



Broken Arrow Municipal Authority

Loan Summary

\$11,415,000 Series 2019B Clean Water SRF Loan from Oklahoma Water Resources Board

June 3, 2019



**MUNICIPAL
FINANCE
SERVICES, INC.**

est. 1990

Municipal Finance Services, Inc.
P.O. Box 747
Edmond, OK 73083-0747
P: 405.340.1727

\$11,415,000
Broken Arrow Municipal Authority
Tulsa County
Series 2019B Clean Water SRF Promissory Note to Oklahoma Water Resources Board

Sources and Uses of Funds

Sources of Funds

Principal amount of 2019B CWSRF Note	11,415,000.00
Other Sources	-
Total Sources of Funds	<u>11,415,000.00</u>

Uses of Funds

Project Fund	11,303,425.00
Bond Counsel	55,537.50
Financial Advisor	55,537.50
Local Trustee	500.00
Misc.	-
Total Uses of Funds	<u>11,415,000.00</u>

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\$11,415,000
 Broken Arrow Municipal Authority
 Tulsa County
 Series 2019B Clean Water SRF Promissory Note to Oklahoma Water Resources Board

Draw Schedule and Key Dates

Assumed Closing Date/First Draw for Analysis Purposes	6/11/2019
First Interest Payment Date	9/15/2019
Final Draw Date	3/15/2021
First Principal Payment Date	9/15/2021
Final Principal and Interest Date	3/15/2041

	Projected Date	Projected Amount	Cumulative Amount Drawn
Draw 1	6/11/2019	111,575.00	111,575.00
Draw 2	7/15/2019	538,258.33	649,833.33
Draw 3	8/15/2019	538,258.33	1,188,091.67
Draw 4	9/15/2019	538,258.33	1,726,350.00
Draw 5	10/15/2019	538,258.33	2,264,608.33
Draw 6	11/15/2019	538,258.33	2,802,866.67
Draw 7	12/15/2019	538,258.33	3,341,125.00
Draw 8	1/15/2020	538,258.33	3,879,383.33
Draw 9	2/15/2020	538,258.33	4,417,641.67
Draw 10	3/15/2020	538,258.33	4,955,900.00
Draw 11	4/15/2020	538,258.33	5,494,158.33
Draw 12	5/15/2020	538,258.33	6,032,416.67
Draw 13	6/15/2020	538,258.33	6,570,675.00
Draw 14	7/15/2020	538,258.33	7,108,933.33
Draw 15	8/15/2020	538,258.33	7,647,191.67
Draw 16	9/15/2020	538,258.33	8,185,450.00
Draw 17	10/15/2020	538,258.33	8,723,708.33
Draw 18	11/15/2020	538,258.33	9,261,966.67
Draw 19	12/15/2020	538,258.33	9,800,225.00
Draw 20	1/15/2021	538,258.33	10,338,483.33
Draw 21	2/15/2021	538,258.33	10,876,741.67
Draw 22	3/15/2021	538,258.33	11,415,000.00
		11,415,000.00	

Municipal Finance Services, Inc.
 5/28/2019

Draw Schedule and Key Dates

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 Tulsa County
 Series 2019B Clean Water SRF Promissory Note to Oklahoma Water Resources Board

Estimated debt service schedule based on assumed interest rate, assumed closing date , and assumed draw schedule

Date	Principal	Est. Interest Rate (Includes OWRB 0.50% Admin Fee)	Interest	P&I	Annual P&I	Note Balance
6/11/2019		2.130%				111,575.00
9/15/2019		2.130%	633.75	633.75		1,726,350.00
3/15/2020		2.130%	18,589.91	18,589.91	19,223.66	4,955,900.00
9/15/2020		2.130%	53,953.23	53,953.23		8,185,450.00
3/15/2021		2.130%	87,659.35	87,659.35	141,612.58	11,415,000.00
9/15/2021	5,000	2.130%	124,271.30	129,271.30		11,410,000.00
3/15/2022	5,000	2.130%	122,191.59	127,191.59	256,462.89	11,405,000.00
9/15/2022	5,000	2.130%	124,162.43	129,162.43		11,400,000.00
3/15/2023	5,000	2.130%	122,084.50	127,084.50	256,246.93	11,395,000.00
9/15/2023	5,000	2.130%	124,053.57	129,053.57		11,390,000.00
3/15/2024	5,000	2.130%	122,651.32	127,651.32	256,704.88	11,385,000.00
9/15/2024	270,000	2.130%	123,944.70	393,944.70		11,115,000.00
3/15/2025	275,000	2.130%	119,032.39	394,032.39	787,977.09	10,840,000.00
9/15/2025	275,000	2.130%	118,011.47	393,011.47		10,565,000.00
3/15/2026	280,000	2.130%	113,142.35	393,142.35	786,153.81	10,285,000.00
9/15/2026	285,000	2.130%	111,969.37	396,969.37		10,000,000.00
3/15/2027	290,000	2.130%	107,091.67	397,091.67	794,061.03	9,710,000.00
9/15/2027	290,000	2.130%	105,709.53	395,709.53		9,420,000.00
3/15/2028	295,000	2.130%	101,437.70	396,437.70	792,147.23	9,125,000.00
9/15/2028	300,000	2.130%	99,340.83	399,340.83		8,825,000.00
3/15/2029	300,000	2.130%	94,508.40	394,508.40	793,849.23	8,525,000.00
9/15/2029	305,000	2.130%	92,808.83	397,808.83		8,220,000.00
3/15/2030	310,000	2.130%	88,029.35	398,029.35	795,838.18	7,910,000.00

Municipal Finance Services, Inc.
 5/28/2019

Estimated Debt Service Schedule

\$11,415,000
 Broken Arrow Municipal Authority
 Tulsa County
 Series 2019B Clean Water SRF Promissory Note to Oklahoma Water Resources Board

Estimated debt service schedule based on assumed interest rate, assumed closing date, and assumed draw schedule

Date	Principal	Est. Interest Rate (Includes OWRB 0.50% Admin Fee)	Interest	P&I	Annual P&I	Note Balance
9/15/2030	315,000	2.130%	86,113.53	401,113.53		7,595,000.00
3/15/2031	320,000	2.130%	81,336.12	401,336.12	802,449.65	7,275,000.00
9/15/2031	320,000	2.130%	79,200.50	399,200.50		6,955,000.00
3/15/2032	325,000	2.130%	74,893.76	399,893.76	799,094.26	6,630,000.00
9/15/2032	330,000	2.130%	72,178.60	402,178.60		6,300,000.00
3/15/2033	335,000	2.130%	67,467.75	402,467.75	804,646.35	5,965,000.00
9/15/2033	340,000	2.130%	64,938.97	404,938.97		5,625,000.00
3/15/2034	340,000	2.130%	60,239.06	400,239.06	805,178.03	5,285,000.00
9/15/2034	345,000	2.130%	57,536.03	402,536.03		4,940,000.00
3/15/2035	350,000	2.130%	52,903.28	402,903.28	805,439.32	4,590,000.00
9/15/2035	355,000	2.130%	49,969.80	404,969.80		4,235,000.00
3/15/2036	360,000	2.130%	45,603.89	405,603.89	810,573.69	3,875,000.00
9/15/2036	365,000	2.130%	42,185.83	407,185.83		3,510,000.00
3/15/2037	370,000	2.130%	37,589.18	407,589.18	814,775.01	3,140,000.00
9/15/2037	375,000	2.130%	34,184.13	409,184.13		2,765,000.00
3/15/2038	380,000	2.130%	29,610.85	409,610.85	818,794.98	2,385,000.00
9/15/2038	385,000	2.130%	25,964.70	410,964.70		2,000,000.00
3/15/2039	390,000	2.130%	21,418.33	411,418.33	822,383.03	1,610,000.00
9/15/2039	395,000	2.130%	17,527.53	412,527.53		1,215,000.00
3/15/2040	400,000	2.130%	13,083.53	413,083.53	825,611.06	815,000.00
9/15/2040	405,000	2.130%	8,872.63	413,872.63		410,000.00
3/15/2041	410,000	2.130%	4,390.76	414,390.76	828,263.39	0.00
	11,415,000.00		3,202,486.30	14,617,486.30	14,617,486.30	

Municipal Finance Services, Inc.
 5/28/2019

Estimated Debt Service Schedule

\$11,415,000

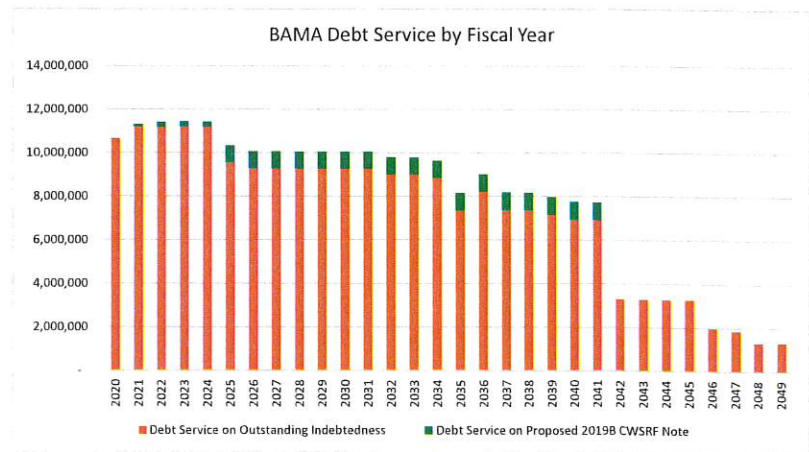
Broken Arrow Municipal Authority

Tulsa County

Series 2019B Clean Water SRF Promissory Note to Oklahoma Water Resources Board

BAMA Debt Service by Fiscal Year

Fiscal Year	Debt Service on Outstanding Indebtedness	Debt Service on Proposed 2019B CWSRF Note	Total
2020	10,650,599	19,224	10,669,823
2021	11,173,961	141,613	11,315,573
2022	11,167,784	256,463	11,424,247
2023	11,199,715	256,247	11,455,962
2024	11,178,842	256,705	11,435,547
2025	9,550,110	787,977	10,338,087
2026	9,280,197	786,154	10,066,351
2027	9,272,336	794,061	10,066,397
2028	9,259,581	792,147	10,051,729
2029	9,262,544	793,849	10,056,393
2030	9,260,579	795,838	10,056,417
2031	9,261,405	802,450	10,063,855
2032	9,010,816	799,094	9,809,910
2033	8,994,287	804,646	9,798,933
2034	8,840,097	805,178	9,645,275
2035	7,358,351	805,439	8,163,791
2036	8,221,483	810,574	9,032,057
2037	7,375,343	814,775	8,190,118
2038	7,361,351	818,795	8,180,146
2039	7,153,440	822,383	7,975,823
2040	6,939,493	825,611	7,765,105
2041	6,917,968	828,263	7,746,232
2042	3,306,369	-	3,306,369
2043	3,297,029	-	3,297,029
2044	3,291,605	-	3,291,605
2045	3,287,242	-	3,287,242
2046	1,985,702	-	1,985,702
2047	1,856,406	-	1,856,406
2048	1,326,935	-	1,326,935
2049	1,324,397	-	1,324,397
	218,365,967	14,617,486	



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Cashflow Analysis

	From Audited Financial Statements							Pro Forma
	Fiscal Year							
	2012	2013	2014	2015	2016	2017	2018	
Operating Revenues								
Water Charges	16,759,921	17,064,483	16,105,552	16,687,587	18,558,284	19,059,695	20,074,726	20,074,726
Sewer Charges	8,353,408	8,974,057	8,856,815	9,974,088	10,379,074	11,281,592	12,501,228	12,501,228
Sanitation Charges	5,613,116	5,974,537	5,998,650	6,174,942	6,192,711	6,358,341	6,441,209	6,441,209
Stormwater fees	3,426,891	3,798,650	3,720,772	4,057,514	4,300,911	4,795,114	5,538,953	
Fees and Fines	715,604	747,504	776,128	827,079	881,371	917,171	994,744	
Miscellaneous	1,039,916	442,886	495,073	460,343	1,216,845	381,896	89,228	
Total Operating Revenues	35,908,856	37,002,117	35,952,990	38,181,553	41,529,196	42,793,809	45,640,088	39,017,163
Operating Expenses (Ex. Depreciation and Amortization))								
General Government	1,130,076	1,101,758	1,143,869	1,303,771	1,174,487	840,472	779,918	779,918
Finance & Admin.	875,535	946,065	926,305	942,528	1,178,148	1,201,975	1,616,817	1,616,817
Engineering & Const.	1,440,675	1,889,734	1,858,753	1,933,637	2,075,939	2,387,739	2,639,603	2,639,603
Water Distribution	12,065,834	11,965,628	11,596,510	8,320,578	9,807,118	9,753,418	9,270,888	9,270,888
Sanitary Sewer Service	4,095,138	4,635,662	4,940,728	4,630,583	5,115,682	5,443,944	4,924,119	4,924,119
Sanitation Services	4,419,856	4,294,281	4,756,924	4,912,482	5,093,933	4,931,800	5,067,747	5,067,747
Support Services	2,398,403	2,528,875	2,663,587	2,728,547	2,796,248	3,001,390	3,131,265	
Stormwater	2,067,386	2,130,607	2,390,218	2,995,260	2,594,973	3,115,765	3,186,513	
Total Operating Expenses	28,492,903	29,492,610	30,276,894	27,767,386	29,836,528	30,676,403	30,616,870	24,299,092
Operating Gain (Loss)	7,415,953	7,509,507	5,676,096	10,414,167	11,692,668	12,117,406	15,023,218	14,718,071
Interest Earnings	21,263	15,653	8,927	2,485	8,329	17,883	272,653	272,653
1-cent Sales Tax (Used FY 2019 Projected for Pro Forma)	11,008,958	11,638,078	12,263,262	13,000,666	13,621,367	14,052,322	14,052,322	14,721,941
Available Before Debt Service & Transfers	18,446,174	19,163,238	17,948,285	23,417,318	25,322,364	26,187,611	29,348,193	29,712,665
Max Annual Debt Service -								11,455,962
					Debt Service Coverage Ratio			2.59
					Minimum is			1.25

City of Broken Arrow, Oklahoma
Sales Tax Receipts

	FY ending June 30:									
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Projected
	3%	3%	3%	3%	3%	3%	3%	3% (7mos)	3.55%	
								3.55% (5 months)		
July	2,546,793.19	2,605,106.65	2,662,347.98	3,055,434.53	3,044,000.93	3,251,891.04	3,520,550.09	3,455,049.43	4,248,709.63	4,578,194.76
August	2,529,456.89	2,687,994.92	2,773,225.83	3,338,726.34	3,121,087.10	3,259,396.02	3,487,929.46	3,536,128.75	4,312,523.99	4,612,397.43
September	2,497,226.34	2,735,517.70	2,663,560.18	2,854,847.70	2,967,571.38	3,085,514.28	3,473,964.35	3,441,659.01	4,179,667.62	4,387,053.39
October	2,438,473.52	2,655,400.89	2,828,791.10	2,845,599.84	2,999,572.15	3,257,982.59	3,423,436.05	3,542,432.77	3,950,343.78	4,307,953.16
November	2,163,862.05	2,472,733.24	2,642,006.57	2,773,015.47	3,017,206.81	3,181,017.48	3,196,241.55	3,289,585.28	4,212,418.17	4,197,261.39
December	2,663,995.78	2,504,061.78	2,700,081.39	2,781,204.10	3,148,912.81	3,170,176.65	3,423,067.40	3,254,656.54	3,965,275.63	4,201,051.98
January	2,511,085.41	2,681,224.08	2,862,828.89	3,131,010.35	3,210,712.17	3,394,996.90	3,509,561.82	3,519,220.93	4,455,161.91	4,661,493.97
February	2,859,317.52	2,852,017.68	3,108,913.42	3,128,703.48	3,308,193.38	3,696,708.81	3,695,017.50	3,720,606.82	4,446,691.54	4,605,692.49
March	2,348,003.54	2,467,371.87	2,594,508.45	2,750,963.65	2,792,110.63	3,256,397.12	3,080,983.08	3,773,279.26	3,786,535.11	3,920,862.72
April	2,390,418.99	2,376,301.32	2,656,149.37	2,699,609.00	2,856,281.30	2,967,690.68	3,342,795.80	3,856,072.50	3,891,908.80	4,091,516.71
May	2,563,230.45	2,656,097.39	2,824,542.95	2,829,469.57	3,197,588.12	3,507,241.91	3,451,756.13	4,138,007.44	4,239,295.79	4,334,312.03
June	2,671,258.46	2,572,560.16	2,709,917.18	2,860,649.47	3,126,551.14	3,274,694.92	3,258,797.68	3,837,111.70	4,197,212.02	4,365,100.50
FY Total	30,183,122.14	31,266,387.68	33,026,873.31	35,049,233.50	36,789,787.92	39,303,708.40	40,864,100.91	43,363,810.43	49,885,743.99	52,262,890.53
1.0 % ST	10,061,041 -0.82%	10,422,129 3.59%	11,008,958 5.63%	11,683,078 6.12%	12,263,263 4.97%	13,101,236 6.83%	13,621,367 3.97%	13,456,595 -1.21%	14,052,322 4.43%	14,721,941 4.84%

First 11 months of FY 2019 vs same period in FY 2018

Broken Arrow
1.0% Sales Tax Receipts by Fiscal Year

