

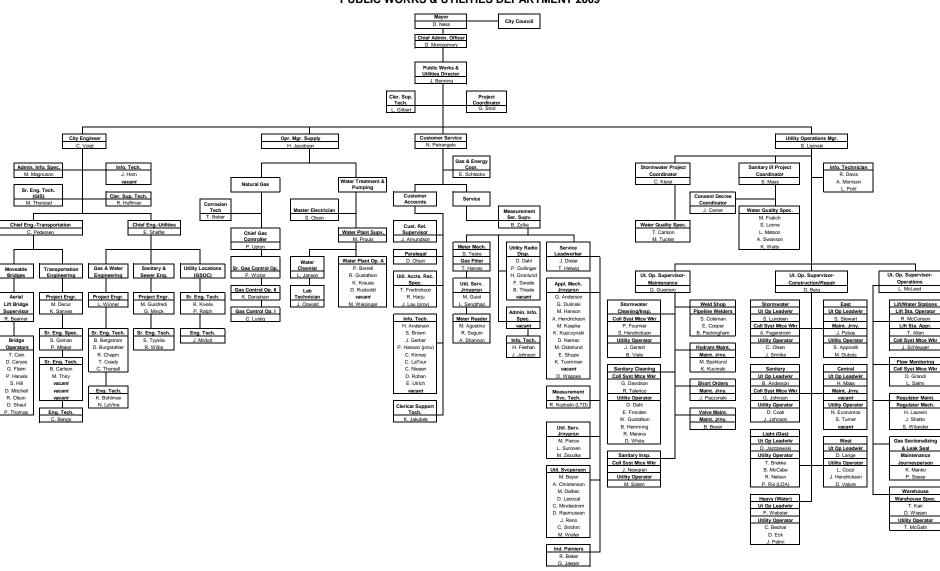
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## OFFICERS OF THE DEPARTMENT

Mayor		Don Ness
Chief Administrative Officer		Dave Montgomery
City Council Public Works & Utilities Comm	ittee	
Councilor Jay Fosle		
DEPARTMENT OF PUBLIC WORKS	& UTILITIES	
Director		Jim Benning
City Engineer		Cindy Voigt
Manager, Customer Service		Nick Petrangelo
Manager, Utility Operations		Steve Lipinski
Operations Manager, Gas & Water Supply		Howard Jacobson
Chief Engineer, Utilities		Eric Shaffer
Safety & Training Officer		Julie Baker
Accounting		Ken Taylor

# CITY OF DULUTH PUBLIC WORKS & UTILITIES DEPARTMENT 2009



# Water Utility Statement of Net Income For The Year Ended December 31, 2009 and 2008 (Unaudited)

	2009	2008
Operating Revenue		
Metered Water Sales	\$ 11,701,062	\$ 11,131,136
Other	243,934	<u>222,626</u>
Total Operating Revenue	\$ 11,944,996	\$11,353,762_
Operating Expense		
Director's Office	60,713	60,963
Capital Related Expenses	1,328,840	1,678,616
Utility General Expense	2,083,325	2,666,912
Engineering	224,523	389,058
Utility Operations	2,524,013	2,346,229
Water Treatment and Pumping	2,802,645	2,519,182
Customer Service	1,478,969_	1,427,626_
Total Operating Expense	(10,503,028)	(11,088,586)
Operating Income	1,441,968	265,176_
Other Revenue		
Contributed Capital	21,822	47,512
Gain or Loss on the Sale of Fixed Assets	8,601	3,372
Transfer from Other Funds		
Fleet Services Rebate	0	21,000
Intergovernmental	16,919	16,919
Interest Income	52,435	<u>107,175</u>
Total Other Revenue	99,777	195,978
Other Expenses and Transfers		
Transfer to Other Funds		
Investing Activities	26,732	70,193
Non-Capital Improvements	291,400	434,218
Interest on Long Term Debt	297,249	240,761_
Total Other Expenses and Transfers	(615,381)	(745,172)
Net Income or Loss	\$926,364_	\$(284,018)

# Water Utility Statement of Net Assets For The Year Ending December 31, 2009 and 2008 (Unaudited)

#### **Assets**

	2009	2008
Current Assets		
Cash	\$ 2,106,624	\$ 1,924,597
Restricted Cash and Equivalents:		
Minnesota Water Connection Fees	89,040	89,040
Construction	0	0
Accounts Receivable (Net)	1,157,907	928,966
Interfund Loan Receivable	0	884,234
Due from Other Funds	82,497	44,875
Special Assessments	78,870	116,042
Due from Other Governments	65,694	718
Inventory	786,893	<u>832,852</u>
Total Current Assets	\$4,367,525_	\$4,821,324_
Utility Plant		
In Service	67,626,235	62,833,907
Construction	2,044,462	4,684,108
Less Accumulated Depreciation	28,258,775	(27,111,789)
Total Utility Plant Assets	41,411,922	40,406,226
Other Assets		
Special Assessments Receivable	282,079	336,889
Issuance Costs	38,943	29,748
Total Other Assets	321,022	366,637
Total Assets	\$46,100,469_	\$45,594,187_

# Water Utility Statement of Net Assets For The Year Ending December 31, 2009 and 2008 (Unaudited)

#### Liabilities & Net Assets

	2009		2008
Current Liabilities			
Accounts Payable	\$ 232,795		\$ 202,019
Contracts Payable	143,850		82,104
Due to Other Governments	148,566		151,400
Due to Other Funds	1,150,417		1,833,664
Accrued Salaries Payable	121,234		107,697
Vacations Payable	216,196		0
Accrued Interest Payable	137,494		91,760
Notes Payable	345,955		181,608
Bonds Payable	460,000		446,000
Leases Payable	106,910		126,861
Deferred Revenue	452,407		0
Customer Deposits	10,000		10,000
Total Current Liabilities (Payable from Current Assets)	\$_	3,525,824	\$3,233,113_
Long Term Liabilities			
Vacations Payable	21,328		248,869
Net Other Post Employment Benefits	347,551		810,345
Notes Payable	1,996,408		1,862,124
Bonds Payable	3,737,000		4,001,000
Leases Payable	3,141,048		3,043,812
Less Unamortized Bond Discount	(12,108)		(22,130)
Total Long Term Liabilities		9,231,227	9,944,020
Total Long Term Clabilities	_	9,231,221	9,944,020
Total Liabilities	_	12,757,051	13,177,133
Net Assets			
Invested in Capital Assets, Net of Related Debt	31,675,652		30,796,699
Unrestricted	1,667,766		1,620,355
Total Net Assets	_	33,343,418	32,417,054
Total Liabilities and Net Assets	\$	46,100,469	\$45,594,187_

#### City of Duluth Water Utility Bonds, Notes and Capital Leases Payable December 31, 2009

						Principal Outstanding								Principal Outstanding
		Issued	Issue Date	Final Maturity		12/31/2008		Issued		Draw Down		Retired		12/31/2009
Water Utility	_										_			
Bonds														
Revenue and General Obligation	\$	1,690,000	9/1/2002	2/1/2018	\$	1,232,000	\$	0	\$	0	\$	101,000	\$	1,131,000
Revenue and General Obligation		1,385,000	12/1/2002	2/1/2018		1,005,000		0		0		85,000		920,000
Revenue and General Obligation Refunding		625,000	3/1/2003	2/1/2010		190,000		0		0		95,000		95,000
Revenue and General Obligation		1,120,000	12/19/2006	2/1/2022		1,070,000		0		0		60,000		1,010,000
Revenue and General Obligation Refunding		950,000	12/13/2007	2/1/2016		950,000		0		0		105,000		845,000
Revenue and General Obligation		196,000	2/19/2009	2/1/2024	_	0	_	196,000	_	0	_	0	_	196,000
Bond Total					\$_	4,447,000	\$_	196,000	\$_	0	\$_	446,000	\$_	4,197,000
Notes														
Public Facilities Authority	\$	870,000	8/25/2003	8/20/2018	\$	628,732	\$	0	\$	0	\$	55,608	\$	573,124
Public Facilities Authority		1,971,532	7/2/2004	8/20/2018		1,415,000		0		0		126,000		1,289,000
Public Facilities Authority		1,698,450	10/28/2009	8/20/2019	_	0	_	0	_	480,239	_	0	_	480,239
Note Total					\$_	2,043,732	\$_	0	\$_	480,239	\$_	181,608	\$	2,342,363
Capital Leases														
AMR System	\$	3,443,490	7/12/2007	2/1/2024	\$_	3,170,673	\$_	0	\$_	205,313	\$_	128,028	\$_	3,247,958
Capital Lease Total					\$_	3,170,673	\$_	0	\$_	205,313	\$_	128,028	\$_	3,247,958
Total Water Utility Bonds, Notes and Capital Leases					\$_	9,661,405	\$_	196,000	\$_	685,552	\$_	755,636	\$_	9,787,321
										-				

Future Payments:			
Year	<u>Principal</u>	Interest	<u>Total</u>
2010	\$ 912,865	\$ 333,374	\$ 1,246,239
2011	923,360	320,271	1,243,631
2012	950,119	291,798	1,241,917
2013	985,146	261,902	1,247,048
2014	1,010,446	230,554	1,241,000
2015	1,047,037	197,810	1,244,847
2016	1,082,925	163,527	1,246,452
2017	977,123	130,517	1,107,640
2018	1,009,643	98,725	1,108,368
2019	522,845	71,894	594,739
2020	359,252	56,536	415,788
2021	375,017	42,447	417,464
2022	385,156	27,797	412,953
2023	301,684	14,674	316,358
2024	162,915	3,104	166,019
	\$ 11,005,533	\$ 2,244,930	\$ 13,250,463

#### Water Fund Schedule of Fixed Assets Year Ending December 31, 2009

	-	Balance Jan. 1, 2009	Ad	ditions	_	Deductions		lance 31, 2009	Accumula Depreciat		Book Valu	ıe_
Lands and Grounds	\$	205,703 \$		0	\$	2,003 \$		203,700 \$		0 \$	203,7	00
Infrastructure		41,461,682	1	,290,847		0	42,	752,529	14,003,8	364	28,748,6	65
<b>Buildings and Structures</b>		17,107,907		96,113		0	17,	204,020	10,956,	135	6,247,8	85
Equipment and Tools		4,058,615	3	,512,728		105,357	7,	465,986	3,298,7	776	4,167,2	10
Work in Progress		4,684,107	2	,194,095	_	4,833,740	2,	044,462		0	2,044,4	62
Total	\$	67,518,014 \$	7	,093,783	\$	4,941,100 \$	69,	670,697 \$	28,258,	775 \$	41,411,9	22

# **COMPARATIVE STATEMENT, OPERATING EXPENSE OF ALL STATIONS, YEARS 2008 AND 2009**

		Daily Average		
Station	Year	Gallons Pumped, Initial Supply	Gallons Pumped	Electricity
<del> </del>	2009	16,973,333	6,201,670,000	
Lakewood	2008	16,919,918	6,175,770,000	
	2009	1, 2, 2, 2	1,432,301,000	
Middle	2008		1,301,004,000	
	2009		606,300,000	
Woodland	2008		605,076,000	
=	2009		2,693,490,000	,
West Duluth	2008		2,657,940,000	
	2009		170,160,000	
Orphanage	2008		142,763,800	
	2009		471,673,000	
Highland	2008		465,158,000	
A 11	2009		730,401,000	
Arlington	2008		716,507,000	
	2009		68,002,000	
Lakeside	2008		64,260,600	
5 15	2009		240,327,000	\$ 20,500
Bay View	2008		221,915,800	
	2009		170,041,000	
Proctor	2008		154,442,000	
A+ I	2009		unmetered	\$ 1,161
Airport	2008		unmetered	
TOTALC	2009	16,973,333	12,784,365,000	
TOTALS	2008	16,919,918	12,504,837,200	\$ 959,069

## **WATER PLANT STATISTICS**

	2009	2008	2007	2006	2005	2004	2003
Water Pumped							
Million Cubic Feet	829.1	826	846	832.4	825.1	862.6	903.1
Water Sold							
Million Cubic Feet	658	601	746	697.8	704.7	718.8	730.7
General & Distribution Operating							
Costs including Maintenance (*)	\$ 9,250,685	\$ 9,930,687	\$ 9,545,839	\$ 8,399,508	\$ 7,979,034	\$ 7,165,410	\$ 7,318,249
Cost per 100 Cubic Feet	\$ 1.4059	\$ 1.6524	\$ 1.2796	\$ 1.2037	\$ 1.1323	\$ 0.9969	\$ 1.0015
Interest charges	\$ 297,249	\$ 240,761	\$ 305,579	\$ 307,361	\$ 340,199	\$ 326,297	\$ 329,210
Cost per 100 Cubic Feet	\$ 0.0452	\$ 0.0401	\$ 0.0410	\$ 0.0440	\$ 0.0483	\$ 0.0454	\$ 0.0451
Depreciation charge	\$ 1,252,343	\$ 1,157,899	\$ 1,184,485	\$ 1,124,151	\$ 1,063,447	\$ 1,066,639	\$ 1,059,456
Cost per 100 Cubic Feet	\$ 0.1903	\$ 0.1927	\$ 0.1588	\$ 0.1611	\$ 0.1509	\$ 0.1484	\$ 0.1450
Total Cost per 100 Cubic Feet	\$ 1.6414	\$ 1.8851	\$ 1.4793	\$ 1.4089	\$ 1.3314	\$ 1.1906	\$ 1.1916
Operating revenue	\$ 11,944,996	\$ 11,353,762	\$ 12,150,049	\$ 10,916,443	\$ 10,282,800	\$ 9,884,976	\$ 9,732,863
Cost per 100 Cubic Feet	\$ 1.8153	\$ 1.8891	\$ 1.6287	\$ 1.5644	\$ 1.4592	\$ 1.3752	\$ 1.3320
Water meters in service	27,950	28,016	28,087	27,948	27,809	27,696	27,572
Water main miles	425.2	424.4	424.3	408.3	408.22	406.24	403.38
Water meters per mile of main	65.73	66.01	66.20	68.45	68.12	68.18	68.35
Hydrants on system	2506	2,500	2,396	2,373	2,363	2,231	2,196

<sup>(\*)</sup> Depreciation not included

2009
COMPARATIVE TABLES
SHOWING OPERATING EFFICIENCIES AT PUMPING STATIONS

Station	Year	Average Total Dynamic Head	Million Gallon Feet	K.W.H. per Million Gallon Feet	Per Cent Efficiency	K.W.H. Consumed
Lakewood High Lift	2009	289.52	1,795,507	5.07	61.88	9,110,850
	2008	289.52	1,788,008	6.18	50.78	11,047,200
Middle	2009	290.00	415,367	3.36	90.39	1,394,800
Middle	2008	290.00	377,291	4.04	77.69	1,523,600
Woodland	2009	556.00	337,103	5.20	60.33	1,780,200
woodiand	2008	556.00	336,422	4.57	68.66	1,537,200
West Duluth	2009	60.00	161,609	3.75	83.66	606,528
Booster Station	2008	60.00	159,476	3.66	85.66	584,064
Ornhanago	2009	115.00	19,568	3.68	85.25	72,000
Orphanage -	2008	115.00	16,418	4.72	66.51	77,440
Highland -	2009	133.00	62,733	5.55	56.53	348,480
підпіапи	2008	133.00	61,866	6.02	52.15	372,160
Aulinaton	2009	276.00	201,591	3.89	80.65	784,960
Arlington	2008	276.00	197,756	4.52	69.34	894,720
Lakeside -	2009	230.00	15,640	4.87	64.42	76,240
Lakeside	2008	230.00	14,280	4.83	64.89	69,040
Pay View	2009	252.00	60,562	3.86	81.27	233,600
Bay View	2008	252.00	55,923	4.00	78.43	223,680
Droctor	2009	290.00	49,312	5.62	55.82	277,120
Proctor	2008	290.00	44,788	4.70	66.73	210,560

# WATER PURIFICATION 2009 LAKEWOOD STATION

		Average	Ammoni	a Dosage	Chlorine	e Dosage
	Total Number of Gallons	Water Temperature	MG/L	Lbs.	MG/L	Lbs.
Month	Treated	Degree F				
January	452,260,000	34.8	0.51	1,911	1.66	6,274
February	419,970,000	33.9	0.50	1,758	1.64	5,743
March	467,560,000	32.5	0.50	1,966	1.67	6,510
April	477,690,000	34.0	0.50	1,998	1.56	6,216
May	535,690,000	37.6	0.45	1,992	1.55	6,917
June	542,590,000	41.7	0.51	2,300	1.68	7,605
July	580,840,000	44.0	0.51	2,480	1.77	8,577
August	561,210,000	48.1	0.51	2,388	1.78	8,316
September	558,900,000	57.8	0.52	2,406	1.87	8,738
October	524,020,000	52.4	0.53	2,307	1.92	8,371
November	518,980,000	47.5	0.51	2,208	1.74	7,514
December	561,960,000	41.2	0.52	2,418	1.68	7,890
TOTAL	6,201,670,000			26,132		88,671
Average/Month	516,805,833	42.1	0.51	2,178	1.71	7,389

# 2009 LAKE SUPERIOR RAW WATER AND DULUTH FINISHED WATER (LABORATORY ANALYSES)

#### Milligrams per Liter, Except pH, Turbidity and Specific Conductance

	RAW	FINISHED		
	Average	Average		
Dissolved Oxygen	12.29	12.34		
pH	7.84	9.03		
Monthly Specific Conductance Micromhos/cm	97.8	123		
Nitrate Nitrogen				
Chlorides				
Alkalinity	42.8	45.7		
Hardness				
Sulfates	3.2	8.3		
Phosphates				
Iron				
Fluorides	0.05	1.13		
Aluminum				
Sodium				
Dissolved Solids				
Turbidity NTU	0.69	0.014		
Chlorine	0	1.15		
Temperature	41.9			

## **WATER TREATMENT 2009**

	Asbestos Removal	De	ntal	Treatment Effectiveness
	Alum	Fluoride	Dosage	Turbidity
Month	MG/L	MG/L	Gal	NTU
January	5.23	1.05	2,102	0.016
February	3.85	1.15	1,890	0.014
March	4.06	1.22	2,543	0.016
April	5.38	1.2	2,374	0.015
May	6.18	1.12	2,289	0.013
June	13.07	1.17	2,523	0.013
July	14.37	1.09	2,567	0.014
August	13.46	1.11	2,408	0.013
September	15.07	0.97	2,385	0.014
October	19.44	1.09	2,281	0.014
November	16.38	1.17	2,380	0.013
December	16.51	1.17	2,553	0.018
Average/Month	11.08	1.13	2,358	0.014

#### **BACTERIOLOGICAL DATA 2009**

		RAW WAT	ER INTAKE		TREATE	D WATER	DISTRI	BUTION
Average for	Number Samples	Total  Bacteria  per ml.  48 Hours  35 degree C	Coliform per 100 ml	Fecal Coliform per 100 ml	Number Samples	Number Samples Positive	Number Samples	Number Samples Positive
January	32	2.59	0.25	0.12	131	0	90	0
February	33	1.09	0.09	0.03	131	0	92	0
March	34	9.62	2.32	0.18	158	0	95	0
April	36	6.78	1.16	0.03	193	0	93	0
May	34	1.21	0.29	0.00	202	0	91	0
June	39	0.82	0.44	0.08	228	0	94	0
July	38	1.47	0.58	0.00	214	0	92	0
August	39	4.18	1.59	0.15	233	0	97	0
September	36	12.64	0.57	0.09	220	0	95	0
October	38	6.41	7.66	0.92	216	0	92	0
November	35	6.74	0.60	0.06	199	0	93	0
December	36	1.78	0.39	0.02	202	0	3	0
TOTAL	430				2,327	0	1,027	0
Average for Month	36	4.61	1.33	0.14	194	0	86	0

#### **LENGTH OF WATER MAINS IN FEET 2009**

Diameter	Ductile/Cast			Polyvinyl	High Density			
Inches	Iron	Steel	Copper	Chloride	Polyethylene	Total	Valves	Manholes
1			819			819	5	
2	33		1,857		8,634	10,524	29	
3	869				619	1,488	6	
4	14,413					14,413	61	
6	1,186,157	1,204		1,729	8,671	1,197,761	2647	76
8	177,730	698			99,202	277,630	524	29
10	215,528	7,035			19,318	241,881	416	20
12	205,674	1,809			10,848	218,331	347	51
14					1,052	1,052	0	0
16	105,480	10,397				115,877	126	75
18	1,399				2,106	3,505	2	1
20	16,520	29,265				45,785	31	34
24	10,716	54			5,013	15,783	11	12
30		2,661				2,661	1	3
36	36,660	11,358				48,018		39
42	181	49,211				49,392	7	36
48						0		
TOTALS	1,971,360	113,692	2,676	1,729	155,463	2,244,920	4213	376
					Total Miles -	425.2		
					Added in 2009	0.80	5	-1

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 FINAL REPORT 2009**

	Mueller		Mathews		Michigan	Unknown	Waterous	lo	wa	Stockholm	Total	Valves on	Lineal Feet
	5"	4"	4 1/2"	5"	5"	5"	5"	4"	5"	2"	Hydrants	Branches	Main to Hydt.
TOTAL IN SERVICE 12/31/2008	216	0	542	0	6	345	1,387	0	2	2	2,500	2,147	48,202
REPLACED OUT OR REMOVED 2009	0	0	-23	0	0	0	-15	0	0	0	-38	-38	-180
REPLACED IN OR INSTALLED 2009	0	0	0	0	0	0	44	0	0	0	44	45	653
TOTAL IN SERVICE 12/31/2009	216	0	519	0	6	345	1,416	0	2	2	2,506	2,154	48,675

Number of Hydrants added in 2009 - 6

Number of Hydrant Valves added in 2009 - 7

Lineal feet of Hydrant branch main added in 2009 - 473

DATA, RESERVOIRS AND TANKS

	Capacity	Overflow	Greatest		
Location	Gallons	<b>Elevation</b>	Depth	Dimension	Remarks
Lakeside Tank	100,000	500.00 Feet	23.75 Feet	Diameter 27 Feet	Built in 1961
34th Avenue East "Reservoir "A"	16,320,000	294.00 Feet	31.50 Feet	284 Feet x 391 Feet	Built 1898, Rebuilt 1938
Endion Reservoir	14,140,000	290.00 Feet	27.80 Feet	240 Feet x 320 Feet	Built by G & W Company
					Rebuilt 1922
					New Roof 1966
					Lined 1988
West End Reservoirs #1-6	10,200,000	290.00 Feet	33.00 Feet	Diameter 100 Feet	Built 1953
West Duluth Reservoir	10,000,000	289.75 Feet	21.00 Feet	327.3 Feet x 263.3 Feet	Built 1906
					Remodeled 1925
Middle System - Reservoir #1	5,171,000	560.00 Feet	28.00 Feet	Diameter 187.38 Feet	Built 1913
					New Roof 1928
					Lined 1988
Middle System - Reservoir #2	5,131,000	560.00 Feet	25.00 Feet	Diameter 190 Feet	Built in 1951
Woodland Reservoir #1	1,021,000	806.00 Feet	22.00 Feet	Diameter 91.5 Feet	Built in 1915
					Lined 1939
					Refaced 2002
Woodland Reservoir #2	2,015,000	806.00 Feet	35.50 Feet	Diameter 100 Feet	Built in 1950
					Lined 2000
					Refaced 2002
Arlington Reservoir #1	240,490	806.00 Feet	27.00 Feet	Diameter 40 Feet	Built in 1925
Arlington Reservoir #2	1,534,000	806.00 Feet	27.50 Feet	Diameter 100 Feet	Built in 1950
Orphanage Tank #1	400,000	916.00 Feet	129.40 Feet	Diameter 51.5 Feet	Built 1994
Gary Standpipe					Removed September 1999
Highland Tank #1	100,000	931.00 Feet	22.00 Feet	Diameter 30 Feet	Built 1954
Highland Tank #2	400,000	931.00 Feet	35.00 Feet	Diameter 46 Feet	Built 1972
Bay View Heights Steel Tank	100,000	550.00 Feet	26.00 Feet	Diameter 26 Feet	Built 1972
Proctor Tank	400,000	833.00 Feet	142.00 Feet	Diameter 51.5 Feet	Built 1989
TOTAL	67,272,490				

#### **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	Average Total
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	17400	56
			1 1949	DeLaval		4	1 Unit direct connected to 350 hp, 2300 volt, 60 cycle, GE Induction motor	440	20800	51
			1 1981	Worthington	Single Stage	1	1 Unit direct connected to 200 hp, 2300 volt, 60 cycle, GE Induction motor	500	11389	51
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	1200	17400	280
			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	20800	318
			1 1981	Worthington	Single Stage	1	1 Unit direct connected to 1000 hp, 2300 volt, 60 cycle GE capacitor induction motor	1185	11389	276
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	1800	4000	317
			1 1969	Aurora	Single Stage, One Unit, Centrifugal	4	Direct connected to 250 hp, 2300 volt, 60 cycle, 3-phase Louis Allis Induction motor	1750	2500	300
			1 1986	Fairbanks- Morse	Single Stage, One Unit, Centrifugal	5	Direct connected to 250 hp, 2300 volt, 60 cycle, 3-phase Siemens-Allis motor	1785	2600	290
Woodland	Reservoir A	Woodland & Arlington Reservoir	1 1950	Allis-Chalmers	All Units Single State, Two Unit, Centrifugal	3	Direct connected to 500 hp, 2300 volt, 60 cycle, Allis-Chalmers synchronous motor, with direct connected exciter	1800	2050	596
			1 1986	Fairbanks Morse Co.		4	Direct connected to 300 hp, 2300 volt, 60 cycle, Siemens-Allis Induction motor	1775	1720	560
			1 1975	Aurora #421	Two Stage, Centrifugal	5	Direct connected to 240 hp, 2300 volt, 60 cycle, 3-phase Marathon Induction motor	1750	1250	555

#### **PUMPING STATIONS - WATER PUMPING EQUIPMENT**

West Duluth	Reservoir A, Endion & West	West Duluth Reservoir & West Duluth System	2 1993	Fairbanks- Morse	All Units Single Stage	2	Rewound to 300 hp, 400 volt, 60 cycle, 3-phase Marathon Induction motor, with VFD drive	1200	6000	70
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	1750	1000	125
			1 1961		Single Stage Centrifugal	6	Direct connected to 40 hp, 440 volt, 60 cycle, U.S. Induction motor	1750	1000	125
Highland	Arlington Reservoirs	Highland Tanks	1 1955	DeLaval	Single Stage, Single Suction Centrifugal	3	Direct connected to 10 hp, 440 volt, 60 cycle, 3-phase, GE Induction motor	3475	200	136
			1 1955	DeLaval	Single Stage, Single Suction Centrifugal	4	Direct connected to 20 hp, 440 volt, 60 cycle, 3-phase, GE Induction motor	3500	350	136
			1 1959	Fairbanks- Morse	Single Stage, Double Suction Centrifugal	5	Direct connected to 50 hp, 440 volt, 60 cycle, 3-phase Fairbanks-Morse Induction motor	1750	1000	140
			1 1959	Fairbanks- Morse	Single Stage, Double Suction Centrifugal	6	Direct connected to 50 hp, 440 volt, 60 cycle, 3-phase Fairbanks-Morse Induction motor	1750	1000	140
Arlington	Middle Reservoirs	Arlington Reservoirs	2 1958	Fairbanks- Morse Model 5814	Single Stage Centrifugal	1 2	Each unit direct connected to 150 hp, 440 volt, 60 cycle, 3-phase U.S. Induction motor	1800	1600	270
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	1750	1000	240
Bay View	West Duluth Reservoir	Bay View Tank	2 1973 2 2002	Aurora	Single Stage Centrifugal	1 2	Each unit direct connected to 125 hp, 440 volt, 60 cycle, 3-phase U.S. Induction motor	3500	1200	320
Proctor	Bay View Tank	Proctor Standpipe	2 1973	Aurora	Single Stage Centrifugal	1 2	Each unit direct connected to 125 hp, 440 volt, 60 cycle, 3-phase Louis Allis motor	3500	1200	320

## **WATER UTILITY ACTIVITIES 2009**

ACTIVITY	WORK COMPLETED
Repair of water services and mains	294
Main breaks	106
Cut off services	38
Install services	37
Steam requests (hydrants/services)	529
Water leak checks	678
Field work for contractors, Engineering	О
Miscellaneous Customer Service requests	385
Fire hydrants:	
Replace and repair hydrants	78
Steaming	see above
Inspection	All fire hydrants in the City are inspected by DFD and Utility Operations
	as part of a preventative maintenance program.

# **CUSTOMER SERVICE DIVISION WATER ACTIVITIES 2009**

ACTIVITY	WORK COMPLETED
Meter Truck:	
Gauge water service	115
Applications (water & gas)	7,413
Credit (water & gas)	1,867
Emergency (water & gas)	927
General (water & gas)	2,281
Meter Shop:	
Water meters repaired	327
Water meters tested	2,593
Plumbing truck orders (water & gas)	576

# Gas Utility Statement of Net Income For The Year Ended December 31, 2009 and 2008 (Unaudited)

	2009	2008
Operating Revenue		<del></del>
Residential Sales	\$ 28,025,618	\$ 33,598,446
Commercial & Industrial - Firm	12,611,342	15,514,549
Commercial & Industrial - Interruptible	4,303,853	8,321,239
Servicing Appliances	632,808	600,928
Other	662,479	409,436
Total Operating Revenue	\$ 46,236,	100 \$ 58,444,598
Operating Expense		
Director's Office	77,285	78,565
Capital Related Expenses	1,146,066	1,194,470
Utility General Expense	2,352,544	3,235,450
Engineering	477,523	321,004
Utility Operations	1,849,537	1,816,570
Natural Gas	28,263,236	43,327,950
Customer Service	3,781,135	3,957,014
Total Operating Expense	(37,947,	326) (53,931,023)
Operating Income	8,288,	<u>4,513,575</u>
Other Revenue		
Contributed Assets	21,764	29,804
Gain or Loss on Sale of Fixed Assets	100,726	6,145
Transfer from Other Funds		
Fleet Services Rebate	0	21,000
Intergovernmental	23,364	23,365
Interest Income	129,893	150,671
Total Other Revenue	275,	.747230,985
Other Expenses and Transfers		
Interest Expense	554975	505728
Transfers to Other Funds		
Payment to City in Lieu of Taxes	4,091,122	3,314,101
Investing Activities	121,100	133,257
Misc. Transfers	0	0
Non-Capital Improvements	20,093	47,136
Total Other Expenses and Transfers	(4,787,	(4,000,222)
Net Income or Loss	\$3,777,	231 \$ 744,338

# Gas Utility Statement of Net Assets For The Year Ending December 31, 2009 and 2008 (Unaudited)

Assets

	2009	)	2008	1
Current Assets				
Cash	\$ 4,568,394		\$ 0	
Restricted Cash and Equivalents:				
Customer Deposit	1,517,133		1,014,744	
Construction	0		0	
Accounts Receivable (Net)	6,965,373		9,480,457	
Interfund Loan Receivable	236,207		0	
Due from Other Funds	60,610		50,169	
Special Assessments	13,568		22,035	
Due from Other Governments	30,984		171	
Inventory	875,371		851,973	
Prepaid gas	2,331,410		4,962,814	
Total Current Assets	\$_	16,599,050	\$_	16,382,363
Utility Plant				
In Service	59,798,384		55,260,281	
Construction	561,584		3,557,672	
Less Accumulated Depreciation	(17,833,912)		(16,967,107)	
Total Utility Plant Assets	<u>-</u>	42,526,056	_	41,850,846
Other Assets				
Special Assessments Receivable	44,200		59,336	
Bond Issuance Charges	53,969		16,434	
Advance to Other Funds	1,950,000		2,100,000	
Advance to Other Fullus	1,930,000		2,100,000	
Total Other Assets	-	2,048,169	_	2,175,770
Total Assets	\$ <sub>=</sub>	61,173,275	\$ <sub>=</sub>	60,408,979

# Gas Utility Statement of Net Assets For The Year Ending December 31, 2009 and 2008 (Unaudited)

#### **Liabilities & Net Assets**

			51111100 G 11017100010			
	2009				2008	
Current Liabilities						
Accounts Payable	\$ 2,999,737			\$	4,268,157	
Contracts Payable	274,590				22,917	
Due to Other Governments	93,548				87,539	
Due to Other Funds	170,178				113,806	
Interfund Loan Payable	0				167,358	
Accrued Salaries Payable	160,959				128,967	
Accrued Vacations Payable	323,891				0	
Deferred Revenue	1,489,269				1,815,430	
Customer Deposits	1,206,434				1,001,673	
Accrued Interest Payable	176,810				202,772	
Bonds Payable	652,000				964,000	
Leases Payable	98,001				116,290	
•					· · · · · · · · · · · · · · · · · · ·	
Total Current Liabilities (Payable from Current Assets)	\$	7,645,417			\$_	8,888,909
Long Term Liabilities						
Accrued Vacations Payable	57.042				334,698	
Net Other Post Employment Benefits	276.696				910,469	
Bonds Payable	10,093,814				11,124,000	
Leases Payable	2,879,294				2,790,160	
Less Unamortized Bond Discount	 (40,796)			_	(123,834)	
Total Long Term Liabilities		13,266,050				15,035,493
-					_	
Total Liabilities	_	20,911,467			_	23,924,402
Net Assets						
Invested in Capital Assets, Net of Related Debt	28,897,712				26,996,664	
Unrestricted	11,364,096				9,487,913	
Total Net Assets		40,261,808				36,484,577
	_	-,,			<del>-</del>	,,
Total Liabilities and Net Assets	\$_	61,173,275	l		\$_	60,408,979

# City of Duluth Gas Utility Bonds and Capital Leases Payable December 31, 2009

	Issued	Issue Date	Final Maturity		Principal Outstanding 12/31/2008		Issued	Draw Down		Retired	,	Principal Outstanding 12/31/2009
Gas Utility				_		_			_		_	
Bonds												
Revenue and General Obligation	\$ 5,300,000	12/1/2001	2/1/2017	\$	3,560,000	\$	0 \$	0	\$	3,560,000	\$	0
Revenue and General Obligation	2,132,000	9/1/2002	2/1/2018		1,553,000		0	0		129,000		1,424,000
Revenue and General Obligation	1,425,000	12/1/2002	2/1/2018		1,040,000		0	0		85,000		955,000
Revenue and General Obligation	6,090,000	12/1/2003	2/1/2019		4,800,000		0	0		355,000		4,445,000
Revenue and General Obligation	1,190,000	12/19/2006	2/1/2022		1,135,000		0	0		60,000		1,075,000
Revenue and General Obligation Refunding	2,846,814	12/17/2009	2/1/2017	_	0	_	2,846,814	0	_	0	_	2,846,814
Bond Total			;	\$_	12,088,000	\$_	2,846,814 \$	0	\$	4,189,000	\$_	10,745,814
Capital Leases												
AMR System	\$ 3,156,533	7/12/2007	2/1/2024	\$_	2,906,450	\$_	0 \$	188,203	\$	117,358	\$_	2,977,295
Capital Lease Total			;	\$_	2,906,450	\$_	0 \$	188,203	\$_	117,358	\$_	2,977,295
Total Gas Utility Bonds and Capital Leases			;	\$_	14,994,450	\$_	2,846,814 \$	188,203	\$_	4,306,358	\$_	13,723,109

Future Payments:			
Year	<u>Principal</u>	Interest	<u>Total</u>
2010	\$ 750,000	\$ 453,659	\$ 1,203,659
2011	1,220,889	448,662	1,669,551
2012	1,268,231	410,291	1,678,522
2013	1,317,884	369,309	1,687,193
2014	1,360,806	324,183	1,684,989
2015	1,409,904	275,153	1,685,057
2016	1,463,307	222,909	1,686,216
2017	1,515,987	167,300	1,683,287
2018	1,135,054	115,468	1,250,522
2019	855,359	74,684	930,043
2020	328,980	50,976	379,956
2021	342,932	38,000	380,932
2022	357,227	24,426	381,653
2023	261,877	12,572	274,449
2024	134,672	2,552	137,224
	\$13,723,109	\$ 2,990,144	\$16,713,253_

Gas Fund Schedule of Fixed Assets Year Ending December 31, 2009

	_	Balance Jan. 1, 2009	_	Additions	. <u>-</u>	Deductions	ı	Balance Dec. 31, 2009	•	Accumulated Depreciation	_	Book Value
Lands and Grounds	\$	420,815	\$	0	\$	0	\$	420,815	\$	0	\$	420,815
Infrastructure		48,480,005		621,625		0		49,101,630		14,426,602		34,675,028
Buildings and Structures		2,592,124		0		0		2,592,124		570,430		2,021,694
Equipment and Tools		3,767,337		4,130,812		214,334		7,683,815		2,836,880		4,846,935
Work in Progress	_	3,557,672	_	1,645,811	_	4,641,899	ı	561,584		0	_	561,584
Total	\$_	58,817,953	\$_	6,398,248	\$	4,856,233	\$	60,359,968	\$	17,833,912	\$_	42,526,056

#### **GAS PLANT STATISTICS**

	2009	2008	2007	2006	2005	2004	2003
Gas sold MMBTU	4,804,897	5,169,299	4,544,616	4,285,167	4,777,330	5,066,548	5,289,874
Cost of gas sold	\$ 27,647,451	\$ 42,819,209	\$ 36,093,665	\$ 35,703,140	\$ 41,122,097	\$ 32,396,692	\$ 31,209,000
Cost per MMBTU sold	\$ 5.7540	\$ 8.2834	\$ 7.9421	\$ 8.3318	\$ 8.6078	\$ 6.3942	\$ 5.8998
Other operating costs,							
including maintenance(*)	\$ 9,243,290	\$ 10,106,846	\$ 9,561,803	\$ 7,952,616	\$ 7,793,937	\$ 8,145,934	\$ 7,792,433
Cost per MMBTU sold	\$ 1.9237	\$ 1.9552	\$ 2.1040	\$ 1.8558	\$ 1.6314	\$ 1.6078	\$ 1.4731
Interest charges	\$ 554,975	\$ 505,728	\$ 540,182	\$ 523,749	\$ 548,648	\$ 558,318	\$ 367,087
Cost per MMBTU sold	\$ 0.1155	\$ 0.0978	\$ 0.1189	\$ 0.1222	\$ 0.1148	\$ 0.1102	\$ 0.0694
Depreciation charge(**)	\$ 1,056,585	\$ 1,088,666	\$ 1,060,245	\$ 999,663	\$ 956,700	\$ 908,136	\$ 864,153
Cost per MMBTU sold	\$ 0.2199	\$ 0.2106	\$ 0.2333	\$ 0.2333	\$ 0.2003	\$ 0.1792	\$ 0.1634
Total cost per MMBTU sold	\$ 8.0131	\$ 10.5470	\$ 10.3982	\$ 10.5432	\$ 10.5543	\$ 8.2915	\$ 7.6056
Operating revenue							
per MMBTU	\$ 9.6227	\$ 11.3061	\$ 10.4177	\$ 11.5200	\$ 11.5600	\$ 8.8800	\$ 7.9861
Gas meters in service	26,148	25,983	25,726	25,369	25,085	24,970	24,857
Gas main miles	506	510.2	508	495.34	488.26	482.19	478.46
Gas meters per mile of main	51.68	50.93	50.64	51.22	51.38	51.78	51.95

<sup>(\*)</sup> Does not include depreciation for the cost of natural gas

<sup>(\*\*)</sup> Does not include depreciation due to change in Capital Policy

# **GAS ANALYSIS 2009**

	Gas			Consumption	
	Purchased	Storage	MMBTU	w/o Transport	Total Transport
Month	MMBTU	Gas	Transport	MMBTU	BTU's
Beginning Balance		664,455			
January	940,205	-221,246	26,670	913,535	1006
February	679,502	-169,500	20,670	658,832	1003
March	594,197	-127,195	20,645	573,552	1005
April	370,393	-81,364	16,345	354,048	1011
May	238,014	101,782	13,535	224,479	1010
June	169,025	161,832	10,016	159,009	1008
July	129,148	175,036	7,120	122,028	1005
August	139,344	204,208	10,783	128,561	1002
September	132,356	213,805	10,050	122,306	1002
October	378,079	62,408	12,046	366,033	1004
November	387,896	7,274	11,766	376,130	1002
December	826,989	-314,350	20,605	806,384	1001
Storage Balance		677,145			
Totals	4,985,148		180,251	4,804,897	1005

<sup>-</sup> withdraw, + inject

## **GAS TRANSPORTATION ANALYSIS 2009**

	Transport	Customer		US Energy	To	otal Transport	Number of
Month	in MMBTU	Bill	Transport Bill			Revenue	Customers
January	26,670	\$ 3,621.72	\$	2,310.83	\$	5,932.55	2
February	20,670	\$ 3,460.46	\$	5,432.35	\$	8,892.81	2
March	20,645	\$ 3,858.40	\$	4,824.30	\$	8,682.70	2
April	16,345	\$ 3,068.41	\$	8,037.69	\$	11,106.10	2
May	13,535	\$ 1,381.56	\$	(3,459.13)	\$	(2,077.57)	2
June	10,016	\$ 1,191.12	\$	1,879.59	\$	3,070.71	2
July	7,120	\$ 1,007.22	\$	(1,133.14)	\$	(125.92)	2
August	10,783	\$ 3,663.03	\$	1,235.74	\$	4,898.77	2
September	10,050	\$ 1,150.88	\$	2,431.77	\$	3,582.65	2
October	12,046	\$ 2,091.09	\$	(1,806.92)	\$	284.17	2
November	11,766	\$ 2,517.05	\$	-	\$	2,517.05	2
December	20,605	\$ 2,407.70	\$	10,699.10	\$	13,106.80	2
TOTALS	180,251	\$ 29,418.64	\$	30,452.18	\$	59,870.82	2
AVERAGE P	ER MMBTU	\$ 0.163	\$	0.169	\$	0.332	

#### **LENGTH OF GAS MAINS IN FEET 2009**

Diameter - Inches	Polyethylene	Steel	Total	Valves	Manholes
1	30,698		30,698	47	
1 1/4	2,911		2,911	28	
2	1,696,510	31,380	1,727,890	827	
3	337,732	9,730	347,462	223	
4		52,673	52,673	63	3
6	47,730	83,577	131,307	96	18
8	1,507	156,707	158,214	60	28
10		93,799	93,799	24	21
12		12,159	12,159	10	5
14		4,118	4,118		2
16		91,591	91,591	7	
Totals	2,117,088	535,734	2,652,822	1385	77

Total Miles Gas Main

Added in 2009

-1.8 \*

Pressure Regulators

16

Gas Valves added in 2009

30

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.

<sup>\*</sup> Negative pipe is from adjustments in mapping in Geographic Information System.

## **GAS UTILITY ACTIVITIES 2009**

ACTIVITY	WORK COMPLETED
SERVICES AND MAINS	
Installations	164
Cutoffs	52
Repaired services and mains (not considered hits)	25
Rerouted/replaced	75
Install/extend/loop main	3
Lowered gas services/mains	1
Hits	54

# **CUSTOMER SERVICE DIVISION GAS ACTIVITIES 2009**

ACTIVITY	WORK COMPLETED
Service Workorders Completed:	
Appliance Service	4,401
Furnace Cleaning	3,362
Tin Shop	394
Meter Truck:	
Applications (water & gas)	7,413
Credit (water & gas)	1,867
Emergency (water & gas)	927
General (water & gas)	2,281
Meter Shop:	
Gas Meters Repaired	163
Gas Meters Tested	1,385
Plumbing Truck Orders (water & gas)	576

# Sewer Utility Statement of Net Income For The Year Ended December 31, 2009 and 2008 (Unaudited)

	2009	2008
Operating Revenue General Sewage Revenue Other	\$ 17,762,353 126,556	\$ 16,547,629 64,037
Total Operating Revenue	\$17,888,909_	\$ <u>16,611,666</u>
Operating Expense		
Director's Office	56,288	82,631
Capital Related Expenses	1,346,065	1,477,855
Utility General Expense	1,385,041	1,673,266
Engineering	329,472	151,780
Utility Operations	1,910,480	2,056,529
Wastewater Treatment	8,673,461	7,906,592
Inflow and Infiltration	1,956,242	2,493,838
Customer Services	603,623	461,777
Total Operating Expense	(16,260,672)	(16,304,268)
Operating Income	1,628,237	307,398
Other Revenue		
Contributed Assets	121,518	232,472
Gain or Loss on Sale of Fixed Assets	2,160	1,900
Transfer from Other Funds		
Fleet Services Rebate	0	9,000
Intergovernmental	8,283	8,283
Interest Income	32,339	151,549
Total Other Revenue	164,300	403,204
Other Expenses and Transfers		
Transfer to Other Funds		
Investing Activities	24,558	94,582
Other Transfers	50,000	65,605
Interest on Long Term Debt	707,671	639,712
Total Other Expenses and Transfers	(782,229)	(799,899)
Net Income or Loss	\$1,010,308_	\$(89,297)_

# Sewer Utility Statement of Net Assets For The Year Ending December 31, 2009 and 2008 (Unaudited)

	ASSE	,13
	2009	2008
Current Assets		
Cash	\$ 2,454,188	\$ 2,221,855
Restricted Cash and Equivalents:		
Construction	477,797	3,393
Accounts Receivable (Net)	1,939,808	1,392,704
Interfund Loan Receivable	0	956,793
Due from Other Funds	207,515	35,864
Special Assessments	23,347	17,406
Due from Other Governments	22,350	320
Inventory	37,286	0
Prepaids	197,364	0
Total Current Assets	\$5,359,655_	\$ 4,628,335
Utility Plant		
In Service	58,466,098	55,151,592
Construction	996,654	4,085,924
Less Accumulated Depreciation	(10,571,760)	(9,574,759)
·		
Total Utility Plant Assets	48,890,992	49,662,757
Other Assets		
Special Assessments Receivable	151,272	132,736
Issuance Costs	163,753	112,701_
Total Other Assets	315,025	245,437
Total Assets	\$ 54,565,672	\$54,536,529_

# Sewer Utility Statement of Net Assets For The Year Ending December 31, 2009 and 2008 (Unaudited)

### **Liabilities & Net Assets**

	2009	<u> </u>	2008
Current Liabilities			_
Accounts Payable	\$ 212,087		\$ 243,390
Contracts Payable	135,666		608,462
Due to Other Governments	705,451		752,589
Due to Other Funds	554,866		1,921,608
Accrued Salaries Payable	76,320		78,366
Vacations Payable	157,515		0
Interest Payable	289,060		262,449
Bonds Payable	1,263,612		1,365,000
Notes Payable	226,495		159,742
Leases Payable	92,061		109,242
Deferred Revenue	251,934		0_
Total Current Liabilities (Payable from Current Assets)	\$_	3,965,067	\$5,500,848_
Long Term Liabilities			
Vacations Payable	7,621		164,208
Net Other Post Employment Benefits	0		97,691
Notes Payable	2,537,381		2,688,196
Bonds Payable	14,541,574		13,748,000
Leases Payable	2,704,792		2,621,060
Less Unamortized Bond Discount	17,100		(65,303)
Total Long Term Liabilities	_	19,808,468	19,253,852
Total Liabilities	_	23,773,535	24,754,700
Net Assets			
Invested in Capital Assets, Net of Related Debt	28,145,387		29,149,521
Legal Restricted Assets	4,140		3,393
Unrestricted	2,642,610		628,915
Total Net Assets	_	30,792,137	29,781,829
Total Liabilities and Net Assets	\$_	54,565,672	\$ <u>54,536,529</u>

#### City of Duluth Sewer Utility Bonds, Notes and Capital Leases Payable December 31, 2009

		Issued	Issue Date	Final Maturity		Principal Outstanding 12/31/2008		Issued		Draw Down		Retired		Principal Outstanding 12/31/2009
Sewer Utility	_						_							
Bonds														
Revenue and General Obligation	\$	1,080,000	12/1/1998	2/1/2009	\$	130,000	\$	0	\$	0	\$	130,000	\$	0
Revenue and General Obligation		1,330,000	12/1/2001	2/1/2017		890,000		0		0		890,000		0
Revenue and General Obligation		2,003,000	9/1/2002	2/1/2018		1,458,000		0		0		120,000		1,338,000
Revenue and General Obligation		1,825,000	12/1/2002	2/1/2018		1,330,000		0		0		110,000		1,220,000
Revenue and General Obligation Refunding		1,240,000	3/1/2003	2/1/2010		385,000		0		0		190,000		195,000
Revenue and General Obligation		4,045,000	12/1/2004	2/1/2020		3,405,000		0		0		230,000		3,175,000
Revenue and General Obligation		1,011,831	12/19/2005	2/1/2021		912,519		0		0		54,694		857,825
Revenue and General Obligation		2,503,169	12/19/2005	2/1/2021		2,257,481		0		0		135,306		2,122,175
Revenue and General Obligation		765,450	12/19/2006	2/1/2022		729,000		0		0		40,500		688,500
Revenue and General Obligation		179,550	12/19/2006	2/1/2022		171,000		0		0		9,500		161,500
Revenue and General Obligation		2,120,000	12/13/2007	2/1/2023		2,120,000		0		0		100,000		2,020,000
Revenue and General Obligation Refunding		1,325,000	12/13/2007	2/1/2016		1,325,000		0		0		160,000		1,165,000
Revenue and General Obligation		1,244,000	2/19/2009	2/1/2024		0		1,244,000		0		0		1,244,000
Revenue and General Obligation Refunding		713,186	12/17/2009	2/1/2017		0		713,186		0		0		713,186
Revenue and General Obligation		905,000	12/17/2009	2/1/2025	_	0		905,000	_	0	_	0	_	905,000
Bond Total					\$_	15,113,000	\$_	2,862,186	\$_	0	\$_	2,170,000	\$_	15,805,186
Notes														
Public Facilities Authority	\$	100,000	8/25/2003	8/20/2018	\$	72,268	\$	0	\$	0	\$	6,392	\$	65,876
Public Facilities Authority		1,179,115	10/17/2003	8/20/2018		878,000		0		0		83,000		795,000
Public Facilities Authority (Note 1)		2,042,350	7/12/2007	8/20/2022	_	1,897,670	_	0	_	75,363	_	70,033	_	1,903,000
Note Total					\$_	2,847,938	\$_	0	\$_	75,363	\$_	159,425	\$_	2,763,876
Capital Leases														
AMR System	\$	2,965,228	7/12/2007	2/1/2024	\$_	2,730,302	\$_	0	\$_	176,797	\$_	110,246	\$_	2,796,853
Capital Lease Total					\$_	2,730,302	\$_	0	\$_	176,797	\$_	110,246	\$_	2,796,853
Total Sewer Utility Bonds, Notes, and Capital Leases					\$_	20,691,240	\$_	2,862,186	\$_	252,160	\$_	2,439,671	\$_	21,365,915

Future Payments:				
<u>Year</u>	<u>Pri</u>	ncipal	Interest	Total
2010	\$ 1,58	2,168 \$	701,213	\$ 2,283,381
2011	1,63	3,534	669,089	2,302,623
2012	1,70	3,088	615,806	2,318,894
2013	1,75	3,638	558,929	2,312,567
2014	1,820	6,578	498,712	2,325,290
2015	1,87	1,545	435,170	2,309,715
2016	1,78	1,045	371,777	2,152,822
2017	1,78	7,958	309,346	2,097,304
2018	1,74	9,609	245,851	1,995,460
2019	1,359	9,711	187,921	1,547,632
2020	1,41	9,119	136,282	1,555,401
2021	1,10	2,973	89,760	1,192,733
2022	81:	3,705	55,903	869,608
2023	599	9,216	29,206	628,422
2024	30-	4,028	8,947	312,975
2025	7	5,000	1,500	76,500
	\$ 21,36	5,915 \$	4,915,412	\$ 26,281,327

## Sewer Fund Schedule of Fixed Assets Year Ending December 31, 2009

	-	Balance Jan. 1, 2009	Transfer to Clean Water Fund	_	Additions	. <u>-</u>	Deductions	_	Balance Dec. 31, 2009	-	Accumulated Depreciation	-	Book Value
Lands and Grounds	\$	681,349	\$ (525,000)	\$	0	\$	0	\$	156,349	\$	0	\$	156,349
Infrastructure		45,051,905	0		812,197		0		45,864,102		6,148,942		39,715,160
<b>Buildings and Structures</b>		6,377,453	0		183,072		0		6,560,525		2,058,791		4,501,734
Equipment and Tools		3,040,884	0		2,918,000		73,762		5,885,122		2,364,027		3,521,095
Work in Progress	_	4,085,923	 0	_	957,317		4,046,586	_	996,654		0	_	996,654
Total	\$_	59,237,514	\$ (525,000)	\$_	4,870,586	\$	4,120,348	\$_	59,462,752	\$	10,571,760	\$	48,890,992

					Pump Cap.			Motor		Force	Force Main	
	Station	Station Type -	Daily Flow	Wet Well	GPM	Pump Mfg.	Motor HP	Voltage -	Motor	Main	Discharge	Aux. Power
	Location	Year Updated	Basin No.	Capacity	each unit			Phase	F.L.A.	Size	Location	Gen. Set No.
1	215 S.	Triplex	305280 gal.	301397 gal.	1 - 1700	KSB	1 - 83 hp	480	105	10"	5005 London Rd.	Permanent
	60th Ave. E.	Submersible			2 - 1700		2 - 83 hp					Onsite
					3 - 1700		3 - 83 hp					
		2006	1					3			SA0880119	
2	20	Simplex	2160 gal.	927.6 gal.	81	Worthington	3 hp	240	8.75	3"	55th Ave. E.	2766
	Lakeside Ct.	Wet well, dry well									Lakeside Ct &	
											London Rd.	2770
		1932	1					3			SA0880117	
3	35 S.	Triplex	397872 gal.	N/A	1 - 1200	KSB	1 - 34 hp	480	1 - 47.5	16"	Lower side of	2765
	45th Ave. E.	Submersible			2 - 1200		2 - 34 hp		2 - 47.5		London Rd. on	
					3 - 265		3 - 10 hp		3 - 15.1		42nd Ave. E.	2767
		1999	4					3			SD1210001	
4	720 S.	Duplex	3024 gal.	927.52 gal.	1 - 100	KSB	1 - 5 hp	208	1 - 15.4	4"	23rd Ave. E. &	2766
	23rd Ave. E.	Submersible			2 - 100		2 - 5 hp		2 - 15.4		Water St.	
												2770
			6					3			SW0430011	
5	715 S.	Simplex	720 gal.	97.3 gal.	1 - 67.42	Flygt	1.9 hp	240	9	3"	22nd Ave. E. &	2770 (1)
	22nd Ave. E.	Submersible									Water St.	
												2766 (2)
		1970	6					1			SW0430012	
6	200	Wet well	1106064 gal.	9313.8 gal.	1 - 2400	Chicago	40 hp	240	1 - 98	24"	1st Ave. E. &	2765 (1)
	Lake Place Dr.	Dry well			2 - 1800				2 - 98		1st St.	
		Pump 1 - 1970s			3 - 1800				3 - 98			1
		Pumps 2&3 - 1980s	16					3			CH0460269	
7	528	Duplex	78048 gal.	N/A	1 - 400	KSB	6.5 hp	208	23	6"	Northeast side of	2765
	Lake Ave. S.	Submersible			2 - 400		6.5 hp		23		station	
						(+ mixer)	5.4 hp		18.2			2767
		2006	16					3			SA1090003	
8	729	Wet well	228960 gal.	8863.8 gal.	1 - 808	Fairbank	30 hp	480	37.7	8"	Northeast side of	2765
	Lake Ave. S.	Dry well			2 - 808	Morse					station #7	
		1983 & 1987										2767
		new pumps & motors	15					3			SA109003	
9	1202	Wet well	165888 gal.	3941 gal.	1 - 702	Fairbank	1- 10 hp	240	27.2	10"	11th St. &	2766 (1)
	Minnesota Ave.	Dry well			2 - 702	Morse					Lake Ave.	
		New motors										2770 (2)
		1985	15					3			SA1090015	one pump only
10	1939	Duplex	N/A	N/A	1 - 207.7	KSB	1 - 2.4 hp	208	8.7	4'	20th St. &	2770 (1)
	Minnesota Ave.	Submersible			2 - 247.1		2 - 2.4 hp				Minnesota Ave.	
					1							2766 (2)
		1996	15					3			SA0009	

	Station	Station Time	Daily Flass	Wet Well	Pump Cap.	Dumm Mfm	Motor UD	Motor	Matau	Force	Force Main	Aux. Power
	Location	Station Type - Year Updated	Daily Flow Basin No.	Capacity	GPM each unit	Pump Mfg.	Motor HP	Voltage - Phase	Motor F.L.A.	Main Size	Discharge Location	Gen. Set No.
11	2845	Duplex	N/A	N/A	1 - 164.4	KSB	1 - 2.4 hp	208	39301	4"	29th St. &	2770 (1)
	Minnesota Ave.	Submersible			2 - 161.4		2 - 2.4 hp				Minnesota Ave.	0700 (0)
		1996	15					3			SA1110002	2766 (2)
12	3539	Duplex	80640 gal.		1 - 170	KSB	1 - 1.75 hp	208	1 - 6.9	4"	36th St. &	2770 (1)
	Minnesota Ave.	Submersible			2 - 170		2 - 1.75 hp		2 - 6.9		Minnesota Ave.	
		1996	15		(approx.)			3			SA1110013	2766 (2)
13	432	Duplex	N/A	N/A	1 - 650	KSB	1 - 12.8 hp	480	1 - 19	12"	11th Ave. W. &	2765
	Railroad St.	Submersible			2 - 650		2 - 12.8 hp		19-Feb		Railroad St.	
		4005	40		1&2 - 710						01410400004	2767
14	735	1995 Wet well	16 50,976 gal.	2.476 gol	1 - 163	Worthington	1 - 3 hp	3 240	1 - 9.5	8"	SW0400031	2766
14	Garfield Ave.	Dry well	50,976 gai.	2,476 gal.	2 - 276	vvortnington	2 - 7.5 hp	240	2 - 18.5	٥	Michigan St.	2700
	Garriela Ave.	~1940			2 270		2 - 7.5 Hp		2 10.5			2770
			18					3			SA0310022	
15	2132	Triplex	248,688 gal.	N/A	1 - 2400	Chicago	1 - 40 hp	480	54	10"	23rd Ave. W.	2765
	Michigan St.	Wet well			2 - 2400		2 - 40 hp				below Michigan St.	
		Dry well	40		3 - 2400		3 - 40 hp				CW0240020	
16	210 S.	~1975 Wet well	18 572,544 gal.	4,630 gal.	912	Yeomans	1 - 15 hp	3 240	1 - 40	10"	SW0310030 37th Ave. W.	2765
10	37th Ave. W.	Dry well	372,544 gai.	4,050 gai.	avg. both	Teomans	1 - 13 Hp	240	1 - 40	10	above Oneota St.	2703
	07417440. ***	1993-95			pumps						abovo onocia on	2767
		new pumps & motors	23					3			SW0300016	
17	4100	Duplex	243,072 gal.	N/A	1 - 1000	KSB	1 - 10 hp	240	1 - 32.5	8"	Oneota	2767
	Oneota St.	Submersible			2 - 1000		2 - 10 hp		2 - 32.5			
		~1975 2001	23					3			SW0290038	2765
18	700 S.	Duplex	N/A	N/A	1 - 58.56	KSB	1 - 1.75 hp	208	1 - 6.9	6"	63rd Ave. W.	2770
.0	63rd Ave. W.	Submersible	14//	14//	2 - 54.92	ROB	2 - 1.75 hp	200	2 - 6.9		00147170.77	2110
		1996	26					3			SA0180041	
19	107	Duplex	2880 gal.	409 gal.	1 - 73.7	Meyers	1 - 2 hp	240	1 - 3.2	4"	Below RR	2770
	Spring St.	Submersible			2 - 79.2		2 - 2 hp		2 - 3.2		tracks	0700
	South	1984	28								SW1230034	2766
20	1325	Duplex	20		1 - 169	KSB	1 - 5 hp	208	1 - 17.7	-	Hilton	
	Hilton St.	Submersible			2 - 160		2 - 5 hp					
	New	2004										
								30			SA0090036	

					Pump Cap.			Motor		Force	Force Main	
	Station Location	Station Type - Year Updated	Daily Flow Basin No.	Wet Well Capacity	GPM each unit	Pump Mfg.	Motor HP	Voltage - Phase	Motor F.L.A.	Main Size	Discharge Location	Aux. Power Gen. Set No.
21	11 Commonwealth	Duplex Wet well	3,600 gal.	480 gal.	1 - 125	Chicago	2 - 5 hp	240	2 - 13.4	4"	Commonwealth & Prescott St.	2770
	Ave.	Dry well 2007	30		2 - 96.0		3 - 5 hp	3	3/13/2004		SA0030035	2765
22	629 Walnut St.	Duplex Submersible	43,344 gal.		1 - 180 2 - 135.3	KSB	1 - 5 hp 2 - hp	240	1 - 29.2 2 - 10.1	4"	Walnut St. & Eklund Ave.	2770
		2002	33		1-2:337.6			3			SA0730023	2766
23	346 E. Owatonna St.	Duplex steel shell	3,168 gal.	295.5 gal.	1 - 120.6 2 - 131.3	Flygt	1 - 3.8 hp 2 - 3.8 hp	240	14	4"		2766
		Submersible ~1975	11		2 10110			1			SA0960002	2770
24	No longer operational											
25	4634 Woodland Ave.	Duplex Submersible 2001	8352 gal.		1 - 2 -	KSB	1 - 15 hp 2 - 15 hp	240	1 - 52 2 - 52		Woodland Ave. near Vassar St.	
26	1015	Duplex	11 49,680 gal.		1 - 175	KSB	1 - 16.5	3 240	1 - 52	4"	SA1000001 Woodbury Lane	2767
	Jean Duluth Rd.	Submersible 1999	.0,000 ga		2 - 175	.102	2 - 16.5		2 - 52			2765
			5					3			SA0860115	
27	835 E. Superior St.	Duplex Submersible	4320 gal.	145.9 gal.	1 - 46.8 2 - 49.4	Myers	1 - 2 hp 2 - 2 hp	240	1 - 7.5 2 - 7.5	3"	Superior St.	2766
		1984	13					3			SA0420086	2770
28	4937 Airport Rd.	Duplex Submersible	17,136 gal.	N/A	1 - 150 2 - 150	KSB	1 - 3.4 hp 2 - 3.4 hp	240	1 - 10.2 2 - 10.2	4"	Washington St.	2770
	·	1998	22		rated from factory			3			SA1170006	2766
29	15 N. 7th Ave. E.	Duplex Submersible 1984	5184 gal.	456.3 gal.	1 - 159 2 - 159 (approx.)	Flygt	1 - 3 hp 2 - 3 hp	240	1 - 9 2 - 9	4"	1st St. Alley east of station	2770
20	2022	Duratan	13	077.01	4 400.0	□l. · · · · ·	4 5 5	3	4 40	0"	SA0470148	0700
30	2939 Morris Thomas	Duplex Submersible	14,112 gal.	377.8 gal.	1 - 120.6 2 - 124.6	Flygt	1 - 5 hp 2 - 5 hp	240	1 - 13 2 - 13	6"	Morris Thomas W. of Keel	2766
		1989	20			CP3102		3				2770

	Station 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 Location	Aux. Power Gen. Set No.
31	3822 Haines Rd.	Duplex Submersible	13,104 gal.	658.3 gal.	1 - 200.5 2 - 154.3	Flygt	1 - 5 hp 2 - 5 hp	240	1 - 13 2 - 13	6"	Hutchinson Rd. near Piedmont	2766
		1989	21			CP3102		3				2770
32	3862 Haines Rd.	Duplex Submersible	5,472 gal.	613.4 gal.	1 - 138.9 2 - 155.3	Flygt	1 - 5 hp 2 - 5 hp	240	1 - 13 2 - 13	4"	Haines Rd. south of	2766
		1989	21			CP3102	·	3			Piedmont SA0600093	2770
33	11503 Hwy #23	Duplex Submersible	NA	420 gal.	1 - 140 2 - 140	KSB	1 - 3 hp 2 - 3 hp	208	1 - 9.8 2 - 9.8	4"	Peary St. in woods before	2766 2770
		1995			(estimated)						access rd. SA0030061	
34	2706 Parkwood Lane	Duplex Submersible	NA	433.9 gal.	1 - 166 2 - 166	Flygt	1 -10 hp 2 - 10 hp	480	1 - 13 1 - 13	4"	Hanford Ave. N. of Station	2767
		1993	20			CP3127		3			SA0560093	2765
36	412 Hastings Dr.	Duplex Submersible	1,152 gal.	980 gal.	1 - 195.4 2 - 196.7	Flygt	1 - 10 hp 2 - 10 hp	240	1 - 26 2 - 26	Twin 4"	Ewing & Marshall St.	2767
		1992	11			CP3127X		3			SA0900005	2765
37	1031 London Rd.	Duplex Submersible	3,888 gal.	441.4 gal.	1 - 186.5 2 - 191.9	Flygt	1 - 3 hp 2 - 3 hp	208	1 - 10 2 - 10	4"	E. Superior St.	2766
		1984	13			CP3085		3			SA0420080	2770
38	4600 Minnesota Ave	Duplex Submersible	288 gal.	1241.8 gal	1 - 175.7 2 - 46	Flygt	1 - 2.3 hp 2 - 0.5 hp	240	1 - 10.2 2 - 4.3	6"	Park Point Rec Area MH	2766
	Park Point		16			CP3085 Meyers		1			SA1120015	2770
39	7301 Grand Ave.	Duplex Submersible 1988	20,880 gal.	643.2 gal	1 - 306.3 2 - 313.8	Flygt	1 - 5 hp 2 - 5 hp	240	1 - 13 2 - 13	6"	Grand Ave.	2766 2770
			23					3				
40	1200 Port Terminal Dr.	Steel shell dry well with 6' concrete	36, 864 gal.	534.9 gal.	1 - 286.6 2 - 281.5	Fairbanks Morse	1 - 7.5 hp 2 - 7.5 hp	240	1 - 22.6 2 - 22.6	8"	Near Sta #14	None
		wet well	18					3			SA0320008	

					Pump Cap.			Motor		Force	Force Main	
	Station Location	Station Type - Year Updated	Daily Flow Basin No.	Wet Well Capacity	GPM each unit	Pump Mfg.	Motor HP	Voltage - Phase	Motor F.L.A.	Main Size	Discharge Location	Aux. Power Gen. Set No.
41	1037	Duplex	8928 gal.		1 - 400	KSB	1 - 15 hp	240	1 - 43.5	6"	Joshua Ave. &	2767
	Joshua Ave.	Submersible			2 - 400		2 - 15 hp		2 - 43.5		Maple Grove	2765
			22					3			SA0680029	2705
42	4551	Duplex	NA	NA	NA	KSB	1 - 5 hp	480	1 - 7.8	4"	Airport Approach	2767
	Stebner Rd.	Submersible					2 - 5 hp		2 - 7.8	6"	& Airport Rd.	
		1996	22					3			SD1180032	2765
43	11600	Duplex			1 - 100	KSB	1 - 15 hp	240	1 - 43.5			2767
	Perch Lake Dr.	Submersible			2 - 100		2 - 15 hp		2 - 43.5			
		2000			3 - 150			2			C 4 4 0 0 0 0 0 4	2765
44	12800	Duplex			1 - 180	KSB	1 - 10 hp	3 208	29	6"	SA1280001 Lift Station	2767
74	W. 5th St.	Submersible			2 - 180	ROD	2 - 10 hp	200	29		#43	2707
		2000			3 - 200		,		_,			2765
								3				
45	52nd Ave. E.	Triplex		2 MG	1 - 1100	KSB	1 - 32 hp	480	39	12"	47th Ave. E. &	Permanent
	& Dodge St.	Submersible 2005			2 - 1100 3 - 1100		2 - 32 hp 3 - 32 hp				Superior St.	on site
	Douge St.	2003			3 - 1100		3 - 32 HP	3			SW0830136	
46	Grinder Pump	Duplex				Barnes	1 - 2 hp	208	9.2	1.25"	3	
	#1	Submersible					2 - 2 hp					
	(behind) 1467	Grinder							9.2			
47	88th Ave. W. Grinder Pump	~2005				Barnes		3				
47	#2	(in Bethany				Dairies						
	9239	Crisis Shelter)										
	Idaho St.	~2005										
48	Grinder Pump					Barnes						
	#3 2501	(9) 723-3870										
	Commonwealth Ave.	(9) 723-3670 ~2005										
49	Beacon PT	Private										
	21st Ave. E. &											
	Water St.	724-4053										
50	505	0: 5 :				0 ': 1						
	S. 18th Ave. E. & Lakewalk	StorageBasin 2007		1 MG	No Pumps	Gravity In						
	(Endion St.)	2007		I IVIG	Fullips	Gravity Out						

## **LENGTH OF SANITARY SEWER PIPE IN FEET 2009**

PIPE MATERIAL

Dia.	Force						II E WATER							
Inches	Main	ABS	ACP	BRA	CBR	CI/DI	CMP	HDPE	PVC	CIPP	RCP	STL	VCP	Totals
2								1,665	665					2,330
3														0
4														0
6		45							1,277	55			13,021	14,398
8		7,066	7,165			12,601		855	429,436	22,959	320		1,044,017	1,524,419
9										430			27,654	28,084
10			14,854			3,944		155	33,785	807	3,389		77,977	134,911
12			2,184			1,317		532	17,273	2,683	48,905		57,144	130,038
14						165								165
15									8,688	561	36,446		35,281	80,976
16						413								413
18				1,303		80	1,062		732	412	19,241		19,170	42,000
20				115		24					467		3,725	4,331
21				440		105			1,091		6,117		643	8,396
22				2,595									1,213	3,808
24				1,012		711			693		12,733		4,117	19,266
26				606							416			1,022
27				463							1,029		536	2,028
28				1,375										1,375
30				491		146					3,421			4,058
32				1,421							863			2,284
34				503							56			559
36				1,437	46.5	610		-			2,159			4,206
42				10	462			-						462
45				12	460						70-			472
48				190	156						785			1,131
54					60									60
55 Tatal		7 4 4 4	04.000	44.000	4.400	00.440	4.000	0.007	400.040	07.007	400.047		4 004 400	0 044 400
Total -	0	7,111		11,963						27,907		0	1,284,498	2,011,192

Notes: The City of Duluth Sanitary Sewer system includes 8,547 Manholes.

ABS - Asbestos CI/DI - Cast or Ductile Iron RCA - Reinforced Concrete Arch ACP CMP - Corregated metal RCP - Reinforced Concrete

BRA - Brick Arch PE - Polyethelene STL - Steel **Miles - 380.9** 

CBR - Circular Brick Pipe PVC - Polyvinal Chloride VCP - Vitrified Clay Pipe

Note: Pipe quantities are derived from Geographic Information System.

#### **SANITARY SEWER ACTIVITIES 2009**

751,982 ft 268,008 ft 116 46 spot repairs 5,500 lined and 1,027 replaced  225 14  1,703 708 2
116 46 spot repairs 5,500 lined and 1,027 replaced  225 14  1,703
46 spot repairs 5,500 lined and 1,027 replaced  225 14  1,703
5,500 lined and 1,027 replaced  225 14  1,703
225 14 1,703
14 1,703
1,703
1,703
708 2
2
2
2
448
230
Water Quality Specialists performed 213 connect and disconnect inspections.
Performed line inspections and identified wyes and cross connection and illicit connections using dye for both City and private contractors. Done on an as needed basis.
Continued BOD & TSS sampling to develop Fats, Oils, & Grease (FOG) Program for Food Service Facilities (FSFs).
As part of the Consent Decree, continued aggressive flow monitoring activities in targeted basins in support of ongoing modeling work designed to support and refine I/I efforts.
2 - Lift Stations #29 & 38
Arrowhead Home & Builders Show

- The City signed the Consent Decree effectively ending the lawsuit brought against the City and WLSSD by the US EPA and the US DOJ. Consent Decree approved by the US Federal Judge in October.
- The City Council passed a new plumbing ordinance dealing with the requirements for FSFs participation in a FOG program.
- Utility Operations achieved the goal of disconnecting 630 footing drains and 175 lateral lines.
- Utility Operations received EPA approval for Lakeside Interceptor Storage Tank and for the Canal Park Lift Station and Storage Tank construction.
- Several Staff members presented topical papers at industry conferences.
- Utility Operations completed and had approved by the EPA the I/I Evaluation and Remedial Measures Plans.
- Utility Operations presented and the City Council passed the Point of Sale ordinance requiring an inspection of I/I compliance before a home can be sold.
- Utility Operations presented and the City Council passed and amended the Clean Water Surcharge ordinance to increase the fee to fund the Private Property Lateral Grant Program.

# Clean Water Utility Statement of Net Income For The Year Ended December 31, 2009 and 2008 (Unaudited)

	2009	<u> </u>	2008	
Operating Revenue Charges for Services	\$ 2,423,186		\$604,752	_
Total Operating Revenue	\$_	2,423,186	\$_	604,752
Operating Expense Clean Water Expense	710,304		1,897	
Total Operating Expense	-	(710,304)	-	(1,897)
Operating Income	-	1,712,882	-	602,855
Other Revenue Contributed Assets Interest Income	3,315,007 205		0 192	
Total Other Revenue	-	3,315,212	-	192
Other Expenses and Transfers Interest on Long Term Debt	897		0	
Total Other Expenses and Transfers	-	(897)	-	0
Net Income or Loss	\$_	5,027,197	\$	603,047

# Clean Water Utility Statement of Net Assets For The Year Ending December 31, 2009 and 2008 (Unaudited)

		Assets	
	2009		2008
Current Assets	-		
Cash	\$ 988,767		\$ 600,048
Restricted Cash and Equivalents:			
Construction	0		0
Accounts Receivable (Net)	358,468		0
Due from Other Governments	2,042,646		0
Total Current Assets	\$3,3	89,881	\$600,048_
<u>Utility Plant</u>			
In Service	525,000		0
Construction	4,785,538		2,999
Less Accumulated Depreciation	0		0_
Total Utility Plant Assets	5,3	10,538	2,999
Other Assets			
Issuance Costs	13,724		0
Total Other Assets		13,724	0
Total Assets	\$8,7	14,143	\$603,047_

# Clean Water Utility Statement of Net Assets For The Year Ending December 31, 2009 and 2008 (Unaudited)

### **Liabilities & Net Assets**

		2009			20	08
Current Liabilities						
Accounts Payable	\$	108,783		Ī	\$	)
Contracts Payable		1,947,610				)
Due to Other Governments		10,600			C	
Interest Payable		897			C	)
Notes Payable		56,985			C	)
Bonds Payable		10,388			C	)
Deferred Revenue		16,156			C	)
	_	, , , , , , , , , , , , , , , , , , ,				_
Total Current Liabilities (Payable from Current Assets)		\$	2,151,419			\$0
Long Term Liabilities						
Bonds Payable		189,612				
Notes Payable	_	742,868				<u>)                                    </u>
Total Long Term Liabilities			932,480			0
			•			
Total Liabilities			3,083,899			0
Net Assets						
Invested in Capital Assets, Net of Related Debt		4,324,409			2,999	)
Unrestricted		1,305,835			600,048	
	_	.,,				<del>_</del>
Total Net Assets		_	5,630,244			603,047
Total Liabilities and Net Assets		\$	8,714,143			\$603,047_

#### City of Duluth Clean Water Utility Bonds and Notes Payable December 31, 2009

								Principal Outstanding								Principal Outstanding
Class Mata	4:  :4		_	Issued	Issue Date	Final Maturity	-	12/31/2008	-	Issued	_	Draw Down	_	Retired		12/31/2009
Clean Wate	Bonds															
		Revenue and General Obligation	\$	200,000	2/19/2009	2/1/2024	\$_	0	\$_	200,000	\$_	0	\$_	0	\$	200,000
E	Bond Tota	al					\$_	0	\$_	200,000	\$_	0	\$_	0	\$	200,000
١	Notes															
		Public Facilities Authority	\$	2,414,150	12/10/2009	8/20/2024	\$	0	\$	0	\$	702,238	\$	0	\$	702,238
		Public Facilities Authority		796,835	6/17/2009	8/20/2024	-	0	-	0	-	97,614	_	0	-	97,614
١	Note Tota	I					\$_	0	\$	0	\$_	799,852	\$_	0	\$	799,852
Total Clean Water Utility Bonds and Notes							\$	0	\$	200,000	\$_	799,852	\$_	0	\$	999,852

<u>Year</u>	Principal	Interest	<u>Total</u>
2010	\$ 67,373	\$ 23,761	91,134
2011	207,942	68,076	276,018
2012	212,634	65,087	277,721
2013	216,496	60,768	277,264
2014	222,188	56,330	278,518
2015	226,189	51,753	277,942
2016	230,880	47,085	277,965
2017	235,435	42,320	277,755
2018	240,435	37,447	277,882
2019	244,989	32,433	277,422
2020	250,682	27,298	277,980
2021	255,235	22,042	277,277
2022	261,236	16,677	277,913
2023	266,789	11,142	277,931
2024	272,482	5,463	277,945

### Clean Water Fund Schedule of Fixed Assets Year Ending December 31, 2009

	Balance Jan. 1, 2009	Transfer from Sewer Fund	_	Additions	 Deductions	•	Balance Dec. 31, 2009	Accumulated Depreciation	Book Value
Lands and Grounds	\$ 0	\$ 525,000	\$	0	\$ 0	\$	525,000	\$ 0	\$ 525,000
Infrastructure	0	0		0	0		0	0	0
<b>Buildings and Structures</b>	0	0		0	0		0	0	0
Equipment and Tools	0	0		0	0		0	0	0
Work in Progress	2,999	0	_	4,782,539	 0		4,785,538	0	4,785,538
Total	\$ 2,999	\$ 525,000	\$_	4,782,539	\$ 0	\$	5,310,538	\$ 0	\$ 5,310,538

# Stormwater Utility Statement of Net Income For The Year Ended December 31, 2009 and 2008 (Unaudited)

	2009	<u> </u>	2008
Operating Revenue Stormwater Charges Other	\$ 5,120,945 28,329	<u> </u>	\$ 4,503,162 11,593
Total Operating Revenue	\$_	5,149,274	\$4,514,755_
Operating Expense			
Director's Office	56,139		56,034
Capital Related Expenses	566,558		587,558
Utility General Expense	553,605		545,231
Engineering	230,794		179,658
Utility Operations	1,583,301		1,348,933
Customer Service	238,002		164,442
Total Operating Expense	-	(3,228,399)	(2,881,856)
Operating Income	-	1,920,875	1,632,899
Other Revenue			
Grants Non-Capital	73,643		48,743
Capital Contributions	25,309		0
Gain or Loss on Sale of Fixed Assets	960		160
Transfer from Other Funds			
Fleet Services Rebate	0		9,000
Interest Income	37,743		62,128
Total Other Revenue	-	137,655	120,031
Other Expenses and Transfers			
Bond Interest	100,928		107,034
Transfers to Other Funds			
Investing Activities	36,040		54,475
Other Transfers	502,758		482,533
Total Other Expenses and Transfers	-	(639,726)	(644,042)
Net Income or Loss	\$_	1,418,804	\$1,108,888_

# Stormwater Utility Statement of Net Assets For The Year Ending December 31, 2009 and 2008 (Unaudited)

### Assets

	2009	2008
Current Assets		
Cash	\$ 2,528,833	\$ 2,085,547
Restricted Cash - Construction	0	0
Accounts Receivable	510,906	0
Interfund Loan Receivable	0	613,300
Due from Other Funds	22,015	19,108
Special Assessments	17,807	13,475
Due from Other Governments	23,098	167,983
Inventory	37,286	0
Prepaids	83,466_	61,701
Total Current Assets	\$3,223,411_	\$2,961,114
Utility Plant		
In Service	13,201,539	12,094,884
Construction	433,426	928,516
Less Accumulated Depreciation	(2,088,703)	(1,736,883)
Total Utility Plant Assets	11,546,262	11,286,517
Other Assets		
Bond Issuance Charges	24,433	30,834
Total Other Assets	24,433	30,834
Total Assets	\$ <u>14,794,106</u>	\$ <u>14,278,465</u>

# Stormwater Utility Statement of Net Assets For The Year Ending December 31, 2009 and 2008 (Unaudited)

### **Liabilities & Net Assets**

	2009		2008	
Current Liabilities				
Accounts Payable	\$ 36,856		\$ 34,466	
Contracts Payable	54,909		56,886	
Due to Other Governments	11,493		16,141	
Due to Other Funds	94,638		964,314	
Accrued Salaries Payable	51,866		35,162	
Vacations Payable	109,667		0	
Deferred Revenue	258,621		158,319	
Accrued Interest Payable	41,340		43,886	
Bonds Payable	179,000		170,000	
Total Current Liabilities (Payable from Current Assets)	\$_	838,390	\$_	1,479,174
Long Term Liabilities				
Vacations Payable	8,028		91,712	
Net Other Post Employment Benefits	0		0	
Bonds Payable	2,308,000		2,487,000	
Less Unamortized Bond Discount	(3,551)		(3,856)	
Total Long Term Liabilities	_	2,312,477	_	2,574,856
Total Liabilities	<del>-</del>	3,150,867	<u>,</u>	4,054,030
Net Assets				
Invested in Capital Assets, Net of Related Debt	9,087,246		8,664,207	
Unrestricted	2,555,993		1,560,228	
Total Net Assets	_	11,643,239	_	10,224,435
Total Liabilities and Net Assets	\$_	14,794,106	\$	14,278,465

### City of Duluth Stormwater Utility Bonds Payable December 31, 2009

					Principal Outstanding						Principal Outstanding
	Issued	Issue Date	Final Maturity		12/31/2008		Issued		Retired		12/31/2009
Stormwater Utility											
Bonds											
Revenue and General Obligation	\$ 1,425,000	9/1/2002	2/1/2018	\$	1,037,000	\$	0	\$	85,000	\$	952,000
Revenue and General Obligation	1,705,000	9/7/2006	2/1/2022	_	1,620,000	_	0	_	85,000	_	1,535,000
Bond Total				\$_	2,657,000	\$	0	\$_	170,000	\$_	2,487,000
Total Stormwater Utility Bonds				\$_	2,657,000	\$_	0	\$_	170,000	\$_	2,487,000

Future Payments:			
<u>Year</u>	<u>Principal</u>	Interest	<u>Total</u>
2010	\$ 179,000	\$ 96,729	\$ 275,729
2011	187,000	89,817	276,817
2012	196,000	82,484	278,484
2013	200,000	74,708	274,708
2014	210,000	66,443	276,443
2015	219,000	57,660	276,660
2016	230,000	48,401	278,401
2017	240,000	38,632	278,632
2018	251,000	28,304	279,304
2019	135,000	20,300	155,300
2020	140,000	14,800	154,800
2021	145,000	9,100	154,100
2022	155,000	3,100	158,100
	\$ 2,487,000	\$ 630,478	\$3,117,478
		·	

## Stormwater Fund Schedule of Fixed Assets Year Ending December 31, 2009

	_	Balance Jan. 1, 2009		Additions	 Deductions	ı	Balance Dec. 31, 2009	Accumulated Depreciation			Book Value
Lands and Grounds	\$	8,481	\$	0	\$ 0	\$	8,481	\$	0	\$	8,481
Infrastructure		8,555,385		933,592	0		9,488,977		549,059		8,939,918
Buildings and Structures		1,401,897		0	0		1,401,897		154,209		1,247,688
Equipment and Tools		2,129,122		186,854	13,792		2,302,184		1,385,435		916,749
Work in Progress	_	928,515	_	534,958	1,030,047	i.	433,426		0	-	433,426
Total	\$_	13,023,400	\$_	1,655,404	\$ 1,043,839	\$	13,634,965	\$	2,088,703	\$_	11,546,262

## **LENGTH OF STORM SEWERS IN FEET 2009**

Dia.															
Inch.	BR	CMP	CPD	CI/DI	HDPE	NCP	PPC	PVC	RCP	STN	STL	TP	VCP	UNK	Totals
3									68			979			1,047
4			32,524					395,874	1,446		13	44,879		142,902	617,638
6		2,925	3,176	155	440			11,815	62			281		4,649	23,503
7										39					39
8		289		140	43	401		6,447	53			137	458	4,308	12,276
10		2,408		293	49			1,882	11,979				1,884	31,003	49,498
12		8,397	3,981	1,982	23,079	898		12,926	442,674	50	43		894	91,332	586,256
13									31						31
14				38					239					341	618
15		3,069	124	44	2,251	171	55	1,359	186,835				427	48,983	243,318
16				792					256					755	1,803
17														91	91
18		4,349			463			943	112,544		65		635	38,301	157,300
20				107					1,253		291			4,409	6,060
21		952		63				12	38,528				575	8,321	48,451
22									1,024					1,471	2,495
23														1,040	1,040
24	329	2,689	1,105	158	407			110	68,089	83			644	27,730	101,344
26	1,743							41	4,077					13,488	19,349
27									16,147					1,844	17,991
28	651								4,341					2,872	7,864
29									795					432	1,227
30		904			1,215				39,643					12,472	54,234
31									406						406
32	368								1,976	62				1,815	4,221
33									694						694
34														397	397
36	260	804							34,186	171				15,866	51,287
40									1,306	599				353	2,258
42				253				94	15,389					2,491	18,227
44		225							3,507					988	4,720
45									540					444	984
46														79	79
48	365	198							15,946	545				11,676	28,730
50	241								300					42	583

## **LENGTH OF STORM SEWERS IN FEET 2009**

Dia.															
Inch.	BR	CMP	CPD	CI/DI	HDPE	NCP	PPC	PVC	RCP	STN	STL	TP	VCP	UNK	Totals
51									1,086						1,086
52									404						404
54									13,072					5,174	18,246
56														77	77
58									637					802	1,439
60		252					39		3,199					6,983	10,473
62									635					61	696
65									76					377	453
66	30								245					301	576
72		155							2,656	27				3,965	6,803
73														93	93
78		40							187					279	506
84	224	153							1,967					1,471	3,815
88									406						406
96								324	515	65				434	1,338
108									39					269	308
120									1,002					1,500	2,502
122									54						54
128									52	777				549	1,378
132									173					666	839
144									119						119
156									142						142
192									49						49
UNK	700	290	832		73			9,643	2,728	960				144,090	159,316
	4,911	28,099	41,742	4,025	28,020	1,470	94	441,470	1,033,777	3,378	412	46,276	5,517	637,986	2,277,177

Note: The Storm Sewer system also includes 11,699 catch basins and 5,669 manholes.

Pipe quantities are derived from Geographic Information System.

### STORMWATER UTILITY ACTIVITIES 2009

ACTIVITY	WORK COMPLETED
Cleaning storm sewer pipe	23,358
Cleaning creeks	Removed garbage/trash from streams
Televising storm sewer pipe	24,561 feet
Manhole/catch basin repairs	127
Storm sewer pipeline repairs	
Replacement footage	17 sections
Ditch line (dug or repaired and seeded or sodded)	2,050 feet
Culverts repaired	30
Replacement footage	1,033 feet
Steaming:	
Steamed culverts and ditches blocked with ice	8,304 feet
Sediment trap cleaning	Inspected all 17 and removed 380 cubic yards of material from sediment
	traps
Presentations:	
Public	7
Staff	5
City council and city commissions and committees	3
School presentations, school group, childrens' groups	15
Numerous radio, television and newspaper articles	
Regional conferences	
National conferences	

- In addition to the above activities, the Stormwater Utility continued to support the activities of the award-winning duluthstreams.org website.
- The Utility chaired the Regional Stormwater Protection Team. Staff also participated in the Arrowhead Home and Builders Show, Riverquest, Earth Tracks, and the Watershed Festival, Earth Day Festivities, and Lake Superior Days.
- The Utility submitted its annual report on the Minnesota NPDES Phase II MS4 Stormwater Permit and served on the steering committee for the League of Minnesota Cities statewide effort. The Utility worked with other City staff to maintain a Storm Water Pollution Prevention Program in support of the permit.
- The Utility continued to do stormwater stenciling as part of SIP projects. The stencils, pressed into new concrete, remind the public that storm drains go to Lake Superior. In addition the Utility placed decals on storm drains with three school groups.
- The Utility also participated in the St. Louis River Alliance, and the Regional Stormwater Protection Team.
- The Utility received a grant to purchase a high accuracy GPS unit to locate utility features with pinpoint accuracy.
- The Utility continued the "Rake for the Lake" program for collection of winter sand and adoption of storm drains.
- The City co-sponsored 2 construction workshops as part of the Regional Stormwater Protection Team.
- The Utility continued to monitor four streams with data displayed on the www.duluthstreams.org site.
- A Utility Operations staff member received the Clarence Maddy employee of the year award.