response: Region B did adopt a sustainable approach to allocating groundwater supplies. However, the Region B RWPG has no regulatory or enforcement authority. In accordance with State law, groundwater pumpage is regulated through groundwater conservation districts. In Region B, there are approved groundwater conservation districts in Baylor, Hardeman and Foard Counties. No changes will be made to the final report based on this comment.

25. Comment: It is unclear whether Region B adopted a sustainable approach to groundwater.

Response: Through approval of the Region B Initially Prepared Plan, the Region B RWPG adopted a sustainable approach to groundwater. The Region B RWPG has no regulatory or enforcement authority to limit groundwater use. In accordance with State law, groundwater pumpage is regulated through groundwater conservation districts. In Region B, there are two approved groundwater conservation districts covering Baylor, Hardeman and Foard Counties. At the time the Initially Prepared Plan was published, only the Rolling Plains Groundwater Conservation District (Baylor County) had a certified groundwater management plan. This plan limits groundwater pumpage to 3 acre-feet per year per acre. The total available groundwater supply in Baylor County does not exceed this production limit. A brief discussion of the groundwater conservation districts in Region B will be added to Chapter 3.

26. Comment: It is unclear whether firm or safe yield was used in the development of the plan.

Response: A statement will be added that the safe yield of the following reservoirs was used for evaluating currently available supplies to water user groups.

27. Comment: Disagree with the use of "safe yield" and "safe supply" approach in the IPP.

Response: Water providers in Region B operate their reservoir systems with a reserve water capacity. In addition to the concern about drought, the water quality of a reservoir is greatly diminished under very low storage conditions and the ability to use this water is limited. "Safe Yield" represents the supply available to the region under current operations.

Water supply planning must consider the most restrictive conditions in assessing available supply and determining when new supplies are needed. In Region B, municipal water supplies are operated with a reserve capacity. Also, State regulations (TAC §291.93(3)) require public water utilities to submit a report to the state identifying how the utility intends to meet the projected demands of its service area when the utility reaches 85 percent of its capacity. The regulations also require public water suppliers and wholesale water suppliers to have sufficient supplies to meet the maximum day and/or contractual demands of all their customers. Planning for a surplus of 15 to 20 percent above the demand projections is within reasonable planning guidelines for long-range water supply planning. Drought management is a temporary strategy in response to a drought worse than the drought of record or emergency water shortages. Drought management is not a strategy for long-term water supplies.

28. Comment: There is an insufficient quantitative analysis of environmental impacts.

Response: The quantification of environmental impacts in the Region B Water Plan for the types of water management strategies is appropriate for a planning level report. Quantifications are based on available data from previous studies and desktop analyses. There is limited to no data available on the quantifiable impacts for most of the considered projects. An estimate of the number of acres impacted by each strategy will be added to Attachment 4-1. Impacts from water management strategies are assessed following guidelines developed by the Texas Water Development Board. The Region B Plan will be modified to show water supply yields from new reservoir projects assuming streamflow releases are made using the Consensus method, which is designed to mitigate impacts to downstream flows. Further quantifications of potential impacts of recommended water management strategies will be required by the entity pursuing the supply during the permitting process. A back up table for environmental impacts may be added to Attachment 4-1 to clarify the quantification of environmental impacts.

29. Comment: Water conservation is absent from Attachment 4-1 and 4-2 tables.

Response: Add conservation to Attachments 4-1 and 4-2.

30. Comment: Add passive clothes washer savings to entities with a gpcd less than 140.

Response: Add passive clothes washers to these entities.

31. Comment: Conservation savings are confusing.

Response: A detailed explanation of the savings calculations and costs will be added as an attachment to Chapter 4.

32. Comment: Footnote 1 to Table 4-9 Page 4-18 is confusing.

Response: Clarification regarding potential water savings as the results of a Water Audit will be provided.

33. Comment: More explanation is needed on water savings for the municipal conservation strategies.

Response: A detailed explanation of the savings calculations and costs will be added as an attachment to Chapter 4.

34. Comment: More explanation is needed on costs for the municipal conservation strategies.

Response: A detailed explanation of the savings calculations and costs will be added as an attachment to Chapter 4.

35. Comment: Discussion of environmental impacts associated with the reuse strategy for Bowie is inadequate.

Response: The recommended strategy of wastewater reuse will have no impacts to the water supplies reported in the Region B plan for downstream water users. This is because the analysis required by the TWDB requires the use of Run 3 of the Water Availability Model, which does not include return flows. An assessment of impacts to instream flows would require a daily flow analysis assuming current levels of return flows. This is beyond the scope of regional water planning. It is acknowledged that the reuse of wastewater could have a low to moderate impact to stream flows.

36. Comment: Discussion of environmental impacts associated with the strategies for Wichita Falls is inadequate.

Response: Additional discussion will be provided with regards to environmental impacts associated with the Wichita Falls Strategies.

37. Comment: a) Discussion of environmental impacts associated with the canal system improvements is inadequate.

Response: The laterals provide aquatic habitat during the growing season when the laterals are used to transport irrigation water to farms. However, during the five months or so that irrigation does not occur, the laterals are dry and do not provide aquatic habitat. The laterals are constructed to feed water to farms by gravity. Therefore, they have been constructed on relatively high ground; terrain that is not generally conducive to supporting wetlands. Because the laterals are man-made, they would not be considered jurisdictional waters in any event. For these reasons, environmental impacts to aquatic habitat and jurisdictional waters (including wetlands) resulting from the enclosure of laterals in pipelines would be expected to be minimal.

Comment: b) Discussion of environmental impacts associated with the conservation pool strategy for Lake Kemp is inadequate.

Response: Raising the conservation elevation at Lake Kemp will have no impact to stream flow downstream of the lake. This is because there will be no changes in the permitted storage in the lake. This strategy does not increase the conservation storage; it simply compensates for reduction in storage due to sedimentation. No changes to the authorized storage will be made. The Corps of Engineers will require a new sedimentation survey before it will approve any changes to the conservation elevation. The impacts from this strategy should be negligible. Additional discussion of this strategy will be added to Chapter 4.

38. Comment: The Chloride Control Project, as discussed beginning on page 4-45, does not meet a water supply need and more quantitative information about the potential impacts is required.

Response: The Chloride Control Project has been identified as a regional strategy, adopted by the RWPG, not as a stand-alone strategy, but as a supplement to the other strategies that depend on the Lake Kemp/Diversion waters. As chloride concentrations are reduced in the source water, the cost of treatment will be reduced and the more efficient use of the water for irrigation will be enhanced. Several environmental impact studies have been completed over the past years and concluded that the Chloride Control Project is an environmentally feasible project. No changes to the final plan will be made based on this comment.

39. Comment: Encourage the evaluation of an alternate approach that relies on land stewardship measures to help address both water quality and quantity issues in Lake Kemp.

Response: Comment noted, with no change in the final plan based on this comment.

40. Comment: Drought management is not evaluated in the Region B IPP.

Response: The Region B RWPG considered drought management measures, and concluded that drought management strategies are interim measures in response to drought and are not a reliable long-term water supply. No changes will be made to the final report based on this comment.

Chapter 5: Impacts of Selected Water Management Strategies on Key Parameters

41. Comment: Water Conservation is missing from the list of preferred water management strategies as shown on Page 5-8.

Response: Water Conservation will be added to the list.

Chapter 7: Description of How the Regional Water Plan is Consistent with Long-Term Protection of the States Water Resources, Agricultural Resources, and Natural Resources

42. Comment: The plan does not adequately address this consistency.

Response: Comment is noted. However, we believe the plan does adequately address this issue, and no change to the final plan will be made based on this comment.

Chapter 8: Recommendations Including Unique Stream Segments, Unique Reservoir Sites, and Legislative and Regional Policy Issues

43. Comment: Concern with the statement on Page 8-2 "It is the intention of the RWPG that surface water uses that will not have a significant impact on the region's water supply and water supply projects that do not involve the development of or connection to a new water source are deemed consistent with the regional water plan though not specifically recommended in the plan".

Response: Comment and concerns are noted, however, no change in the final plan will be made based on this comment.

44. Comment: The statement on page 8-2 "the Chloride Control Project on the Wichita and Pease Rivers is a water management strategy with high regional support" is a subjective statement and neglects to mention that U.S. Fish and Wildlife Service and Texas Parks and Wildlife Department have formally expressed their concerns.

Response: Chapter 8 is intended to be a discussion of Regional policy issues. The statement that the Chloride Control Project has a high degree of regional support is accurate. The US Fish and Wildlife Service and the Texas Parks and Wildlife Department are federal and state agencies, respectively, and their concerns regarding the project are well known. Additional discussion of their positions is not relevant to the subject of this chapter.

45. Comment: Concerns with statements on Page 8-7 regarding clarification of the effect of designating unique stream segments.

Response: The Region B Water Planning Group recognizes that the Texas Legislature clarified its intent with respect to state financing of the construction of a reservoir. However, such clarification does not necessarily preclude State agencies from using the designation in considering the granting of permits. For example, 30 TAC §297.53 (Habitat Mitigation) currently includes the following requirement:

In its consideration of an application for a new or amended water right to store, take, or divert state water in excess of 5,000 acre-feet per year, the commission shall assess the effects, if any, of the granting of the application on fish and wildlife habitats. **The commission shall also consider whether the proposed project would affect river or stream segments of unique ecological value** as identified by the applicable approved regional water plan and

designated as such by the Texas Legislature in accordance with Texas Water Code §16.051(3).
(emphasis added)

State law would presumably take precedence over a State regulation, but the above example demonstrates the general concern of the Water Planning Group on this issue. Furthermore, given the Legislature's clarification and the fact that there are no new reservoirs currently planned in Region B, the designation of unique stream segments in Region B seems unnecessary at this time.

46. Comment: Though no designation of reservoirs are being recommended as stated on Page 8-7 and 8-8, such designations should proceed carefully and we support the planning groups decision not to recommend designation.

Response: Comment noted with no change in the final plan based on this comment.

47. Comment: The basis for the recommendation that gallons per capita per day (gpcd) calculation of water use as stated on Page 8-11 be based on residential use is unclear.

Response: Utilizing total water use would not provide for a fair comparison across the State. Some areas have more manufacturing, industry, and commercial facilities than other areas and the gpcd values would be skewed for comparison purposes. Your comment is noted, however, no change in the final plan will be made based on this comment.

48. Comment: Use of municipal supplies for small scale livestock watering does not appear to be a major factor.

Response: Comment noted with no change in the final plan based on this comment.

Chapter 10: Adoption of Plan

49. Comment: Encourage the RWPG to consider holding future public hearings outside of typical business hours.

Response: The public hearing on the IPP was held in the evening of July 6, 2005 at 6:00 PM. However, the monthly or quarterly meetings of the RWPG are typically held during normal business hours and have been well attended.

50. Comment: The Technical Advisory Committee could be seen as beneficial, but it could also work against the intended nature of an effective public process.

Response: The Technical Advisory Committee (TAC) has been very beneficial to the RWPG and it should be noted that all information presented to the TAC was also presented to the entire RWPG at a public meeting. There was public notification and public participation at the meetings relative to all information presented to the TAC.

TEXAS PARKS & WILDLIFE COMMENTS – LETTER DATED SEPTEMBER 13, 2005

1. Comment: Texas Parks & Wildlife (TPW) encourages Region B to consider land stewardship as an additional means of conserving water that also may benefit wildlife habitat.

Response: Land Stewardship is a practice that is supported and encouraged by Region B and the RWPG believes it is a benefit to the State's natural resources by improving watershed productivity through increased surface water runoff and groundwater recharge.

2. Comment: TPW has expressed concerns in the past regarding the Chloride Control Project (CCP) but TPW supports the statement from the IPP that states "the effectiveness and environmental impacts of the project will be evaluated as the CCP facilities are completed and operating within the Wichita River Basin".

Response: Several environmental impact studies have been completed regarding the CCP and studies have shown that the project is environmentally feasible.

3. Comment: TPW expressed disappointment that the plan does not recommend nomination of any stream segments as ecologically unique.

Response: Given the fact that there are no new reservoirs currently planned in Region B, the designation of unique stream segments in Region B seems unnecessary at this time.

Pam McKay Comments – Letter Dated September 14, 2005

1. Comment: More emphasis should be placed on using water wisely.

Response: It should be noted that the Region B IPP relies heavily on conservation measures to reduce municipal water waste.

2. Comment: General public needs to be encouraged and educated on the importance of water conservation.

Response: Region B adopted four management practices as part of the IPP to encourage water conservation. These practices included Public and School Education, Reduction of Unaccounted for water, Water Conservation Pricing and Passive Clothes Washer Rules.

Penny Miller Comments – Letter Dated September 4, 2005

1. Comment: Lack of more coherent water conservation strategy.

Response: Water conservation was considered for all water use types with needs. In the development of projected water demands for regional water planning the Texas Water Development Board adjusted the municipal water demands to account for water savings associated with the natural replacement of plumbing fixture with more water efficient fixtures. The demands for the other categories of use that were adopted by the Region B RWPG and the TWDB did not include any adjustments for inherent conservation measures. Additional water savings for each water use category due to conservation is addressed through water management strategies. Conservation strategies are identified in the Region B IPP for municipal, irrigation and steam electric power use. Through the work of the Water Conservation Implementation Task Force, the State has recognized the need to promote awareness for conservation. A water conservation awareness campaign has been recommended to the Legislature. The Region B RWPG supports this recommendation.

2. Comment: Disagrees with the recommendation that gpcd measurements include only residential use.

Response: Currently, gpcd measurements are being used to compare different cities across the state. Variations in commercial, industrial, and institutional water use can result in significant differences in gpcd values. The recommendation to use residential water use for gpcd calculations would provide a more equitable means of comparisons across the state.

3. Comment: Lack of consideration of impacts to wildlife.

Response: Additional detail will be added to Attachment 4-4 to clarify the evaluation of environmental impacts.

James Cantwell Comment – (Phone Comment)

1. Comment: Concerned about the reduction in water supply for the City of Bowie. Water supply shown in 2006 Plan was reduced when compared to the 2001 Plan.

Response: The reduction in water supply for the City of Bowie was based on the use of the Water Availability Model (WAM) that was not used in the 2001 Plan. Bowie did not show a firm need but did show a safe need based on the WAM. No change to the plan will be made based on this comment.

PUBLIC HEARING COMMENTS – JULY 6, 2005

1. Ms. Penny Miller stated that as a resident of Wichita Falls she had been involved with various organizations that have studied water policy within the State of Texas, especially Region B during the past two years. She expressed her appreciation of the work that has been done on the Plan, the tremendous amount of information available for the public, and the watershed management approach that the region took. Of primary significance to Ms. Miller was the water conservation portion of the Plan. She noted the four municipal conservation efforts brought out including the dependence of public and school education, the cost of purchasing water, reduction of water through water audits, and passive clothes washer rules. Ms. Miller's opinion was that the Plan suggested that water conservation was just supposed to magically happen. She said that methods of implementation to encourage people to use less water must be addressed. She also stated that nothing was mentioned for industry, irrigation, agriculture, or any other category other than municipal. Ms. Miller disagreed that the suggestion that the gallons per day calculation of water used be based on residential use only. She remarked that was not appropriate, although easy to measure. When looking at water conservation strategies overall and the impact of water use within the region, all ways to measure water should be used.

Response: Ms. Penny Miller's comments were noted, however it should be noted that the IPP does promote water conservation through public education, water audits, water conservation pricing and Passive Clothes Washer Rules. With regards to gallons per capita per day (GPCD) calculation of water use being based on "residential" use only, it should be noted that this would allow for a fair across the state comparison of GPCD values. No change to the plan will be made based on this comment.

2. Ms. Roberta Sund of Lakeside City asked what the term "seasonal conservation pools" as listed under strategies meant. Ms. Simone F. Kiel replied that right now the Wichita irrigation district was operating under the seasonal pool, which runs from April through October, when allowable to contain water above their current permitted conservation level, which are the months used for irrigation. Mr. Jimmy Banks stated there had not been enough rainfall to put them into that level. Ms. Kiel explained that it allows them during high rainfall events to capture that water and use it for irrigation purposes. Ms. Sund also asked why Lakeside City showed a shortage even though it purchased water from the City of Wichita Falls which did not show a shortage. Mr. Maroney replied it was a contractual shortage.

3. Mr. Mick Baldys of Wichita Falls questioned the population projections and why it indicated a dramatic decrease in 2030. He expressed his concern as an increase in population might not meet the demand. Mr. Maroney explained many of the population projections were put forth by the state data center, and in most cases they just had to accept their projections. He expressed his concern, but also noted that the Plan would be updated every five years, which should keep it on track. Region B also figured its water availability using the safe-supply method.
4. Mr. Scott Taylor of the City of Wichita Falls asked how was the amount of conservation volume determined and how was the price for that conservation determined. Ms. Kiel stated that she had the figures but would rather get back with him so that her calculations were correct. However, she said it was based on population using the best management practice guidelines as developed by the Water Conservation Task Force. Additional information on the water savings and costs for conservation will be added as an attachment to Chapter 4.
5. Mr. Keith Spears of Vernon asked when referred to purchasing water from local providers, were local land owners taken into consideration and if so at what cost per thousand gallons. Mr. Maroney stated that he did not, a local provider would not necessarily be a land owner. It would probably fall under additional groundwater supply. When he asked what that price might be, Mr. Maroney stated that he was familiar with one system in the West Texas area that paid as much as 60¢ to 80¢ per thousand.
6. Ms. Jennifer Ellis of Austin asked why several counties showed several levels of strategies when the most economical would be conservation. Mr. Maroney replied he did not want to be totally dependent upon water conservation, although it was a noble effort. The alternatives were listed in case water conservation was not sufficient to meet the needs.

If you have any questions regarding the above information, please call me.

Sincerely,

BIGGS & MATHEWS, INC.
FREESE & NICHOLS
ALAN PLUMMER & ASSOC.