

FLOW AND STRENGTH PROJECTIONS

MONTH: February 2021

	<u>PROJECTED</u>	<u>ACTUAL</u>	<u>DIFFERENCE</u>	<u>PROJECTED INCOME FOR MONTH</u>	<u>ACTUAL INCOME FOR MONTH</u>	<u>SURPLUS OR DEFICIT</u>
FLOW (GALLONS)	143,765,063	132,019,000	-11,746,063	\$ 90,284.46	\$ 82,907.93	\$ (7,376.53)
B.O.D. (#s)	376,739	432,443	55,704	\$ 71,203.67	\$ 81,731.66	\$ 10,527.99
S. SOLIDS (#s)	347,371	360,760	13,389	\$ 82,674.30	\$ 85,860.86	\$ 3,186.56
PHOSPHORUS (#s)	6,872	6,748	-124	\$ 42,970.62	\$ 42,193.68	\$ (776.94)
AMMONIA-N (#s)	47,430	48,546	1,116	\$ 58,623.48	\$ 60,002.24	\$ 1,378.76
CHLORIDES (#s)	813,738	842,312	28,574	\$ 2,441.21	\$ 2,526.94	\$ 85.72
			TOTAL:	\$ 348,197.74	\$ 355,223.31	\$ 7,025.57

(THRU FEBRUARY 2021)

PROJECTED FOR 2021

	<u>END OF YEAR PROJECTED</u>	<u>YEAR TO DATE SURPLUS/ DEFICIT</u>	<u>YEAR TO DATE SURPLUS/ DEFICIT \$\$</u>
FLOW (GALLONS)	2,053,099,003	-33,485,926	\$ (21,029.16)
B.O.D. (#s)	3,755,281	104,976	\$ 19,840.52
S. SOLIDS (#s)	3,909,560	16,250	\$ 3,867.48
PHOSPHORUS (#s)	80,410	204	\$ 1,274.05
AMMONIA-N (#s)	505,265	6,599	\$ 8,155.75
CHLORIDES (#s)	8,748,079	28,856	\$ 86.57
		TOTAL:	\$ 12,195.20

INFLUENT STRENGTH (Heart of the Valley Metropolitan Sewerage Facility)

February 2021

MONTH	FLOW		TSS			BOD			TOTAL PHOSPHORUS			AMMONIA			CHLORIDE		
	Million * Gallons	Avg MGD	Avg mg/L	Avg #/day	Total #/Month	Avg mg/L	Avg #/day	Total # Month	Avg mg/L	Avg #/day	Total # Month	Avg mg/L	Avg #/day	Total # Month	Avg mg/L	Avg #/day	Total # Month
Jan	151.4	4.9	217	8,736	270,817	300	12,085	374,624	6.05	243	7,528	49.0	1961	60,780	702	28,228	875,077
Feb	135.2	4.8	231	8,334	258,362	311	12,383	346,731	5.91	235	6,583	46.4	1641	50,873	796	28,751	891,291
Mar																	
Apr																	
May																	
Jun																	
Jul																	
Aug																	
Sep																	
Oct																	
Nov																	
Dec																	
Yearly Average	143.3	4.9	224	8,535	264,590	305	12,234	360,678	5.98	239	7,055	47.7	1,801	55,827	749	28,490	883,184
Yearly Total	286.6				529,179			721,356			14,111			111,653			1,766,368
*Includes Hauled Waste [Plant Design Capacity]		8.5		13,565			12,209			339			1,600				
[Max Design Capacity]		11.9		16,278			14,651			407			1,920				
February % of Capacity		41%		51%			85%			58%			85%				
February Max Daily Flow		6.58															

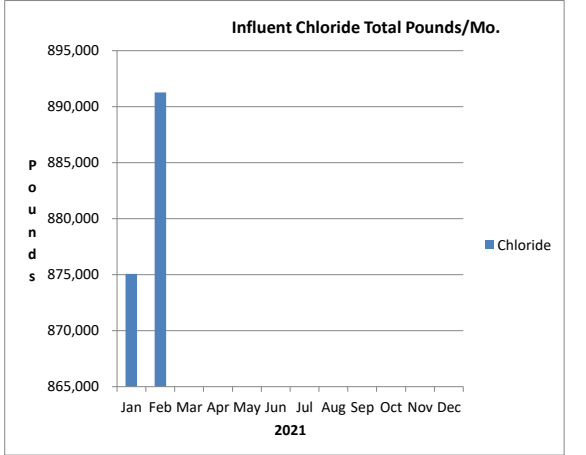
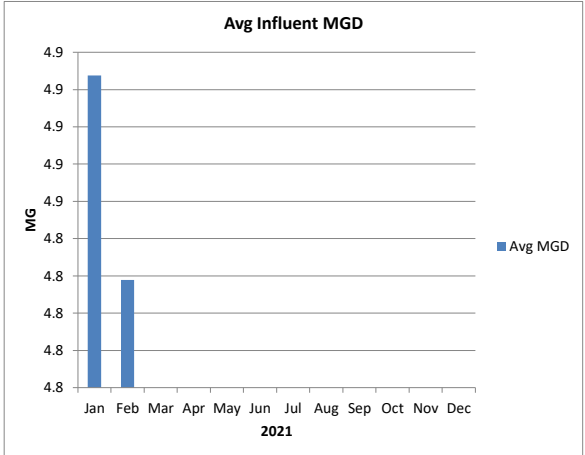
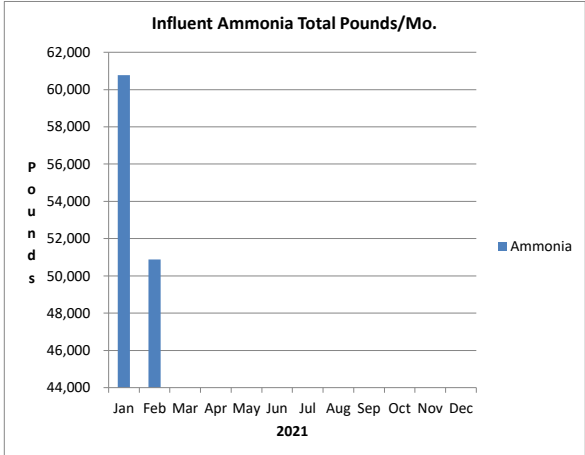
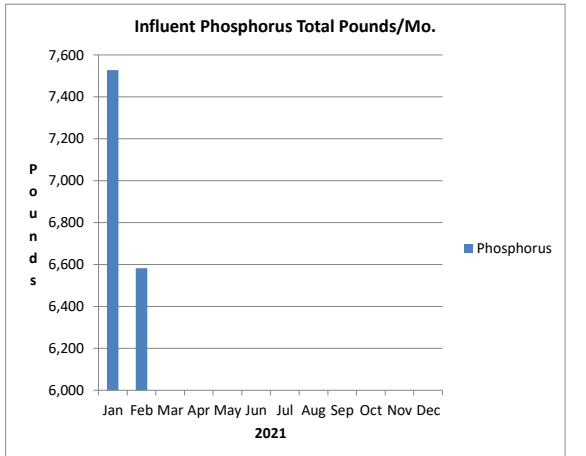
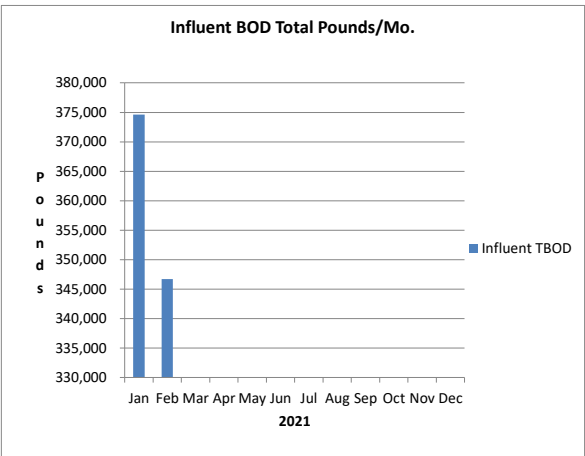
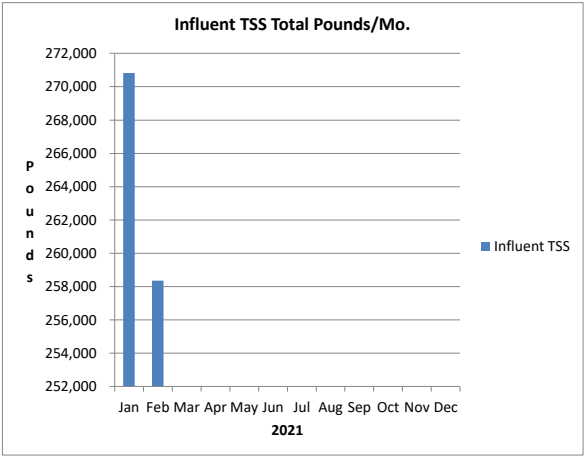
EFFLUENT QUALITY

MONTH	FLOW		TSS			BOD			TOTAL PHOSPHORUS			AMMONIA			CHLORIDE
	Million Gallons	Avg MGD	Avg mg/L	Avg #/day	Total #/Month	Avg mg/L	Avg #/day	Total # Month	Avg mg/L	Avg #/day	Total # Month	Avg mg/L	Avg #/day	Total # Month	Avg mg/L
Jan	63.8	2.1	10.9	185	5,721	9.3	160	4,957	0.31	5.2	163	0.42	7.8	241.9	707
Feb	66.3	2.4	11	206	5,759	10	196	5,499	0.31	5.9	166.55	0.42	7.68	237.99	808
Mar															
Apr															
May															
Jun															
Jul															
Aug															
Sep															
Oct															
Nov															
Dec															
Yearly Average	65.1	2.2	10.8	195	5,740	9.7	178.1	5,228	0.31	5.6		0.42	7.7	239.9	758
Yearly Total	130.1				11,480			10,456			329			479.9	
Effluent Gallons to Fox Energy (February)		68.91	51%						6 mo. Avg	6.10					
Million Gallons		68.91													
% to Fox Energy		51%													
				February	Avg #'s										
				WEEK 1	152										
				WEEK 2	224										
				WEEK 3	238										
				WEEK 4	208										

	Monthly Avg Limit
Jan- March	10 mg/L
April-May	11 mg/L
June-Sept	4.4 mg/L
Oct-Dec	18 mg/L

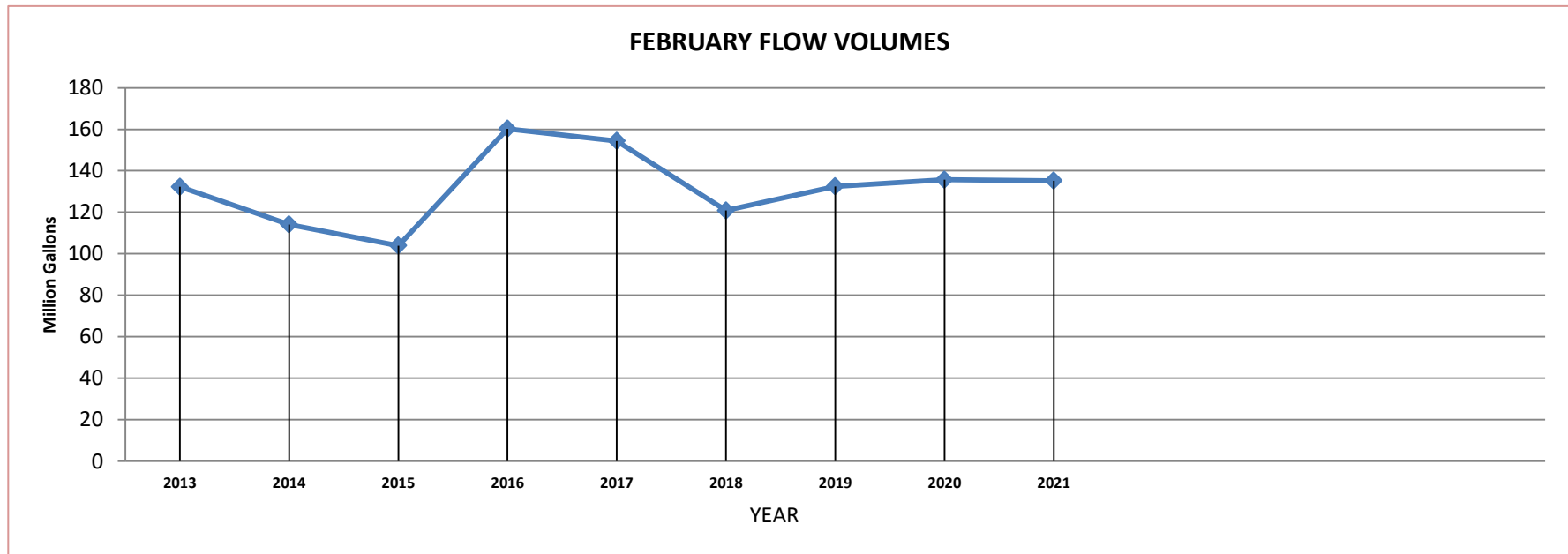
{PERMIT LIMITS (WDNR)}

Monthly (Avg)	801#	Monthly Avg	30 mg/L	Monthly Avg	31.5#
Weekly (Avg)	1345#	Weekly Avg	45 mg/L	6 mo Avg	10.5#
Daily Max (mg/L)	30	WLA May-Oct		Daily Max mg/L	1.0



HEART OF THE VALLEY METROPOLITAN SEWERAGE DISTRICT

<u>Year</u>	<u>February Flow Million Gallons</u>	<u>Precipitation Inches</u>
2013	132.251	1.22
2014	114.081	1.74
2015	103.918	0.52
2016	160.230	1.13
2017	154.391	0.00
2018	120.841	0.00
2019	132.459	2.81
2020	135.703	1.02
2021	135.210	1.29



HEART OF THE VALLEY METROPOLITAN SEWERAGE DISTRICT

% CONTRIBUTION BY COMMUNITY - FLOW GALLONS

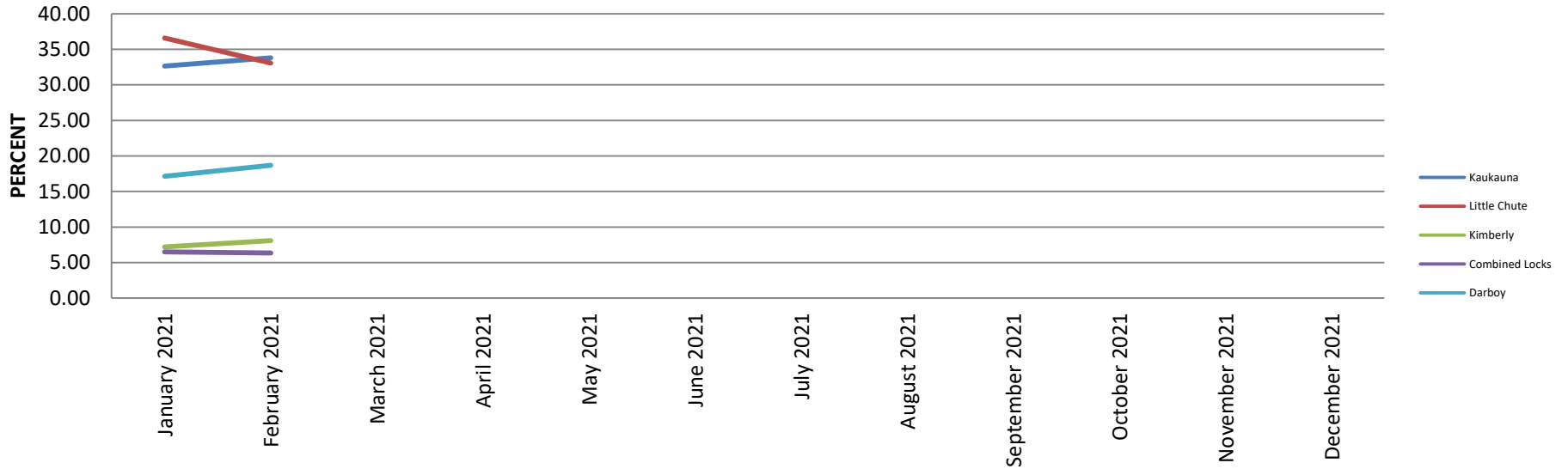
	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>	<u>Rainfall - Inches*</u>
January 2021	32.64	36.57	7.19	6.49	17.12	0.71
February 2021	33.80	33.06	8.11	6.34	18.68	1.29
March 2021						
April 2021						
May 2021						
June 2021						
July 2021						
August 2021						
September 2021						
October 2021						
November 2021						
December 2021						

* Nov-March=Rain,Melted Snow, Etc (in.)

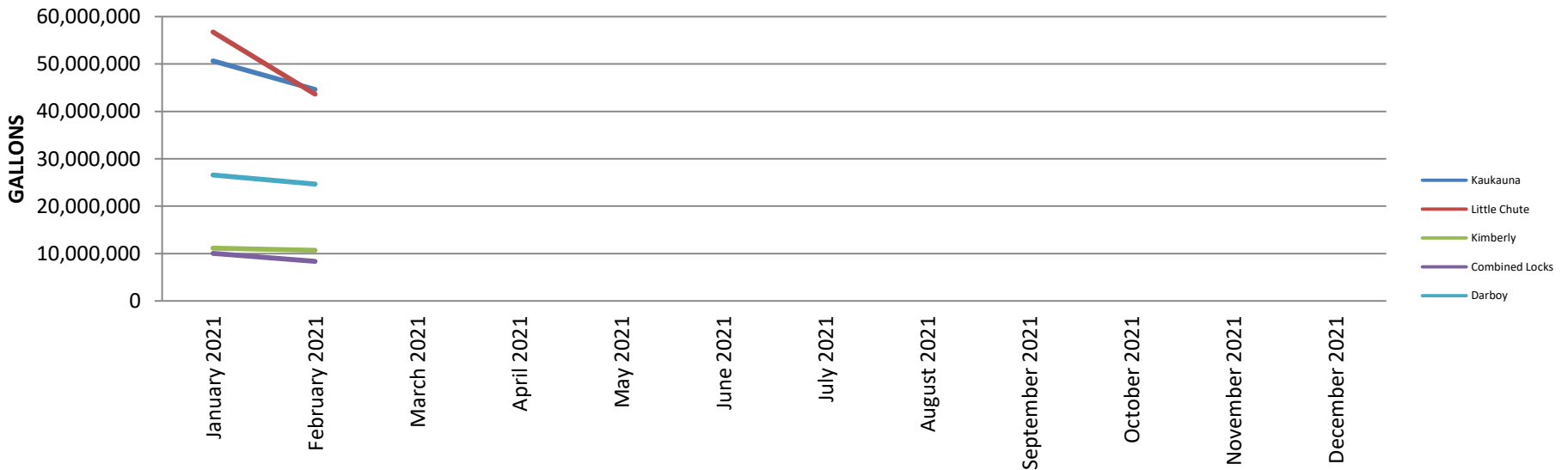
GALLONS CONTRIBUTION BY COMMUNITY - FLOW GALLONS

	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2021	50,653,000	56,758,000	11,153,000	10,069,000	26,563,000
February 2021	44,627,000	43,652,000	10,710,000	8,367,000	24,666,000
March 2021					
April 2021					
May 2021					
June 2021					
July 2021					
August 2021					
September 2021					
October 2021					
November 2021					
December 2021					

% CONTRIBUTION BY COMMUNITY - FLOW GALLONS



GALLONS CONTRIBUTION BY COMMUNITY - FLOW GALLONS



HEART OF THE VALLEY METROPOLITAN SEWERAGE DISTRICT

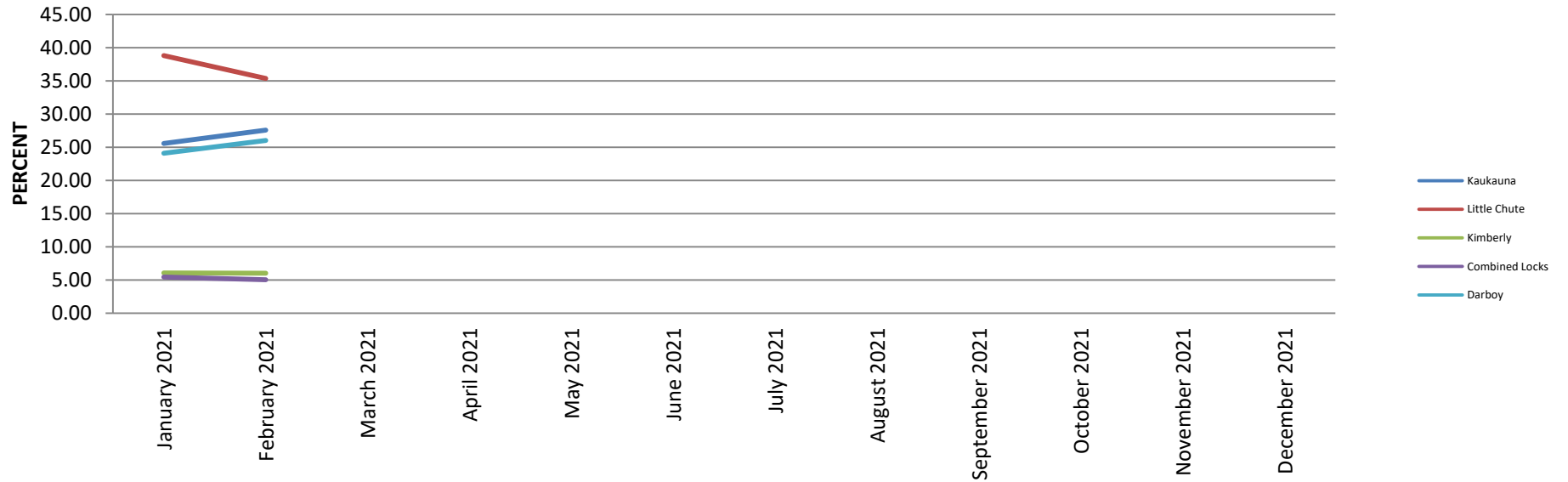
% CONTRIBUTION BY COMMUNITY - B.O.D. POUNDS

	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2021	25.57	38.82	6.06	5.46	24.09
February 2021	27.56	35.35	6.03	5.03	26.03
March 2021					
April 2021					
May 2021					
June 2021					
July 2021					
August 2021					
September 2021					
October 2021					
November 2021					
December 2021					

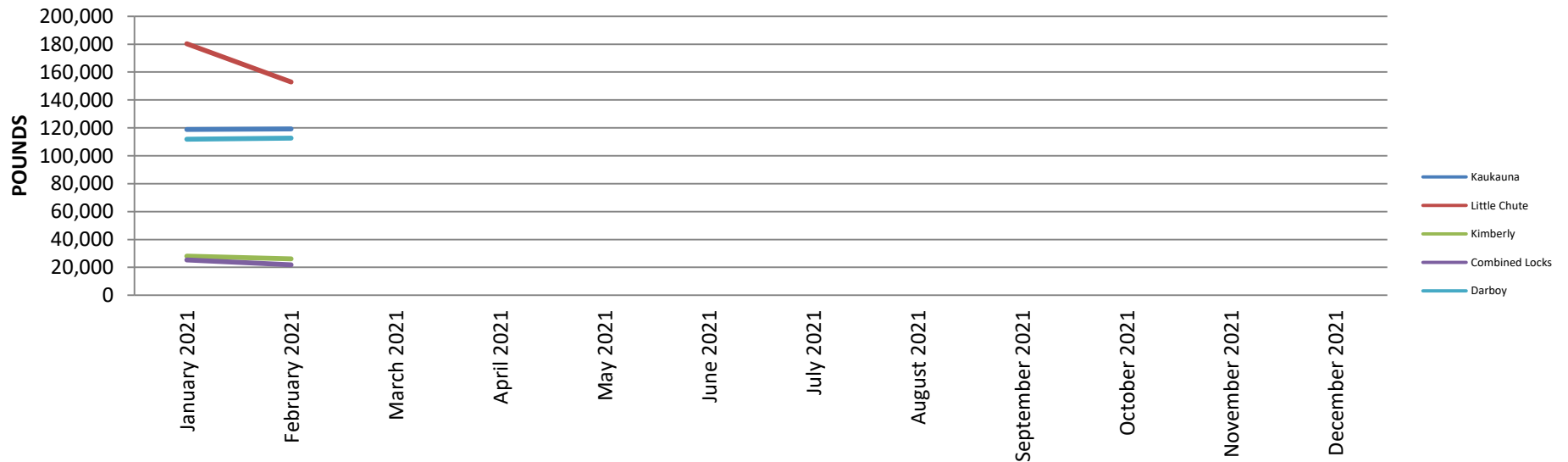
POUNDS CONTRIBUTION BY COMMUNITY - B.O.D. POUNDS

	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2021	118,779	180,309	28,143	25,348	111,869
February 2021	119,174	152,882	26,084	21,751	112,551
March 2021					
April 2021					
May 2021					
June 2021					
July 2021					
August 2021					
September 2021					
October 2021					
November 2021					
December 2021					

% CONTRIBUTION BY COMMUNITY - B.O.D. POUNDS



POUNDS CONTRIBUTION BY COMMUNITY - B.O.D. POUNDS



HEART OF THE VALLEY METROPOLITAN SEWERAGE DISTRICT

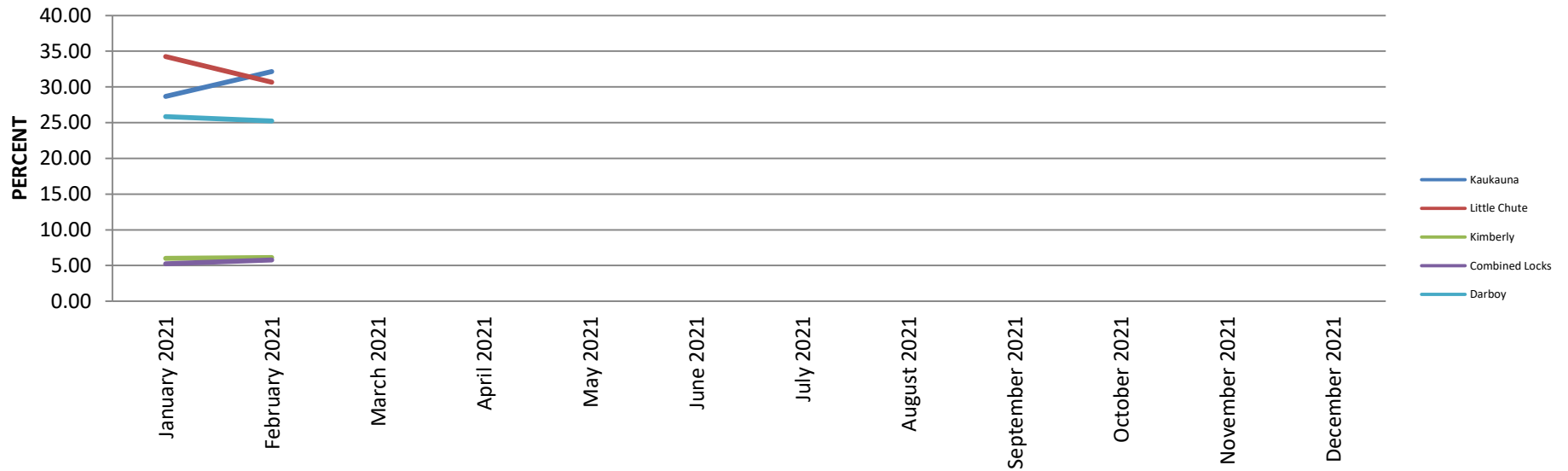
% CONTRIBUTION BY COMMUNITY -TOTAL SUSPENDED SOLIDS POUNDS

	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2021	28.68	34.25	6.00	5.23	25.84
February 2021	32.17	30.68	6.13	5.80	25.22
March 2021					
April 2021					
May 2021					
June 2021					
July 2021					
August 2021					
September 2021					
October 2021					
November 2021					
December 2021					

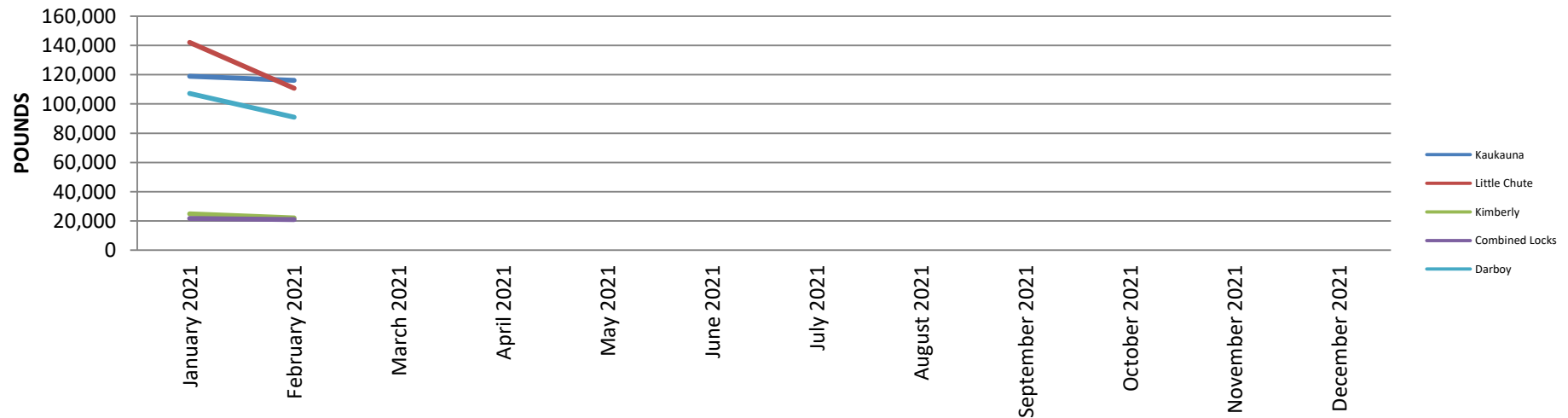
POUNDS CONTRIBUTION BY COMMUNITY - TOTAL SUSPENDED SOLIDS POUNDS

	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2021	118,920	141,992	24,872	21,690	107,110
February 2021	116,061	110,689	22,100	20,913	90,998
March 2021					
April 2021					
May 2021					
June 2021					
July 2021					
August 2021					
September 2021					
October 2021					
November 2021					
December 2021					

% CONTRIBUTION BY COMMUNITY - TOTAL SUSPENDED SOLIDS POUNDS



POUNDS CONTRIBUTION BY COMMUNITY - TOTAL SUSPENDED SOLIDS POUNDS



HEART OF THE VALLEY METROPOLITAN SEWERAGE DISTRICT

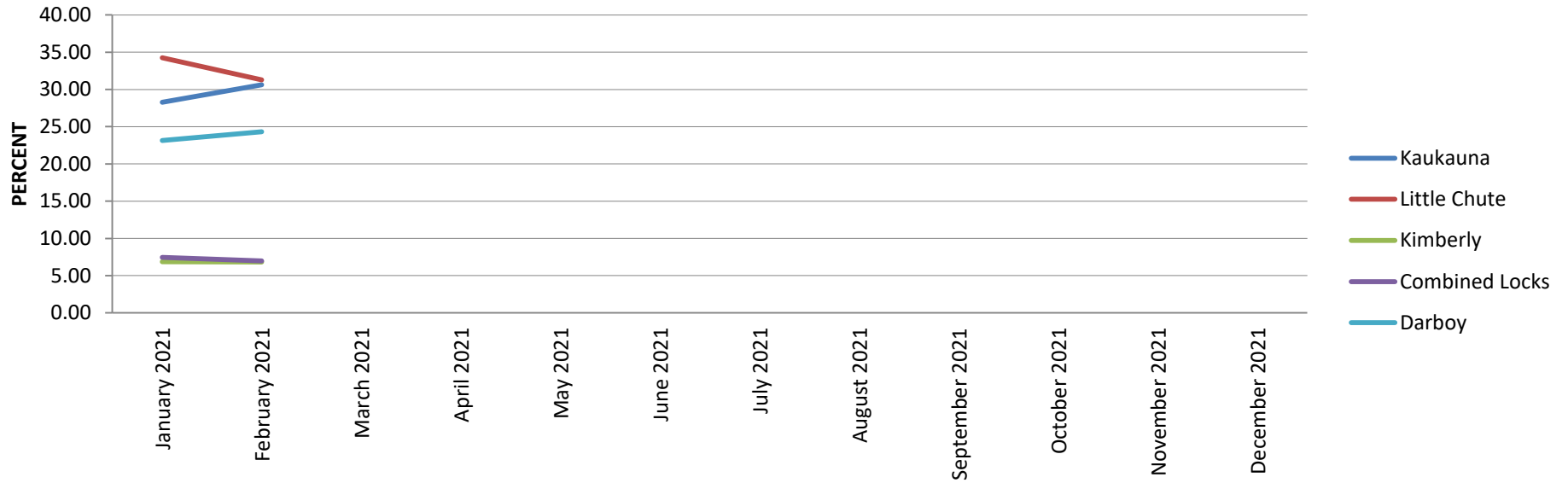
% CONTRIBUTION BY COMMUNITY - PHOSPHORUS POUNDS

	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2021	28.27	34.26	6.86	7.47	23.14
February 2021	30.61	31.27	6.83	6.98	24.31
March 2021					
April 2021					
May 2021					
June 2021					
July 2021					
August 2021					
September 2021					
October 2021					
November 2021					
December 2021					

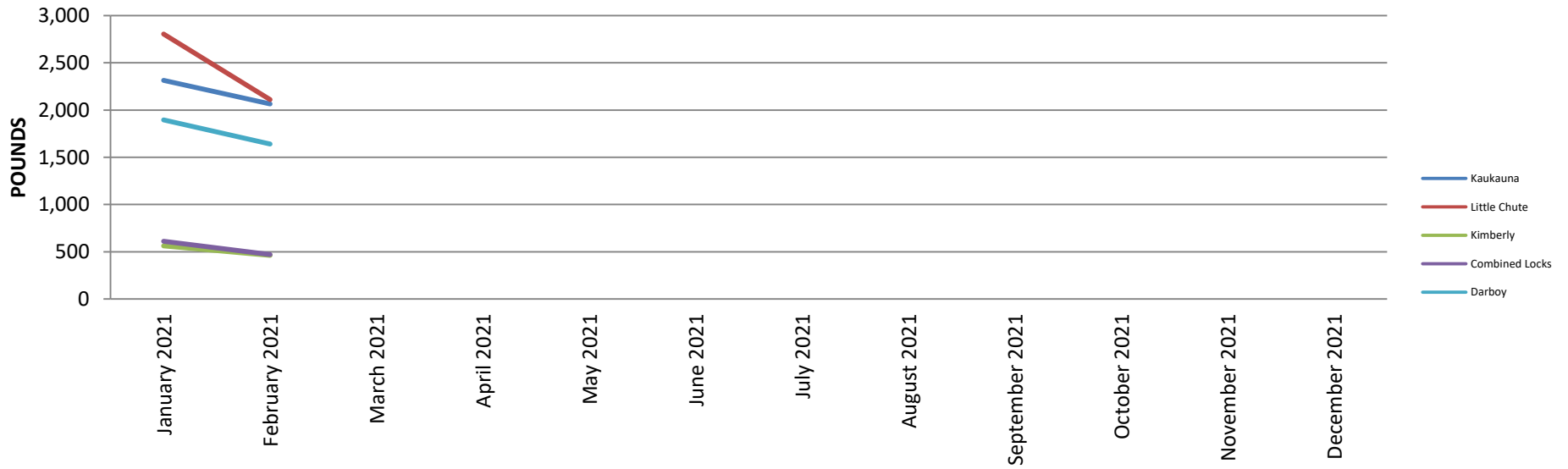
POUNDS CONTRIBUTION BY COMMUNITY - PHOSPHORUS POUNDS

	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2021	2,314	2,805	561	611	1,894
February 2021	2,065	2,110	461	471	1,641
March 2021					
April 2021					
May 2021					
June 2021					
July 2021					
August 2021					
September 2021					
October 2021					
November 2021					
December 2021					

% CONTRIBUTION BY COMMUNITY - PHOSPHORUS POUNDS



POUNDS CONTRIBUTION BY COMMUNITY - PHOSPHORUS POUNDS



HEART OF THE VALLEY METROPOLITAN SEWERAGE DISTRICT

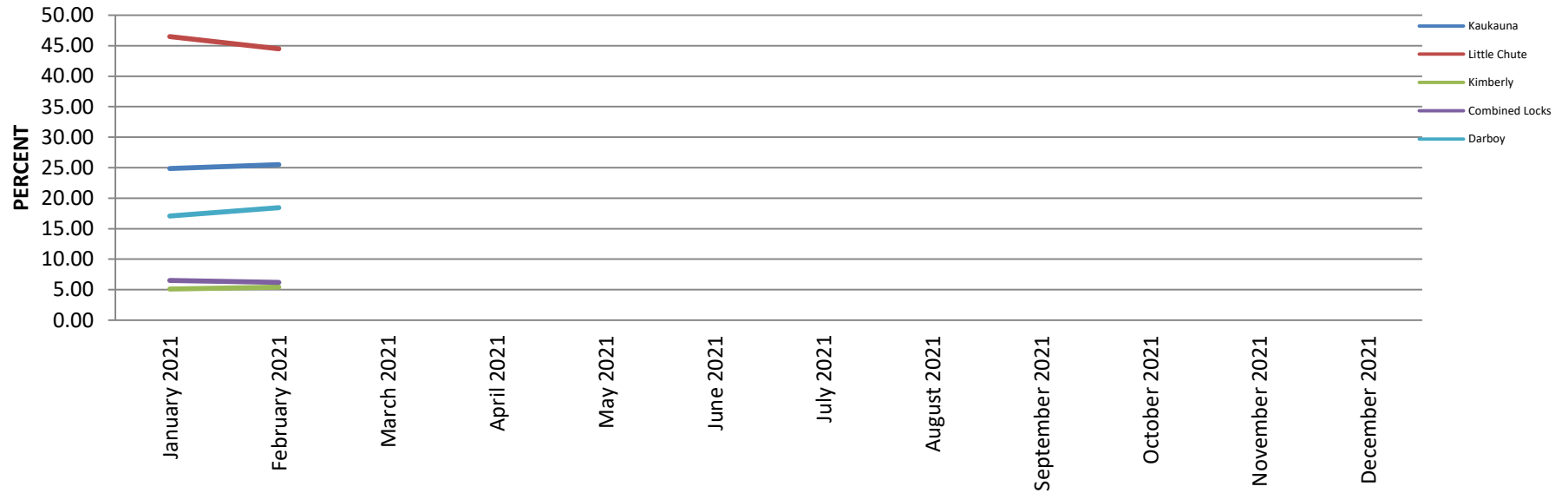
% CONTRIBUTION BY COMMUNITY - AMMONIA POUNDS

	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2021	24.85	46.49	5.08	6.49	17.09
February 2021	25.48	44.51	5.39	6.19	18.44
March 2021					
April 2021					
May 2021					
June 2021					
July 2021					
August 2021					
September 2021					
October 2021					
November 2021					
December 2021					

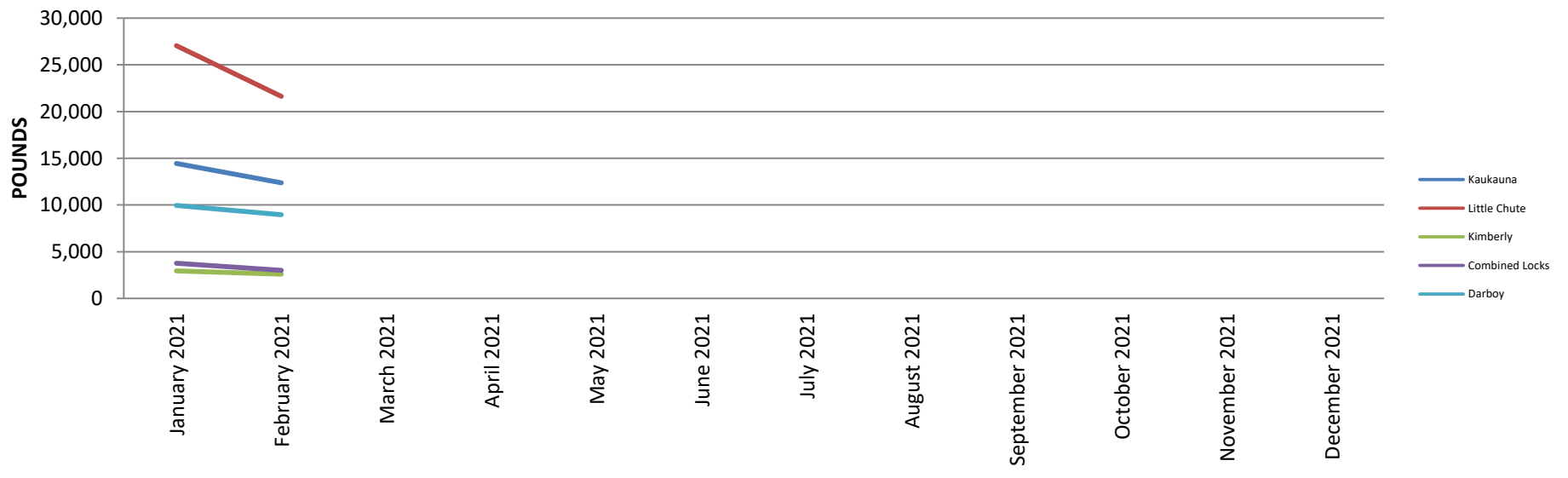
POUNDS CONTRIBUTION BY COMMUNITY - AMMONIA POUNDS

	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2021	14,449	27,032	2,951	3,776	9,940
February 2021	12,371	21,607	2,615	3,003	8,950
March 2021					
April 2021					
May 2021					
June 2021					
July 2021					
August 2021					
September 2021					
October 2021					
November 2021					
December 2021					

% CONTRIBUTION BY COMMUNITY - AMMONIA POUNDS



POUNDS CONTRIBUTION BY COMMUNITY - AMMONIA POUNDS



HEART OF THE VALLEY METROPOLITAN SEWERAGE DISTRICT

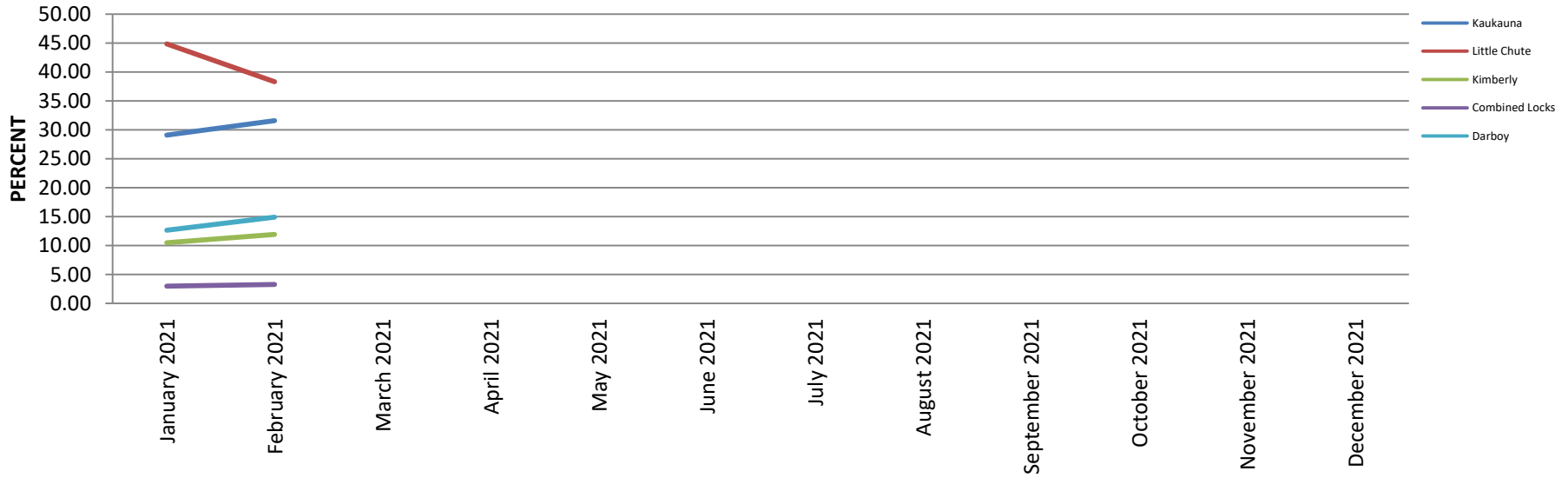
% CONTRIBUTION BY COMMUNITY - CHLORIDE POUNDS

	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2021	29.06	44.82	10.50	2.98	12.63
February 2021	31.59	38.33	11.91	3.26	14.91
March 2021					
April 2021					
May 2021					
June 2021					
July 2021					
August 2021					
September 2021					
October 2021					
November 2021					
December 2021					

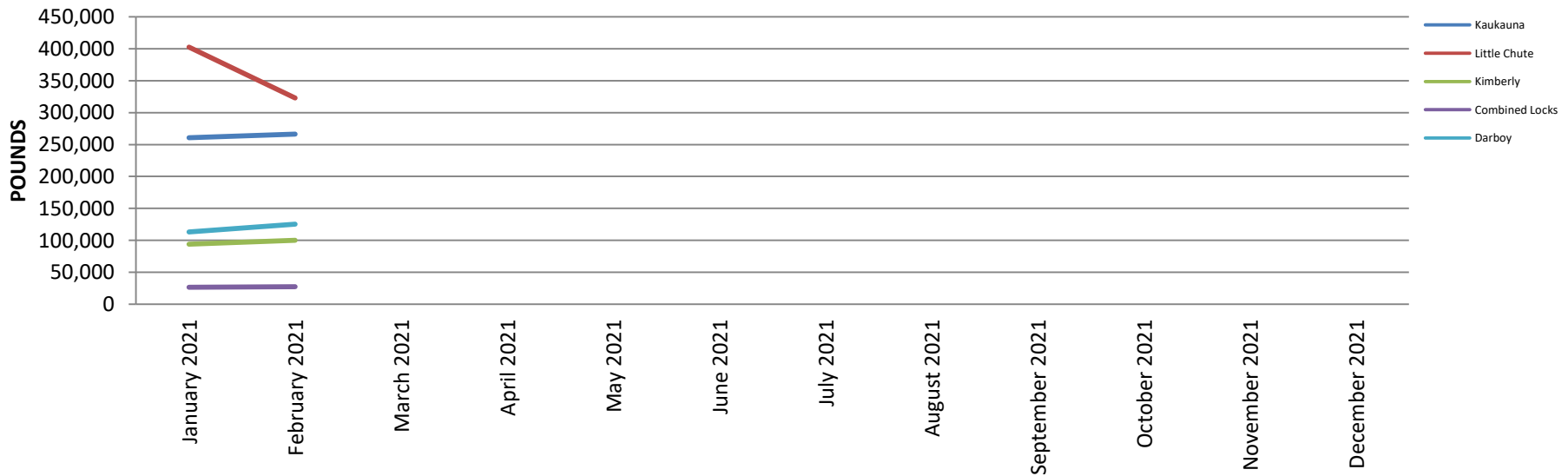
POUNDS CONTRIBUTION BY COMMUNITY - CHLORIDE POUNDS

	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2021	260,808	402,271	94,270	26,746	113,365
February 2021	266,097	322,891	100,337	27,435	125,551
March 2021					
April 2021					
May 2021					
June 2021					
July 2021					
August 2021					
September 2021					
October 2021					
November 2021					
December 2021					

% CONTRIBUTION BY COMMUNITY - CHLORIDE POUNDS

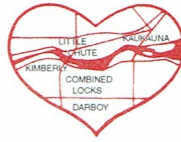


POUNDS CONTRIBUTION BY COMMUNITY - CHLORIDE POUNDS



DISTRICT DIRECTOR:

Brian M. Helminger

**COMMISSIONERS:**

David J. Casper, President
 Bruce M. Siebers, Vice-Pres.
 Patrick E. Hennessey, Secretary
 Kevin P. Coffey
 John W. Sundelius

SERVING:

Combined Locks
 Kaukauna
 Kimberly
 Little Chute
 Darboy S.D.

Heart of the Valley**METROPOLITAN SEWERAGE DISTRICT**

801 THILMANY ROAD
 KAUKAUNA, WISCONSIN 54130
 (920) 766-5731 FAX (920) 766-5733
 www.hvmsd.org

Facility: Wisconsin Public Service Corporation - Fox Energy Center
 P.O. Box 5651
 Bismarck, ND 58506

Attn: Account # N2310E

Month: February

Year: 2021

Gallons of Final Effluent Purchased (Billing)

<u>Date</u>	<u>Gallons</u>	<u>Date</u>	<u>Gallons</u>
2/1/2021	3,132,000	2/21/2021	2,144,000
2/2/2021	2,881,000	2/22/2021	2,132,000
2/3/2021	2,905,000	2/23/2021	3,103,000
2/4/2021	883,000	2/24/2021	3,212,000
2/5/2021	4,309,000	2/25/2021	3,022,000
2/6/2021	2,216,000	2/26/2021	2,978,000
2/7/2021	2,477,000	2/27/2021	2,407,000
2/8/2021	2,677,000	2/28/2021	2,271,000
2/9/2021	2,628,000		
2/10/2021	2,730,000		
2/11/2021	2,461,000		
2/12/2021	2,282,000		
2/13/2021	1,926,000		
2/14/2021	1,917,000	Total:	68,913,000
2/15/2021	1,907,000		
2/16/2021	1,837,000		
2/17/2021	2,105,000		
2/18/2021	2,098,000		
2/19/2021	2,059,000		
2/20/2021	2,214,000		

Facility: Wisconsin Public Service Corporation - Fox Energy Center
P.O. Box 5651
Bismarck, ND 58506

Attn: Account # N2310E

MONTHLY BILLING

Month: February

Year: 2021

GALLONS PURCHASED: 68,913,000

BILLING RATE: \$0.1619962 PER 1000 GALLONS

TOTAL AMOUNT DUE: \$11,163.64

**Heart of the Valley
Metropolitan Sewerage District**

**Fox Energy Revenue
From the Sale of Final Effluent**

2021

Final Effluent Sent to Fox Energy Facility

Gallons: 156,486,000

Charge Per 1000 Gallons: \$0.1619962 Per 1000 Gallons

Sale of Final Effluent (Revenue Collected): \$25,350.14