

FLOW AND STRENGTH PROJECTIONS

MONTH: January 2022

	<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)	180,474,000	130,348,000	-50,126,000	\$ 137,701.66	\$ 99,455.52	\$ (38,246.14)
B.O.D. (#s)	457,884	429,772	-28,112	\$ 88,371.61	\$ 82,946.00	\$ (5,425.62)
S. SOLIDS (#s)	420,692	348,675	-72,017	\$ 106,855.77	\$ 88,563.45	\$ (18,292.32)
PHOSPHORUS (#s)	7,859	7,534	-325	\$ 52,592.43	\$ 50,417.53	\$ (2,174.90)
AMMONIA-N (#s)	54,499	58,726	4,227	\$ 67,960.25	\$ 73,231.32	\$ 5,271.07
CHLORIDES (#s)	908,022	773,736	-134,286	\$ 3,632.09	\$ 3,094.94	\$ (537.14)
			TOTAL:	\$ 457,113.81	\$ 397,708.76	\$ (59,405.05)

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	-50,126,000	\$ (38,246.14)
B.O.D. (#s)	3,755,281	-28,112	\$ (5,425.62)
S. SOLIDS (#s)	3,909,560	-72,017	\$ (18,292.32)
PHOSPHORUS (#s)	80,410	-325	\$ (2,174.90)
AMMONIA-N (#s)	505,265	4,227	\$ 5,271.07
CHLORIDES (#s)	8,748,079	-134,286	\$ (537.14)
		TOTAL:	\$ (59,405.05)

RAW INFLUENT STRENGTH (Heart of the Valley Metropolitan Sewerage Facility)

January 2022

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	144.3	4.7	264	10,292	319,047	351	13,608	421,860	6.54	253	7,858	50.2	2012	60,352	722	28,567	857,010
Feb																	
Mar																	
Apr																	
May																	
Jun																	
Jul																	
Aug																	
Sep																	
Oct																	
Nov																	
Dec																	
Average	144	4.7	264	10,292	319,047	351	13,608	421,860	6.54	253	7,858	50.2	2,012	60,352	722	28,567	857,010
Yearly Total	144.3				319,047			421,860			7,858			60,352			857,010

*Includes Hauled Waste [Plant Design Capacity]	8.5	13,565	12,209	339	1,600
(Hauled Waste Gallons): 137,840					
[Max Design Capacity]	11.9	16,278	14,651	407	1,920
January % of Capacity	39%	63%	93%	62%	105%

January Max Daily Flow 5.44

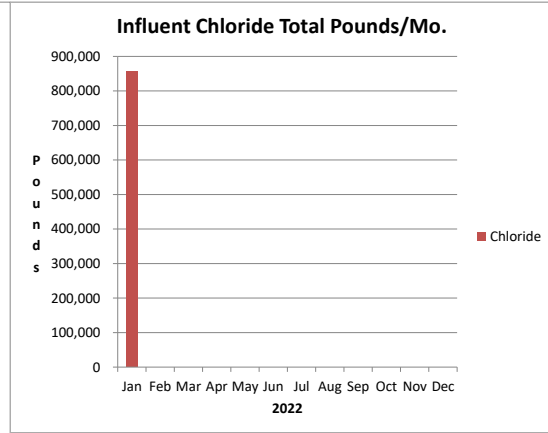
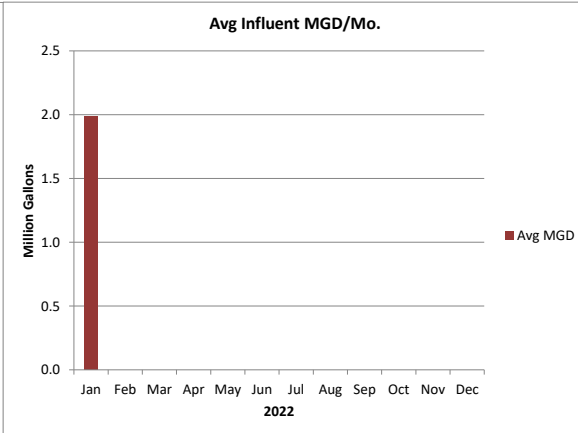
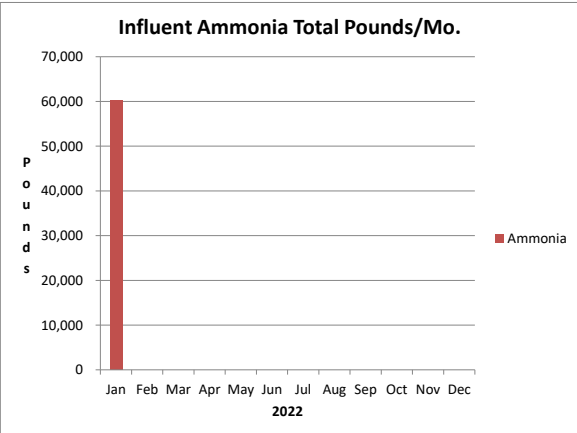
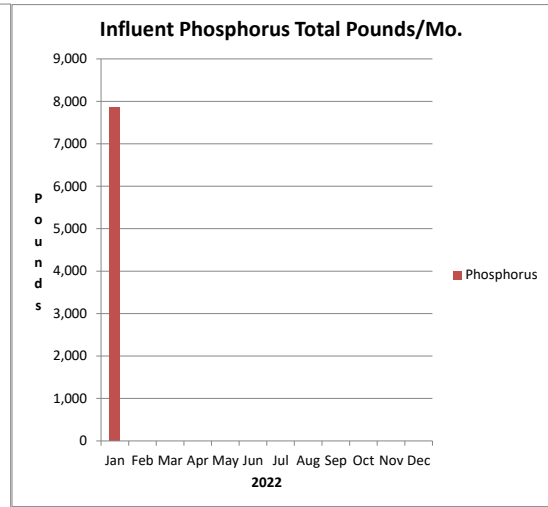
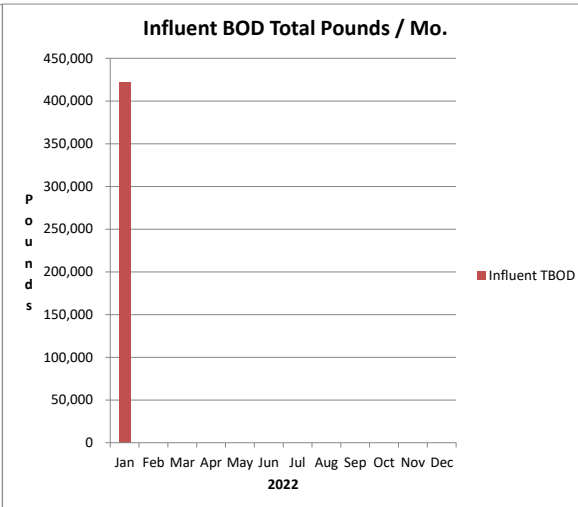
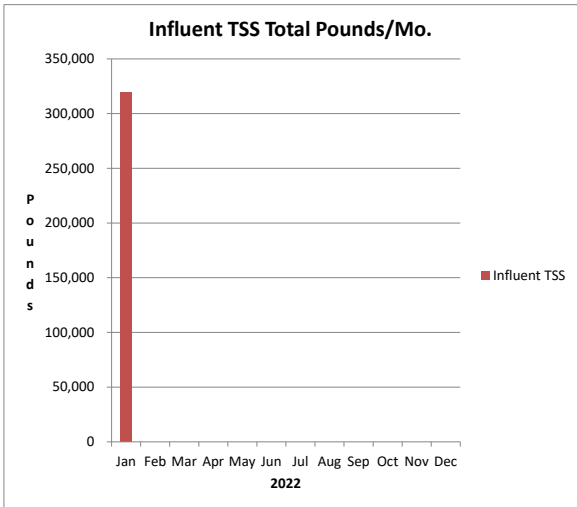
EFFLUENT QUALITY

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	61.6	2.0	12.8	212	6,561	10.5	173	5,364	0.34	5.6	173	0.46	8.0	249	746
Feb															
Mar															
Apr															
May															
Jun															
Jul															
Aug															
Sep															
Oct															
Nov															
Dec															
Average	61.6	2.0	12.8	212	6,561	10.5	173.0	5,364	0.34	5.6	173.3	0.46	8.0	248.6	746
Yearly Total	61.6				6,561			5,364			173			248.6	

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

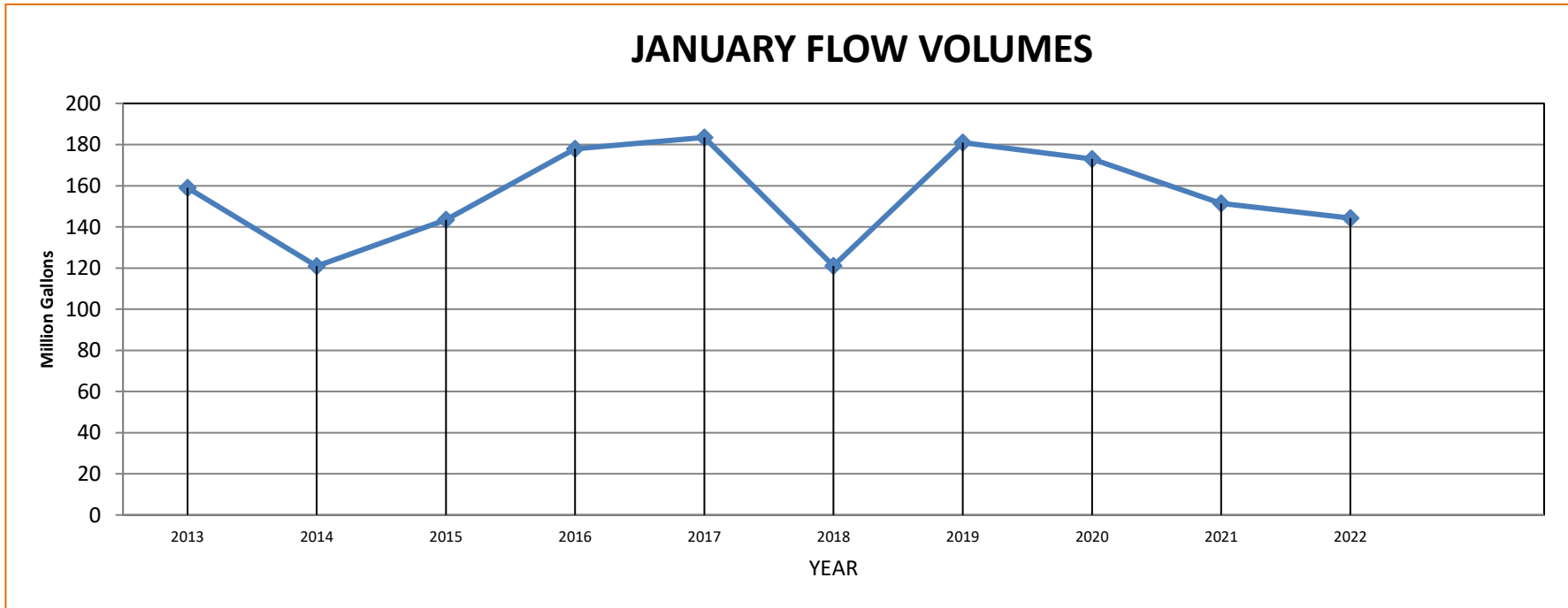
Effluent Gallons to Fox Energy (January)	January	Avg #'s
	WEEK 1	203
	WEEK 2	193
	WEEK 3	197
Million Gallons % to Fox Energy	82.71	57%

6 mo. Avg #	7.22	Nov-April
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HEART OF THE VALLEY METROPOLITAN SEWERAGE DISTRICT

<u>Year</u>	<u>January Flow Million Gallons</u>	<u>Precipitation Inches</u>
2013	159.014	1.79
2014	120.943	1.65
2015	143.460	0.56
2016	177.906	1.53
2017	183.493	0.00
2018	121.122	0.60
2019	181.037	2.36
2020	172.999	1.54
2021	151.398	0.71
2022	144.333	0.28



HEART OF THE VALLEY METROPOLITAN SEWERAGE DISTRICT

% CONTRIBUTION BY COMMUNITY - FLOW GALLONS

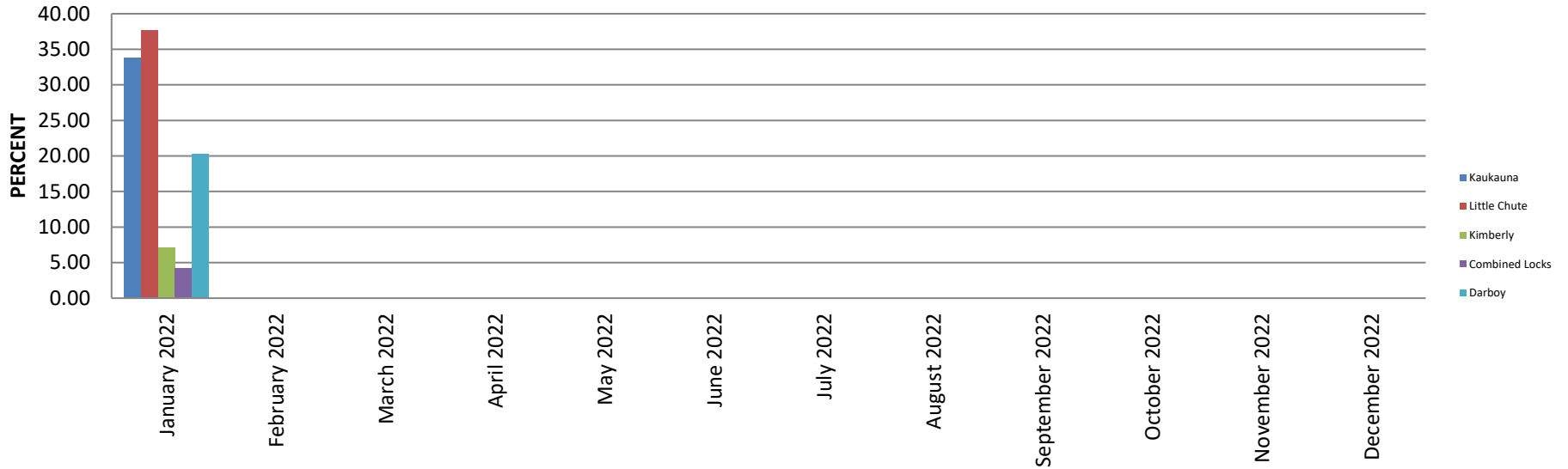
	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>	<u>Rainfall - Inches*</u>
January 2022	33.76	34.71	7.12	4.19	20.22	0.28
February 2022						
March 2022						
April 2022						
May 2022						
June 2022						
July 2022						
August 2022						
September 2022						
October 2022						
November 2022						
December 2022						

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

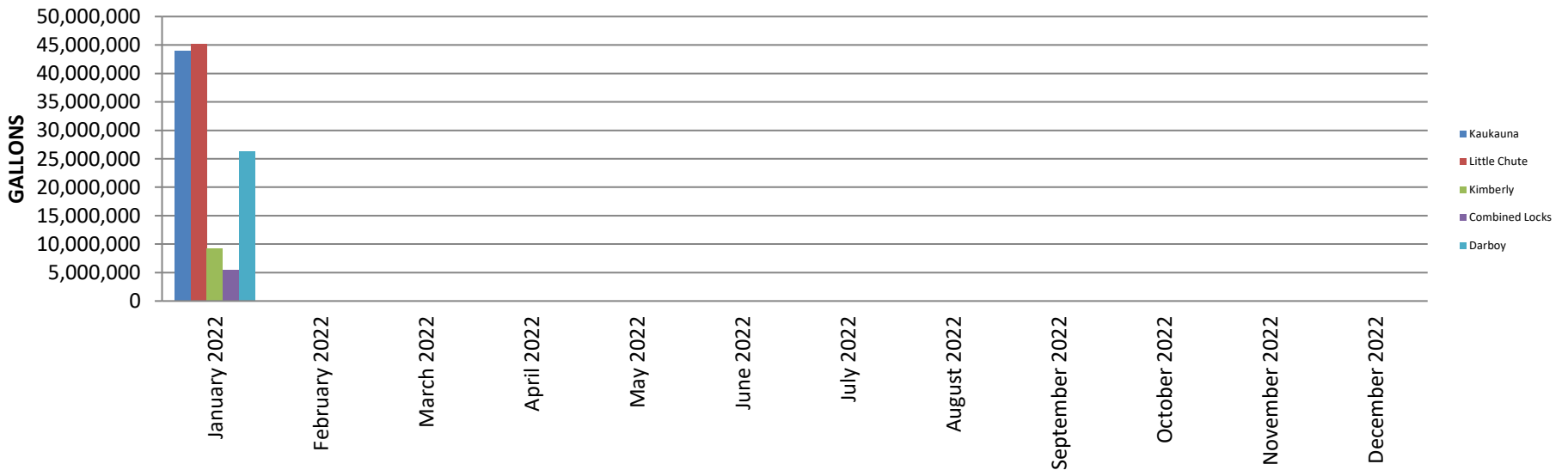
GALLONS CONTRIBUTION BY COMMUNITY - FLOW GALLONS

	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2022	44,006,000	45,240,000	9,281,000	5,463,000	26,358,000
February 2022					
March 2022					
April 2022					
May 2022					
June 2022					
July 2022					
August 2022					
September 2022					
October 2022					
November 2022					
December 2022					

% CONTRIBUTION BY COMMUNITY - FLOW GALLONS



GALLONS CONTRIBUTION BY COMMUNITY - FLOW GALLONS



HEART OF THE VALLEY METROPOLITAN SEWERAGE DISTRICT

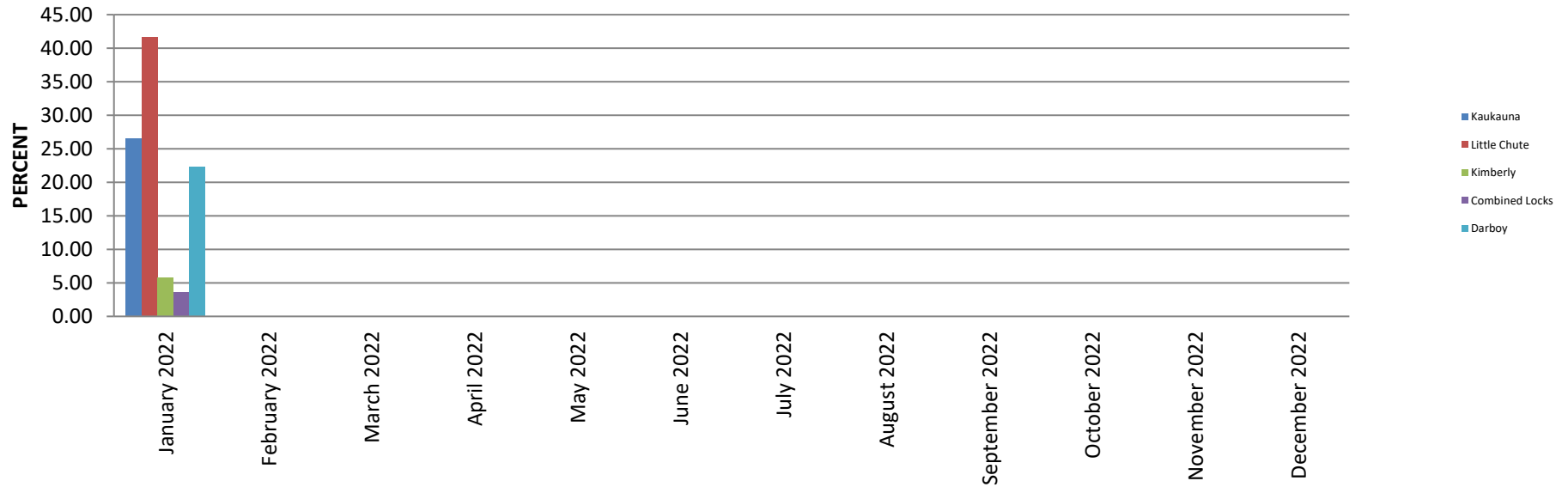
% CONTRIBUTION BY COMMUNITY - B.O.D. POUNDS

	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2022	26.54	41.67	5.82	3.61	22.35
February 2022					
March 2022					
April 2022					
May 2022					
June 2022					
July 2022					
August 2022					
September 2022					
October 2022					
November 2022					
December 2022					

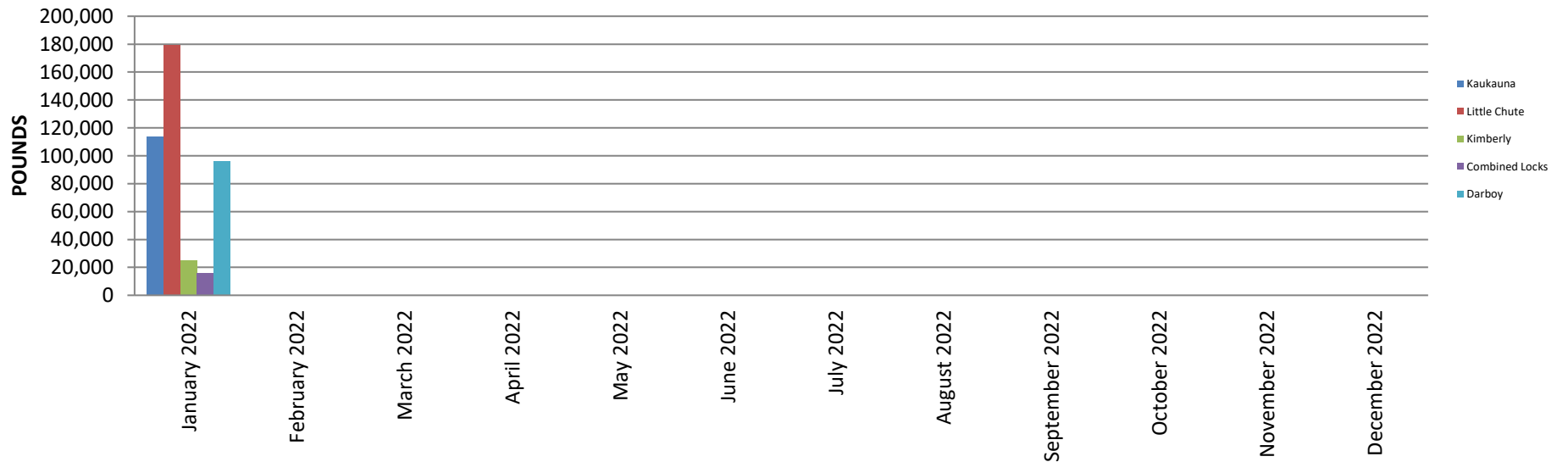
POUNDS CONTRIBUTION BY COMMUNITY - B.O.D. POUNDS

	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2022	114,049	179,088	25,032	15,529	96,075
February 2022					
March 2022					
April 2022					
May 2022					
June 2022					
July 2022					
August 2022					
September 2022					
October 2022					
November 2022					
December 2022					

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



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



HEART OF THE VALLEY METROPOLITAN SEWERAGE DISTRICT

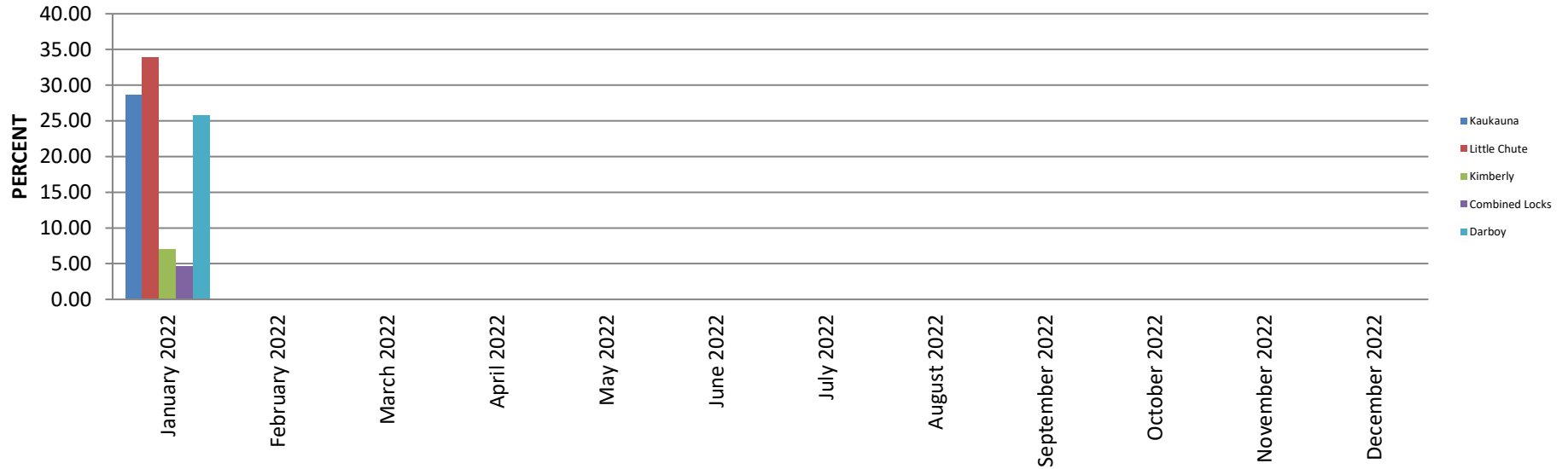
% CONTRIBUTION BY COMMUNITY -TOTAL SUSPENDED SOLIDS POUNDS

	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2022	28.65	33.89	7.00	4.65	25.81
February 2022					
March 2022					
April 2022					
May 2022					
June 2022					
July 2022					
August 2022					
September 2022					
October 2022					
November 2022					
December 2022					

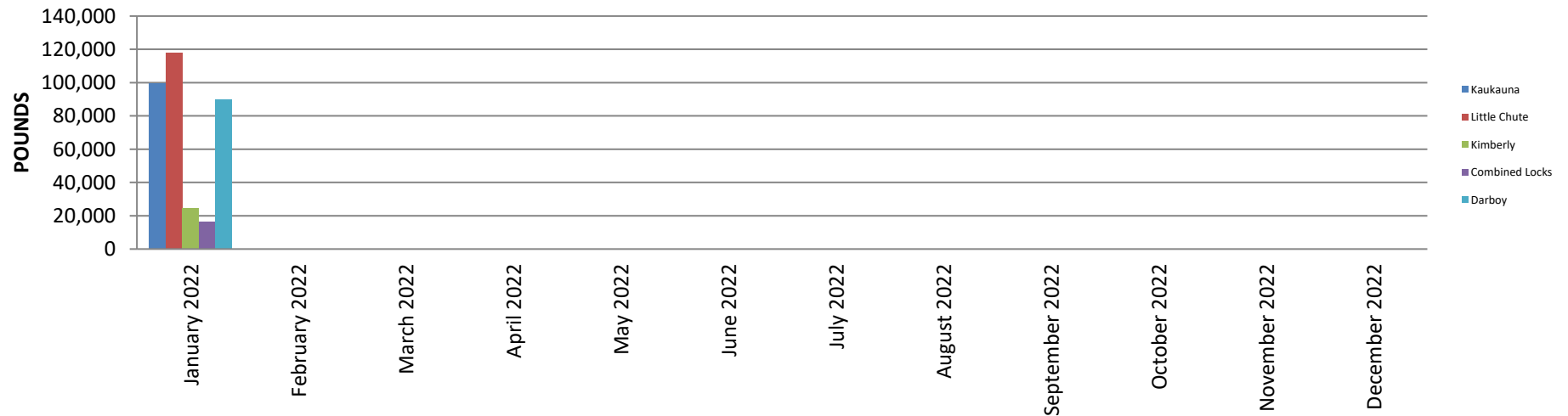
POUNDS CONTRIBUTION BY COMMUNITY - TOTAL SUSPENDED SOLIDS POUNDS

	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2022	99,881	118,168	24,409	16,212	90,008
February 2022					
March 2022					
April 2022					
May 2022					
June 2022					
July 2022					
August 2022					
September 2022					
October 2022					
November 2022					
December 2022					

% CONTRIBUTION BY COMMUNITY -TOTAL SUSPENDED SOLIDS POUNDS



POUNDS CONTRIBUTION BY COMMUNITY - TOTAL SUSPENDED SOLIDS POUNDS



HEART OF THE VALLEY METROPOLITAN SEWERAGE DISTRICT

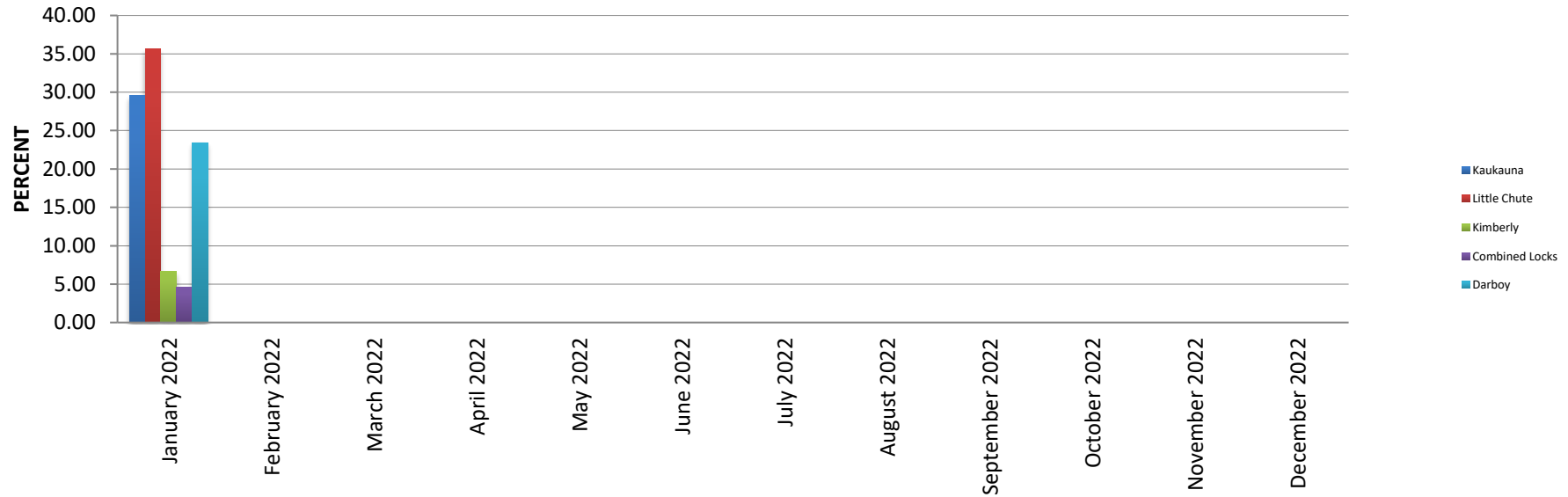
% CONTRIBUTION BY COMMUNITY - PHOSPHORUS POUNDS

	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2022	29.58	35.66	6.70	4.62	23.44
February 2022					
March 2022					
April 2022					
May 2022					
June 2022					
July 2022					
August 2022					
September 2022					
October 2022					
November 2022					
December 2022					

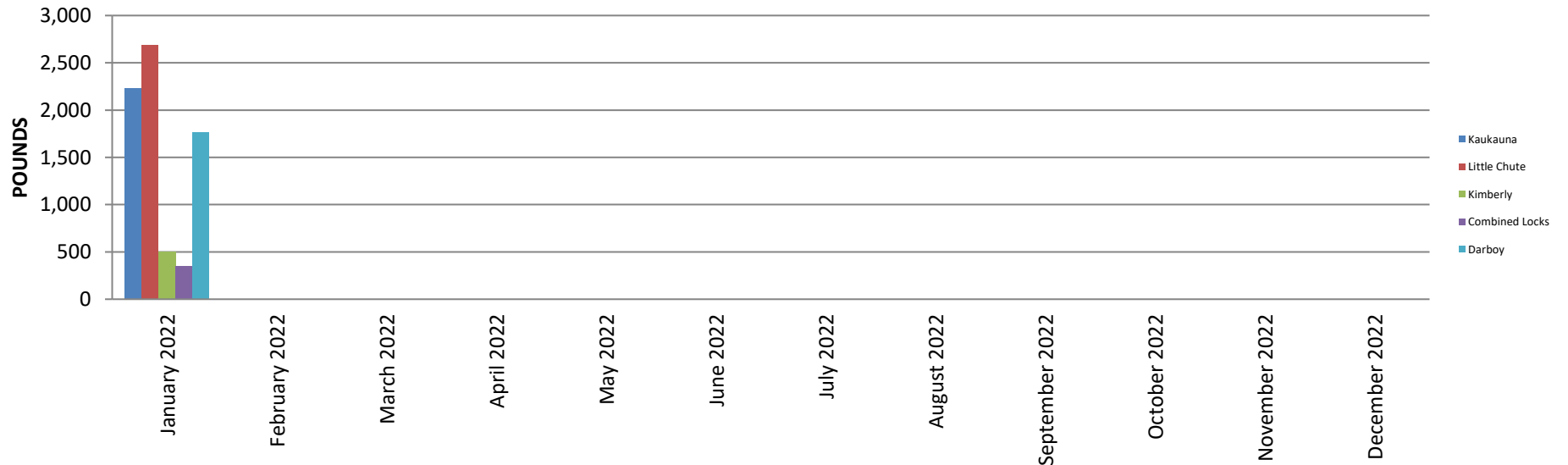
POUNDS CONTRIBUTION BY COMMUNITY - PHOSPHORUS POUNDS

	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2022	2,229	2,686	505	348	1,766
February 2022					
March 2022					
April 2022					
May 2022					
June 2022					
July 2022					
August 2022					
September 2022					
October 2022					
November 2022					
December 2022					

% CONTRIBUTION BY COMMUNITY - PHOSPHORUS POUNDS



POUNDS CONTRIBUTION BY COMMUNITY - PHOSPHORUS POUNDS



HEART OF THE VALLEY METROPOLITAN SEWERAGE DISTRICT

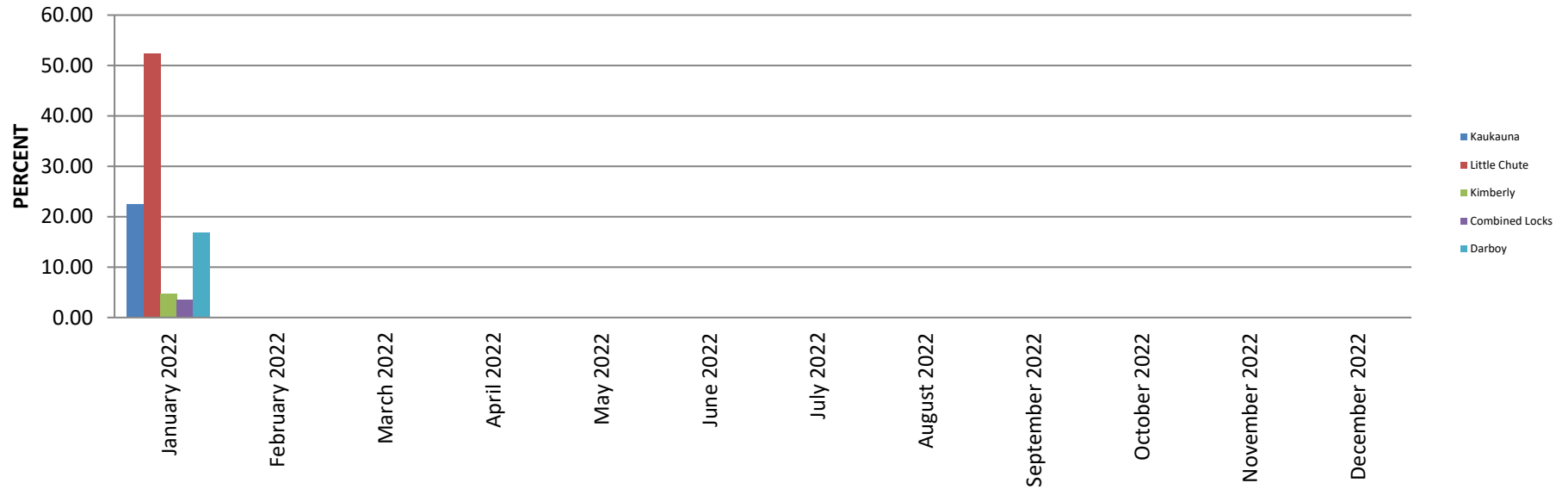
% CONTRIBUTION BY COMMUNITY - AMMONIA POUNDS

	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2022	22.50	52.38	4.72	3.55	16.85
February 2022					
March 2022					
April 2022					
May 2022					
June 2022					
July 2022					
August 2022					
September 2022					
October 2022					
November 2022					
December 2022					

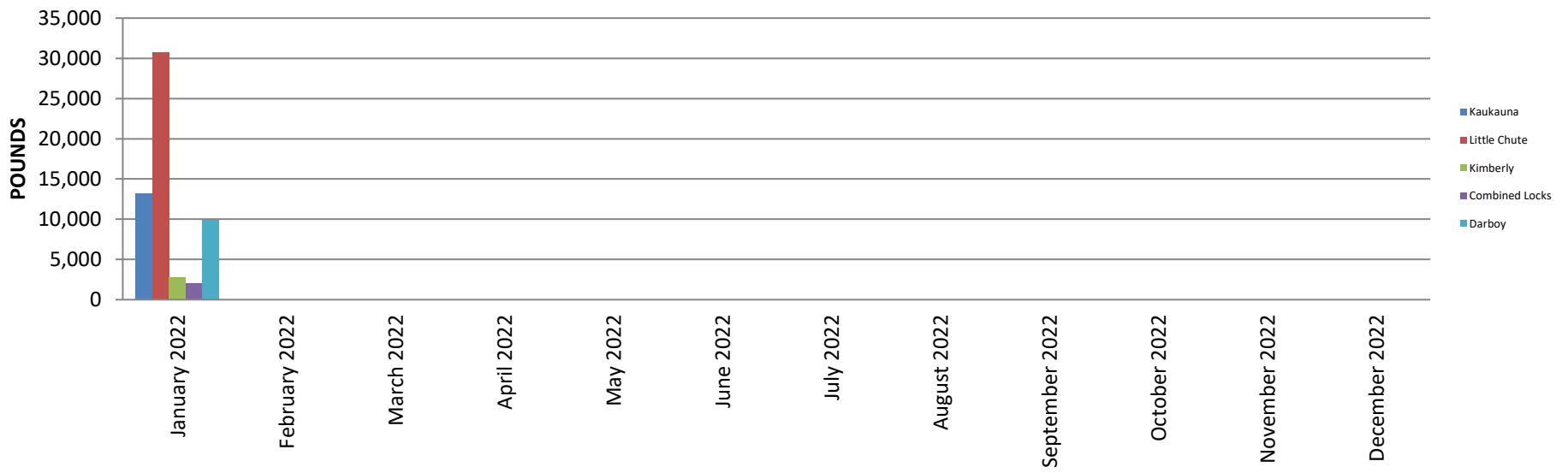
POUNDS CONTRIBUTION BY COMMUNITY - AMMONIA POUNDS

	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2022	13,213	30,761	2,773	2,083	9,895
February 2022					
March 2022					
April 2022					
May 2022					
June 2022					
July 2022					
August 2022					
September 2022					
October 2022					
November 2022					
December 2022					

% CONTRIBUTION BY COMMUNITY - AMMONIA POUNDS



POUNDS CONTRIBUTION BY COMMUNITY - AMMONIA POUNDS



HEART OF THE VALLEY METROPOLITAN SEWERAGE DISTRICT

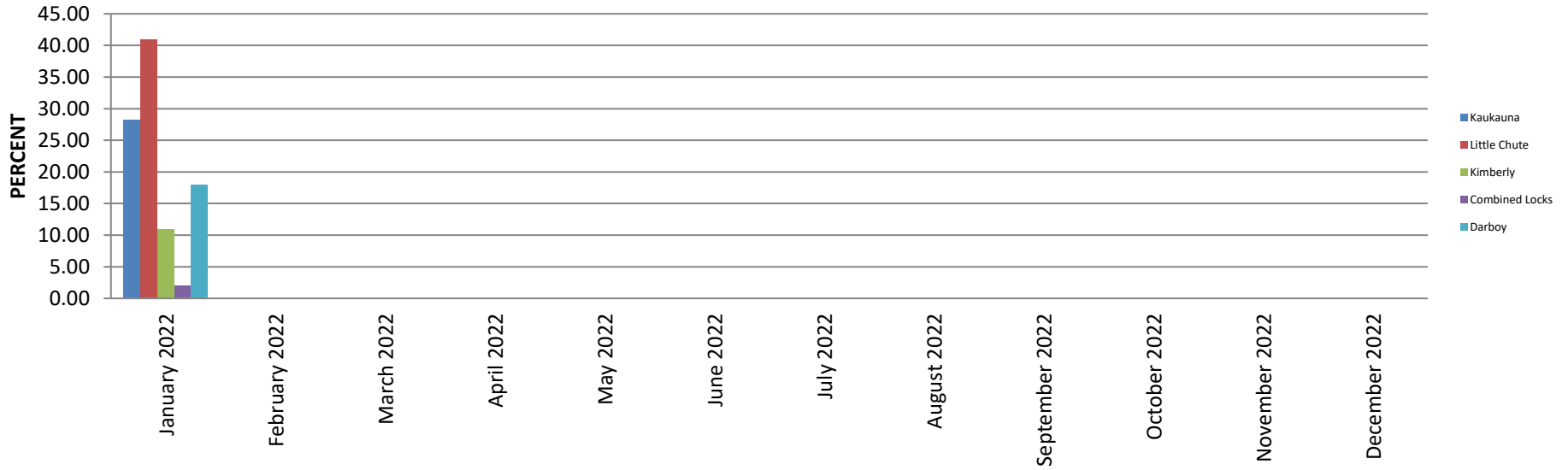
% CONTRIBUTION BY COMMUNITY - CHLORIDE POUNDS

	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2022	28.19	40.98	10.85	2.00	17.98
February 2022					
March 2022					
April 2022					
May 2022					
June 2022					
July 2022					
August 2022					
September 2022					
October 2022					
November 2022					
December 2022					

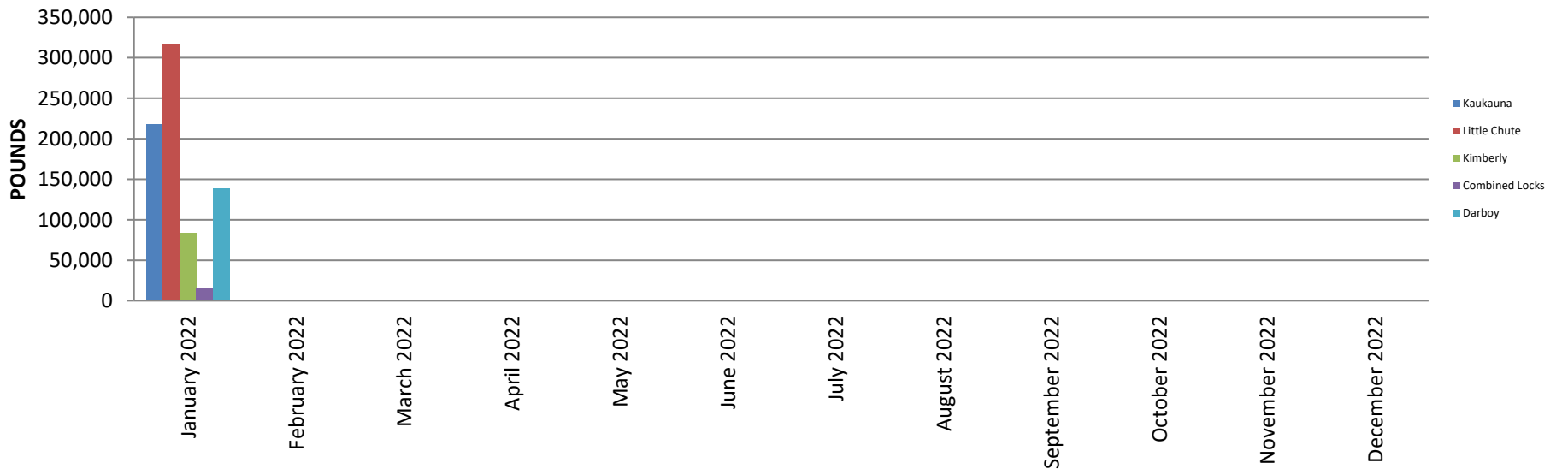
POUNDS CONTRIBUTION BY COMMUNITY - CHLORIDE POUNDS

	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2022	218,136	317,040	83,950	15,473	139,137
February 2022					
March 2022					
April 2022					
May 2022					
June 2022					
July 2022					
August 2022					
September 2022					
October 2022					
November 2022					
December 2022					

% CONTRIBUTION BY COMMUNITY - CHLORIDE POUNDS

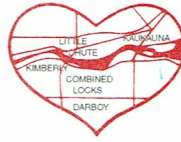


POUNDS CONTRIBUTION BY COMMUNITY - CHLORIDE POUNDS



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
 Darbo 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: January

Year: 2022

Gallons of Final Effluent Purchased (Billing)

<u>Date</u>	<u>Gallons</u>	<u>Date</u>	<u>Gallons</u>
1/1/2022	2,484,000	1/21/2022	2,770,000
1/2/2022	2,663,000	1/22/2022	2,164,000
1/3/2022	2,861,000	1/23/2022	2,626,000
1/4/2022	2,852,000	1/24/2022	2,919,000
1/5/2022	2,735,000	1/25/2022	2,560,000
1/6/2022	2,497,000	1/26/2022	2,821,000
1/7/2022	2,671,000	1/27/2022	2,609,000
1/8/2022	2,680,000	1/28/2022	3,122,000
1/9/2022	2,568,000	1/29/2022	2,757,000
1/10/2022	980,000	1/30/2022	2,606,000
1/11/2022	2,637,000	1/31/2022	2,230,000
1/12/2022	3,505,000		
1/13/2022	3,332,000		
1/14/2022	2,388,000	Total:	82,713,000
1/15/2022	2,702,000		
1/16/2022	3,038,000		
1/17/2022	2,553,000		
1/18/2022	2,827,000		
1/19/2022	2,953,000		
1/20/2022	2,603,000		

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

Attn: Account # N2310E

MONTHLY BILLING

Month: January

Year: 2022

GALLONS PURCHASED: 82,713,000

BILLING RATE: \$0.1635645 PER 1000 GALLONS

TOTAL AMOUNT DUE: \$13,528.91

**Heart of the Valley
Metropolitan Sewerage District**

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

2022

Final Effluent Sent to Fox Energy Facility

Gallons: 82,713,000

Charge Per 1000 Gallons: \$0.1635645 Per 1000 Gallons

Sale of Final Effluent (Revenue Collected): \$13,528.91