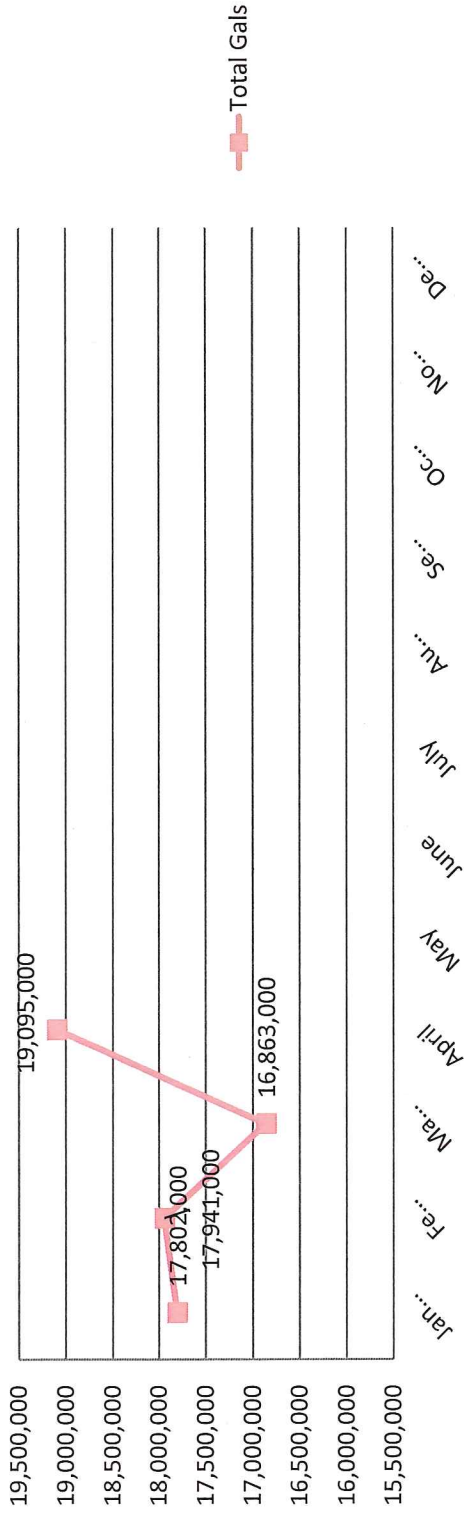
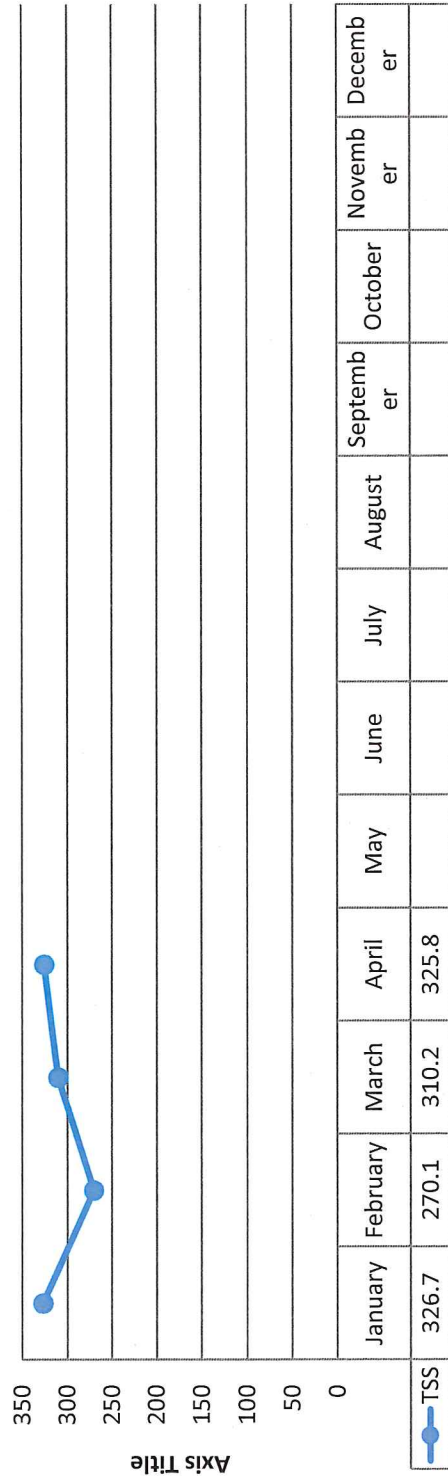


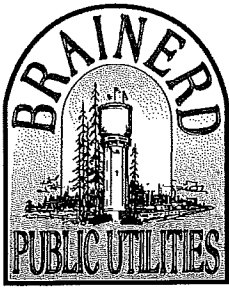


## Total Gals



## TSS





# BRAINERD PUBLIC UTILITIES

8027 Highland Scenic Rd • P.O. Box 373 • Brainerd, Minnesota 56401

Business Office: 218.829.8726 ■ Repair Service: 218.829.2193

www.bpu.org

## BRAINERD PUBLIC UTILITIES WASTEWATER TREATMENT CHARGES FOR THE CITY OF BAXTER

for  
April 2022

### Baxter Monthly Flow and Loading Data

Number of days in billing period	31
Total flow for period (gallons)	19,095,000
Average Daily Flow (MGD)	0.616
CBOD (mg/L)	259.4
TSS (mg/L)	325.8
TP (mg/L)	7.4

### I. Base Charges

Base Capital Charge	\$0.00
Base Operating Charge	63,698.24
Subtotal for Period	<u>\$63,698.24</u>

### II. Excess Charges

Excess Capital Charge	\$0.00
Excess Operating Charges	
Excess Flow	0.00
Excess Loading	0.00
Excess Strength	0.00
Subtotal for Period	<u>\$0.00</u>

### III. Base and Excess Charge Adjustments

('True up' from previous year based on actual Operating Costs)

Operating Charges Previously Billed	\$0.00
True-up Charges for 2021	0.00
Excess Capital Charge Adjustment	0.00
Excess Operating Charge Adjustments	
Excess Flow Adjustment	0.00
Excess Loading Adjustment	0.00
Excess Strength Adjustment	0.00
Subtotal for Period	<u>\$0.00</u>
<b>Total for Period</b>	<u><b>\$63,698.24</b></u>

## Monthly Input Data

for  
April 2022

Current Month	April
Year	2022
Number of days in billing period	31

### Flow

	Brainerd	Baxter	Total
Total flow for period (gallons)	50,027,000	19,095,000	69,122,000
Average Daily Flow (MGD)	1.614	0.616	2.230

### Loading

Measurement Number	Brainerd				Baxter			
	CBOD (mg/L)	TSS (mg/L)	TP (mg/L)	TM (ng/L)	CBOD (mg/L)	TSS (mg/L)	TP (mg/L)	TM (ng/L)
1	233	237	6.35	0	284	280	9.00	0
2	181	338	5.25		268	370	8.80	
3	145	255	5.20		373	495	6.55	
4	143	198	1.60		242	296	5.20	
5	154	198			242	327		
6	91	172			299	304		
7	119	183			195	288		
8	128	221			197	250		
9	109	178			230	222		
10	117	158			168	154		
11	126	196			285	337		
12		193			330	586		
13								
14								
15								
16								
17								
18								
19								
20								
Average Daily Loadings (conc.)	141	211	4.6	-	269	326	7.4	-
Average Daily Loadings (lbs/d)	1,893	2,836	62	-	1,334	1,675	38	-
Average Daily Loadings (mg/d)	-	-	-	-	-	-	-	-

### Most Recent Twelve Months Input Data

#### Brainerd Most Recent Twelve Months Data

	May-21	Jun-21	Jul-21	Aug-31	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	Average	mg/L
Flow (MGD)	1.417	1.187	1.152	1.129	1.096	1.107	1.150	1.144	1.176	1.167	1.124	1.614	1.205	
CBOD (lbs/d)	1,480	1,573	1,645	2,093	1,588	1,912	1,832	1,611	1,372	2,103	1,610	1,893	1,726	172
TSS (lbs/d)	2,383	2,532	2,688	3,105	2,308	2,611	2,771	2,155	2,195	2,995	2,377	2,836	2,580	256
TP (lbs/d)	71	77	73	69	65	60	64	66	61	68	68	62		

#### Baxter Most Recent Twelve Months Data

	May-21	Jun-21	Jul-21	Aug-31	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	Average	mg/L
Flow (MGD)	0.645	0.660	0.630	0.624	0.582	0.574	0.576	0.592	0.574	0.579	0.602	0.616	0.604	
CBOD (lbs/d)	1,285	1,331	1,328	1,251	1,343	1,317	1,262	1,374	1,371	1,139	1,150	1,334	1,290	256
TSS (lbs/d)	1,515	1,459	1,612	1,527	1,418	1,322	1,396	1,615	1,566	1,305	1,559	1,675	1,497	297
TP (lbs/d)	46	46	49	45	40	37	39	42	39	38	40	38		

## Base Charge Calculations

for  
April 2022

### Base Capital Charge Calculations

(Based on the estimated Phase I capital costs, actual costs will be dependent upon interest rates, construction bids, etc.)

Capital Cost: \$0

PFA Interest Rate: 3.233%  
Repayment Period (years) 20

	Weight	Brainerd Allocation		Baxter Allocation		Subtotals
	(%)	(%)	(\$)	(%)	(\$)	(\$)
Flow	30%	66.67%	\$0	33.33%	\$0	\$0
CBOD	30%	66.67%	\$0	33.33%	\$0	\$0
TSS	30%	66.67%	\$0	33.33%	\$0	\$0
TP	10%	66.67%	\$0	33.33%	\$0	\$0
		Totals	\$0		\$0	\$0

	Brainerd	Baxter
Monthly Charges	\$0.00	\$0.00

### Base Operating Charge Calculations

#### Brainerd

##### Current Month Flow and Loading Data

Average Daily Flow (MGD)	1.614
CBOD (mg/L)	140.5
TSS (mg/L)	210.6
TP (mg/L)	4.6

##### Current Month Operating Charge

	Base Unit Cost		Mass	Monthly Cost
	(\$)	Units	(lbs/day)	(\$)
Flow	\$0.796	1000 gal	NA	\$39,806
CBOD	\$0.529	lb CBOD	1,893	\$31,038
TSS	\$0.383	lb TSS	2,836	\$33,658
TP	\$5.746	lb TP	62	\$11,035
			Subtotal	\$115,537.37

#### Baxter

##### Current Month Flow and Loading Data

Average Daily Flow (MGD)	0.616
CBOD (mg/L)	259.4
TSS (mg/L)	325.8
TP (mg/L)	7.4

##### Current Month Operating Charge

	Base Unit Cost		Mass	Monthly Cost
	(\$)	Units	(lbs/day)	(\$)
Flow	\$0.796	1000 gal	NA	\$15,194
CBOD	\$0.529	lb CBOD	1,334	\$21,867
TSS	\$0.383	lb TSS	1,675	\$19,873
TP	\$5.746	lb TP	38	\$6,764
			Subtotal	\$63,698.24

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Date		BRD/BAX's Influent	BRD/BAX's Infl. Total	Baxter's Influent	Baxter's Daily Total	Brainerd's Daily Total
30-Apr	Sat					
29-Apr	Fri					
28-Apr	Thu					
27-Apr	Wed					
26-Apr	Tue	8,663,693,000	2.513	2,527,520,000	0.696	1.817
25-Apr	Mon	8,661,238,000	2.455	2,526,869,000	0.651	1.804
24-Apr	Sun	8,658,838,000	2.400	2,526,261,000	0.608	1.792
23-Apr	Sat	8,656,497,000	2.341	2,525,664,000	0.597	1.744
22-Apr	Fri	8,654,198,000	2.299	2,525,048,000	0.616	1.683
21-Apr	Thu	8,651,851,000	2.347	2,524,412,000	0.636	1.711
20-Apr	Wed	8,649,546,000	2.305	2,523,809,000	0.603	1.702
19-Apr	Tue	8,647,161,000	2.385	2,523,129,000	0.680	1.705
18-Apr	Mon	8,644,866,000	2.295	2,522,511,000	0.618	1.677
17-Apr	Sun	8,642,776,000	2.090	2,521,957,000	0.554	1.536
16-Apr	Sat	8,640,435,000	2.341	2,521,268,000	0.689	1.652
15-Apr	Fri	8,638,093,000	2.342	2,520,624,000	0.644	1.698
14-Apr	Thu	8,635,761,000	2.332	2,520,031,000	0.593	1.739
13-Apr	Wed	8,633,406,000	2.355	2,519,428,000	0.603	1.752
12-Apr	Tue	8,631,042,000	2.364	2,518,836,000	0.592	1.772
11-Apr	Mon	8,628,630,000	2.412	2,518,191,000	0.645	1.767
10-Apr	Sun	8,626,344,000	2.286	2,517,584,000	0.607	1.679
9-Apr	Sat	8,624,062,000	2.282	2,516,944,000	0.640	1.642
8-Apr	Fri	8,621,750,000	2.312	2,516,314,000	0.630	1.682
7-Apr	Thu	8,619,420,000	2.330	2,515,716,000	0.598	1.732
6-Apr	Wed	8,617,066,000	2.354	2,515,116,000	0.600	1.754
5-Apr	Tue	8,614,889,000	2.177	2,514,525,000	0.591	1.586
4-Apr	Mon	8,612,775,000	2.114	2,513,911,000	0.614	1.500
3-Apr	Sun	8,610,712,000	2.063	2,513,319,000	0.592	1.471
2-Apr	Sat	8,608,705,000	2.007	2,512,717,000	0.602	1.405
1-Apr	Fri	8,606,564,000	2.141	2,512,047,000	0.670	1.471
31-Mar	Thu	8,604,471,000	2.093	2,511,414,000	0.633	1.460
	Min		2.007		0.554	1.405
	Max		2.513		0.696	1.817
	Ave		2.294		0.622	1.664

WWTP Influent and Effluent Flows						
Date		BRD/BAX's Influent	BRD/BAX's Infl. Total	Baxter's Influent	Baxter's Daily Total	Brainerd's Daily Total
31-Mar	Thu	8,604,471,000	2.093	2,511,414,000	0.633	1.460
30-Mar	Wed	8,602,416,000	2.055	2,510,840,000	0.574	1.481
29-Mar	Tue	8,600,312,000	2.104	2,510,224,000	0.616	1.488
28-Mar	Mon	8,598,218,000	2.094	2,509,619,000	0.605	1.489
27-Mar	Sun	8,596,140,000	2.078	2,509,001,000	0.618	1.460
26-Mar	Sat	8,594,005,000	2.135	2,508,383,000	0.618	1.517
25-Mar	Fri	8,591,880,000	2.125	2,507,782,000	0.601	1.524
24-Mar	Thu	8,589,716,000	2.164	2,507,166,000	0.616	1.548
23-Mar	Wed	8,587,692,000	2.024	2,506,614,000	0.552	1.472
22-Mar	Tue	8,585,602,000	2.090	2,506,059,000	0.555	1.535
21-Mar	Mon	8,583,473,000	2.129	2,505,406,000	0.653	1.476
20-Mar	Sun	8,581,511,000	1.962	2,504,773,000	0.633	1.329
19-Mar	Sat	8,579,632,000	1.879	2,504,147,000	0.626	1.253
18-Mar	Fri	8,577,737,000	1.895	2,503,509,000	0.638	1.257
17-Mar	Thu	8,575,818,000	1.919	2,502,890,000	0.619	1.300
16-Mar	Wed	8,573,968,000	1.850	2,502,321,000	0.569	1.281
15-Mar	Tue	8,572,224,000	1.744	2,501,715,000	0.606	1.138
14-Mar	Mon	8,570,740,000	1.484	2,501,123,000	0.592	0.892
13-Mar	Sun	8,569,312,000	1.428	2,500,551,000	0.572	0.856
12-Mar	Sat	8,567,914,000	1.398	2,499,982,000	0.569	0.829
11-Mar	Fri	8,566,506,000	1.408	2,499,426,000	0.556	0.852
10-Mar	Thu	8,565,068,000	1.438	2,498,863,000	0.563	0.875
9-Mar	Wed	8,563,622,000	1.446	2,498,286,000	0.577	0.869
8-Mar	Tue	8,562,113,000	1.509	2,497,681,000	0.605	0.904
7-Mar	Mon	8,560,473,000	1.640	2,497,049,000	0.632	1.008
6-Mar	Sun	8,558,775,000	1.698	2,496,437,000	0.612	1.086
5-Mar	Sat	8,557,190,000	1.585	2,495,857,000	0.580	1.005
4-Mar	Fri	8,555,473,000	1.717	2,495,232,000	0.625	1.092
3-Mar	Thu	8,553,721,000	1.752	2,494,611,000	0.621	1.131
2-Mar	Wed	8,551,981,000	1.740	2,494,012,000	0.599	1.141
1-Mar	Tue	8,550,195,000	1.786	2,493,388,000	0.624	1.162
28-Feb	Mon	8,548,368,000	1.827	2,492,739,000	0.649	1.178
	Min		1.398		0.552	0.829
	Max		2.164		0.653	1.548
	Ave		1.818		0.602	1.216

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