

1.Flow and Strength Projections

Notables:

FLOW: 43,619,160 gal. higher than projected

BOD: N/A

S.SOLIDS: N/A

PHOSPHORUS: N/A

AMMONIA: N/A

CHLORIDES: 269,855 #'s over projection

Surplus or Deficit

\$37,389.67 Surplus for January 2017

YTD Total= Surplus of \$37,389.67

2.Hydraulic and Organic Loadings Data

All Permit Values were met for January.

Total Plant Flow: 183,493,000 for January

Notables:

The Influent Ammonia Loadings reached 81.1% of Plant Design.

Final Effluent Suspended Solids Monthly Avg Dropped from 21.35ppm in December to 10.45ppm in January.

3. Fox Energy Center

Fox Energy Pumped 66,723,000 gallons in January

-netting a monthly dollar amount of \$11,329.47

-As of January total revenue collected was \$11,329.47

FLOW AND STRENGTH PROJECTIONS

MONTH: January 2017

	<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)	137,620,240	181,239,400	43,619,160	\$ 115,188.14	\$ 151,697.38	\$ 36,509.24
B.O.D. (#s)	273,423	326,933	53,510	\$ 72,457.10	\$ 86,637.25	\$ 14,180.15
S. SOLIDS (#s)	367,392	310,324	-57,068	\$ 95,889.31	\$ 80,994.56	\$ (14,894.75)
PHOSPHORUS (#s)	7,539	6,596	-943	\$ 46,259.30	\$ 40,473.06	\$ (5,786.25)
AMMONIA-N (#s)	37,911	41,623	3,712	\$ 61,605.38	\$ 67,637.38	\$ 6,032.00
CHLORIDES (#s)	582,596	852,451	269,855	\$ 2,912.98	\$ 4,262.26	\$ 1,349.28
			TOTAL:	\$ 394,312.21	\$ 431,701.87	\$ 37,389.67

PROJECTED FOR 2017

	<u>END OF YEAR PROJECTED</u>	<u>YEAR TO DATE SURPLUS/ DEFICIT</u>	<u>YEAR TO DATE SURPLUS/ DEFICIT \$\$</u>
FLOW (GALLONS)	1,933,366,797	43,619,160	\$ 36,509.24
B.O.D. (#s)	3,232,707	53,510	\$ 14,180.15
S. SOLIDS (#s)	4,183,878	-57,068	\$ (14,894.75)
PHOSPHORUS (#s)	84,963	-943	\$ (5,786.25)
AMMONIA-N (#s)	423,820	3,712	\$ 6,032.00
CHLORIDES (#s)	7,342,132	269,855	\$ 1,349.28
		TOTAL:	\$ 37,389.67

HEART OF THE VALLEY METROPOLITAN SEWERAGE DISTRICT

MONTH: JANUARY 2017

HYDRAULIC AND ORGANIC LOADINGS DATA

INFLUENT

TOTAL FLOW TO PLANT: 183,493,000 GALLONS
 AVERAGE B.O.D. : 200 mg/L
 AVERAGE SUSPENDED SOLIDS : 163 mg/L
 AVERAGE PHOSPHORUS : 4.53 mg/L
 AVERAGE AMMONIA-N : 31.55 mg/L
 AVERAGE CHLORIDES : 574.00 mg/L

MAXIMUM DAILY FLOW TO PLANT:
8,866,000

PERCENT (%) BY COMMUNITY OF TOTAL MONTHLY VOLUME TREATED AT WWTP

<u>COMMUNITY</u>	<u>FLOW</u>	<u>BOD</u>	<u>TSS</u>	<u>PHOSPHORUS</u>	<u>AMMONIA</u>	<u>CHLORIDES</u>
KAUKAUNA	38.67	28.37	29.08	30.98	31.39	34.08
LITTLE CHUTE	25.42	28.24	26.35	24.92	32.86	30.92
KIMBERLY	13.20	11.98	11.30	11.11	8.72	16.58
COMBINED LOCKS	5.98	7.28	5.83	6.44	5.87	2.46
DARBOY	16.73	24.13	27.43	26.55	21.15	15.96

AVERAGE DAILY INFLUENT LOADINGS

FLOW : 5,919,129 GALLONS
 B.O.D. : 9,870 POUNDS
 SUSPENDED SOLIDS : 8,051 POUNDS
 PHOSPHORUS : 223 POUNDS
 AMMONIA-N : 1,558 POUNDS
 CHLORIDES : 28,336 POUNDS

<u>%</u>
49.7
67.4
49.5
54.9
81.1

PLANT DESIGN CRITERIA

11,900,000 GALLONS/DAY
 14,651 POUNDS/DAY
 16,278 POUNDS/DAY
 407 POUNDS/DAY
 1,920 POUNDS/DAY

FINAL EFFLUENT

MONTHLY
AVERAGE

cB.O.D. : 4.88 mg/L
 SUSPENDED SOLIDS : 10.45 mg/L
 PHOSPHORUS : 0.28 mg/L
 AMMONIA-N : 0.27 mg/L
 CHLORIDES : 580.67 mg/L

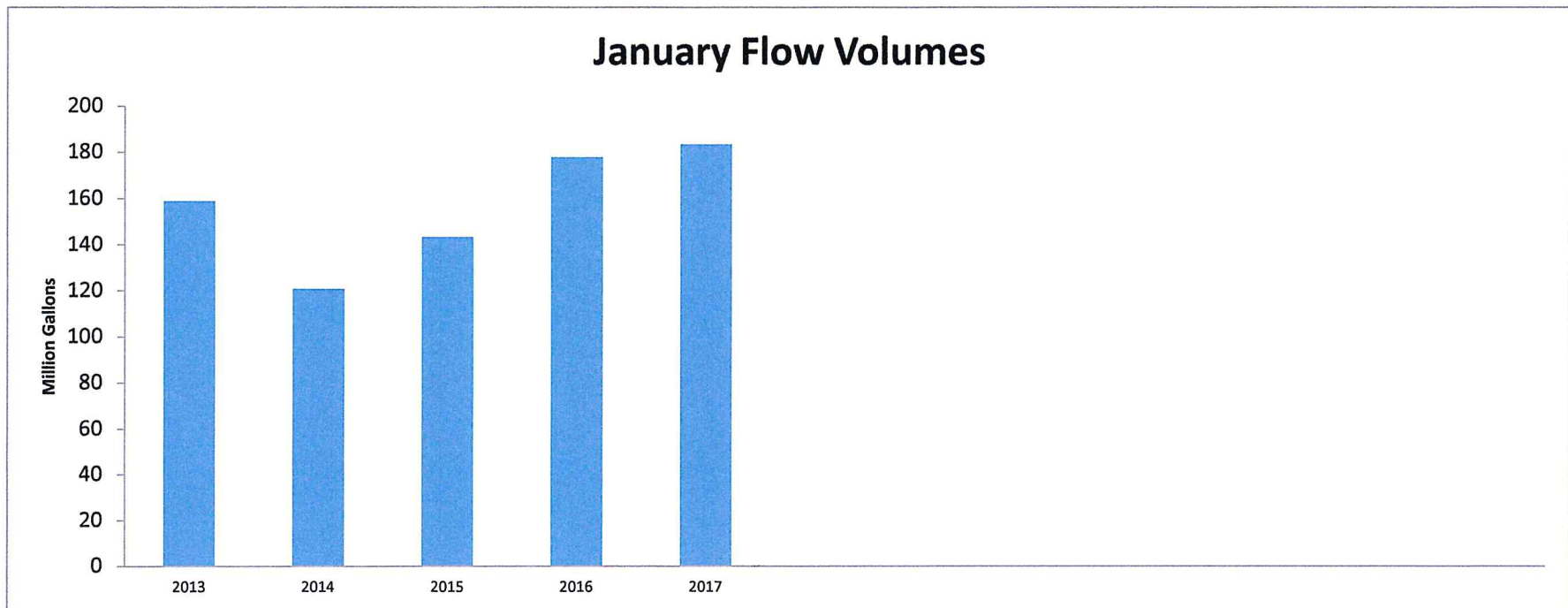
<u>%</u>
19.5
34.8
27.7

PERMIT LIMIT

25 mg/L
 30 mg/L
 1 mg/L

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



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 2017	38.67	25.42	13.20	5.98	16.73	
February 2017						
March 2017						
April 2017						
May 2017						
June 2017						
July 2017						
August 2017						
September 2017						
October 2017						
November 2017						
December 2017						

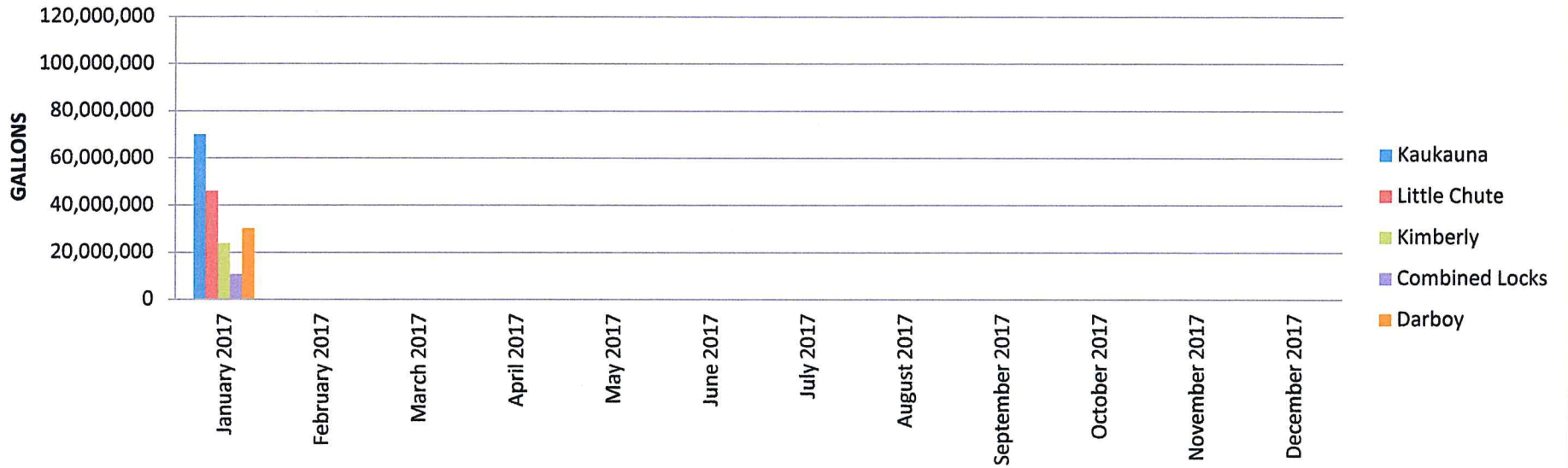
GALLONS CONTRIBUTION BY COMMUNITY - FLOW GALLONS

	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2017	70,086,400	46,073,000	23,922,000	10,834,000	30,324,000
February 2017					
March 2017					
April 2017					
May 2017					
June 2017					
July 2017					
August 2017					
September 2017					
October 2017					
November 2017					
December 2017					

% CONTRIBUTION BY COMMUNITY - FLOW GALLONS



GALLONS CONTRIBUTION BY COMMUNITY - FLOW GALLONS



HEART OF THE VALLEY METROPOLITAN SEWERAGE DISTRICT

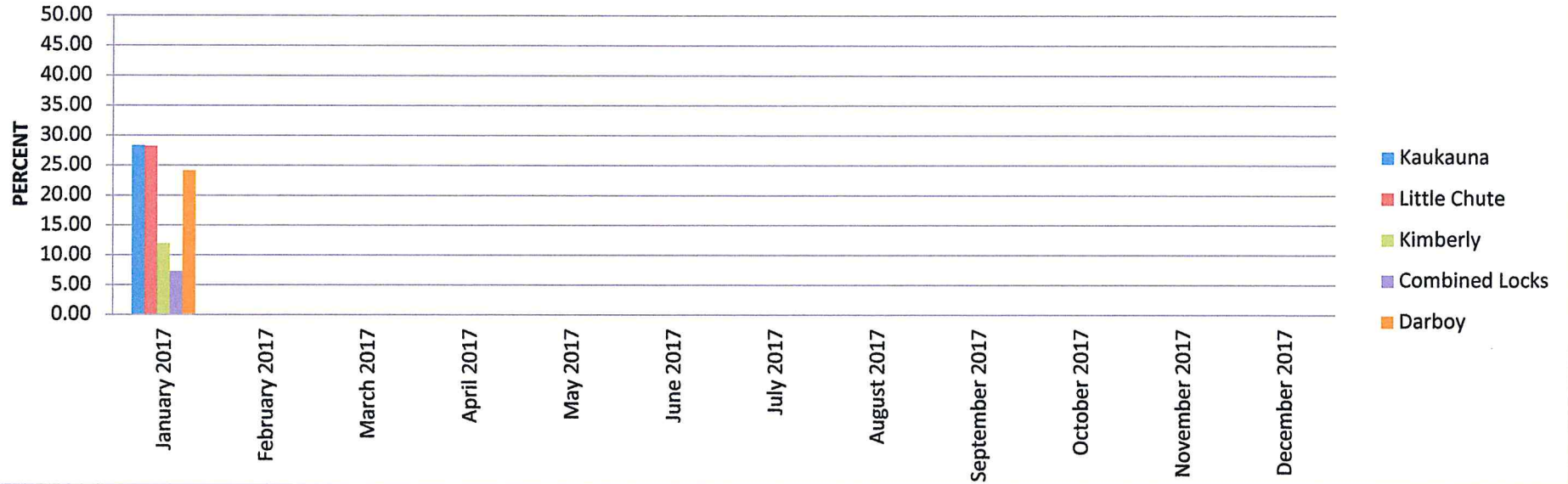
% CONTRIBUTION BY COMMUNITY - B.O.D. POUNDS

	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2017	28.37	28.24	11.98	7.28	24.13
February 2017					
March 2017					
April 2017					
May 2017					
June 2017					
July 2017					
August 2017					
September 2017					
October 2017					
November 2017					
December 2017					

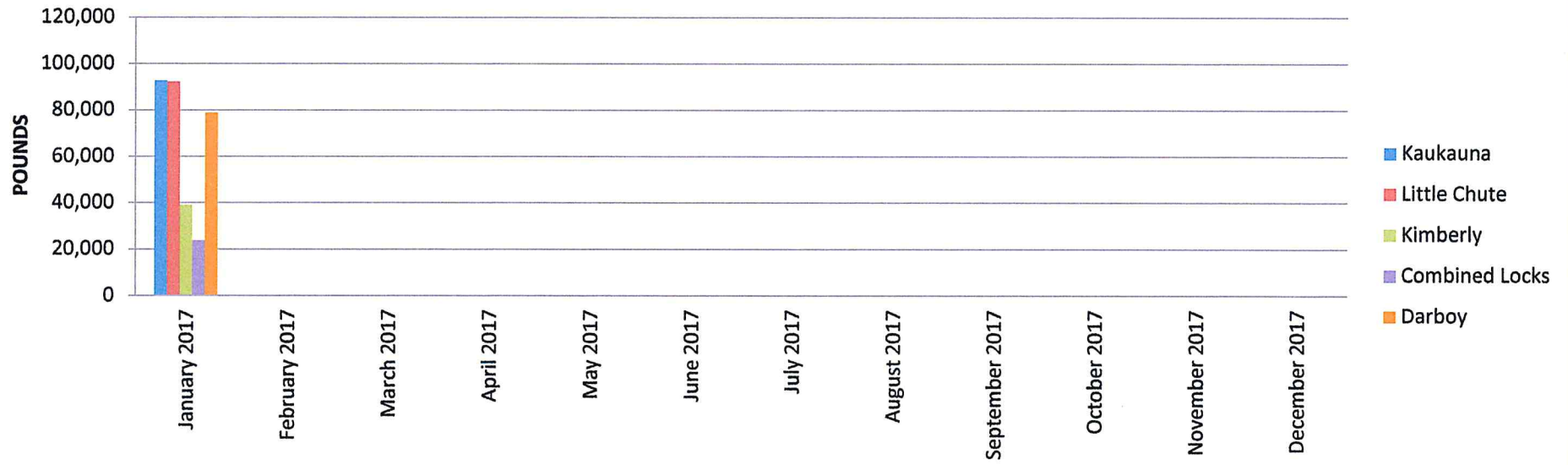
POUNDS CONTRIBUTION BY COMMUNITY - B.O.D. POUNDS

	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2017	92,752	92,337	39,172	23,785	78,888
February 2017					
March 2017					
April 2017					
May 2017					
June 2017					
July 2017					
August 2017					
September 2017					
October 2017					
November 2017					
December 2017					

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



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



HEART OF THE VALLEY METROPOLITAN SEWERAGE DISTRICT

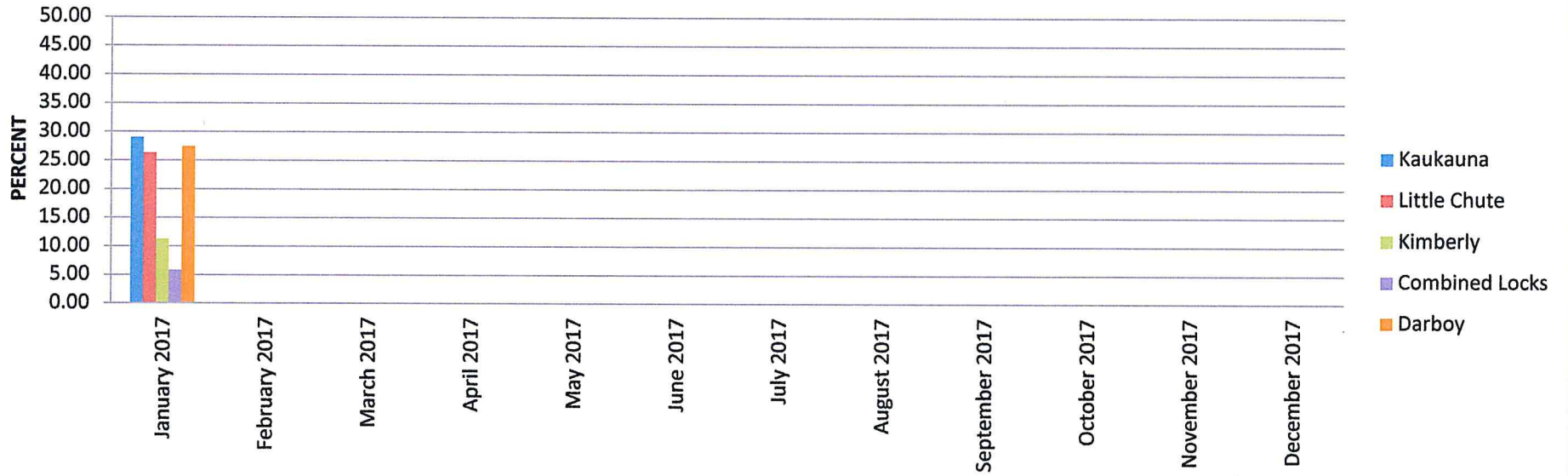
% CONTRIBUTION BY COMMUNITY -TOTAL SUSPENDED SOLIDS POUNDS

	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2017	29.08	26.35	11.30	5.83	27.43
February 2017					
March 2017					
April 2017					
May 2017					
June 2017					
July 2017					
August 2017					
September 2017					
October 2017					
November 2017					
December 2017					

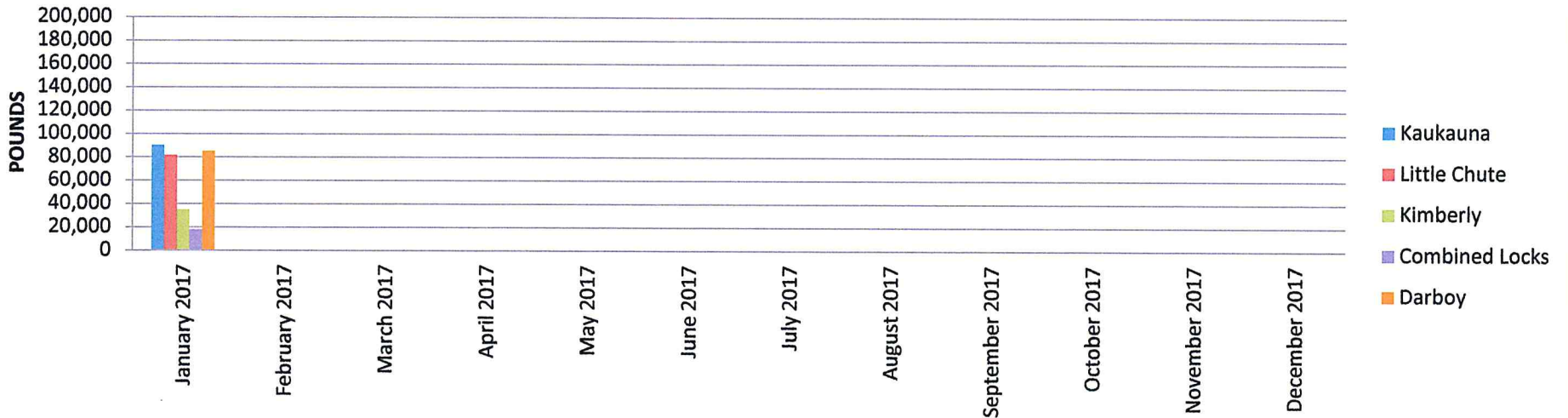
POUNDS CONTRIBUTION BY COMMUNITY - TOTAL SUSPENDED SOLIDS POUNDS

	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2017	90,234	81,769	35,081	18,106	85,135
February 2017					
March 2017					
April 2017					
May 2017					
June 2017					
July 2017					
August 2017					
September 2017					
October 2017					
November 2017					
December 2017					

% CONTRIBUTION BY COMMUNITY - TOTAL SUSPENDED SOLIDS POUNDS



POUNDS CONTRIBUTION BY COMMUNITY - TOTAL SUSPENDED SOLIDS POUNDS



HEART OF THE VALLEY METROPOLITAN SEWERAGE DISTRICT

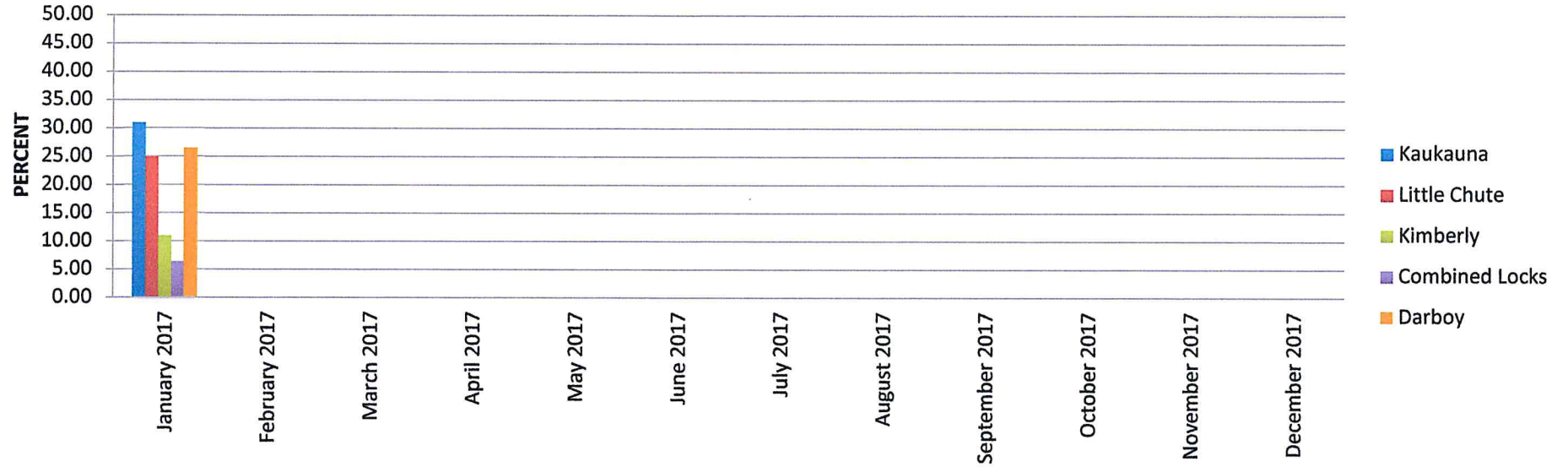
% CONTRIBUTION BY COMMUNITY - PHOSPHORUS POUNDS

	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2017	30.98	24.92	11.11	6.44	26.55
February 2017					
March 2017					
April 2017					
May 2017					
June 2017					
July 2017					
August 2017					
September 2017					
October 2017					
November 2017					
December 2017					

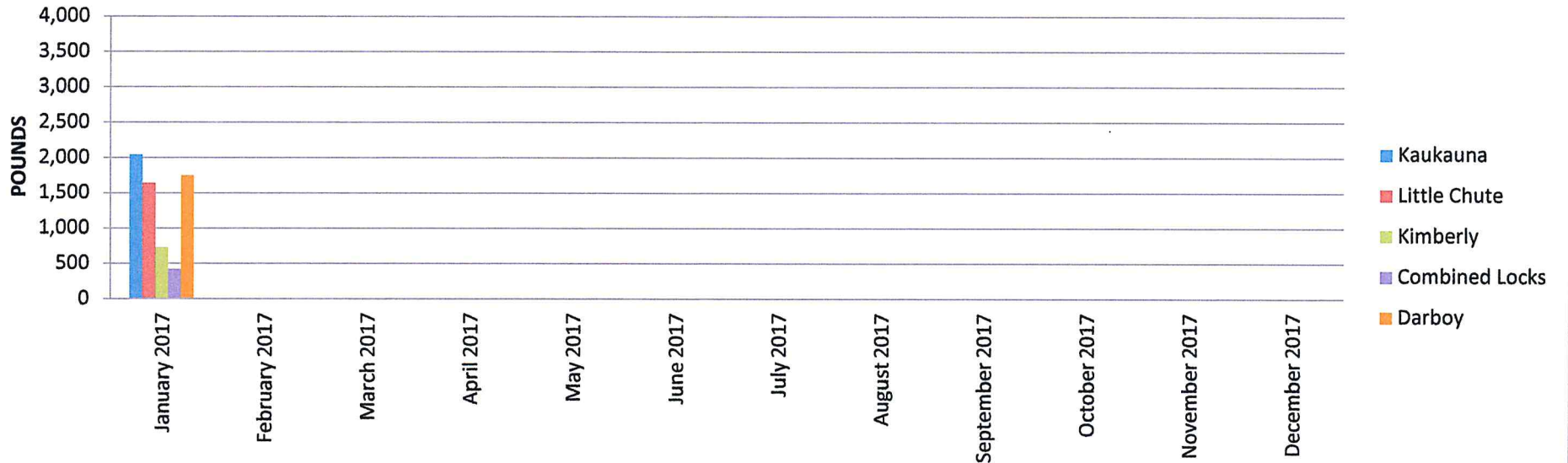
POUNDS CONTRIBUTION BY COMMUNITY - PHOSPHORUS POUNDS

	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2017	2,044	1,643	733	425	1,751
February 2017					
March 2017					
April 2017					
May 2017					
June 2017					
July 2017					
August 2017					
September 2017					
October 2017					
November 2017					
December 2017					

% CONTRIBUTION BY COMMUNITY - PHOSPHORUS POUNDS



POUNDS CONTRIBUTION BY COMMUNITY - PHOSPHORUS POUNDS



HEART OF THE VALLEY METROPOLITAN SEWERAGE DISTRICT

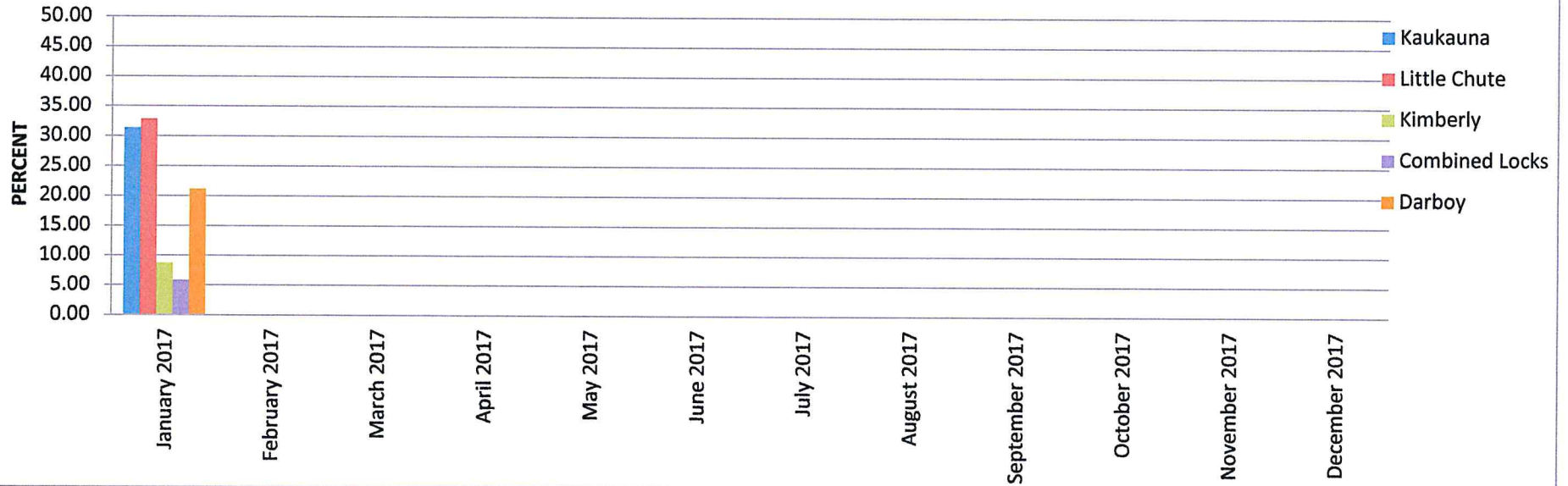
% CONTRIBUTION BY COMMUNITY - AMMONIA POUNDS

	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2017	31.39	32.86	8.72	5.87	21.15
February 2017					
March 2017					
April 2017					
May 2017					
June 2017					
July 2017					
August 2017					
September 2017					
October 2017					
November 2017					
December 2017					

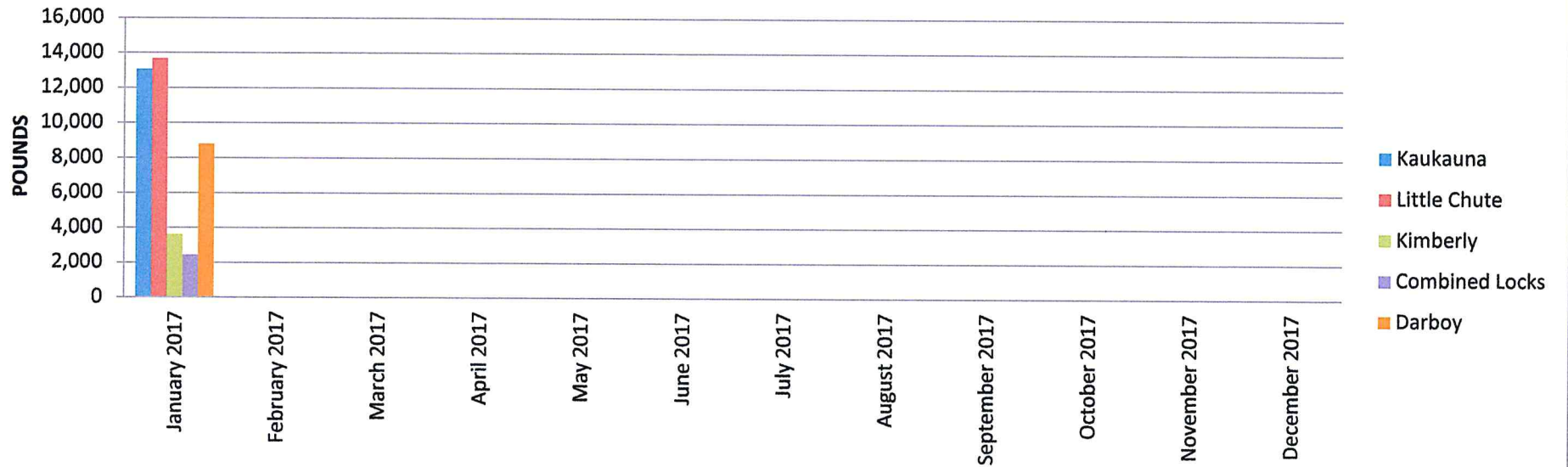
POUNDS CONTRIBUTION BY COMMUNITY - AMMONIA POUNDS

	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2017	13,065	13,677	3,631	2,445	8,804
February 2017					
March 2017					
April 2017					
May 2017					
June 2017					
July 2017					
August 2017					
September 2017					
October 2017					
November 2017					
December 2017					

% CONTRIBUTION BY COMMUNITY - AMMONIA POUNDS



POUNDS CONTRIBUTION BY COMMUNITY - AMMONIA POUNDS



HEART OF THE VALLEY METROPOLITAN SEWERAGE DISTRICT

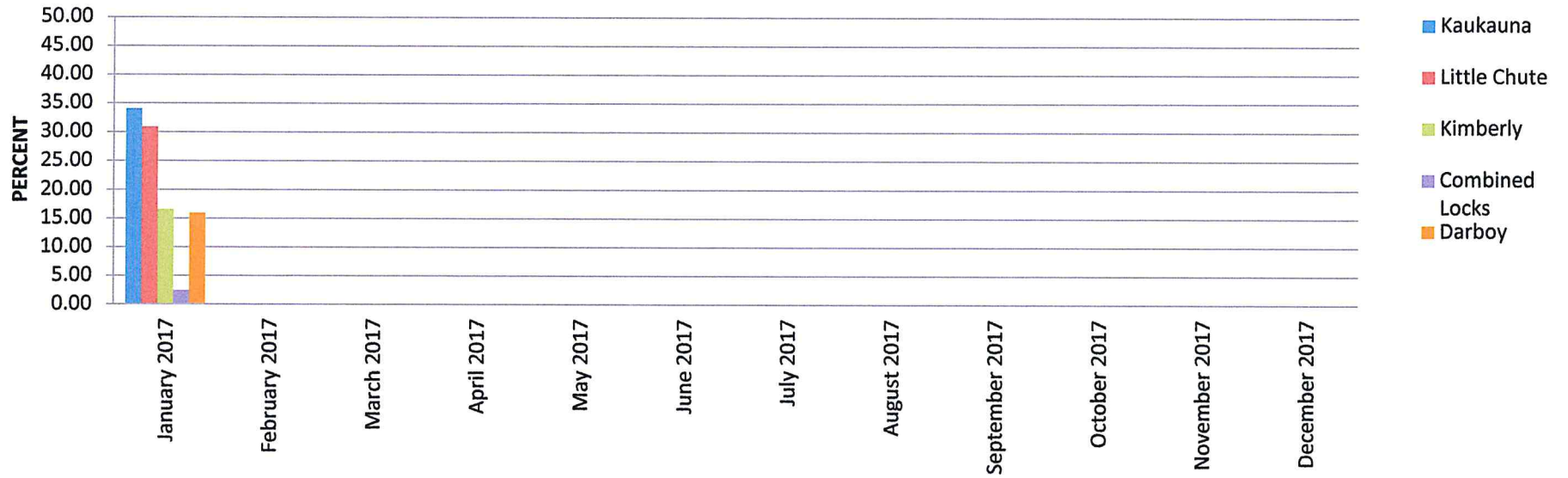
% CONTRIBUTION BY COMMUNITY - CHLORIDE POUNDS

	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2017	34.08	30.92	16.58	2.46	15.96
February 2017					
March 2017					
April 2017					
May 2017					
June 2017					
July 2017					
August 2017					
September 2017					
October 2017					
November 2017					
December 2017					

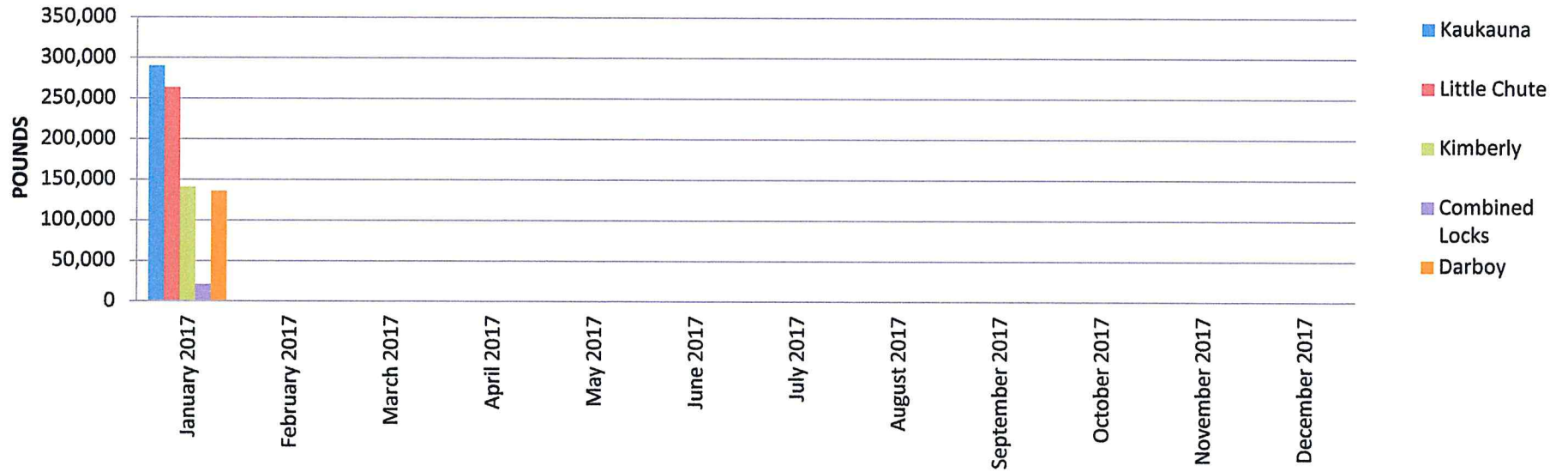
POUNDS CONTRIBUTION BY COMMUNITY - CHLORIDE POUNDS

	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2017	290,487	263,589	141,331	20,961	136,083
February 2017					
March 2017					
April 2017					
May 2017					
June 2017					
July 2017					
August 2017					
September 2017					
October 2017					
November 2017					
December 2017					

% CONTRIBUTION BY COMMUNITY - CHLORIDE POUNDS



POUNDS CONTRIBUTION BY COMMUNITY - CHLORIDE POUNDS

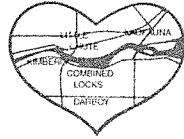


DISTRICT DIRECTOR:

Brian M. Helminger

SERVING:

Combined Locks
Kaukauna
Kimberly
Little Chute
Darboy S.D.



COMMISSIONERS:

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

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 19800
Green Bay, WI 54307-9004

Attn: Account # N2310E

Month: January

Year: 2017

Gallons of Final Effluent Purchased (Billing)

<u>Date</u>	<u>Gallons</u>	<u>Date</u>	<u>Gallons</u>
1/1/2017	0	1/21/2017	2,750,000
1/2/2017	0	1/22/2017	2,213,000
1/3/2017	2,029,000	1/23/2017	2,420,000
1/4/2017	2,271,000	1/24/2017	2,446,000
1/5/2017	2,271,000	1/25/2017	2,447,000
1/6/2017	2,427,000	1/26/2017	2,446,000
1/7/2017	2,502,000	1/27/2017	2,446,000
1/8/2017	2,574,000	1/28/2017	2,081,000
1/9/2017	2,329,000	1/29/2017	161,000
1/10/2017	2,352,000	1/30/2017	2,462,000
1/11/2017	2,415,000	1/31/2017	2,526,000
1/12/2017	2,154,000		
1/13/2017	2,122,000		
1/14/2017	2,395,000		
1/15/2017	2,424,000		
1/16/2017	2,259,000		
1/17/2017	2,274,000		
1/18/2017	2,289,000		
1/19/2017	2,487,000		
1/20/2017	2,751,000		
		Total:	66,723,000

Facility: Wisconsin Public Service Corporation - Fox Energy Center
P.O. Box 19800
Green Bay, WI 54307-9004

Attn: Account # N2310E

MONTHLY BILLING

Month: January

Year: 2017

GALLONS PURCHASED: 66,723,000

BILLING RATE: \$0.1533035 PER 1000 GALLONS

TOTAL AMOUNT DUE: \$10,228.87

**Heart of the Valley
Metropolitan Sewerage District**

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

2017

Final Effluent Sent to Fox Energy Facility

Gallons: 66,723,000

Charge Per 1000 Gallons: \$0.1533035 Per 1000 Gallons

Sale of Final Effluent (Revenue Collected): \$10,228.87