



Where Country Meets Living

Trinity River Authority
c/o Kevin Ward, Region C Chair
5300 S Collins Street
Arlington, Texas 76018

June 18, 2019

RE: City of Springtown, Texas Proposed Amendment to 2016 Region C Water Plan and 2017 State Water Plan

Ladies and Gentlemen of Region C Water Planning Group:

We have engaged the services of Thomas Hoover Engineering, LLC to represent the City of Springtown in matters 2016 Region C Water Plan and 2017 State Water Plan.

Please allow the firm's representatives including Thomas Hoover, P.E. and his consultant William Moriarity, P.E. to present information regarding our request and respond to any questions the members of the planning group may have.

Thank you in advance for your cooperation and attention in this matter.

Respectfully,

A handwritten signature in black ink, appearing to read "David Miller". The signature is written in a cursive style with a large, sweeping initial "D".

David Miller
City Administrator



June 24, 2019

Trinity River Authority
Kevin Ward, Region C Chair
5300 S Collins St,
Arlington, TX 76018

Subject: City of Springtown, Texas
Proposed Amendment to 2016 Region C Water Plan and
2017 State Water Plan

Dear Ladies and Gentlemen of Region C Water Planning Group,

As the City Engineer for the City of Springtown, Texas, I am writing to you today to formally request your support to amend the 2016 Region C Water Plan and 2017 State Water Plan. The reason we are requesting this amendment is that the City has decided to change our water strategy and more fully develop our surface water source from the Tarrant Regional System.

This amendment will allow the Water Plans to more fully represent the current thinking in the City of Springtown and allow us to access SWIFT funding, which is a great source of financing, especially for small communities.

We have worked closely with your consulting team, including Amy Kaarlela, and believe we have covered all the necessary documents. Included with this letter are all the pertinent tables from the Water Plan, appropriately revised.

I, and our consulting engineer William Moriarty P.E., plan on attending your regular meeting on Monday, June 24, 2019 where we will make a formal presentation to the Region C Planning Group and will of course be available for question.

Thank you in advance for your wonderful cooperation and your continued leadership on regional water issues.

Respectfully submitted,

Thomas Hoover Engineering, LLC

A handwritten signature in black ink, appearing to read 'Thomas Hoover', is written over the printed name.

Thomas L Hoover, P.E.

P.O. Box 1808, Keller, TX 76244
817-913-1350 phone
T.B.P.E. Firm Registration No. 006009

Table 5D.298
Costs for Recommended Water Management Strategies for Parker County
Not Covered Under Wholesale Water Providers

Water User Group	Strategy	Imple- mented by:	Quantity** (Ac-Ft/Yr)	Capital Costs	Unit Cost (\$/1000 gal)		Table for Details
					With Debt Service	After Debt Service	
Aledo	Conservation	2020	40	\$21,877	\$0.80	\$0.00	Q-10
	Fort Worth (TRWD)	2020	919	\$0	\$1.96	\$1.96	None
	<i>Parallel pipeline and pump station from Fort Worth</i>	2040	277	\$7,710,500	\$8.18	\$1.03	Q-169
Annetta	Conservation	2020	6	\$2,716	\$0.70	\$0.00	Q-10
	Connect to Weatherford (TRWD)	2030	196	\$2,077,600	\$6.80	\$4.07	Q-171
Annetta North	Conservation	2020	2	\$1,136	\$0.29	\$0.00	Q-10
	Connect to Weatherford (TRWD)	2040	38	\$59,400	\$4.28	\$3.88	Q-171
Annetta South	Conservation	2020	1	\$1,026	\$0.26	\$0.00	Q-10
	Connect to Weatherford (TRWD)	2040	22	\$1,183,300	\$18.83	\$5.02	Q-171
Azle*	Conservation	See Tarrant County.					
	Additional TRWD	See Tarrant County.					
	Water treatment plant expansion	See Tarrant County.					
Cresson*	Conservation	2020	2	\$5,210	\$1.34	\$0.00	Q-10
	New wells in Trinity Aquifer	2020	113	\$917,300	\$2.89	\$0.79	Q-170
Fort Worth*	Conservation	See Tarrant County.					
	Other Measures	See Fort Worth in Section 5C.					
Hudson Oaks	Conservation	2020	36	\$18,908	\$3.45	\$1.29	Q-10
	Additional Weatherford	2050	192	\$0	\$3.78	\$3.78	None
Mineral Wells*	Conservation	2020	6	\$13,723	\$3.37	\$0.00	Q-10
Parker County Other	Conservation	2020	441	\$179,036	\$0.78	\$0.00	Q-10
	Additional Weatherford	2050	3,978	\$0	\$3.78	\$3.78	None
	Additional Walnut Creek SUD	2030	364	\$0	\$5.25	\$5.25	None
	Supply from TRWD	2060	9,618	\$0	\$0.97	\$0.97	None
	<i>Water Treatment Plant and Transmission Facilities</i>	2060	9,618	\$116,775,000	\$5.12	\$2.01	Q-174
	New wells in Trinity Aquifer	2020	200	\$1,448,000	\$3	\$1	Q-173
Parker County SUD*	Conservation	2020	40	\$35,633	\$1.83	\$0.00	Q-10
	Additional BRA with 1 MGD Treatment Plant Expansion	2020	540	\$6,776,000	\$4.60	\$1.38	Q-13
	Additional Groundwater (new wells in Trinity aquifer)	2060	513	\$3,860,000	\$2.70	\$0.77	Q-172
Reno	Conservation	2020	4	\$1,404	\$0.36	\$0.00	Q-10
	Additional Walnut Creek SUD	2040	24	\$0	\$5.25	\$5.25	None
Springtown	Conservation	2020	15	\$6,872	\$0.35	\$0.00	Q-10
	Additional TRWD	2020	244	\$0	\$0.97	\$0.97	None
	<i>Infrastructure needs (WTP Expansion & Lake Intake modifications for lower lake levels)</i>	2020	244	\$2,645,240	\$3.43	\$0.70	Q-175
	New wells in Trinity Aquifer	2020	70	\$998,400	\$4.81	\$1.12	Q-176
	Conservation	2020	117	\$75,798	\$1.30	\$0.00	Q-10
Walnut Creek SUD*	Other Measures	See Walnut Creek SUD in Section 5C.2.					
	Conservation	2020	1,756	\$3,295,000	\$10.25	\$1.29	Q-10
Weatherford	Other Measures	See Weatherford in Section 5C.2.					
	Conservation	2020	47	\$40,117	\$1.72	\$0.00	Q-10

**Table 5D.298
Costs for Recommended Water Management Strategies for Parker County
Not Covered Under Wholesale Water Providers**

Water User Group	Strategy	Imple- mented by:	Quantity** (Ac-Ft/Yr)	Capital Costs	Unit Cost (\$/1000 gal)		Table for Details
					With Debt Service	After Debt Service	
Willow Park	Supply from Weatherford	2030	1,562	\$0	\$3.78	\$3.78	None
	<i>Connect to Weatherford (TRWD) Phase I</i>	<i>2030</i>	<i>306</i>	\$588,100	\$4.43	\$3.94	Q-171
Parker County Irrigation	None	N/A	N/A	N/A	N/A	N/A	N/A
Parker County Livestock	None	N/A	N/A	N/A	N/A	N/A	N/A
Parker County Manufacturing	Conservation	2030	31	\$0	\$0.95	\$0.95	Q-11
	Additional Weatherford	2030	634	\$0	\$3.78	\$3.78	None
	Additional Walnut Creek SUD	2030	87	\$0	\$5.25	\$5.25	None
Parker County Mining	None	N/A	N/A	N/A	N/A	N/A	N/A
Parker County Steam Electric	Additional Weatherford	2050	88	\$0	\$1.89	\$1.89	None

Notes: Water User Groups marked with an * extend into more than one county.

**Quantities listed are for the WUG only. They do not include the WUG's customers.

Table 5D.299
Summary of Recommended Water Management Strategies for
Parker County
Not Covered Under Wholesale Water Providers

Type of Strategy	Quantity (Ac-Ft/Yr)	Capital Costs
Conservation	2,544	\$3,698,456
Purchase from WWP	17,965	\$3,320,300
<i>Delivery infrastructure</i>	583	\$8,298,600
<i>Treatment plants</i>	10,402	\$126,196,240
Groundwater	896	\$7,223,700
Total		\$148,737,296

Table Q-175
Springtown - Surface Water Treatment Plant & Supply Project

Owner: Springtown
Amount: 244 Ac-Ft/Yr

CAPITAL COSTS	Size	Quantity	Unit	Unit Price	Cost
Raw Water Station			1 LS	\$496,702	\$496,702
Water Treatment Plant Expansion (0.5 MGD) and upgrade	0.05 MGD		LS	\$1,425,519	\$1,425,519
Subtotal					\$1,922,221
Engineering and Contingencies (35%)					\$672,777
Subtotal					\$2,594,998
Permitting and Mitigation					\$5,000
Construction Total					\$2,600,000
Interest During Construction		(6 months)			\$45,240
TOTAL COST					\$2,645,240
Annual Cost					
Debt Service (5.5% for 20 years)					\$217,121
Operation and Maintenance					\$55,550
Total Annual Costs					\$272,671
Unit Costs (During Amortization)					
Cost per ac-ft				\$	1,117.51
Cost per 1000 gallons				\$	3.43
Unit Costs (After Amorization)					
Cost per ac-ft				\$	227.66
Cost per 1000 gallons				\$	0.70

**Table ES.2
2070 Supplies for the Largest Wholesale Providers and for Region C**

Wholesale Water Provider	Supplies Available in 2070 from Current Sources^(a)	Supplies Available in 2070 from New Strategies^(a)	Total Supplies Available in 2070^(a)	% of Total Supply from Conservation and Reuse	Cost of Strategies (Millions)
Dallas Water Utilities	506,363	414,323	920,686	31.9%	\$4,265
Tarrant Regional Water District	489,024	483,702	972,726	23.4%	\$5,620
North Texas Municipal Water District	383,146	580,122	963,268	20.6%	\$8,209
City of Fort Worth	282,992	257,766	540,757	26.1%	\$1,198
Trinity River Authority	114,996	142,426	257,422	42.8%	\$81
Upper Trinity Regional Water District	41,002	130,566	171,568	26.9%	\$1,325
Greater Texoma Utility Authority	23,333	69,837	93,170	10.0%	\$240
Total for Region C^(b)	1,631,508	1,795,148	3,426,656		\$23,643

Total Demand in Region C

2,939,880

Management Supply Factor

1.166

Notes:

(a) Current sources include only those that are connected. Some supplies are used by more than one supplier. For example, TRWD supplies water to TRA and Fort Worth, DWU supplies water to UTRWD, etc.

(b) Total for Region C is not a sum of the numbers above. It includes other providers as well. Some supplies serve multiple suppliers.

Table ES.3
Summary of Recommended Strategies - Region C WWP and WUGs*

**volumes shown in gray italics are infrastructure projects to utilize the supply volumes from other strategies*

Entity	Recommended Strategy	Capital Cost	Cost Table	First Decade of Water Strategy	First Decade Water Supply Volume (acre-foot/year)	First Decade Estimated Annual Average Unit Cost (\$/acre-foot/year)	Year 2070 Water Supply Volume (acre-foot/year)	Year 2070 Estimated Annual Average Unit Cost (\$/acre-foot/year)	Year 2020 Water Supply Volume (acre-foot/year)	Year 2030 Water Supply Volume (acre-foot/year)	Year 2040 Water Supply Volume (acre-foot/year)	Year 2050 Water Supply Volume (acre-foot/year)	Year 2060 Water Supply Volume (acre-foot/year)	Year 2070 Water Supply Volume (acre-foot/year)
Parker County														
Aledo	Parallel pipeline and pump station from Fort Worth	\$7,710,500	Q-169	2040	67	\$2,665	269	\$336	0	0	67	164	277	269
Annetta	Connect to Weatherford (TRWD)	\$2,077,600	Q-171	2030	25	\$2,216	196	\$1,326	0	25	28	35	90	196
Annetta North	Connect to Weatherford (TRWD)	\$59,400	Q-171	2040	7	\$1,395	38	\$1,264	0	0	7	16	25	38
Annetta South	Connect to Weatherford (TRWD)	\$1,183,300	Q-171	2040	5	\$6,136	22	\$1,636	0	0	5	10	16	22
Cresson*	New wells in Trinity Aquifer	\$917,300	Q-170	2020	113	\$941	113	\$259	113	113	113	113	113	113
Parker County Other	Water Treatment Plant and Transmission Facilities	\$116,775,000	Q-174	2060	3,635	\$1,668	9,618	\$1,668	0	0	0	0	3,635	9,618
Parker County Other	New wells in Trinity Aquifer	\$1,448,000	Q-173	2020	200	\$849	200	\$244	200	200	200	200	200	200
Parker County SUD*	Additional BRA with 1 MGD Treatment Plant Expansion	\$6,776,000	Q-13	2020	540	\$1,499	540	\$450	540	540	540	540	540	540
Parker County SUD*	Additional Groundwater (new wells in Trinity aquifer)	\$3,860,000	Q-172	2060	513	\$881	513	\$881	0	0	0	0	513	513
Springtown	Infrastructure improvements at Lake intake	\$2,645,240	Q-175	2020	67	\$1,118	236	\$228	67	244	237	230	227	236
Springtown	New wells in Trinity Aquifer	\$998,400	Q-176	2020	70	\$1,566	70	\$366	70	70	70	70	70	70
Willow Park	Connect to Weatherford (TRWD) Phase I	\$588,100	Q-171	2030	137	\$1,444	1,562	\$1,284	0	137	306	706	1,135	1,562
Rockwall County														
Blackland WSC*	Direct Connection to NTMWD	\$3,295,550	Q-179	2020	48	\$407	356	\$65	48	153	204	246	296	356
Cash SUD	Increase delivery infrastructure from NTWMD	\$6,654,700	Q-180	2020	1,165	\$531	1,042	\$53	1,165	1,075	782	824	927	1,042
Fate	Increase delivery infrastructure from NTMWD	\$15,075,000	Q-182	2060	390	\$528	2,982	\$528	0	0	0	0	390	2,982
Tarrant County														
Azle*	Water treatment plant expansion	\$11,046,000	Q-13	2020	162	\$805	1,641	\$241	162	255	383	607	925	1,641
Benbrook	Water treatment plant expansions	\$13,715,000	Q-13	2060	2,342	\$701	2,307	\$701	0	0	0	0	2,342	2,307
Bethesda WSC*	Connection to Arlington	\$18,698,000	Q-184	2020	1,416	\$704	2,614	\$104	1,416	1,619	1,833	2,072	2,336	2,614
Blue Mound	Purchase Existing Water System from Monarch Utilities	\$5,000,000	Q-185	2020	0	NA	0	NA	0	0	0	0	0	0
Burleson*	Increase delivery infrastructure from Fort Worth	\$21,780,000	Q-186	2040	967	\$401	5,541	\$72	0	0	967	2,386	3,922	5,541
Crowley	Increase delivery infrastructure from Fort Worth	\$11,558,000	Q-187	2030	184	\$394	3,028	\$75	0	184	678	1,297	2,347	3,028
Johnson County SUD*	Connect to Grand Prairie	\$86,140,000	Q-188	2020	6,726	\$1,248	6,726	\$176	6,726	6,726	6,726	6,726	6,726	6,726
Keller	Increase delivery infrastructure from Fort Worth	\$17,535,000	Q-189	2030	2,170	\$196	5,679	\$49	0	2,170	3,697	4,516	5,139	5,679
Kennedale	Increase delivery infrastructure from Ft Worth	\$3,685,000	Q-191	2040	188	\$1,284	277	\$192	0	0	188	239	283	277
Kennedale	Connect to Arlington	\$1,720,000	Q-190	2020	280	\$619	280	\$104	280	280	280	280	280	280
Pantego	Connect to Arlington	\$778,000	Q-192	2030	27	\$2,776	24	\$345	0	27	27	26	25	24
Pantego	Connect to Fort Worth	\$831,000	Q-193	2030	27	\$3,001	24	\$385	0	27	27	26	25	24
Pelican Bay	Azle (TRWD)	\$956,000	Q-194	2030	11	\$7,332	12	\$714	0	11	11	11	11	12
Southlake*	Increase delivery infrastructure from Ft Worth	\$43,035,000	Q-195	2020	141	\$479	8,349	\$46	0	141	2,157	4,198	6,264	8,349
Watauga	Increase delivery infrastructure North Richland Hills/Fort Worth	\$1,874,676	Q-199	2020	980	\$69	1,225	\$9	980	1,119	1,254	1,208	1,192	1,225

REGION C WATER PLANNING GROUP

Senate Bill One Fifth Round of Regional Water Planning - Texas Water Development Board

Board Members

Kevin Ward, Chair
Russell Laughlin, Vice-Chair
Tom Kula, Secretary
David Bailey
Chris Boyd
Bill Ceverha
Grace Darling
Gary Douglas
Tim Fisher
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Steve Mundt
Bob Riley
Drew Satterwhite
Rick Shaffer
Gary Spicer
Connie Standridge
Jack Stevens
Richard Wagner
Dr. Tom Woodward

June 24, 2019

Jeff Walker
Executive Administrator
Texas Water Development Board
1700 North Congress
Austin, Texas 78711-3231

Re: Region C Support of City of Springtown Amendment Pursuit

Dear Mr. Walker:

The City of Springtown is currently pursuing an amendment to the *2016 Region C Water Plan*, to include a Water Treatment Plant Expansion/Upgrade with their existing Water Management Strategy titled "*Infrastructure needs (Lake intake modifications for lower lake levels)*". The City's engineer made a presentation to the Region C Water Planning Group at the June 24, 2015 RCWPG meeting, and the RCWPG voted to support Springtown's efforts to pursue this amendment.

We believe that this amendment meets the criteria of a minor amendment per TAC Chapter 357.51(c)(2), and that there is a need for this amendment to enable Springtown to apply for and receive SWIFT funding. With this letter, the RCWPG is formally requesting that TWDB make a "Minor Amendment Determination" on this proposed amendment for Springtown. Included with this letter is detailed information about this proposed amendment as outlined in TWDB guidance for Minor Amendments.

Please contact me if you have any questions regarding our request.

Sincerely,

Kevin Ward
Chair, Region C Water Planning Group

C: Tom Kula, Region C Secretary
Kevin Smith, TWDB Project Manager
Amy Kaarlela, Freese and Nichols, Inc.

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