

## 2020 - WATER CONSUMPTION

DATE	Lake Mitchell Influent MG	B-Y Rural Water Influent MG	Effluent to Water Towers MG
12/1/2020	0-MG	1.273	1.321
12/2/2020	0-MG	1.549	1.365
12/3/2020	0-MG	1.202	1.252
12/4/2020	0-MG	1.594	1.398
12/5/2020	0-MG	1.139	1.016
12/6/2020	0-MG	1.652	1.666
12/7/2020	0-MG	1.113	1.052
12/8/2020	0-MG	1.627	1.620
12/9/2020	0-MG	1.211	1.366
12/10/2020	0-MG	1.704	1.635
12/11/2020	0-MG	1.157	1.320
12/12/2020	0-MG	1.612	1.561
12/13/2020	0-MG	1.131	1.066
12/14/2020	0-MG	1.695	1.900
12/15/2020	0-MG	1.088	0.91
12/16/2020	0-MG	1.603	1.608
12/17/2020	0-MG	1.348	1.247
12/18/2020	0-MG	1.179	1.019
12/19/2020	0-MG	1.62	1.652
12/20/2020	0-MG	1.127	0.996
12/21/2020	0-MG	1.697	1.722
12/22/2020	0-MG	1.307	1.136
12/23/2020	0-MG	1.229	1.265
12/24/2020	0-MG	1.495	1.329
12/25/2020	0-MG	1.031	0.910
12/26/2020	0-MG	1.602	1.637
12/27/2020	0-MG	1.051	0.923
12/28/2020	0-MG	1.326	1.422
12/29/2020	0-MG	1.453	1.600
12/30/2020	0-MG	1.326	1.422
12/30/2020	0-MG	1.081	1.110
<b>TOTALS</b>	<b>0-MG</b>	<b>42.222</b>	<b>41.446</b>

<u>Date</u>	<u>Source</u>	<u>Site</u>	<u>Chlorine PPM</u> 0.5PPM-4.00PPM	<u>Bacteria</u>
12/1/2020	Water Treatment Plant	#1	2.86	Absent
12/1/2020	Fire Dept	#2	2.44	Absent
12/1/2020	Queen of Peace	#3	2.67	Absent
12/1/2020	East Cenex Stores	#4	2.58	Absent
12/1/2020	J Mart Sinclair	#5	2.77	Absent
12/1/2020	Dakotat Medical Spec	#6	2.83	Absent
12/1/2020	Erickson Oil	#7	2.41	Absent
12/7/2020	Arnies	#8	2.80	Absent
12/7/2020	Wesley Acres	#9	2.26	Absent
12/7/2020	Culvers	#10	2.29	Absent
12/7/2020	Moose Lodge	#11	2.83	Absent
12/7/2020	City Library	#12	2.60	Absent
12/7/2020	City Park Dept	#13	2.88	Absent
12/7/2020	Ampride	#14	2.57	Absent
12/7/2020	City Hall	#15	2.47	Absent
<b>Average</b>			<b>2.63</b>	<b>Absent</b>

# CITY OF MITCHELL

## Monthly - Chemical Inventory at the Water Treatment Plant

Date: 1/1/21

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 131 lbs. or 0.0655 Ton

Poly-phosphate 8,745 lbs. or 4.37 Ton's

Carbon Dioxide 0 Lbs. or 0 Ton's

Ammonia 572.5 lbs. or 0.2825 Ton's

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

MONTH --- December      YEAR - 2020

Influent ----- 42.222-- Million Gallon's

Effluent ----- 41.446 -- 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----- 805 lbs. @ \$1.75 per lb. = \$1408.75

Total = \$1408.75

Cost per Unit (750 gallon) = \$0.025

Cost per 1,000 gallons of water = \$0.034

# CITY OF MITCHELL

## MONTHLY WATER TREATMENT CHEMICAL COMSUMPTION REPORT MONTH / YEAR—December, 2020----- 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>5# or 0.013- TON'S</u>	X	\$1.45/LB.	= <u>\$7.25</u>
Poly Phosphate	= <u>805# or .40 TON</u>	X	\$1.75/LB.	= <u>\$1,408.75</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	.255/1000 GALS. RAW WATER	= <u>\$0.00</u>

TOTAL = \$1,408.75

Raw Water Treated (LAKE) 0 MG-----or 0 MGD-----or----- PEAK DAY 0 MG  
 Finished Water (EFFLUENT) 41.446 MG-----or 1.336 MGD-----or----- PEAK DAY 1.900 MG  
 B-Y- Water (INFLUENT) 42.222 MG----- or 1.362 MGD-----or----- PEAK DAY 1.704 MG  
 B-Y & RAW WATER TREATED – TOTAL= 42.222 MG --- or 1.362 MGD ----or ----- PEAK DAY 1.704 MG

Chemical cost = 1,408.75 = \$29.42 per MG or 0.025 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	<u>0</u> 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>1.35</u> Mg/L--	<u>805</u> 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 Water Rate Charged

1/5/2021

	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: 2021 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	1,124,000	0	1,124,000	\$1,382.52	0	\$0.00	0	\$0.00	0	\$0.00	\$1,382.52
2	1,617,000	0	1,617,000	\$1,988.91	0	\$0.00	0	\$0.00	0	\$0.00	\$1,988.91
3	1,079,000	0	1,079,000	\$1,327.17	0	\$0.00	0	\$0.00	0	\$0.00	\$1,327.17
4	1,634,000	0	1,634,000	\$2,009.82	0	\$0.00	0	\$0.00	0	\$0.00	\$2,009.82
5	1,097,000	0	1,097,000	\$1,349.31	0	\$0.00	0	\$0.00	0	\$0.00	\$1,349.31
6	1,615,000	0	1,615,000	\$1,986.45	0	\$0.00	0	\$0.00	0	\$0.00	\$1,986.45
7	1,072,000	0	1,072,000	\$1,318.56	0	\$0.00	0	\$0.00	0	\$0.00	\$1,318.56
8	1,589,000	0	1,589,000	\$1,954.47	0	\$0.00	0	\$0.00	0	\$0.00	\$1,954.47
9	1,111,000	0	1,111,000	\$1,366.53	0	\$0.00	0	\$0.00	0	\$0.00	\$1,366.53
10	1,724,000	0	1,724,000	\$2,120.52	0	\$0.00	0	\$0.00	0	\$0.00	\$2,120.52
11	1,092,000	0	1,092,000	\$1,343.16	0	\$0.00	0	\$0.00	0	\$0.00	\$1,343.16
12	1,595,000	0	1,595,000	\$1,961.85	0	\$0.00	0	\$0.00	0	\$0.00	\$1,961.85
13	1,081,000	0	1,081,000	\$1,329.63	0	\$0.00	0	\$0.00	0	\$0.00	\$1,329.63
14	1,655,000	0	1,655,000	\$2,035.65	0	\$0.00	0	\$0.00	0	\$0.00	\$2,035.65
15	1,046,000	0	1,046,000	\$1,286.58	0	\$0.00	0	\$0.00	0	\$0.00	\$1,286.58
16	1,566,000	0	1,566,000	\$1,926.18	0	\$0.00	0	\$0.00	0	\$0.00	\$1,926.18
17	1,306,000	0	1,306,000	\$1,606.38	0	\$0.00	0	\$0.00	0	\$0.00	\$1,606.38
18	1,131,000	0	1,131,000	\$1,391.13	0	\$0.00	0	\$0.00	0	\$0.00	\$1,391.13
19	1,585,000	0	1,585,000	\$1,949.55	0	\$0.00	0	\$0.00	0	\$0.00	\$1,949.55
20	1,077,000	0	1,077,000	\$1,324.71	0	\$0.00	0	\$0.00	0	\$0.00	\$1,324.71
21	1,502,000	0	1,502,000	\$1,847.46	0	\$0.00	0	\$0.00	0	\$0.00	\$1,847.46
22	1,420,000	0	1,420,000	\$1,746.60	0	\$0.00	0	\$0.00	0	\$0.00	\$1,746.60
23	1,024,000	0	1,024,000	\$1,259.52	0	\$0.00	0	\$0.00	0	\$0.00	\$1,259.52
24	1,610,000	0	1,610,000	\$1,980.30	0	\$0.00	0	\$0.00	0	\$0.00	\$1,980.30
25	980,000	0	980,000	\$1,205.40	0	\$0.00	0	\$0.00	0	\$0.00	\$1,205.40
26	1,564,000	0	1,564,000	\$1,923.72	0	\$0.00	0	\$0.00	0	\$0.00	\$1,923.72
27	1,002,000	0	1,002,000	\$1,232.46	0	\$0.00	0	\$0.00	0	\$0.00	\$1,232.46
28	1,125,000	0	1,125,000	\$1,383.75	0	\$0.00	0	\$0.00	0	\$0.00	\$1,383.75
29	1,397,000	0	1,397,000	\$1,718.31	0	\$0.00	0	\$0.00	0	\$0.00	\$1,718.31
30	1,416,000	0	1,416,000	\$1,741.68	0	\$0.00	0	\$0.00	0	\$0.00	\$1,741.68
31	1,032,000	0	1,032,000	\$1,269.36	0	\$0.00	0	\$0.00	0	\$0.00	\$1,269.36
<b>TOTALS</b>	<b>40,868,000</b>	<b>0</b>	<b>40,868,000</b>	<b>\$50,267.64</b>	<b>0</b>	<b>\$0.00</b>	<b>0</b>	<b>\$0.00</b>	<b>0</b>	<b>\$0.00</b>	<b>\$50,267.64</b>

Previous Month Read = 11,926,229,000  
 Current Month Read = 11,967,097,000  
 Current Month Use = 40,868,000

	Total Cost	Gallons Used	Base Cost	Cost Over 2.65MGD
Days billed in December =	\$50,267.64	40,868,000	\$50,267.64	\$0.00
Days carried from previous month =	\$0.00	0	\$0.00	\$0.00
<b>Total bill for December =</b>	<b>\$50,267.64</b>	<b>40,868,000</b>	<b>\$50,267.64</b>	<b>\$0.00</b>

Days that will be billed in January = \$0.00

Note: January billing meter was read on January 5th therefore no December days will be included in February billing.