

# TEXAS WATER DEVELOPMENT BOARD



**AN ORDER** concerning the interregional conflict between the 2011 North Central Texas Regional Planning Area Regional Water Plan and the 2011 North East Texas Regional Planning Area Regional Water Plan in accordance with Texas Water Code § 16.053.

On January 8, 2015, the Texas Water Development Board (Board) considered the interregional conflict between the 2011 North Central Texas Regional Planning Area (Region C) Regional Water Plan and the 2011 North East Texas Regional Planning Area (Region D) Regional Water Plan.

In reaching its decision, the Board considered the following information: the 2011 Regional Water Plans for Regions C and D including all attachments thereto; oral arguments of the parties made in front of the Board on August 7, 2014 and January 8, 2015; the May 19, 2014, recommendation made by the Executive Administrator; the Briefs submitted on June 20, 2014 and Reply Briefs submitted by Regions C and D submitted on July 7, 2014; the analysis and quantification submitted by Region C on October 29, 2014; Region D's response to that analysis submitted on December 17, 2014; and the Executive Administrator's Recommendation based on Region C's analysis and quantification submitted on December 17, 2014.

The Board finds that Region C's 2011 Regional Water Plan together with the analysis and quantification submitted on October 29, 2014, meet the applicable statutory and regulatory criteria. Further, the Board finds that in accordance with Texas Water Code (TWC) §§ 16.051 and 16.053, the interregional conflict as asserted by Region D is hereby resolved with the inclusion of the Marvin Nichols Reservoir Project as a recommended water management strategy in the 2011 Region C Regional Water Plan. Accordingly, the Board adopts the following Findings of Fact and Conclusions of Law:

## **I. FINDINGS OF FACT**

### **Procedural History**

1. Every five years, each of the sixteen Regional Water Planning Areas submits a Regional Water Plan (RWP) to the Board for approval and incorporation into the State Water Plan (SWP) in accordance with TWC §§ 16.051 and 16.053.
2. On October 4, 2010, the Board approved the 2011 Region D RWP, which asserted that the inclusion of the proposed Marvin Nichols Reservoir as a water management strategy in any 2011 RWP or the 2012 SWP would create an interregional conflict based on negative impacts to Region D.
3. On December 6, 2010, the Board approved the 2011 Region C RWP, which included the proposed Marvin Nichols Reservoir as a recommended, long-term water management strategy for Tarrant Regional Water District, North Texas Municipal Water District and the Upper Trinity Regional Water District, and as an alternative strategy for Dallas Water Utilities and the City of Irving.
4. On January 12, 2011, Ward Timber Ltd., et. al. filed a lawsuit in Travis County District Court, seeking judicial review of the Board's decision approving the Region C 2011 RWP.
5. On December 5, 2011, the District Court denied the Board's plea to the jurisdiction, declared that an interregional conflict existed between the Region C and Region D water plans, reversed the Board's approval of Region C's 2011 RWP, and remanded the case back to the Board to resolve the conflict.
6. On May 23, 2013, the 11<sup>th</sup> Court of Appeals of Texas, Eastland, affirmed the ruling of the District Court.
7. On December 16, 2013, in an attempt to negotiate a resolution to the conflict, the TWDB facilitated mediation for the Region C and D regional water planning groups. The mediation was conducted by the State Office of Administrative Hearings.
8. On December 17, 2013, the mediator reported the mediation as unsuccessful.
9. On March 4, 2014, the Executive Administrator issued a preliminary draft recommendation to resolve the conflict between the Region C and Region D 2011 RWPs.

10. After publishing notice in accordance with 31 TAC § 357.14, on April 29, 2014 a public hearing was held in Region C and on April 30, 2014, a public hearing was held in Region D during which the Executive Administrator received input from the public regarding the Executive Administrator's draft resolution of the conflict.
11. The Executive Administrator issued his final recommendation regarding resolution of the interregional conflict on May 19, 2014.
12. Regional water planning groups for Regions C and D submitted briefs to the Board on June 20, 2014 and reply briefs on July 7, 2014.
13. On August 7, 2014, the Board heard comments from designated representatives from Regions C and D as well as from the Executive Administrator.
14. After consideration of the comments and all information submitted by the Executive Administrator and Regions C and D, the Board then issued an Interim Order in which Region C was ordered to conduct an analysis and quantification of the impacts of the Marvin Nichols Reservoir on the agricultural and natural resources of Region D and the State, pursuant to TWC §§ 16.051 and 16.053 and Title 31 Texas Administrative Code, Chapters 357 and 358. Region C was to submit this analysis and quantification to the Board by November 3, 2014.
15. Region C submitted the analysis and quantification of the impacts of the Marvin Nichols Reservoir to the Board on October 29, 2014.
16. Region D submitted comments related to Region C's October 29, 2014, analysis and quantification on December 17, 2014. The Executive Administrator submitted a recommendation to the Board related to Region C's analysis and quantification on December 17, 2014.
17. The Board relies upon and adopts the information contained in the filings submitted for consideration in this matter as support for its ultimate determinations on resolution of this conflict, to the extent consistent with its decision.

### **Project Description and Cost**

18. The Marvin Nichols Reservoir as proposed by Region C is to be located on the main stem of the Sulphur River Basin in Franklin, Titus, and Red River Counties, and entirely within the boundaries of Region D.

19. The Marvin Nichols Reservoir is a recommended water management strategy for Tarrant Regional Water District and North Texas Municipal Water District, and the Upper Trinity Regional Water District. It is an alternative strategy for Dallas Water Utilities and the City of Irving.
20. Region C indicates in its 2011 RWP that the capital cost of the Marvin Nichols Reservoir, including the primary delivery infrastructure, is approximately \$3.43 billion.
21. The cost per thousand gallons of water from the Marvin Nichols Reservoir will be approximately \$2.07 until the debt service is paid. Once the debt service is paid, the cost per thousand gallons of water will be reduced to approximately \$0.57.
22. The range of costs for other potentially feasible water management strategies for Region C vary between just over \$.50 to \$7.78 per thousand gallons.
23. As proposed, the current site for the Marvin Nichols Reservoir conflicts with existing cemeteries, electric lines, oil and gas pipelines, oil and gas wells, water wells and roads. Region C has estimated that 10 percent of the capital costs would be applied to address these issues.
24. The projected yield of the Marvin Nichols Reservoir is 612,300 acre-feet per year. Of this, 489,840 acre-feet per year will be allocated to Region C. Region D will be allocated 20 percent of the yield.
25. As noted in Region C's 2011 RWP, the division of the 489,840 acre-feet per year assumed to be available to Region C from the proposed Marvin Nichols Reservoir is:
  - a. 280,000 acre-feet per year for Tarrant Regional Water District;
  - b. 174,840 acre-feet per year for North Texas Municipal Water District; and
  - c. 35,000 acre-feet per year for Upper Trinity Regional Water District.

### **Public Health, Safety, and Welfare**

26. Ensuring that municipal demands are met is a way to safeguard the public's health, safety, and welfare. Municipal demand includes potable water supply as well as sufficient supply for sanitation and fire protection. Municipal demand also includes the needs of residential, commercial, and institutional water users.
27. In 2006, 90.7 percent of the water use in Region C was directed for municipal purposes.

28. As shown in the Region C 2011 RWP, the supply from the Marvin Nichols Reservoir is an integral supply to Tarrant Regional Water District, North Texas Municipal Water District and Tarrant Regional Water District, each of which provide a large supply of its water for municipal demands.
29. Including the Marvin Nichols Reservoir in the Region C 2011 RWP as a recommended strategy will enable the Region to meet its projected municipal needs.

### **Furtherance of Economic Development**

30. Timber is abundant and supports a large timber industry in Region D.
31. The development of a new reservoir in the Sulphur River Basin could act as a catalyst for economic development and growth in the area. New reservoirs may stimulate the economy through new recreational business and local improvements.
32. The Board Staff provides technical assistance to regional water planning groups. One aspect of the technical assistance is the development of the socio-economic impacts of failing to meet projected water needs. The Board Staff estimated that the annual economic value and income loss associated with the projected Region C potential water shortages in 2060, is over \$50 billion.

### **Protection of Natural Resources**

33. Both Regions acknowledge that there are negative impacts to natural resources associated with the Reservoir.
34. The analysis and quantification submitted by Region C on October 29, 2014 relied on a 2013 report prepared by Freese and Nichols, Inc. for the United States Army Corps of Engineers.
35. The analysis and quantification provided by Region C on October 29, 2014, is based primarily on the area to be inundated by the Marvin Nichols Reservoir, which is a total of 66,103 acres.
36. The quantification of impacts to natural resources provided by Region C included a summary of the flow-frequency relationship for the Sulphur River immediately below the proposed Marvin Nichols Reservoir with and without the Reservoir.

37. It is estimated that the proposed Marvin Nichols Reservoir will inundate 5.2 percent of the forested wetlands, 2.4 percent of the bottomland hardwood forests, and 0.4 percent of the upland forests in Region D.
38. It is estimated that the proposed Marvin Nichols Reservoir would reduce flows discharging to bays, estuaries and arms of the Gulf of Mexico by approximately 670,000 acre-feet per year.
39. There are an estimated 5.973 million acres of bottomland hardwoods in Texas.
40. There are an estimated 831,838 acres of bottomland hardwoods in Region D.
41. The Marvin Nichols Reservoir as proposed would inundate 31,600 acres of bottomland hardwood.
42. Mitigation will be required to offset impacts of the Marvin Nichols Reservoir on natural resources, but the estimates of mitigation land are wide-ranging at this stage. The estimates for the required mitigation that have been provided to the Board at this time have been between approximately 47,000 and 749,000 acres.
43. In the counties in which the proposed Marvin Nichols Reservoir would be located, there are three federally endangered species, none of which are expected to be impacted by the Reservoir; and 21 species listed as threatened or endangered by the Texas Parks and Wildlife Department, three of which are considered to have moderate potential to be impacted by the Reservoir.
44. It is estimated that the proposed Marvin Nichols Reservoir will impact 34 sites that are likely eligible for the National Register of Historic Properties, and 18 sites that are not likely eligible for the National Register of Historic Properties.

#### **Protection of Agricultural Resources**

45. Of the approximately 66,000 acres of land to be inundated by the Marvin Nichols Reservoir, close to 43,000 acres are useful in the growth and harvesting of timber.
46. It is anticipated that mitigation land required for the Marvin Nichols Reservoir will be located in Region D and that farming and timbering activity on mitigation land will be prohibited or significantly restricted.
47. The inundation of the Marvin Nichols Reservoir will impact an estimated 1.6 percent of the total timberland in Region D.

48. As proposed, the Marvin Nichols Reservoir would inundate an estimated 0.76 percent of the prime farmland in Region D and an estimated 0.04 percent of the prime farmland in the state.

### **Water Conservation Practices and Drought Management Measures**

49. Region C recommended water management strategies that are expected to reduce water use by 567,473 acre-feet by the year 2060.
50. The water conservation plans and drought contingency plans for the required entities in Region C were reviewed and updated in the 2011 Region C RWP.
51. Consistent with TWDB rules, both Region C and Region D included water management strategies in their RWPs that if built, would provide a greater supply than their projected demand.

### **Long-Term Protection of State's Water Resources**

52. Region C's 2011 RWP is consistent with the long-term protection of the state's water resources, in part because the Region used the surface water availability models and groundwater availability models approved by the Texas Commission on Environmental Quality and the Board, the results of which were used to determine the amount of supply that could be allocated while still protecting the sustainability of the resource.
53. Region C undertook several studies to address the rapid population growth and other changing conditions in Region C. The results of those studies were incorporated into the development of the 2011 Region C RWP.

## **II. CONCLUSIONS OF LAW**

1. The Board has jurisdiction over this matter pursuant to TWC § 16.053(h)(6), which states that the Board shall facilitate coordination between regions to resolve an interregional conflict, and if a conflict remains, the Board shall resolve the conflict.
2. The Board is required to approve RWPs pursuant to TWC §16.053.

3. The Board is required to prepare and adopt a comprehensive SWP that incorporates the RWP approved from each region under TWC § 16.051.
4. Pursuant to TWC § 16.053(h)(7), the Board may approve and incorporate a RWP only after determining that all interregional conflicts involving that regional planning area have been resolved; the plan includes water conservation practices and drought management measures; and the plan is consistent with long-term protection of the state's water resources, agricultural resources, and natural resources as embodied in the guidance principles adopted under TWC § 16.051(d).
5. The Board resolves this conflict pursuant to TWC § 16.053(h)(6) after following the procedures contained in the Board's rules.
6. There are no outstanding interregional conflicts related to the 2011 Region C RWP.
7. The Region C 2011 RWP together with the analysis and quantification submitted on October 29, 2014, meets the statutory requirements related to the Regional and State Water Plans under TWC §§ 16.051 and 16.053 as well as the Board's rules.
8. The projected cost per thousand gallons of water from the Reservoir is reasonable under TWC §§ 16.051 and 16.053.
9. The public health, safety, and welfare of the state will be ensured, in part through the provision of water from the proposed Marvin Nichols Reservoir and therefore, including it in the 2011 RWP for Region C, complies with the requirements of TWC §§ 16.051 and 16.053.
10. Region C has submitted a reasonable analysis and quantification of the impacts of the Reservoir on the agricultural and natural resources of Region D and the State, in accordance with TWC §§ 16.051 and 16.053.
11. Region C's 2011 RWP is consistent with the long-term protection of the state's agricultural and natural resources as provided for in TWC § 16.053(h)(7)(C).
12. In reviewing a regional water plan, the Board must consider and balance the statutory criteria contained in TWC § 16.053.
13. In accordance with TWC § 16.053(h)(7), the water conservation plans and drought contingency plans for the required entities in Region C were reviewed and updated in the 2011 Region C RWP.
14. Region C included a drought management plan in its 2011 RWP that met the requirements of TWC § 16.053(h)(7).



15. Region C included reasonable and comprehensive water conservation practices in its 2011 RWP and is therefore in compliance with TWC § 16.053(h)(7).
16. Pursuant to 31 TAC § 357.62, this Order is final and not appealable to the Board.

**NOW, THEREFORE, BE IT ORDERED BY THE TEXAS WATER DEVELOPMENT BOARD, IN ACCORDANCE WITH THESE FINDINGS OF FACT AND CONCLUSIONS OF LAW THAT:**

1. The Region C Regional Water Planning Group shall revise, pursuant to TWC § 16.053(h)(6), Chapter 10 of its 2011 RWP, relating to the Plan Approval Process to reflect the mediation, this Board action, and other actions taken to effectuate this decision. Region C shall adopt the revisions and submit its revised RWP and supporting documents to the Board on or before March 20, 2015, for Board consideration.
2. The Region D regional water planning group shall revise, pursuant to TWC § 16.053(h)(6), its 2011 RWP by revising all references to a conflict to reflect that the conflict has been resolved, and to revise Chapter 10 of its 2011 RWP, relating to the Plan Approval Process, to reflect the mediation, this Board action, and other actions taken to effectuate this decision. Region D shall adopt the revisions and submit its revised RWP and supporting documents to the Board on or before March 20, 2015, for Board consideration.
3. The Executive Administrator is directed to undertake an examination of current rules and guidance pertaining to the development of regional water plans as well as an evaluation of Board staff's review process, and identify any opportunities for: completing a more substantive review of the plans; ensuring that future regional and state water planning efforts include all statutorily-required analyses; involving the Regional Water Planning Groups Stakeholder Committee in considering ways to identify potential conflicts and facilitate resolution early in the planning process; and defining "interregional conflict" in a manner that is consistent with the ruling of the 11<sup>th</sup> Court of Appeals in *Texas Water Development Board vs. Ward Timber, Ltd.*, 411 S.W.3d 554 (Tex. App.-Eastland 2013,

no pet.). Once the Executive Administrator has completed his review, the Executive Administrator will report back to the Board for further guidance.

4. The Region C and Region D regional water planning groups are encouraged to continue to participate in the Sulphur River Basin Study.
5. If any provision, sentence, clause, or phrase of this order is for any reason held to be invalid, the invalidity of any portion shall not affect the validity of the remaining portions of this order.
6. Authority is delegated to the General Counsel to make non-substantive changes to this order, as needed.

Issue Date: January 8, 2015

TEXAS WATER DEVELOPMENT BOARD



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Carlos Rubinstein, Chairman