October 2, 2006

Mr. Bill Roberts
Texas Water Development Board
P.O. Box 13231
Austin, Texas 78711-3231

Dear Mr. Roberts:

We have reviewed the draft State Water Plan, including the electronic files available through the Texas Water Development Board website. The draft plan is well written and presents a comprehensive overview of the water supply issues and recommended water management strategies developed by the regional water planning groups. We recognize that many of the water management strategies are multi-faceted and the details cannot be adequately described for each strategy in the State Water Plan. However, we would like to clarify an important component of the water management strategy to move water from Toledo Bend Reservoir to Region C and the North East Texas region.

The 2006 Region C Water Plan recommends moving a total of 400,000 acre-feet per year of water from Toledo Bend Reservoir to Region C and another 100,000 acre-feet per year to the upper Sabine Basin in the North East Texas region to meet long-term needs in the Region C and D planning areas. This strategy will be implemented in two phases, with Phase 1 completed by 2050 and Phase 2 after 2060. Important components of this strategy are obtaining an interbasin transfer permit to move this water from the Sabine River Basin to the Trinity River Basin and securing Texas' full share of the yield of Toledo Bend.

The Toledo Bend Reservoir was built in the 1960s by the Sabine River Authority of Texas and the Sabine River Authority of Louisiana. The yield of the project is split equally between the two states, and Texas' share of the yield being slightly more than 1 million acre-feet per year. The Sabine River Authority of Texas currently has a water right to divert 750,000 acre-feet per year from Toledo Bend Reservoir and has applied for a water right amendment to divert an additional 293,300 acre-feet per year. When granted, the Sabine River Authority of Texas will have water rights equal to Texas' full share of the yield of Toledo Bend. The water right amendment, which has been submitted to the TCEQ and declared administratively complete, also seeks the right to move this water from the Sabine River Basin to the Trinity River Basin. This water right was submitted with the intent of providing water to Region C and is an important component of the Toledo Bend water management strategy.

The 2006 Region C Water Plan, 2006 East Texas Region Water Plan and the 2006 North East Texas Region Water Plan each discuss moving water from Toledo Bend as a recommended water management strategy for the Sabine River Authority. This strategy is specifically discussed in the Region C plan in the Executive Summary, Sections 4D.1, 4D.26, 4E.1, Chapter 5, and related appendices. The North East Texas water plan recommends using water from the Toledo Bend transfer to meet water needs in Hunt County in Section 4.8 of the plan. In the East Texas water plan, the strategy is discussed in Section 4C, and the East Texas plan refers to the 2006 Region C and 2006 North East Texas water plans for details of the recommended strategy. The permit amendment is specifically identified in the 2006 Region C Water Plan in Sections 4D.1, 4E.1 and 5.2, which discuss the Toledo Bend project. For your convenience, we have attached excerpts from each of three regional water plans.

In light of the recommendations in the regional water plans and the importance of the permit amendment for the Toledo Bend Reservoir strategy, we offer these suggested changes to the State Water Plan:

1. Chapter 6, page 152: Add a note to the Reservoir Yield table that the 750,000 acre-feet per year from Toledo Bend Reservoir is the permitted diversion. SRA is seeking a permit amendment for Texas's share of the full yield of the project.
2. DB07 database: Add a regional comment to water management strategies C07TB, C07.1TB, C07.2TB, and C07.3TB that says, "SRA is seeking a water right to divert an additional 293,300 acre-feet per year from Toledo Bend Reservoir, and a right to move this water from the Sabine River Basin to the Trinity River Basin. This permit amendment, when granted, will be part of this water management strategy."

We appreciate the opportunity to comment on the draft State Water Plan and we commend the Texas Water Development Board is developing a comprehensive plan to secure adequate water supplies for the State's future generations.

Sincerely,

SABINE RIVER AUTHORITY OF TEXAS

Jerry Clark
Executive Vice President
And General Manager

Excerpt from 2006 Region C Water Plan

Chapter 4D – Evaluation of Major Water Management Strategies

[Note: this chapter discusses major potentially feasible strategies. Recommended strategies for wholesale water providers are discussed in Chapter 4E.]

4D.1 Toledo Bend Reservoir

Toledo Bend Reservoir is an existing impoundment located in the Sabine River Basin on the border between Texas and Louisiana. It was built in the 1960s by the Sabine River Authority of Texas (SRA) and the Sabine River Authority of Louisiana. The yield of the project is split equally between the two states, and Texas' share of the yield is slightly over 1,000,000 acre-feet per year [(2)]. The SRA holds a Texas water right to divert 750,000 acre-feet per year from Toledo Bend and is seeking the right to divert an additional 293,300 acre-feet per year.

Table 4D.1
Major Potentially Feasible Water Management Strategies for Region C

Strategy	Maximum Supply Available to Region C in Acre-Feet per Year	Location Number in Figure 4D.1
Conservation and Reuse (Includes Projects Listed below)	1,068,627	N/A
Toledo Bend Reservoir	600,000	24
Gulf of Mexico with Desalination	Unlimited	18
Marvin Nichols Reservoir	489,840	20
Wright Patman Lake – System	390,000	22
Lake Texoma Not Yet Authorized - Blend	220,000	3
Lake Texoma Not Yet Authorized - Desalination	207,000	3
Sam Rayburn Reservoir/B.A. Steinhagen	200,000	23
Lake Livingston	200,000	17
Ogallala Groundwater (Roberts County)	200,000	1
TRWD Third Pipeline and Reuse	188,765	8
Wright Patman Lake - Raise Flood Pool	180,000	22
Oklahoma Water	165,000 or more	16
Lower Bois d'Arc Creek Reservoir	123,000	9
Lake Fork Reservoir	120,000	10
George Parkhouse Lake (North)	118,960	12
Lake Palestine	114,337	14
Lake Texoma - Blend	113,000	3

Table 4D.1 (continued)

Strategy	Maximum Supply Available to Region C in Acre-Feet per Year	Location Number in Figure 4D.1
Lake Fastrill	112,100	15
George Parkhouse Lake (South)	108,480	13
Lake Texoma - Desalination	105,000	3
East Fork Reuse Project	102,000	5
Wright Patman Lake - Texarkana	100,000	22
Carrizo-Wilcox Groundwater (Brazos County)	100,000	6
Cypress Basin Supplies (Lake O' the Pines)	89,600	21
Return Flows above DWU Lakes	79,605	N/A
Southside (Lake Ray Hubbard) Reuse	67,253	4
Lewisville Lake Reuse	67,253	2
Tehuacana Reservoir	56,800	7
Lake Ralph Hall and Reuse	50,740	11
Lake Columbia	35,800	19

The SRA and Metroplex water suppliers have been investigating the possibility of developing substantial water supplies from Toledo Bend Reservoir, with up to 100,000 acre-feet per year delivered to SRA customers in the upper Sabine River Basin (Region D, the North East Texas Region) and up to 600,000 acre-feet per year delivered to Region C. (Toledo Bend Reservoir is located in Region I, the East Texas Region.) The development of this supply will require an agreement among the SRA and Metroplex suppliers, an interbasin transfer permit from the Sabine River Basin to the Trinity River Basin, and development of water transmission facilities. Because Toledo Bend Reservoir is so far from Region C (about 200 miles), this is a relatively expensive source of supply for the Region. However, it does offer a substantial water supply, and environmental impacts will be limited because it is an existing source.

As discussed in Section 4E, getting water from Toledo Bend Reservoir is a recommended strategy for the North Texas Municipal Water District (200,000 acre-feet per year) and the Tarrant Regional Water District (200,000 acre-feet per year). It is an alternative strategy for Dallas Water Utilities and the Upper Trinity Regional Water District. The recommended strategy involves the use of 500,000 acre-feet per year (100,000 for SRA customers in the upper Sabine River Basin and 400,000 for the Metroplex). The Region C capital cost of the recommended strategy is $1.92 billion. (This differs from the cost in Table 4D.2 because the recommended strategy develops less supply from Toledo Bend Reservoir than is potentially feasible.)

4D.26 Summary of Recommended Major Water Management Strategies

Table 4D.3 is a summary of the recommended major water management strategies for Region C. There are 15 recommended major strategies, supplying a total of 2.24 million acre-feet per year to Region C at a capital cost of $8.6 billion.

Table 4D.3
Recommended Major Water Management Strategies for Region C

Strategy	Supplier	Supply (Acre-Feet per Year)	Supplier Capital Cost	Supplier Unit Cost ($/kGal.)	
				Pre-Amort.	Post-Amort.
Toledo Bend Reservoir	NTMWD	200,000	$886,002,000	$1.56	$0.57
	TRWD	200,000	$1,035,188,000	$1.92	$0.77
Marvin Nichols Reservoir	NTMWD	174,840	$534,125,000	$0.94	$0.26
	TRWD	280,000	$1,482,167,000	$1.66	$0.48
	UTRWD	35,000	$142,761,000	$1.27	$0.36
TRWD 3rd Pipeline & Reuse	TRWD	188,765	$626,347,000	$1.05	$0.31
Lower Bois d'Arc Ck. Res.	NTMWD	123,000	$399,190,000	$0.87	$0.14
Lake Fork Reservoir	DWU	120,000	$362,916,000	$0.84	$0.17
Oklahoma Water	NTMWD	50,000	$128,898,000	$0.95	$0.37
	TRWD	50,000	$287,349,000	$1.86	$0.58
	UTRWD	15,000	$60,967,000	$1.36	$0.45
Lake Palestine	DWU	111,460	$414,447,000	$1.08	$0.25
New Lake Texoma (Blend)	NTMWD	113,000	$201,829,000	$0.58	$0.18
Lake Fastrill	DWU	112,100	$569,170,000	$1.40	$0.27
Wright Patman Lake - Flood Pool	DWU	112,100	$572,036,000	$1.50	$0.36
East Fork Reuse Project	NTMWD	102,000	$288,879,000	$0.92	$0.21
Return Flows above DWU Lakes	DWU and UTRWD	79,605	$0	$0.10	$0.10
Southside (Lake Ray Hubbard) Reuse	DWU	67,253	$200,333,000	$0.87	$0.21
Lewisville Lake Reuse	DWU	67,253	$191,439,000	$0.78	$0.15
Lake Ralph Hall and Reuse	UTRWD	50,740	$211,153,000	$1.10	$0.17
Region C Total		**2,252,116**	**$8,595,196,000**		

Note: The costs and unit costs in Table 4D.3 may be different from those in Table 4D.2 because the amounts and participants may be different.

4E.1 Recommended Strategies for Regional Wholesale Water Providers

The recommended strategies for the regional wholesale water providers include conservation, reuse, connections to existing sources already under contract, connection to other existing sources, and the development of new reservoirs. The total amount of supply from these strategies is 2.6 million acre-feet per year in 2060, bringing the total supply for the regional providers to 3.8 million acre-feet per year.

Strategies for Multiple Wholesale Water Providers (Pages 4E.2 – 3)

Toledo Bend Reservoir. The use of water from Toledo Bend Reservoir (East Texas) to North Texas is a recommended strategy for the Tarrant Regional Water District and North Texas Municipal Water District in Region C. Toledo Bend Reservoir is an alternative strategy for Dallas Water Utilities and Upper Trinity Regional Water District. With participation from the NTMWD and the TRWD in Region C, the project would include the delivery of 500,000 acre-feet per year of water:

- 100,000 acre-feet per year for the Sabine River Authority in the upper Sabine Basin (North East Texas Region)
- 200,000 acre-feet per year for Tarrant Regional Water District
- 200,000 acre-feet per year for North Texas Municipal Water District.

The facilities to deliver the water would be developed in phases, with Phase 1 planned for 2050 and Phase 2 planned after 2060.

Dallas Water Utilities (page 4E.8)

In addition, the following alternative water management strategies are designated for DWU in case water demand is higher than projected or one or more of DWU's recommended water management strategies is not developed in a timely manner:

- Additional water conservation
- Lake Texoma
- Toledo Bend Reservoir
- Lake O' the Pines
- Lake Livingston

Tarrant Regional Water District (Pages 4E.11,4E.13-17)

The recommended water management strategies for TRWD are as follows:

- Conservation and Reuse
  - Water conservation by customers
  - Third pipeline and reuse project
- Eagle Mountain Connection
- Marvin Nichols Reservoir
- Toledo Bend Reservoir

The development of the Marvin Nichols Reservoir, connection to Toledo Bend Reservoir, and connection to Oklahoma water sources are multi-provider strategies and are discussed above.

The alternative water management strategies for TRWD are as follows:

- Toledo Bend Reservoir Phase 2 (accelerated to occur before 2060)]
- Wright Patman Lake
- Sam Rayburn/B.A. Steinhagen
- Lake Tehuacana
- Livingston
- System operation
- Paluxy groundwater wells near Eagle Mountain Lake.

Table 4E.4
Recommended Water Management Strategies for Tarrant Regional Water District
- Values in Acre-Feet per Year -

Source	2010	2020	2030	2040	2050	2060
Currently Available Supplies (Safe Yield)						
West Fork System	*98,975*	*98,150*	*97,325*	*96,500*	*95,675*	*94,850*
Benbrook Lake	*6,834*	*6,834*	*6,834*	*6,834*	*6,834*	*6,834*
Cedar Creek	*152,783*	*150,067*	*147,350*	*144,633*	*141,917*	*139,200*
Richland-Chambers Reservoir	*188,444*	*181,388*	*174,332*	*167,276*	*160,220*	*153,165*
Total Available Supplies	***447,036***	***436,439***	***425,841***	***415,243***	***404,646***	***394,049***
Water Management Strategies						
Conservation	11,653	26,391	38,319	50,086	63,480	79,793
Third Pipeline and Reuse						
- Additional Richland-Chambers Yield	21,556	28,612	35,668	37,465	37,465	37,465
- Additional Cedar Creek Yield		24,933	27,650	30,367	33,083	35,800
- RC Reuse	63,000	63,000	63,000	63,000	63,000	63,000
- CC Reuse		52,500	52,500	52,500	52,500	52,500
Total, Third Pipeline and Reuse	**84,556**	**169,045**	**178,818**	**183,332**	**186,048**	**188,765**
Marvin Nichols Reservoir			140,000	140,000	280,000	280,000
Toledo Bend Reservoir					100,000	100,000
Oklahoma Water						50,000
Total Supplies from Strategies	**96,209**	**195,436**	**357,137**	**373,418**	**629,528**	**698,558**
Total Supplies	**543,245**	**631,875**	**782,978**	**788,661**	**1,034,174**	**1,092,607**
Total from Conservation & Reuse	96,209	195,436	217,137	233,418	249,528	268,558
Percent from Conservation & Reuse	17.7%	30.9%	27.7%	29.6%	24.1%	24.6%
Projected Demands	**428,966**	**518,976**	**595,992**	**678,304**	**779,509**	**893,510**
Surplus or (Shortage)	114,280	112,899	186,986	110,357	254,665	199,097

Table 4E.5
Summary of Costs for TRWD Recommended Water Management Strategies

Strategy	Development Dates	Quantity for TRWD (Ac-Ft/Yr)	TRWD Share of Capital Cost	Unit Cost ($/kGal.)	
				Pre-Amort.	Post-Amort.
Eagle Mountain Connection	2008	0	$130,595,000	N/A	N/A
Third East Texas Pipeline and Reuse	2010, 2018	188,765	$626,347,000	$1.05	$0.31
Marvin Nichols Reservoir	2030, 2050	280,000	$1,482,167,000	$1.66	$0.48
Toledo Bend Reservoir	2050, after 2060	200,000	$1,035,188,000	$1.92	$0.77
Oklahoma Water	2060	50,000	$287,349,000	$1.86	$0.58
Total Capital Costs			**$3,561,646,000**		

Note: No capital costs are associated with the recommended water conservation measures.

North Texas Municipal Water District (Pages 4E.17-18, 4E.23, 25)

The North Texas Municipal Water District (NTMWD) serves much of the rapidly growing suburban area north and east of Dallas. Demands on the NTMWD are expected to more than double from 2010 to 2060. The projected water shortages for the NTMWD are nearly 113,300 acre-feet per year in 2010, increasing to 545,400 acre-feet per year by 2060. A considerable portion of this shortage will be met through conservation and reuse, as NTMWD fully utilizes its existing sources and their capacity for reuse. To meet the remaining shortages, NTMWD will need to develop new water supplies and utilize interim water sources as long-term strategies are developed. A listing of the potentially feasible strategies considered for NTMWD with the unit costs is shown on Figure 4E.7. The recommended water management strategies for NTMWD include:

- Conservation
- Interim Treated Water Purchase from Dallas Water Utilities
- Additional Wilson Creek Reuse Project
- East Fork Reuse Project
- Additional Lake Lavon Yield
- Interim Purchase of Lake Texoma Water from GTUA/Sherman
- Upper Sabine Basin Supply

- New Supply from Lake Texoma
- Lower Bois d'Arc Creek Reservoir
- Fannin County Water Supply System
- Marvin Nichols Reservoir
- Toledo Bend Reservoir
- Oklahoma Water
- Water Treatment Plant and Distribution Improvements

The development of the Marvin Nichols Reservoir, connection to Toledo Bend Reservoir, and connection to Oklahoma water sources are multi-provider strategies and are discussed above.

Table 4E.7
Recommended Water Management Strategies for North Texas Municipal Water District
- Values in Acre-Feet per Year -

Source	2010	2020	2030	2040	2050	2060
Currently Available Supplies						
Lake Lavon	*104,000*	*104,000*	*104,000*	*104,000*	*104,000*	*104,000*
Lake Texoma	*77,300*	*77,300*	*77,300*	*77,300*	*77,300*	*77,300*
Lake Chapman	*49,976*	*49,150*	*48,324*	*47,498*	*46,672*	*45,843*
Wilson Creek Reuse (permitted)	*35,941*	*35,941*	*35,941*	*35,941*	*35,941*	*35,941*
Lake Bonham	*3,800*	*3,800*	*3,800*	*3,800*	*3,800*	*3,650*
Treatment and Distribution losses	*(13,163)*	*(13,122)*	*(13,120)*	*(13,770)*	*(12,553)*	*(12,714)*
Total Available Supplies	***257,854***	***257,069***	***256,245***	***254,769***	***255,160***	***254,020***
Water Management Strategies						
Conservation	12,638	33,936	47,866	60,800	72,991	86,114
Interim DWU Supply	11,210	11,210	0	0	0	0
Wilson Creek Reuse (new)	26,956	35,941	35,941	35,941	35,941	35,941
East Fork Reuse	81,400	96,400	102,000	102,000	102,000	102,000
Additional Lake Lavon	11,000	10,000	9,000	8,000	7,000	6,000
Interim GTUA Supply	20,000	0	0	0	0	0
Upper Sabine Basin	50,000	30,000	20,000	10,000	10,000	10,000
New Lake Texoma		38,250	57,105	54,105	100,460	112,460
Lower Bois d'Arc Creek		123,000	121,000	119,000	117,000	115,000
Marvin Nichols Reservoir			87,420	87,420	174,840	174,840
Toledo Bend Phase 1					100,000	100,000
Oklahoma Water						50,000
Treatment and Distribution losses	(10,028)	(17,240)	(21,623)	(20,823)	(32,362)	(35,312)
Total Supplies from Strategies	**213,204**	**378,737**	**480,332**	**477,266**	**720,232**	**792,355**
Total Supplies (Including Losses)	**461,030**	**618,566**	**714,954**	**711,212**	**943,030**	**1,011,063**
Total from Conservation & Reuse	156,935	202,218	221,748	234,682	246,873	259,996
Percent from Conservation & Reuse	34.0%	32.7%	31.0%	33.0%	26.2%	25.7%
Projected Demands	**371,170**	**482,856**	**567,856**	**650,027**	**722,158**	**799,386**
Surplus or (Shortage)	89,860	135,710	147,098	61,185	220,872	211,677

Table 4E.8
Summary of Costs for NTMWD Recommended Water Management Strategies

Strategy	Develop Dates	Quantity for NTMWD (Ac-Ft/Yr)	NTMWD Share of Capital Cost	Unit Cost ($/kGal.)	
				Pre-Amort.	Post-Amort.
Treatment and Distribution Improvements	2005-2060	N/A	$1,290,523,000	N/A	N/A
Interim DWU Supply	2006	11,210	$1,350,000	$0.75	$0.72
Wilson Creek Reuse	2005	35,941	$1,150,000	$0.0072	$0.00
East Fork Reuse	2010	102,000	$288,879,000	$0.92	$0.21
Additional Lake Lavon	2006	11,000	$270,000	$0.0056	$0.00
Interim GTUA Supply	2006	20,000	$104,000	$0.09	$0.09
Upper Sabine Basin	2010	50,000	$60,232,000	$0.52	$0.25
New Lake Texoma	2015	113,000	$201,829,000	$0.58	$0.18
Lower Bois d'Arc Creek	2020	123,000	$399,190,000	$0.87	$0.14
Fannin County Water Supply System	2020	0	$55,458,000	$1.96	$0.52
Marvin Nichols Reservoir	2030, 2050	174,840	$534,125,000	$0.94	$0.26
Toledo Bend Reservoir	2050, after 2060	200,000	$886,002,000	$1.56	$0.57
Oklahoma Water	2060	50,000	$128,898,000	$0.95	$0.37
Total Capital Costs			**$3,848,010,000**		

Note: No capital costs are associated with the recommended water conservation measures.

Sabine River Authority (Page 4E.49)

The Sabine River Authority (SRA) is based in Regions D and I. The SRA currently provides water from its Upper Basin reservoirs (Lake Tawakoni and Lake Fork Reservoir) to water users in Region C. These sources are fully contracted and SRA has requests for additional water in the Upper Basin. The SRA plans to participate in the Toledo Bend Reservoir project that would transport water to the Upper Basin area and Region C. The Sabine River Authority is also seeking an amendment to its existing water right in Toledo Bend Reservoir for an additional 293,300 acre-feet per year of water supply. This amendment has been submitted to the Texas Commission on Environmental Quality and declared administratively complete. Regions D and I will develop management strategies for the Sabine River Authority.

5. Impacts of Recommended Water Management Strategies

5.2 Impacts of Recommended Water Management Strategies on Moving Water from Rural and Agricultural Areas and Impacts to Third Parties

Page 5.8

The recommended Region C water plan includes several strategies that move water from rural areas to urban centers. These strategies fall into two general categories:

- New connections to existing water sources: Toledo Bend Reservoir to TRWD and NTMWD, Wright Patman Lake to DWU, Lake Fork Reservoir to DWU, Lake Palestine to DWU, Texoma to NTMWD and GTUA, Oklahoma water to NTMWD, TRWD and UTRWD, etc.
- New reservoirs: Marvin Nichols, Ralph Hall, Lower Bois d'Arc Creek, and Fastrill.

Pages 5.9-5.10

Other protections for agricultural and rural uses were incorporated in the process of evaluating and allocating water supplies. Specifically, these include:

- Existing and proposed surface water supplies were evaluated under the prior appropriation doctrine that governs surface water rights and protects senior water rights. In the final Region C Water Plan, there are no transfers of irrigation water rights to urban uses.
- The amount of available supplies from existing sources was limited to firm yield. Existing uses from these sources were protected through the allocation process and only the amount of water that is currently permitted (up to the firm yield) was considered for transfer to Region C. Three existing reservoirs (Texoma, Wright Patman and Toledo Bend) are currently seeking or are recommended to seek additional water rights. This additional water would not impact agricultural or rural activities.

Excerpt from 2006 East Texas Region Water Plan

(Pages 4C-75-76, Chapter 4C)

Sabine River Authority

The Sabine River Authority (SRA) is based in North East Texas and East Texas Regional Water Planning Areas. SRA currently provides water from its Lower Basin system (Toledo Bend reservoir and Canal System) to water users in the East Texas Region. The SRA provides water from its Upper Basin reservoirs (Lake Tawakoni and Lake Fork) to water users in Regions C, North East Texas Region and East Texas Region. These sources are fully contracted and SRA has requests for additional water in the Upper Basin. There are sufficient supplies from the Lower Basin system to meet water demands, but SRA cannot fully meet the current and future demands in the Upper Basin. To meet these shortages, SRA plans to participate in the Toledo Bend Reservoir project that would transport 500,000 acre-feet per year of water from Toledo Bend to the Upper Basin area and Region C. Of this amount, 100,000 acre-feet per year would be used for users in the Upper Sabine Basin, 200,000 acre-feet per year would be for the North Texas Municipal Water District, and 200,000 acre-feet per year would be for the Tarrant Regional Water District. Both the North Texas Municipal Water District and Tarrant Regional Water District are based in Region C. A recommended alternate strategy is to transport an additional 200,000 acre-feet per year from Toledo Bend to Dallas Water Utilities for a total of 700,000 acre-feet per year from Toledo Bend Reservoir. Details of the development of Toledo Bend Project for users in Region C are discussed in the 2006 Region C Water Plan. The 2006 North East Region Plan discusses the project for users in the Upper Sabine Basin.

Excerpt from 2006 Region D Water Plan

Page 4-73-74

4.8 (k) Hunt County
• Able Springs WSC
Description / Discussion of Needs
Able Springs Water Supply Corporation is a public water supply located primarily in Kaufman County and supplies consumers in Kaufman, Hunt and Van Zandt counties. Approximately 11% of Able Springs's consumer demand is located in Hunt County. Current water supply is from the Sabine River Authority (SRA) and City of Terrell. Approximately 91% of the supply is from the SRA. In Hunt County, the WSC is projected to have a supply deficit of 47 ac-ft/yr in 2050 and increasing to a deficit of 143 in 2060. Able Springs WSC will need a contract increase in order to supply this projected shortage. Normally, the WSC would request a contract increase from SRA, but the authority has allocated all Lake Tawakoni and Lake Fork water to its existing customers. SRA is proposing to transfer water from the Toledo Bend Reservoir to meet anticipated needs of its customers in the upper Sabine basin. Water from Toledo Bend will be used to meet Able Springs's needs beginning 2050.

Evaluated Strategies Four alternative strategies were considered to meet Able Springs WSC's water supply shortages. Advanced conservation was not selected since per capita use is less than 140 gpcpd. There are no significant current water needs that could be met by water reuse. Groundwater was not selected because the WSC plans to continue using surface water for its needs. Consequently, surface water was considered as the alternative to meet projected demands.

Recommendations The recommended strategy for Able Springs WSC to meet their projected deficit from 2050 is to purchase raw water from the Sabine River Authority's proposed Toledo Bend Transfer.

Page 4-75

• Cash WSC

Description / Discussion of Needs Cash Water Supply Corporation is a public water supply located primarily in Hunt County. The water supply corporation sells water to Combined Consumers WSC, Aqua Source Utility, City of Lone Oak and City of Quinlan. In addition to meeting the needs of its retail customers, Cash supplies water to consumers in Hunt, Hopkins,

Rains and Rockwall counties. Approximately 90% of Cash's demand is located in Hunt County. Current water supply is from the Sabine River Authority (SRA) and North Texas Municipal Water District (NTMWD). Approximately 76% of water supply to Cash WSC is from SRA, and Cash plans to buy additional water from this source to meet their future needs. Cash is projected to have a supply deficit of 4305 ac-ft/yr around 2060, and will need a contract increase in order to supply this projected shortage. Normally, Cash would request a contract increase from SRA, but the authority has allocated all Lake Tawakoni and Lake Fork water to its existing customers. SRA is proposing to transfer water from Toledo Bend Reservoir to meet anticipated needs of its customers. Water from Toledo Bend will be used to meet Cash WSC needs in 2060. Cash WSC has a contract with NTMWD for 1792 ac-ft/yr. Region C's tabulations show NTMWD as not having sufficient water to meet all their contractual obligation to Cash WSC. Consequently, Region C has developed tables to show current and future allocation to Cash WSC from NTMWD.

Evaluated Strategies Four alternative strategies were considered to meet Cash WSC's water supply shortages. Advanced conservation was not selected since per capita use is less than 140 gpcpd. There are no significant current water needs in Cash that could be met by water reuse. Groundwater was not selected because it is inadequate in quality and quantity for supplies of this size. Consequently, surface water was selected as the alternative to meet projected demands.

Recommendations The recommended strategy for Cash WSC to meet their projected deficit in 2060 is to purchase raw water from the Sabine River Authority's proposed Toledo Bend Transfer. Also, Region C has developed strategies to meet NTMWD's contractual obligation to Cash WSC.

Page 4-76 - 77

Combined Consumers WSC

Description / Discussion of Needs Combined Consumers Water Supply Corporation is a public water supply located primarily in Hunt County and supplies consumers in both Hunt and Van Zandt counties. Approximately 80% of the WSC's consumer demand is located in Hunt County. Current water supply is from the Sabine River Authority (SRA) and Cash WSC. Approximately 94% of water supply to the WSC is from SRA. The WSC is projected to have a supply deficit of

75 ac-ft/yr in 2030 and increasing to a deficit of 3631 in 2060. Combined Consumers WSC will need a contract increase in order to supply this projected shortage. Normally, the WSC would request a contract increase from SRA, but the authority has allocated all Lake Tawakoni and Lake Fork water to its existing customers. SRA is proposing to transfer water from the Toledo Bend Reservoir to meet anticipated needs of its customers. Water from Toledo Bend will be used to meet Combined Consumers needs beginning in 2030.

Evaluated Strategies The four alternative strategies considered to meet Combined Consumers WSC's water supply shortages are listed in the table below. Advanced conservation was not selected since per capita use is less than 140 gpcpd. There are no significant current water needs that could be met by water reuse. Groundwater was not selected because it is inadequate in quality and quantity. Consequently, surface water was considered as a viable alternative to meet projected demands.

Recommendations The recommended strategy for Combined Consumers WSC to meet their projected deficit from 2030 is to purchase raw water from the Sabine River Authority's proposed Toledo Bend Transfer.

Page 4-81

• **Steam Electric**

Description / Discussion of Needs The Steam Electric W.U.G. in Hunt County has a demand that is projected to grow from 8,639 ac-ft/yr in 2010 to 23,902 ac-ft/yr in 2060. This demand is projected as a result of a proposed Cobisa power plant near Greenville. Greenville currently contracts with the Sabine River Authority for its supply. Sabine River Authority (SRA) is a leading wholesale water provider for consumers in Hunt County. All SRA water from Lake Tawakoni and Lake Fork has been contracted and there is no water available from these lakes to meet the projected steam electric demands. SRA is proposing to transfer water from the Toledo Bend Reservoir to the North Texas region to meet anticipated future needs of its customers. Since there is no other wholesale water provider in the area with adequate amounts of water to meet steam electric demands in Hunt County, SRA water from the Toledo Bend Reservoir will be used to meet future shortages.

Evaluated Strategies Three alternative strategies were considered to meet the Hunt County Steam Electric WUG's water supply shortages. In this round of planning, estimates were not made for electric power water conservation because data on operating strategies for each power plant was not available. Groundwater is not feasible due to the limited capacity of aquifers in the Greenville area. Surface water was considered as a viable alternative to meet projected demands.

Recommendations The recommended strategy for the Hunt County Steam Electric W.U.G. to meet projected demands during the planning period is to purchase raw water from the Sabine River Authority's proposed Toledo Bend transfer.