

FLOW AND STRENGTH PROJECTIONS

MONTH: May 2015

	<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)	205,099,863	154,962,520	-50,137,343	\$ 148,697.40	\$ 112,347.83	\$ (36,349.57)
B.O.D. (#s)	300,513	281,862	-18,651	\$ 71,822.61	\$ 67,364.96	\$ (4,457.65)
S. SOLIDS (#s)	467,298	328,388	-138,910	\$ 92,057.71	\$ 64,692.48	\$ (27,365.23)
PHOSPHORUS (#s)	8,337	6,934	-1,403	\$ 43,744.24	\$ 36,382.33	\$ (7,361.91)
AMMONIA-N (#s)	35,033	39,032	3,999	\$ 57,278.96	\$ 63,817.21	\$ 6,538.25
CHLORIDES (#s)	664,850	568,541	-96,309	\$ 3,324.25	\$ 2,842.71	\$ (481.54)
			TOTAL:	\$ 416,925.16	\$ 347,447.51	\$ (69,477.65)

(THRU MAY 2015)

PROJECTED FOR 2015

	<u>END OF YEAR PROJECTED</u>	<u>YEAR TO DATE SURPLUS/ DEFICIT</u>	<u>YEAR TO DATE SURPLUS/ DEFICIT \$\$</u>
FLOW (GALLONS)	1,990,763,703	-289,302,783	\$ (209,744.52)
B.O.D. (#s)	3,436,567	-255,577	\$ (61,082.85)
S. SOLIDS (#s)	5,046,098	-719,908	\$ (141,821.79)
PHOSPHORUS (#s)	96,019	-9,442	\$ (49,542.28)
AMMONIA-N (#s)	398,962	12,940	\$ 21,157.23
CHLORIDES (#s)	7,094,286	-551,198	\$ (2,755.99)
		TOTAL:	\$ (443,790.19)

HEART OF THE VALLEY METROPOLITAN SEWERAGE DISTRICT

MONTH: MAY 2015

HYDRAULIC AND ORGANIC LOADINGS DATA

INFLUENT

TOTAL FLOW TO PLANT: 164,246,000 GALLONS
 AVERAGE B.O.D. : 203 mg/L
 AVERAGE SUSPENDED SOLIDS : 217 mg/L
 AVERAGE PHOSPHORUS : 4.99 mg/L
 AVERAGE AMMONIA-N : 26.96 mg/L
 AVERAGE CHLORIDES : 516.43 mg/L

MAXIMUM DAILY FLOW TO PLANT:
10,790,000 GALLONS

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	37.31	27.09	26.96	32.91	29.87	34.52
LITTLE CHUTE	25.89	26.59	29.26	25.66	30.17	30.08
KIMBERLY	12.60	14.36	13.06	12.19	103.70	13.61
COMBINED LOCKS	5.96	7.83	7.65	7.14	6.82	2.93
DARBOY	18.24	24.13	23.07	22.10	22.76	18.86

AVERAGE DAILY INFLUENT LOADINGS

FLOW : 5,298,258 GALLONS
 B.O.D. : 8,963 POUNDS
 SUSPENDED SOLIDS : 9,584 POUNDS
 PHOSPHORUS : 220 POUNDS
 AMMONIA-N : 1,191 POUNDS
 CHLORIDES : 22,820 POUNDS

<u>%</u>
44.5
61.2
58.9
54.1
62.1

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. : 5.39 mg/L
 SUSPENDED SOLIDS : 9.37 mg/L
 PHOSPHORUS : 0.45 mg/L
 AMMONIA-N : 0.36 mg/L
 CHLORIDES : 558.57 mg/L

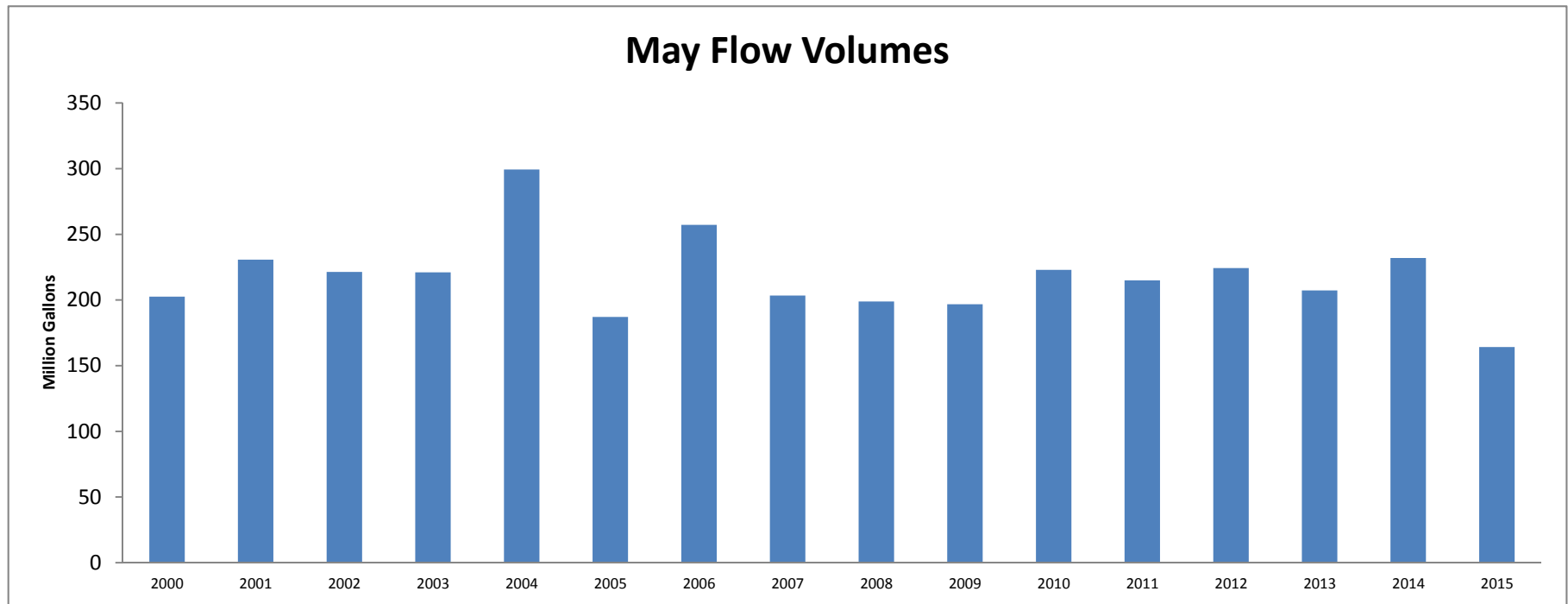
<u>%</u>
21.5
31.2
45.0

PERMIT
LIMIT

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

HEART OF THE VALLEY METROPOLITAN SEWERAGE DISTRICT

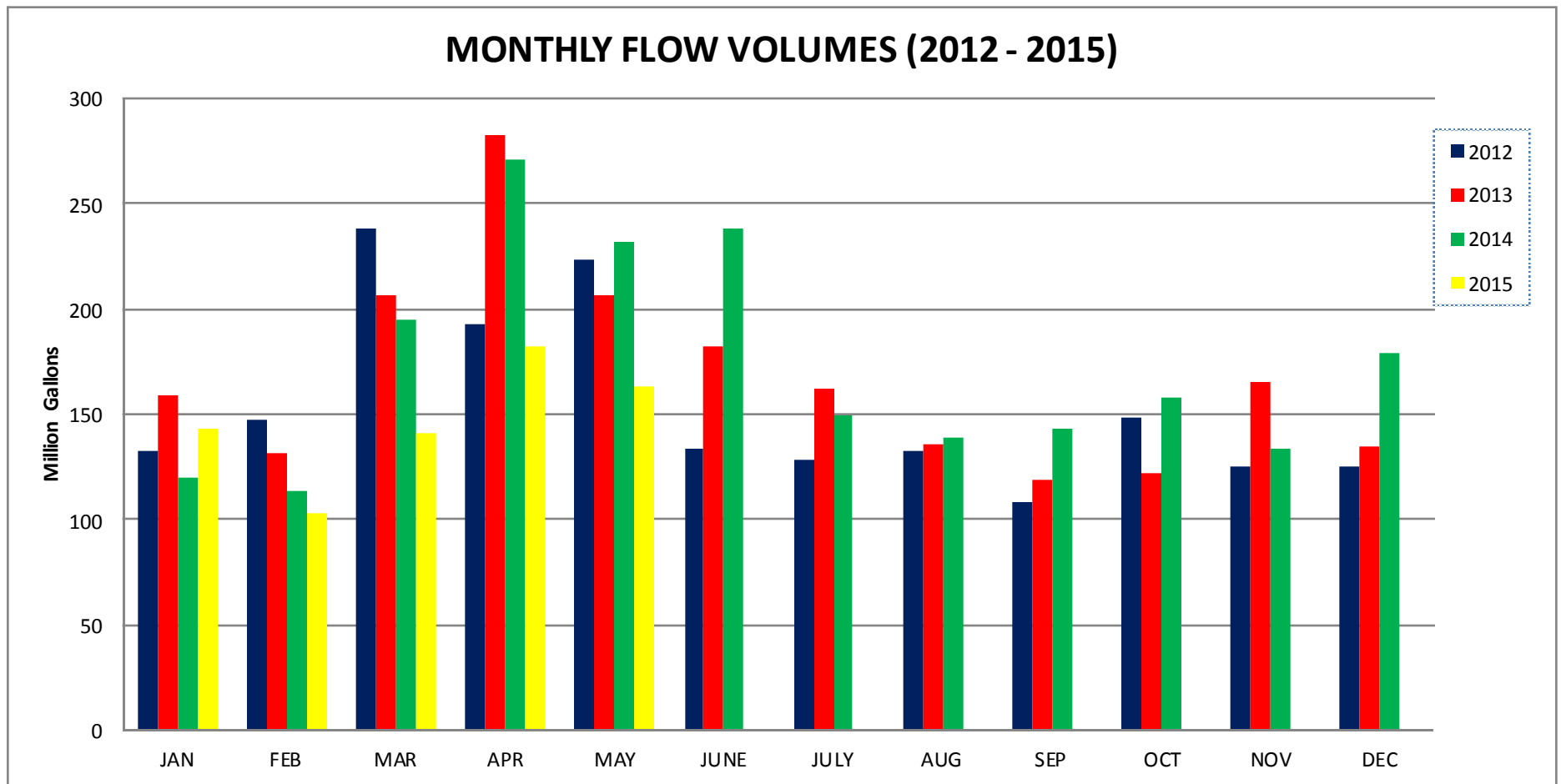
<u>Year</u>	<u>May Flow Million Gallons</u>	<u>Precipitation Inches</u>
2000	202.571	4.70
2001	230.775	5.36
2002	221.376	2.75
2003	221.082	2.75
2004	299.395	6.60
2005	187.137	1.55
2006	257.231	4.43
2007	203.456	2.28
2008	198.891	1.07
2009	196.800	2.45
2010	222.909	2.94
2011	214.953	2.03
2012	224.309	3.17
2013	207.246	2.76
2014	231.951	3.03
2015	164.246	3.44



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>
2012	133.587	148.063	239.291	192.940	224.309	133.928	129.100	132.987	109.316	149.466	125.396	126.223
2013	159.014	132.251	207.339	283.615	207.246	182.739	163.201	135.948	119.210	122.015	165.861	135.674
2014	120.943	114.081	195.096	272.038	231.951	239.160	150.335	139.604	143.973	158.887	133.835	179.535
2015	143.460	103.918	141.868	182.911	164.246							

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



HEART OF THE VALLEY METROPOLITAN SEWERAGE DISTRICT

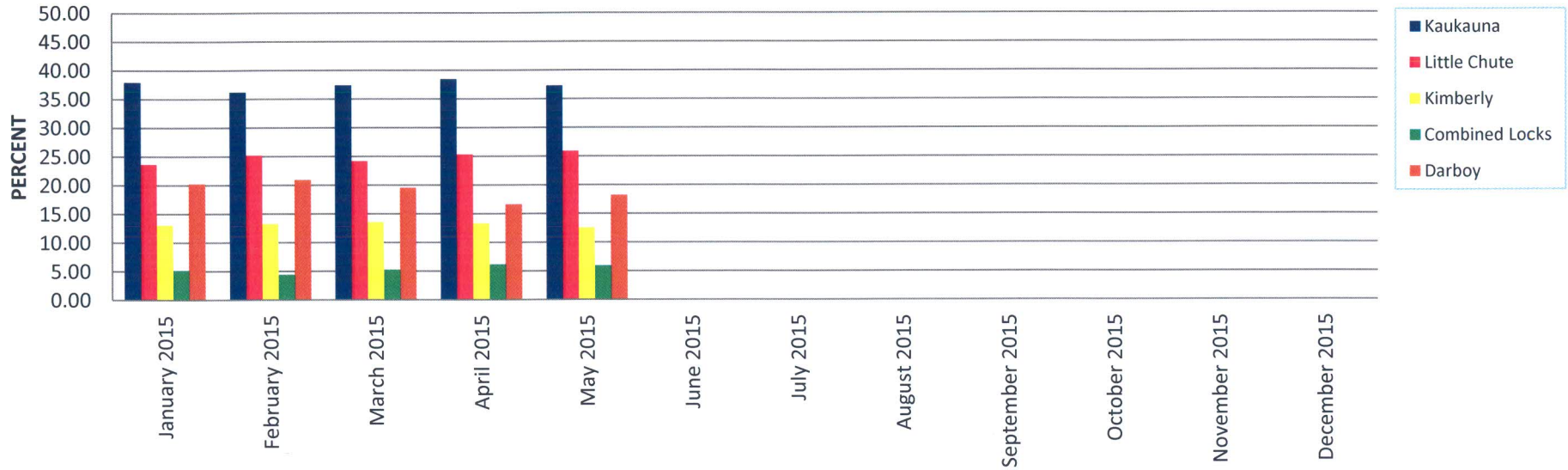
% CONTRIBUTION BY COMMUNITY - FLOW GALLONS

	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>	<u>Rainfall - Inches</u>
January 2015	37.90	23.63	13.06	5.19	20.22	0.56
February 2015	36.21	25.18	13.26	4.45	20.90	0.52
March 2015	37.39	24.20	13.55	5.32	19.53	0.90
April 2015	38.45	25.32	13.38	6.23	16.63	1.91
May 2015	37.31	25.89	12.60	5.96	18.24	3.44
June 2015						
July 2015						
August 2015						
September 2015						
October 2015						
November 2015						
December 2015						

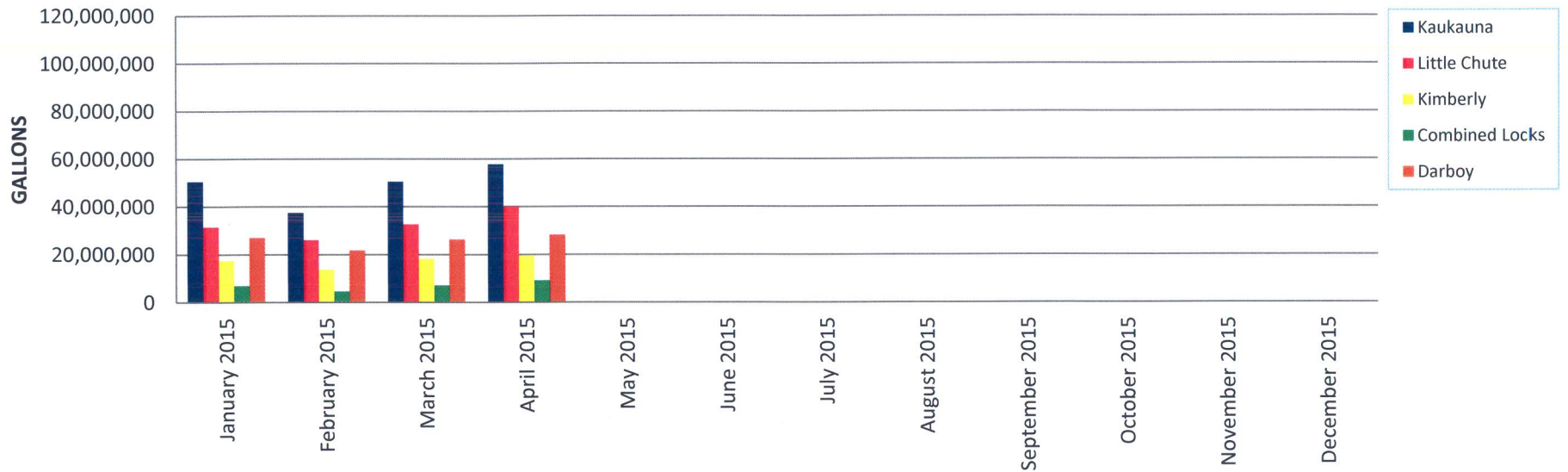
GALLONS CONTRIBUTION BY COMMUNITY - FLOW GALLONS

	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2015	50,570,950	31,530,000	17,429,000	6,924,000	26,985,000
February 2015	37,561,780	26,127,000	13,752,000	4,614,000	21,686,000
March 2015	50,496,530	32,678,000	18,302,000	7,186,000	26,375,000
April 2015	57,821,520	40,117,000	19,531,000	9,229,000	28,264,000
May 2015					
June 2015					
July 2015					
August 2015					
September 2015					
October 2015					
November 2015					
December 2015					

FLOW PERCENT CONTRIBUTED BY COMMUNITY



FLOW GALLONS CONTRIBUTED BY COMMUNITY



HEART OF THE VALLEY METROPOLITAN SEWERAGE DISTRICT

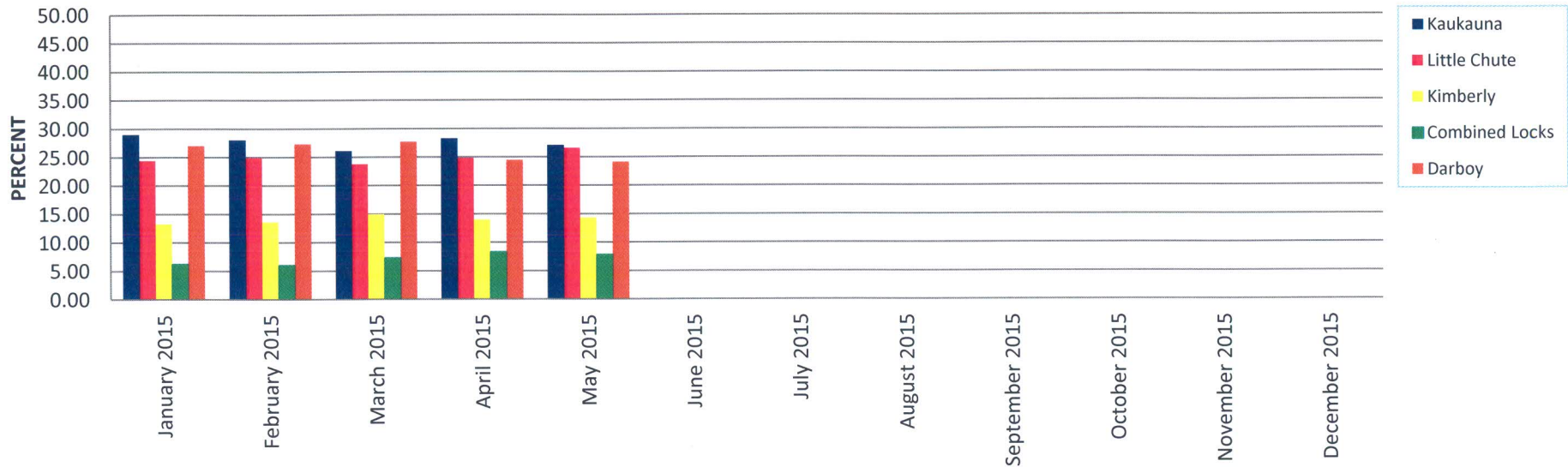
% CONTRIBUTION BY COMMUNITY - B.O.D. POUNDS

	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2015	29.01	24.40	13.31	6.25	27.03
February 2015	28.06	24.94	13.63	6.05	27.32
March 2015	26.13	23.80	15.02	7.32	27.72
April 2015	28.28	24.87	14.03	8.32	24.49
May 2015	27.09	26.59	14.36	7.83	24.13
June 2015					
July 2015					
August 2015					
September 2015					
October 2015					
November 2015					
December 2015					

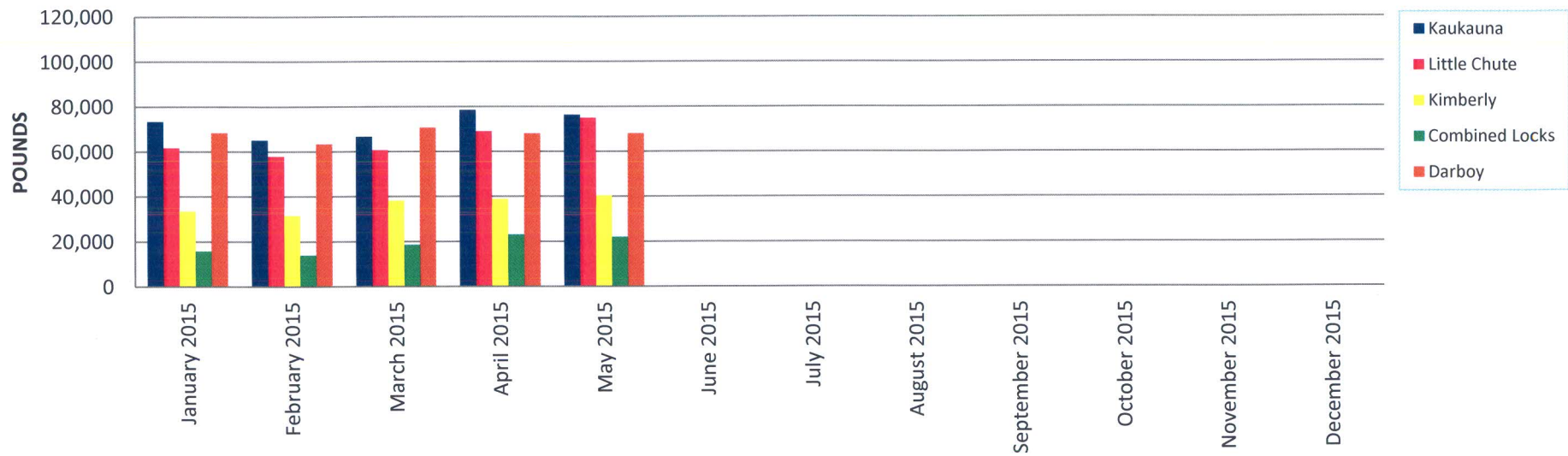
POUNDS CONTRIBUTION BY COMMUNITY - B.O.D. POUNDS

	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2015	73,318	61,663	33,645	15,805	68,331
February 2015	65,150	57,919	31,646	14,052	63,437
March 2015	66,672	60,728	38,323	18,677	70,735
April 2015	78,518	69,052	38,963	23,114	68,003
May 2015	76,346	74,949	40,478	22,065	68,025
June 2015					
July 2015					
August 2015					
September 2015					
October 2015					
November 2015					
December 2015					

B.O.D. PERCENT CONTRIBUTED BY COMMUNITY



B.O.D POUNDS CONTRIBUTED BY COMMUNITY



HEART OF THE VALLEY METROPOLITAN SEWERAGE DISTRICT

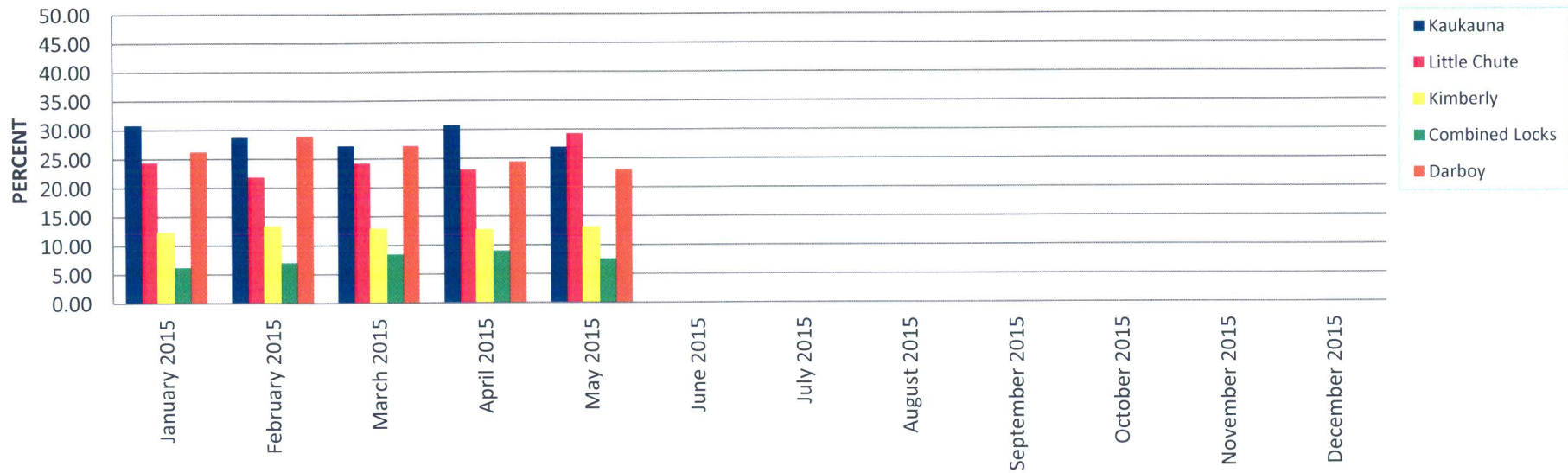
% CONTRIBUTION BY COMMUNITY -TOTAL SUSPENDED SOLIDS POUNDS

	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2015	30.86	24.36	12.26	6.25	26.27
February 2015	28.76	21.88	13.34	7.08	28.94
March 2015	27.27	24.23	12.82	8.49	27.19
April 2015	30.81	23.06	12.65	9.05	24.43
May 2015	26.96	29.26	13.06	7.65	23.07
June 2015					
July 2015					
August 2015					
September 2015					
October 2015					
November 2015					
December 2015					

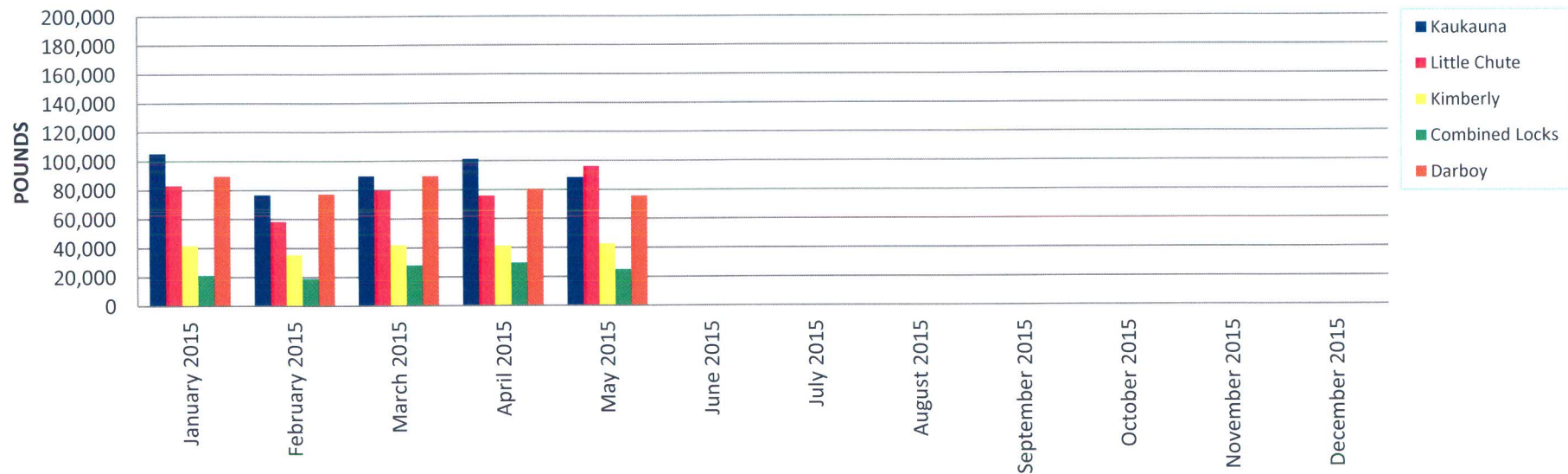
POUNDS CONTRIBUTION BY COMMUNITY - TOTAL SUSPENDED SOLIDS POUNDS

	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2015	105,347	83,157	41,863	21,340	89,675
February 2015	76,755	58,404	35,592	18,894	77,228
March 2015	89,678	79,679	42,173	27,928	89,401
April 2015	101,321	75,850	41,600	29,752	80,330
May 2015	88,534	96,099	42,893	25,118	75,744
June 2015					
July 2015					
August 2015					
September 2015					
October 2015					
November 2015					
December 2015					

TSS PERCENT CONTRIBUTED BY COMMUNITY



TSS POUNDS CONTRIBUTED BY COMMUNITY



HEART OF THE VALLEY METROPOLITAN SEWERAGE DISTRICT

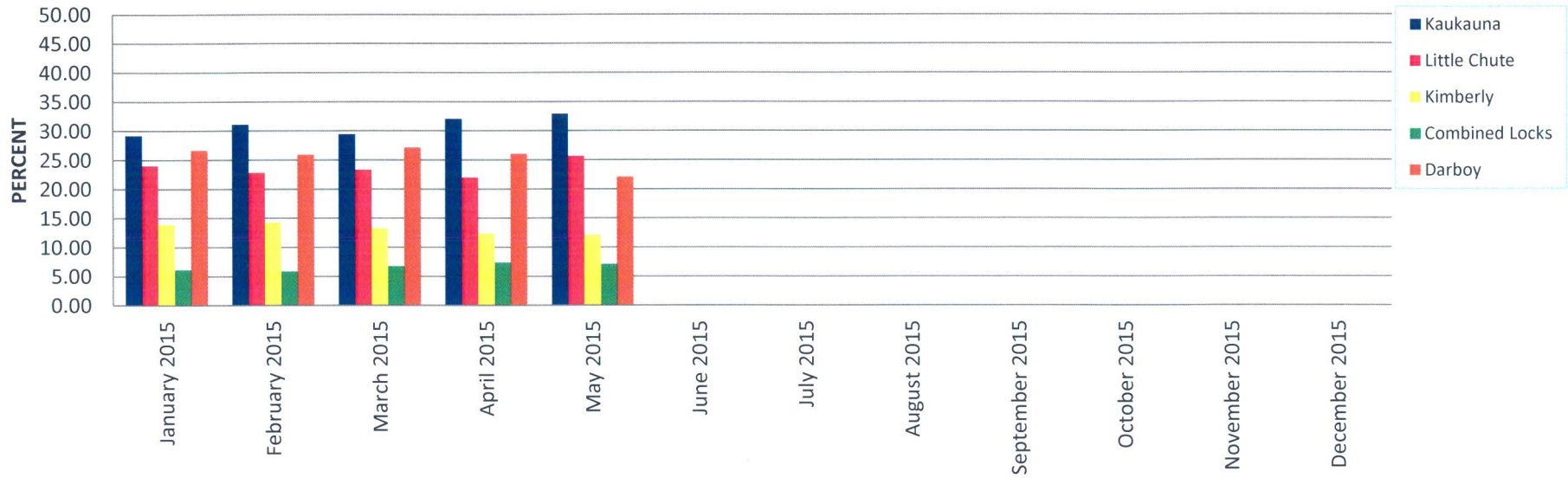
% CONTRIBUTION BY COMMUNITY - PHOSPHORUS POUNDS

	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2015	29.18	24.02	13.95	6.16	26.69
February 2015	31.10	22.85	14.28	5.87	25.90
March 2015	29.42	23.35	13.28	6.78	27.16
April 2015	32.07	21.98	12.45	7.44	26.06
May 2015	32.91	25.66	12.19	7.14	22.10
June 2015					
July 2015					
August 2015					
September 2015					
October 2015					
November 2015					
December 2015					

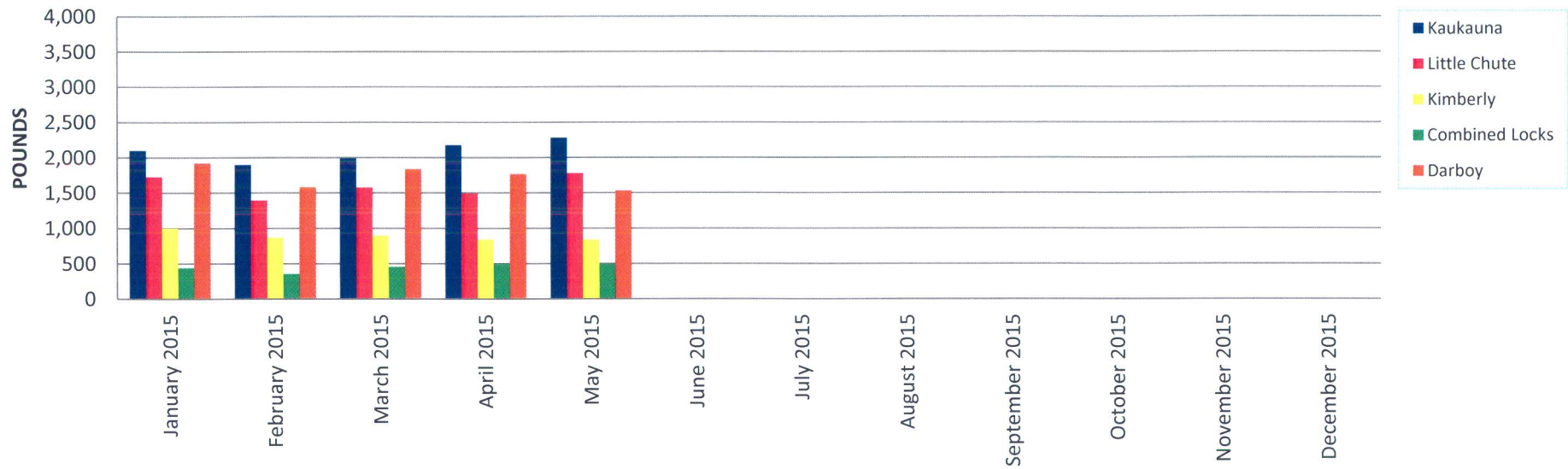
POUNDS CONTRIBUTION BY COMMUNITY - PHOSPHORUS POUNDS

	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2015	2,102	1,730	1,004	443	1,922
February 2015	1,900	1,396	873	359	1,583
March 2015	1,991	1,580	899	459	1,838
April 2015	2,176	1,492	845	504	1,768
May 2015	2,282	1,780	845	495	1,532
June 2015					
July 2015					
August 2015					
September 2015					
October 2015					
November 2015					
December 2015					

PHOSPHORUS PERCENT CONTRIBUTED BY COMMUNITY



PHOSPHORUS POUNDS CONTRIBUTED BY COMMUNITY



HEART OF THE VALLEY METROPOLITAN SEWERAGE DISTRICT

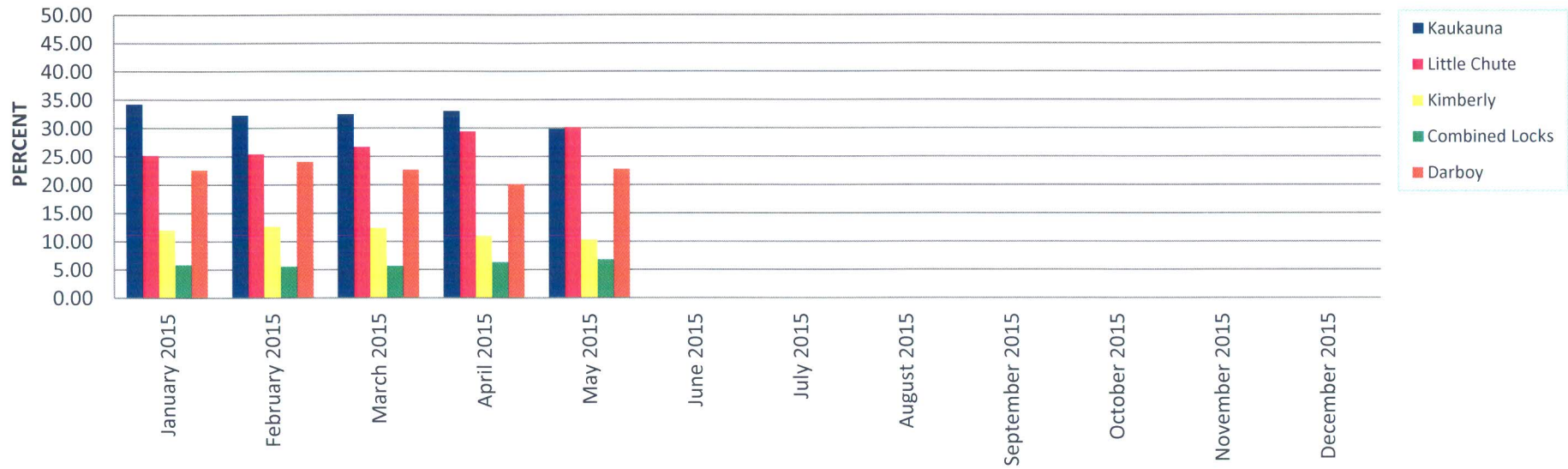
% CONTRIBUTION BY COMMUNITY - AMMONIA POUNDS

	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2015	34.22	25.20	12.03	5.91	22.64
February 2015	32.29	25.42	12.64	5.59	24.06
March 2015	32.50	26.70	12.42	5.69	22.69
April 2015	33.04	29.42	11.07	6.38	20.09
May 2015	29.87	30.17	10.37	6.82	22.76
June 2015					
July 2015					
August 2015					
September 2015					
October 2015					
November 2015					
December 2015					

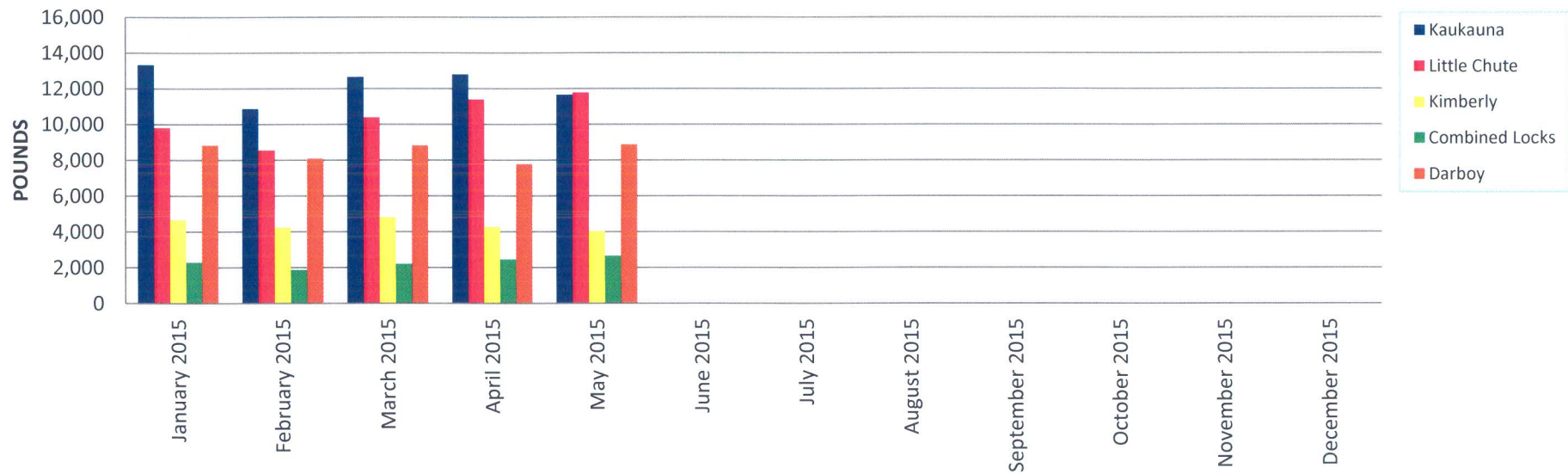
POUNDS CONTRIBUTION BY COMMUNITY - AMMONIA POUNDS

	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2015	13,335	9,820	4,686	2,303	8,824
February 2015	10,867	8,554	4,254	1,883	8,097
March 2015	12,654	10,396	4,837	2,215	8,834
April 2015	12,796	11,394	4,287	2,470	7,781
May 2015	11,660	11,777	4,049	2,663	8,882
June 2015					
July 2015					
August 2015					
September 2015					
October 2015					
November 2015					
December 2015					

AMMONIA PERCENT CONTRIBUTED BY COMMUNITY



AMMONIA POUNDS CONTRIBUTED BY COMMUNITY



HEART OF THE VALLEY METROPOLITAN SEWERAGE DISTRICT

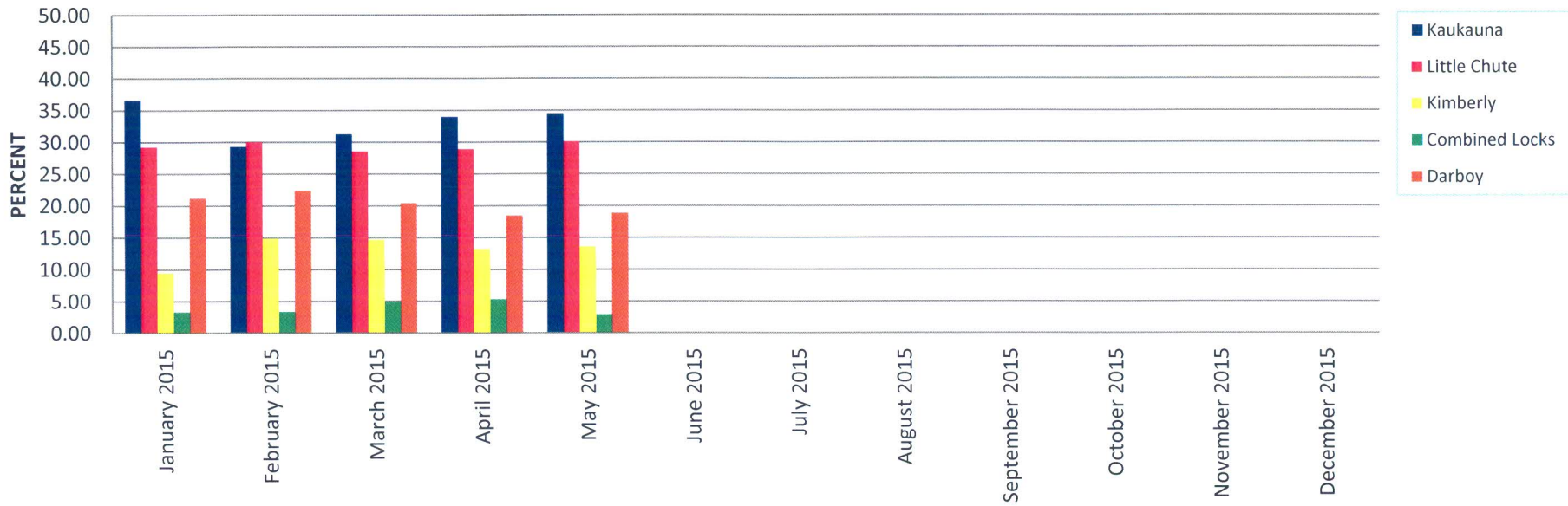
% CONTRIBUTION BY COMMUNITY - CHLORIDE POUNDS

	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2015	36.70	29.27	9.48	3.34	21.21
February 2015	29.31	30.03	14.88	3.38	22.40
March 2015	31.28	28.56	14.72	5.00	20.44
April 2015	33.99	28.92	13.27	5.36	18.46
May 2015	34.52	30.08	13.61	2.93	18.86
June 2015					
July 2015					
August 2015					
September 2015					
October 2015					
November 2015					
December 2015					

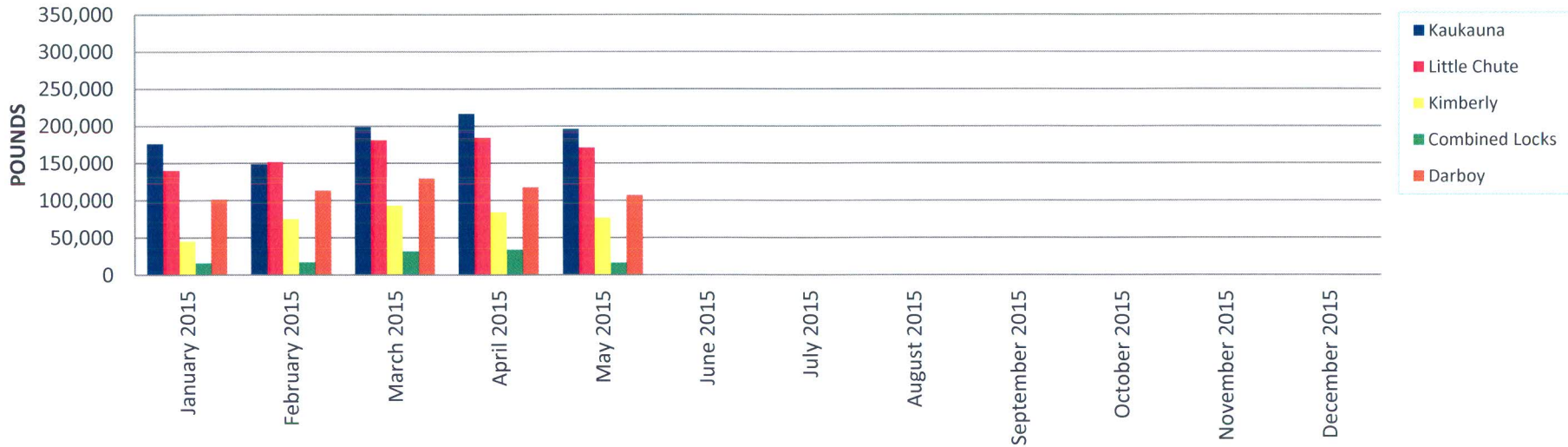
POUNDS CONTRIBUTION BY COMMUNITY - CHLORIDE POUNDS

	<u>Kaukauna</u>	<u>Little Chute</u>	<u>Kimberly</u>	<u>Combined Locks</u>	<u>Darboy</u>
January 2015	176,145	140,515	45,509	16,036	101,795
February 2015	148,537	152,140	75,410	17,124	113,490
March 2015	198,616	181,301	93,436	31,758	129,781
April 2015	216,672	184,335	84,556	34,174	117,648
May 2015	196,234	171,005	77,372	16,677	107,253
June 2015					
July 2015					
August 2015					
September 2015					
October 2015					
November 2015					
December 2015					

CHLORIDE PERCENT CONTRIBUTED BY COMMUNITY



CHLORIDE POUNDS CONTRIBUTED BY COMMUNITY

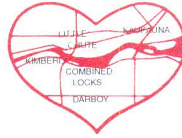


DISTRICT MANAGER:

Glen H. Geurts

SERVING:

Combined Locks
 Kaukauna
 Kimberly
 Little Chute
 Darboy S.D.

**COMMISSIONERS:**

David J. Casper, President
 Stephen D. Giebel, Vice-Pres.
 Bruce M. Siebers, Secretary
 Kevin P. Coffey
 Patrick E. Hennessey

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: May

Year: 2015

Gallons of Final Effluent Purchased (Billing)

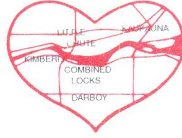
<u>Date</u>	<u>Gallons</u>	<u>Date</u>	<u>Gallons</u>
5/1/2015	1,825,000	5/21/2015	2,676,000
5/2/2015	2,725,000	5/22/2015	2,674,000
5/3/2015	1,495,000	5/23/2015	558,000
5/4/2015	3,224,000	5/24/2015	0
5/5/2015	3,647,000	5/25/2015	0
5/6/2015	3,432,000	5/26/2015	0
5/7/2015	742,000	5/27/2015	0
5/8/2015	3,403,000	5/28/2015	0
5/9/2015	3,182,000	5/29/2015	0
5/10/2015	3,168,000	5/30/2015	0
5/11/2015	2,181,000	5/31/2015	0
5/12/2015	2,840,000		
5/13/2015	2,574,000		
5/14/2015	2,339,000	Total:	59,514,000
5/15/2015	2,805,000		
5/16/2015	3,552,000		
5/17/2015	2,768,000		
5/18/2015	2,373,000		
5/19/2015	2,650,000		
5/20/2015	2,681,000		

DISTRICT MANAGER:

Glen H. Geurts

SERVING:

Combined Locks
Kaukauna
Kimberly
Little Chute
Darboy S.D.



COMMISSIONERS:

David J. Casper, President
Stephen D. Giebel, Vice-Pres.
Bruce M. Siebers, Secretary
Kevin P. Coffey
Patrick E. Hennessey

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

MONTHLY BILLING

Month: May

Year: 2015

GALLONS PURCHASED: 59,514,000

BILLING RATE: \$0.1532880 PER 1000 GALLONS

TOTAL AMOUNT DUE: \$9,122.78

**Heart of the Valley
Metropolitan Sewerage District**

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

2015

Final Effluent Sent to Fox Energy Facility

Gallons: 307,174,000

Charge Per 1000 Gallons: \$0.1532880 Per 1000 Gallons

Sale of Final Effluent (Revenue Collected): \$47,086.09