

## 2019 - WATER CONSUMPTION

DATE	Lake Mitchell Influent MG	B-Y Rural Water Influent MG	Effluent to Water Towers MG
7/1/2019	0-MG	2.321	2.310
7/2/2019	0-MG	3.222	3.236
7/3/2019	0-MG	2.755	2.743
7/4/2019	0-MG	1.976	1.795
7/5/2019	0-MG	2.148	2.036
7/6/2019	0-MG	2.060	2.338
7/7/2019	0-MG	1.839	1.661
7/8/2019	0-MG	2.080	2.118
7/9/2019	0-MG	2.465	2.603
7/10/2019	0-MG	1.775	1.784
7/11/2019	0-MG	2.866	2.877
7/12/2019	0-MG	2.024	1.982
7/13/2019	0-MG	2.693	2.750
7/14/2019	0-MG	1.968	1.916
7/15/2019	0-MG	3.057	3.138
7/16/2019	0-MG	2.868	2.870
7/17/2019	0-MG	2.866	2.871
7/18/2019	0-MG	2.054	1.900
7/19/2019	0-MG	2.614	2.784
7/20/2019	0-MG	2.372	2.366
7/21/2019	0-MG	2.360	2.361
7/22/2019	0-MG	1.982	2.336
7/23/2019	0-MG	2.563	2.684
7/24/2019	0-MG	2.773	2.777
7/25/2019	0-MG	2.720	2.672
7/26/2019	0-MG	2.404	2.478
7/27/2019	0-MG	2.844	2.855
7/28/2019	0-MG	2.206	2.105
7/29/2019	0-MG	2.211	2.194
7/30/2019	0-MG	2.420	2.567
7/31/2019	0-MG	2.161	1.999
<b>TOTALS</b>	<b>0-MG</b>	<b>74.667</b>	<b>75.106</b>

# City of Mitchell Water Rate Charged

8/1/2019

	Base Rate (1,000 Gallons)	Added Rate (1,000 Gallons)	Combined Rate (1,000 Gallons)
Use below 2.65 MGD =	\$1.06	\$0.00	\$1.06
Use between 2.65 MGD to 2.90 MGD =	\$1.06	\$1.00	\$2.06
Use between 2.90 MGD to 3.15 MGD =	\$1.06	\$1.50	\$2.56
All use over 3.15 MGD =	\$1.06	\$2.00	\$3.06

Month: 7 Year: 2019 Billing Month: 8

Day of Month	24 Hour Use(Kgal)	Use Above 2.65 MGD	Base Rate Use	Base Rate Cost	2.65 - 2.9 MGD Usage	2.65 - 2.9 MGD Added Cost	2.9 - 3.15 MGD Usage	2.9 - 3.15 MGD Added Cost	All Use Over 3.15 MGD	All Use Over 3.15 MGD Cost	Total Daily Cost
1	2,430,000	0	2,430,000	\$2,575.80	0	\$0.00	0	\$0.00	0	\$0.00	\$2,575.80
2	3,037,000	387,000	3,037,000	\$3,219.22	250,000	\$250.00	137,000	\$205.50	0	\$0.00	\$3,674.72
3	2,817,000	167,000	2,817,000	\$2,986.02	167,000	\$167.00	0	\$0.00	0	\$0.00	\$3,153.02
4	2,267,000	0	2,267,000	\$2,403.02	0	\$0.00	0	\$0.00	0	\$0.00	\$2,403.02
5	2,197,000	0	2,197,000	\$2,328.82	0	\$0.00	0	\$0.00	0	\$0.00	\$2,328.82
6	1,856,000	0	1,856,000	\$1,967.36	0	\$0.00	0	\$0.00	0	\$0.00	\$1,967.36
7	2,124,000	0	2,124,000	\$2,251.44	0	\$0.00	0	\$0.00	0	\$0.00	\$2,251.44
8	2,128,000	0	2,128,000	\$2,255.68	0	\$0.00	0	\$0.00	0	\$0.00	\$2,255.68
9	2,244,000	0	2,244,000	\$2,378.64	0	\$0.00	0	\$0.00	0	\$0.00	\$2,378.64
10	2,033,000	0	2,033,000	\$2,154.98	0	\$0.00	0	\$0.00	0	\$0.00	\$2,154.98
11	2,715,000	65,000	2,715,000	\$2,877.90	65,000	\$65.00	0	\$0.00	0	\$0.00	\$2,942.90
12	2,337,000	0	2,337,000	\$2,477.22	0	\$0.00	0	\$0.00	0	\$0.00	\$2,477.22
13	2,480,000	0	2,480,000	\$2,628.80	0	\$0.00	0	\$0.00	0	\$0.00	\$2,628.80
14	2,279,000	0	2,279,000	\$2,415.74	0	\$0.00	0	\$0.00	0	\$0.00	\$2,415.74
15	2,869,000	219,000	2,869,000	\$3,041.14	219,000	\$219.00	0	\$0.00	0	\$0.00	\$3,260.14
16	2,934,000	284,000	2,934,000	\$3,110.04	250,000	\$250.00	34,000	\$51.00	0	\$0.00	\$3,411.04
17	2,935,000	285,000	2,935,000	\$3,111.10	250,000	\$250.00	35,000	\$52.50	0	\$0.00	\$3,413.60
18	2,345,000	0	2,345,000	\$2,485.70	0	\$0.00	0	\$0.00	0	\$0.00	\$2,485.70
19	2,637,000	0	2,637,000	\$2,795.22	0	\$0.00	0	\$0.00	0	\$0.00	\$2,795.22
20	2,219,000	0	2,219,000	\$2,352.14	0	\$0.00	0	\$0.00	0	\$0.00	\$2,352.14
21	2,400,000	0	2,400,000	\$2,544.00	0	\$0.00	0	\$0.00	0	\$0.00	\$2,544.00
22	2,278,000	0	2,278,000	\$2,414.68	0	\$0.00	0	\$0.00	0	\$0.00	\$2,414.68
23	2,363,000	0	2,363,000	\$2,504.78	0	\$0.00	0	\$0.00	0	\$0.00	\$2,504.78
24	2,815,000	165,000	2,815,000	\$2,983.90	165,000	\$165.00	0	\$0.00	0	\$0.00	\$3,148.90
25	3,024,000	374,000	3,024,000	\$3,205.44	250,000	\$250.00	124,000	\$186.00	0	\$0.00	\$3,641.44
26	2,397,000	0	2,397,000	\$2,540.82	0	\$0.00	0	\$0.00	0	\$0.00	\$2,540.82
27	2,717,000	67,000	2,717,000	\$2,880.02	67,000	\$67.00	0	\$0.00	0	\$0.00	\$2,947.02
28	2,530,000	0	2,530,000	\$2,681.80	0	\$0.00	0	\$0.00	0	\$0.00	\$2,681.80
29	2,261,000	0	2,261,000	\$2,396.66	0	\$0.00	0	\$0.00	0	\$0.00	\$2,396.66
30	2,199,000	0	2,199,000	\$2,330.94	0	\$0.00	0	\$0.00	0	\$0.00	\$2,330.94
31	2,479,000	0	2,479,000	\$2,627.74	0	\$0.00	0	\$0.00	0	\$0.00	\$2,627.74
<b>TOTALS</b>	<b>76,346,000</b>	<b>2,013,000</b>	<b>76,346,000</b>	<b>\$80,926.76</b>	<b>1,683,000</b>	<b>\$1,683.00</b>	<b>330,000</b>	<b>\$495.00</b>	<b>0</b>	<b>\$0.00</b>	<b>\$83,104.76</b>

	Total Cost	Gallons Used	Base Cost	Cost Over 2.65MGD
Previous Month Read =	10,919,139,000			
Current Month Read =	10,995,485,000			
Current Month Use =	76,346,000			
Days billed in July =	\$83,104.76	76,346,000	\$80,926.76	\$2,178.00
Days carried from previous month =	\$0.00	0	\$0.00	\$0.00
Total bill for July =	\$83,104.76	76,346,000	\$80,926.76	\$2,178.00

Days that will be billed in August = \$0.00

Note: August billing meter was read on August 1st therefore no July days will be included in September billing.

<u>Date</u>	<u>Source</u>	<u>Site</u>	<u>Chlorine PPM</u> 0.5PPM-4.00PPM	<u>Bacteria</u>
7/2/2019	Dakota Medical Speclist	#6	2.67	Absent
7/2/2019	Erickson Oil	#7	2.75	Absent
7/2/2019	Arnies	#8	3.02	Absent
7/2/2019	Wesley Acres	#9	2.68	Absent
7/2/2019	Culvers	#10	2.09	Absent
7/2/2019	Moose Lodge	#11	2.72	Absent
7/2/2019	City Library	#12	2.62	Absent
7/2/2019	City Park Dept	#13	3.10	Absent
7/9/2019	Ampride	#14	2.67	Absent
7/9/2019	City Hall	#15	2.62	Absent
7/9/2019	Mitchell Techenical Inst	#16	2.86	Absent
7/9/2019	Holy Family Church	#17	2.56	Absent
7/9/2019	Mitchell Middle School	#18	2.48	Absent
7/9/2019	Brady Memorial Home	#19	2.82	Absent
7/9/2019	GT Body Shop	#20	2.10	Absent
<b>Average</b>			<b>2.65</b>	<b>Absent</b>

# MONTHLY -- B-Y WATER- GALLON AND CHEMICAL USAGE REPORT

MONTH --- July      YEAR - 2019

Influent ----- 74.667-- Million Gallon's

Effluent ----- 75.106-- Million Gallon's

Chemical costs for B-Y Water:

Chlorine usage ----- 0 lbs. @ \$1.45 per lb. = \$0.00

Ammonia usage ----- 0 lbs. @ \$2.17 per lb. = \$0.00

Poly -phosphate----- 800 lbs. @ \$1.75 per lb. = \$1,400.00

Total = \$1,400.00

Cost per Unit (750 gallon) = \$0.014

Cost per 1,000 gallons of water = \$0.019

# CITY OF MITCHELL

## MONTHLY WATER TREATMENT CHEMICAL COMSUMPTION REPORT MONTH / YEAR July, 2019 ----- Jon Vermeulen – Utilities Superintendent

Coagulant Aid- (2187)	= <u>0-Gals.</u>	X	CONTRACT	= <u>\$0.00</u>
Lime	= <u>0# or 0- TON'S</u>	X	<u>\$192.39/TON</u>	= <u>\$0.00</u>
Sodium Chlorite	= <u>0-GAL.</u>	X	CONTRACT	= <u>\$0.00</u>
Fluoride	= <u>0-GAL.</u>	X	<u>\$1.99/GAL.</u>	= <u>\$0.00</u>
Polymer (2386)	= <u>0-GAL.</u>	X	CONTRACT	= <u>\$0.00</u>
Activated Carbon	= <u>0# or 0- TON'S</u>	X	<u>\$1,936.25/TON</u>	= <u>\$0.00</u>
Chlorine	= <u>3# or 0.00- TON'S</u>	X	<u>\$1.45/LB.</u>	= <u>\$4.35</u>
Poly Phosphate	= <u>800# or .375 TON</u>	X	<u>\$1.75/LB.</u>	= <u>\$1,400.00</u>
Carbon Dioxide	= <u>0# or 0- TON'S</u>	X	<u>\$178.00/TON</u>	= <u>\$0.00</u>
Ammonia	= <u>0# or .000- TON'S</u>	X	<u>\$2.17 /LB.</u>	= <u>\$0.00</u>
Pristine Contract	= <u>0 –MG of WATER</u>	X	<u>.255/1000 GALS. RAW WATER</u>	= <u>\$0.00</u>

TOTAL = \$1,404.35

Raw Water Treated (LAKE) 0 MG-----or 0 MGD-----or----- PEAK DAY 0 MG

Finished Water (EFFLUENT) 75.106 MG-----or 2.423 MGD-----or----- PEAK DAY 3.236 MG

B-Y- Water (INFLUENT) 74.667 MG----- or 2.409 MGD-----or----- PEAK DAY 3.222 MG

B-Y & RAW WATER TREATED -- TOTAL= 725.106 MG --- or 2.423 MGD ----or ----- PEAK DAY 3.326 MG

Chemical cost = 1404.35 = \$18.69 per MG or 0.014 cents per Unit (750 GALLONS).

### CHEMICAL FEED RATES IN Mg/L

Coagulant Aid- (2187)	= <u>0</u> Mg/L --	--	Gallons / Raw Water
Lime	= <u>0</u> Mg/L	--	<u>0</u> lbs. / 7 lbs. Per Gallon/ Raw Water
Sodium Chlorite	= <u>0</u> Mg/L --	--	<u>0</u> Gallons / Raw Water
Fluoride	= <u>0</u> Mg/L --	--	<u>0</u> Gallons / Raw Water
Polymer (2386)	= <u>0</u> Mg/L --	--	<u>0</u> Gallons / Raw Water
Activated Carbon	= <u>0</u> Mg/L --	--	<u>0</u> lbs. / 4 lbs. per Gallon / Raw Water
Chlorine	= <u>0</u> Mg/L --	--	<u>0</u> lbs. / 11.75 lbs. per Gallon / Raw Water
Poly Phosphate	= <u>1.69</u> Mg/L--	--	<u>800</u> lbs. / 10.5 lbs. per Gallon / Raw Water
Carbon Dioxide	= <u>0</u> Mg/L --	--	<u>0</u> lbs. / 8.50 lbs. per Gallon / Raw Water
Ammonia	= <u>0</u> Mg/L --	--	<u>0</u> lbs. / 5.15 lbs. per Gallon / Raw Water
Polymer	= <u>0</u> Mg/L --	--	<u>0</u>

# CITY OF MITCHELL

## Monthly - Chemical Inventory at the Water Treatment Plant

Date: 8/1/19

Coagulant – (AF-1102) 903 Gallons

Lime 159,104 lbs. or 79.552 Ton's

Fluoride 814 Gallon's

Sodium Chlorite – (PHI-3125) 80 Gallon's

Polymer-(PHI-2386) 5 Gallon's  
(AF-84500) 225 Gallon's

Activated Carbon 6,650 lbs. or 3.325 Ton's

Chlorine 313 lbs. or 0.157 Ton

Poly-phosphate 2450 lbs. or 1.225 Ton's

Carbon Dioxide 0 Lbs. or 0 Ton's

Ammonia 680 lbs. or 0.34 Ton's