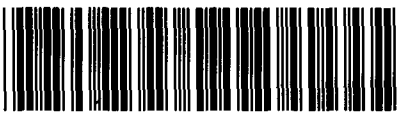

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Addendum StartPage: 0

PUC DOCKET NO. 49351

RECEIVED

RATEPAYERS APPEAL OF THE DECISION BY BEAR CREEK SPECIAL UTILITY DISTRICT TO CHANGE RATES	§ § § §	**PUBLIC UTILITY COMMISSION OF TEXAS**

2019 MAY 9 PM 4:56

PUBLIC UTILITY COMMISSION FILING CLERK

BEAR CREEK SPECIAL UTILITY DISTRICT'S RESPONSES TO COMMISSION STAFF'S SECOND REQUEST FOR INFORMATION
QUESTION NOS. STAFF 2-1 TO STAFF 2-13

COMES NOW, Bear Creek Special Utility District ("Bear Creek SUD") and files this, its Response to Commission Staff's Second Request for Information, which was received on April 18, 2019. Pursuant to 16 Tex. Admin. Code § 22.144(c), a "party upon whom a request is served shall serve a full written response … within 20 days after receipt of the request". Twenty days after April 18, 2019, is May 8, 2019; therefore, Bear Creek SUD's responses are timely filed.

Respectfully submitted,

John J. Carlton
The Carlton Law Firm P.L.L.C.
4301 Westbank Drive, Suite B-130
Austin, Texas 78746
(512) 614-0901
Fax (512) 900-2855
State Bar No. 03817600

ATTORNEY FOR BEAR CREEK SPECIAL UTILITY DISTRICT

CERTIFICATE OF SERVICE

I hereby certify that I have served or will serve a true and correct copy of the foregoing document via hand delivery, facsimile, electronic mail, overnight mail, U.S. mail and/or Certified Mail Return Receipt Requested to all parties on this the 9th day of May, 2019.

John J. Carlton

DOCKET NO. 49351

RESPONSE TO COMMISSION STAFF'S SECOND REQUEST FOR INFORMATION
QUESTION NOS. STAFF 2-1 THROUGH 2-13

STAFF 2-1: Provide any and all rate studies, including methodologies, best practice references, and calculations, and assumptions used to support the rate changes subject to this appeal. The studies should include all calculations for costs Bear Creek SUD customers receiving water and/or sewer service.

RESPONSE: Bear Creek SUD requested financial assistance through the Greater Texoma Utility Authority for construction of improvements to the District's water system, including new pump station and ground storage facilities, and new water distribution lines. The costs associated with the construction projects resulted in issuance of bonds through the Texas Water Development Board in the amount of $7,490,000. In the attached pro forma, rates necessary to service the debt for this bond issue were calculated based on the current number of customers (2,301) in the District. Utilizing current revenues and operations and maintenance expenses from the most current audit, the rates necessary to service the debt for the new bond issue were calculated by subtracting operations and maintenance expenses, current debt on the system, required reserve and administrative payments from revenue, thereby determining the amount necessary to repay the debt. The summary can be seen in the attached pro forma.

It is worth noting that the pro forma does not take into account future increases in wholesale water rates (expenditure for Bear Creek SUD) from North Texas Municipal Water District ("NTMWD"). NTMWD rates have increased from $1.19 per 1,000 to $2.97 per 1,000 from 2009 to 2019. With the new $1.6 billion-dollar reservoir, pipelines and treatment plant projects going on, this wholesale rate is expected to continue to rise. Attached you will find the NTMWD's historical water rates along with a graph depicting their projections.

Responsive documents will be produced.

Prepared by: Drew Satterwhite

Sponsored by: Drew Satterwhite

STAFF 2-2: Provide a separate cost of service for water and wastewater, from costs associated with providing any other distinct service provided by Bear Creek SUD to all other customers.

RESPONSE: Bear Creek SUD only provides water service.

See documents produced in response to Staff 2-1 for responsive documents..

Prepared by: Camille Reagan

Sponsored by: Camille Reagan

STAFF 2-3: Provide all other documentation and information used by the board of directors to set the rates which went into effect December 18, 2018 subject to this appeal.

RESPONSE: Responsive documents will be produced.

Prepared by: Drew Satterwhite

Sponsored by: Camille Reagan and Drew Satterwhite

STAFF 2-4: Please provide a copy of the audited financial statements of Bear Creek SUD completed at the time Bear Creek SUD made its decision to institute the rates effective December 18, 2018.

RESPONSE: Responsive documents will be produced.

Prepared by: Camille Reagan

Sponsored by: Camille Reagan

STAFF 2-5: Please provide a copy of Bear Creek SUD's budget available at the time the Bear Creek SUD made its decision to institute the rates effective December 18, 2018.

RESPONSE: Responsive documents will be produced.

Prepared by: Camille Reagan

Sponsored by: Camille Reagan

STAFF 2-6: Please provide total annual interest and principal payments on outstanding debt and payment amortization schedule(s) for each debt for which Bear Creek SUD is responsible. Please also provide the allocation of such debt between water and sewer services eligible for this appeal and any services not eligible for appeal, if any, under TWC §13.043, or specifying that there are no differences in costs for water and sewer service.

RESPONSE: Bear Creek SUD only provides water service. There is no allocation of costs.

Responsive documents will be produced.

Prepared by: Camille Reagan

Sponsored by: Camille Reagan

STAFF 2-7: Please provide documentation indicating how much of the debt is issued to pay for the capital investment specifically related to water, wastewater, and any other distinct service rates that may be appealed under TWC § 13.043. Please separate out any debt that was issued for services that are paid for with rates that are not appealable under TWC §13.043.

RESPONSE: Bear Creek SUD only provides water service. There is no separation of debt for other services.

Please see documents produced in response to Staff 2-6 for responsive documents.

Prepared by: Camille Reagan

Sponsored by: Camille Reagan

STAFF 2-8: Provide copies of all debt agreements including but not limited to bond agreements and loan agreements for any debt service used to providing water and wastewater service.

RESPONSE: Bear Creek SUD only provides water service.

Responsive documents will be produced.

Prepared by: Camille Reagan

Sponsored by: Camille Reagan

STAFF 2-9: Please provide total gallons of water produced and gallons of water billed for the fiscal year completed directly prior to the date the decision was made to increase the rates subject to this appeal by month, customer class, and tier.

RESPONSE: The 2017 Appendix D Report submitted to NTMWD contains the information of total gallons of water produced, gallons of water billed for the fiscal year by month and customer class. There are no records available by tier.

Responsive documents will be produced.

Prepared by: Camille Reagan

Sponsored by: Camille Reagan

STAFF 2-10: Please provide the revenue requirement including detailed expenses used to set the rates and supporting financial statements or budget used to determine the revenue requirement.

RESPONSE: The Pro Forma produced in response to Staff 2-1 lays out the revenue requirement. The rate increase was based on 2,301 customers servicing the debt.

See documents produced in response to Staff 2-1.

Prepared by: Camille Reagan

Sponsored by: Camille Reagan

STAFF 2-11: Please provide the general ledger which includes detailed expenses used to make up the revenue requirement. If the revenue requirement is based on a budget, please provide the budget-to-actual comparison for the period available at the time the decision to change the rates appealed in this case was made.

RESPONSE: Responsive documents will be produced separately as Confidential Documents pursuant to the terms of a Protective Order.

Prepared by: Camille Reagan

Sponsored by: Camille Reagan

STAFF 2-12: Please provide the reconciliation between the historical financial statements and/or the budget used and the revenue requirement used to set the rates subject to this appeal.

RESPONSE: Please see documents produced in response to Staff 2-1.

Prepared by: Camille Reagan

Sponsored by: Camille Reagan

STAFF 2-13: Please provide all detailed invoices supporting any rate case expenses for which the Bear Creek SUD intends to request recovery incurred due to this appeal. Invoices should include the name of the person providing the service, hourly billing rates, specific description of services performed during the time billed, and hours billed on each invoice.

RESPONSE: Responsive documents will be produced.

Prepared by: Camille Reagan

Sponsored by: Camille Reagan

RESPONSIVE TO COMMISSION STAFF'S

RFI 2-1

PRO FORMA OPERATING STMT **30 year scenario**

Bear Creek SUD

YEAR	OPERATING INCOME[1]	Rate Increase Necessary to Service Debt[2]	O&M EXPENSES	DWSRF FUNDS $7,490,000 DEBT SERVICE	EXISTING CITY DEBT ON W/S SYSTEM	RESERVE PAYMENTS	ESTIMATED ADMIN PAYMENTS[3]	COVERAGE
2019	2,088,907	248,508	1,778,222	89,147	138,786	71,160	33,750	1.68
2020	2,088,907	414,180	1,778,222	354,580	138,786	71,160	33,750	1.21
2021	2,088,907	414,180	1,778,222	352,623	138,787	71,160	27,750	1.23
2022	2,088,907	414,180	1,778,222	350,419	138,786	71,160	26,759	1.23
2023	2,088,907	414,180	1,778,222	353,006	138,787	71,160	25,768	1.23
2024	2,088,907	414,180	1,778,222	350,315	138,786	-	24,777	1.41
2025	2,088,907	414,180	1,778,222	352,370	138,786	-	23,786	1.41
2026	2,088,907	414,180	1,778,222	354,190	138,786	-	22,795	1.41
2027	2,088,907	414,180	1,778,222	350,746	138,787	-	21,804	1.42
2028	2,088,907	414,180	1,778,222	352,118	138,787	-	20,813	1.42
2029	2,088,907	414,180	1,778,222	353,212	138,786	-	19,821	1.42
2030	2,088,907	414,180	1,778,222	354,019	138,786		18,830	1.42
2031	2,088,907	414,180	1,778,222	354,575	138,787	-	17,839	1.42
2032	2,088,907	414,180	1,778,222	354,918	138,787	-	16,848	1.42
2033	2,088,907	414,180	1,778,222	355,065	126,968	-	15,857	1.46
2034	2,088,907	414,180	1,778,222	354,918	126,969	-	14,866	1.46
2035	2,088,907	414,180	1,778,222	354,518	126,969	-	13,875	1.46
2036	2,088,907	414,180	1,778,222	353,883	-	-	12,884	1.98
2037	2,088,907	414,180	1,778,222	353,008	-	-	11,893	1.99
2038	2,088,907	414,180	1,778,222	351,888	-	-	10,902	2.00
2039	2,088,907	414,180	1,778,222	350,518	-	-	9,911	2.01
2040	2,088,907	414,180	1,778,222	353,973	-	-	8,920	2.00
2041	2,088,907	414,180	1,778,222	352,098	-	-	7,929	2.01
2042	2,088,907	414,180	1,778,222	350,014	-	-	6,938	2.03
2043	2,088,907	414,180	1,778,222	352,746	-	-	5,946	2.02
2044	2,088,907	414,180	1,778,222	350,194	-	-	4,955	2.04
2045	2,088,907	414,180	1,778,222	352,484	-	-	3,964	2.03
2046	2,088,907	414,180	1,778,222	354,486	-	-	2,973	2.03
2047	2,088,907	414,180	1,778,222	351,198	-	-	1,982	2.05
2048	2,088,907	414,180	1,778,222	352,748	-	-	991	2.05
2049	2,088,907	414,180	1,778,222	354,005	-	-	0	2.05

(1) Does not include depreciation or future NTMWD Water Rate Increases

(2) Board will increase rates as necessary to service debt. Pro forma reflects $10.00 increase effective 2019, additional $5.00 increase effective 2020.

(3) Administrative payments billed directly to GTUA.

	Fiscal Year Ended September 30,				
	2017	2016	2015	2014	2013
Operating Revenues					
Water Sales	1,185,455	1,116,528	878,791	709,683	523,309
Customer Charges/Fees	903,452	827,807	942,174	1,344,762	277,134
Othe Income	0	0	151,700	165,450	88,593
Total Operating Revenue	2,088,907	1,944,335	1,972,665	2,219,895	889,036
Operating Expenses					
Payroll and benefits	400,236	381,896	327,463	282,718	110,160
Water purchases	612,112	551,497	464,271	423,323	198,326
Repairs and maintenance	387,470	33,382	44,137	19,411	28,996
Utilities	61,369	60,262	61,815	50,671	24,519
Supplies	243,553	237,891	100,841	132,870	28,847
Insurance	151,661	114,604	115,350	85,617	36,472
Dues and Fees	11,264	8,404	9,773	7,693	3,494
Professional fees	95,216	60,252	94,699	51,274	24,195
Other operating expenses	124,487	187,687	237,296	109,486	59,034
Total Operating Expenses	2,087,368	1,635,875	1,455,645	1,163,063	514,043
Operating Income	1,539	308,460	517,020	1,056,832	374,993

* Excludes bond payments to GTUA and depreciation.

Customers		2,301.00	
	2018	$10.00	276,120.00
	2019	$15.00	414,180.00
			690,300.00

Reserve

$10,673,975.73

$355,799.19	Total Reserve = average of tot debt
$5,929.99	Monthly payment
$71,159.84	Annual payment

Independent Bank

Refinance of USDA Loan

FY	PRINCIPAL	INTEREST	TOTAL
2018	$ 78,581	$ 60,205	$ 138,786
2019	81,210	57,576	138,786
2020	83,771	55,016	138,787
2021	86,729	52,057	138,786
2022	89,631	49,156	138,787
2023	99,010	39,776	138,786
2024	99,010	39,776	138,786
2025	99,010	39,776	138,786
2026	99,011	39,776	138,787
2027	99,011	39,776	138,787
2028	116,716	22,070	138,786
2029	116,716	22,070	138,786
2030	116,717	22,070	138,787
2031	116,717	22,070	138,787
2032	116,717	22,070	138,787
2033	121,218	5,750	126,968
2034	121,218	5,751	126,969
2035	121,218	5,751	126,969
TOTAL	$ 1,862,211	$ 600,492	$ 2,462,703

North Texas Municipal Water District

Regional Water System - Historical Water Rates (per 1,000 gallons)

11/1/2017 12 47

Year	Member Rate		Customer Rate		Difference			
	Full	Excess	Full	Excess	Full		Excess	
1957	$ 0.180	$ 0 070	-	-	-	-	-	-
1958	$ 0.180	$ 0.070	-	-	-	-	-	-
1959	$ 0.180	$ 0.070	$ 0.250	$ 0.100	$0 070	38.9%	$0.030	42.9%
1960	$ 0.180	$ 0.070	$ 0.250	$ 0.100	$0 070	38.9%	$0.030	42.9%
1961	$ 0.180	$ 0.070	$ 0.250	$ 0.100	$0.070	38.9%	$0.030	42.9%
1962	$ 0.180	$ 0.070	$ 0 250	$ 0.100	$0.070	38.9%	$0.030	42.9%
1963	$ 0.150	$ 0.070	$ 0.250	$ 0.100	$0.100	66.7%	$0.030	42.9%
1964	$ 0.150	$ 0.070	$ 0 250	$ 0.100	$0.100	66.7%	$0.030	42.9%
1965	$ 0.200	$ 0.070	$ 0 250	$ 0.100	$0 050	25.0%	$0.030	42.9%
1966	$ 0.200	$ 0.070	$ 0 250	$ 0.100	$0 050	25.0%	$0.030	42.9%
1967	$ 0.180	$ 0.070	$ 0.250	$ 0.100	$0.070	38.9%	$0.030	42.9%
1968	$ 0.185	$ 0.070	$ 0.250	$ 0.100	$0.065	35.1%	$0 030	42.9%
1969	$ 0.192	$ 0.070	$ 0.250	$ 0 100	$0.058	30.2%	$0.030	42 9%
1970	$ 0.235	$ 0 070	$ 0.285	$ 0.120	$0.050	21 3%	$0 050	71.4%
1971	$ 0.235	$ 0.070	$ 0.285	$ 0.120	$0.050	21 3%	$0 050	71.4%
1972	$ 0 242	$ 0.070	$ 0.292	$ 0.120	$0.050	20 7%	$0 050	71.4%
1973	$ 0.230	$ 0 070	$ 0.280	$ 0 120	$0.050	21.7%	$0.050	71 4%
1974	$ 0.250	$ 0.070	$ 0.300	$ 0.120	$0.050	20 0%	$0 050	71 4%
1975	$ 0.264	$ 0.070	$ 0.314	$ 0.120	$0.050	18 9%	$0.050	71.4%
1976	$ 0 274	$ 0.100	$ 0.324	$ 0.150	$0.050	18.2%	$0.050	50.0%
1977	$ 0.308	$ 0 100	$ 0.358	$ 0 150	$0.050	16.2%	$0.050	50 0%
1978	$ 0 275	$ 0.100	$ 0.325	$ 0.150	$0.050	18.2%	$0.050	50.0%
1979	$ 0 275	$ 0.100	$ 0 325	$ 0.150	$0.050	18.2%	$0.050	50.0%
1980	$ 0.300	$ 0.100	$ 0.350	$ 0.150	$0.050	16.7%	$0.050	50.0%
1981	$ 0.319	$ 0.120	$ 0.369	$ 0.170	$0.050	15.7%	$0.050	41.7%
1982	$ 0.369	$ 0 120	$ 0.419	$ 0 170	$0.050	13.6%	$0.050	41.7%
1983	$ 0.419	$ 0.120	$ 0.469	$ 0.170	$0.050	11.9%	$0.050	41.7%
1984	$ 0.419	$ 0.120	$ 0 469	$ 0.170	$0.050	11.9%	$0.050	41 7%
1985	$ 0.469	$ 0.120	$ 0.519	$ 0.170	$0.050	10.7%	$0.050	41.7%
1986	$ 0.569	$ 0.120	$ 0.619	$ 0.170	$0 050	8.8%	$0.050	41.7%
1987	$ 0.619	$ 0.120	$ 0 669	$ 0.170	$0.050	8.1%	$0.050	41.7%
1988	$ 0.619	$ 0.120	$ 0 669	$ 0.170	$0 050	8.1%	$0.050	41.7%
1989	$ 0.619	$ 0.120	$ 0.669	$ 0.170	$0.050	8.1%	$0.050	41.7%
1990	$ 0.619	$ 0.120	$ 0 669	$ 0.170	$0.050	8.1%	$0.050	41.7%
1991	$ 0.619	$ 0.120	$ 0 669	$ 0.170	$0 050	8.1%	$0.050	41.7%
1992	$ 0.669	$ 0.120	$ 0.719	$ 0.170	$0 050	7.5%	$0.050	41.7%
1993	$ 0 719	$ 0.120	$ 0.769	$ 0.170	$0 050	7.0%	$0.050	41.7%
1994	$ 0.719	$ 0.120	$ 0.769	$ 0.170	$0 050	7 0%	$0.050	41.7%
1995	$ 0.719	$ 0.120	$ 0.769	$ 0.170	$0 050	7 0%	$0.050	41.7%
1996	$ 0 719	$ 0.120	$ 0.769	$ 0.170	$0.050	7.0%	$0.050	41.7%
1997	$ 0 719	$ 0.120	$ 0.769	$ 0.170	$0 050	7 0%	$0.050	41.7%
1998	$ 0.719	$ 0.120	$ 0.769	$ 0.170	$0 050	7.0%	$0.050	41.7%
1999	$ 0 719	$ 0.120	$ 0.769	$ 0.170	$0 050	7.0%	$0.050	41.7%
2000	$ 0.719	$ 0.120	$ 0.769	$ 0 170	$0.050	7.0%	$0.050	41.7%
2001	$ 0.719	$ 0 120	$ 0.769	$ 0 170	$0.050	7.0%	$0.050	41 7%
2002	$ 0.800	$ 0 120	$ 0.850	$ 0.170	$0.050	6 3%	$0.050	41 7%
2003	$ 0.870	$ 0.200	$ 0.920	$ 0.250	$0.050	5 7%	$0.050	25 0%
2004	$ 0.920	$ 0.200	$ 0.970	$ 0.250	$0 050	5 4%	$0.050	25.0%
2005	$ 0.970	$ 0 200	$ 1.020	$ 0.250	$0.050	5.2%	$0.050	25.0%
2006	$ 0.970	$ 0.230	$ 1.020	$ 0.280	$0.050	5.2%	$0.050	21.7%
2007	$ 1 020	$ 0.300	$ 1.070	$ 0.350	$0.050	4.9%	$0 050	16 7%
2008	$ 1.080	$ 0 420	$ 1.130	$ 0.470	$0.050	4 6%	$0 050	11 9%
2009	$ 1 180	$ 0.530	$ 1.230	$ 0.580	$0.050	4 2%	$0.050	9.4%
2010	$ 1 250	$ 0.440	$ 1.300	$ 0.490	$0.050	4 0%	$0 050	11 4%
2011	$ 1 370	$ 0.380	$ 1.420	$ 0.430	$0.050	3.6%	$0 050	13 2%
2012	$ 1.490	$ 0.380	$ 1.540	$ 0.430	$0.050	3.4%	$0.050	13.2%
2013	$ 1.700	$ 0 350	$ 1.750	$ 0.400	$0.050	2.9%	$0.050	14.3%
2014	$ 1.870	$ 0 450	$ 1.920	$ 0.500	$0.050	2.7%	$0.050	11 1%
2015	$ 2.060	$ 0 510	$ 2.110	$ 0.560	$0.050	2.4%	$0.050	9.8%
2016	$ 2.290	$ 0.410	$ 2.340	$ 0 460	$0.050	2.2%	$0.050	12 2%
2017	$ 2.530	$ 0 410	$ 2.580	$ 0.460	$0.050	2.0%	$0.050	12 2%
2018	$ 2.780	$ 0.400	$ 2 830	$ 0.450	$0.050	1.8%	$0 050	12 5%

*Excess portion of wholesale rate is amount charged when a city exceeds its contracted minimum This funds the additional cost of chemicals and power for treatment and delivery. If a city uses less than its contracted minimum, the excess portion of the rate may be rebated annually.

NORTH TEXAS MUNICIPAL WATER DISTRICT

Regional Service Through Unity

September 28, 2018

Mr. Herman Stork
President
Bear Creek Special Utility District
P. O. Box 188
Lavon, TX 75166

RE: 2018-19 ANNUAL BUDGET CHARGES

Dear Mr. Stork:

The 2018-19 Annual Budget was approved by the NTMWD Board of Directors at the September 2018 Board Meeting. The water rate is being adjusted from $2.83 to $2.97 per 1,000 gallons, the excess water rate is being adjusted from 45.0¢ to 47.0¢ per 1,000 gallons and the City's Minimum Annual Demand is 243,364,000 gallons for 2018-19. Enclosed are the 2018-19 Budget Summary and Billing Schedule for the following charge:

- Regional Water System $ 722,791.08

The NTMWD Board of Director's goal is to continue to provide an effective, responsible level of service while maintaining a minimum cost and stable rate to the cities. Your continued cooperation and support will allow the District to maintain an excellent level of service.

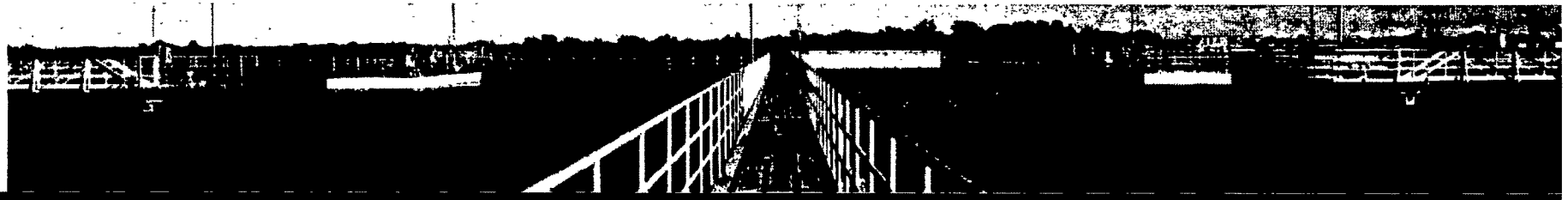
Should you have any questions or need additional information, please contact Erik Felthous, Assistant Deputy - Finance, by email at efelthous@ntmwd.com.

Sincerely,

THOMAS W. KULA
Executive Director / General Manager

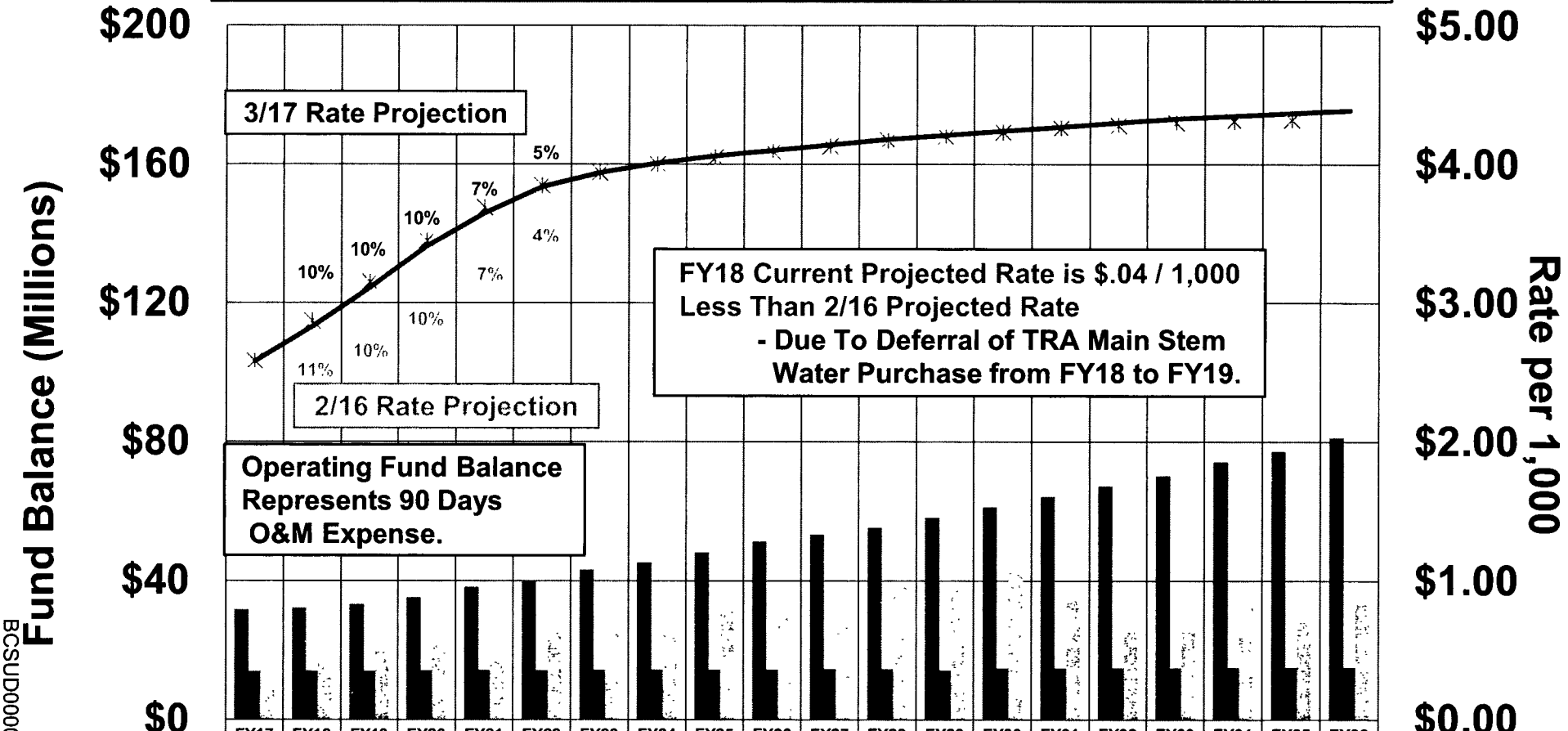
TWK/EAF/dtf
Enclosures

NORTH TEXAS MUNICIPAL WATER DISTRICT



PROJECTED CUSTOMER WATER RATES & FUND BALANCES

Preliminary – Rates are Adopted by the Board Annually in September



	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	FY36
Oper Fund	$31	$32	$33	$35	$38	$40	$43	$45	$48	$51	$53	$55	$58	$61	$64	$67	$70	$74	$77	$81
Contingency Fund	$14	$14	$14	$14	$14	$14	$14	$14	$14	$14	$14	$14	$14	$15	$15	$15	$15	$15	$15	$15
Cap Imp Fund	$20	$16	$20	$21	$17	$25	$25	$25	$31	$31	$29	$38	$37	$42	$34	$25	$25	$32	$28	$33
3/17 Projection	$2.58	$2.83	$3.11	$3.41	$3.65	$3.84	$3.94	$4.01	$4.06	$4.10	$4.14	$4.18	$4.21	$4.24	$4.27	$4.30	$4.33	$4.35	$4.37	$4.39
2/16 Projection	$2.58	$2.87	$3.15	$3.45	$3.69	$3.85	$3.94	$4.00	$4.05	$4.09	$4.13	$4.17	$4.20	$4.23	$4.26	$4.28	$4.30	$4.31	$4.32	

BCSUD000023

Kimley-Horn & Associates, Inc. **Opinion of Probable Construction Cost**

Client:	**Bear Creek SUD**	**Date:**	**7/24/2018**
Project:	**PS #2 Upgrades & SH 205 Utility Relocations**	**Prepared By:**	**SAW**
KHA No.:	**064474103**	**Checked By:**	**TLS**

Title:	**Summary**	**Sheet:**	**1**

Item No.	Item Description		Item Cost
1	2.0 Million Gallon GST and (2) Vertical Turbine Pumps	$	4,107,500
2	16-inch & 12-inch Offsite Water Lines	$	2,330,500
	Total:	**$**	**6,438,000**

Basis for Cost Projection:

- [x] No Design Completed
- [ ] Preliminary Design
- [ ] Final Design

The Engineer has no control over the cost of labor, materials, equipment, or over the Contractor's methods of determining prices or over competitive bidding or market conditions. Opinions of probable construction costs provided herein are based on the information known to Engineer at this time and represent only the Engineer's judgment as a design professional familiar with the construction industry. The Engineer cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from its opinions of probable costs.

Kimley-Horn & Associates, Inc. **Opinion of Probable Construction Cost**

Client:	**Bear Creek SUD**	**Date:**	**7/24/2018**
Project:	**PS #2 Upgrades & SH 205 Utility Relocations**	**Prepared By:**	**SAW**
KHA No.:	**064474103**	**Checked By:**	**TLS**

Title:	**2.0 Million Gallon GST and (2) Vertical Turbine Pumps**	**Sheet:**	**2**

Item No.	Item Description	Quantity	Unit	Unit Price	Item Cost
1	Mobilization, Bonds, and Insurance	1	LS	$ 90,000	$ 90,000
2	2.0 Million Gallon Type III Concrete GST	1	LS	$ 1,000,000	$ 1,000,000
3	Mixer	1	EA	$ 50,000	$ 50,000
4	Tank Excavation (Includes Access Ramp and Track and hauling soil offsite)	22,000	CY	$ 30	$ 660,000
5	Shoring	3,000	SF	$ 70	$ 210,000
6	Tank Subgrade Preparation	1	LS	$ 96,000	$ 96,000
7	Import Backfill	13,500	CY	$ 25	$ 337,500
8	Stabilization of Tank Construction Areas	1	LS	$ 82,000	$ 82,000
9	1,200 GPM Vertical Turbine Pump & Can (Outside)	2	EA	$ 60,000	$ 120,000
10	Electrical Building, SCADA, Instrumentation, & HVAC	1	LS	$ 150,000	$ 150,000
11	Yard Piping	1	LS	$ 25,000	$ 25,000
12	Concrete Slab for Pumps	30	SY	$ 100	$ 3,000
13	Concrete Sidewalk Around GST	130	SY	$ 60	$ 7,800
14	SWPPP	1	LS	$ 5,000	$ 5,000
15	Connect to Existing Water Line	1	EA	$ 5,000	$ 5,000
16	Electromagnetic Flow Meter	1	LS	$ 10,000	$ 10,000
17	ARV's	4	EA	$ 5,000	$ 20,000
18	Site Grading	1	LS	$ 50,000	$ 50,000
19	Groundwater Drainage Lift Station	1	LS	$ 50,000	$ 50,000
20	Metal Roof for Pumps	1	LS	$ 10,000	$ 10,000

Subtotal:		$ 2,990,000
Conting. (%,+/-)	20	$ 600,000
Engineering (Contract)		$ 442,500
CCA (1/2 Contract)		$ 75,000
Total:		**$ 4,107,500**

Basis for Cost Projection:

- [x] No Design Completed
- [ ] Preliminary Design
- [ ] Final Design

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Client:	**Bear Creek SUD**	**Date:**	**7/24/2018**
Project:	**PS #2 Upgrades & SH 205 Utility Relocations**	**Prepared By:**	**SAW**
KHA No.:	**064474103**	**Checked By:**	**TLS**

Title:	**16-inch & 12-inch Offsite Water Lines**	**Sheet:**	**3**

Item No.	Item Description	Quantity	Unit	Unit Price	Item Cost
1	Mobilization, Bonds, and Insurance	1	LS	$ 60,000	$ 60,000
2	12" AWWA C900 DR 18 PVC Water Line By Open Cut	5,800	LF	$ 100	$ 580,000
3	16" AWWA C900 DR 18 PVC Water Line By Open Cut	2,000	LF	$ 140	$ 280,000
4	12" AWWA C900 DR 18 PVC Restrained Joint Water Line With Casing Spacers	400	LF	$ 120	$ 48,000
5	16" AWWA C900 DR 18 PVC Restrained Joint Water Line With Casing Spacers	200	LF	$ 200	$ 40,000
6	Bore with 24" Steel Casing	400	LF	$ 750	$ 300,000
7	Bore with 30" Steel Casing	200	LF	$ 900	$ 180,000
8	Fire Hydrant Assembly	9	EA	$ 7,000	$ 63,000
9	16" Butterfly Valve	3	EA	$ 9,000	$ 27,000
10	12" Gate Valve	10	EA	$ 6,000	$ 60,000
11	Trench Safety	7,800	LF	$ 2	$ 15,600
12	Seed, Fertilizer, and Erosion Control	7,800	LF	$ 5	$ 39,000
13	Connect to Existing Water Line	10	EA	$ 5,000	$ 50,000
		Subtotal:			$ 1,750,000
		Conting. (%,+/-) 20			$ 350,000
		Engineering (Contract)			$ 155,500
		CCA (1/2 Contract)			$ 75,000
		Total:			**$ 2,330,500**

Basis for Cost Projection:

- [x] No Design Completed
- [ ] Preliminary Design
- [ ] Final Design

The Engineer has no control over the cost of labor, materials, equipment, or over the Contractor's methods of determining prices or over competitive bidding or market conditions. Opinions of probable construction costs provided herein are based on the information known to Engineer at this time and represent only the Engineer's judgment as a design professional familiar with the construction industry. The Engineer cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from its opinions of probable costs.

Texas Water Development Board

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

Fill out this form as completely as possible.
If a field does not apply to your entity, leave it blank.

CONTACT INFORMATION

Name of Utility: Bear Creek SUD

Public Water Supply Identification Number (PWS ID): TX0430037

Certificate of Convenience and Necessity (CCN) Number: 10066

Surface Water Right ID Number: _____

Wastewater ID Number: _____

Completed By: Camille Reagan Title: General Manager

Address: P.O. Box 188 City: Lavon Zip Code: 75166

Email: creagan@bearcreeksud.com Telephone Number: 972-843-2101

Date: 08/01/2018

Regional Water Planning Group: C Map

Groundwater Conservation District: North Te Map

Check all that apply:

- [x] Received financial assistance of $500,000 or more from TWDB
- [ ] Have 3,300 or more retail connections
- [ ] Have a surface water right with TCEQ

Section I: Utility Data

A. Population and Service Area Data

1. Current service area size in square miles: 21
(Attach or email a copy of the service area map.)

2. Provide historical service area population for the previous five years, starting with the most current year.

Year	Historical Population Served By Retail Water Service	Historical Population Served By Wholesale Water Service	Historical Population Served By Wastewater Service
2017	6,933	0	0
2016	6,411	0	0
2015	6,288	0	0
2014	5,523	0	0
2013	5,523	0	0

3. Provide the projected service area population for the following decades.

Year	Projected Population Served By Retail Water Service	Projected Population Served By Wholesale Water Service	Projected Population Served By Wastewater Service
2020	8,279	0	0
2030	13,430	0	0
2040	21,817	0	0
2050	35,479	0	0
2060	50,613	0	0

4. Describe the source(s)/method(s) for estimating current and projected populations.

B. System Input

Provide system input data for the previous five years.

Total System Input = Self-supplied + Imported – Exported

Year	Self-supplied Water in Gallons	Purchased/Imported Water in Gallons	Exported Water in Gallons	Total System Input	Total GPCD
2017	0	214,349,000	0	214,349,000	85
2016	0	225,667,000	0	225,667,000	96
2015	0	214,274,000	0	214,274,000	93
2014	0	212,420,000	0	212,420,000	105
2013	0	212,420,000	0	212,420,000	105
Historic 5-year Average	0	215,826,000	0	215,826,000	97

C. Water Supply System (Attach description of water system)

1. Designed daily capacity of system 1,669,000 **gallons** per day.
2. Storage Capacity:
   Elevated 1,100,000 **gallons**
   Ground 569,000 **gallons**

3. List all current water supply sources in gallons.

Water Supply Source	Source Type*	Total Gallons
North Texas Municipal Wate	Contract	235,231,000
	Choose One	
	Choose One	
	Choose One	
	Choose One	
	Choose One	

*Select one of the following source types: *Surface water, Groundwater, or Contract*

4. If surface water is a source type, do you recycle backwash to the head of the plant?
   ○ Yes _____ estimated **gallons** per day
   ○ No

D. Projected Demands

1. Estimate the water supply requirements for the next ten years using population trends, historical water use, economic growth, etc.

Year	Population	Water Demands (gallons)
2018	7,517	253,837,929
2019	7,893	266,546,118
2020	8,279	332,368,020
2021	8,693	348,986,421
2022	9,128	366,582,375
2023	9,584	384,830,031
2024	10,063	404,055,240
2025	10,567	424,258,002
2026	11,095	445,438,317
2027	11,650	467,596,185

2. Describe sources of data and how projected water demands were determined. Attach additional sheets if necessary.

E. High Volume Customers

1. List the annual water use, in gallons, for the five highest volume **RETAIL customers.** Select one of the following water use categories to describe the customer; choose Residential, Industrial, Commercial, Institutional, or Agricultural.

Retail Customer	Water Use Category*	Annual Water Use	Treated or Raw
Lavon Grand Heritage	Institutional	12,842,800	Treated
Corps of Engineers	Commercial	1,949,000	Treated
Community ISD	Institutional	1,390,300	Treated
Latimore Materials Co.	Commercial	1,368,800	Treated
Bee Line Materials	Choose One	1,333,100	Treated

*For definitions on recommended customer categories for classifying customer water use, refer to the online Guidance and Methodology for Reporting on Water Conservation and Water Use.

2. If applicable, list the annual water use for the five highest volume **WHOLESALE customers.** Select one of the following water use categories to describe the customer; choose Municipal, Industrial, Commercial, Institutional, or Agricultural.

Wholesale Customer	Water Use Category*	Annual Water Use	Treated or Raw
	Choose One		Choose One
	Choose One		Choose One
	Choose One		Choose One
	Choose One		Choose One
	Choose One		Choose One

*For definitions on recommended customer categories for classifying customer water use, refer to the online Guidance and Methodology for Reporting on Water Conservation and Water Use.

F. Utility Data Comment Section

Provide additional comments about utility data below.

Section II: System Data

A. Retail Connections

1. List the active retail connections by major water use category.

Water Use Category*	Active Retail Connections			
	Metered	Unmetered	Total Connections	Percent of Total Connections
Residential – Single Family	2,216		2,216	96%
Residential – Multi-family (units)	0		0	0%
Industrial	6		6	0%
Commercial	70		70	3%
Institutional	19		19	1%
Agricultural	0		0	0%
TOTAL	2,311	0	2,311	

*For definitions on recommended customer categories for classifying customer water use, refer to the online Guidance and Methodology for Reporting on Water Conservation and Water Use.

2. List the net number of new retail connections by water use category for the previous five years.

Water Use Category*	Net Number of New Retail Connections				
	2017	2016	2015	2014	2013
Residential – Single Family	106	96	260	0	0
Residential – Multi-family (units)	0	0	0	0	0
Industrial	0	0	14	0	0
Commercial	5	7	0	0	0
Institutional	0	1	0	0	0
Agricultural	0	0	0	0	0
TOTAL	111	104	274	0	0

*For definitions on recommended customer categories for classifying customer water use, refer to the online Guidance and Methodology for Reporting on Water Conservation and Water Use.

B. Accounting Data

For the previous five years, enter the number of gallons of RETAIL water provided in each major water use category.

Water Use Category*	Total Gallons of Retail Water				
	2017	2016	2015	2014	2013
Residential - Single Family	156,852,220	181,746,400	174,109,600	163,957,000	163,957,000
Residential – Multi-family	0	0	0	0	0
Industrial	2,211,900	1,394,100	1,396,000	665,900	665,900
Commercial	19,055,500	23,297,900	22,274,100	21,147,900	21,147,900
Institutional	3,981,400	1,846,800	2,276,900	3,786,500	3,786,500
Agricultural	0	0	0	0	0
TOTAL	182,101,020	208,285,200	200,056,600	189,557,300	189,557,300

*For definitions on recommended customer categories for classifying customer water use, refer to the online Guidance and Methodology for Reporting on Water Conservation and Water Use.

C. Residential Water Use

For the previous five years, enter the residential GPCD for single family and multi-family units.

Water Use Category*	Residential GPCD				
	2017	2016	2015	2014	2013
Residential - Single Family	62	78	76	81	81
Residential – Multi-family					

D. Annual and Seasonal Water Use

1. For the previous five years, enter the gallons of treated water provided to RETAIL customers.

Month	Total Gallons of Treated Retail Water				
	2017	2016	2015	2014	2013
January	11,144,121	13,442,221	11,501,616	10,412,244	10,412,244
February	9,437,730	12,926,277	10,315,882	10,142,659	10,142,659
March	11,816,152	13,905,555	10,680,005	9,951,214	9,951,214
April	11,274,969	14,091,996	11,701,417	15,849,858	15,849,858
May	14,241,156	13,432,991	11,338,227	18,588,688	18,588,688
June	13,436,598	19,135,136	15,216,603	21,571,708	21,571,708
July	18,489,884	23,953,993	21,766,148	25,804,979	25,804,979
August	22,732,150	26,992,430	33,577,735	25,070,457	25,070,457
September	21,391,948	22,872,266	26,002,111	23,231,221	23,231,221
October	19,004,882	19,542,169	23,293,597	15,952,417	15,952,417
November	16,113,057	14,572,866	13,882,420	18,667,806	18,667,806
December	13,018,372	13,417,301	10,780,839	12,239,759	12,239,759
TOTAL	182,101,019	208,285,201	200,056,600	207,483,010	207,483,010

2. For the previous five years, enter the gallons of raw water provided to RETAIL customers.

Month	Total Gallons of Raw Retail Water				
	2017	2016	2015	2014	2013
January	0	0	0	0	0
February	0	0	0	0	0
March	0	0	0	0	0
April	0	0	0	0	0
May	0	0	0	0	0
June	0	0	0	0	0
July	0	0	0	0	0
August	0	0	0	0	0
September	0	0	0	0	0
October	0	0	0	0	0
November	0	0	0	0	0
December	0	0	0	0	0
TOTAL	0	0	0	0	0

3. Summary of seasonal and annual water use.

Water Use	Seasonal and Annual Water Use					Average in Gallons
	2017	2016	2015	2014	2013	
Summer Retail (Treated + Raw)	54,658,632	70,081,559	70,560,486	72,447,144	72,447,144	68,038,993 5yr Average
TOTAL Retail (Treated + Raw)	182,101,019	208,285,201	200,056,600	207,483,010	207,483,010	201,081,768 5yr Average

E. Water Loss

Provide Water Loss data for the previous five years.

Water Loss GPCD = [Total Water Loss in Gallons ÷ Permanent Population Served] ÷ 365

Water Loss Percentage = [Total Water Loss ÷ Total System Input] x 100

Year	Total Water Loss in Gallons	Water Loss in GPCD	Water Loss as a Percentage
2017		0	0%
2016		0	0%
2015	20,355,457	9	10%
2014		0	0%
2013		0	0%
5-year average	4,071,091	2	2%

F. Peak Water Use

Provide the Average Daily Water Use and Peak Day Water Use for the previous five years.

Year	Average Daily Use (gal)	Peak Day Use (gal)	Ratio (peak/avg)
2017	594,429	1,365,800	2.30
2016	612,745	1,423,600	2.32
2015	586,862	1,612,600	2.75
2014	470,313	1,448,000	3.08
2013	537,917	1,156,400	2.15

G. Summary of Historic Water Use

Water Use Category	Historic 5-year Average	Percent of Connections	Percent of Water Use
Residential SF	168,124,444	96%	0%
Residential MF	0	0%	0%
Industrial	1,266,760	0%	0%
Commercial	21,384,660	3%	0%
Institutional	3,135,620	1%	0%
Agricultural	0	0%	0%

H. System Data Comment Section

Provide additional comments about system data below.

Section III: Wastewater System Data

If you do not provide wastewater system services then you have completed the Utility Profile. Save and Print this form to submit with your Plan. Continue with the Water Conservation Plan Checklist to complete your Water Conservation Plan.

A. Wastewater System Data (Attach a description of your wastewater system.)

1. Design capacity of wastewater treatment plant(s): _____ **gallons** per day.

2. List the active wastewater connections by major water use category.

Water Use Category*	Active Wastewater Connections			
	Metered	Unmetered	Total Connections	Percent of Total Connections
Municipal			0	0%
Industrial			0	0%
Commercial			0	0%
Institutional			0	0%
Agricultural			0	0%
TOTAL	0	0	0	

2. What percent of water is serviced by the wastewater system? ____%

3. For the previous five years, enter the number of gallons of wastewater that was treated by the utility.

Month	Total Gallons of Treated Wastewater				
	2017	2016	2015	2014	2013
January					
February					
March					
April					
May					
June					
July					
August					
September					
October					
November					
December					
TOTAL	0	0	0	0	0

4. Can treated wastewater be substituted for potable water?

◯ Yes ◯ No

B. Reuse Data

1. Provide data on the types of recycling and reuse activities implemented during the current reporting period.

Type of Reuse	Total Annual Volume (in gallons)
On-site irrigation	
Plant wash down	
Chlorination/de-chlorination	
Industrial	
Landscape irrigation (parks, golf courses)	
Agricultural	
Discharge to surface water	
Evaporation pond	
Other	
TOTAL	0

C. Wastewater System Data Comment

Provide additional comments about wastewater system data below.

You have completed the Utility Profile. Save and Print this form to submit with your Plan. Continue with the **Water Conservation Plan Checklist** to complete your Water Conservation Plan.

RESPONSIVE TO COMMISSION STAFF'S

RFI 2-3

Federal Environmental Review

Environmental Information Document

To be used for projects receiving funding from the Clean Water State Revolving Fund or the Drinking Water State Revolving Fund

TWDB-0801
5/22/2015

Introduction: Full Environmental Review

When federal loan program funds are spent on a construction project, the project must be assessed for environmental impacts. The Environmental Information Document (EID) allows the Water Supply and Infrastructure Division, as well as other review agencies, to make determinations about the degree of impacts that can reasonably be expected to occur as a result of construction of a proposed project. For additional information about different types of impacts, see the scope of impacts section on the following page. Each sheet in the following template is intended to address a specific requirement needed to comply with the National Environmental Policy Act (NEPA). Information included in this template represents baseline information pertinent to the majority of projects. This template does not replace the necessity to submit a regulatory permit application to the U.S. Army Corps of Engineers (when applicable). Regulatory agencies and the TWDB may require additional information to determine project specific mitigation and permitting requirements as well as issue an environmental finding. Projects seeking funding through the Clean Water State Revolving Fund (CWSRF) or the Drinking Water State Revolving Fund (DWSRF) are subject to NEPA requirements. A full explanation of TWDB environmental requirements is provided in 31 TAC §375, Subchapter E (CWSRF), and 31 TAC §371, Subchapter E (DWSRF).

Timing

Preparation of the EID is conducted during the planning phase of the project after a loan commitment has been secured. Please note that issuance of an environmental determination by TWDB environmental staff is required prior to TWDB approval of the Engineering Feasibility Report and release of design and/or construction funds. From beginning to end, this process can be completed in as few as 4 months but typically takes 8 to 10 months for most projects.

Example timeline for the preparation of an EID:

- Variable: Preparation of the base document (time varies by consultant).
- 2-3 months: Agency coordination & public meeting (agency coordination does not need to be complete prior to the public meeting).
- 1 month: Preliminary review of the EID by TWDB staff. After review, the TWDB will send a list of deficiencies to the consultant identifying any additional information required.
- Variable: Submission of supplemental information by the consultant as required by TWDB comments (time varies by consultant).
- 1 month: TWDB approval of the EID and issuance of an environmental determination.
- 1 month: 30-day public comment period.
- Board: Next available Board date for an affirmation of the original loan commitment.

Report Structure

The structure of the EID is crucial in allowing for an efficient review of the document. Adhering to the provided structure will allow for ease of use by the project reviewer and others who may be unfamiliar with the project. For projects that contain multiple components, the EID must be prepared in a manner that addresses each component in an orderly fashion.

Submission

Once completed, the EID, as well as any questions regarding the preparation of the document or review process, should be submitted to:

Environmental Reviewer
Texas Water Development Board, Regional Water Planning & Development
P.O. Box 13231, Austin, Texas 78711-3231
Telephone: (512) 936-0938

Scope of Impacts

When constructing a project, three types of impacts must be documented in the EID. These impacts are as follows:

- Direct impacts
- Secondary impacts
- Cumulative impacts

Benefits – Environmental impacts that result in a positive outcome

Secondary and cumulative impacts are often assessed jointly. Environmental impacts can be both positive (hereafter known as benefits) and negative (hereafter known as impacts). The EID should include a discussion of both impacts and benefits. When considering cumulative impacts under NEPA, review and implement the information in *Considering Cumulative Effects Under the National Environmental Policy Act*, which is published by the Council of Environmental Quality.

Direct Impacts

Direct impacts are effects on the environment that occur at the same time and place as the project. They are the most certain and predictable of the impacts and are typically the easiest to identify. Direct impacts include impacts from construction-related activities as well as impacts related to operation of a newly constructed or modified facility upon completion of construction. Construction impacts include such things as air emissions from construction vehicle traffic, soil disturbance, sedimentation and erosion, and land clearing activities. Operational impacts include such things as increased noise from generators or other equipment in use after construction is completed, odors associated with pump stations, and increased effluent discharge to a stream from a plant expansion.

Direct Impacts – Effects on the environment that occur at the same time and place as the project.

Examples of direct impacts include the following:

- Displacement of wildlife due to vegetation clearing associated with construction projects
- Air emissions from open burning during construction
- Aquatic habitat degradation from installation of a sewer pipe crossing a stream
- Increased nutrient loading in a river from a wastewater treatment plant discharge
- Odors from a wastewater treatment plant

Secondary Impacts

Secondary impacts are effects to the environment and natural resources that are removed in time and distance from a project's construction and operation activities. Secondary impacts are also called "indirect impacts" and are often thought of as chain reaction processes where one action or result leads to another action or result. Guidelines for implementing NEPA (40 CFR §1508.8) broadly define secondary impacts as:

Secondary impacts (indirect impacts) – Effects to the environment and natural resources that are more removed in time and distance from a project's construction and operation activities.

> *...indirect effects, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.*

Secondary impacts associated with infrastructure projects are often related to residential, commercial, and industrial growth that the infrastructure project supports. For example, after sewer service is extended into

an unsewered area, a subdivision might be built. The paved roads and other impervious services in the new subdivision may increase the level of pollutants in a nearby stream due to runoff. The decreased water quality that results in the stream is not directly related to the construction or operation of the sewer system, but it is indirectly related to the project because the expanded sewer system supported development of the new subdivision.

Cumulative Impacts

Cumulative impacts are effects that result from the project's direct impacts when added together with impacts from other past, present, and future projects that can be reasonably predicted. NEPA regulations define cumulative impacts as "environmental impacts which result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time."

Cumulative impacts – Effects that result from the project's direct impacts added together with impacts from other past, present, and future projects that can be reasonably predicted.

Evaluating cumulative impacts requires analysis of the "big picture" in terms of time and space. Consider the following example: run-off from parking areas surrounding a single shopping center might not be a significant stressor to the receiving stream, but the combined run-off from multiple shopping centers located in the same watershed can become a significant stressor. Another example would be where a combination of wastewater infrastructure projects in the same river basin could create nutrient issues downstream. Note: In some cases, cumulative impacts may be positive. For example, if, in a watershed, several stream and wetland restorations are implemented in the headwaters of the watershed, then nutrient loadings and siltation may be reduced downstream. Cumulative impacts are an issue that must be considered any time that growth is anticipated in the project area, even if that growth is not facilitated by or connected to the proposed project. If impacts from a proposed project are minor and limited to construction only, they are less likely to contribute to cumulative impacts in the broader project area.

Cumulative impacts must be considered and discussed for any project that takes place in an area experiencing growth and development, even if the proposed project is not an expansion project.

Environmental Information Document

The following pages, beginning with the Table of Contents, contain the template EID. The following nine (9) sections should be completed to the maximum extent practicable. To expedite the review of this document, please provide all requested information in a clear and concise manner. If a section does not apply to the project, please indicate that it does not apply by writing "Not Applicable" in the space provided.
Sections 1, 3, 4, and 5 request specific information regarding the proposed project; alternatives considered; the environmental setting of the project; potential direct, secondary, and cumulative impacts; and proposed mitigation. Section 2 provides a list of attachments that should be included in Section 9 of the EID. As noted in Section 2, documents lacking required attachments will not be accepted. Section 6 describes the public participation process and the materials that must be submitted by the applicant after a public meeting has occurred. In order to facilitate agency coordination, Section 7 provides a rubric for the applicant to determine whether agency coordination is required. Example coordination and notification letters are conveniently provided within the document. Section 8 contains a certification statement whereby the applicant confirms that the information contained in this document is accurate and complete to the applicant's knowledge, and that this document describes the complete project.

***To update the Table of Contents: (1) Click on Table, (2) Choose Update Table, (3) Select Update Entire Table**

Table of Contents

Section 1: General Information

Authority (Loan Applicant): Greater Texoma Utility Authority/Bear Creel SUD

TWDB Project No: 62810

Project Name: GTUA/Bear Creek Water System Improvements Projects

Counties where project activities will occur: Collin

Funding Source/ Loan Number:	Texas Water Development Board Drinking Water State Revolving Fund / / /	
Total Estimated Project Costs:	$7,490,000	
TWDB Funded Phases:	☒ Planning ☒ Acquisition ☒ Design ☒ Construction	
Other Funding Source(s):	None	
Consultant Project Name/Number (if applicable):		
Primary Contact for questions concerning the EID:	Company:	Greater Texoma Utility Authority
	Contact Person:	Carolyn Bennett
	Mailing Address:	5100 Airport Drive, Denison TX 75020
	Phone:	903-786-4433
	Email:	carolynb@gtua.org
Project Engineer:	Company:	Kimley-Horn
	Contact Person:	Stuart Williams, P.E.
	Mailing Address:	260 East Davis Street, Suite 100, McKinney TX 75069
	Phone:	469-301-2587
	Email:	stuart.williams@kimley-horn.com

List of Preparers:

1. Carolyn Bennett, Greater Texoma Utility Authority
2. Stuart Williams, P.E., Kimley-Horn
3.

Section 2: List of Attachments

Documents lacking required attachments will not be accepted

Identify the project footprint on all maps.

Maps must have adequate resolution and be at an appropriate scale.

Example project maps are provided online at:

http://www.twdb.texas.gov/financial/instructions/doc/TWDB-1800.pdf

Many of the resources required by the following list of attachments can be acquired for free online. If you are unfamiliar with the resources identified below or are not sure where to find them, please contact your environmental reviewer for assistance.

Map(s): Show existing structures, potential location(s) of new or upgraded structure(s), and areas(s) that will be disturbed by the project, including construction staging area(s). Provide a scale bar, north arrow, and legend.

Label and Describe: Potentially-impacted environment(s) and site feature(s) (e.g., public/private property, developed or landscaped areas, roads, historic properties, wetlands, forested areas, rivers, streams, 100-year floodplain, prime farmland, wild and scenic rivers, protected areas, above and below-ground utilities, U.S. EPA designated sole source aquifer areas, etc.)

Appendix A: Standard Maps	
Regional Location Map	Page: A-1
USGS Topographic Map(s) for Preferred Alternative	Page: A-2
Project footprint or plans/plats	Page: A-3 , A-4
Geologic Map	Page: A-5, A-6
FEMA Floodplain Map(s)	Page: A-**7**
National Wetlands Inventory Map(s)	Page: A-8

Appendix B: Environmental Setting, Impacts and Mitigation Attachments			
Appendix B1 Soils & Prime and Important Farmland (Section 5.3) Page: B-1 thru B-13	NRCS Soil Survey for Proposed Project Area of Interest (Required) ☒ Map + Table of Soils (Series level) ☒ Map + Table of Hydric Soils ☒ Map + Table of Prime & Important Farmlands NRCS Farm Impact Rating (If Applicable) Farm Impact Rating Form	Attached ☐	N/A ☒
Appendix B2 Wetlands, Streams & Waters of the U.S (Section 5.6) Page: B-14	Wetland & Streams Impacts Map (If Applicable) Wetland & Streams Impacts Map Wetland Delineation Report (If Applicable) Wetland Delineation Report	Attached ☒ Attached ☐	N/A ☒ N/A ☒

Section 2: List of Attachments **Documents lacking required attachments will not be accepted**	
Appendix B3 Biological Resources (Section 5.7) Page: B-15 & B-16	County List of Rare, Candidate, Threatened and Endangered Species (Required) ☒ USFWS: County List of Federal Candidate, Threatened and Endangered Species ☒ TPWD: County List of State and Federal Rare, Threatened and Endangered Species ☒ Potential Impacts Table
Appendix B4 Cultural Resources (Section 5.8) Page: B-	Cultural Resources Report (If Applicable) Cultural Resources Report Attached ☐ N/A ☒
Appendix B5 Hazardous Materials (Section 5.9) Page: B-	Hazardous Materials (If Applicable) Formal Site Assessment Attached ☐ N/A ☒
Appendix B6 Social Implications & Environmental Justice (Section 5.10) Page: B-17 through B-36	All maps & reports should be generated through the EPA's EJ View Website (Required) ☒ EJ View Map (add a 0.5 mile buffer around the construction area) ☒ ACS Summary Report ☒ Census Summary Report ☒ Environmental Report Census QuickFacts Summary (Required) ☒ City vs. State ☒ County vs. State
Appendix B7 Public Meeting (Section 6) Page: B-37 – B51	Public Meeting Documentation ☒ Publisher's affidavit and a copy of the Public Meeting Notice ☒ Statement signed by applicant - meeting was held in conformance with the Public Meeting Notice. ☒ List of witnesses ☒ Written summary of the meeting

Section 3: Project Description
Preferred Action Alternative

For the purposes of this document the project site includes all areas that will be disturbed by the project, including construction staging area(s). The project area includes surrounding areas which may, directly or indirectly, be impacted by the project.

1. **Background:** Briefly describe the existing system (e.g., treatment processes, capacity of treatment plant, annual average and peak demand flows, etc.).

The Bear Creek Special Utility District ("BCSUD") currently purchases wholesale water from the NTMWD.

BCSUD facilities consist of:

1. Elevated Storage

   Pressure Plane 1
   (1) 400,000 gallon elevated storage tank

   Pressure Plane 2
   (1) 300,000 gallon elevated storage tank
   (1) 200,000 gallon elevated storage tank

   Pressure Plane 3
   (1) 200,000 gallon elevated storage tank

2. Ground Storage
   Pressure Planes 1 and 2
   (1) 500,000 gallon ground storage tank

   Pressure Plane 3
   (1) 32,000 gallon ground storage tank
   (1) 20,000 gallon ground storage tank
   (1) 17,000 gallon ground storage tank

3. Pump Station Facilities
   Serves Pressure Planes 1 and 2
   Pressure Plane 1 - (2) 625 gpm pumps
   Pressure Plane 2 – (2) 1,000 gpm pumps

   Serves Pressure Plane 3
   (2) 400 gpm pumps

In total, the existing Bear Creek SUD water system has 4,050 gpm in pumping capacity, and 1.669 million gallons of total water storage.

Section 3: Project Description
Preferred Action Alternative

The Bear Creek SUD's average daily use in 2017 was 594,429 gallons, peak day use was 1,365,800 gallons, with a ratio of 2.30 for peak/average.

2. **Project Location:** Briefly describe the project location (e.g., new undeveloped site, existing treatment plant site, undeveloped portion of an existing site, site adjacent to existing facilities, currently owned, acquisition required, etc.).

Proposed project improvements to include new pump station and new ground storage tank will be constructed in the area of the existing ground storage tank and pump station and/or property adjacent to existing facilities. Water lines will be constructed along SH 78, Moore Lane, CR 486 and within the pump station facilities project area.

Latitude/Longitude: 33.018197 -96.448519
Project Address (if applicable): 585 Geren Drive, Lavon, Texas 75166

3. **Project Need & Purpose**: What need does the project address? (e.g., improve water quality, increase capacity, inadequate system or system components, increase treatment due to more stringent effluent limits, linear work, etc.)

Project is necessary in order to provide a separate pump station and 2.0 ground storage tank for Pressure Zone 2. Pumps for Pressure Zone 1 and Pressure Zone 2 are currently located on top of an existing 500,000 gallon concrete ground storage tank. The pump stations at this delivery point account for 60% of the customers and is the only delivery site source for Pressure Zones 1 and 2. The lack of redundancy for delivery to the ground storage tank is unacceptable. The pump station at delivery point #1 would not have the capacity to support the system in the event of an outage at delivery point #1. In addition, the pump station needs to be moved off the top of the ground storage tank. The location of the pumps on top of the ground storage tank has proven to create maintenance issues and safety hazards. Proposed project will move pump station off of the top of the ground storage tank to an area at ground level, which will facilitate maintenance responsibilities associated with the pump station and limit the safety concerns associated with working on top of a ground storage tank. By the time the proposed pump station is constructed in 2020, the system will have approximately seven (7) hours of ground storage capacity available during a maximum day event for delivery point #2. this is unacceptable as it only achieves 58% of the engineer's recommendation for ground storage capacity. The proposed 2.0 million gallon ground storage tank will include yard piping and valving to allow for emergency interconnection between Pressure Zones #1 and #2. This capability will provide adequate ground storage capacity for emergency events

Section 3: Project Description
Preferred Action Alternative

at delivery point #2 when constructed in 2020. Proposed upgrades to delivery point #2 include 6,900 LF of 12-inch and [redacted] of 16-inch off-site water lines to serve Pressure Zone #1. The 16-inch water line will discharge from delivery point #2 north to SH 78. The proposed 12-inch water line will extend from Grand Heritage Boulevard to Bentley Drive. The proposed upgrades are necessary to provide both adequate facilities and improved water distribution.

Is the proposed project being pursued in response to a compliance order? No

4. **Project Description**: Description should include project costs, design year and design population.

Proposed project consists of construction of 2.0 MG ground storage tank, pump station, 6,900 LF of 12" water line, 1,600 LF of 16" water line, and other appurtenances as necessary for project. Construction costs are estimated at $5,214,000. Design year is 2035 with design population of 12,867.

Is the proposed project part of a larger project? ☒ Yes ☐ No

If the proposed project is one phase of a larger project, describe the duration and purpose of the larger project.

Larger project includes additional ground storage and pumping capacity to serve growing population, along with necessary water lines.

5. **Waste Disposal:** Does the project require sludge/soil/waste disposal? ☒ Yes ☐ No

If yes, identify the location(s) and method(s) of disposal:

The proposed project will require off-site soil disposal. The soil coming from this site will be considered clean soil and will likely be disposed of by the contractor either at a landfill to be used as cover soil, or on private property that needs fill dirt.

6. **Project Components:** Provide a bulleted list (e.g. install 1,000 linear feet of new 6-8 inch pipeline in existing ROW and easements from the outfall structure in Lake X to the WTP, install new 300,000 gallon ground storage tank at the WTP, demolish existing chemical storage building, etc.).

- 2.0 MG ground storage tank
- Pump station
- 2,700 GPM Vertical Turbine Pump & Can
- 6,900 LF 12" water line
- 1,600 LF 16" water line
- Yard Piping
- Site Grading
- Fire Hydrants
- Valves
- Trench Safety
- Seed, Fertilizer and Erosion Control
- Connections to Existing Water Lines

Section 3: Project Description
Preferred Action Alternative

7. **Project Magnitude:**

i. Current population of service area: 5,652
ii. Anticipated population of service area in 20 years: 16
iii. Will the proposed project service the entire population increase? ☐ Yes ☒ No

8. **Project Schedule:**

Anticipated Completion of Environmental Review: February 2019

Completion of Acquisition: August 2019

Completion of Permitting: Permitting complete

Completion of Design: January 2019

Start of Construction: March 2019

Construction Completion: January 2020

9. **Project Costs:** Provide an estimate of the cost of the project. $ 7,490,000

Construction	$5,214,000
Basic Engineering	$748,000
Environmental	$5,000
Fiscal Services	$262,271
Water Conservation Plan	$500
Land/Easements, Admin., Project Legal Expenses, Inspection, Const. Mgmt, Testing, etc.	$215,200
Contingencies	$1,045,029
Total	$7,490,000

10. **Other Projects:** Provide a description of any other projects in progress that may be affected by the proposed project (e.g., TxDOT plans for Road Construction, etc.).

There are no known TxDOT projects or other construction projects currently underway in the project area that may be affected by the proposed project.

Section 4: Alternative Analysis

No-Action Alternative

Environmental Impact Description

Provide a qualitative description of the environmental impacts of the no-action alternative and compare the impacts to that of the preferred alternative. (e.g., WTP would remain out of compliance with TCEQ primary drinking water standards, leaky on-site septic systems would continue to contaminate surface water, etc.)

Under the no action alternative, no action would be taken to replace the existing substandard pump station and ground storage facilities. The Bear Creek SUD water system would continue to operate under existing conditions. Without action, the Bear Creek SUD will be unable to provide citizens with a sustained and reliable water source. The pump station at delivery point #1 would not have the capacity to support the system in the event of an outage at delivery point #2. In addition, the pump station needs to be moved off the top of the ground storage tank. The location of the pumps on top of the ground storage tank has proven to create maintenance issues and safety hazards. Proposed project will move pump station off of the top of the ground storage tank to an area at ground level, which will facilitate maintenance responsibilities associated with the pump station and limit safety concerns associated with working on top of a ground storage tank. By the time the proposed pump station is constructed in 2020, the system will have approximately seven (7) hours of storage availability, which is unacceptable and only achieves 58% of the engineer's recommendation for storage capacity. The proposed 2.0 million gallon ground storage tank will include yard piping and valving to allow for emergency interconnection between pressure Zones #1 and #2. This capability will provide adequate ground storage capacity for emergency events at delivery point #2.

Under the preferred alternative, the Bear Creek SUD would construct facilities at the existing ground storage tank/pump station facilities location and/or adjacent to the existing the facilities to be replaced. The new facilities would allow the Bear Creek SUD to provide adequate storage availability and pumping capacity for their customers. Fire flow capacity would be met as well with the preferred alternative.

Land use under the no-action alternative would remain the same. Land use under the preferred alternative would also remain the same, as the proposed project will be constructed in an area of existing BCSUD water system facilities, and on property adjacent to the existing facilities site.

Vegetation will be left undisturbed under the no-action alternative. While vegetation would be disturbed under the preferred alternative, once the project is constructed, the vegetation will be seeded and allowed to return to its natural state as existed prior to the proposed project being constructed.

Air quality considerations for the proposed project would be dust and exhaust gases from construction activities. Under the no-action alternative, there would be no additional dust and exhaust gases from construction activities. The preferred alternative involves construction activities. Construction activities may temporarily degrade air quality through dust and exhaust gases associated with construction equipment. Measures to control fugitive dust would be considered and incorporated into the final design and construction specifications.

Section 4: Alternative Analysis

No-Action Alternative

Environmental Impact Analysis

Please indicate whether the direct impacts of the no-action alternative on the following resources are greater than, less than or the same as the direct impacts of the preferred alternative on the same resource.

Land Use						
Change in land use and land cover is:	☐	Greater	☐	Less	☒	Same
Prime and Important Farmland						
Impacts to prime and important farmland are:	☐	Greater	☐	Less	☒	Same
Water Resources						
Impacts to surface water quality are:	☐	Greater	☐	Less	☒	Same
Impacts to groundwater quality and quantity are:	☐	Greater	☐	Less	☒	Same
Impacts to floodways or floodplains are:	☐	Greater	☐	Less	☒	Same
Impacts to wetlands are:	☐	Greater	☐	Less	☒	Same
Vegetation and Habitat						
Impacts to trust resources are:	☐	Greater	☐	Less	☒	Same
Impacts to wildlife are:	☐	Greater	☐	Less	☒	Same
Impacts to native vegetation is:	☐	Greater	☒	Less	☐	Same
Impacts to endangered species habitat are:	☐	Greater	☐	Less	☒	Same
Cultural Resources						
Impacts to cultural resources or historic properties are:	☐	Greater	☐	Less	☒	Same
Air Quality						
Effects on air quality are:	☐	Greater	☒	Less	☐	Same
Environmental Justice						
Impacts to Low-income or Minority Populations are:	☐	Greater	☐	Less	☒	Same

Section 4: Alternative Analysis

No-Action Alternative

Secondary and Cumulative Impacts: Considering resources that the no-action alternative will impact, identify any past, present or reasonably foreseeable future projects which impact these same resources. This answer will provide important contextual information.

The no-action alternative would impact the following resources less than the preferred alternative would impact them:

Vegetation
Air quality

Impact to vegetation and air quality would be less with the no-action alternative than with the preferred alternative. However, neither resource will be impacted permanently due to the preferred alternative being selected. Once the project is constructed, the area will be seeded and vegetation allowed to return to its natural state as existed prior to the project. Air quality will return to condition prior to project upon completion of the construction project.

Past projects that would impact these same resources include the existing water facilities constructed previously within the proposed project area, water and sewer line projects previously constructed, and past road construction projects.

Reasonable foreseeable future projects that would impact the same resources would include additional houses to be constructed by the developers adjacent to the proposed project area, water and sewer line improvement construction projects, roadway widening projects by TxDOT, and additional municipal water facilities constructed within the same proposed project area.

Acceptance/Rejection

Alternative: ☐ Accepted ☒ Rejected

Rationale for Acceptance/Rejection

Discuss the rationale for acceptance/rejection of the no-action alternative, including financial, engineering and environmental considerations (e.g. cost comparison, reliability of alternative, complexity of alternative, significant environmental effects, legal or institutional constraints, etc.):

The no-action alternative was rejected because the Bear Creek SUD's current pump station facilities are in need of improvements. Currently the pumps located at the existing 500,000 ground storage tank to be replaced are located on top of the tank. This has proven to create maintenance issues and safety hazards. In addition, the current system will have approximately seven (7) hours of ground storage capability available during a maximum day event for delivery point #2. This is unacceptable as it only achieved 58% of the engineer's recommendation for ground storage capacity. The proposed 2.0 million gallon ground storage tank will include yard piping and valving to allow for emergency interconnection between Pressure Zones #1 and #2.

Section 4: Alternatives Analysis

Alternative Not Selected

Attach additional alternative sheets as necessary

Description

Please provide a description of this alternative:

There were no alternatives considered. Constructing the improvements at the existing site and adjacent to the existing site are the most conducive scenarios. The existing ground storage tank is in need of replacement, and the existing pumps are located on top of the ground storage tank. Construction of the improvements will rectify the hazards of the pumps being located on top of the ground storage tank, while replacing the ground storage tank as well, which is in need of replacement.

Alternative still in consideration? ☐ *Yes ☒ No

**If yes, please note that the level of detail provided for this alternative should be commensurate with the level of detail provided for the preferred alternative presented in this document. Please work with your Environmental Reviewer to scope this document appropriately in order to prevent project delays.*

Environmental Impact Description

Provide a qualitative description of the environmental impacts (adverse and beneficial) of this alternative and compare the impacts to that of the preferred alternative. Specify temporary versus permanent impacts.

There were no alternatives considered.

Section 4: Alternatives Analysis
Alternative Not Selected

Attach additional alternative sheets as necessary

Environmental Impact Analysis

Please indicate whether the direct impacts of the alternative not selected on the following resources are greater than, less than or the same as the direct impacts of the preferred alternative on the same resource.

Land Use			
Change in land use and land cover is:	☐ Greater	☐ Less	☒ Same
Prime and Important Farmland			
Impacts to prime and important farmland are:	☐ Greater	☐ Less	☒ Same
Water Resources			
Impacts to surface water quality are:	☐ Greater	☐ Less	☒ Same
Impacts to groundwater quality and quantity are:	☐ Greater	☐ Less	☒ Same
Impacts to floodways or floodplains are:	☐ Greater	☐ Less	☒ Same
Impacts to wetlands are:	☐ Greater	☐ Less	☒ Same
Vegetation and Habitat			
Impacts to trust resources are:	☐ Greater	☐ Less	☒ Same
Impacts to wildlife are:	☐ Greater	☐ Less	☒ Same
Impacts to native vegetation is:	☐ Greater	☐ Less	☒ Same
Impacts to endangered species habitat are:	☐ Greater	☐ Less	☒ Same
Cultural Resources			
Impacts to cultural resources or historic properties are:	☐ Greater	☐ Less	☒ Same
Air Quality			
Effects on air quality are:	☐ Greater	☐ Less	☒ Same
Environmental Justice			
Impacts to Low-income or Minority Populations are:	☐ Greater	☐ Less	☒ Same

Section 4: Alternatives Analysis
Alternative Not Selected

Attach additional alternative sheets as necessary

Secondary and Cumulative Impacts: Considering resources that this alternative will impact, identify any past, present or reasonably foreseeable future projects which impact these same resources. This answer will provide important contextual information.

Past projects that would impact these same resources include the existing pump station and ground storage facilities, water and sewer lines constructed along the roadways, housing additions, and street widening projects.

Reasonable foreseeable future projects that would impact the same resources would include additional houses constructed, water and sewer line improvement construction projects, roadway widening projects by TxDOT, and additional municipal water facilities constructed within the same proposed project area.

Acceptance/Rejection

Alternative: ☐ Accepted ☒ Rejected

Rationale for Acceptance/Rejection

Discuss the rationale for acceptance/rejection of this alternative, including financial, engineering and environmental considerations:

There were no alternatives considered.

Section 4: Alternatives Analysis
Alternative Not Selected

Attach additional alternative sheets as necessary

Section 4: Alternatives Analysis
Selection of the Preferred Action Alternative

Discuss the rationale for why the proposed project was chosen as the preferred alternative:

Proposed ground storage tank and pump station project will be built in an area located adjacent to existing facilities that are being replaced. This project site is the most cost effective site due to the proximity to the existing facilities that are being replaced. Water lines will be constructed within easements along SH 78, CR 486 and Moore Lane.

Section 5: Environmental Settings, Impacts and Mitigation

5.1: Land Use

Existing Conditions

Will the project require land use conversion? ☐ Yes ☒ No

If yes, explain:

Describe current and recent past land use and development on the site and on adjacent lands. Discuss project compatibility with adjacent and nearby land uses.

Current land use on adjacent land consists of municipal water facilities. The existing Bear Creek SUD 500,000 gallon ground storage tank and pump station facilities are located within the proposed project site and adjacent to proposed additional property.

Will new or expanded utilities, roads, other infrastructure or public services be required to serve the project?

☐ Yes ☒ No

If yes, describe additional services needed:

Impacts

Describe direct impacts of the project (adverse and beneficial) on land use. Specify temporary versus permanent impacts.

Land use in the Proposed Project Area includes residential subdivisions, municipal water facilities, commercial/industrial, and land committed to urban development. [redacted]

Mitigation Measures

Mitigation Measures for Project Environmental Impacts? ☐ Yes ☒ Not applicable

If yes, list all mitigation measures in Section 5.14.

Section 5: Environmental Settings, Impacts and Mitigation
5.2: Geology

Existing Conditions

Physiographic Province:	☒ Gulf Coast Plains	☐ Central Texas Uplift	☐ Grand Prairie
	☐ Edwards Plateau	☐ North-Central Plains	☐ High Plains
	☐ Basin and Range		

Are there faults within the project's area of interest?	☐ Yes ☒ No
Is the project located in a Karst or Pseudo-Karst Zone?	☐ Yes ☒ No

Include the names and brief descriptions of the geologic formations in the project's area of interest.

Proposed project area is located in Blackland Prairie, Ozan Formation, which consists of clay, dark-gray, weathers to light-brownish gray with weak fissility, calcareous, poorly bedded, variable amounts of silt and glauconite, some siltstone beds, marine megafossils. Thickness of Ozan Formation approximately 425 feet. Areas of Houston Black clay; HoB, 1 to 3 percent slopes, and HoB2, 2 to 4 percent slopes, are within the proposed project area. HoB – Houston Black clay, 1 to 3 percent slopes, is moderately well drained, with very high runoff. HoB2 – Houston Black clay, 2 to 4 percent slopes, is moderately well drained.

Discuss any relevant topographical and geological features (e.g. salt domes, sink holes, shallow limestone formations, karst conditions, cave systems, etc.).

Clay soils of this ecoregion continue to challenge construction because of their tendency to shrink when dry and swell when wet. There are no relevant topographical and/or geological features located in the proposed project site.

Impacts

Describe direct impacts of geology on the proposed project. Please elaborate on all items checked "Yes" above:

Impacts to geology and soils associated with all alternatives considered would be limited to soil grading and trench excavation.

Mitigation Measures

Mitigation Measures for Project Environmental Impacts? ☐ Yes ☒ Not applicable

If yes, list all mitigation measures in Section 5.14.

Section 5: Environmental Settings, Impacts and Mitigation
5.3: Soils & Prime and Important Farmland

Soils

Is soil contamination present?	☐ Yes ☒ No
Does soil type present any constraints to the project?	☐ Yes ☒ No

If yes to either above, explain (if redundant with information provided in the Hazardous Materials section reference that section):

Will soil be moved offsite? ☒ Yes ☐ No	If yes, how will it be disposed of? Disposal method will be up to the contractor. The contractor will either dispose of the soil at a landfill to be used as cover dirt, or the soil will be disposed of on private property that needs fill.
Will soil become contaminated as a result of the proposed project? ☐ Yes ☒ No	If yes, explain:

Prime and Important Farmland

Does the project area contain prime and important farmlands?	☐ Yes ☒ No

If yes, does either of the following exemptions apply?

☐ Exempt – corridor subsurface project (e.g., buried water, sewage, and/or electric lines).

☐ Exempt – previously converted site (e.g., existing water and wastewater treatment plant sites).

If the project area contains prime and important farmlands and does not qualify for the exemptions listed above, include a completed version of the NRCS' Farmland Conversion Impact Rating Form AD-1006

☐ Attach Form AD-1006 to Appendix B1

Impacts

Will prime and important farmland be directly impacted by the project?	☐ Yes ☒ No

Describe direct impacts of the project on prime and important farmland:

None

Mitigation Measures

Mitigation Measures for Project Environmental Impacts? ☐ Yes ☒ Not applicable

If yes, list all mitigation measures in Section 5.14.

Section 5: Environmental Settings, Impacts and Mitigation
5.4: Water Resources

Existing Conditions		
What river basin(s) is the proposed project located in? Trinity		
What major/minor aquifers are located in the greater project area? Trinity		
Are any of these a sole source aquifer?		☐ Yes ☒ No
Water supply(ies):	Surface water(s): North Texas Municipal Water District Groundwater(s): None	

Water Well Projects	
Does the project involve the installation of any water wells?	☐ Yes ☒ No
If yes, provide the depth to ground water, duration and quantity of water to be extracted, and potential affects to the public water supply:	
Will the project require test wells?	☐ Yes ☒ No
Will any existing water well(s) be abandoned?	☐ Yes ☒ No
If yes, discuss best management practices that will be used to abandon the existing well(s):	

Impacts to Water Resources	
Will water resources be directly impacted by the project?	☐ Yes ☒ No
Describe direct impacts (adverse and beneficial) to surface water quality and groundwater quality/quantity (surface water runoff, erosion, sedimentation, temporary loss of vegetation cover, etc.). Specify temporary versus permanent impacts.	
None	
Will the project include new or relocated discharge site(s)?	☐ Yes ☒ No
Will the project require an amendment to an existing TCEQ discharge permit?	☐ Yes ☒ No
If yes, discuss the nature of the permit changes:	

Section 5: Environmental Settings, Impacts and Mitigation
5.4: Water Resources

If the project requires a new permit or a permit amendment, list all stream segment(s) found at and immediately downstream of the proposed discharge sites. Source: TCEQ list of stream segments and water quality data.

Stream Segment ID	Classification	Impaired?	Reason for Impairment
None		☐ Yes ☐ No	
		☐ Yes ☐ No	
		☐ Yes ☐ No	

Mitigation Measures

Mitigation Measures for Project Environmental Impacts? ☐ Yes ☒ Not applicable

If yes, list all mitigation measures in Section 5.14.

Section 5: Environmental Settings, Impacts and Mitigation
5.5: Topography and Floodplains

Topography	
Minimum Elevation in Project Area (MSL):	Maximum Elevation in Project Area (MSL):
493'	555'
Briefly describe the topography in the project area (e.g., gently rolling hills, dominant drainage to the west via tributaries to the Brazos River):	
Proposed project areas consist of flat areas of land, with a small areas of trees.	
Discuss any relevant topographical features (e.g. playa lakes).	
There are no relevant topographical features located in the proposed project area.	

Floodplains & Floodways			
Is the project site located in a 100-year floodplain?			☐ Yes ☒ No ☐ Partial
If yes, list all streams with floodplains in project area. Specify whether the project will be located within the 100-year floodplain and/or floodway(s) of these streams.			
Stream	Project in 100-year floodplain?		Project in floodway?
	☐ Yes ☐ No		☐ Yes ☐ No
	☐ Yes ☐ No		☐ Yes ☐ No
Do the communities (cities and/or counties) in which the project will be constructed participate in the National Flood Insurance Program?			☐ Yes ☐ No ☐ Partial
List all participating cities and counties		List all non-participating cities and counties	

Impacts	
Will floodplains or floodways be directly impacted by the project?	☐ Yes ☒ No
Describe direct impacts of the project (adverse and beneficial) on floodplains and floodways. Specify temporary versus permanent impacts:	
None	

Mitigation Measures	
Mitigation Measures for Project Environmental Impacts?	☐ Yes ☒ Not applicable
If yes, list all mitigation measures in Section 5.14.	

Section 5: Environmental Settings, Impacts and Mitigation
5.6: Wetlands, Streams, and Waters of the United States

Information included in this template represents baseline information pertinent to the majority of projects. Regulatory agencies, including the USACE, may require additional information to determine permitting or mitigation requirements.

List all applicable U.S. Army Corps of Engineers permits for the project (general and/or individual):

None required

Will any of the applicable permits require pre-construction notification? ☐ Yes ☐ No

If yes, which one(s):

Are streams present on the project site or in the project area (perennial, ephemeral, intermittent)?

☐ Yes ☒ No

If yes, list all streams in the project area.

Are wetlands present on the project site or in the project area? ☐ Yes ☒ No

If yes, discuss the type and quality of wetlands (e.g., forested palustrine, emergent riverine):

Section 5: Environmental Settings, Impacts and Mitigation
5.6: Wetlands, Streams, and Waters of the United States

Has a site wetlands/waters delineation or jurisdictional determination been performed using the applicable USACE Wetland Delineation Manual*, including regional supplements**?

☐ Yes: If Yes, has it been verified by the USACE? ☐ Yes ☐ No
☒ No

*Environmental Laboratory. (1987). "Corps of Engineers Wetlands Delineation Manual". Technical Report Y-87-1. U.S. Army Engineers Waterways Experimental Station, Vicksburg, MS.

**The manual is to be used with the appropriate regional supplement. These supplements and the manual can be found on the following website:
http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits/reg_supp.aspx

If yes, summarize the findings below and attach a copy of the field survey to Appendix B2. **If no**, describe the basis for above statements regarding presence or absence of wetlands and waters of the U.S..

Impacts

Will wetlands be impacted?	☐ Yes ☒ No	Will streams be impacted?	☐ Yes ☒ No

Are any of the impacted wetlands/streams in the project area tidally influenced? ☐ Yes ☐ No
N/A

Describe direct impacts of the project (adverse & beneficial) on streams and wetlands (e.g., fill, dredging, dewatering, surface water runoff, other pollutants, etc.). Specify temporary versus permanent impacts.

None

Section 5: Environmental Settings, Impacts and Mitigation
5.6: Wetlands, Streams, and Waters of the United States

Stream/Wetland Impacts (if applicable) *add rows if needed

This section must be accompanied by a Stream/Wetland Impact Map:
The map must include a topographic background with footprint of the project overlain. Assign a number to each stream/wetland in the project footprint and label each on the map (e.g., S1, S2, W1, W2).
Attach the map to Appendix B2

Stream Impacts:
Include all streams in project footprint even if impact is zero feet

# Keyed to Map (S1, S2,...)	Temporarily impacted		Permanently impacted	
	All Streams [linear ft]	Potential Waters of U.S. (streams only) [linear ft]	All Streams [linear ft]	Potential Waters of U.S. (streams only) [linear ft]
Total Stream Impacts (feet):				

Wetland Impacts:
Include all wetlands in project footprint even if impact is zero acres.

# Keyed to Map (W1, W2,...)	Temporarily impacted		Permanently impacted	
	All Wetlands [ac]	Potential Waters of U.S. (wetlands only) [ac]	All Wetlands [ac]	Potential Waters of U.S. (wetlands only) [ac]
Total Wetland Impacts (acres):				

Mitigation Measures

Mitigation Measures for Project Environmental Impacts? ☐ Yes ☒ Not applicable
If yes, list all mitigation measures in Section 5.14.

Section 5: Environmental Settings, Impacts and Mitigation
5.7: Biological Elements

Ecoregion:			
	☐ Arizona/New Mexico Mtns.	☐ Central Great Plains	☒ Texas Blackland Prairies
	☐ Chihuahuan Deserts	☐ Cross Timbers	☐ East Central Texas Plains
	☐ High Plains	☐ Edwards Plateau	☐ Western Gulf Coastal Plain
	☐ Southwestern Tablelands	☐ Southern Texas Plains	☐ South Central Plains

Using USFWS and TPWD County Lists of Rare, Candidate, Threatened and Endangered Species, create a table of potential impacts with the following columns:

(1) Species (common and scientific names), (2) State/federal protection status, (3) Habitat, (4) Presence of Critical Habitat, (5) Project Site Suitability, and (6) Potential Impacts of Project

Attach the Potential Impacts Table to Appendix B3

Has a biological field survey been performed?	☐ Yes	☒ No

If yes, summarize the finding below. Attach report to Appendix B3, if applicable – exclude report from publicly available documents to protect location sensitive information.

Are any parks, recreational areas, forest preserves, grassland preserves, wildlife refuges, wild or scenic rivers, karst faunal regions or zones, or nature preserves (federal, state or local; public or private) in or near the project area?	☐ Yes	☒ No

If yes, list and describe proximity to project site:

Briefly describe the vegetation and wildlife, including aquatic species, present in the project site and project area.

* Do not include protected species addressed in the potential impacts table.

Vegetation within the project area consists mostly of native grasses, dominant species such as Johnsongrass (*Sorghum halapense)*, giant ragweed (*Ambrosia trifida*), western ragweed (*Ambrosia psilostachya)*, annual broomweed *(Amphiachyris dracunculoides)*, clover (*Dalea* spp.), and Bermudagrass (*Cynodon dactylon)*.
Trees in the project areas include Elm *(Ulmus),* Cedar *(Cedrus)*, Bois D'Arc *(Malcura pomifera)*, Hackberry *(Celtis),* Weeping Willow *(Salix babylonica),* Cottonwood *(Populus deltoids),* and Oak *(Quercus).*

Wildlife known to be in the area include American Kestrel *(falco sparverious)*, Killdeer *(Charadruis vociferous)*, Red-tailed Hawk *(Buteo jamaicensis)*, Greater Roadrunner *(Geocoddyz californianus)*, House Sparrow *(Passer domesticus)*, Turkey Vulture *(Cathartes aura)*, and Fox Squirrel *(Sciurus niger)*. Several other species of wildlife could be present in the proposed project area given the existing habitat. These could include small rodents such as rabbit and field mice, a variety of herps, and numerous insects and small animals.

Section 5: Environmental Settings, Impacts and Mitigation
5.7: Biological Elements

Impacts

Discuss potential impacts (adverse and beneficial) to trust resources, wildlife and natural vegetation, including habitat. Provide information about the nature, extent, duration and location of the impacts. Specify temporary versus permanent impacts.

* Do not include protected species already addressed in the potential impacts table.

Construction activities involve removal of vegetation temporarily as well as permanently. Potential impacts due to this activity include impact for nesting migratory birds and/or their young that could be present in the proposed project area. Ground nesting birds prevalent in the project area could suffer impacts to removal of habitat for nesting and foraging. Project area will be seeded and allowed to return to its natural state upon completion of construction activities. Areas where permanent structures are constructed, the ground storage tank and pump station facilities, will be permanently altered. Texas Parks and Wildlife Department and U.S. Fish and Wildlife Department review of the proposed project area indicated construction of the proposed project does not anticipate significant impacts to rare, threatened or endangered species, or other fish and wildlife resources, or their habitats.

Construction activities would comply with Texas Commission on Environmental Quality storm water permit requirements and other applicable erosion and sedimentation ordinances and standards. Erosion of soil due to the proposed project would be expected to be minimal and would be controlled as indicated previously, and would be temporary. Re-vegetation would reduce sedimentation and siltation upon completion of the proposed construction project, and the project area would be seeded to allow the area to return to the natural state as existed prior to the proposed construction project.

If present in or near the project area, discuss potential impacts to any parks, recreational areas, forests preserves, grasslands preserves, wildlife refuges, wild or scenic rivers, karst faunal regions or zones, or nature preserves (federal, state or local; public or private):

None

Mitigation Measures

Mitigation Measures for Project Environmental Impacts? ☐ Yes ☒ Not applicable

If yes, list all mitigation measures in Section 5.14.

Section 5: Environmental Settings, Impacts and Mitigation
5.8: Cultural Resources

Have you notified the State Historic Preservation Officer (SHPO) at the Texas Historical Commission that you intend to use the NEPA process to comply with Section 106 of the National Historic Preservation Act?	☒ Yes ☐ No

Identify parties that were consulted regarding cultural resources, including Tribal Historic Preservation Officers (THPO), the federal Advisory Council on Historic Preservation (ACHP), local governments, or any other interested parties.

No parties were contacted other than the Texas Historical Commission.

Has an archeologist and/or an architectural historian performed a desktop review of the proposed project?	☒ Yes ☐ No

Identify cultural resources/historic properties (included in or eligible for inclusion in the National Register of Historic Places) within the proposed project's area of impact.

None

Has an archeological and/or architectural survey been conducted?	☐ Yes ☒ No

If Yes, briefly summarize the results of the report(s) and attach them to Appendix B4, if applicable – exclude report from publicly available documents to protect location sensitive information.

Does the project have the potential to affect significant cultural resources/historic properties?	☐ Yes ☒ No

If you have determined that historic properties will not be impacted, explain how this conclusion was reached.

Review of proposed project area by the Texas Historical Commission, response letter attached,

Describe direct impacts (adverse and beneficial) of the project on cultural resources/historic properties. Specify temporary versus permanent impacts.

None

Mitigation Measures

Mitigation Measures for Project Environmental Impacts?	☐ Yes ☒ Not applicable

If yes, list all mitigation measures in Section 5.14.

Section 5: Environmental Settings, Impacts and Mitigation

5.9: Hazardous Materials

The TWDB does not fund the testing, remediation, removal, disposal, or related work for contaminated or potentially contaminated material.

Is there a Superfund Site in the project area or in an area associated with the proposed work (e.g., Superfund site upstream of project activities in a floodplain)?	
No	
Was a site assessment conducted?	☐ Yes ☒ No
If a formal site assessment was conducted please attach the report and/or data search to Appendix B5.	☐ Attached ☒ Not Applicable
If an informal site assessment was conducted, please briefly describe methods and results. Make sure to identify any potential environmental hazards located on the site due to past site uses (e.g. soil contamination or proximity to nearby hazardous liquid or gas pipelines) :	
Texas Commission on Environmental Quality website researched, and found only one Superfund Site in Collin County, Rogers Delinted Cottonseed in Farmersville, Texas. This site is not in the proximity of the proposed project area. In addition, TCEQ website reveals this site no longer presents an imminent and substantial endangerment to public health and safety or to the environment, due to the remediation actions performed.	
Mitigation Measures	
Mitigation Measures for Project Environmental Impacts? If yes, list all mitigation measures in Section 5.14.	☐ Yes ☒ Not applicable

Section 5: Environmental Settings, Impacts and Mitigation
5.10: Social Implications & Environmental Justice

Social Implications	
Will land acquisition for the project require the use of eminent domain?	☐ Yes ☒ No
If yes, describe:	
Will people or businesses be relocated as a result of this project?	☐ Yes ☒ No
If yes, describe the extent and nature of the relocations.	
Will the project cause an increase in resident's monthly service rates?	☒ Yes ☐ No
If yes, provide an estimate of an average monthly residential bill and the anticipated monthly residential increase required to finance the debt.	Average Monthly User Rate: $62.14 Anticipated Increase: $10.00
Will the project require an increase in taxes to finance the debt?	☐ Yes ☒ No
If yes, provide an estimate of the increase required:	

Environmental Justice

Area	Population	% Minority	% Below the Poverty Level/ Per Capita Income
State	28,304,596	56	15.6/27,828
County: Collin	969,603	42	6.3/39,933
City: Lavon	2,219	38	12/26,626
Project Area (0.5 mile buffer)	413/436	28/27	22/31,109 – 25/28,353

Does the project area have a portion of the population, greater than the city, county or state average, who are members of a racial/ethnic minority category or who have incomes less than or equal to the state's official poverty level?	☐ Yes ☒ No

Impacts	
Will the project disproportionally impact low-income or minority populations?	☐ Yes ☒ No
Please explain: Proposed project is not anticipated to disproportionally impact low-income or minority populations.	

Mitigation Measures	
Mitigation Measures for Project Environmental Impacts? If yes, list all mitigation measures in Section 5.14.	☐ Yes ☒ Not applicable

Section 5: Environmental Settings, Impacts and Mitigation
5.11: Other Potential Impacts or Requirements

1. **Air Quality:** Is the project in a maintenance or non-attainment area for any priority air pollutant under the federal Clean Air Act?	☒ Yes ☐ No

If yes, describe the impact the project will have on ambient air quality.

Proposed project area is located in Collin County, which is part of the EPA designated nine-county non-attainment area for the eight-hour standard for the pollutant ozone. Proposed project involves construction activities, which temporarily impact air quality. Dust would be controlled with timely application of non-potable water, utilizing non-potable water and spray trucks. Proposed project would not be expected to permanently affect the region's air quality status.

2. **Scenic Views**: Will the project impact scenic views or vistas during construction or operation?	☐ Yes ☒ No

If yes, indicate which scenic views or vistas will be impacted and discuss adverse impacts. Specify temporary versus permanent impacts.

3. **Traffic:** Will construction of this project involve rerouting or controlling traffic?	☐ Yes ☒ No

If yes, describe traffic changes and how long traffic will be disrupted:

The volume of construction–related traffic would be expected to be minor and should cause no significant disruption or increase in hazards to public roadways and would not disrupt existing traffic patterns.

4. **Other Potential Impacts:** If the project may cause any adverse impacts not addressed by items 1-3, identify and discuss them here (e.g., odor, prevailing winds, noise, blasting, night work, etc.):

Temporary increases in noise levels would occur during construction of the proposed projects, due to construction equipment and vehicles traveling to and from the construction areas. The project would be completed using construction vehicles and other typical heavy equipment. Due to unpredictable patterns of movement of heavy machinery, construction noise would not be continuous at any given location, and it is impossible to predict construction noise levels at specific sites. Standard specifications for the project would be developed to require that the contractor be familiar, observe, and comply with all federal, state and local ordinances and regulations that affect the conduct of work. There would be no long-term noise effects associated with the proposed projects.

Mitigation Measures

Mitigation Measures for Project Environmental Impacts?	☐ Yes ☒ Not applicable

If yes, list all mitigation measures in Section 5.14.

Section 5: Environmental Settings, Impacts and Mitigation
5.12: Secondary and Cumulative Impacts

Considering resources that your project will impact, identify any past, present or reasonably foreseeable future projects which impact these same resources. This answer will provide important contextual information.

Past Project: Proposed project location is location of existing facilities, and property adjacent to pump station site. Current facilities at proposed site include one (1) 500,000 gallon ground storage tank and pump station.

Future Project: Bear Creek SUD anticipates constructing additional ground storage tank(s) and water system facilities at the same location as the proposed project will be constructed, which would affect the same resources as the proposed project. Future water and sewer line construction projects along roadways adjacent to the project area would also affect these same resources, as would future TxDOT road construction projects.

Mitigation Measures

Mitigation Measures for Project Environmental Impacts? ☐ Yes ☒ Not applicable

If yes, list all mitigation measures in Section 5.14.

Section 5: Environmental Settings, Impacts and Mitigation
5.13: Standard Mitigation, Precautionary Measures and Best Management Practices

Describe any standard mitigation, precautionary measures and best management practices to be used during project construction (e.g., storm water pollution prevention plan, re-vegetation, dust and siltation control, establish original grades in floodplains, etc.).

Construction activities associated with the proposed project would comply with Texas Commission on Environmental Quality storm water permit requirements and other applicable erosion and sedimentation control ordinances and standards. Erosion control methods would be implemented according to local, state and federal ordinances and regulations. Erosion of soil due to the proposed project would be expected to be minimal and would be controlled with re-vegetation to reduce sedimentation and siltation upon completion of the proposed construction projects. Newly graded areas within the proposed project would be seeded with native grasses and allowed to return to their natural state. Erosion control measures would be in place during construction and after until the area is allowed to return to its natural state. Dust would be controlled with timely applications of water, utilizing non-potable water and spray trucks. Standard specifications for the project would be developed to require the contractor be familiar, observe, and comply with all federal, state and local ordinances and regulations that affect the conduct of work.

Section 5: Environmental Settings, Impacts and Mitigation
5.14: Mitigation Measures

Provide a list of potential adverse impacts of the proposed project and a description of how those impacts will be avoided, minimized, or mitigated. This list will be used to develop conditions for the environmental determination issued by the TWDB. Please ensure the information is consistent with what was provided to regulatory agencies and incorporates applicable agency recommendations. When responding to recommendations provided by regulatory agencies, identify which are feasible and which will not be implemented.

Impact:	Recommended/Required by What Entity? (if applicable)	Mitigation Measures Description:
Example: *Loss of 5 acres of forested wetland*	*Example:* *USACE*	*Example:* *Purchase 10 credits from ABC Wetland Bank*

Section 5: Environmental Settings, Impacts and Mitigation
5.15: References

U.S. Fish and Wildlife Services, Arlington Texas, Website, https://www.fws.gov/southwest/es/ArlingtonTexas/

Texas Parks and Wildlife Department, Website, https://tpwd.texas.gov/landwater/land/habitats/cross_timbers/endangered_species/

U.S. Fish and Wildlife Services Wetlands Mapper, https://www.fws.gov/wetlands/data/mapper.html

USDA National Resources Conservation Services Online Web Soil Survey, https://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/national/home/?cid=nrcs142p2_053369

USGS Mineral Resources On-Line Spatial Data, https://mrdata.usgs.gov/

TCEQ Superfund Website, https://www.tceq.texas.gov/remediation/superfund

EPA's EJ View Website, https://www.epa.gov/ejscreen\

Census QuickFacts, https://www.census.gov/quickfacts/fact/table/US/PST045216

Section 6: Public Participation

PUBLIC MEETING

1. Does the project or activities involve a probable or known public controversy? ☐ Yes ☒ No
   If yes, please contact your TWDB environmental reviewer for the public hearing guidance.

2. **Notify the Public:** Public participation is required to inform the public of potential social, economic or environmental impacts of the proposed project. The applicant must notify the public of the meeting by advertisement in a newspaper of general circulation within the project area at least thirty (30) days prior to the date of the meeting. The 30-day period may count either the day of the advertisement or the day of the meeting, but not both.

3. **Notify requisite agencies and interested parties:** A written notice of the meeting should be sent to any state, federal or local agency, government, organization or individual that has an interest in the proposed project.

4. **Floodplain/Wetland:** If the proposed action is located in a wetland and/or the 100-year floodplain (500-yr floodplain for critical actions), you are required to notify the public and involve the affected and interested public in the decision making process. Incorporate a discussion of alternatives to construction in the floodplain/wetlands, potential impacts and proposed mitigation measures into the public meeting.

5. **Public Meeting Notice Includes:**
   - ☒ Published 30 days in advance of meeting
   - ☒ Date, time and place of meeting
   - ☒ Brief description of project & floodplain/wetland notice (if applicable)
   - ☒ Cost, including estimated monthly bill and any connection fee, tax or surcharge
   - ☒ Convenient local source for EID (available at least 30 days prior to meeting)
   - ☒ Statement of Purpose: "One of the purposes of this meeting is to discuss the potential environmental impacts of the project and alternatives to it."

Example Public Meeting Notice:

A public meeting is being held on _____(day, date)_____at __(time)___ at_____(location, address)_____ to discuss the _____city/district_____'s proposed project to _____(project description)_____ at _____(project location)_____ . One of the purposes of this hearing is to discuss the potential environmental impacts of the project and alternatives to it. The total estimated cost of the project is $_____. The estimated monthly bill for a typical resident is currently_____. A user rate increase of _____will be required to finance this project. *In addition, a connection fee/tax/surcharge/other fee of $_____will be required.* An application for financial assistance for the project has been *(will be)* filed with the Texas Water Development Board, P.O. Box 13231, Austin, Texas, 78711-3231. An Environmental Information Document for the project has been prepared which will be available for public review at _____(city hall/district offices)___ at_____(address)____between the hours of _____(hours)____for 30 days following the date of this notice. Written comments on the proposed project may be sent to _____(address)_____or to the Texas Water Development Board.

Floodplain/Wetland: Incorporate into Public Meeting Notice for projects in a floodplain or wetland
This project involves construction (a) of a critical facility in the 500-year floodplain, (b) in the 100-year floodplain, or (c) construction located in a wetland. Alternatives to construction in a floodplain/wetland, potential impacts on floodplains/wetlands and proposed mitigation measures will be addressed during the public meeting.

6. **Public Meeting Documentation**
   - ☒ Publisher's affidavit and a copy of the notice
   - ☒ Statement signed by applicant: meeting was held in conformance with the Public Meeting Notice.
   - ☒ List of witnesses
   - ☒ Written summary of the meeting

7. **Were adverse comments about any aspect of the project received?** ☐ Yes ☒ No
   If yes, describe how they were resolved:

Section 7: Agency Coordination

When coordinating with an agency, send hard copies by public carrier with delivery confirmation requested. Retain copies of those confirmations. When a response is not received from an agency, documentation of the delivery must be included with the coordination materials submitted to the TWDB. All agency coordination should be included in Appendix C and should be presented in the same order as the following table.

Mailing addresses for the following agencies are provided online at:
http://www.twdb.texas.gov/financial/instructions/doc/addresses.pdf

Uniform Project Notification Requirements		
Bureau of Reclamation	☒ Sent ☐ *Response* (Not required)	Page: C-1 – C11
Bureau of Land Management	☒ Sent ☐ *Response* (Not required)	Page: C-12 – C-22
Intergovernmental Review: Depending on the nature and location of the proposed project, notification should be sent to the City Mayor, County Judge or both.	☒ Sent ☐ *Response* (Not required)	Page: C-23 - C56
Uniform Agency Coordination Requirements		
Texas Historical Commission	☒ Sent ☒ Response	Page: C-57
U.S. Army Corps of Engineers	☒ Sent ☒ Response	Page: C-58
Texas Parks and Wildlife Department Wildlife Habitat Assessment Program	☒ Sent ☒ Response ☒ Response to TPWD recommendations indicating which recommendations will be implemented.	Page: C-59

Circumstantial Requirements

Use the following questions to determine if coordination is required regarding potential impacts to the resource identified. If Yes, provide the page number for coordination materials.

Will the project adversely affect federally listed threatened or endangered species or their critical habitat? ☒ No effect (no coordination required) ☐ Not likely to adversely affect ☐ Likely to adversely affect	U.S. Fish and Wildlife Service Division of Ecological Services If not likely, concurrence that adverse effects have been adequately mitigated **recommended** If likely, formal Section 7 consultation **required** Page: C- 60 – C-65
Will the project impact prime and important farmlands? ☐ Yes ☒ No ☐ Exempt (pipeline project, existing site)	U.S. Department of Agriculture Natural Resources Conservation Service If Yes, Page: C-66

Section 7: Agency Coordination	
Is the project located within or directly adjacent to a national forest or grasslands? Does the project share a surface water connection that may impact these resources? ☐ Yes ☒ No	U.S. Forest Service National Forest or Grasslands If Yes, Page: C-
Is the project located within or directly adjacent to National Park Service Lands? Does the project share a surface water connection that may impact these resources? Does the proposed project have the potential to impact view sheds, natural sounds, night skies, or air quality of any NPS units or National Historic Landmarks? ☐ Yes ☒ No	National Park Service Environmental Quality Division If Yes, Page: C-
Wild and Scenic Rivers: coordination is required for all projects located in one of the following counties: El Paso, Brewster, Crane, Crocket, Culberson, Edwards, Hudspeth, Jeff Davis, Loving, Pecos, Presidio, Reeves, Schleicher, Sutton, Terrell, Upton, Val Verde, Ward and Winkler. ☐ Yes ☒ No	National Park Service Big Bend National Park, Rio Grande Wild & Scenic River If Yes, Page: C-
Is the project site within the floodplain or adjacent to the channel of the Rio Grande River OR located in, or directly adjacent to, the IBWC's flood control projects in Texas? ☐ Yes ☒ No	International Boundary and Water Commission (U.S. Section) Environmental Management Division If Yes, Page: C-
Is the project located within the contributing zone (stream flow source) or recharge zone of the Edwards Aquifer? ☐ Yes ☒ No	Environmental Protection Agency Groundwater/UIC Section (6WQ-SG) If Yes, Page: C-
Is the project located in, or directly adjacent to, tidal waters or tidally influenced wetlands? ☐ Yes ☒ No	National Marine Fisheries Service Habitat Conservation Division If Yes, Page: C-
Is the project located in a coastal management zone? ☐ Yes ☒ No	General Land Office If Yes, Page: C-
Will the proposed project affect any known organizations or private entities? ☐ Yes ☒ No	Coordination with the affected party(s) is required. If Yes, Page: C-

Section 7: Agency Coordination

For communities that participate in the NFIP: Is the project is located in the 100-year floodplain (1% chance of flooding)? ☐ Yes ☒ No Does the project involve construction of a critical facility (WTP, WWTP,etc.) in the 500-year floodplain (0.2% chance of flooding)? ☐ Yes ☒ No **Any construction in the 100-year floodplain and construction of critical facilities in the 500-year floodplain requires a Floodplain Development Permit. Floodplain Development Permits must be acquired prior to TWDB approval of engineering plans and specifications and release of construction funds.	National Flood Insurance Program Local Floodplain Administrator If Yes, Page: C-
For communities that DO NOT participate in the NFIP: Does the project involve construction in the 100-year floodplain or construction of a critical facility in the 500-year floodplain? ☐ Yes ☐ Exempt: strictly pipeline installation ☐ No ☐ Undetermined: no maps available to make determination **If the project is not exempt and is (a) located in the 100 year floodplain, (b) involves construction of a critical facility in the 500-year floodplain or (c) no floodplain maps are available for the project area, a Flood Risk Assessment must be prepared.	Flood Risk Assessment The assessment should include an elevation study, risk of flooding determination, and recommendation (build, no build, special accommodations). The assessment must be sealed by a licensed engineer. If Yes, Page: C-

Section 7: Agency Coordination
Sample Agency Notification Letter

DATE

CONTACT NAME
ADDRESS
See section 7 for agency contact information

RE: Project Notification: Please Review - No Response Required

Dear CONTACT:

The **APPLICANT** is pursuing federal funding through the Texas Water Development Board's **FUNDING PROGRAM** for the proposed **PROJECT NAME (TWDB PROJECT NUMBER)**. The purpose of this notification is to identify if the proposed project will have any potential conflicts with projects being implemented by your agency.

Attached to this letter is a document containing general contact information, project description and project maps. A copy of the full Environmental Information Document (EID), which includes background environmental information and a robust analysis of potential impacts, is available upon request.

If you have any questions or need additional information, please contact me at (tel:)_____ or by e-mail at _____.

Sincerely,
APPLICANT/CONSULTANT

Enclosure: Section 1 (General Information), Section 3 (Project Description) and Appendix A (Standard Maps) from the EID.

Section 7: Agency Coordination
Sample Agency Coordination Letter

DATE

CONTACT NAME
ADDRESS
See section 7 for agency contact information

RE: NEPA Review Requested for Federally Funded Project
Environmental Information Document Available
Consultation#_____, Date_____
_____(Project Name)_____
_____(Applicant)_____
_____(Project Location)_____

Dear CONTACT:

The APPLICANT is pursuing federal funding through the Texas Water Development Board's FUNDING PROGRAM for the proposed PROJECT NAME (TWDB PROJECT NUMBER). The purpose of this coordination is to identify potential environmental and permitting issues: specifically, permits or mitigative measures required to ensure compliance with environmental regulations specific to your agency's area of jurisdiction.

The attached Environmental Information Document (EID) provides a project description, project maps, background environmental information, a robust analysis of potential impacts and a list of all agencies with whom we are coordinating. Sections particularly relevant to your agency include: (use the table of relevant sections by agency provided on the next page to complete this section).

Include a brief description of mitigation measures that will be implemented to reduce impacts to resources under the agency's area of jurisdiction.

Recommended or required actions identified through this coordination, including permits, will be considered for inclusion as conditions in the TWDB's environmental determination. Please cite the relevant authority (statue/regulation) for recommendations.

We request your concurrence with our determination that_____. If you have any questions or need any additional information, please contact me at (tel:)_____ or by e-mail at _____.

Sincerely,
APPLICANT

Enclosure: EID (access to the EID may also be provided by including a link where the EID can be downloaded).

Section 7: Agency Coordination

Relevant Sections by Agency

(for the purposes of this EID, not intended to be all inclusive)

Uniform Project Notification Requirements	
Bureau of Reclamation, Bureau of Land Management, and Local Council of Governments	Section 1: General Information Section 3: Project Description Appendix A: Standard Maps
Uniform Agency Coordination Requirements	
Texas Historical Commission	Section 1: General Information Section 3: Project Description Section 5.8: Cultural Resources Appendix A: Standard Maps Appendix B4: Cultural Resources Report (if applicable)
U.S. Army Corps of Engineers	Section 1: General Information Section 3: Project Description Section 5.4: Water Resources Section 5.5: Topography and Floodplains Section 5.6: Wetlands, Streams and Waters of the U.S. Appendix A: Standard Maps Appendix B2: Wetlands, Streams and Waters of the U.S. (if applicable)
Texas Parks and Wildlife Department & U.S. Fish and Wildlife Service	Section 1: General Information Section 3: Project Description Section 5.1: Land Use Section 5.4: Water Resources Section 5.6: Wetlands, Streams and Waters of the U.S. Section 5.7: Biological Resources Appendix A: Standard Maps Appendix B3: Biological Resources
Circumstantial Requirements	
U.S. Department of Agriculture Natural Resources Conservation Service	Section 1: General Information Section 3: Project Description Section 5.1: Land Use Section 5.3: Soils & Prime and Important Farmlands Appendix A: Standard Maps Appendix B1: Soils & Prime and Important Farmlands

Section 7: Agency Coordination

Relevant Sections by Agency

(for the purposes of this EID, not intended to be all inclusive)

U.S. Forest Service National Forest or Grasslands	Section 1: General Information Section 3: Project Description Section 5.5: Topography and Floodplains Section 5.6: Wetlands, Streams and Waters of the U.S. Section 5.7: Biological Resources Appendix A: Standard Maps Appendix B3: Biological Resources
National Park Service Environmental Quality Division	Section 1: General Information Section 3: Project Description Section 5.4: Water Resources Section 5.5: Topography and Floodplains Section 5.6: Wetlands, Streams and Waters of the U.S. Section 5.7: Biological Resources Appendix A: Standard Maps Appendix B3: Biological Resources
National Park Service Big Bend National Park	Section 1: General Information Section 3: Project Description Section 5.5: Topography and Floodplains Section 5.6: Wetlands, Streams and Waters of the U.S. Section 5.7: Biological Resources Appendix A: Standard Maps Appendix B3: Biological Resources
International Boundary and Water Commission (U.S. Section) Environmental Management Division	Section 1: General Information Section 3: Project Description Section 5.4: Water Resources Section 5.5: Topography and Floodplains Section 5.6: Wetlands, Streams and Waters of the U.S. Appendix A: Standard Maps
Environmental Protection Agency Groundwater/UIC Section (6WQ-SG)	Section 1: General Information Section 3: Project Description Section 5.5: Topography and Floodplains Section 5.6: Wetlands, Streams and Waters of the U.S. Section 5.7: Biological Resources Appendix A: Standard Maps Appendix B3: Biological Resources

Section 7: Agency Coordination Relevant Sections by Agency (for the purposes of this EID, not intended to be all inclusive)	
National Flood Insurance Program Local Floodplain Administrator & Texas Water Development Board Flood Mitigation Planning Division	Section 1: General Information Section 3: Project Description Section 5.5: Topography and Floodplains Appendix A: Standard Maps
National Marine Fisheries Service Habitat Conservation Division	Section 1: General Information Section 3: Project Description Section 5.5: Topography and Floodplains Section 5.6: Wetlands, Streams and Waters of the U.S. Section 5.7: Biological Resources Appendix A: Standard Maps Appendix B3: Biological Resources
General Land Office	Section 1: General Information Section 3: Project Description Appendix A: Standard Maps

Section 8: Certification

CERTIFICATION

I hereby certify that the information contained in this document is accurate and complete to the best of my knowledge, and that this document describes the complete project. There are no other projects, stages or components other than those described in this document, which are related to the project as connected actions or phased actions.

Signature_____ Date: February 19, 2018

Title: Project Coordinator

Section 9: Appendices

TCEQ FMT ASSISTANCE CONTRACT

FMT Capacity Assessment Exit Interview Form

Review of this preliminary Financial, Managerial and Technical (FMT) Capability assessment helped identify the following strengths of your water or wastewater system which you should continue to build upon and opportunities for improvement which, if addressed, should allow your system to attain a higher level of capability. A final FMT assessment of your system will involve more detailed review of this field assessment, and your compliance and operating records. If you have any questions, or need more detailed information or assistance, please contact the Texas Commission on Environmental Quality (TCEQ) at 512-239-6403.

0430037	Bear Creek SUD	Collin	4
PWS or WW Permit #	Water or Wastewater System Name	County	Region

MANAGERIAL ASSESSMENT

Strengths	Opportunities	Criteria
☒	☐	Knowledge of legal authority
☒	☐	Operating reports to Board / Council
☒	☐	Written operating policies
☒	☐	Phone accessibility for customers (24 hours)
☒	☐	Application/formal process for service
☒	☐	Service for all applicants in CCN area
☒	☐	Record Keeping
☒	☐	Budget (periodic review & adjustment)
☒	☐	75% / 90% rule for plant expansion
☒	☐	Emergency Planning
☒	☐	Adequate elections
☐	☐	TCEQ Annual Reports (IOUs only)
☒	☐	Correction of audit material weaknesses
☒	☐	Capital Improvement Plan
☒	☐	Staff/Board training (not operator cert)
☒	☐	Approved CCN (WSCs or IOUs only)
☒	☐	Long-range Planning
☒	☐	Water Conservation Plan
☒	☐	Customer Service
☒	☐	85% Rule Violation

FINANCIAL ASSESSMENT

Strengths	Opportunities	Criteria
☒	☐	Rates based on cost of service
☒	☐	Customer termination policy / enforcement
☒	☐	Water metered rates for winter average
☒	☐	Revenues cover expenses
☒	☐	No delinquent debt payment
☒	☐	Metered Rates
☒	☐	Adequate reserve accounts
☒	☐	Insurance coverage
☒	☐	Access to financing
☒	☐	Audited financial statement
☒	☐	Rate study / review frequency
☒	☐	Ready access to cash for emergencies
☒	☐	Current on regulatory fees
☒	☐	Current on lab fees
☒	☐	Correction of Inspection deficiencies
☒	☐	Adequate water/wastewater treatment facilities
☐	☐	Cross-connection control program at WWTP
☒	☐	Adequate storage / pressure
☒	☐	Preventative Maintenance Program
☒	☐	Written O&M Manual (current)
☒	☐	Proper water or wastewater treatment
☐	☐	Source Water Protection Program
☒	☐	Metered Connections
☒	☐	No Primary Chemical Violations
☒	☐	No Secondary Chemical Violations
☒	☐	Tank Maintenance Program
☐	☐	No discharge Violations
☐	☐	Current discharge permit
☒	☐	Drawings / plans of treatment facilities
☒	☐	Monitored unaccounted water loss

Strengths	Opportunities	Criteria
☒	☐	Lab Equipment
☒	☐	Operator training
☒	☐	Certified operator/proper level & number
☐	☐	Turbidity Treatment
☒	☐	Adequate Source Water or Contracts
☐	☐	TCEQ Approved CT Study (surface water)
☒	☐	Disinfection Throughout Distr. System
☐	☒	Emergency Interconnections

The above has been discussed during an exit interview with the Contractor (or TCEQ staff).

Camille Reagan		General Manager	9/13/18
Name of Water or Wastewater Official		Title	Date
Scott Willeford	9/13/18		
Contractor (or TCEQ Staff)	Date	Contractor (or TCEQ Staff)	Date

BEAR CREEK SUD

Telephone 1-972-843-2101 • P.O. Box 188
Lavon, Texas 75166

Date: October 9, 2018 **Time**: 7:00PM

MINUTES OF REGULAR BOARD MEETING

Call to order by: President Herman Stork

Directors Present: Herman Stork, Bryan Block, Chris Elder, Leticia Harrison, Robert Haynes, David Hawkins, Kevin Hutchinson

Directors Absent: None

Public Comment: None

Consent Items:

Approval of Minutes of Regular Meeting on September 11, 2018.
Approval of September 2018 Financials.
Approval of September 2018 General Manager Report

General Manager, C. Reagan noted that all lead and copper samples that were submitted for 2018 were approved by Texas Commission on Environmental Quality (TCEQ). C. Reagan received notification from TCEQ stating that Bear Creek SUD will now be on a three year sampling schedule for lead and copper and will no longer be required to complete Water Quality Parameter sampling.

Motion made by Director B. Block, seconded by Director K. Hutchinson to approve Consent Items. Motion carried unanimously.

Staff Report:

Legal update by James W. Wilson: *Attorney James Wilson was not in attendance.*

Regular Agenda Items:

A. Consider all matters incident and related to the approval and execution of a Water Facilities Contract with the Greater Texoma Utility Authority (GTUA), including the adoption of a resolution pertaining thereto:

Motion made by Director C. Elder, seconded by Director R. Haynes to approve the contract presented by GTUA pending approval by attorney, James Wilson. Motion carried unanimously.

B. Discuss and act upon approving Resolution No. 2018-006 – Appointment of Assistant Secretary:

Motion made by Director B. Block, seconded by Director K. Hutchinson to approve Resolution 2018-006 appointing Amber Wright to the Office of Assistant Secretary. Motion carried unanimously.

C. Discuss and act upon approving Resolution No. 2018-007 – Appointment of Assistant Secretary:

Motion made by Director B. Block, seconded by Director K. Hutchinson to approve Resolution 2018-007 appointing Camille Reagan to the Office of Assistant Secretary. Motion carried unanimously.

D. Discuss Texas Water Development Board Loan Rate Increase and North Texas Municipal Water District Rate Increase FY2019 Workshop: *Todd Strouse, Kimley-Horn, presented the documents to the Board of Directors for the rate increase workshop to be held on October 30, 2018. Kimley-Horn will make the recommended changes to the documents and present at the rate increase workshop on October 30, 2018.*

North Texas Municipal Water District finalized the rate increase for 2019 for members and customers. The rate increase will be 5% for 2019. Bear Creek SUD's annual demand has increased for 2019 to 243,364,000 gallons of water for the take and pay contract.

A Capacity Assessment Report was completed by Texas Commission on Environment Quality (TCEQ) for Bear Creek SUD. A representative from TCEQ met with Bear Creek SUD representatives on September 13, 2018 to evaluate the financial, managerial and technical capacity of Bear Creek SUD. The report was received on September 27, 2018 from TCEQ stating that Bear Creek SUD was found to have the financial, managerial and technical capacity to proceed with the application for assistance from the Drinking Water State Revolving Fund for the proposed project. It was determined that the proposed project would assist Bear Creek SUD to remain compliant with the TCEQ rules and regulations.

E. Discuss and act upon approving Ordinance 2018-006 – Amending Bear Creek SUD Rate Order:

Motion made by Director K. Hutchinson, seconded by Director D. Hawkins to approve Ordinance 2018-006 amending the Bear Creek SUD Rate Order. Motion carried unanimously.

Adjournment to Executive Session:

Motion by Director K. Hutchinson, seconded by Director R. Haynes to adjourn to Executive Session at 8:20PM. Motion carried unanimously.

Executive Session:

Executive Session Call to Order at 8:23PM.

Executive Session Agenda Items:

(A) The Board may recess into closed or executive session to discuss the following:
(1) Government Code §551.072. Discuss Property Purchase.

(B) Reconvene into Regular Session and take any action necessary as a result of the Executive Session.

Adjourn Executive Session at 8:47PM.

Regular Session Call to Order at 8:48PM.

Adjournment at 8:49PM:

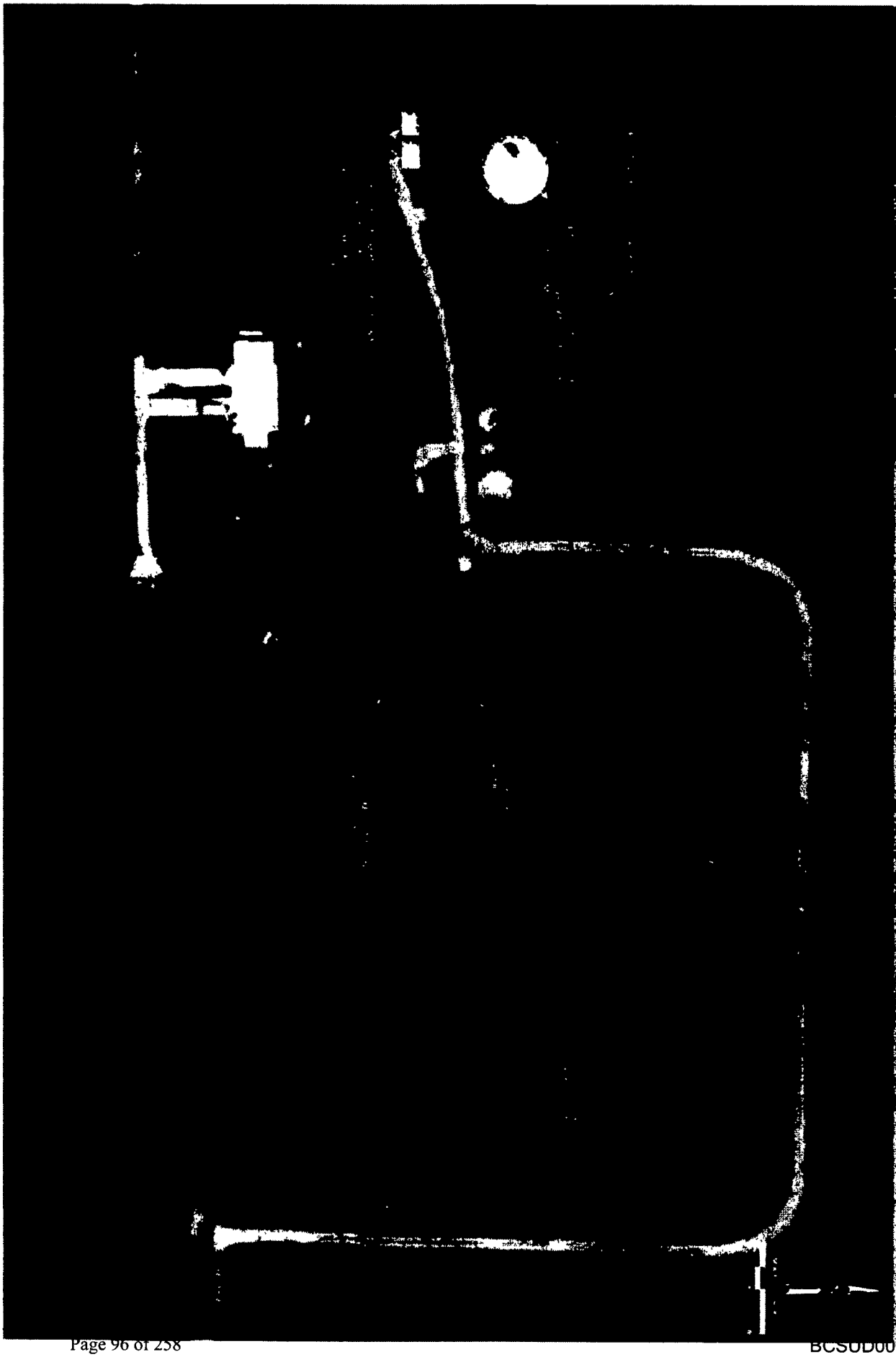
Herman Stork, President

Bryan Block, Vice President

Camille Reagan, Recorder

Bear Creek
Team Member

Summary
(a)



Proposed Rate Increase

Comparison of Water Provider's Minimum Monthly Service Charge

TRWA 2018 Rate Study Purchased Water Comparison Table

BCSUD (3/4" Meter)
Standard Residential Service Rates

Monthly Minimum	$ 35.00
Water Included w/Minimum Bill:	0/gallons

Tier (gal):	$/1,000 gal:
0-5,0000	$ 6.35
5,0001-10,000	$ 7.05
10,001-15,000	$ 8.09
15,001-25,000	$ 10.00
25,001+	$ 11.27

2018 Rate Study
Purchased Water

Gallons	10th Percentile	Median	90th Percentile
0-1000	$0.00	$4.41	$9.00
1001-2000	$0.00	$6.18	$9.32
2001-3000	$3.15	$6.26	$9.32
3001-4000	$4.57	$6.30	$9.32
4001-5000	$4.57	$6.65	$9.78
5001-6000	$4.72	$7.18	$9.78
6001-7000	$4.72	$7.18	$9.78
7001-8000	$4.72	$7.25	$9.78
8001-9000	$4.72	$7.25	$9.80
9001-10000	$4.72	$7.25	$9.80
10001-15000	$4.87	$7.83	$10.50
15001-20000	$5.02	$7.90	$10.50
20001-25000	$5.17	$8.25	$11.50
25001-30000	$5.32	$8.26	$11.50
30001-35000	$5.47	$8.26	$12.52
35001-40000	$5.56	$8.38	$12.52
40001-50000	$5.56	$8.63	$13.20
>50000	$5.56	$8.63	$14.20
Base Rate	$22.00	$32.00	$45.00
Gallons Included	0	0	2000
Monthly Usage (in gallons)	2100	4700	10000
Water Loss %	2.50%	9.00%	22.00%
Equity buy-in/capital improvement/ reconnect/impact fee	$0.00	$1,100.00	$2,450.00
Standard connection/tap/ installation fee	$202.29	$800.00	$2,100.00
Reconnect Fee	$25.00	$50.00	$90.00
Meter Set Fee	$0.00	$235.00	$1,650.00
Tap Fee	$0.00	$32.50	$50.00
Miles of Pipe	36	101.23	346

Membership Fee		Deposit		Additional Renters Deposit	
10th Percentile	$0	10th Percentile	$0	Yes	20.00%
90th Percentile	$350	90th Percentile	$200	No	65.71%
Median	$100	Median	$100	No Answer	14.29%
Refundable	77.27%	Refundable	75.00%	Of those with positive values,	
Non-Refundable	18.18%	Non-Refundable	16.67%	10th Percentile	$*
No Answer	04.45%	No Answer	08.33	90th Percentile	$*
				Median	$*

*not enough data to report