

## 2021 - WATER CONSUMPTION

DATE	Lake Mitchell Influent MG	B-Y Rural Water Influent MG	Effluent to Water Towers MG
12/1/2021	0-MG	1.106	0.974
12/2/2021	0-MG	1.145	1.016
12/3/2021	0-MG	1.883	1.735
12/4/2021	0-MG	1.128	0.998
12/5/2021	0-MG	1.141	1.046
12/6/2021	0-MG	1.168	1.038
12/7/2021	0-MG	1.683	1.762
12/8/2021	0-MG	1.101	0.973
12/9/2021	0-MG	1.138	1.001
12/10/2021	0-MG	1.635	1.703
12/11/2021	0-MG	1.077	0.957
12/12/2021	0-MG	1.118	1.008
12/13/2021	0-MG	1.134	1.008
12/14/2021	0-MG	1.664	1.731
12/15/2021	0-MG	1.391	1.432
12/16/2021	0-MG	1.256	1.316
12/17/2021	0-MG	1.105	1.042
12/18/2021	0-MG	1.103	1.071
12/19/2021	0-MG	1.130	1.078
12/20/2021	0-MG	1.682	1.828
12/21/2021	0-MG	1.092	0.997
12/22/2021	0-MG	1.055	1.173
12/23/2021	0-MG	1.179	1.067
12/24/2021	0-MG	1.614	1.651
12/25/2021	0-MG	0.996	0.879
12/26/2021	0-MG	1.097	0.993
12/27/2021	0-MG	1.228	1.131
12/28/2021	0-MG	1.142	1.030
12/29/2021	0-MG	1.667	1.724
12/30/2021	0-MG	1.117	0.987
12/31/2021	0-MG	1.111	0.989
<b>TOTALS</b>	<b>0-MG</b>	<b>39.086</b>	<b>37.338</b>

<u>Date</u>	<u>Source</u>	<u>Site</u>	<u>Chlorine PPM</u> 0.5PPM-4.00PPM	<u>Bacteria</u>	<u>Fluoride Mg/L</u>
12/6/2021	Mitchell Treatment Plant	#1	2.75	Absent	
12/6/2021	Queen of Peace	#3	2.83	Absent	
12/6/2021	East Cenex Store	#4	2.46	Absent	
12/6/2021	Dakota Medical Special	#6	2.67	Absent	
12/6/2021	Arnies	#8	2.83	Absent	
12/6/2021	Culvers	#10	2.55	Absent	
12/6/2021	Moose Lodge	#11	2.83	Present	
12/6/2021	City Park Department	#13	2.85	Absent	
12/13/2021	Fire Department	#2	2.49	Absent	
12/13/2021	J Mart Sinclair	#5	2.67	Absent	
12/13/2021	Erickson Oil	#7	2.67	Absent	
12/13/2021	Wesley Acres	#9	2.42	Absent	
12/13/2021	City Library	#12	2.44	Absent	
12/13/2021	Ampride	#14	2.67	Absent	
12/13/2021	City Hall	#15	2.52	Absent	
<b>Average</b>			<b>2.64</b>	<b>Absent</b>	

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

MONTH --- December      YEAR - 2021

Influent ----- 39.086-- Million Gallon's

Effluent ----- 37.338-- Million Gallon's

Chemical costs for B-Y Water:

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

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

Poly -phosphate----- 800 lbs. @ \$1.75 per lb. = \$1400.00

Total = \$1400.00

Cost per Unit (750 gallon) = \$0.028

Cost per 1,000 gallons of water = \$0.037

# CITY OF MITCHELL

## MONTHLY WATER TREATMENT CHEMICAL CONSUMPTION REPORT MONTH / YEAR—December, 2021----- 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	\$192.39/TON	= <u>\$0.00</u>
Sodium Chlorite	= <u>0-GAL.</u>	X	CONTRACT	= <u>\$0.00</u>
Fluoride	= <u>0-GAL.</u>	X	\$1.99/GAL.	= <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	\$1,936.25/TON	= <u>\$0.00</u>
Chlorine	= <u>0# or 0- TON'S</u>	X	\$1.45/LB.	= <u>\$0.00</u>
Poly Phosphate	= <u>800# or .375 TON</u>	X	\$1.75/LB.	= <u>\$1,400.00</u>
Carbon Dioxide	= <u>0# or 0 - TON'S</u>	X	\$178.00/TON	= <u>\$0.00</u>
Ammonia	= <u>0# or 0- TON'S</u>	X	\$2.17 /LB.	= <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 = \$1,400.00

Raw Water Treated (LAKE) 0 MG-----or 0 MGD-----or----- PEAK DAY 0 MG  
 Finished Water (EFFLUENT) 37.338 MG----or 1.204 MGD-----or----- PEAK DAY 1.883 MG  
 B-Y- Water (INFLUENT) 39.086 MG----- or 1.260 MGD-----or----- PEAK DAY 1.828 MG  
 B-Y & RAW WATER TREATED – TOTAL= 39.086 MG --- or 1.260 MGD ----or ----- PEAK DAY 1.828 MG

Chemical cost = 1,400.00 = \$37.49 per MG or 0.028 cents per Unit (750 GALLONS).

### CHEMICAL FEED RATES IN Mg/L

Coagulant Aid- (2187)	= <u>0</u> Mg/L --	0	Gallons / Raw Water
Lime	= <u>0</u> Mg/L	0	lbs. / 7 lbs. Per Gallon/ Raw Water
Sodium Chlorite	= <u>0</u> Mg/L --	0	Gallons / Raw Water
Fluoride	= <u>0</u> Mg/L --	0	Gallons / Raw Water
Polymer (2386)	= <u>0</u> Mg/L --	0	Gallons / Raw Water
Activated Carbon	= <u>0</u> Mg/L --	0	lbs. / 4 lbs. per Gallon / Raw Water
Chlorine	= <u>0</u> Mg/L --	0	lbs. / 11.75 lbs. per Gallon / Raw Water
Poly Phosphate	= <u>1.78</u> Mg/L--	800	lbs. / 10.5 lbs. per Gallon / Raw Water
Carbon Dioxide	= <u>0</u> Mg/L --	0	lbs. / 8.50 lbs. per Gallon / Raw Water
Ammonia	= <u>0</u> Mg/L --	0	lbs. / 5.15 lbs. per Gallon / Raw Water
Polymer	= <u>0</u> Mg/L --	0	

# CITY OF MITCHELL

## Monthly - Chemical Inventory at the Water Treatment Plant

Date: 1/1/22

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 861 lbs. or 0.431 Ton

Poly-phosphate 7200 lbs. or 3.6 Ton's

Carbon Dioxide 0 Lbs. or 0 Ton's

Ammonia 565.5 lbs. or 0.283 Ton's

# CITY OF MITCHELL

## MONTHLY GALLON & CHEMICAL REPORT

E-mail address-(jvermeulen@cityofmitchell.org)

Water Dept. ----- 605-995-8449

Fax: 605-995-8410

December, 2021 Water Production

TO: Aqua-Pure

Lake Mitchell

GALLONS TREATED (Raw Water) ----- 0- MG

Contract Cost per 1,000 Gallons-----\$0.022

Subtotal, Lake Mitchell-----\$0.00

Poly-Phosphate Usage

Poly-phosphate (PO4) usage= 800 lbs. @ \$1.75 per lb. = --\$1400.00

Generator Lease-----\$250.00

Total-----\$1650.00

REPORTED BY: -----Jon Vermeulen

REPORT RETURNED ON-----11/1/22

# City of Mitchell Water Rate Charged

1/3/2022

	Base Rate (1,000 Gallons)	Added Rate (1,000 Gallons)	Combined Rate (1,000 Gallons)
Use below 2.65 MGD =	\$1.23	\$0.00	\$1.23
Use between 2.65 MGD to 2.90 MGD =	\$1.23	\$1.00	\$2.23
Use between 2.90 MGD to 3.15 MGD =	\$1.23	\$1.50	\$2.73
All use over 3.15 MGD =	\$1.23	\$2.00	\$3.23

Month: 12 Year: 2022 Billing Month: 1

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	1,057,000	0	1,057,000	\$1,300.11	0	\$0.00	0	\$0.00	0	\$0.00	\$1,300.11
2	1,099,000	0	1,099,000	\$1,351.77	0	\$0.00	0	\$0.00	0	\$0.00	\$1,351.77
3	1,648,000	0	1,648,000	\$2,027.04	0	\$0.00	0	\$0.00	0	\$0.00	\$2,027.04
4	1,080,000	0	1,080,000	\$1,328.40	0	\$0.00	0	\$0.00	0	\$0.00	\$1,328.40
5	1,095,000	0	1,095,000	\$1,346.85	0	\$0.00	0	\$0.00	0	\$0.00	\$1,346.85
6	1,121,000	0	1,121,000	\$1,378.83	0	\$0.00	0	\$0.00	0	\$0.00	\$1,378.83
7	1,649,000	0	1,649,000	\$2,028.27	0	\$0.00	0	\$0.00	0	\$0.00	\$2,028.27
8	1,054,000	0	1,054,000	\$1,296.42	0	\$0.00	0	\$0.00	0	\$0.00	\$1,296.42
9	1,091,000	0	1,091,000	\$1,341.93	0	\$0.00	0	\$0.00	0	\$0.00	\$1,341.93
10	1,594,000	0	1,594,000	\$1,960.62	0	\$0.00	0	\$0.00	0	\$0.00	\$1,960.62
11	1,033,000	0	1,033,000	\$1,270.59	0	\$0.00	0	\$0.00	0	\$0.00	\$1,270.59
12	1,071,000	0	1,071,000	\$1,317.33	0	\$0.00	0	\$0.00	0	\$0.00	\$1,317.33
13	1,085,000	0	1,085,000	\$1,334.55	0	\$0.00	0	\$0.00	0	\$0.00	\$1,334.55
14	1,629,000	0	1,629,000	\$2,003.67	0	\$0.00	0	\$0.00	0	\$0.00	\$2,003.67
15	1,350,000	0	1,350,000	\$1,660.50	0	\$0.00	0	\$0.00	0	\$0.00	\$1,660.50
16	1,119,000	0	1,119,000	\$1,376.37	0	\$0.00	0	\$0.00	0	\$0.00	\$1,376.37
17	1,150,000	0	1,150,000	\$1,414.50	0	\$0.00	0	\$0.00	0	\$0.00	\$1,414.50
18	1,052,000	0	1,052,000	\$1,293.96	0	\$0.00	0	\$0.00	0	\$0.00	\$1,293.96
19	1,083,000	0	1,083,000	\$1,332.09	0	\$0.00	0	\$0.00	0	\$0.00	\$1,332.09
20	1,583,000	0	1,583,000	\$1,947.09	0	\$0.00	0	\$0.00	0	\$0.00	\$1,947.09
21	1,105,000	0	1,105,000	\$1,359.15	0	\$0.00	0	\$0.00	0	\$0.00	\$1,359.15
22	1,126,000	0	1,126,000	\$1,384.98	0	\$0.00	0	\$0.00	0	\$0.00	\$1,384.98
23	1,132,000	0	1,132,000	\$1,392.36	0	\$0.00	0	\$0.00	0	\$0.00	\$1,392.36
24	1,576,000	0	1,576,000	\$1,938.48	0	\$0.00	0	\$0.00	0	\$0.00	\$1,938.48
25	944,000	0	944,000	\$1,161.12	0	\$0.00	0	\$0.00	0	\$0.00	\$1,161.12
26	1,047,000	0	1,047,000	\$1,287.81	0	\$0.00	0	\$0.00	0	\$0.00	\$1,287.81
27	1,181,000	0	1,181,000	\$1,452.63	0	\$0.00	0	\$0.00	0	\$0.00	\$1,452.63
28	1,093,000	0	1,093,000	\$1,344.39	0	\$0.00	0	\$0.00	0	\$0.00	\$1,344.39
29	1,631,000	0	1,631,000	\$2,006.13	0	\$0.00	0	\$0.00	0	\$0.00	\$2,006.13
30	1,067,000	0	1,067,000	\$1,312.41	0	\$0.00	0	\$0.00	0	\$0.00	\$1,312.41
31	1,061,000	0	1,061,000	\$1,305.03	0	\$0.00	0	\$0.00	0	\$0.00	\$1,305.03
<b>TOTALS</b>	<b>37606000</b>	<b>0</b>	<b>37,606,000</b>	<b>\$46,255.38</b>	<b>0</b>	<b>\$0.00</b>	<b>0</b>	<b>\$0.00</b>	<b>0</b>	<b>\$0.00</b>	<b>\$46,255.38</b>

	Total Cost	Gallons Used	Base Cost	Cost Over 2.65MGD
Previous Month Read =	12,645,746,000			
Current Month Read =	12,683,352,000			
Current Month Use =	37,606,000			
	Days billed in December = \$46,255.38	37,606,000	\$46,255.38	\$0.00
	Days carried from previous month = \$0.00	0	\$0.00	\$0.00
	<b>Total bill for December = \$46,255.38</b>	<b>37,606,000</b>	<b>\$46,255.38</b>	<b>\$0.00</b>

Days that will be billed in January = \$0.00

Note: January billing meter was read on January 3rd therefore no December days will be included in February billing.