

CITY OF DULUTH



**Public Works & Utilities Department
2023 Annual Report**

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Front cover photo:
Morris Thomas Road reconstruction showing
inspected and reconditioned 1959 gas main
(photo by City Engineering staff)

OFFICERS OF THE DEPARTMENT

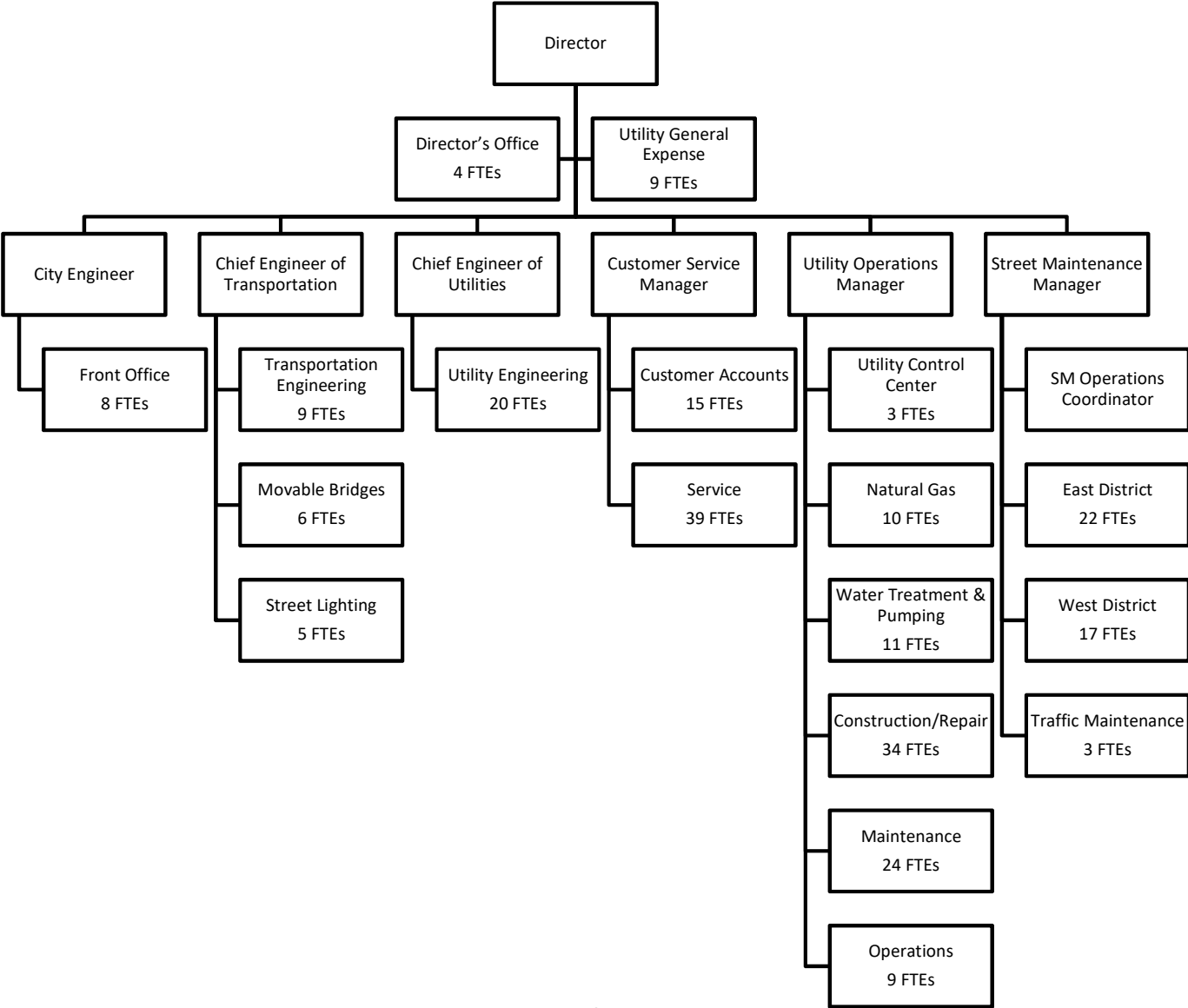
Mayor	.....	Emily Larson
Chief Administrative Officer	.....	Noah Schuchman
City Council Public Works & Utilities Committee		
Councilor Mike Mayou		
Duluth Public Utilities Commission		
Carrie Ryan, President	Councilor Noah Hobbs	
Chris Adatte, Vice President	Councilor Mike Mayou	
Erin Abramson	Councilor Terese Tomanek	
Andrea Crouse		

DEPARTMENT OF PUBLIC WORKS & UTILITIES

Director	.....	Jim Benning
City Engineer	.....	Cindy Voigt
Chief Engineer, Transportation	.....	Cari Pedersen
Chief Engineer, Utilities	.....	Tom Pfeffer
Chief Engineer, Utilities	.....	Howard Smith
Manager, Customer Service	.....	John Upton
Manager, Street Maintenance	.....	Chad Bednar
Manager, Utility Operations	.....	Greg Guerrero
Executive Assistant	.....	Leanna Gilbert
Public Works & Utilities Analyst	.....	Chris Ostern
Public Works & Utilities Analyst	.....	Kerry Venier
Financial Analyst	.....	Angie Hassett

City of Duluth Public Works & Utilities Department 2023

Total Budgeted FTEs: 256



**W
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R**

**Water Utility
Statement of Net Income
For The Year Ended December 31, 2022 and 2023
(Unaudited)**

	2022		2023
<u>Operating Revenue</u>			
Metered Water Sales	\$ 15,840,690		\$ 17,257,538
Other	173,191		180,881
Total Operating Revenue	\$ 16,013,881		\$ 17,438,419
<u>Operating Expense</u>			
Director's Office	138,061		155,887
Capital Related Expenses	1,880,144		1,882,569
Utility General Expense	586,558		1,110,735
Engineering	643,362		760,601
Utility Operations	3,072,694		3,160,920
Water Treatment and Pumping	3,331,380		3,803,725
Customer Service	1,548,076		1,541,398
Total Operating Expense	(11,200,275)		(12,415,835)
Operating Income	4,813,606		5,022,584
<u>Other Revenue</u>			
Contributed Capital	7,011,073		3,730,580
Gain or Loss on the Sale of Fixed Assets	16,988		32,438
Transfer from Other Funds			
Administrative Billing Fee	135,000		135,000
Permanent Improvement Fund	0		70,618
Interest Income	(119,386)		19,900
Total Other Revenue	7,043,675		3,988,536
<u>Other Expenses and Transfers</u>			
Transfer to Other Funds			
Non-Capital Improvements	166,000		166,000
Reimbursement for MIS Programmer	53,850		55,800
Interest on Long Term Debt	188,407		171,655
Total Other Expenses and Transfers	(408,257)		(393,455)
Net Income or Loss	\$ 11,449,024		\$ 8,617,665

Water Utility
Statement of Net Assets
For The Year Ending December 31, 2022 and 2023
(Unaudited)

	Assets & Deferred Outflows	
	2022	2023
<u>Current Assets</u>		
Cash	\$ 9,148,975	\$ 12,963,111
Accounts Receivable (Net)	1,518,482	1,587,346
Special Assessments	12,694	10,879
Due from Other Funds	2,617,945	430,667
Due from Other Governments	465,327	318,528
Inventory	1,516,629	1,693,989
Prepays	<u>2,514,303</u>	<u>1,636,126</u>
Total Current Assets	\$ <u>17,794,355</u>	\$ <u>18,640,646</u>
<u>Utility Plant</u>		
In Service	113,470,780	115,425,270
Construction	<u>11,389,591</u>	<u>16,006,813</u>
Less Accumulated Depreciation	<u>(47,777,535)</u>	<u>(49,319,256)</u>
Total Utility Plant Assets	<u>77,082,836</u>	<u>82,112,827</u>
<u>Other Assets</u>		
Special Assessments Receivable	<u>55,479</u>	<u>49,269</u>
Total Other Assets	<u>55,479</u>	<u>49,269</u>
Total Assets	<u>94,932,670</u>	<u>100,802,742</u>
<u>Deferred Outflows</u>		
Deferred Pension Obligation Outflows	1,201,762	673,656
Deferred OPEB Outflows	<u>1,928,143</u>	<u>2,767,332</u>
Total Deferred Outflows	<u>3,129,905</u>	<u>3,440,988</u>
Total Assets and Deferred Outflows	\$ <u><u>98,062,575</u></u>	\$ <u><u>104,243,730</u></u>

**Water Utility
Statement of Net Assets
For The Year Ending December 31, 2022 and 2023
(Unaudited)**

	Liabilities & Net Assets	
	2022	2023
<u>Current Liabilities</u>		
Accounts Payable	\$ 624,926	\$ 368,207
Contracts Payable	1,211,825	779,925
Notes Payable	894,000	904,000
Purchase Agreement Payable	285,684	146,915
Due to Other Funds	21,218	114,709
Due to Other Governments	34,809	52,984
Accrued Interest Payable	73,644	65,456
Accrued Salaries Payable	171,180	165,274
Vacations Payable	315,888	316,814
Unearned Revenue	84,158	69,291
Bonds Payable	256,000	261,000
Total Current Liabilities (Payable from Current Assets)	\$ 3,973,332	\$ 3,244,575
<u>Long Term Liabilities</u>		
Notes Payable	6,038,179	5,547,000
Purchase Agreement Payable	146,915	0
Vacations Payable	0	39,999
Pension Liability	4,017,148	2,683,268
Bonds Payable	3,181,000	2,920,000
Less Unamortized Bond Discount or Premium	28,015	25,245
Total Long Term Liabilities	13,411,257	11,215,512
Total Liabilities	17,384,589	14,460,087
<u>Deferred Inflows</u>		
Deferred Pension Obligation Inflows	133,865	916,041
Deferred OPEB Inflows	294,184	0
Total Deferred Inflows	428,049	916,041
<u>Net Assets</u>		
Invested in Capital Assets, Net of Related Debt	66,253,043	72,308,667
Unrestricted	13,996,894	16,558,935
Total Net Assets	80,249,937	88,867,602
Total Liabilities, Deferred Inflows, and Net Assets	\$ 98,062,575	\$ 104,243,730

City of Duluth
Water Utility Bonds, Notes, and Purchase Agreements Payable
December 31, 2023

	<u>Issued</u>	<u>Issue Date</u>	<u>Final Maturity</u>	<u>Principal Outstanding 12/31/2022</u>	<u>Issued</u>	<u>Draw Down</u>	<u>Retired</u>	<u>Principal Outstanding 12/31/2023</u>
Water Utility								
Bonds								
Revenue and General Obligation	\$ 196,000	2/19/2009	2/1/2024	\$ 32,000	\$ 0	\$ 0	\$ 16,000	\$ 16,000
Revenue and General Obligation	4,050,000	10/17/2018	2/1/2034	<u>3,405,000</u>	<u>0</u>	<u>0</u>	<u>240,000</u>	<u>3,165,000</u>
Bond Total				<u>\$ 3,437,000</u>	<u>\$ 0</u>	<u>\$ 0</u>	<u>\$ 256,000</u>	<u>\$ 3,181,000</u>
Notes								
Public Facilities Authority	\$ 1,293,200	9/14/2010	8/20/2025	\$ 274,000	\$ 0	\$ 0	\$ 90,000	\$ 184,000
Public Facilities Authority	3,344,131	12/14/2010	8/20/2025	733,000	0	0	242,000	491,000
Public Facilities Authority	1,221,631	11/29/2011	8/20/2026	336,000	0	0	82,000	254,000
Public Facilities Authority	4,778,806	3/24/2014	8/20/2029	2,231,000	0	0	309,000	1,922,000
Public Facilities Authority	3,857,531	1/24/2022	8/20/2042	<u>3,358,179</u>	<u>0</u>	<u>412,821</u>	<u>171,000</u>	<u>3,600,000</u>
Note Total				<u>\$ 6,932,179</u>	<u>\$ 0</u>	<u>\$ 412,821</u>	<u>\$ 894,000</u>	<u>\$ 6,451,000</u>
Purchase Agreements								
AMR System	\$ 3,375,986	3/28/2008	2/1/2024	<u>432,599</u>	<u>0</u>	<u>0</u>	<u>285,684</u>	<u>146,915</u>
Purchase Agreement Total				<u>\$ 432,599</u>	<u>\$ 0</u>	<u>\$ 0</u>	<u>\$ 285,684</u>	<u>\$ 146,915</u>
Total Water Utility Bonds, Notes, and Purchase Agreements				<u>\$ 10,801,778</u>	<u>\$ 0</u>	<u>\$ 412,821</u>	<u>\$ 1,435,684</u>	<u>\$ 9,778,915</u>

Future Payments:			
<u>Year</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2024	\$ 1,311,915	\$ 161,479	\$ 1,473,394
2025	1,170,000	143,391	1,313,391
2026	841,000	125,897	966,897
2027	770,000	111,940	881,940
2028	780,000	98,760	878,760
2029	795,000	85,304	880,304
2030	479,000	71,499	550,499
2031	490,000	60,463	550,463
2032	502,000	48,723	550,723
2033	514,000	36,447	550,447
2034	526,000	23,617	549,617
2035	193,000	16,048	209,048
2036	195,000	14,112	209,112
2037	197,000	12,156	209,156
2038	199,000	10,180	209,180
2039	201,000	8,184	209,184
2040	203,000	6,168	209,168
2041	205,000	4,132	209,132
2042	<u>207,000</u>	<u>2,076</u>	<u>209,076</u>
	<u>\$ 9,778,915</u>	<u>\$ 1,040,576</u>	<u>\$ 10,819,491</u>

Water Fund
Schedule of Fixed Assets
Year Ending December 31, 2023

	<u>Balance Jan. 1, 2023</u>	<u>Additions</u>	<u>Deductions</u>	<u>Balance Dec. 31, 2023</u>	<u>Accumulated Depreciation</u>	<u>Book Value</u>
Lands and Grounds	\$ 208,963	\$ 0	\$ 0	\$ 208,963	\$ 0	\$ 208,963
Infrastructure	82,649,691	1,996,398	0	84,646,089	25,267,451	59,378,638
Buildings and Structures	22,338,952	0	0	22,338,952	16,565,239	5,773,713
Equipment and Tools	8,273,174	241,237	283,145	8,231,266	7,486,566	744,700
Work in Progress	<u>11,389,591</u>	<u>6,630,320</u>	<u>2,013,098</u>	<u>16,006,813</u>	<u>0</u>	<u>16,006,813</u>
Total	<u>\$ 124,860,371</u>	<u>\$ 8,867,955</u>	<u>\$ 2,296,243</u>	<u>\$ 131,432,083</u>	<u>\$ 49,319,256</u>	<u>\$ 82,112,827</u>

COMPARATIVE STATEMENT, OPERATING EXPENSE OF ALL STATIONS

Station	Year	Daily Average Gallons Pumped, Initial Supply	Gallons Pumped	K.W.H. Consumed	Electricity
Lakewood	2022	9,726,027	3,550,300,000	5,916,750	\$ 765,948
	2023	11,130,970	4,062,804,000	7,061,250	\$ 895,524
Middle	2022	2,608,847	952,229,000	668,934	\$ 95,622
	2023	2,435,222	888,856,000	1,332,125	\$ 183,941
Woodland	2022	1,810,844	660,958,000	1,484,688	\$ 188,618
	2023	1,473,069	537,670,000	1,505,659	\$ 192,399
West Duluth	2022	1,249,304	455,996,000	139,101	\$ 32,969
	2023	2,233,893	815,371,000	235,528	\$ 40,031
Orphanage	2022	225,995	82,488,000	58,124	\$ 9,887
	2023	188,036	68,633,000	57,547	\$ 10,097
Highland	2022	1,296,458	473,207,000	404,264	\$ 60,035
	2023	1,118,962	408,421,000	419,511	\$ 61,569
Arlington	2022	1,488,422	543,274,000	877,010	\$ 141,942
	2023	1,343,003	490,196,000	937,999	\$ 145,473
Lakeside	2022	134,164	48,970,000	57,333	\$ 13,885
	2023	113,833	41,549,000	60,694	\$ 15,061
Bay View	2022	530,170	193,512,000	299,547	\$ 39,815
	2023	415,745	151,747,000	220,658	\$ 37,385
Proctor	2022	400,523	146,191,000	210,568	\$ 35,682
	2023	314,874	114,929,000	197,365	\$ 34,182
Airport	2022	-	unmetered	6,311	\$ 1,364
	2023	-	unmetered	14,436	\$ 2,392
TOTALS	2022	19,470,754	7,107,125,000	10,122,629	\$ 1,385,766
	2023	20,767,607	7,580,176,000	12,042,771	\$ 1,618,053

WATER PLANT STATISTICS

	2023	2022	2021	2020	2019	2018	2017
Water Pumped							
Million Cubic Feet	571.34	474.57	497.48	536.84	600.37	623.28	655.20
Water Sold							
Million Cubic Feet	311.00	389.00	386.65	464.23	527.56	561.94	568.41
General & Distribution Operating							
Costs including Maintenance (*)	\$ 10,590,969	\$ 9,380,116	\$ 7,444,915	\$ 8,183,754	\$ 8,928,974	\$ 9,255,377	\$ 9,285,999
Cost per 100 Cubic Feet	\$ 3.4055	\$ 2.4113	\$ 1.9255	\$ 1.7629	\$ 1.6925	\$ 1.6470	\$ 1.6337
Interest charges	\$ 171,655	\$ 188,407	\$ 192,141	\$ 219,220	\$ 245,638	\$ 252,071	\$ 182,025
Cost per 100 Cubic Feet	\$ 0.0552	\$ 0.0484	\$ 0.0497	\$ 0.0472	\$ 0.0466	\$ 0.0449	\$ 0.0320
Depreciation charge	\$ 1,824,866	\$ 1,820,159	\$ 1,797,168	\$ 1,773,304	\$ 1,752,474	\$ 1,818,410	\$ 1,826,882
Cost per 100 Cubic Feet	\$ 0.5868	\$ 0.4679	\$ 0.4648	\$ 0.3820	\$ 0.3322	\$ 0.3236	\$ 0.3214
Total Cost per 100 Cubic Feet	\$ 4.0474	\$ 2.9277	\$ 2.4400	\$ 2.1921	\$ 2.0712	\$ 2.0155	\$ 1.9871
Operating revenue	\$ 17,438,419	\$ 16,013,881	\$ 15,920,408	\$ 15,099,895	\$ 15,142,720	\$ 14,925,155	\$ 14,445,384
Revenue per 100 Cubic Feet Sold	\$ 5.6072	\$ 4.1167	\$ 4.1175	\$ 3.2527	\$ 2.8703	\$ 2.6560	\$ 2.5414
Water meters in service	28,842	28,775	28,693	28,518	28,324	28,957	28,329
Water main miles	433.30	432.80	432.30	430.30	429.50	429.30	428.40
Water meters per mile of main	66.56	66.49	66.37	66.27	65.95	67.45	66.13
Hydrants on system	2,806	2,793	2,778	2,747	2,738	2,716	2,708

(*) Depreciation not included

WATER PURIFICATION 2023 LAKEWOOD STATION

Month	Total Number of Gallons Treated (Millions)	Average Water Temperature at Treatment Bldg, Degrees F	Ammonia Lbs. Used	Chlorine Lbs. Used	Alum Gal. Used	Fluoride Gal. Used	Turbidity of Effluent NTU
January	304.5	35.1	1,191	8,036	3,900	1,084	0.020
February	305.1	34.4	1,189	8,167	3,900	1,116	0.021
March	344.4	32.9	1,343	9,334	7,800	1,246	0.025
April	331.4	34.3	1,278	9,108	3,900	1,176	0.029
May	365.4	37.0	1,392	9,801	15,600	1,266	0.015
June	408.2	42.5	1,563	10,865	11,700	1,382	0.017
July	399.2	42.8	1,524	10,480	7,800	1,370	0.017
August	428.1	54.4	1,648	11,957	7,800	1,444	0.019
September	388.7	61.0	1,489	11,106	7,800	1,328	0.030
October	348.1	57.3	1,359	10,523	11,700	1,223	0.021
November	323.4	44.6	1,251	9,012	3,900	1,138	0.020
December	327.4	38.7	1,295	8,867	7,800	1,176	0.020
TOTAL	4,273.9		16,522	117,256	93,600	14,948	
Average/Month	356.2	42.9	1,377	9,771	7,800	1,246	0.021

2023
LAKE SUPERIOR RAW WATER
AND DULUTH FINISHED WATER (LABORATORY ANALYSES)

Milligrams per Liter (except pH, Specific Conductance, and Turbidity)

	RAW	FINISHED
	Average	Average
Dissolved Oxygen, ppm	11.8	14.3
pH	7.85	9.14
Monthly Specific Conductance, Micromhos/cm	102.3774038	132.9
Alkalinity, ppm CaCO ₃	43	48
Sulfates, ppm	3.1	10.1
Fluoride, ppm	0.05	0.78
Turbidity, NTU	1.60	0.021
Total Dissolved Solids, ppm	N/A	59.9
Hardness, ppm CaCO ₃	N/A	42
Chlorine, Total, ppm Cl ₂	N/A	2.01
Monochloramine, ppm Cl ₂	N/A	2.12
Ammonia, Free, ppm NH ₃ -N	N/A	0.01
Ammonia, Total, ppm NH ₃ -N	N/A	0.444

BACTERIOLOGICAL DATA 2023

	RAW WATER INTAKE	DISTRIBUTION	
Average for	Number Samples	Number Samples	Number Samples Positive
January	14	91	0
February	15	91	0
March	18	91	0
April	11	90	0
May	17	92	0
June	16	91	0
July	16	93	0
August	18	92	0
September	15	91	0
October	14	91	0
November	15	91	0
December	14	91	0
TOTAL	183	1,095	0
Average for Month	15.3	91.3	0

LENGTH OF WATER MAINS IN FEET

Diameter Inches	Cast Iron	Ductile Iron	Steel	Copper	Polyvinyl Chloride	High Density Polyethylene	Total	Valves	Vaults
1				770		4	774	4	
1 1/4				24			24	1	
2			182	2,587		12,159	14,928	39	
3	1,350						1,350	10	
4	9,804	2,845				242	12,891	53	
6	948,325	146,339	569		1,729	13,303	1,110,265	2,440	
8	72,153	103,543	458		294	195,552	372,000	945	5
10	152,922	53,193	5,978			35,384	247,477	439	7
12	151,794	44,131	1,904			33,503	231,332	428	11
14						2,400	2,400		
16	72,285	23,949	11,001			2,587	109,822	137	1
18	1,390	435				2,092	3,917	5	
20	14,220	1,793	29,254			14,052	59,319	112	4
24	8,440	6,583	55			5,952	21,030	34	1
30			2,673				2,673	2	
36	25,066	11,722	11,394				48,182	33	3
42	181		49,224				49,405	6	
TOTALS	1,457,930	394,533	112,692	3,381	2,023	317,230	2,287,789	4,688	32
Total Miles -							433.3		
Change from 2022 -							0.5	34	0

Notes: Pipe and valves in hydrant branches are not included in the above table.
 Air valves, valves without gates and valves inside pump stations are not included.
 All Main and Hydrant information provided from Geographic Information System.

HYDRANTS AND BRANCHES

	Total Hydrants	Valves on Branches	Lineal Feet Main to Hydt.
TOTAL IN SERVICE			
12/31/2022	2,793	2,766	43,571
TOTAL IN SERVICE			
12/31/2023	2,806	2,779	43,790
Changes from 2022:	13	13	219

DATA, RESERVOIRS AND TANKS

Location	Capacity (Gallons)	Overflow Elevation (Feet)	Greatest Depth (Feet)	Dimension (Feet)	Remarks
Lakeside Tank	100,000	500.00	23.75	Diameter 27	Built in 1961
34th Avenue East "Reservoir A"	16,320,000	294.00	30.00	284 x 391	Built 1898, Rebuilt 1938
Endion Reservoir	14,140,000	290.00	28.00	240 x 320	Built by G & W Company Rebuilt 1922 New Roof 1966 Lined 1988
West End Reservoirs #1-6	10,200,000	290.00	33.00	Diameter 100	Built 1953
West Duluth Reservoir	10,000,000	290.00	21.00	327.3 x 263.3	Built 1906 Remodeled 1925 New Roof 2014
Middle System - Reservoir #1	5,171,000	560.00	28.00	Diameter 187.38	Built 1913 New Roof 1928 Lined 1988
Middle System - Reservoir #2	5,131,000	560.00	25.00	Diameter 190	Built in 1951
Woodland Reservoir #1	1,021,000	806.00	22.00	Diameter 91.5	Built in 1915 Lined 1939 Refaced 2002
Woodland Reservoir #2	2,015,000	806.00	35.50	Diameter 100	Built in 1950 Lined 2000 Refaced 2002
Arlington Reservoir #1	240,490	806.00	27.00	Diameter 40	Built in 1925
Arlington Reservoir #2	1,534,000	806.00	27.50	Diameter 100	Built in 1950
Orphanage Tank #1	400,000	916.00	129.40	Diameter 51.5	Built 1994
Highland Water Tower	1,000,000	141.60	40.00	Diameter 74.8 1/4	Built 2011
Bay View Heights Steel Tank	100,000	550.00	26.00	Diameter 26	Built 1972
Proctor Tank	400,000	825.00	142.00	Diameter 51.5	Built 1989
TOTAL	67,772,490				

PUMPING STATIONS - WATER PUMPING EQUIPMENT

Station	Source of Supply	Reservoirs Discharged Into	No. Units and Year Installed	Make of Pump	Type of Pump	Unit No.	Pumps Driven By	R.P.M.	Average Capacity G.P.M. Each Unit
Lakewood Low Lift	Lake Superior	Lakewood	1 -- 1992	Patterson	Single Stage Centrifugal	2	1 Unit direct connected to 300 hp, 2300 volt, 60 cycle, GE Induction motor	900	17,400
			1 -- 1949	DeLaval		4	1 Unit direct connected to 350 hp, 2300 volt, 60 cycle, GE Induction motor	440	20,800
			1 -- 1981	Worthington	Single Stage	1	1 Unit direct connected to 200 hp, 2300 volt, 60 cycle, GE Induction motor	500	11,389
Lakewood High Lift	Lakewood (Detention Basin)	Reservoir A Endion, West End, & West Duluth	1 -- 1992	Patterson	Single Stage Centrifugal	2	2 Unit direct connected to 1500 hp, 2300 volt, 60 cycle GE Induction motor with VFD and fixed controller	1,200	17,400
			1 -- 1949	DeLaval	Two Stage Centrifugal	4	2 Unit direct connected to 2000 hp, 2300 volt, 60 cycle, GE synchronous motor, with direct exciter	720	20,800
			1 -- 1981	Worthington	Single Stage	1	1 Unit direct connected to 1000 hp, 2300 volt, 60 cycle GE capacitor induction motor	1,185	11,389
Middle	Reservoir A and Endion	Middle Service	1 -- 1950	Allis-Chalmers	Single Stage, Two Unit, Centrifugal	3	Direct connected to 400 hp, 2300 volt, 60 cycle, Allis-Chalmers synchronous motor, with direct connected exciter	1,800	4,000
			1 -- 1969	Aurora	Single Stage, One Unit, Centrifugal	4	Direct connected to 250 hp, 2300 volt, 60 cycle, 3-phase Louis Allis Induction motor	1,750	2,500
			1 -- 1986	Fairbanks-Morse	Single Stage, One Unit, Centrifugal	5	Direct connected to 250 hp, 2300 volt, 60 cycle, 3-phase Siemens-Allis motor	1,785	2,600
Woodland	Reservoir A	Woodland & Arlington Reservoir	1 -- 1950	Allis-Chalmers	All Units Single Stage, Two Unit, Centrifugal	3	Direct connected to 500 hp, 2300 volt, 60 cycle, Allis-Chalmers synchronous motor, with direct connected exciter	1,800	2,050
			1 -- 1986	Fairbanks Morse Co.		4	Direct connected to 300 hp, 2300 volt, 60 cycle, Siemens-Allis Induction motor	1,775	1,720
			1 -- 1975	Aurora #421	Two Stage, Centrifugal	5	Direct connected to 240 hp, 2300 volt, 60 cycle, 3-phase Marathon Induction motor	1,750	1,250

PUMPING STATIONS - WATER PUMPING EQUIPMENT

Station	Source of Supply	Reservoirs Discharged Into	No. Units and Year Installed	Make of Pump	Type of Pump	Unit No.	Pumps Driven By	R.P.M.	Average Capacity G.P.M. Each Unit
West Duluth	Reservoir A, Endion & West	West Duluth Reservoir & West Duluth System	2 -- 2009	Fairbanks-Morse	All Units Single Stage	2	200 hp, 460 volt, 60 cycle 3-phase WEG NEMA Premium Induction motor, with VFD drive	1,200	6,000
Orphanage	Woodland Reservoirs	Orphanage Tanks	1 -- 1961	Worthington Type L-2	Single Stage Centrifugal	5	Direct connected to 40 hp, 440 volt, 60 cycle, U.S. Induction motor	1,750	1,000
			1 -- 1961		Single Stage Centrifugal	6	Direct connected to 40 hp, 440 volt, 60 cycle, U.S. Induction motor	1,750	1,000
Highland	Arlington Reservoirs	Highland Tanks	2 -- 2012	Aurora	Single Stage, Single Suction Centrifugal	3	2-Unit Direct connected to 150 hp, 460 volt, 60 HZ, 3-phase Marathon Electric XRI high efficiency motor	1,800	1,200
Arlington	Middle Reservoirs	Arlington Reservoirs	3 -- 2010	Aurora Type 411 BF Size 6x8x20	Single Stage Centrifugal	3	250 hp, 460 volt, 60 cycle 3-phase Baldor Induction motor with VFD drive	1,750	1,700
Lakeside	Two 10" Mains	Lakeside Tank	2 -- 1961	Worthington Type L-3	Single Stage Centrifugal	1 2	Each unit direct connected to 100 hp, 440 volt, 60 cycle, 3-phase U.S. Induction motor	1,750	1,000
Bay View	West Duluth Reservoir	Bay View Tank	2 -- 1973	Aurora	Single Stage Centrifugal	1	Each unit direct connected to 125 hp, 440 volt, 60 cycle, 3-phase U.S. Induction motor	3,500	1,200
			2 -- 2002			2			
Proctor	Bay View Tank	Proctor Standpipe	2 -- 1973	Aurora	Single Stage Centrifugal	1	Each unit direct connected to 125 hp, 440 volt, 60 cycle, 3-phase Louis Allis motor	3,500	1,200
						2			

WATER UTILITY ACTIVITIES 2023

UTILITY OPERATIONS

ACTIVITY	WORK COMPLETED
Repair of water services	21
Repair of valves	73
Repair of main breaks	63 breaks, 55 leaks
Install services	81
Fire Hydrants	
Replaced hydrants	14
Repaired hydrants	62
New hydrants	0
Inspection	All fire hydrants in the City are inspected by the Fire Department and Utility Operations as part of a preventative maintenance program.

CUSTOMER SERVICE

ACTIVITY	WORK COMPLETED
Meter Truck	
Gauge water service	77
Applications (water & gas)	7,223
Delinquent account service shut off/restore (water & gas)	2,076
Emergency (water & gas)	828
General (water & gas)	2,371
Meter Shop	
Water meters repaired	27
Water meters tested	6,771
Plumbing truck orders (water & gas)	875

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**Gas Utility
Statement of Net Income
For The Year Ended December 31, 2022 and 2023
(Unaudited)**

	2022	2023
<u>Operating Revenue</u>		
Residential Sales	\$ 33,562,173	\$ 28,723,581
Commercial & Industrial - Firm	15,300,287	10,351,390
Commercial & Industrial - Interruptible	8,854,714	5,068,774
Servicing Appliances	1,220,636	1,102,380
Other	686,761	880,450
Total Operating Revenue	\$ 59,624,571	\$ 46,126,575
<u>Operating Expense</u>		
Director's Office	157,184	160,447
Capital Related Expenses	1,633,014	1,705,143
Utility General Expense	517,948	1,484,324
Engineering	1,097,185	1,211,004
Utility Operations	1,750,029	2,013,495
Natural Gas	37,335,430	24,590,425
Customer Service	5,413,301	5,211,444
Total Operating Expense	(47,904,091)	(36,376,282)
Operating Income	11,720,480	9,750,293
<u>Other Revenue</u>		
Contributed Assets	131,410	223,894
Gain or Loss on Sale of Fixed Assets	22,265	26,159
Interest Income	(122,850)	23,014
Total Other Revenue	30,825	273,067
<u>Other Expenses and Transfers</u>		
Interest Expense	18,273	8,472
Transfers to Other Funds		
Payment to City in Lieu of Taxes	2,869,276	4,173,720
Non-Capital Improvements	103,750	103,750
Reimbursement for MIS Programmer	53,850	55,900
Credit Home Energy Fund for Rebate	306	0
Total Other Expenses and Transfers	(3,045,455)	(4,341,842)
Net Income or Loss	\$ 8,705,850	\$ 5,681,518

Gas Utility
Statement of Net Assets
For The Year Ending December 31, 2022 and 2023
(Unaudited)

	Assets & Deferred Outflows	
	2022	2023
<u>Current Assets</u>		
Cash	\$ 8,880,290	\$ 12,950,195
Restricted Cash and Equivalents:		
Customer Deposits	1,706,810	1,664,215
Accounts Receivable (Net)	9,485,650	5,842,240
Assessments Receivable	0	7,994
Due from Other Funds	0	14,462
Interfund Loan Receivable	0	420,296
Inventory	1,454,608	1,546,251
Prepaid Expenses	1,825,131	417,211
Prepaid Gas	1,919,615	2,064,758
	<u>\$ 25,272,104</u>	<u>\$ 24,927,622</u>
<u>Utility Plant</u>		
In Service	92,524,994	94,964,392
Construction	4,568,311	4,236,532
	<u>97,093,305</u>	<u>99,200,924</u>
Less Accumulated Depreciation	(33,427,276)	(34,731,008)
	<u>63,666,029</u>	<u>64,469,916</u>
Total Utility Plant Assets	<u>63,666,029</u>	<u>64,469,916</u>
<u>Other Assets</u>		
Special Assessments Receivable	6,272	78,672
	<u>6,272</u>	<u>78,672</u>
Total Other Assets	<u>6,272</u>	<u>78,672</u>
Total Assets	<u>88,944,405</u>	<u>89,476,210</u>
<u>Deferred Outflows</u>		
Deferred Pension Obligation Outflows	1,670,288	921,608
Deferred OPEB Outflows	2,594,808	3,884,315
	<u>4,265,096</u>	<u>4,805,923</u>
Total Deferred Outflows	<u>4,265,096</u>	<u>4,805,923</u>
Total Assets and Deferred Outflows	<u>\$ 93,209,501</u>	<u>\$ 94,282,133</u>

Gas Utility
Statement of Net Assets
For The Year Ending December 31, 2022 and 2023
(Unaudited)

	Liabilities & Net Assets	
	2022	2023
<u>Current Liabilities</u>		
Accounts Payable	\$ 5,850,954	\$ 2,785,412
Contracts Payable	292,443	397,519
Purchase Agreement Payable	261,877	134,672
Due to Other Funds	24,785	30,621
Due to Other Governments	150,150	116,175
Accrued Interest Payable	6,208	2,108
Accrued Salaries Payable	230,362	232,147
Accrued Vacations Payable	468,883	458,522
Unearned Revenue	1,277,264	1,219,197
Customer Deposits	<u>1,706,809</u>	<u>1,664,215</u>
Total Current Liabilities (Payable from Current Assets)	\$ <u>10,269,735</u>	\$ <u>7,040,588</u>
<u>Long Term Liabilities</u>		
Accrued Vacations Payable	20,291	52,656
Purchase Agreement Payable	134,672	0
Pension Liability	<u>5,583,299</u>	<u>3,670,892</u>
Total Long Term Liabilities	<u>5,738,262</u>	<u>3,723,548</u>
Total Liabilities	<u>16,007,997</u>	<u>10,764,136</u>
<u>Deferred Inflows</u>		
Deferred Pension Obligation Inflows	186,054	1,253,206
Deferred OPEB Inflows	<u>432,177</u>	<u>0</u>
Total Deferred Inflows	<u>618,231</u>	<u>1,253,206</u>
<u>Net Assets</u>		
Invested in Capital Assets, Net of Related Debt	63,269,480	64,335,244
Unrestricted	<u>13,313,793</u>	<u>17,929,547</u>
Total Net Assets	<u>76,583,273</u>	<u>82,264,791</u>
Total Liabilities, Deferred Inflows, and Net Assets	\$ <u><u>93,209,501</u></u>	\$ <u><u>94,282,133</u></u>

City of Duluth
Gas Utility Purchase Agreements Payable
 December 31, 2023

	<u>Issued</u>	<u>Issue Date</u>	<u>Final Maturity</u>	<u>Principal Outstanding 12/31/2022</u>	<u>Issued</u>	<u>Draw Down</u>	<u>Retired</u>	<u>Principal Outstanding 12/31/2023</u>
Gas Utility								
Purchase Agreements								
AMR System	\$ 3,094,654	3/28/2008	2/1/2024	\$ 396,549	\$ 0	\$ 0	\$ 261,877	\$ 134,672
Purchase Agreement Total				\$ 396,549	\$ 0	\$ 0	\$ 261,877	\$ 134,672
Total Gas Utility Purchase Agreements				<u>\$ 396,549</u>	<u>\$ 0</u>	<u>\$ 0</u>	<u>\$ 261,877</u>	<u>\$ 134,672</u>

<u>Future Payments:</u>			
<u>Year</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2024	\$ 134,672	\$ 2,552	\$ 137,224

Gas Fund
Schedule of Fixed Assets
Year Ending December 31, 2023

	<u>Balance Jan. 1, 2023</u>	<u>Additions</u>	<u>Deductions</u>	<u>Balance Dec. 31, 2023</u>	<u>Accumulated Depreciation</u>	<u>Book Value</u>
Lands and Grounds	\$ 426,078	\$ 0	\$ 0	\$ 426,078	\$ 0	\$ 426,078
Infrastructure	81,149,215	2,429,814	0	83,579,029	25,966,952	57,612,077
Buildings and Structures	2,592,124	0	0	2,592,124	1,235,731	1,356,393
Equipment and Tools	8,357,577	304,022	294,438	8,367,161	7,528,325	838,836
Work in Progress	4,568,311	2,161,997	2,493,776	4,236,532	0	4,236,532
Total	<u>\$ 97,093,305</u>	<u>\$ 4,895,833</u>	<u>\$ 2,788,214</u>	<u>\$ 99,200,924</u>	<u>\$ 34,731,008</u>	<u>\$ 64,469,916</u>

GAS STATISTICS

	2023	2022	2021	2020	2019	2018	2017
Gas sold MCF	6,615,228	6,168,117	5,678,028	5,731,748	5,984,783	5,603,857	5,218,978
Cost of gas sold	\$ 23,994,788	\$ 36,775,067	\$ 25,527,796	\$ 19,293,616	\$ 20,067,111	\$ 20,731,398	\$ 18,991,411
Cost per MCF sold	\$ 3.6272	\$ 5.9621	\$ 4.4959	\$ 3.3661	\$ 3.3530	\$ 3.6995	\$ 3.6389
Other operating costs, including maintenance(*)	\$ 10,803,746	\$ 9,538,972	\$ 8,337,025	\$ 9,274,230	\$ 9,942,276	\$ 10,587,922	\$ 10,528,802
Cost per MCF sold	\$ 1.6332	\$ 1.5465	\$ 1.4683	\$ 1.6180	\$ 1.6613	\$ 1.8894	\$ 2.0174
Interest charges	\$ 8,472	\$ 18,273	\$ 27,713	\$ 37,042	\$ 46,251	\$ 58,802	\$ 86,980
Cost per MCF sold	\$ 0.0013	\$ 0.0030	\$ 0.0049	\$ 0.0065	\$ 0.0077	\$ 0.0105	\$ 0.0167
Depreciation charge(**)	\$ 1,577,748	\$ 1,590,052	\$ 1,563,784	\$ 1,515,571	\$ 1,515,603	\$ 1,491,899	\$ 1,409,755
Cost per MCF sold	\$ 0.2385	\$ 0.2578	\$ 0.2754	\$ 0.2644	\$ 0.2532	\$ 0.2662	\$ 0.2701
Total cost per MCF sold	\$ 5.5002	\$ 7.7694	\$ 6.2445	\$ 5.2550	\$ 5.2753	\$ 5.8656	\$ 5.9431
Operating revenue	\$ 46,126,575	\$ 59,624,571	\$ 40,989,652	\$ 36,442,471	\$ 39,698,821	\$ 39,104,406	\$ 36,120,190
per MCF	\$ 6.9728	\$ 9.6666	\$ 7.2190	\$ 6.3580	\$ 6.6333	\$ 6.9781	\$ 6.9209
Gas meters in service	30,213	30,083	29,794	29,322	29,101	28,505	28,617
Gas main miles	572.40	569.90	565.80	560.50	556.60	553.40	549.40
Gas transmission miles	5.30	5.30	5.30	5.30	5.30	5.30	5.30
Gas meters per mile of main	52.78	52.79	52.66	52.31	52.28	51.51	52.09

(*) Does not include depreciation for the cost of natural gas

(**) Does not include depreciation due to change in Capital Policy

LENGTH OF GAS MAINS IN FEET

Diameter - Inches	Polyethylene	Steel	Total	Valves
1/2	2,234		2,234	
1	51,507		51,507	77
1 1/4	1	2,273	2,274	26
2	1,955,394	18,784	1,974,178	1,010
3	400,607	4,505	405,112	269
4	3,219	33,156	36,375	68
6	79,695	55,399	135,094	122
8	42,943	131,133	174,076	98
10	5	119,461	119,466	43
12	19,414	9,989	29,403	21
16		92,556	92,556	9
Totals	2,555,019	467,256	3,022,275	1,743

Total Miles Gas Main 572.4

Added in 2023 2.5

Pressure Regulators 34

Gas Valves added in 2023 1

Note: Valves used only as plugs on end of mains are not included in the above table.
Gas main quantities are derived from Geographic Information System.

GAS UTILITY ACTIVITIES 2023

UTILITY OPERATIONS

ACTIVITY	WORK COMPLETED
Services and Mains	
Installations	1
Cutoffs	6
Valves inspected and operated	298
Hits	33

CUSTOMER SERVICE

ACTIVITY	WORK COMPLETED
Service Workorders Completed	
Appliance service	3,455
Furnace cleaning	2,998
Tin shop/venting	532
Meter Truck	
Applications (water & gas)	7,223
Delinquent account service shut off/restore (water & gas)	2,076
Emergency (water & gas)	828
General (water & gas)	2,371
Meter Shop	
Gas meters repaired	27
Gas meters tested	863
Plumbing truck orders (water & gas)	875
Other	
Gas leak detection surveys	6,542
Inspect and paint gas meters and risers	5,981

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**Sewer Utility
Statement of Net Income
For The Year Ended December 31, 2022 and 2023
(Unaudited)**

	2022		2023
<u>Operating Revenue</u>			
General Sewage Revenue	\$ 18,496,665		\$ 20,030,217
Other	229,001		165,478
Total Operating Revenue	\$ 18,725,666		\$ 20,195,695
<u>Operating Expense</u>			
Director's Office	132,830		134,925
Capital Related Expenses	1,696,436		1,661,992
Utility General Expense	293,674		386,895
Engineering	687,531		730,046
Utility Operations	2,291,028		2,127,989
Wastewater Treatment	9,781,768		10,331,542
Inflow and Infiltration	592,810		661,634
Customer Service	476,355		465,435
Total Operating Expense	(15,952,432)		(16,500,458)
Operating Income	2,773,234		3,695,237
<u>Other Revenue</u>			
Contributed Assets	0		10,349
Gain or Loss on Sale of Fixed Assets	0		1,288
Transfer from Clean Water Fund to Cover Restricted Cash	11,300		11,300
Permanent Improvement Fund	0		38,647
Interest Income	(77,899)		18,272
Total Other Revenue	(66,599)		79,856
<u>Other Expenses and Transfers</u>			
Transfer to Other Funds			
Non-Capital Improvements	103,750		103,750
Reimbursement for MIS Programmer	53,850		55,800
Reimbursement for Fund 210 Costs	306		0
Interest on Long Term Debt	32,894		17,694
Total Other Expenses and Transfers	(190,800)		(177,244)
Net Income or Loss	\$ 2,515,835		\$ 3,597,849

**Sewer Utility
Statement of Net Assets
For The Year Ending December 31, 2022 and 2023
(Unaudited)**

	Assets & Deferred Outflows	
	2022	2023
<u>Current Assets</u>		
Cash	\$ 6,046,222	\$ 7,982,363
Restricted Cash and Equivalents:		
Construction	473,140	527,670
Accounts Receivable (Net)	1,788,628	1,957,889
Special Assessments	12,143	12,914
Due from Other Funds	0	38,647
Due from Other Governments	187,673	154,511
Inventory	95,655	118,458
Prepays	<u>3,171,133</u>	<u>2,912,476</u>
Total Current Assets	\$ <u>11,774,594</u>	\$ <u>13,704,928</u>
<u>Utility Plant</u>		
In Service	90,653,157	92,645,820
Construction	<u>482,624</u>	<u>1,174,831</u>
Less Accumulated Depreciation	<u>(26,463,304)</u>	<u>(27,943,671)</u>
Total Utility Plant Assets	<u>64,672,477</u>	<u>65,876,980</u>
<u>Other Assets</u>		
Special Assessments Receivable	<u>61,575</u>	<u>62,680</u>
Total Other Assets	<u>61,575</u>	<u>62,680</u>
Total Assets	<u>76,508,646</u>	<u>79,644,588</u>
<u>Deferred Outflows</u>		
Deferred Pension Obligation Outflows	703,969	377,086
Deferred OPEB Outflows	<u>1,114,546</u>	<u>1,458,372</u>
Total Deferred Outflows	<u>1,818,515</u>	<u>1,835,458</u>
Total Assets and Deferred Outflows	\$ <u><u>78,327,161</u></u>	\$ <u><u>81,480,046</u></u>

**Sewer Utility
Statement of Net Assets
For The Year Ending December 31, 2022 and 2023
(Unaudited)**

	Liabilities & Net Assets	
	2022	2023
<u>Current Liabilities</u>		
Accounts Payable	\$ 81,087	\$ 338,913
Contracts Payable	86,016	567,716
Notes Payable	75,000	75,000
Purchase Agreement Payable	246,005	126,510
Due to Other Funds	19,081	42,375
Due to Other Governments	837,536	843,429
Interest Payable	15,493	6,424
Accrued Salaries Payable	94,555	92,521
Vacations Payable	192,041	170,475
Unearned Revenue	55,730	45,178
Bonds Payable	343,211	177,518
Total Current Liabilities (Payable from Current Assets)	\$ 2,045,755	\$ 2,486,059
<u>Long Term Liabilities</u>		
Notes Payable	75,000	0
Vacations Payable	0	29,002
Purchase Agreement Payable	126,510	0
Pension Liability	2,353,167	1,501,986
Bonds Payable	252,518	75,000
Less Unamortized Bond Discount or Premium	5,981	1,771
Total Long Term Liabilities	2,813,176	1,607,759
Total Liabilities	4,858,931	4,093,818
<u>Deferred Inflows</u>		
Deferred Pension Obligation Inflows	78,415	512,763
Deferred OPEB Inflows	114,199	0
Total Deferred Inflows	192,614	512,763
<u>Net Assets</u>		
Invested in Capital Assets, Net of Related Debt	63,548,252	65,421,181
Legal Restricted Assets	473,140	527,670
Unrestricted	9,254,224	10,924,614
Total Net Assets	73,275,616	76,873,465
Total Liabilities, Deferred Inflows, and Net Assets	\$ 78,327,161	\$ 81,480,046

City of Duluth
Sewer Utility Bonds, Notes, and Purchase Agreements Payable
December 31, 2023

	<u>Issued</u>	<u>Issue Date</u>	<u>Final Maturity</u>	<u>Principal Outstanding 12/31/2022</u>	<u>Issued</u>	<u>Draw Down</u>	<u>Retired</u>	<u>Principal Outstanding 12/31/2023</u>
Sewer Utility								
Bonds								
Revenue and General Obligation	\$ 1,244,000	2/19/2009	2/1/2024	\$ 200,729	\$ 0	\$ 0	\$ 98,211	\$ 102,518
Revenue and General Obligation	905,000	12/17/2009	2/1/2025	220,000	0	0	70,000	150,000
Revenue and General Obligation Refunding	1,110,000	11/5/2015	2/1/2023	175,000	0	0	175,000	0
Bond Total				\$ 595,729	\$ 0	\$ 0	\$ 343,211	\$ 252,518
Notes								
Public Facilities Authority	\$ 1,255,464	10/29/2014	8/20/2024	\$ 150,000	\$ 0	\$ 0	\$ 75,000	\$ 75,000
Note Total				\$ 150,000	\$ 0	\$ 0	\$ 75,000	\$ 75,000
Purchase Agreements								
AMR System	\$ 2,907,099	3/28/2008	2/1/2024	\$ 372,515	\$ 0	\$ 0	\$ 246,005	\$ 126,510
Purchase Agreement Total				\$ 372,515	\$ 0	\$ 0	\$ 246,005	\$ 126,510
Total Sewer Utility Bonds, Notes, and Purchase Agreements				\$ 1,118,244	\$ 0	\$ 0	\$ 664,216	\$ 454,028

Future Payments:			
<u>Year</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2024	\$ 379,028	\$ 9,698	\$ 388,726
2025	75,000	1,500	76,500
	\$ 454,028	\$ 11,198	\$ 465,226

**Sewer Fund
Schedule of Fixed Assets
Year Ending December 31, 2023**

	<u>Balance Jan. 1, 2023</u>	<u>Additions</u>	<u>Deductions</u>	<u>Balance Dec. 31, 2023</u>	<u>Accumulated Depreciation</u>	<u>Book Value</u>
Lands and Grounds	\$ 161,612	\$ 0	\$ 0	\$ 161,612	\$ 0	\$ 161,612
Infrastructure	77,237,534	1,721,167	0	78,958,701	17,746,063	61,212,638
Buildings and Structures	7,101,150	0	0	7,101,150	4,475,215	2,625,935
Equipment and Tools	6,152,861	402,151	130,655	6,424,357	5,722,393	701,964
Work in Progress	482,624	2,417,117	1,724,910	1,174,831	0	1,174,831
Total	<u>\$ 91,135,781</u>	<u>\$ 4,540,435</u>	<u>\$ 1,855,565</u>	<u>\$ 93,820,651</u>	<u>\$ 27,943,671</u>	<u>\$ 65,876,980</u>

PUMPING STATIONS - SEWAGE PUMPING EQUIPMENT

	Station GIS Location	Station Type - Year Updated	Daily Flow - Basin No.	Wet Well Capacity	Pump Cap. GPM each unit	Pump Mfg.	Motor HP	Motor Voltage - Phase	Motor F.L.A.	Force Main Size	Force Main Discharge GIS Location	Aux. Power Gen. Set No.
1	PS0880001	Triplex Submersible 6/16/2006	305,280 gal. 1	301,397 gal.	1 - 1700 2 - 1700 3 - 1700	KSB	1 - 83 hp 2 - 83 hp 3 - 83 hp	480 3	105	10"	SA0880119	Permanent Onsite 2779-150kW
2	PS0880002	Duplex Submersible 3/18/2009	2,160 gal. 1	927.6 gal.	1 - 23 2 - 23 1 & 2 - 35	Barnes	1 - 2 hp 2 - 2 hp	230 3	1 - 8 2 - 8	3"	SA0880117	All 60 Amp
3	PD0830003	Triplex Submersible 10/19/1999	397,872 gal. 4	N/A	1 - 265 2 - 1200 3 - 1200	KSB	1 - 10 hp 2 - 34 hp 3 - 34 hp	480 3	1 - 15.1 2 - 47.5 3 - 47.5	16"	SD1210001	Permanent Onsite 125kW
4	PS043004	Duplex Submersible 1/20/2006	3,024 gal. 6	927.52 gal.	1 - 100 2 - 100	KSB	1 - 5 hp 2 - 5 hp	208 3	1 - 15.4 2 - 15.4	4"	SW0430011	All 60 Amp
5	PS043005	Simplex Submersible 1970	720 gal. 6	97.3 gal.	1 - 67.42	Myers	1.9 hp	230 1	5.3	3"	SW0430012	
6	PS0410006	Duplex Submersible 8/12/2012	1,106,064 gal. 16	9,313.8 gal.	1 - 3000 2 - 3000 3 - 3000	RJB	50 hp 50 hp 50 hp C/G 5 hp	480 3	1 - 66.7 2 - 66.7 3 - 66.7 6	24"	CH0460269	Permanent #2772 gen set
6SF	PS0410049	Duplex Submersible		8 mg		KSB	1 - 50 hp 2 - 50 hp	480 3	69.4 69.4	24"		Permanent
7	PS1090007	Duplex Submersible 2006	78,048 gal. 16	N/A	1 - 400 2 - 400	KSB	6.5 hp 6.5 hp	208 3	23 23	6"	SA1090003	All 60 Amp
8	PS1090008	Triplex Submersible 2016	228,960 gal. 15	8,863.8 gal.	1 - 808 2 - 808	KSB	83 hp 83 hp 83 hp	480 3	105 105 105	8"	SA1090003	Permanent SG 250kW
9	PS1090009	Duplex Submersible New motors 2011	165,888 gal. 15	3,941 gal.	1 - 800 2 - 800 3 - 800	KSB Grinder	1 - 7.5 hp 2 - 7.5 hp	208 3	26.3 26.3 17	10"	SA1090015	All 60 Amp
10	PS1100010	Duplex Submersible 1996	N/A 15	N/A	1 - 208 2 - 247.1	KSB	1 - 2.4 hp 2 - 2.4 hp	208 3	8.7	4"	SA0009	All 60 Amp

PUMPING STATIONS - SEWAGE PUMPING EQUIPMENT

	Station GIS Location	Station Type - Year Updated	Daily Flow - Basin No.	Wet Well Capacity	Pump Cap. GPM each unit	Pump Mfg.	Motor HP	Motor Voltage - Phase	Motor F.L.A.	Force Main Size	Force Main Discharge GIS Location	Aux. Power Gen. Set No.
11	PS1110011	Duplex Submersible 1996	N/A 15	N/A	1 - 164.4 2 - 161.4	KSB	1 - 2.4 hp 2 - 2.4 hp	208 3	1 - 8.4 2 - 8.4	4"	SA1110002	All 60 Amp
12	PS1110012	Duplex Submersible 1996	80,640 gal. 15		1 - 170 2 - 170 (approx.)	KSB	1 - 2.4 hp 2 - 2.4 hp	208 3	1 - 6.9 2 - 6.9	4"	SA1110013	All 60 Amp
13	PS0400013	Duplex Submersible 1995	N/A 16	N/A	1 - 650 2 - 650 1 & 2 - 710	KSB	1 - 12.8 hp 2 - 12.8 hp	480 3	1 - 29 2 - 29	12"	SW0400031	2765 2767 200 Amp
14	PS0320014	Duplex Submersible 2013	50,976 gal. 18	1,008 gal.	1 - 230 2 - 230	Flygt	1 - 10 hp 2 - 10 hp	208 3	1 - 9.5 2 - 18.5	8"	SA0310022	2766 2770
15	PS0310015	Triplex Wet well Dry well ~1975	248,688 gal. 18	N/A	1 - 2400 2 - 2400 3 - 2400	Chicago	1 - 40 hp 2 - 40 hp 3 - 40 hp	480 3	54	10"	SW0310030	2765 2767 200 Amp
16	PS0300016	Duplex Submersible 2013	 23		1 - 1400 2 - 1400 1 & 2 - 2300	KSB	32 hp 32 hp	480 3	38.9 38.9	10"	SW0300016	2765 2766 200 Amp
17	PS0290017	Duplex Submersible ~1975 2001	243,072 gal. 23	N/A	1 - 1000 2 - 1000 1 & 2 - 1500	KSB	1 - 10 hp 2 - 10 hp	240 3	1 - 32.5 2 - 32.5	8"	SW0290038	2767 2765 200 Amp
18	PS0180018	Duplex Submersible 1996	N/A 26	N/A	1 - 58.56 2 - 54.92 1 & 2 - 85	KSB	1 - 1.75 hp 2 - 1.75 hp	208 3	1 - 6.9 2 - 6.9	6"	SA0180041	All 60 Amp
19	PS1230019	Duplex Submersible 2012	2,880 gal. 28	409 gal.	1 - 124 2 - 104 1 & 2 - 169	Meyers	1 - 2 hp 2 - 2 hp	240 3	1 - 9.0 2 - 9.0	4"	SW1230034	All 60 Amp
20	PS0090020	Duplex Submersible 2004			1 - 360 2 - 360 1 & 2 - 540	KSB	1 - 5 hp 2 - 5 hp	208 30	1 - 17.7		SA0090036	2765 2767 200 Amp
21	PS0020021	Duplex Submersible 2007	3,600 gal. 30	480 gal.	1 - 125 2 - 125	KSB	1 - 10 hp 2 - 10 hp	208 3	1 - 33.4 2 - 30.1	4"	SA0030035	All 60 Amp

PUMPING STATIONS - SEWAGE PUMPING EQUIPMENT

	Station GIS Location	Station Type - Year Updated	Daily Flow - Basin No.	Wet Well Capacity	Pump Cap. GPM each unit	Pump Mfg.	Motor HP	Motor Voltage - Phase	Motor F.L.A.	Force Main Size	Force Main Discharge GIS Location	Aux. Power Gen. Set No.
22	PS0730022	Duplex Submersible 2002	43,344 gal. 33		1 - 180 2 - 135.3 1-2:337.6	KSB	1 - 10 hp 2 - 3.4 hp	240 3	1 - 29.2 2 - 10.1	4"	SA0730023	2765 2767 200 Amp
23	PS0960023	Duplex Submersible 2014	3,168 gal. 11	295.5 gal.	1 - 100 2 - 100 1 & 2 - 118	KSB	1 - 5 hp 2 - 5 hp	240 1	15.4 15.4	4"	SA0960002	All 60 Amp
24	NEW PIER B	Duplex Submersible 2016			1 - 150 2 - 150 1 & 2 - 165	KSB	1 - 5 hp 2 - 5 hp	208 3	17.7 17.7		SA0400052	60 Amp
25	PS1030025	Duplex Submersible 2001	8,352 gal. 11		1 - 200 2 - 200 1 & 2 - 300	KSB	1 - 15 hp 2 - 15 hp	240 3	1 - 52 2 - 52		SA1000001	2767 2765 200 Amp
26	PS0920026	Duplex Submersible 1999	49,680 gal. 5		1 - 200 2 - 200 1 & 2 - 300	KSB	1 - 16.5 2 - 16.5	240 3	1 - 52 2 - 52	4"	SA0860115	2767 2765
27	PS0420027	Duplex Submersible 1984	4,320 gal. 13	145.9 gal.	1 - 46.8 2 - 49.4 1 & 2 - 73	Myers	1 - 2 hp 2 - 2 hp	240 3	1 - 7.5 2 - 7.5	3"	SA0420086	All 60 Amp
28	PS1170028	Duplex Submersible 1998	17,136 gal. 22	N/A	1 - 159 2 - 159	KSB	1 - 3.4 hp 2 - 3.4 hp	240 3	1 - 10.2 2 - 10.2	4"	SA1170006	All 60 Amp
29	PS0470029	Duplex Submersible 2008	5,184 gal. 13	456.3 gal.	1 - 159 2 - 159 1 & 2 - 238	Barnes	1 - 2 hp 2 - 2 hp	240 3	1 - 9 2 - 9	1.25"	SA0470148	All 60 Amp
30	PS0580030	Duplex Submersible 1989	14,112 gal. 20	377.8 gal.	1 - 120.6 2 - 124.6 1 & 2 - 200	Flygt CP3102	1 - 5 hp 2 - 5 hp	208 3	1 - 9.2 2 - 9.2	6"	SA0580129	All 60 Amp
31	PS0600031	Duplex Submersible 1989	13,104 gal. 21	658.3 gal.	1 - 200.5 2 - 154.3 1 & 2 - 300	Flygt CP3102	1 - 5 hp 2 - 5 hp	240 3	1 - 13 2 - 13	6"	SA0600032	All 60 Amp
32	PS0600032	Duplex Submersible 1989	5,472 gal. 21	613.4 gal.	1 - 139 2 - 155 1 & 2 - 300	Flygt CP3102	1 - 5 hp 2 - 5 hp	240 3	1 - 13 2 - 13	4"	SA0600093	All 60 Amp

PUMPING STATIONS - SEWAGE PUMPING EQUIPMENT

	Station GIS Location	Station Type - Year Updated	Daily Flow - Basin No.	Wet Well Capacity	Pump Cap. GPM each unit	Pump Mfg.	Motor HP	Motor Voltage - Phase	Motor F.L.A.	Force Main Size	Force Main Discharge GIS Location	Aux. Power Gen. Set No.	
33	PS1280033	Duplex Submersible 1995	NA	420 gal.	1 - 140 2 - 140 1 & 2 - 210	KSB	1 - 3.25 hp 2 - 3.25 hp	208	1 - 9.8 2 - 9.8	4"	SA0030061	All 60 Amp	
34	PS0560034	Duplex Submersible 1993	NA 20	433.9 gal.	1 - 166 2 - 156 1 & 2 - 249	Flygt CP3127	1 - 10 hp 2 - 10 hp	480 3	1 - 13 1 - 13	4"	SA0560093	2767 2765 200 Amp	
35	PS0630035	Duplex Submersible 2007			1 - 200 2 - 200 1 & 2 - 300	KSB	1 - 7.5 2 - 7.5	208 3	1 - 26.7 2 - 26.7	4"	SA0610012	All 60 Amp	
36	PS0900036	Duplex Submersible 1992	1,152 gal. 11	980 gal.	1 - 195.4 2 - 196.7	Flygt CP3127X	1 - 10 hp 2 - 10 hp	240 3	1 - 26 2 - 26	Twin 4"	SA0900005	2767 2765 200 Amp	
37	PS0420037	Duplex Submersible 1984	3,888 gal. 13	441.4 gal.	1 - 186.5 2 - 191.9	Flygt CP3085	1 - 3 hp 2 - 3 hp	208 3	1 - 10 2 - 10	4"	SA0420080	All 60 Amp	
38	PS1120038	Duplex Submersible	Operated by Facilities Management										
39	PS0150039	Duplex Submersible 2013	20,880 gal. 23	643.2 gal.	1 - 282 2 - 280 1 & 2 - 359	KSB	1 - 5 hp 2 - 5 hp	208 3	1 - 17.7 2 - 17.7	6"	SA0180001	All 60 Amp	
40	PS0330040	Steel shell dry well with 6' concrete wet well	36,864 gal. 18	534.9 gal.	1 - 286.6 2 - 281.5	Fairbanks Morse	1 - 7.5 hp 2 - 7.5 hp	240 3	1 - 22.6 2 - 22.6	8"	SA0320008	All 60 Amp	
41	PS0680041	Duplex Submersible 2002	8,928 gal. 22		1 - 400 2 - 400	KSB	1 - 15 hp 2 - 15 hp	240 3	1 - 43.5 2 - 43.5	6"	SA0680029	2767 2765 200 Amp	
42	PS1320042	Duplex Submersible 1996	NA 22	NA	NA	KSB	1 - 5 hp 2 - 5 hp	480 3	1 - 7.8 2 - 7.8	4" 6"	SD1180032	2767 2765 200 Amp	
43	PS1280143	Duplex Submersible 2000			1 - 187 2 - 189 3 - 200	KSB	1 - 15 hp 2 - 15 hp	240 3	1 - 43.5 2 - 43.5	6"	SA1280001	2767 2765 200 Amp	

PUMPING STATIONS - SEWAGE PUMPING EQUIPMENT

	Station GIS Location	Station Type - Year Updated	Daily Flow - Basin No.	Wet Well Capacity	Pump Cap. GPM each unit	Pump Mfg.	Motor HP	Motor Voltage - Phase	Motor F.L.A.	Force Main Size	Force Main Discharge GIS Location	Aux. Power Gen. Set No.
44	PS0010144	Duplex Submersible 2000			1 - 179 2 - 173 3 - 200	KSB	1 - 10 hp 2 - 10 hp	208 3	29 29	6"	PS1280143	2767 2765 200 Amp
45	PS0880045	Triplex Submersible 2012		2 MG	1 - 2200 2 - 2200 3 - 2200	KSB	1 - 50 hp 2 - 50 hp 3 - 50 hp	480 3	69 69 69	12"	SW0830136	Permanent on site 2778 100kW
46	PS0090046	Duplex Submersible Grinder ~2005				Barnes	1 - 2 hp 2 - 2 hp	240 3	16 16	1.25"	SA0090132	
47	PS0090047	(in Bethany Crisis Shelter) ~2005				Barnes	1 - 1 hp 2 - 1 hp	240 1	9.2 9.2	1.25"	SA0090083	
48	PS0080048	 ~2005				Barnes	1 - 2 hp 2 - 2 hp	208 3	9.2 9.2		SW0080024	60 Amp
49	PS0410049	Duplex Submersible		8 MG		KSB	1 - 50 hp 2 - 50 hp	480 3	69.4 69.4	24"		Permanent 2772
50	PW042001	Storage Basin 2007		1 MG	No Pumps	Gravity In Gravity Out						
51	PS0430001	Storage Basin Oct. 2010		3 MG		KSB	1 - 10 hp 2 - 10 hp	208 3	32.7 32.7		SA0930190	Permanent on site 2777
53	PS0060001	Duplex Submersible 2012			1 - 525 2 - 525 1 & 2 - 1100	KSB	1 - 10 hp 2 - 10 hp	208 3	23.2 23.2	6"	SW00800024	2765 2767

LENGTH OF SANITARY SEWER PIPE IN FEET

PIPE MATERIAL

Dia. Inches	Force Main	ABS	ACP	BRA	CI/DI	CIPP	CMP	HDPE	PVC	RCP	UNK	VCP	Totals
1	113.45												113.45
1 1/4	328.12												328.12
1 1/2	1,575.47												1,575.47
2	28,396.78												28,396.78
3	16,926.67												16,926.67
4	25,754.36				271.98								26,026.34
6	12,950.56		92.65			202.02			1,551.07		176.27	5,760.36	20,732.92
8	9,605.75	6,056.95	4,490.57		11,808.48	243,713.05		1,699.90	484,436.72	305.59	1,886.59	764,287.44	1,528,291.03
9						6,499.93						19,744.77	26,244.70
10	5,452.07		36.28		3,606.70	35,062.48		45.24	34,157.71	3,301.08	637.58	62,454.30	144,753.45
12	4,213.36		51.19		1,392.18	18,401.32		513.01	21,657.71	42,761.03		38,585.54	127,575.35
14					163.03								163.03
15						9,243.93			11,917.37	32,531.18		22,676.05	76,368.54
16	5,298.64				495.47			999.86		48.12			6,842.09
18				348.25	79.22	14,520.87	918.68		1,133.00	10,550.13		16,557.04	44,107.18
20	753.30			118.37	12.13	1,113.57				465.86		2,377.82	4,841.04
21					111.17	438.09			1,094.57	6,466.56	7.47	654.49	8,772.35
22				1,677.35		895.18						1,221.15	3,793.69
24	693.95			466.93	1,299.40	2,479.58			693.35	10,136.68		4,083.06	19,852.96
26				479.39		564.50				419.11			1,463.00
27						455.80				720.11		529.96	1,705.86
28				1,386.60									1,386.60
30				499.10	303.94	1,284.04				2,875.19			4,962.28
32						1,884.83				403.03			2,287.87
34						562.39							562.39
36				476.13	3,167.49	1,287.51			105.00	1,401.91			6,438.04
42				466.79				386.89					853.68
45				467.07									467.07
48				237.60	35.34	31.29		1,166.72		593.97			2,064.92
55						83.91							83.91
UNK	4,213.42								345.23	9.09	591.93	342.09	5,501.77
Total	116,275.89	6,056.95	4,670.69	6,623.58	22,746.51	338,724.28	918.68	4,811.62	557,091.74	112,988.65	3,299.84	939,274.09	2,113,482.54

Note: The City of Duluth Sanitary Sewer system includes 8,719 manholes.

ABS - Acrylonitrile Butadiene Styrene
 ACP - Asbestos Cement Pipe
 BRA - Brick Arch
 CI/DI - Cast or Ductile Iron

CIPP - Cured in Place Pipe
 CMP - Corrugated Metal Pipe
 HDPE - High Density Polyethylene
 PVC - Polyvinyl Chloride

Miles of Pipe- 400.3
 RCP - Reinforced Concrete Pipe
 UNK - Unknown
 VCP - Vitrified Clay Pipe

Note: Pipe quantities are derived from Geographic Information System.

SANITARY SEWER ACTIVITIES 2023

ACTIVITY	WORK COMPLETED
Sewer calls	229
Cleaning sanitary sewer pipe	340,128 ft
Televising sanitary sewer pipe	51,525 ft
I & I inspections (Inflow and Infiltration Grant Program)	
Homes inspected	81
Point of Sale certificates	959
Point of Sale waivers	9
Laterals rehabilitated	119
Inspections for connections and disconnections	
Connections	78
Disconnections	21

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**Clean Water Utility
Statement of Net Income
For The Year Ended December 31, 2022 and 2023
(Unaudited)**

	2022	2023
<u>Operating Revenue</u>		
Charges for Services	\$ <u>1,649,877</u>	\$ <u>1,649,750</u>
Total Operating Revenue	\$ <u>1,649,877</u>	\$ <u>1,649,750</u>
<u>Operating Expense</u>		
Clean Water Expense	<u>792,904</u>	<u>825,315</u>
Total Operating Expense	<u>(792,904)</u>	<u>(825,315)</u>
Operating Income	<u>856,973</u>	<u>824,435</u>
<u>Other Revenue</u>		
Interest Income	<u>(11,460)</u>	<u>2,709</u>
Total Other Revenue	<u>(11,460)</u>	<u>2,709</u>
<u>Other Expenses and Transfers</u>		
Transfer to Sewer Fund to Cover Restricted Cash	11,300	11,300
Interest on Long Term Debt	<u>54,638</u>	<u>38,003</u>
Total Other Expenses and Transfers	<u>(65,938)</u>	<u>(49,303)</u>
Net Income or Loss	\$ <u><u>779,575</u></u>	\$ <u><u>777,841</u></u>

**Clean Water Utility
Statement of Net Assets
For The Year Ending December 31, 2022 and 2023
(Unaudited)**

Assets

	2022	2023
<u>Current Assets</u>		
Cash	\$ 865,156	\$ 1,076,604
Accounts Receivable (Net)	<u>165,359</u>	<u>171,436</u>
Total Current Assets	\$ <u>1,030,515</u>	\$ <u>1,248,040</u>
<u>Utility Plant</u>		
In Service	<u>40,378,099</u>	<u>40,378,099</u>
Less Accumulated Depreciation	<u>(5,699,659)</u>	<u>(6,266,530)</u>
Total Utility Plant Assets	<u>34,678,440</u>	<u>34,111,569</u>
Total Assets	\$ <u><u>35,708,955</u></u>	\$ <u><u>35,359,609</u></u>

Clean Water Utility
Statement of Net Assets
For The Year Ending December 31, 2022 and 2023
(Unaudited)

	Liabilities & Net Assets	
	2022	2023
<u>Current Liabilities</u>		
Accounts Payable	\$ 2,000	\$ 8,341
Notes Payable	1,110,000	1,126,000
Interest Payable	16,079	10,093
Unearned Revenue	6,341	4,588
Bonds Payable	15,789	16,482
Total Current Liabilities (Payable from Current Assets)	\$ 1,150,209	\$ 1,165,504
<u>Long Term Liabilities</u>		
Notes Payable	2,008,000	882,000
Bonds Payable	16,482	0
Total Long Term Liabilities	2,024,482	882,000
Total Liabilities	3,174,691	2,047,504
<u>Net Assets</u>		
Invested in Capital Assets, Net of Related Debt	31,528,169	32,087,087
Unrestricted	1,006,095	1,225,018
Total Net Assets	32,534,264	33,312,105
Total Liabilities and Net Assets	\$ 35,708,955	\$ 35,359,609

**City of Duluth
Clean Water Utility Bonds and Notes Payable
December 31, 2023**

	<u>Issued</u>	<u>Issue Date</u>	<u>Final Maturity</u>	<u>Principal Outstanding 12/31/2022</u>	<u>Issued</u>	<u>Draw Down</u>	<u>Retired</u>	<u>Principal Outstanding 12/31/2023</u>
Clean Water Utility								
Bonds								
Revenue and General Obligation	\$ 200,000	2/19/2009	2/1/2024	\$ 32,271	\$ 0	\$ 0	\$ 15,789	\$ 16,482
Bond Total				\$ 32,271	\$ 0	\$ 0	\$ 15,789	\$ 16,482
Notes								
Public Facilities Authority	\$ 796,835	8/20/2009	8/20/2024	\$ 123,000	\$ 0	\$ 0	\$ 61,000	\$ 62,000
Public Facilities Authority	2,414,150	11/25/2009	8/20/2024	384,000	0	0	190,000	194,000
Public Facilities Authority	3,753,059	7/28/2010	8/20/2025	808,000	0	0	266,000	542,000
Public Facilities Authority	8,504,224	7/28/2010	8/20/2025	1,803,000	0	0	593,000	1,210,000
Note Total				\$ 3,118,000	\$ 0	\$ 0	\$ 1,110,000	\$ 2,008,000
Total Clean Water Utility Bonds and Notes				<u>\$ 3,150,271</u>	<u>\$ 0</u>	<u>\$ 0</u>	<u>\$ 1,110,000</u>	<u>\$ 2,024,482</u>

Future Payments:			
<u>Year</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2024	\$ 1,142,482	\$ 27,504	\$ 1,169,986
2025	882,000	11,096	893,096
	<u>\$ 2,024,482</u>	<u>\$ 38,600</u>	<u>\$ 2,063,082</u>

**Clean Water Fund
Schedule of Fixed Assets
Year Ending December 31, 2023**

	<u>Balance Jan. 1, 2023</u>	<u>Additions</u>	<u>Deductions</u>	<u>Balance Dec. 31, 2023</u>	<u>Accumulated Depreciation</u>	<u>Book Value</u>
Lands and Grounds	\$ 525,000	\$ 0	\$ 0	\$ 525,000	\$ 0	\$ 525,000
Infrastructure	39,680,981	0	0	39,680,981	6,094,412	33,586,569
Equipment and Tools	172,118	0	0	172,118	172,118	0
Work in Progress	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	<u>\$ 40,378,099</u>	<u>\$ 0</u>	<u>\$ 0</u>	<u>\$ 40,378,099</u>	<u>\$ 6,266,530</u>	<u>\$ 34,111,569</u>

STORMWATER

Stormwater Utility
Statement of Net Income
For The Year Ended December 31, 2022 and 2023
(Unaudited)

	2022	2023
<u>Operating Revenue</u>		
Stormwater Charges	\$ 7,819,848	\$ 7,586,378
Other	61,476	56,844
Total Operating Revenue	\$ 7,881,324	\$ 7,643,222
<u>Operating Expense</u>		
Director's Office	132,760	135,467
Capital Related Expenses	617,413	843,819
Utility General Expense	328,671	758,484
Engineering	771,760	867,410
Utility Operations	1,721,183	2,014,580
Customer Service	318,980	311,841
Total Operating Expense	(3,890,767)	(4,931,601)
Operating Income	3,990,557	2,711,621
<u>Other Revenue</u>		
Grants Non-Capital	20,509	79,481
Contributed Assets	0	24,327
Transfer from Other Funds		
Permanent Improvement Fund	0	70,618
Interest Income	(69,581)	17,937
Total Other Revenue	(49,072)	192,363
<u>Other Expenses and Transfers</u>		
Bond Interest	(192)	0
Transfer to Other Funds		
Non-Capital Improvements	41,500	41,500
Street Sweeping	450,000	450,000
Reimbursement for MIS Programmer	53,850	55,900
Reimbursement for Fund 210 Costs	184	0
Total Other Expenses and Transfers	(545,342)	(547,400)
Net Income or Loss	\$ 3,396,143	\$ 2,356,584

Stormwater Utility
Statement of Net Assets
For The Year Ending December 31, 2022 and 2023
(Unaudited)

	Assets & Deferred Outflows	
	2022	2023
<u>Current Assets</u>		
Cash	\$ 5,885,746	\$ 7,412,518
Accounts Receivable	797,992	802,163
Special Assessments	25,679	25,075
Due from Other Funds	210	74,863
Due from Other Governments	27,666	0
Inventory	101,793	130,204
Prepays	1,890,698	1,728,820
Total Current Assets	\$ 8,729,784	\$ 10,173,643
<u>Utility Plant</u>		
In Service	25,194,559	25,882,217
Construction	521,339	1,146,901
Less Accumulated Depreciation	(5,777,127)	(6,157,498)
Total Utility Plant Assets	19,938,771	20,871,620
<u>Other Assets</u>		
Special Assessments Receivable	1,090	1,383
Total Other Assets	1,090	1,383
Total Assets	28,669,645	31,046,646
<u>Deferred Outflows</u>		
Deferred Pension Obligation Outflows	538,137	311,808
Deferred OPEB Outflows	598,654	771,148
Total Deferred Outflows	1,136,791	1,082,956
Total Assets and Deferred Outflows	\$ 29,806,436	\$ 32,129,602

Stormwater Utility
Statement of Net Assets
For The Year Ending December 31, 2022 and 2023
(Unaudited)

	Liabilities & Net Assets	
	2022	2023
<u>Current Liabilities</u>		
Accounts Payable	\$ 39,349	\$ 59,250
Contracts Payable	24,797	103,652
Due to Other Funds	16,358	134,698
Due to Other Governments	1,624	439
Accrued Salaries Payable	72,958	86,165
Vacations Payable	149,059	173,146
Unearned Revenue	83,677	39,914
Total Current Liabilities (Payable from Current Assets)	\$ <u>387,822</u>	\$ <u>597,264</u>
<u>Long Term Liabilities</u>		
Pension Liability	<u>1,798,840</u>	<u>1,241,975</u>
Total Long Term Liabilities	<u>1,798,840</u>	<u>1,241,975</u>
Total Liabilities	<u>2,186,662</u>	<u>1,839,239</u>
<u>Deferred Inflows</u>		
Deferred Pension Obligation Inflows	59,943	423,998
Deferred OPEB Inflows	<u>50,050</u>	<u>0</u>
Total Deferred Inflows	<u>109,993</u>	<u>423,998</u>
<u>Net Assets</u>		
Invested in Capital Assets, Net of Related Debt	19,938,771	20,871,620
Unrestricted	<u>7,571,010</u>	<u>8,994,745</u>
Total Net Assets	<u>27,509,781</u>	<u>29,866,365</u>
Total Liabilities, Deferred Inflows, and Net Assets	\$ <u><u>29,806,436</u></u>	\$ <u><u>32,129,602</u></u>

**Stormwater Fund
Schedule of Fixed Assets
Year Ending December 31, 2023**

	<u>Balance Jan. 1, 2023</u>	<u>Additions</u>	<u>Deductions</u>	<u>Balance Dec. 31, 2023</u>	<u>Accumulated Depreciation</u>	<u>Book Value</u>
Lands and Grounds	\$ 13,743	\$ 0	\$ 0	\$ 13,743	\$ 0	\$ 13,743
Infrastructure	21,430,025	688,326	0	22,118,351	3,470,748	18,647,603
Buildings and Structures	1,401,897	0	0	1,401,897	546,740	855,157
Equipment and Tools	2,348,894	63,242	63,910	2,348,226	2,140,010	208,216
Work in Progress	<u>521,339</u>	<u>1,322,633</u>	<u>697,071</u>	<u>1,146,901</u>	<u>0</u>	<u>1,146,901</u>
Total	<u>\$ 25,715,898</u>	<u>\$ 2,074,201</u>	<u>\$ 760,981</u>	<u>\$ 27,029,118</u>	<u>\$ 6,157,498</u>	<u>\$ 20,871,620</u>

PUMPING STATIONS - STORMWATER PUMPING EQUIPMENT

	Station Location	Station Type - Year Updated	Pump G.P.M.	Pump Mfg.	Motor HP	Motor Voltage - Phase	Motor F.L.A.	Force Main Size	Discharge Location
1	1801 Minnesota Ave.	Simplex Submersible 1980	760	Flygt CP-3101	5	230 3	13.4	6"	AP1100004
2	13th St. S & St. Louis Ave.	Simplex Submersible 1984	750	Hydromatic S6L	3	230 3	14	6"	AP1090017

LENGTH OF STORM SEWERS IN FEET

Dia. Inch.	BR	CMP/STL	CPD	CI/DI	HDPE	NCP	PPC	PVC	RCP	STN	TMP	TP	VCP	UNK	Totals
2								72.86					21.80		94.66
3					4.70			4.90				840.33			849.94
4			35,773.73					505,147.72	1,033.59			237.24		140,906.46	683,098.74
6		2,736.00	211.26	171.72	12.25			23,095.37	75.94			245.15	3,380.08	17,638.64	47,566.43
8		760.00	820.42	444.39	379.67	48.40		18,411.41	592.52			117.24	870.32	4,726.56	27,170.93
10		3,860.00	63.23	589.44	59.36		64.35	5,397.14	12,745.83				3,719.29	16,200.00	42,698.64
12		39,786.00	13,251.28	1,201.38	30,813.71	779.08		24,540.64	394,848.15				3,665.70	57,326.48	566,212.43
13									46.83					0.00	46.83
14				38.02					232.57					300.67	571.26
15		8,148.73	476.01		9,908.79	167.82		3,308.32	170,899.17				2,583.51	32,042.78	227,535.12
16		89.20		502.02	589.62				212.51					781.32	2,174.68
17														91.31	91.31
18		7,265.42	946.89		5,154.88	50.27		3,957.13	109,274.64				1,805.92	22,398.05	150,853.21
20		50.42		90.08	198.37				1,076.20					3,112.13	4,527.20
21		337.58		83.63				49.33	36,620.25				1,719.34	3,488.37	42,298.50
22								206.85	937.08						1,143.94
24	276.91	3,319.01	46.44	237.80	2,714.31			611.94	78,564.82	160.14			1,171.51	13,952.74	101,055.62
26	2,584.39				160.34			47.62	3,622.33					11,168.40	17,583.09
27	75.31	50.05			28.22		84.17		14,609.00					928.61	15,775.37
28	1,134.66	119.46							3,567.46					1,473.37	6,294.94
29									335.57						335.57
30	154.58	1,064.40	50.58		2,481.75				38,486.08		143.47			5,221.33	47,602.20
31									319.54						319.54
32	581.77				23.53				2,454.79					387.21	3,447.29
33									711.15						711.15
34							45.39		621.53					288.53	955.45
36	185.87	1,614.54	231.69		1,171.19	459.91	475.62		32,804.52					7,399.41	44,342.75
38							42.66		85.45						128.11
40									724.52	659.05				56.27	1,439.84
42	200.35	134.37		103.10	46.28		241.71		10,567.06				84.63	141.00	11,518.50
44		138.63							3,702.56					385.20	4,226.39
45							110.60		331.20						441.80
46					45.98									72.02	118.00
48	68.65	1,239.85		98.87	265.42		731.08	54.98	18,119.35	948.80	78.30			3,388.28	24,993.59
50	239.81								283.92					17.06	540.79

LENGTH OF STORM SEWERS IN FEET

Dia. Inch.	BR	CMP/STL	CPD	CI/DI	HDPE	NCP	PPC	PVC	RCP	STN	TMP	TP	VCP	UNK	Totals
51									1,019.20						1,019.20
52									448.03						448.03
54	94.06						116.92		10,449.92					2,547.76	13,208.65
55							84.00								84.00
56									89.10	57.60				65.30	212.00
58									54.43						54.43
60	36.26	846.09				27.59	361.78		4,173.54	366.30				1,552.88	7,364.44
62									112.05					57.83	169.88
66		109.83							631.54	69.79				264.74	1,075.89
68							57.53								57.53
72		517.18					483.04		2,309.94	1,523.33				400.79	5,234.28
73														79.34	79.34
78									398.57						398.57
84	203.01	411.39					111.55	138.30	658.21	1,540.48					3,062.94
88									128.30						128.30
96		106.32							754.42	128.73				223.73	1,213.20
108									608.49						608.49
120									748.23	368.26				258.42	1,374.91
122									54.02						54.02
128	105.29	57.77							58.68	726.38				551.82	1,499.94
132									170.24						170.24
144									127.41						127.41
192									49.22						49.22
UNK	665.77	632.20	82.61		151.93		1,352.04	2,175.26	6,502.81	192.70			74.61	90,669.51	102,499.44
Totals	6,606.70	73,394.44	51,954.14	3,560.45	54,210.30	1,533.08	4,362.44	587,219.78	968,052.48	6,741.56	221.78	1,439.96	19,096.72	440,564.34	2,218,958.18

Note: The Storm Sewer system also includes 11,222 catch basins and 5,223 manholes.

Miles of Pipe 420.3

Pipe quantities are derived from Geographic Information System.

BR - Brick

CMP/STL - Corrugated Metal (iron or steel)/Steel

CPD - Corrugated Polyethylene Drainage Pipe

CI/DI - Cast or Ductile Iron

HDPE - High Density Polyethylene

NCP - Non-Reinforced Concrete Perforated Pipe

PPC - Pour-in-Place Concrete

PVC - Polyvinyl Chloride

RCP - Reinforced Concrete

STN - Stone

TMP - Timber Pipe

TP - Thermoplastic

VCP - Vitrified Clay Pipe

UNK - Unknown

DULUTH CREEKS AND STREAMS

Creek or Stream	Drainage Area (square miles)
Amity	16.60
58th Ave E	0.59
50th Ave E	0.63
47th Ave E	0.36
43rd Ave E	0.59
40th Ave E	0.45
38th Ave E	0.03
37th Ave E	0.13
34th Ave E	0.53
Tischer	7.30
Chester	7.30
Oregon	0.85
Brewery	1.66
Greys	0.63
Clarkhouse	1.00
Buckingham	1.10
Miller	9.70
Coffee	1.76
Merritt	2.30
32nd Ave W	0.73
41st Ave W	0.36
Keene	6.40

Creek or Stream	Drainage Area (square miles)
44th Ave W	0.78
49th Ave W	0.80
62nd Ave W	0.90
Kingsbury	8.60
68th Ave W	0.15
79th Ave W	0.14
82nd Ave W	0.26
Knowlton	1.56
84th Ave W	0.23
86th Ave W	0.08
Gogebic Street	0.34
Lenroot Street	0.61
Stewart Street	1.97
Morgan Park	1.31
U. S. Steel	2.70
Gary Street	0.33
Bowser Street	0.08
Heard Street	0.06
Sargent	3.30
Fond du Lac	0.58
Mission	10.30
Lester River	35.60

MPCA MS4 CREEK DATA

MS4 Discharge Waterbodies	Water Quality Status	Cause of Impairment	TMDL Development Status	Other
Lake Superior	ORVW Impaired	Mercury (fish tissue) PCB (fish tissue)	NE Mercury TMDL Region	Restricted Discharge Area
St Louis River	Impaired	Mercury (fish tissue and water column) PCB (fish tissue and water column) DDT Dieldrin Dioxin Toxaphene Fecal Coliform Aquatic Macroinvertebrate Bioassessments	TMDL Approved	Area of Concern & Protected Water
Amity Creek	Impaired	Total Suspended Solids	TMDL Approved	Trout stream
E Br Amity	Impaired	Total Suspended Solids	TMDL Approved	Trout stream
Lester River	Impaired	Mercury (water column) Mercury (fish tissue) Total Suspended Solids	TMDL Approved TMDL Approved TMDL Approved	Trout stream
Lester River Beach				
Twin Ponds- Buckingham Creek	Impaired (Upper Twin Ponds)	PCB (fish tissue)- Upper Twin Mercury (fish tissue)- South Twin	Not started Not started	Trout stream
Miller Creek	Impaired	Temperature Lack of coldwater assemblage Aquatic Macroinvertebrates E. coli Chloride	TMDL Approved TMDL in process** TMDL in process** TMDL Approved TMDL in process**	Trout stream
		PFOS		
Chester Creek	Impaired Impaired	Mercury E. coli Chloride	Not started TMDL Approved TMDL pending	Trout stream Beach TMDL
Keene Creek	Impaired	E. coli Chloride	TMDL Approved TMDL in process**	Trout stream
Kingsbury Creek	Impaired	Fish Bioassessment, Aquatic Macroinvertebrates Total Suspended Solids Chloride	Related to TSS TDML TMDL Approved TMDL in process**	Trout stream, Related to TSS
Mission Creek				Trout stream
Sargent Creek	Impaired	E. coli	TMDL Approved	Trout stream, Beach TMDL
		PFOS		
Boy Scout Boat Launch	Impaired	E. coli	TMDL Approved	Related to Sargent Creek

MPCA MS4 CREEK DATA

MS4 Discharge Waterbodies	Water Quality Status	Cause of Impairment	TMDL Development Status	Other
Stewart Creek	Impaired	E. coli	TMDL Approved	Trout stream, Beach TMDL
Clyde Ave Boat Launch	Impaired	E. coli	Draft TMDL/Temp Deferred	Related to Stewart Creek
Tischer Creek	Impaired	E. coli	TMDL Approved	Trout stream
Brighton Beach				
58th Ave E				
50th Ave E				
47th Ave E				
43rd Ave E				
42nd Ave E Beach				
38th Ave E				
37th Ave E				
34th Ave E				
Oregon				
Brewery				
Greys				
Clarkhouse				
Coffee	High-Risk for Impairment	Chloride	Data suggests TMDL pending	Trout stream
Merritt	Impaired	E. coli	TMDL Approved	Trout stream
Lakewalk/16th Ave Beach				
Leif Erickson Beach	Impaired	E. coli	TMDL Approved	Related to Chester Creek
Lakewalk/2nd Ave Beach				
13th St S Beach (Lake)				
15th St S Beach (Harbor)	Impaired	E. coli	TMDL Approved	
20th St S Beach (Harbor)	Impaired	E. coli	TMDL Approved	
Lafayette Com Club Beach				
Park Point Beach House				
Sky Harbor Beach (Harbor)	Impaired	E. coli	TMDL Approved	
32nd Ave W				
41st Ave W				
44th Ave W				
49th Ave W				
62nd Ave W				
68th Ave W				
79th Ave W				
82nd Ave W				
Knowlton				Trout stream

MPCA MS4 CREEK DATA

MS4 Discharge Waterbodies	Water Quality Status	Cause of Impairment	TMDL Development Status	Other
84th Ave W				
85th Ave W				
Gogebic St				
Lenroot St				
Morgan Park				
U.S. Steel				
Gary St				
Bowser				
Heard St				

*Not listed as underway in the MPCA status file:

<http://www.pca.state.mn.us/index.php/water/water-types-and-programs/minnesotas-impaired-waters-and-tmdls/impaired-waters-list.html>

**Expected to be completed by 2025.

STORMWATER UTILITY ACTIVITIES 2023

ACTIVITY	WORK COMPLETED
Catch basin repair or rehab	178
Construction site inspections completed	409
Culverts repaired or replaced	290
Ditch line (dug or repaired and seeded or sodded)	6,438 linear feet
Illicit discharges detected and removed	12 reported, 12 evaluated/eliminated
Line flushing/cleaning	109 lines, 11,448 ft
Manhole repair or rehab	131
Outfalls inspected	0
Sediment trap cleaning	0
Structural sedimentation basins inspected	0
Televising storm sewer pipe	101 lines, 10,823 ft
Presentations	11
Radio, television, and newspaper articles	107,450 total reach with RSPT