

NORTH EAST TEXAS REGIONAL WATER PLANNING GROUP

Region D

ERRATA

This Errata responds to the Interoffice Memorandum dated May 14, 2001 from Ralph Boeker, Regional Planning Manager, to Tommy R. Knowles, Deputy Executive Administrator for Office Planning and the letter dated May 18, 2001 addressed to Mr. Walt Sears, General Manager, Northeast Texas Municipal Water District and Mr. Tony Williams, Chairman, North East Texas Regional Water Planning Group from Mr. Tommy Knowles.

The above referenced Interoffice Memorandum and letter state the following questions. Attached are the BWR Consultant Team responses to these questions.

A. Determinations of whether the plans were developed according to the general provisions for planning included in statute and rule. Sources not addressed include smaller lakes and groundwater.

- 1.) The following paragraphs and **Table 5.4a** and **Table 5.4b** are to be inserted following Table 5.4, “*Drought Trigger Conditions by Source and Drought Response Actions for Designated Major Water Providers*”, Section 5.4, page 198 of the “*Adopted Water Plan*” prepared for The North East Texas Regional Water Planning Group – Region D, dated January 5, 2001.

Some communities procure surface water from local lakes as a part or a total of the communities’ water supply. In addition there are lakes that are currently used only for other purposes such as recreation. These lakes, the drought triggering mechanism that is used by these communities on these lakes, and the response made to the drought “trigger” is provided in Table 5.4.a.

Table 5.4.a. Drought Trigger Conditions and Drought Response of Surface Water Supply Lakes.

Source(s)	Drought Response Triggers	Drought Response Actions
Greenville City Lakes	See City of Greenville on Table 5.4.	See City of Greenville on Table 5.4.
Lake Texoma	This Lake is located in Region C and is not a source of supply in the North East Texas Region	This Lake is located in Region C and is not a source of supply in the North East Texas Region
Big Creek Lake Cooper Lake	Trigger conditions based on the exceedance of two of the following four criteria: City reservoir levels, PDSI, Reservoir recharge frequency and Water demand	Stage I – voluntary conservation. Stage II – required curtailment of non-essential water uses and preparation for wholesale water rationing. Stage III – mandatory reduction in non-essential water uses and curtailment of water deliveries to wholesale customers. Stage IV – advanced Stage III measures.

North East Texas Regional Water Planning Group Group D

Source(s)	Drought Response Triggers	Drought Response Actions
Lake Tyler	This Lake is located in Region I and is not a source of supply in the North East Texas Region	This Lake is located in Region I and is not a source of supply in the North East Texas Region
Lake Lavon	Triggers based on WSE of Lake Lavon, or % of demand on plant capacity, or the ability to recover a % of normal operating elevation	Stage I – Start drought conditions operations. Stage II – Implement pro rata allocations for all users using billing records. Stage III – Further reduce pro rata allocations
Sulphur ROR	This supply source is used by steam electric users only. No drought contingency plan required	This supply source is used by steam electric users only. No drought contingency plan required.
Lake Gladewater	Triggers based on lake levels. Stage I-lake level drops to within 3’ of intake pipe, Stage II-lake level drops to within 2’ of intake pipe, Stage III-lake level drops to with 1’ of intake pipe.	Stage I-Implementation of voluntary conservation. Stage II-Implementation of mandatory conservation Stage III-implementation of mandatory conservation with limitations on use only for extreme needs.
Lake Quitman	This supply source is used only for recreational purposes. No drought contingency plan required.	This supply source is used only for recreational purposes. No drought contingency plan required.
Lake Holbrook	This supply source is used only for recreational purposes. No drought contingency plan required	This supply source is used only for recreational purposes. No drought contingency plan required
Lake Hawkins	This supply source is used only for recreational purposes. No drought contingency plan required	This supply source is used only for recreational purposes. No drought contingency plan required
Lake Winnsboro	This supply source is used only for recreational purposes. No drought contingency plan required	This supply source is used only for recreational purposes. No drought contingency plan required
Ellison Creek Lake	This supply source is used by Lone Star Steel Plant. No drought contingency plan required	This supply source is used by Lone Star Steel Plant. No drought contingency plan required
Caddo Lake	This Lake does not supply water to Region D and is not a source of supply in the North East Texas Region	This Lake does not supply water to Region D and is not a source of supply in the North East Texas Region
Gilmer Lake	Still under construction, drought contingency plan to be developed once its in operation.	Still under construction, drought contingency plan to be developed once its in operation.

Groundwater drought trigger response mechanisms are complicated. The water level in the aquifers and the response to water draw down varies from location to location within the northeast Texas region. Monitoring water levels in public supply wells will be used to trigger drought response. The monitoring of groundwater from public supply wells requires careful evaluation of the data because of the cyclic nature of the withdrawals and the heavy demands during near drought conditions. There are incidences of groundwater supply wells in close proximity to each other and that are generally equal in-depth and are withdrawing water from different aquifers within the region. Therefore, the use of the water supply wells for monitoring is judged to be the most reliable. Typically, the most critical information is the level achieved after a short recovery period. The details of the well monitoring and the conservation effort will be addressed in Phase II of the plan and will be developed in cooperation with the operators of the water supply well and There is at least one well selected for monitoring in each county, and in some cases up to five wells have been identified. The wells were selected based on proximity to the larger users, representing the applicable aquifers, and based on the data history. Wells with longer history were selected as applicable. The average monitoring period is 28 years.

Table 5.4.b. Monitoring Wells for Drought Trigger Conditions

State Well Number	Latitude	Longitude	County	Aquifer Code	First Year Monitored	Most Recent Year Monitored	Years Monitored
1,628,703	333,051	943,700	Bowie	Nacatoch	1941	1982	42
1,628,706	333,044	943,701	Bowie	Nacatoch	1941	1982	42
3,501,108	325,917	945,759	Camp	Carrizo	1957	1975	19
3,408,501	325,718	950,426	Camp	Carrizo-Wilcox	1963	1984	22
1,657,901	330,029	945,440	Camp	Carrizo-Wilcox	1960	2000	41
1,663,201	330,650	941,004	Cass	Carrizo-Wilcox	1936	1968	33
1,663,301	330,653	940,933	Cass	Carrizo-Wilcox	1953	1961	9
1,734,301	332,820	954,556	Delta	Trinity	1971	2000	30
1,743,101	332,128	954,351	Delta	Trinity	1971	1986	16
1,661,701	330,003	942,926	Delta	Trinity	1968	1997	30
1,755,407	331,016	951,252	Franklin	Wilcox	1971	1988	18
1,762,603	330,345	951,615	Franklin	Wilcox	1942	1961	20
3,406,304	325,746	951,708	Franklin	Wilcox	1951	1988	38
3,526,706	323,013	945,114	Gregg	Carrizo-Wilcox	1964	2000	35
3,527,401	323,314	944,244	Gregg	Wilcox	1965	1987	23
3,537,201	322,800	942,510	Harrison	Wilcox	1964	2000	35
3,537,801	322,419	942,618	Harrison	Wilcox	1960	2000	41

North East Texas Regional Water Planning Group Group D

Table 5.4.b. Cont. Monitoring Wells for Drought Trigger Conditions

State Well Number	Latitude	Longitude	County	Aquifer Code	First Year Monitored	Most Recent Year Monitored	Years Monitored
1,761,701	330,221	952,810	Hopkins	Wilcox	1979	1991	13
1,761,702	330,133	952,807	Hopkins	Wilcox	1984	2000	17
1,761,301	330,635	952,305	Hopkins	Wilcox	1976	2000	25
1,761,901	330,148	952,409	Hopkins	Wilcox	1973	1995	23
1,758,502	330,408	954,916	Hopkins	Nacatoch	1968	1982	15
1,741,905	331,508	955,301	Hunt	Nacatoch	1970	1982	13
1,749,305	331,431	955,355	Hunt	Nacatoch	1949	1971	23
1,749,306	331,423	955,357	Hunt	Nacatoch	1962	1982	21
1,727,201	333,725	954,205	Lamar	Woodbine	1964	200	37
1,729,103	333,557	952,736	Lamar	Trinity	1967	2000	34
1,729,601	333,414	952,322	Lamar	Trinity	1971	2000	30
3,514,703	324,504	942,050	Marion	Carrizo-Wilcox	1947	2000	54
3,515,801	324,658	941,210	Marion	Carrizo-Wilcox	1963	2000	38
1,650,607	331,148	944,728	Morris	Wilcox	1956	2000	45
1,658,506	330,443	944,813	Morris	Wilcox	1960	1984	25
3,410,301	325,229	954,559	Rains	Wilcox	1958	1969	12
1,617,701	333,906	945,919	Red River	Blossom	1968	2000	33
3,437,305	322,918	952,410	Smith	Queen City	1972	2000	29
3,439,505	322,549	951,104	Smith	Carrizo-Wilcox	1956	1983	28
1,756,304	331,340	950,111	Titus	Wilcox	1963	2000	38
1,756,711	330,931	950,610	Titus	Wilcox	1976	1988	13
3,518,401	324,137	945,051	Upshur	Carrizo-Wilcox	1966	2000	35
3,408,905	325,243	950,055	Upshur	Queen City	1975	2000	26
3,425,501	323,241	955,627	Van Zandt	Wilcox	1960	1990	31
3,406,608	325,725	951,600	Wood	Carrizo-Wilcox	1975	1989	15

B. Determinations of consistency between Regional Water Plans, which include water management strategies that rely on water supply sources, located outside of the region and/or a shared Special Water Resource. The Firm yield of Lake Tawakoni, as reported in Table 4, is in Conflict between Region C and Region D.

- 1.) The discrepancy between the Region C and Region D firm yield for Lake Tawakoni has been discussed with Tom Gooch, TCB; Terrace Stewart, Region C Chair; Jim Parks, Region C Vice Chair; David Parsons, Region D Committee; Reeves Hayter, Region D Consultant; Ed Motley, Region C Consultant; Ralph Boeker, TWDB; and Stephanie Griffin, Region C Consultant. This group as

North East Texas Regional Water Planning Group Group D

agreed that the appropriate firm yield are the numbers included in the Region D Regional Water Plan with the exception of the yield for the Year 2000 which is to be changed from 238,100 acre feet to 230,357 acre feet. The following action is recommended.

2.) **Table 4, Northeast Texas Water Supply Sources, Appendix A**

Row: "Lake Tawakoni" Column: "Year 2000"
Delete: "238,100"
Add: "230,357"

3.) **Table 3.2, "Sabine Basin Surface Water Supplies"** of Section 3.1 (a), page 76 of the "*Adopted Water Plan*" prepared for The North East Texas Regional Water Planning Group – Region D, dated January 5, 2001.

Row: "Lake Tawakoni" Column: "Year 2000"
Delete: "238,100"
Add: "230,357"

Row: "Total," Column: "Year 2000"
Delete: "613,740"
Add: "605,957"

4.) **Paragraph 3, Page 76, "Lake Tawakoni"** of Section 3.1 (a), page 77 of the "*Adopted Water Plan*" prepared for The North East Texas Regional Water Planning Group – Region D, dated January 5, 2001.

Delete sentence: Permitted use is 238,100 acre-ft/yr (Freese and Nichols, 1999).
Add sentence: The water available in 2,000 is 230,357 acre-ft/yr.

5.) **Table 3.49, "Sabine River Authority"** of Section 3.5(a), page 117 the "*Adopted Water Plan*" prepared for The North East Texas Regional Water Planning Group – Region D, dated January 5, 2001.

Row: "Lake Tawakoni" Column: "2000"
Delete: "238,100"
Add: "230,357"

Row: "Total," Column: "Year 2000"
Delete: "426,760"
Add: "419,017"

6.) **Table 4.34, "Water Supplies and Demands for Sabine River Authority"** of Section 7.2(h), page 251 (replacement to Table 4.34, Section 4.3(d) page 137)the "*Adopted Water Plan*" prepared for The North East Texas Regional Water Planning Group – Region D, dated January 5, 2001.

North East Texas Regional Water Planning Group Group D**Supplies (ac-ft/yr)**

Row: "Lake Tawakoni" Column: "2000"

Delete: "238,100"

Add: "230,357"

Row: "Total," Column: "Year 2000"

Delete: "426,760"

Add: "419,017"

Demands (ac-ft/yr)

Row: "Other Regions" Column: "2000"

Delete: "337,462"

Add: "331,268"

Row: "Total," Column: "Year 2000"

Delete: "426,760"

Add: "420,773"

Deficit (ac-ft/yr)

Row: "Total" Column: "2000"

Delete: "207"

Add: "1,756"

C. Determination that all documented interregional conflict have been resolved. The adopted plan does not report any interregional conflicts.

D. Determination that no water supply sources in a region have been over allocated, both from an intraregional and an interregional perspective. A limited number of current groundwater sources within the region that are shown as available in Table 5 were in excess of supplies reported in Table 4.

- 1.) Section 3.2 (b) discusses the methods used to determine the groundwater supply in North East Texas Region D. The groundwater availability was estimated by a combination of methods and reflects an effort to limit expansion of groundwater supplies to meet projected demands. Some of the estimates, such as for the Carrizo-Wilcox groundwater availability are conservative. Some aquifers, particularly the Carrizo-Wilcox, have a large total volume available but may be limited locally. The "Adopted Water Plan" states in Section 6.3(i), page 229 "The North East Texas RWPG supports the completion of the TWDB'S Groundwater Availability Modeling (GAM) Program. It is hoped that the development of new modeling tools will result in more accurate and realistic assessments of groundwater availability in the North East Texas Region."

North East Texas Regional Water Planning Group Group D

The Consultant Team has made the following adjustments or recommendations to address over allocation of groundwater supplies. We recommend that these areas be further studied in next phase to produce more reliable data and strategies.

2.) **Nacatoch Aquifer in Delta County**

A maximum over allocation occurs in 2020 of 217 acre ft/yr. After the year 2020 the over allocation decreases significantly. In the year 2020, the City of Commerce will be increasing its surface water contract amount. (Table 5.2, page 158, “Adopted Water Plan”).

According to **Table 4, Appendix A**, Delta County has a groundwater supply from the Nacatoch Aquifer in the Sulphur Basin of 227 acre ft/yr and a demand in the year 2020 of 444 acre ft/yr, 224 acre ft/yr of which is from a City of Commerce well located in Delta County, near the Hunt County line. Hunt County has a groundwater supply from the Nacatoch Aquifer in the Sulphur Basin of 400 acre ft/yr and a demand of 174 acre ft/yr. The water supply will be adjusted between the counties to reflect this demand. However, because of the inaccuracies of the data, some ground water sources may experience temporary shortages during periods of extreme drought.

Revise **Table 4, Northeast Texas Water Supply Sources, Appendix A** as follows:

Delete the following line from Table 4 for Delta County:

NACATOCH	01	D	60	03	06020	227	227	227	227	227	227
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Replace with the following line for Delta County

NACATOCH	01	D	60	03	06020	444	444	444	444	444	444
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Delete the following line from Table 4 for Hunt County:

NACATOCH	01	D	116	03	11620	400	400	400	400	400	400
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Replace with the following line for Hunt County

NACATOCH	01	D	116	03	11620	183	183	183	183	183	183
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Revise **Table 3.9, Groundwater Availability by Basin and County for the Nacatoch Aquifer**. Page 88, “Adopted Water Plan”

Row: “Delta,” Column: “Sulphur”
 Delete: “227”
 Add: “444”

Row: “Hunt,” Column: “Sulphur”
 Delete: “400”
 Add: “183”

3.) **The Carrizo Wilcox Aquifer, in the Sulfur Basin in Franklin County.**

The data available suggests that there is adequate groundwater in Franklin County to meet the year 2000 water demands. The highest demands for the 50-year study period occur in year 2000. Therefore the groundwater supply is adjusted to match the supply available in year 2000 for the Sulphur River Basin and the Cypress River Basin. Apparently the distribution of the Carrizo-Wilcox groundwater between the river basins is different than predicted.

Revise **Table 4, Northeast Texas Water Supply Sources, Appendix A** as follows:

Delete the following line from Table 4 for Franklin County for Sulphur Basin Groundwater:

CARRIZO-WILCOX	01	D	80	03	08010	950	545	545	545	545	545
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Replace with the following line for Franklin County for Sulphur Basin Groundwater:

CARRIZO-WILCOX	01	D	80	03	08010	950	950	950	950	950	950
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Delete the following line from Table 4 for Franklin County for Cypress Basin Groundwater:

CARRIZO-WILCOX	01	D	80	04	08010	1,750	2,155	2,155	2,155	2,155	2,155
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Replace with the following line for Franklin County for Cypress Basin Groundwater

CARRIZO-WILCOX	01	D	80	04	08010	1,750	1,750	1,750	1,750	1,750	1,750
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Revise **Table 3.8, Groundwater Availability by Basin and County for the Carrizo-Wilcox Aquifer.** Page 87, *“Adopted Water Plan”*

Row: “Franklin,” Column: “Sulphur”
Delete: “545”
Add: “950”

Row: “Franklin,” Column: “Cypress”
Delete: “2,155”
Add: “1,750”

Revise **Table 3.13, Groundwater Availability by Aquifer and River for the North East Texas Region.** Page 90, *“Adopted Water Plan”*

Row: “Carrizo-Wilcox,” Column: “Sulphur”
Delete: “59,588”

North East Texas Regional Water Planning Group Group D

Add: "69,993"

Row: "Carrizo-Wilcox," Column: "Cypress"

Delete: "267,147"

Add: "266,742"

4.) **The Woodbine Aquifer, in the Sulfur Basin in Hunt County.**

One of the strategies to meet future demands included adding one groundwater well for Wolfe City. As a result the groundwater appears to be over allocated by 87 acre ft/yr. The groundwater supply has been increased in the Woodbine Aquifer in the Sulfur Basin in Hunt County. However, some ground water sources may experience temporary shortages during periods of extreme drought. The available groundwater for Hunt County should be further studied during the Phase II NETRWPG Water Plan.

Revise **Table 4, Northeast Texas Water Supply Sources, Appendix A** as follows:

Delete the following line from Table 4 for Hunt County for Sulphur Basin Groundwater:

WOODBINE	01	D	116	03	11629	331	331	331	331	331	331
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Replace with the following line for Hunt County for Sulphur Basin Groundwater

WOODBINE	01	D	116	03	11629	331	418	418	418	418	418
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Revise **Table 3.13, Groundwater Availability by Aquifer and River for the North East Texas Region.** Page 90, "Adopted Water Plan"

Row: "Woodbine," Column: "Sulphur"

Delete: "341"

Add: "418"

5.) **The Nacatoch Aquifer, in the Sulfur Basin in Titus County.**

The water supply from the County Other category is shown to come from groundwater. The two entries in **Table 5, Appendix A**, purchase the water from the City of Talco. This source is changed to contract supply.

Delete the following lines from Table 5 for Titus County in the Sulphur Basin Groundwater:

##	COUNTY OTHER	040996225	D	0996	757	225	03	01		D	225	3	22520	NACATOCH	436
##	COUNTY OTHER	040996225	D	0996	757	225	03	01		D	225	3	22520	NACATOCH	109

Replace with the following lines

##	COUNTY OTHER	040996225	D	0996	757	225	03	03		D	225	3	22520	NACATOCH	436
##	COUNTY OTHER	040996225	D	0996	757	225	03	03		D	225	3	22520	NACATOCH	109

North East Texas Regional Water Planning Group Group D

6.) **The Carrizo-Wilcox Aquifer in Van Zant County**

The ground water from the Carrizo-Wilcox aquifer in Van Zandt County has been over allocated by a maximum 957 acre ft/yr in the Sabine River Basin in year 2050, 332 acre ft/yr in the Neches River Basin in year 2040, and by 224 acres ft/yr in the Trinity River Basin in year 2050. The first over allocation appears in the Sabine and Neches River Basins in the year 2020. The over allocation in the Sabine River Basin and the Neches River Basin occur as a result of the strategies to add wells to meet future demand. The areas have been evaluating alternative surface water sources. (See Section 5.3(t), page 188, of the “*Adopted Water Plan.*”) Phase II of the NETRWPG should analyze in detail the availability of groundwater and alternatives for surface water. Until other alternatives can be identified, the communities may experience temporary water shortages during periods of extreme drought.

7.) **The Carrizo-Wilcox Aquifer, in the Sulfur Basin in Hopkins County.**

The recommended strategy for the City Como to meet future demands is to add an additional well with a total capacity of 46 acre ft/yr in the Carrizo-Wilcox Aquifer in the Sulfur River Basin in year 2010. With the addition of this well, the identified supply will be over allocated by 25 acre ft/yr out a total of 1,100 acre ft/yr identified as available. There is a surplus of over 2,800 acre ft/yr in the Carrizo-Wilcox Aquifer in the Cypress and Sabine River Basins in Hopkins County. The additional groundwater is probably available, however, temporary shortages may occur during periods of extreme drought. The groundwater supply is recommended to be analyzed in more detail during Phase 2 of the NETWRPG water plan.

Revise **Table 4, Northeast Texas Water Supply Sources, Appendix A** as follows:

Delete the following line from Table 4 for Hopkins County for Sulphur Basin Groundwater:

CARRIZO-WILCOX	01	D	112	03	11210	1,100	1,100	1,100	1,100	1,100	1,100
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Replace with the following line for Hunt County for Sulphur Basin Groundwater

CARRIZO-WILCOX	01	D	112	03	11210	1,125	1,125	1,125	1,125	1,125	1,125
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Delete the following line from Table 4 for Hopkins County for Sabine Basin Groundwater

CARRIZO-WILCOX	01	D	112	05	11210	4,033	4,033	4,033	4,033	4,033	4,033
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Replace with the following line for Hopkins County for Sabine River Basin Groundwater

CARRIZO-WILCOX	01	D	112	05	11210	4,008	4,008	4,008	4,008	4,008	4,008
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Revise **Table 3.8, Groundwater Availability by Basin and County for the Carrizo-Wilcox Aquifer.** Page 87, “*Adopted Water Plan*”

North East Texas Regional Water Planning Group Group D

Row: "Hopkins," Column: "Sulphur"
 Delete: "1,100"
 Add: "1,125"

Row: "Hopkins," Column: "Sabine"
 Delete: "4,033"
 Add: "4,008"

8.) Carrizo-Wilcox Aquifer in the Sabine River Basin in Upshur County

The recommended strategies for the City of East Mountain and for Union Grove WSC were to add additional well for a total additional withdrawal of 270 acre ft/yr. This over allocates the identified available groundwater by 14.5 acre ft/yr of the total amount identified (1,472 acre ft/yr) or a 1-per cent over allocation. The available supply is adjusted to reflect the increase demand in **Table 4, Appendix A**. This amount is considerably less than the accuracy of the available data. However, these communities may experience a temporary shortage during periods of extreme drought.

Revise **Table 4, Northeast Texas Water Supply Sources, Appendix A** as follows:

Delete the following line from Table 4 for Upshur County for Sabine Basin Groundwater:

CARRIZO-WILCOX	01	D	230	05	23010	1,473	1,473	1,473	1,473	1,473	1,473
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Replace with the following line for Upshur County for Sabine River Basin Groundwater

CARRIZO-WILCOX	01	D	230	05	23010	1,488	1,488	1,488	1,488	1,488	1,488
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Revise **Table 3.8, Groundwater Availability by Basin and County for the Carrizo-Wilcox Aquifer**. Page 87, "Adopted Water Plan"

Row: "Upshur," Column: "Sabine"
 Delete: "1,473"
 Add: "1,488"

Row: "Total," Column: "Sabine"
 Delete: "160,010"
 Add: "160,025"

9.) The Carrizo-Wilcox Aquifer in the Sabine River Basin in Wood County

The recommended strategies to address future water shortages included adding additional wells for the City of Mineola, Fauke WSC, and Lake Fork WSC. Beginning in 2010, these additional wells will withdraw 753 acre ft/yr more water from the aquifer, increasing to 861 acre ft/yr more water in year 2050. The available groundwater from the Carrizo-Wilcox Aquifer in Wood County is

North East Texas Regional Water Planning Group Group D

estimated to be 9,000 acre ft/yr. The additional wells over allocate the groundwater in the Sabine River Basin in Wood County by 175 acre ft/yr in 2010 (or 2 per cent of the total) to a maximum over allocation of 536 acre ft/yr in year 2050 (or 6 per cent of the total.) This is believed to be within the accuracy of the estimated available supply. It is recommended that Water Plan analyze the available groundwater supply during Phase II of the Water Plan NETRWPG. However, communities may experience a temporary shortage during periods of extreme drought.

Revise **Table 4, Northeast Texas Water Supply Sources, Appendix A** as follows:

Delete the following line from Table 4 for Wood County for Sabine Basin Groundwater:

CARRIZO-WILCOX	01	D	250	05	25010	9,000	9,000	9,000	9,000	9,000	9,000
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Replace with the following line for Wood County for Sabine River Basin Groundwater

CARRIZO-WILCOX	01	D	250	05	25010	9,536	9536	9, 536	9, 536	9, 536	9, 536
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Revise **Table 3.8, Groundwater Availability by Basin and County for the Carrizo-Wilcox Aquifer.** Page 87, *“Adopted Water Plan”*

Row: “Wood,” Column: “Sabine”
Delete: “9,000”
Add: “9,536”

Row: “Total,” Column: “Sabine”
Delete: 160,010”
Add: “160,561”

- 10.) **Revise Table 3.8, Groundwater Availability by Basin and County for the Carrizo-Wilcox Aquifer.** Page 87, *“Adopted Water Plan”* to reflect the changes made in comments 3.), 6.), 7.), 8.) and 9.) above.

Delete Table 3.8, Groundwater Availability by Basin and County for the Carrizo-Wilcox Aquifer as presented on Page 87, “Adopted Water Plan.”

Replace with attached Table 3.8

North East Texas Regional Water Planning Group Group D

Table 3.8 – Groundwater Availability by Basin and County for the Carrizo-Wilcox Aquifer

County / Basin	Supply Available (Acre-feet per year)					County Total
	Cypress	Neches	Sabine	Sulphur	Trinity	
Bowie				14,000		14,000
Camp	1,600					1,600
Cass	68,767			15,733		84,500
Franklin	1,750			950		2,700
Gregg	1,333		20,267			21,600
Harrison	71,429		112,071			183,500
Hopkins	68		4,008	1,125		5,201
Hunt			5			5
Marion	1,300					1,300
Morris	109,004			27,596		136,600
Rains			1,400			1,400
Red River				25		25
Smith			8,194			8,194
Titus	4,691			2,409		7,100
Upshur	4,027		1,488			5,515
Van Zandt		1,843	3,567		1,490	5,800
Wood	164		9,536			9,700
Basin Total	266,742	1,843	160,536	60,129	1,490	489,640

11.) **Revise Table 3.9, Groundwater Availability by Basin and County for the Nacatoch Aquifer.** Page 88, “*Adopted Water Plan*” to reflect the changes made in comments 2) and 5.) above.

Delete Table 3.9, Groundwater Availability by Basin and County for the Nacatoch Aquifer as presented on Page 88, “*Adopted Water Plan.*”

Replace with attached Table 3.9

Table 3.9 – Groundwater Availability by Basin and County for the Nacatoch Aquifer

County / Basin	Supply Available (Acre-feet per year)				County Total
	Red	Sabine	Sulphur	Trinity	
Bowie	1,050		584		1,634
Delta			444		444
Franklin			10		10
Hopkins		319	32		351
Hunt		197	183	2	382
Lamar	3		45		48
Rains		2			2
Red River	220		711		931
Titus			550		550
Basin Total	1,273	518	2,259	2	4,352

- 12.) **Revise Table 3.12, Groundwater Availability by Basin and County for the Woodbine Aquifer.** Page 90, “*Adopted Water Plan*” to reflect the changes made in comments 4.) above.

Delete Table 3.12, Groundwater Availability by Basin and County for the Woodbine Aquifer as presented on Page 88, “Adopted Water Plan.”

Replace with attached Table 3.12

Table 3.12 – Groundwater Availability by Basin and County for the Woodbine Aquifer

County / Basin	Supply Available (Acre-feet per year)			County Total
	Sulphur	Red	Trinity	
Hunt	418		89	507
Lamar		2,520		2,520
Red River		700		700
Basin Total	418	3,220	89	3,727

- 13.) The numbers have change in the fourth line in the first paragraph on page 90

Delete the number “3,309 acre ft/yr”

Replace with “3,727 acre ft/yr.”

North East Texas Regional Water Planning Group Group D

- 14.) **Revise Table 3.13, Groundwater Availability by Aquifer and River Basin for the NorthEast Texas Region.** Page 90, “*Adopted Water Plan*” to reflect the changes made in comments above.

Delete Table 3.13, Groundwater Availability by Aquifer and River Basin for the North East Texas Region. Page 90, “Adopted Water Plan.”

Replace with attached Table 3.13

Table 3.13 – Groundwater Availability by Aquifer and River Basin for the North East Texas Region.

Aquifer	River Basin						Aquifer Total
	Cypress	Neches	Red	Sabine	Sulphur	Trinity	
Blossom			287		524		811
Carrizo-Wilcox	266,742	2,143	111	159,710	59,588	390	488,684
Nacatoch			1,273	518	2,559	2	4,352
Queen City	234,500	7,839		135,044	7,000		384,383
Trinity			1,413	433	1,832	228	3,686
Woodbine			3,220	535	418	89	4,262
Basin Total	501,242	10,882	4,957	289,854	71,921	489	886,178

- E. Determination that environmental planning criteria were used to appropriately provide instream and bay and estuary inflow for water management strategies utilizing surface water.** Environmental criteria were applied to the Marvin Nichols I site, to the Prairie Creek Reservoir, and to the George Parkhouse II site.
- F. Determination that cost estimates developed in the plan were prepared in accordance with the provisions of the Contract.** Staff review indicates, in general, the capital cost estimates follow TWDB guidelines.
- G. Determination that all comments received by the RWPG on the initially prepared plan from the TWDB, other state and federal agencies, and the public within the specified comment period were satisfactorily addressed.**
- 1.) The supply for the years 2000 to 2050 in Table 4, “North East Texas Region Water Supply Sources, in Appendix A, for Lake Gladewater shows water supply of 6,900 Ac-ft/yr. This is different from the numbers shown in Table 3.2 (Pages xiii and 76). The reason for this discrepancy is on Page 77 (“The City currently holds a water right for 1,679 Ac-ft/yr, although they have submitted a request to the TNRCC to increase this permitted right to 3,358 Ac-ft/yr.”)
 - 2.) **Paragraph 2, Page 88, “Queen City Aquifer”** of Section 3.2 (c) of the “*Adopted Water Plan*” prepared for The North East Texas Regional Water Planning Group – Region D, dated January 5, 2001.

Delete Number: “424,362 Ac-ft/yr

North East Texas Regional Water Planning Group Group D

Add Number: “384,383 Ac-ft/yr”

- 3.) The following TWDB comment on the IPP should be added to the “Response to Public Comments” portion of Chapter 7 of the plan: “The IPP clearly supports Prairie Creek Reservoir based on the statement on page 201 endorsing the recommendation contained in the *Comprehensive Sabine Watershed Management Plan* that the Sabine River Authority develop the reservoir. Additionally, the IPP recommends that this site be designated by the Texas Legislature as unique for future reservoir development. The Regional Water Planning Group should also consider adding this reservoir as a water management strategy of a major water supplier (Table 13) to ensure this information is considered in subsequent water rights or financial assistance reviews.”

This water management strategy should be added as an entry to Table 13 (paper version). The plan should include a statement that the Regional Water Planning Group recommends Prairie Creek Reservoir as water management strategy.

- 4.) **Table 6, “Current Water Supplies Available to the RWPG by Major Water Provider of Municipal and Manufacturing Water”** in Appendix A prepared for The North East Texas Regional Water Planning Group – Region D, dated January 5, 2001.

Row: “Titus County Freshwater Supply District No. 1”. Columns: “2000 to 2050”

Delete: “48,500 Ac-ft/yr”

Add: “38,500 Ac-ft/yr”

- 5.) **Table 6, “Current Water Supplies Available to the RWPG by Major Water Provider of Municipal and Manufacturing Water”** in Appendix A prepared for The North East Texas Regional Water Planning Group – Region D, dated January 5, 2001.

Row: “Cherokee Water Company”. Columns: “2000 to 2050”

Delete: “18,000 Ac-ft/yr”

Add: “2,000 Ac-ft/yr”

- 6.) **Table 6, “Current Water Supplies Available to the RWPG by Major Water Provider of Municipal and Manufacturing Water”** in Appendix A prepared for The North East Texas Regional Water Planning Group – Region D, dated January 5, 2001.

Row: “Northeast Texas Municipal Water District”

Specific Source Name Column: “Lake O’ the Pines”. Columns: “2000 to 2050”

Delete: “130,600 Ac-ft/yr”

North East Texas Regional Water Planning Group Group D

Add: "110,600 Ac-ft/yr"

- 7.) **Table 6, "Current Water Supplies Available to the RWPG by Major Water Provider of Municipal and Manufacturing Water"** in Appendix A prepared for The North East Texas Regional Water Planning Group – Region D, dated January 5, 2001.

Row: "Sabine River Authority"
Specific Source Name Column: "Lake Tawakoni". Columns: "2000 to 2050"

Delete: "238,100, 229,005, 227,118, 225,232, 223,345, and 221,459"

Add: "216,817"

- 8.) **Table 6, "Current Water Supplies Available to the RWPG by Major Water Provider of Municipal and Manufacturing Water"** in Appendix A prepared for The North East Texas Regional Water Planning Group – Region D, dated January 5, 2001.

Row: "Sabine River Authority"
Specific Source Name Column: "Lake Fork". Columns: "2000 to 2050"

Delete: "188,600, 187,776, 187,590, 187,403, 187,217, and 187,031"

Add: "168,660"

- 9.) **Table 12, "Recommended Management Strategies by City and Category"** in Appendix A prepared for The North East Texas Regional Water Planning Group – Region D, dated January 5, 2001.

The following contract renewal strategies should be added to Table 12:

H. Determination that there is consistency between the selected water management strategies contained in the Regional Water Plans and the supporting electronic data submitted by the regions.

- 1.) **Table 12, “Recommended Management Strategies by City and Category”** in Appendix A prepared for The North East Texas Regional Water Planning Group – Region D, dated January 5, 2001.

Add an entry to the following columns:

Water User Group Name: “Steam Electric”
Water User Group ID: “041002230”
RWPG Letter: “D”
Sequence Number: “1002”
City Number: “1002”
County Number: “230”
Basin Number: “04”
Water Supply Type: “4C”
Supply Source RWPG Letter: “D”
Supply Source Basin Number: “04”
Specific Source ID: “4170”
Specific Source Name: “Gilmer Lake”
Columns 2000 to 2050: “5601”

- 2.) **Table 12, “Recommended Management Strategies by City and Category”** in Appendix A prepared for The North East Texas Regional Water Planning Group – Region D, dated January 5, 2001.

Row: “Manufacturing”
County Number Column: “092”
Specific Source Name Column: “Longview System”
Columns: “2000 to 2050”

Delete: “12,653 Ac-ft/yr”

Add: “17,746 Ac-ft/yr”

- 3.) **Table 12, “Recommended Management Strategies by City and Category”** in Appendix A prepared for The North East Texas Regional Water Planning Group – Region D, dated January 5, 2001.

Row: “Tri-County WSC”

Add the following:

County Number Column: “116”
Specific Source Name Column: “Lake Tawakoni”
Capital Cost Column: “13,570”
Columns 2000 to 2050: “38”

North East Texas Regional Water Planning Group Group D

- 4.) **Table 12, “Recommended Management Strategies by City and Category”** in Appendix A prepared for The North East Texas Regional Water Planning Group – Region D, dated January 5, 2001.

Row: “Diana WSC”. Columns: “2000 to 2050”.

Delete: “71”

Add: “299”

Add to Specific Source Name Column: “NETMWD”.

- 5.) **Page 161, “Recommendations”** of Section 5.3 (d) Camp County of the “*Adopted Water Plan*” prepared for the North East Texas Regional Water Planning Group – Region D, dated January 5, 2001.

Delete: “The Pilgrim’s Pride facility is not in production...to minimize the need for new water sources”

Add: “The Pilgrims Pride facility is not in production at this time and it will be the responsibility of the company to locate an acceptable water source or sources. The source being considered by the company is groundwater from the Carrizo-Wilcox formation. Additionally, the plant design will emphasize water reuse and conservation techniques to minimize the need for new water sources.”

- 6.) **Table 12, “Recommended Management Strategies by City and Category”** in Appendix A prepared for The North East Texas Regional Water Planning Group – Region D, dated January 5, 2001.

Row: “Harmony ISD”. Columns: “2040 to 2050”

Delete: “154”

Add: “73”

- 7.) **Page xx, “Summary of Shortages by River Basin”** Table in “Adopted Water Plan” prepared for the North East Texas Regional Water Planning Group – Region D, dated January 5, 2001.

Row: “Contract Amounts” for Red River Basin Total.
Columns: “2000 to 2050”

Delete: “2310, 3098, 3308, 3426, 3514, and 1644”

Add: “310, 1088, 1288, 1396, 1474, and 1644”

Row: “Red River Basin Total”. Column: “2000 to 2050”

North East Texas Regional Water Planning Group Group D

Delete: “4317, 5321, 6537, 7771, 7918, and 8483”

Add: “317, 1301, 2487, 3701, 3838, and 1383”

I. Correction to Table 6 “Current Water Supplies Available to the RWPG by Major Water Provider of Municipal and Manufacturing Water.” The supply for Longview should be Sabine Run of the River, not Lake Tawakoni.

- 1.) **Table 6 “Current Water Supplies Available to the RWPG by Major Water Provider of Municipal and Manufacturing Water”** in Appendix A prepared for the North East Texas Regional Water Planning Group – Region D, dated January 5, 2001.

Row: “Longview”

Columns: “SPECIFIC SOURCE NAME”

Delete: “LAKE TAWAKONI”

Add: “SABINE ROR”

J. Correction to Table 4 “Northeast Texas Region Water Supply Sources.” In Appendix A for the North East Regional Water Planning Group – Region D, Dated January 5, 2001. The supply for Lake Lavon is to be changed to match the numbers provided in Region C.

Row: “Lake Lavon”

Make the following Changes

Column	Name of Source	Yr 2000	Yr 2010	Yr 2020	Yr 2030	Yr 2040	Yr 2050
Delete	Lake Lavon	104,000	104,000	104,000	104,000	104,000	104,000
Insert	Lake Lavon/Reuse	139,845	138,143	136,543	134,743	132,943	131,143

Row: “Surface Water Total”

Make the following Changes (Also reflect changes from B.(2.) above.)

Column	Yr 2000	Yr 2010	Yr 2020	Yr 2030	Yr 2040	Yr 2050
Delete	3,815,213	3,818,990	3,809,618	3,799,238	3,789,066	3,785,176
Insert	3,843,315	3,853,133	3,842,161	3,829,981	3,818,009	3,812,319

North East Texas Regional Water Planning Group Group D

Row: "Groundwater Total"

Make the following Changes (Also reflect changes from Item D above.)

Column	Yr 2000	Yr 2010	Yr 2020	Yr 2030	Yr 2040	Yr 2050
Delete	886,921	886,918	886,916	886,728	886,727	886,488
Insert	887,468	887,552	887,550	887,362	887,361	887,122

Row: "Total Supply"

Make the following Changes

Column	Yr 2000	Yr 2010	Yr 2020	Yr 2030	Yr 2040	Yr 2050
Delete	4,702,134	4,705,908	4,696,534	4,685,966	4,675,793	4,671,664
Insert	4,730,783	4,740,685	4,729,711	4,717,343	4,705,370	4,699,441

- K. Addition to Table 6 "Current Water Supplies Available to the RWPG by Major Water Provider of Municipal and Manufacturing Water"** in Appendix A for the North East Regional Water Planning Group – Region D, Dated January 5, 2001. Table 6 includes water supply sources that are committed by contract with the Sabine River Authority to water users outside of Region D. It needs to be clear that although the water supply exists, it is not available for other sources according to existing contracts.

Add the following Footnote to Table 6 "Current Water Supplies Available to the RWPG by Major Water Provider of Municipal and Manufacturing Water" in Appendix A for the North East Regional Water Planning Group – Region D, Dated January 5, 2001.

"Note: The current water supplies available in the year 2000 to Region D from Lake Tawakoni is 46,071 acre ft/yr and 44,800 acre ft/yr from Lake Fork. All other water is obligated by contract to users outside of Region D."

- L. Add Table 13 "Recommended Management Strategies By Major Water Provider of Municipal and Manufacturing Water "** to Appendix A for the North East Regional Water Planning Group – Region D, Dated January 5, 2001. This table was not included in the original submittal.

