

## FLOW AND STRENGTH PROJECTIONS

MONTH: May 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)	236,542,000	207,575,000	-28,967,000	\$ 180,481.55	\$ 158,379.73	\$ (22,101.82)
B.O.D. (#s)	445,415	534,486	89,071	\$ 85,965.10	\$ 103,155.80	\$ 17,190.70
S. SOLIDS (#s)	405,526	407,769	2,243	\$ 103,003.60	\$ 103,573.33	\$ 569.72
PHOSPHORUS (#s)	7,611	8,772	1,161	\$ 50,932.81	\$ 58,702.22	\$ 7,769.41
AMMONIA-N (#s)	52,180	57,320	5,140	\$ 65,068.46	\$ 71,478.04	\$ 6,409.58
CHLORIDES (#s)	973,915	1,056,127	82,212	\$ 3,895.66	\$ 4,224.51	\$ 328.85
			<b>TOTAL:</b>	\$ 489,347.18	\$ 499,513.62	\$ 10,166.44

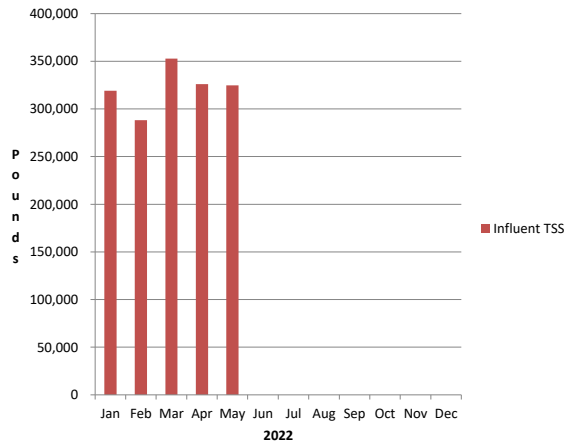
(THRU MAY 2022)

PROJECTED FOR 2022

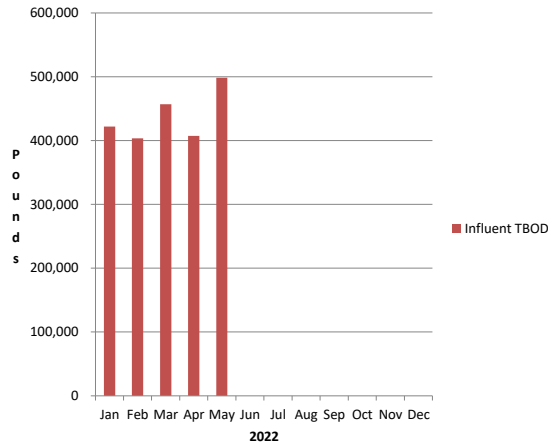
	<u>END OF YEAR PROJECTED</u>	<u>YEAR TO DATE SURPLUS/ DEFICIT</u>	<u>YEAR TO DATE SURPLUS/ DEFICIT \$\$</u>
FLOW (GALLONS)	2,053,099,003	-79,164,000	\$ (60,402.13)
B.O.D. (#s)	3,755,281	260,989	\$ 50,370.86
S. SOLIDS (#s)	3,909,560	29,497	\$ 7,492.35
PHOSPHORUS (#s)	80,410	2,624	\$ 17,562.75
AMMONIA-N (#s)	505,265	17,970	\$ 22,408.42
CHLORIDES (#s)	8,748,079	354,532	\$ 1,418.13
		<b>TOTAL:</b>	\$ 38,850.37



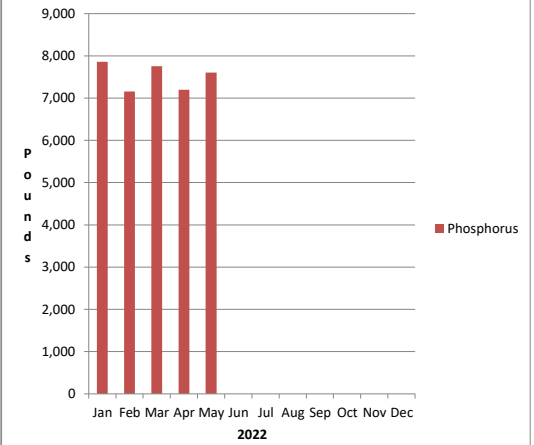
**Influent TSS Total Pounds/Mo.**



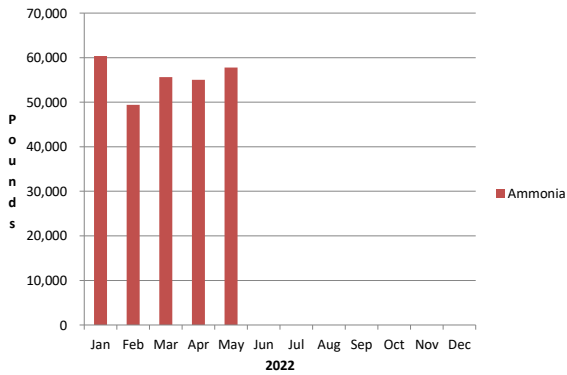
**Influent BOD Total Pounds / Mo.**



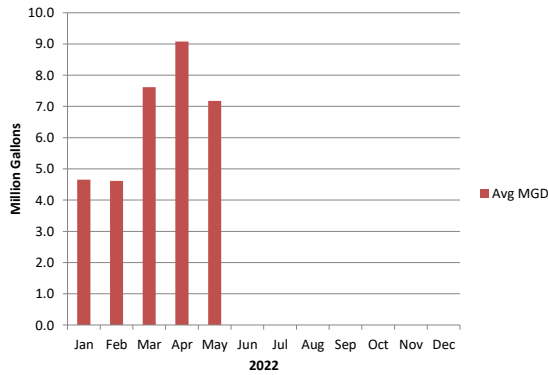
**Influent Phosphorus Total Pounds/Mo.**



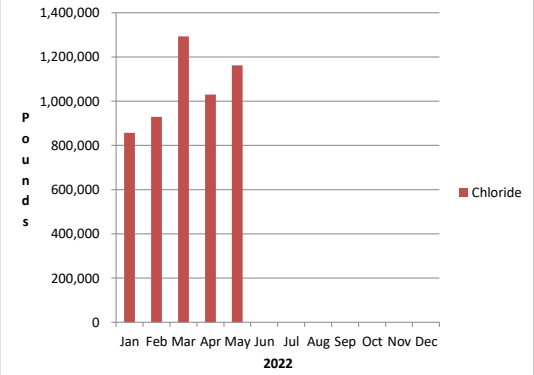
**Influent Ammonia Total Pounds/Mo.**



**Avg Influent MGD/Mo.**

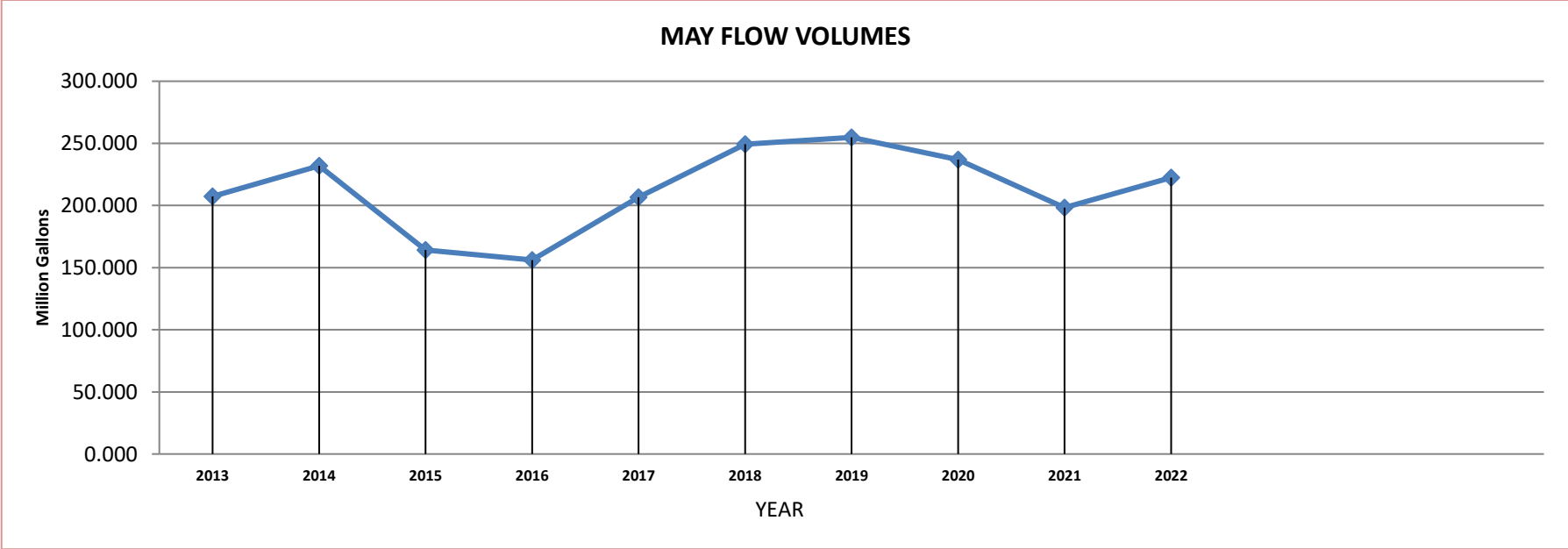


**Influent Chloride Total Pounds/Mo.**



# HEART OF THE VALLEY METROPOLITAN SEWERAGE DISTRICT

<u>Year</u>	<u>May Flow Million Gallons</u>	<u>Precipitation Inches</u>
2013	207.246	2.76
2014	231.951	3.03
2015	164.246	3.44
2016	156.148	2.52
2017	206.521	2.88
2018	249.379	3.71
2019	254.810	4.55
2020	236.946	4.82
2021	198.367	2.71
2022	222.500	2.40

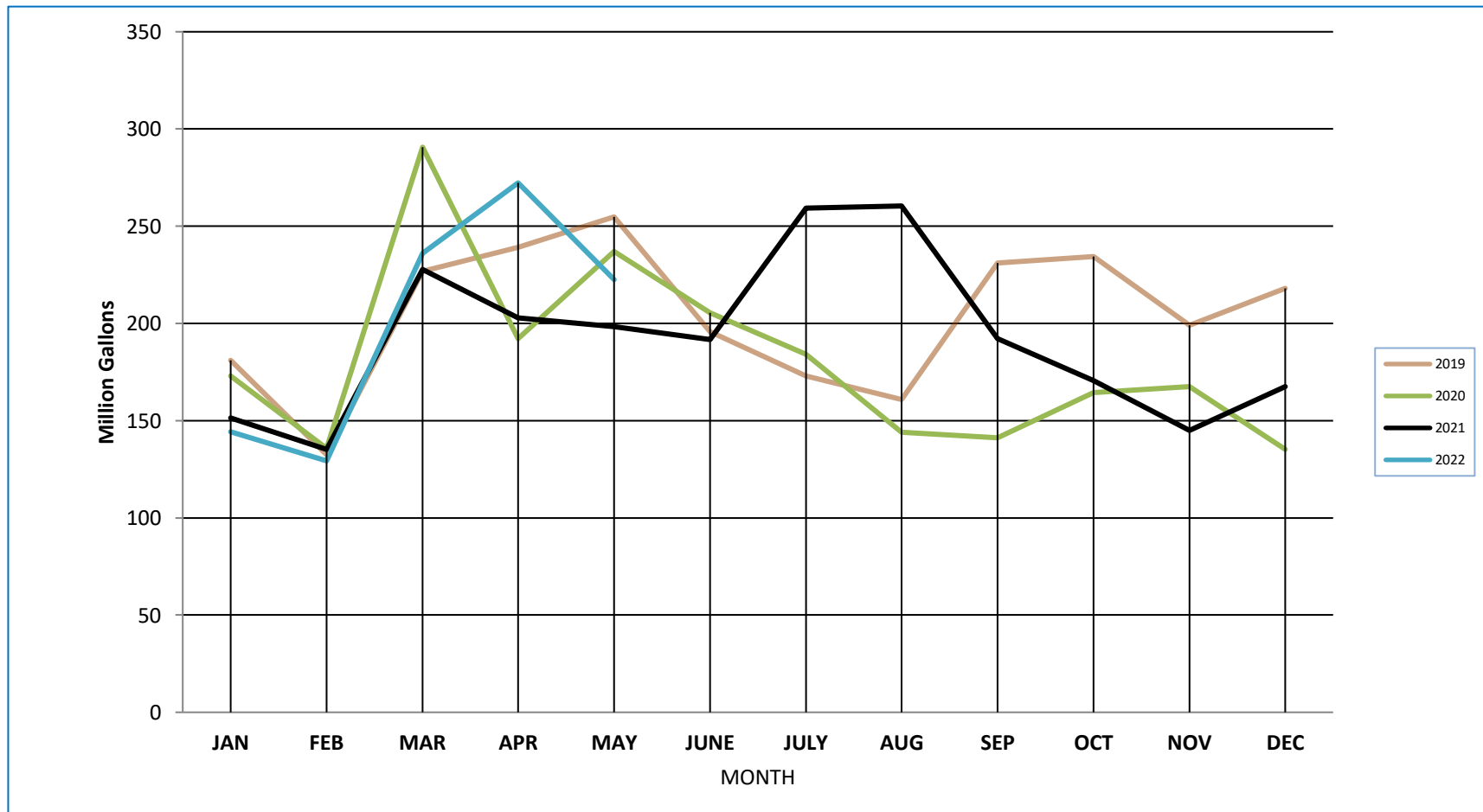


# HEART OF THE VALLEY METROPOLITAN SEWERAGE DISTRICT

	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUNE</u>	<u>JULY</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>
<b>2019</b>	181.037	132.459	226.921	239.147	254.810	195.654	172.916	160.932	231.033	234.439	199.024	218.097
<b>2020</b>	172.999	135.703	290.643	192.150	236.946	205.368	184.011	144.085	141.266	164.399	167.558	135.257
<b>2021</b>	151.398	135.210	227.688	202.920	198.367	191.728	259.337	260.418	192.127	170.491	145.014	167.477
<b>2022</b>	144.333	129.312	236.184	272.294	222.5							

\*\*\* FLOW VOLUMES REPORTED IN MILLION GALLONS \*\*\*

## MONTHLY FLOW VOLUMES



# HEART OF THE VALLEY METROPOLITAN SEWERAGE DISTRICT

## % CONTRIBUTION BY COMMUNITY - FLOW GALLONS

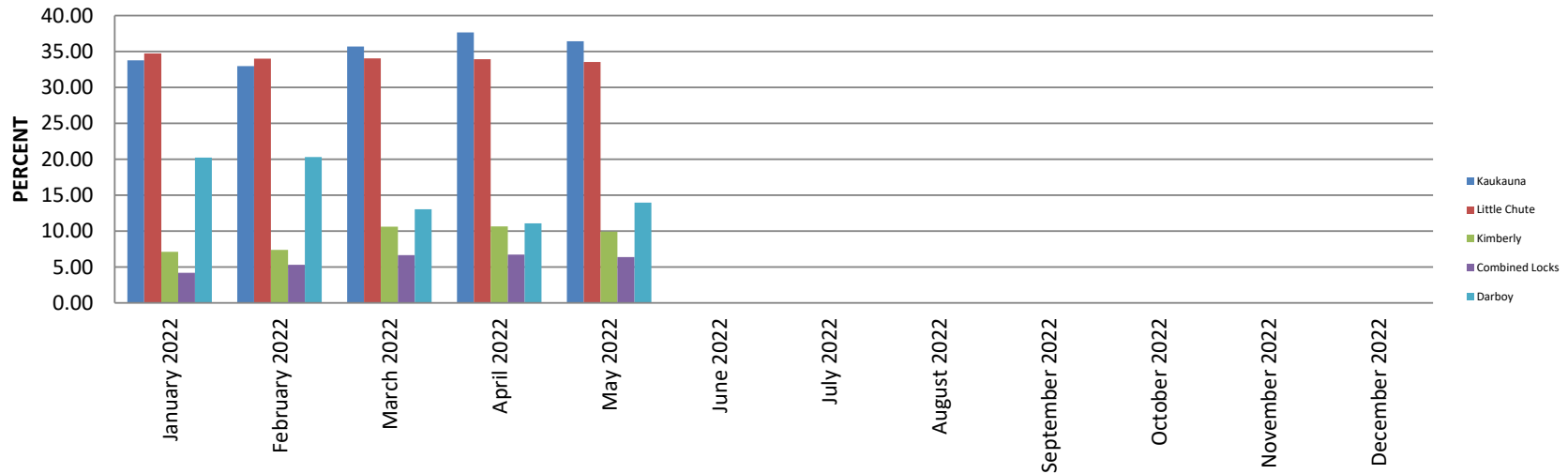
	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>	<u>Rainfall - Inches*</u>
January 2022	33.76	34.71	7.12	4.19	20.22	0.28
February 2022	32.97	34.01	7.39	5.30	20.32	0.50
March 2022	35.69	34.04	10.60	6.66	13.02	5.46
April 2022	37.67	33.91	10.65	6.71	11.06	2.87
May 2022	36.44	33.55	9.90	6.37	13.94	2.40
June 2022						
July 2022						
August 2022						
September 2022						
October 2022						
November 2022						
December 2022						

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

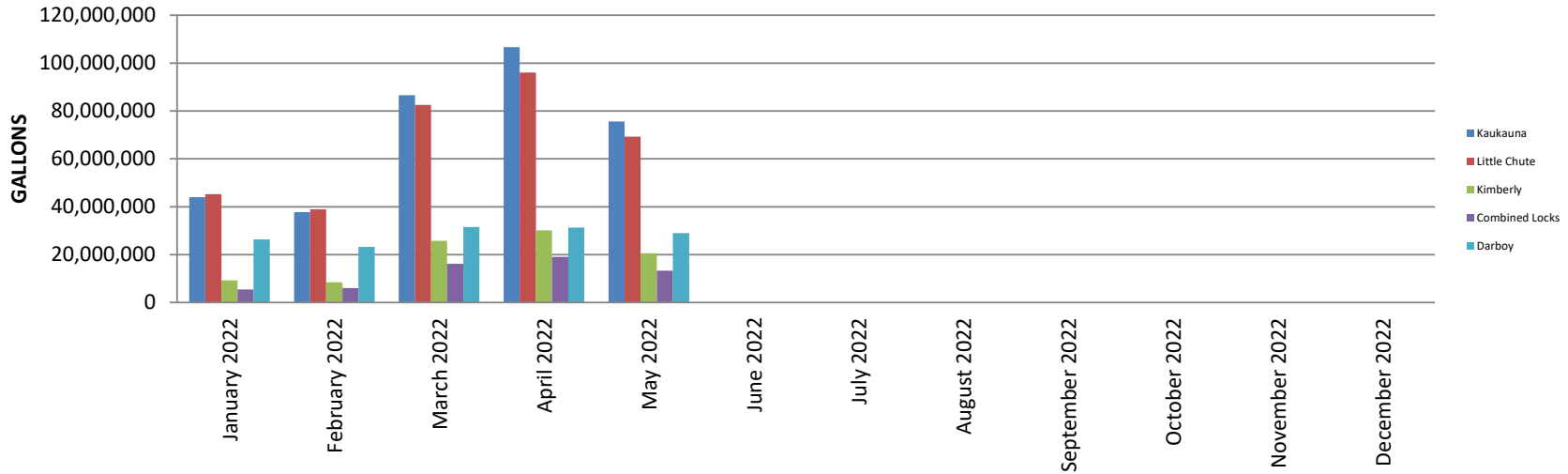
## GALLONS CONTRIBUTION BY COMMUNITY - FLOW GALLONS

	<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	37,739,000	38,925,000	8,463,000	6,063,000	23,260,000
March 2022	86,547,000	82,539,000	25,708,000	16,146,000	31,571,000
April 2022	106,667,000	96,022,000	30,170,000	19,012,000	31,306,000
May 2022	75,630,000	69,236,000	20,545,000	13,231,000	28,933,000
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

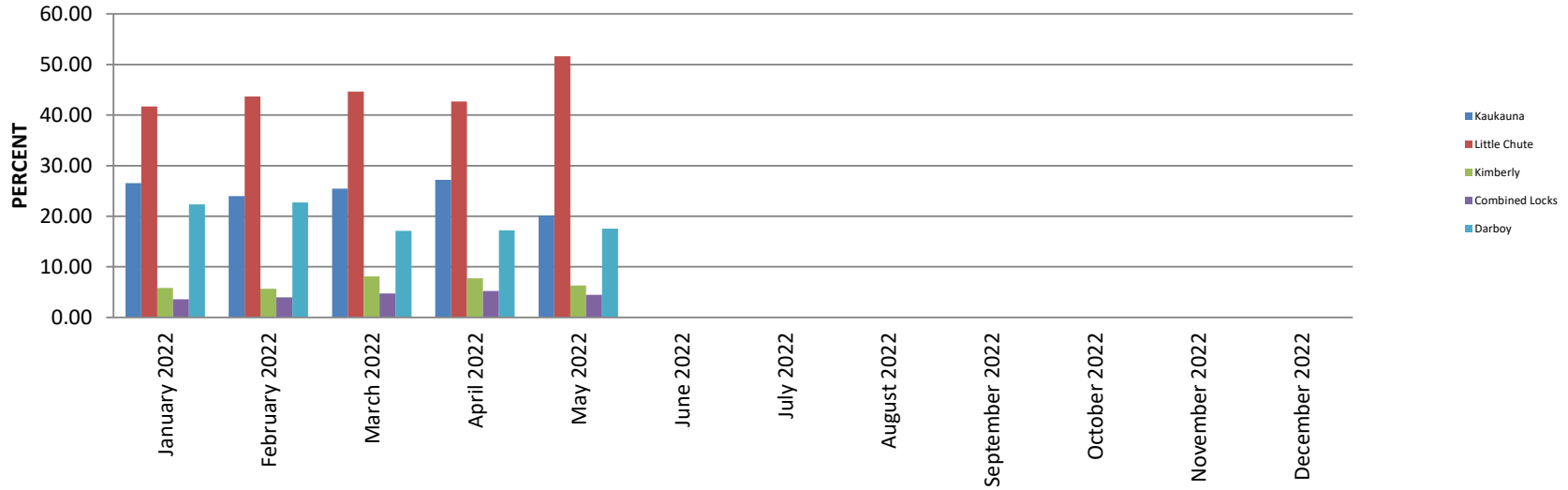
	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2022	26.54	41.67	5.82	3.61	22.35
February 2022	23.98	43.65	5.68	3.99	22.71
March 2022	25.47	44.62	8.09	4.73	17.09
April 2022	27.17	42.65	7.72	5.24	17.21
May 2022	20.15	51.59	6.29	4.45	17.53
June 2022					
July 2022					
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September 2022					
October 2022					
November 2022					
December 2022					

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

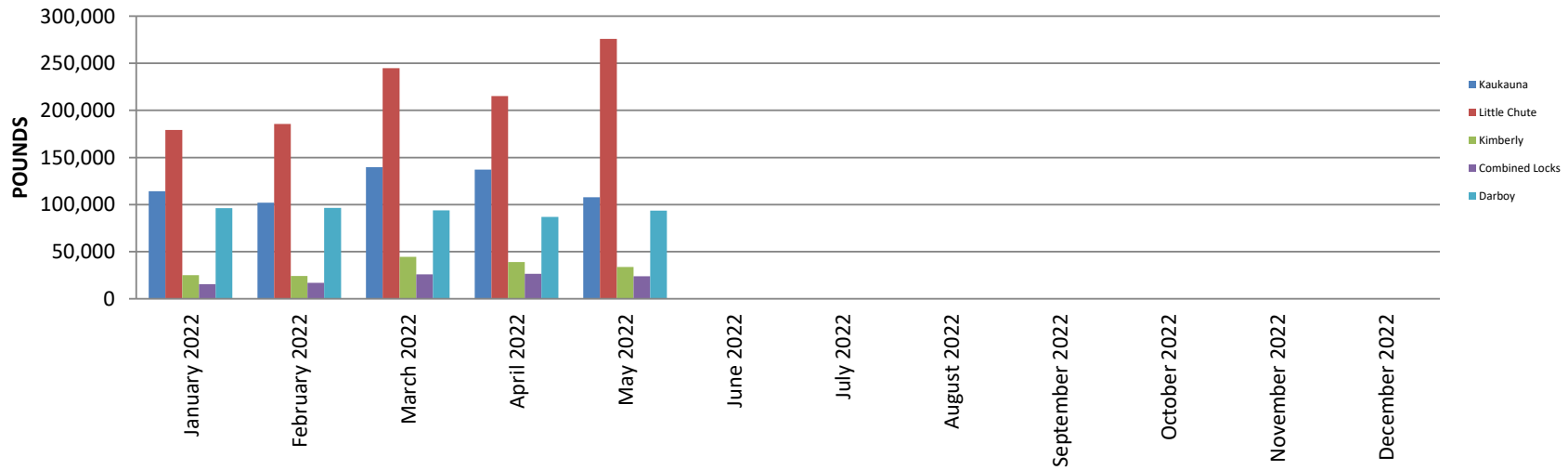
	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2022	114,049	179,088	25,032	15,529	96,075
February 2022	101,875	185,458	24,145	16,935	96,501
March 2022	139,657	244,645	44,368	25,938	93,728
April 2022	137,018	215,081	38,942	26,422	86,797
May 2022	107,680	275,717	33,642	23,772	93,674
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

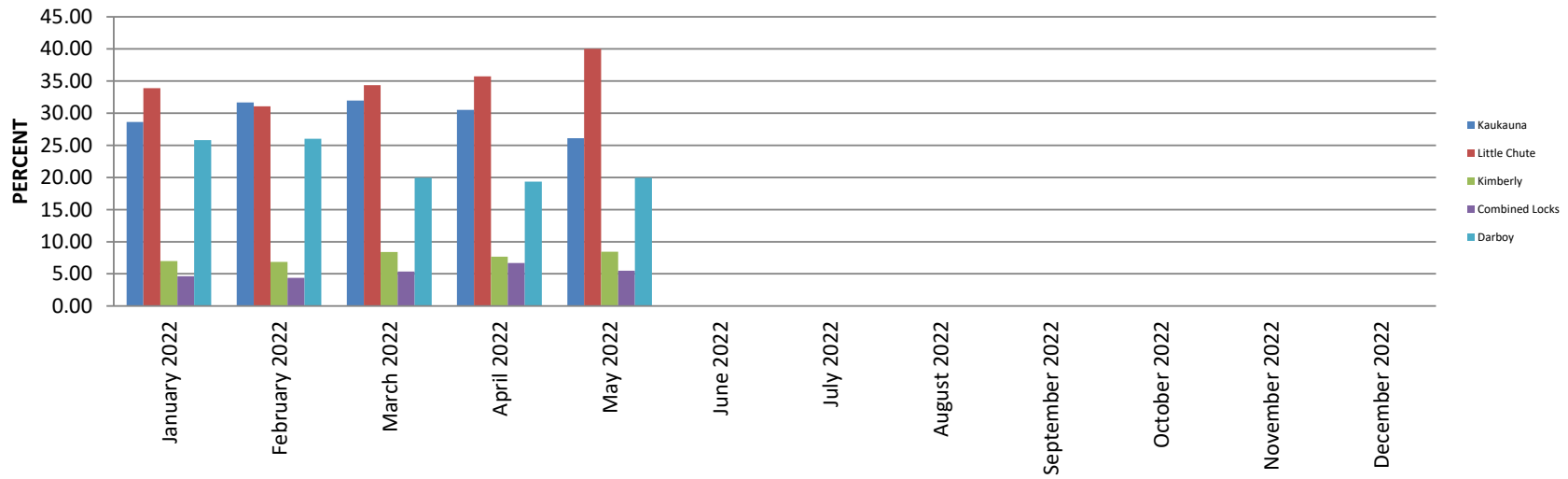
## % CONTRIBUTION BY COMMUNITY -TOTAL SUSPENDED SOLIDS POUNDS

	<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	31.68	31.07	6.85	4.36	26.04
March 2022	31.96	34.35	8.40	5.36	19.94
April 2022	30.53	35.73	7.68	6.71	19.35
May 2022	26.13	40.00	8.43	5.50	19.94
June 2022					
July 2022					
August 2022					
September 2022					
October 2022					
November 2022					
December 2022					

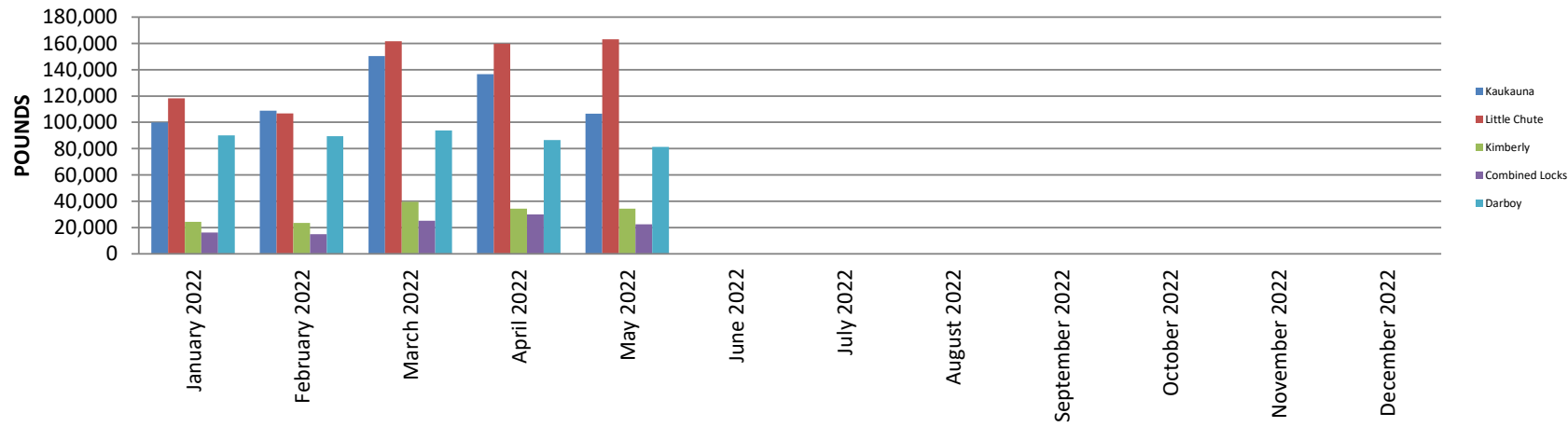
## POUNDS CONTRIBUTION BY COMMUNITY - TOTAL SUSPENDED SOLIDS POUNDS

	<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	108,904	106,811	23,566	15,004	89,520
March 2022	150,309	161,575	39,497	25,190	93,802
April 2022	136,587	159,842	34,368	30,012	86,546
May 2022	106,548	163,104	34,359	22,437	81,322
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

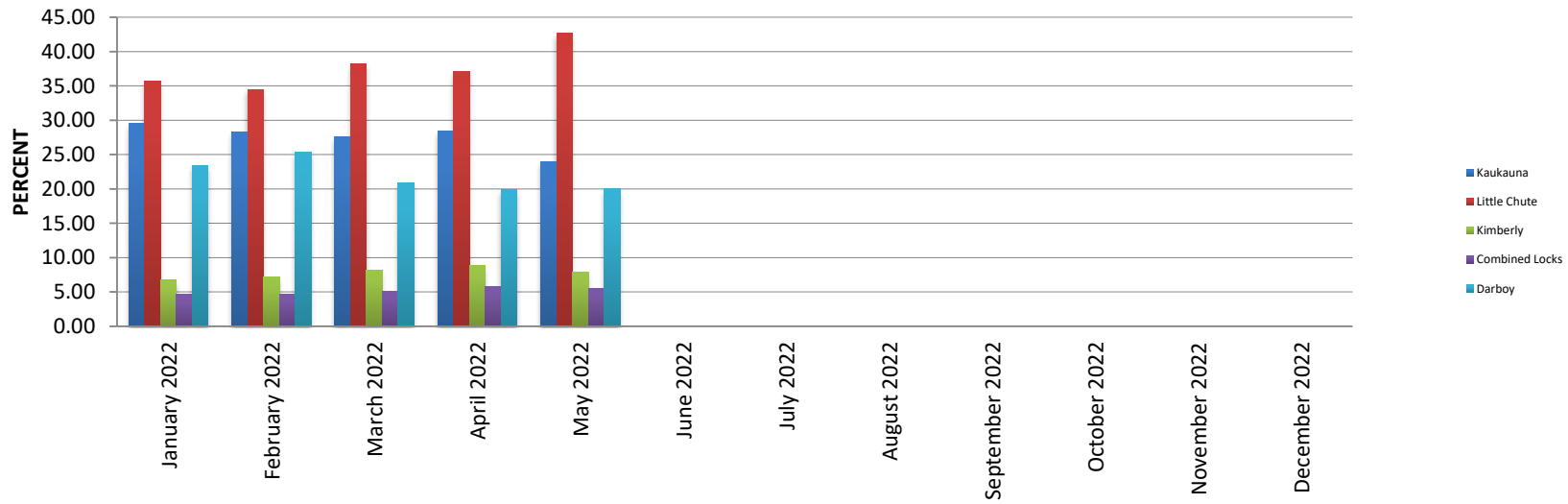
## % CONTRIBUTION BY COMMUNITY - PHOSPHORUS POUNDS

	<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	28.25	34.51	7.19	4.68	25.37
March 2022	27.53	38.18	8.23	5.13	20.93
April 2022	28.42	37.06	8.93	5.74	19.85
May 2022	23.97	42.65	7.87	5.51	20.00
June 2022					
July 2022					
August 2022					
September 2022					
October 2022					
November 2022					
December 2022					

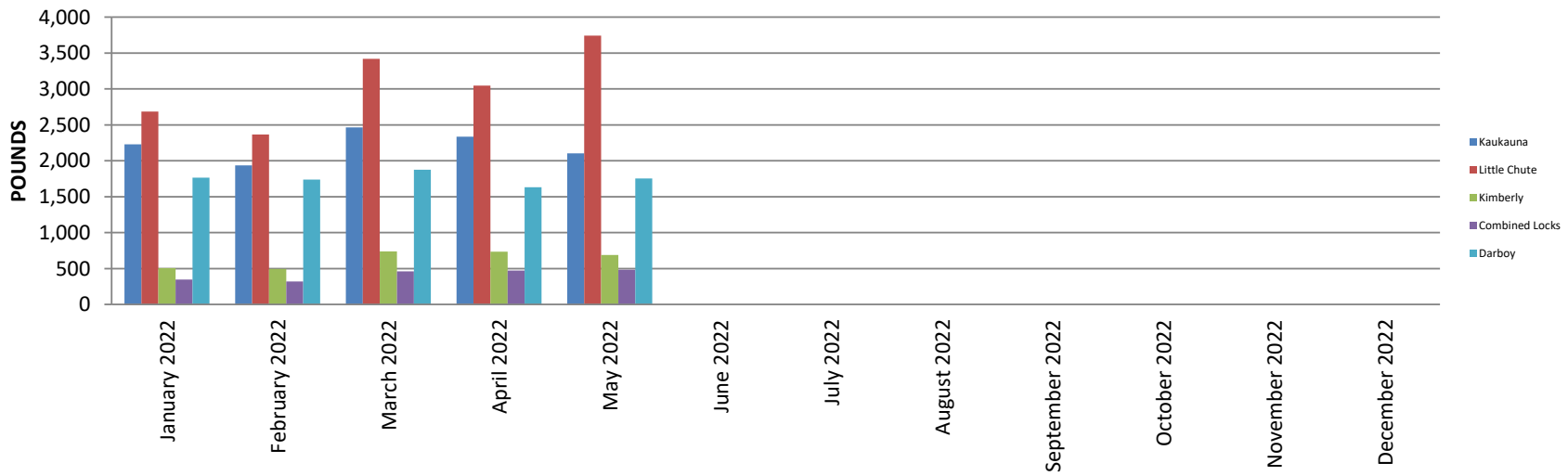
## POUNDS CONTRIBUTION BY COMMUNITY - PHOSPHORUS POUNDS

	<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	1,935	2,364	493	320	1,737
March 2022	2,465	3,419	737	459	1,875
April 2022	2,337	3,048	735	472	1,632
May 2022	2,103	3,741	690	484	1,754
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

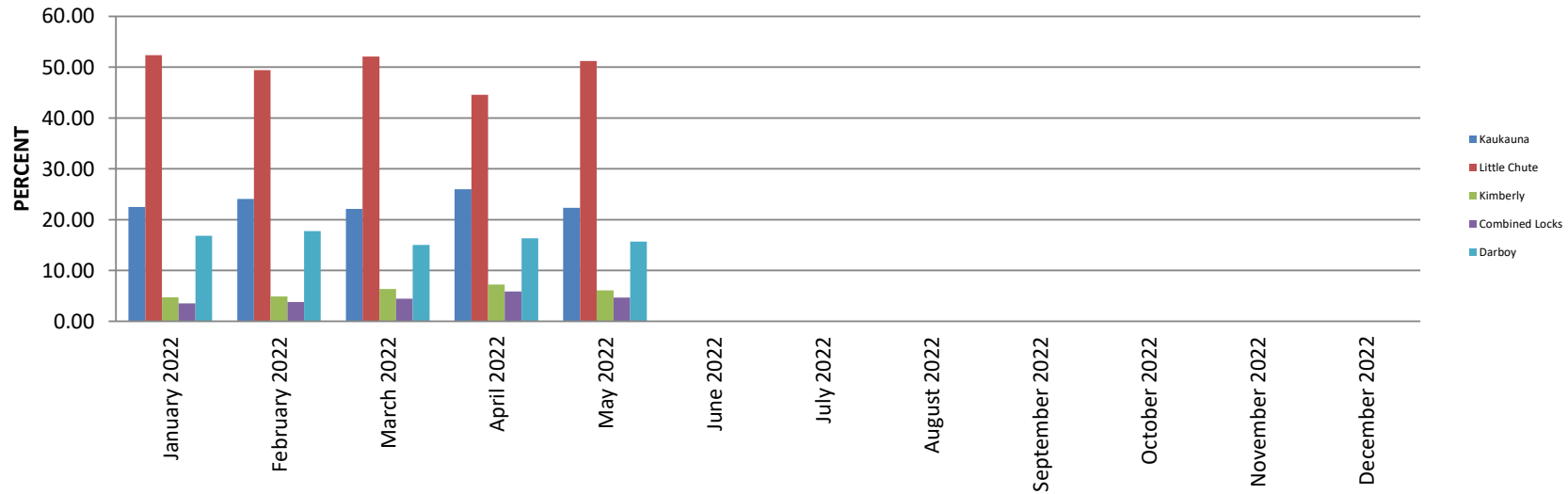
## % CONTRIBUTION BY COMMUNITY - AMMONIA POUNDS

	<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	24.08	49.43	4.90	3.82	17.77
March 2022	22.09	52.08	6.38	4.43	15.03
April 2022	26.00	44.56	7.26	5.85	16.34
May 2022	22.31	51.23	6.08	4.69	15.69
June 2022					
July 2022					
August 2022					
September 2022					
October 2022					
November 2022					
December 2022					

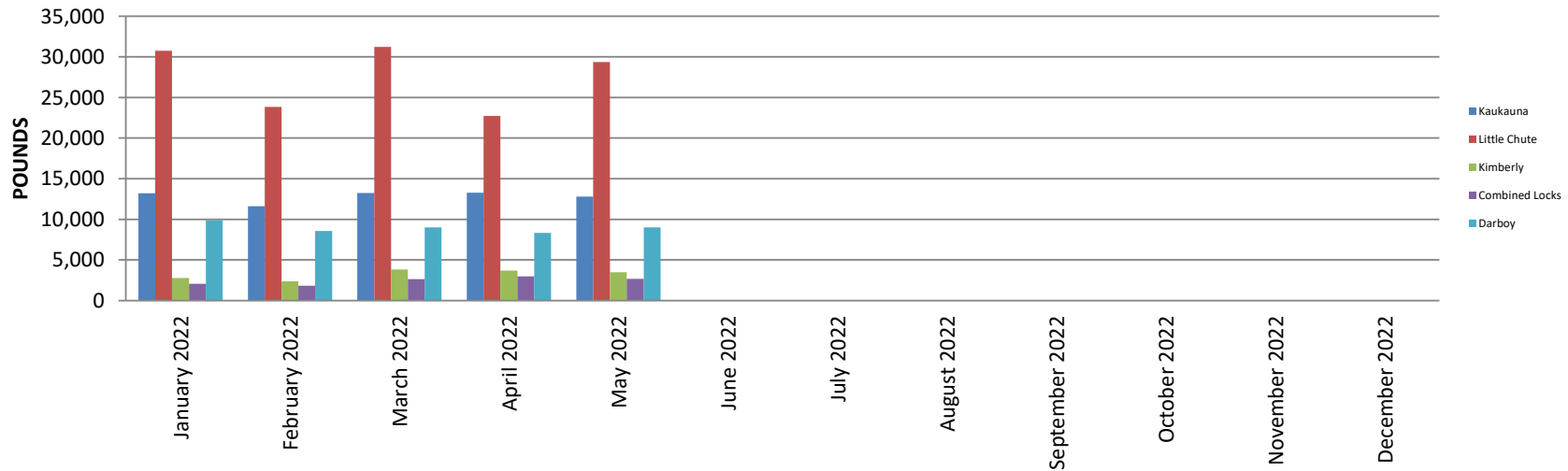
## POUNDS CONTRIBUTION BY COMMUNITY - AMMONIA POUNDS

	<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	11,612	23,841	2,363	1,842	8,570
March 2022	13,236	31,211	3,826	2,653	9,006
April 2022	13,266	22,735	3,705	2,983	8,336
May 2022	12,788	29,365	3,483	2,689	8,996
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

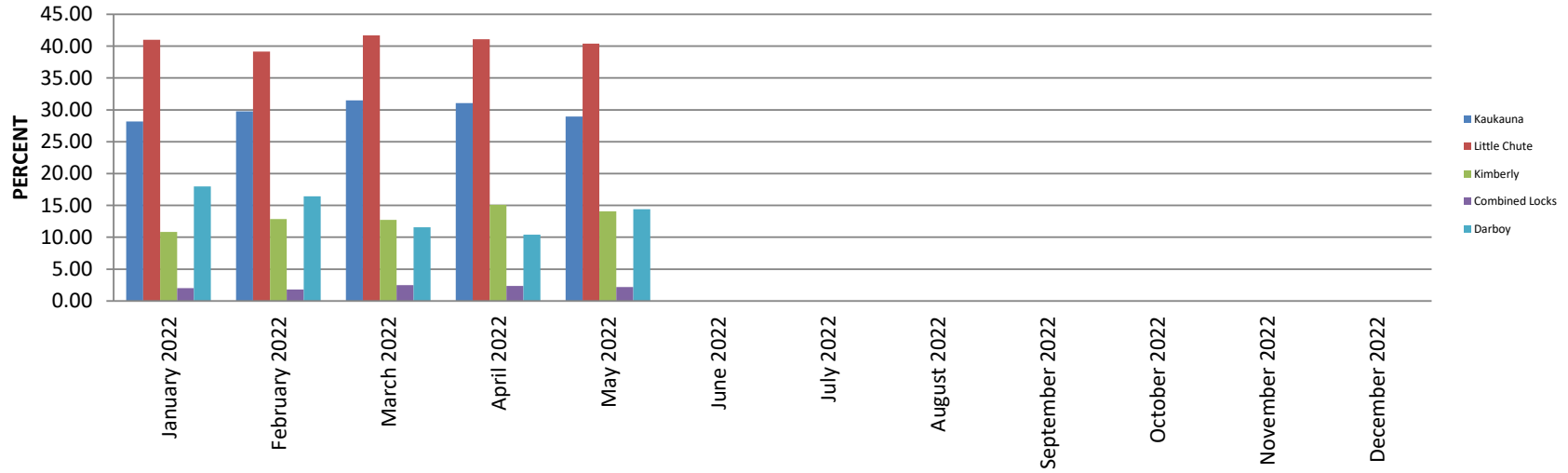
	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2022	28.19	40.98	10.85	2.00	17.98
February 2022	29.77	39.14	12.86	1.82	16.42
March 2022	31.49	41.70	12.75	2.49	11.57
April 2022	31.04	41.08	15.10	2.38	10.40
May 2022	28.94	40.39	14.07	2.20	14.41
June 2022					
July 2022					
August 2022					
September 2022					
October 2022					
November 2022					
December 2022					

## POUNDS CONTRIBUTION BY COMMUNITY - CHLORIDE POUNDS

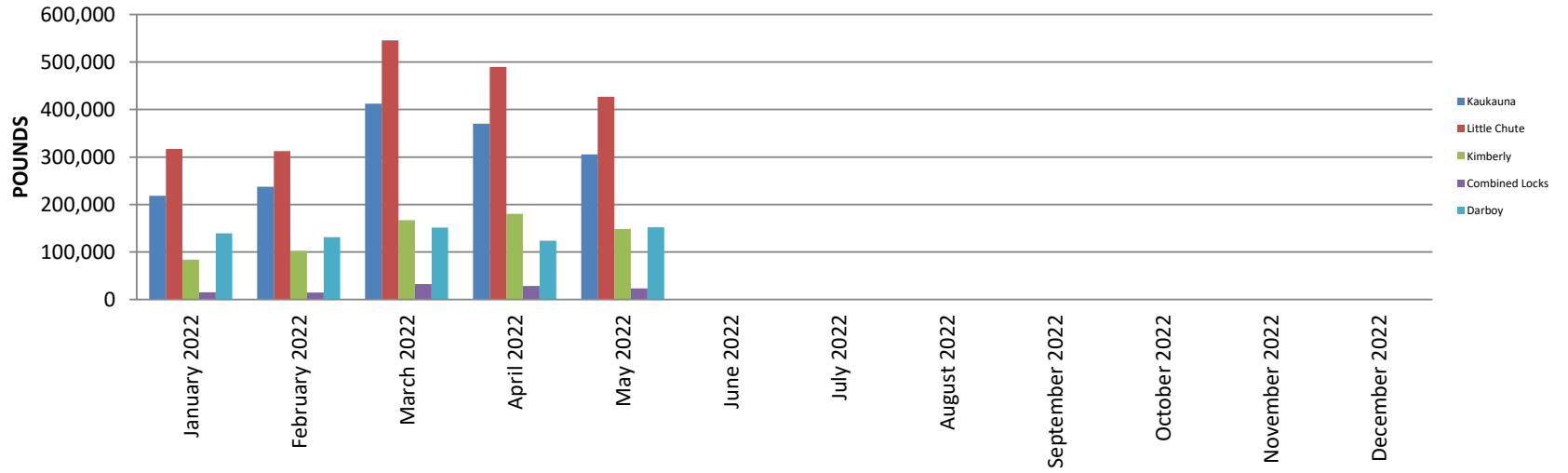
	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2022	218,136	317,040	83,950	15,473	139,137
February 2022	237,466	312,154	102,539	14,529	130,931
March 2022	412,002	545,722	166,848	32,583	151,392
April 2022	370,037	489,639	180,041	28,374	123,942
May 2022	305,646	426,556	148,548	23,200	152,178
June 2022					
July 2022					
August 2022					
September 2022					
October 2022					
November 2022					
December 2022					



### % CONTRIBUTION BY COMMUNITY - CHLORIDE POUNDS

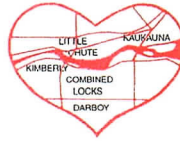


### POUNDS CONTRIBUTION BY COMMUNITY - CHLORIDE POUNDS



**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  
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](http://www.hvmsd.org)

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

**Attn:** Account # N2310E

**Month:** May

**Year:** 2022

Gallons of Final Effluent Purchased (Billing)

<u>Date</u>	<u>Gallons</u>	<u>Date</u>	<u>Gallons</u>
5/1/2021	491,000	5/21/2021	2,245,000
5/2/2021	2,903,000	5/22/2021	2,773,000
5/3/2021	3,385,000	5/23/2021	3,113,000
5/4/2021	3,213,000	5/24/2021	2,836,000
5/5/2021	3,205,000	5/25/2021	2,814,000
5/6/2021	2,769,000	5/26/2021	3,015,000
5/7/2021	536,000	5/27/2021	3,507,000
5/8/2021	706,000	5/28/2021	1,529,000
5/9/2021	1,848,000	5/29/2021	1,383,000
5/10/2021	3,229,000	5/30/2021	2,934,000
5/11/2021	3,793,000	5/31/2021	4,289,000
5/12/2021	3,917,000		
5/13/2021	3,403,000		
5/14/2021	0	<b>Total:</b>	<b>63,837,000</b>
5/15/2021	1,000		
5/16/2021	0		
5/17/2021	0		
5/18/2021	0		
5/19/2021	0		
5/20/2021	0		

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

**Attn:** Account # N2310E

## **MONTHLY BILLING**

**Month:** May

**Year:** 2022

**GALLONS PURCHASED:** 63,837,000

**BILLING RATE:** \$0.1635645 PER 1000 GALLONS

**TOTAL AMOUNT DUE: \$10,441.47**

**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: 380,588,000**

**Charge Per 1000 Gallons: \$0.1635645** Per 1000 Gallons

**Sale of Final Effluent (Revenue Collected): \$62,250.69**