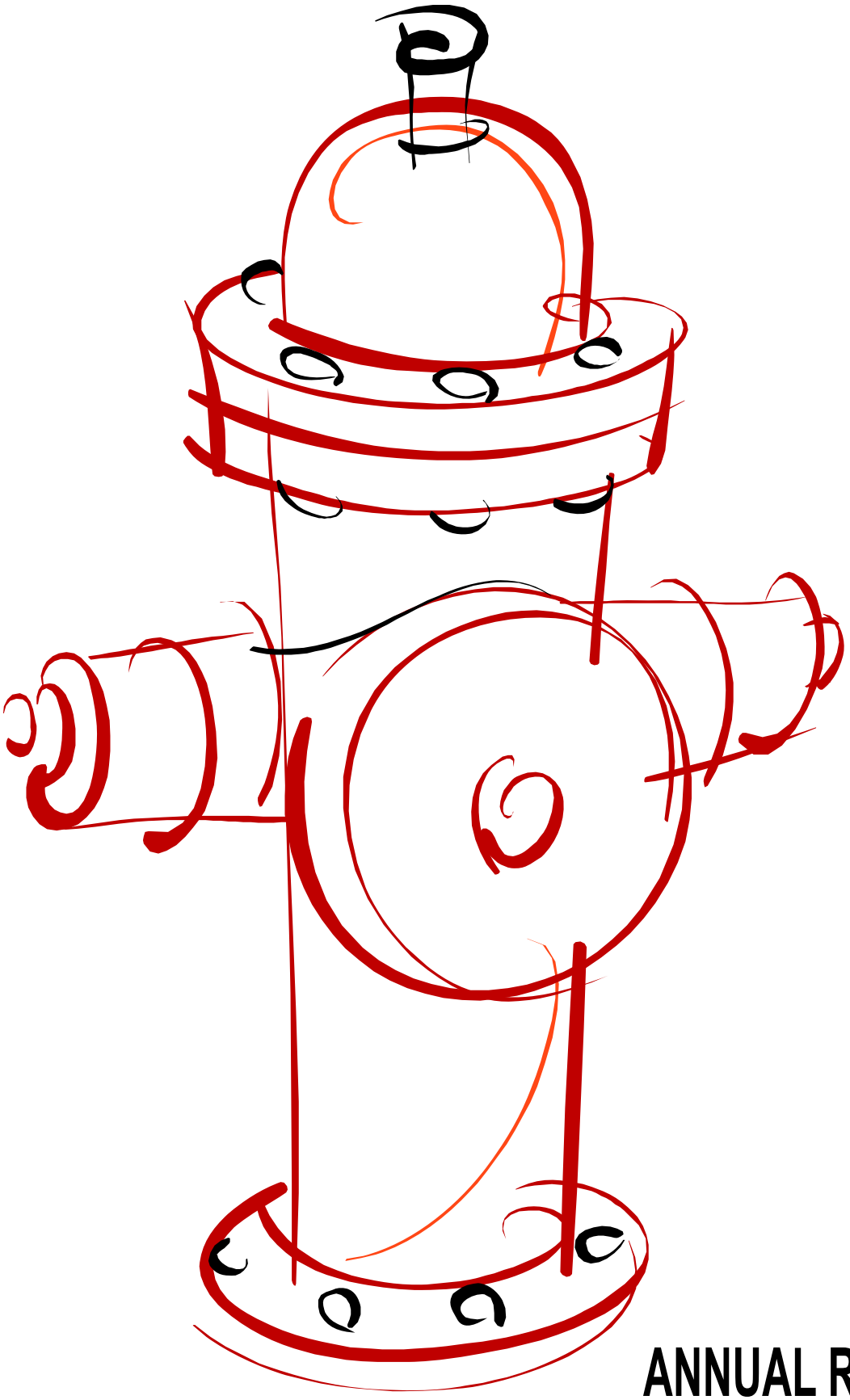
City of Evanston



ANNUAL REPORT 2008

EVANSTON WATER & SEWER DIVISION

Contents

Introduction

Pumping Section

Filtration Section

Contents

Distribution Section

Meter Section

Sewer Section

PLANT DATA

General Statistics

Intakes

36-42"- 5,946' depth 28'
48" - 5,300' depth 28'
54" - 5,340' depth 28'
Approximate capacity 150 mgd

Suction Wells

2 – 22' diameter x 74' depth to bottom with traveling screens
1 – 20' diameter x 52' 6" depth top to bottom
Alternate application point of activated carbon and polymers.

Low Lift Pumps

2 – Electric motor driven pumps (2- 30 mgd)
4 – Dual drive electric- natural gas
(3 – 15 mgd, 1 – 30 mgd)
Total capacity 135 mgd
Emergency standby 70 mgd

Flash Mix Basin

14' 9" x 14' 9" x 31' 7" deep
Single vertical shaft mixer
Applications point for:
-Alum
-Chlorine
-Fluoride

Slow Mix Settling Basins

2 with five 60' shafts per basin and four paddle wheel sections.
Capacity 2.865 mg each

2 with eight 60' shafts per basins and four paddle wheel sections.
Capacity 4.300 mg each
Flow parallel to shaft.

Double deck-series flow
Retention time at 108 mgd is 3 hours 35 minutes

Filters

12- 3 mgd anthracite capped rapid sand filters
12- 6 mgd anthracite capped rapid sand filters
Total rated capacity 108 mgd at 4 gpm/ft.^{2}
Automatic surface and back wash system on all 24 filters

Underground Storage

Clearwells [8] - 4.5 mg
Reservoir - 5.0 mg
Total Plant Storage - 9.5 mg

High Lift Pumps

Electric Motor Driven Pumps:
1 – 15 mgd, 2 – 25 mgd
1 – Dual drive, electric-natural gas (10 mgd)
2 – Dual drive, electric-natural gas (15 mgd)
1 – Dual drive, electric-natural gas (22 mgd)
1 – Natural gas engine [20 mgd]
Total rated capacity 147 mgd
Emergency 82 mgd

Wash Water Pumps

2 – 20 mgd
2 – 10 mgd

Detention Tank

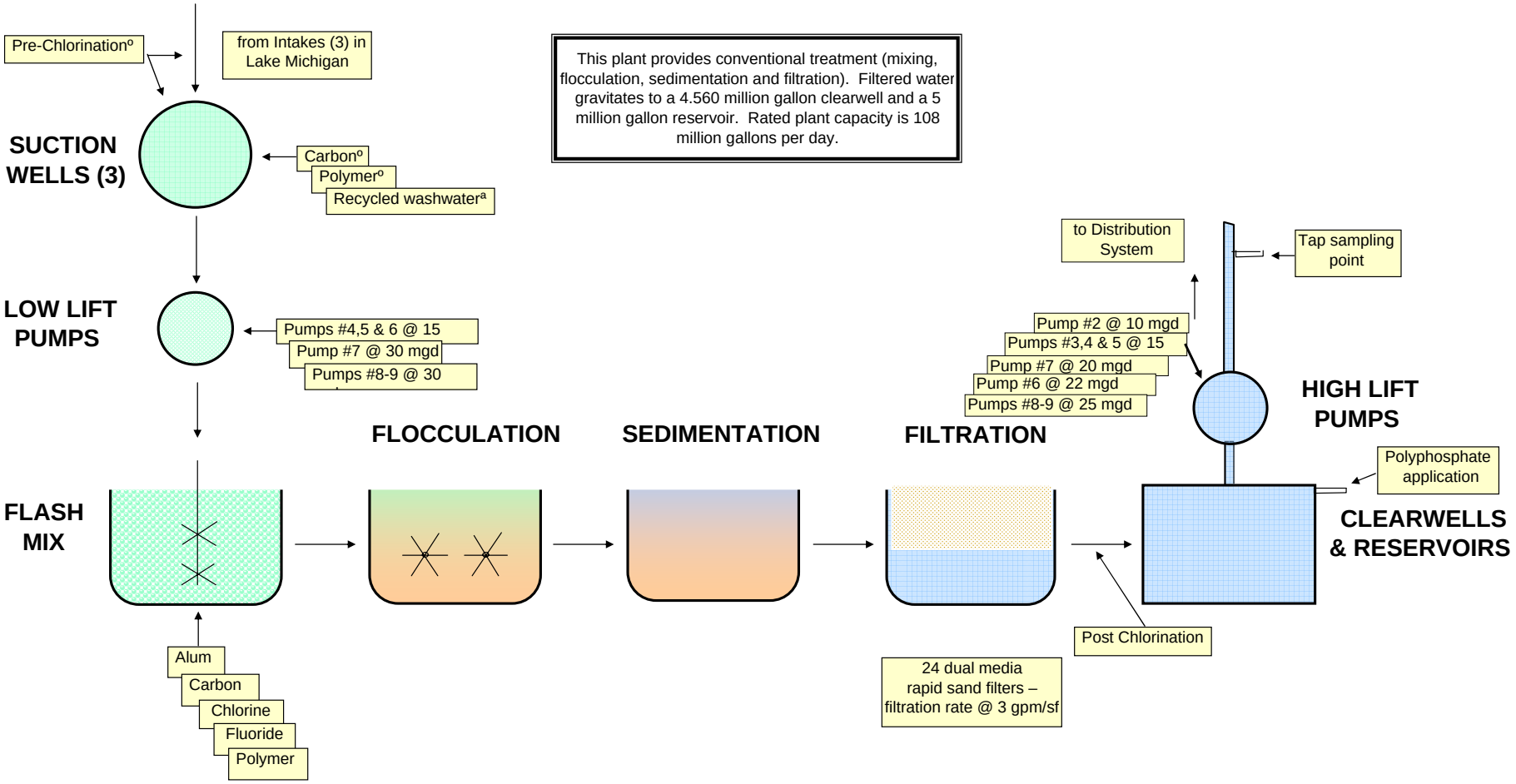
80'W x 192'L x 12'D divided into two sections.
Total capacity 1.1 mg
One submersible sludge pump at 700 gpm

Note:

mg = million gallons
mgd = million gallons per day
gpm = gallons per minute

CITY OF EVANSTON WATER TREATMENT PLANT

555 Lincoln Street / Evanston, Illinois 60201



Volume in millions of gallons	0.109	2.384	13.516	1.061	9.560*
Adjustments to include volumes in connecting piping	0.110	2.390	13.520	1.070	4.570*

Notes:
[o]alternate feed point
[a]avg. 1% of raw water flow
*based on 8.0' depth

jwc/4-97

WATER WORKS IMPROVEMENTS (1913 to 2008)
General Statistics

1874 -Evanston Community water system established.

1913 -12 M.G.D. filter plant construction.

1923 - Filter plant expanded to 24 MGD.

1934 -A 5 million gallon underground reservoir was constructed at the plant site.

1944 -Contracted to supply Skokie.

1949 -High lift (finished water) pumping station constructed.
-Filter Plant expanded to 48 MGD.
-Slow Mix Basins 1 & 2 were constructed.

1956 -48" intake and low lift (raw water) pump station constructed.
- 36" feeder main to Skokie.

1964 -Filter plant expanded to 72 M.G.D.
-Additional 36" feeder main to Skokie.
-Slow mix basins 3 & 4 were constructed.

1971 -20 M.G.D. high lift pump and natural gas engine installed.

1974 -Filter wash water detention basin, 1.1 M.G. capacity.

1976 -Constructed 54" intake 5,340 feet in length. Extended 48" intake 5,300 feet.

1981 -Material storage building constructed at south water tank yard.
-Installed 3 new boilers, two 50 H.P. and one 20 H.P.

(1981 continued)
-Replacement of 5 KV switchgear and motor starting equipment o low lift pumps.
-Upgraded slow mix equipment in basins 1 and 2.

1982 -Installation of two 30 M.G.D. low lift pumps.
-Replaced 5 KV motor starter center for high lift pumps.

1983 -New chemical building and chemical feed system.
-Installation of a 500 KW emergency generator.
-Rehabilitation of six 1914 and six 1924 filters to increase rate to 3 M.G.D. per filter.

1984 -A 5 million gallon standpipe with booster station replaced the 1.5 million gallon elevated tank in southwest Evanston, erected in 1932.

1985 -Began selling water to Northwest Water Commission at the rate of 10 MGD, bypassing reservoir until repairs were completed.
-Installed dual drive 22 MGD high lift pump with associated suction/discharge piping.
-Installed two 48" diameter pipes from reservoir to east side of high lift suction tunnel.
-Completed system automation which provided a micropressor based digital control system to perform control and supervisory functions.

1986 -A 7.5 million gallon standpipe with booster station replaced the 1.0 million gallon elevated tank in northwest Evanston, erected in 1935.

WATER WORKS IMPROVEMENTS (1913 to 2008)
General Statistics

(1986 continued)
-Began pumping to NWC reservoir June 1.

1988 -Installed two 700 gpm sludge pumps with automatic samplers in the settling basins along with 3400 feet of 8" diameter sludge main from the Filtration Plant to the Chicago Metropolitan Sanitary District interceptor at Lincoln Street and Asbury.

1989 -Completed filter control upgrade to microprocessors.

1990 -Turndown and extension of 48" raw water intake lines into north and south suction wells.
-West filter influent valves upgraded from 16" to 24".

1991 -Upgrade electrical substation and switchgear to 3750 KVA.
-Upgraded West filter effluent piping.

1992 -Installation of chlorine feed system to intakes for Zebra Mussel control.
-Installation of a 15 MGD high lift pump replacing one 8 MGD pump and one 6 MGD pump.
-Installed two 48" diameter butterfly valves on suction piping from reservoir to high lift suction wells.
-Installed hydrofluosilicic acid tank and feed system in garage #6.
-Installed 60" diameter flash mix bypass pipe to influent duct of settling basins.
-Replaced slow mix equipment and flushing system in basins 3 and 4.
-Replaced 480V filter plant switchgear.

(1992 continued)
-Installation of blended phosphate system and initiation of blended phosphate treatment for corrosion control.

1994 -Constructed new chemical storage and handling bldg.

1995 -Replaced #6 Low Lift Pump Unit gasoline engine with natural gas engine.

1996 -Replaced 1949 Filter Building roof.
-Constructed Loading Dock on 1913 Filter building.

1997 -Replaced #2 High Lift Pump Unit gasoline with a natural gas engine.

1998 -Replaced #5 and #7 dual drive Low Lift Pump unit's gasoline engines with natural fueled engines.

2000 -Installed individual effluent turbidimeters on all twenty-four filters.

2001 -Converted #3 High Lift Pump to dual drive.
-Replaced filter bottoms and rehabbed six filters in 1948 filter addition.

2002 -Installation of automatic fixed radio meter reading system completed.
-Replaced effluent settling basin sluice gates with rectangular butterfly valves.

2003 -Installed Uninterruptible power Supply's in Filtration Division and Pumping Division.

WATER WORKS IMPROVEMENTS (1913 to 2008)
General Statistics

2004 -Constructed garages east of the settling basins.
-Constructed an access way to the chemical building from Filtration Division.
-Installed a scrubber.

2005 -Replaced #4 Low Lift Pump Unit gasoline engine with natural gas engine.

2006 **-**Replaced #7 Low Lift Pump Unit.

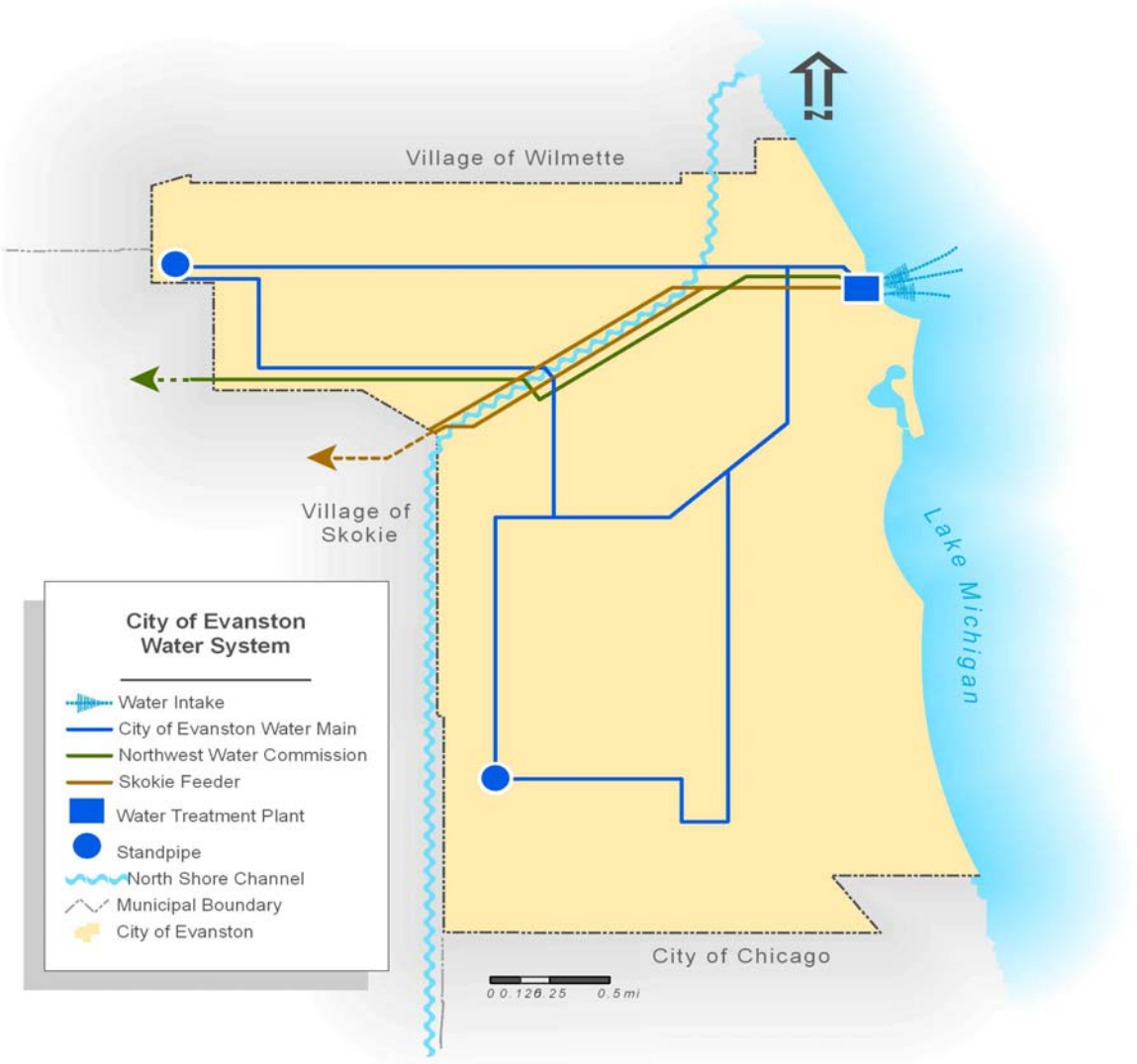
2008 **-**Renovated administrative offices.
-Expanded filter shop area.

Service Area & Population

General Statistics

	Area (Square Miles)	2008 Persons*
Evanston	7.8	74,360
Skokie	10.5	63,633
NORTHWEST WATER COMMISSION		
Arlington Heights	15	75,784
Buffalo Grove	4.5	43,237
Palatine	9	66,848
Wheeling	7.5	35,495
Total Served	**54.3**	**359,357**

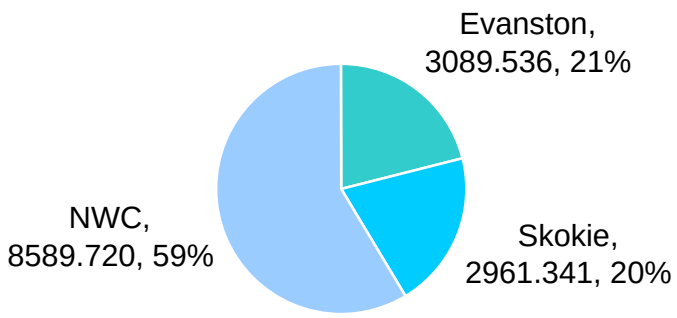
*U.S. Census Bureau July, 2002 Population Estimates



PUMPAGE TO DISTRIBUTION

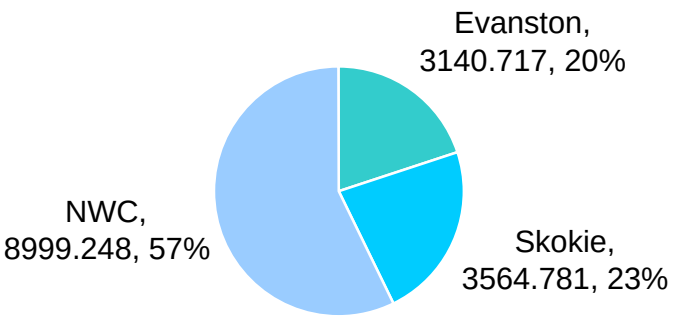
General Statistics

2008 Pumpage to Distribution
(million gallons)



2008 Total Pumpage: 14,626,296,000 Gallons

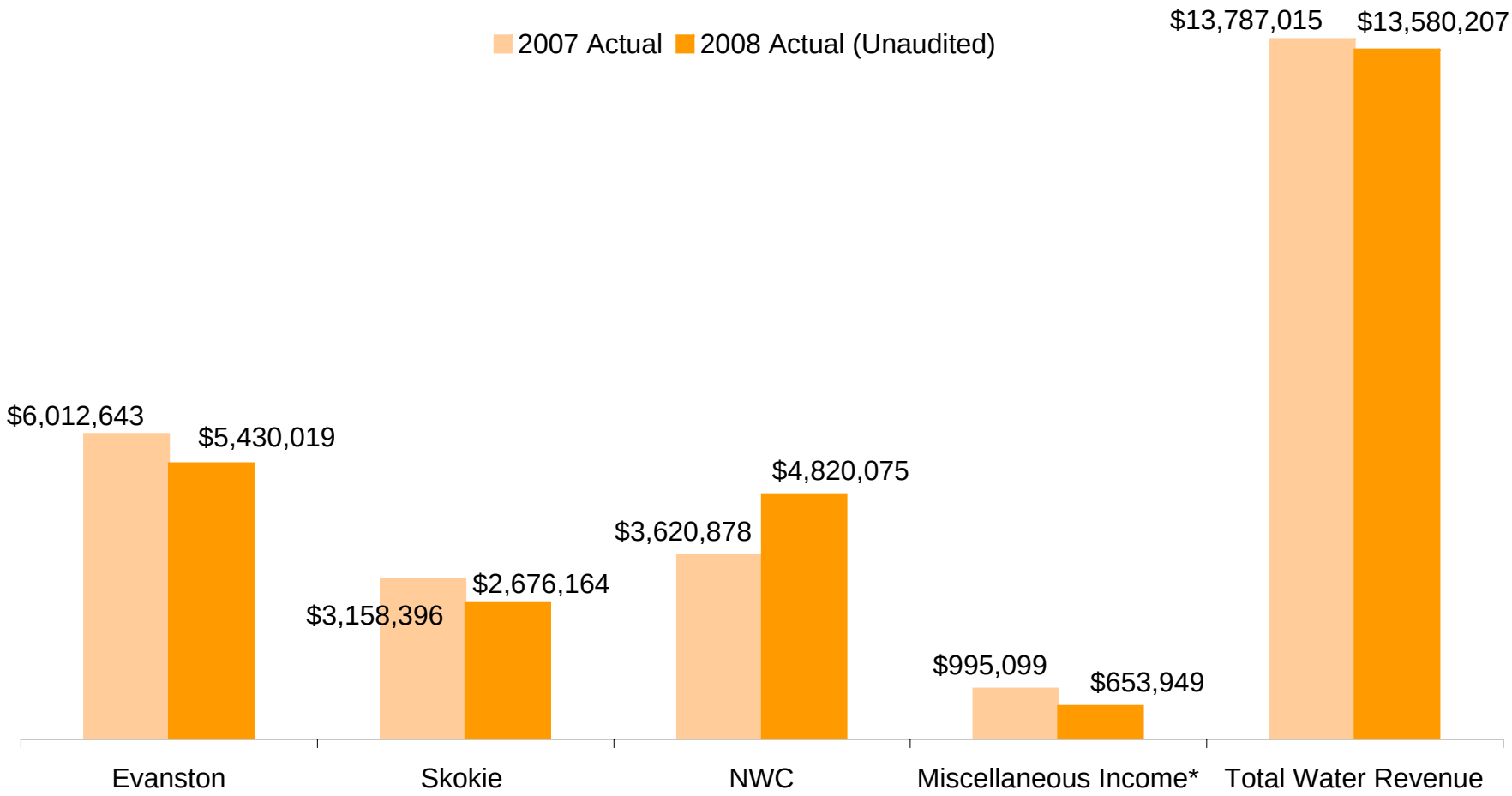
2007 Pumpage to Distribution
(million gallons)



2007 Total Pumpage: 15,704,746,000 Gallons

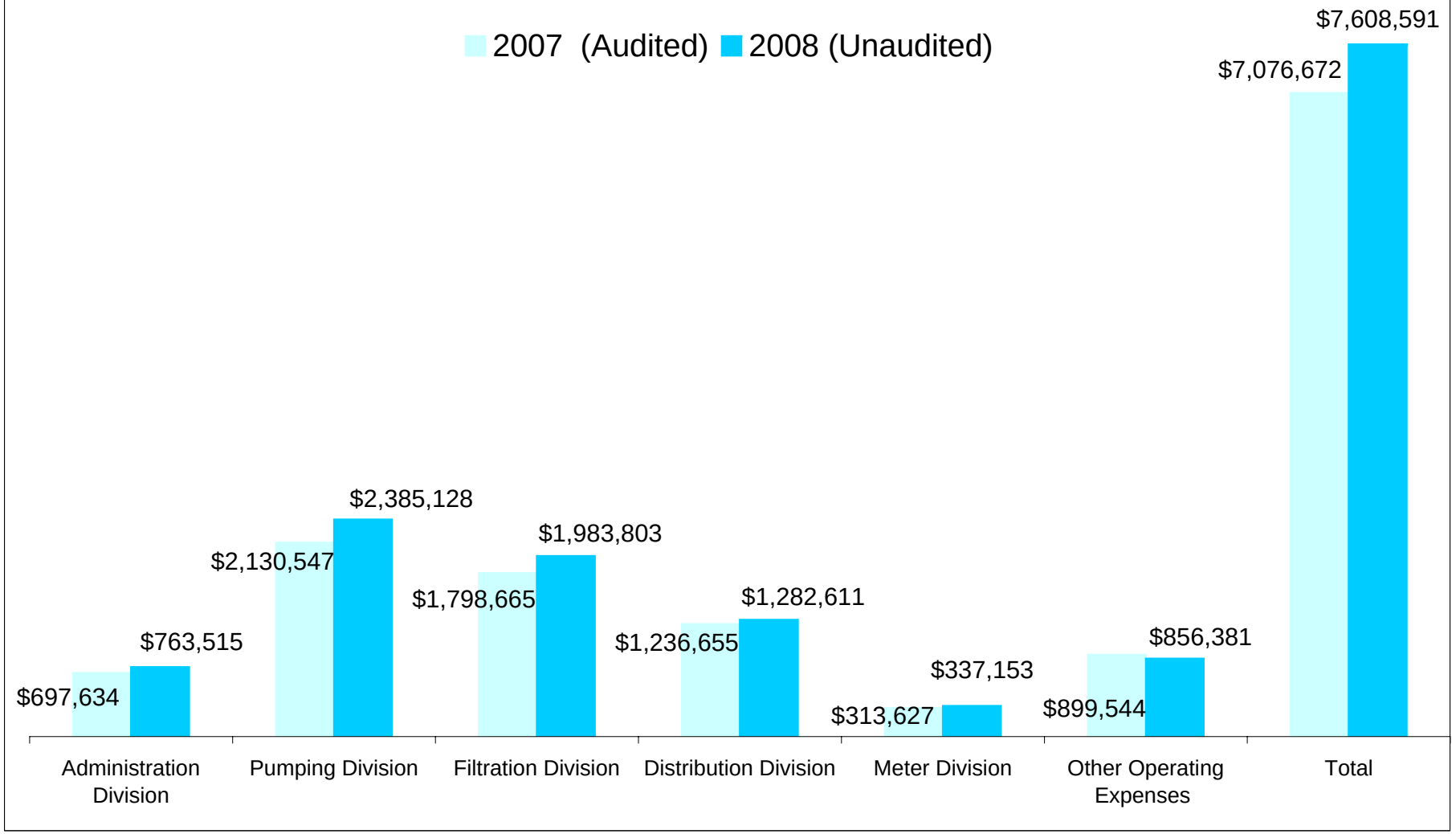
Water Revenues

*Miscellaneous income includes property rental, interest income fees, and merchandise sales



Water Operating and Maintenance Expenditures

Financial numbers depicted herein are based on actual expenditures and do not include audit adjustments such as depreciation and inventory.



Employee Profile and Safety

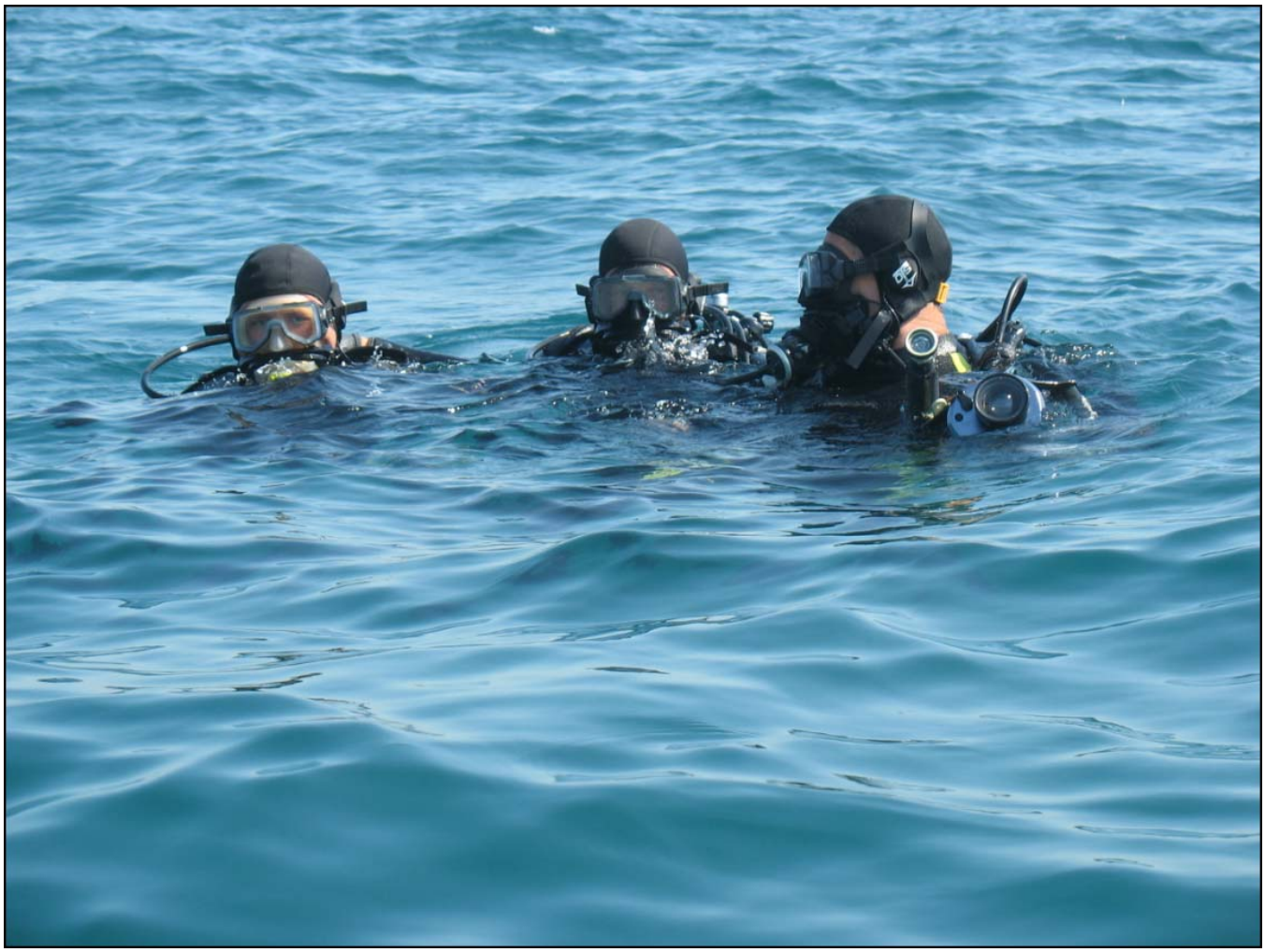
General Statistics

Section	Number of Employees
Administration	4
Pumping	11
Filtration	14
Distribution	9
Sewer	12
Meter	5
Total	**55**

Section	Number of AFMD Start 3/1/2008	Number of Injuries	Highest Consecutive AFMD	Number of AFMD Finish 2/28/2009
Pumping	1,645	3	2,397 - 6/12/2008	1,691
Filtration	1,953	1	3,078 - 2/28/2009	3,078
Distribution	1,350	1	1,673 - 2/28/2009	1,673
Sewer	84	1	1,969 - 2/16/2009	52
Meter	4,051	0	5,038 - 2/28/2009	5,038

*AFMD = Accident Free Man Days

Pumping Section



Our certified in-house dive team annually inspects, cleans and makes necessary repairs to the intakes.

2008/09 AVERAGE DAILY PUMPAGE REPORT (MGD)*

Pumping

Month	Lake Water Pumpage	Wash Water Recycled	Total Raw Water Pumpage	Finished Water Pumpage	Plant Use	Pumpage To			
						Distribution	Evanston	Skokie	N.W.C.
Mar-08	37.001	0.306	37.306	36.570	0.127	36.443	7.212	7.560	21.672
Apr-08	38.074	0.375	38.450	37.080	0.176	36.904	7.430	7.465	22.009
May-08	41.354	0.386	41.739	40.720	0.189	40.530	8.237	7.992	24.302
Jun-08	44.077	0.443	44.520	43.461	0.215	43.246	8.887	8.753	25.606
Jul-08	47.396	0.682	48.078	46.640	0.217	46.423	9.683	9.638	27.563
Aug-08	49.416	0.554	49.970	48.821	0.237	48.584	10.551	10.087	27.946
Sep-08	42.245	0.369	42.614	41.340	0.212	41.128	8.915	8.527	23.686
Oct-08	38.028	0.337	38.366	37.018	0.236	36.782	8.324	7.321	21.137
Nov-08	36.154	0.313	36.467	35.799	0.197	35.602	7.460	7.373	20.769
Dec-08	36.601	0.334	36.935	36.727	0.135	36.592	7.946	7.107	21.539
Jan-09	39.090	0.142	39.232	39.223	0.134	39.089	7.832	8.269	22.987
Feb-09	39.307	0.165	39.471	39.508	0.144	39.363	9.124	7.163	23.076
ANNUAL AVERAGI	**40.747**	**0.369**	**41.115**	**40.257**	**0.185**	**40.072**	**8.464**	**8.113**	**23.533**

***Million Gallons Per Day**

2008/09 MONTHLY PUMPAGE (Million Gallons)

Pumping

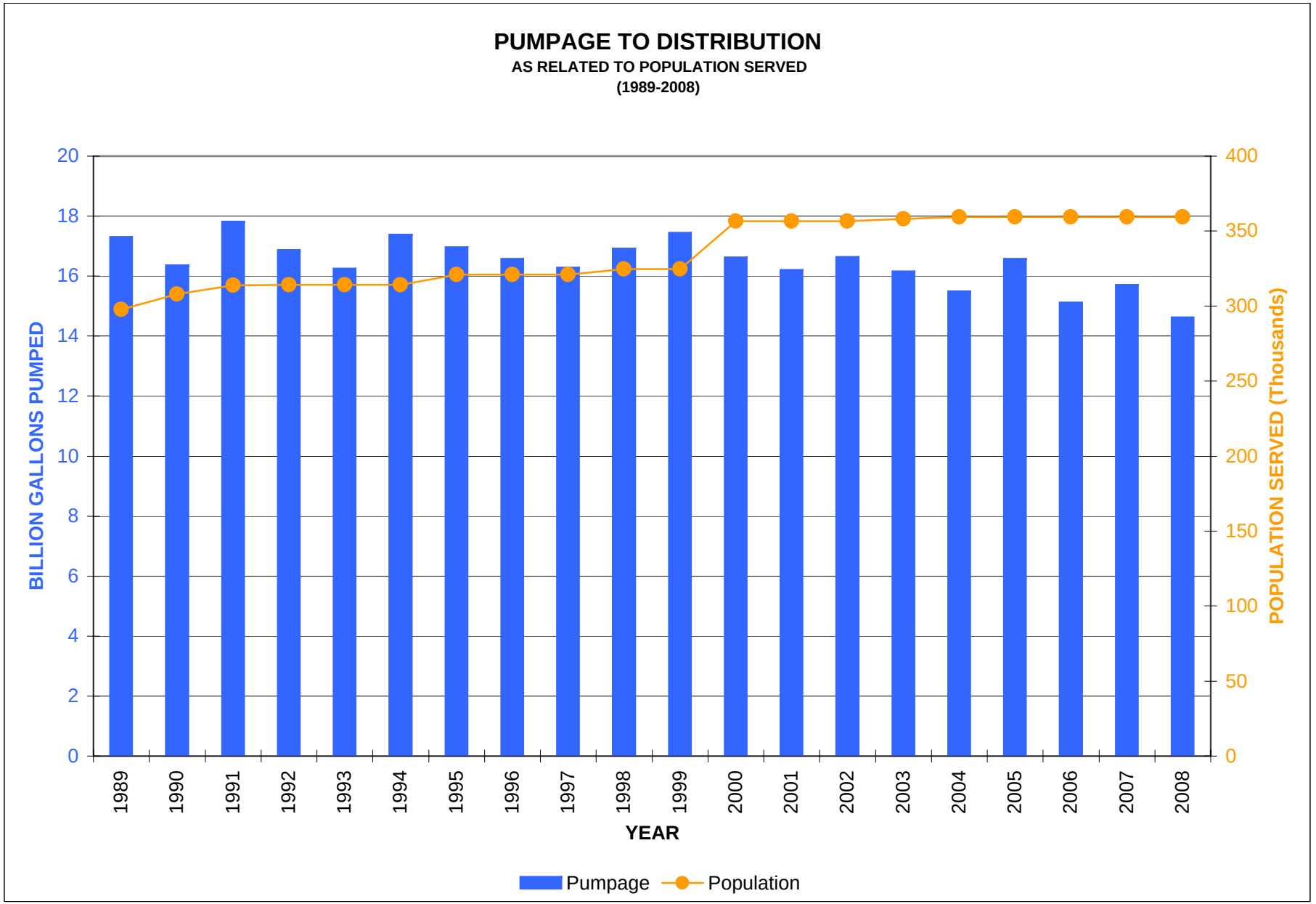
Month	Lake Water Pumpage	Wash Water Recycled	Total Raw Water Pumpage	Finished Water Pumpage	Plant Use	Pumpage To			
						Distribution	Evanston	Skokie	N.W.C.
Mar-08	1,147.019	9.482	1,156.501	1,133.678	3.943	1,129.735	223.561	234.355	671.819
Apr-08	1,142.222	11.264	1,153.486	1,112.391	5.286	1,107.105	222.890	223.959	660.256
May-08	1,281.967	11.951	1,293.918	1,262.308	5.867	1,256.441	255.335	247.755	753.351
Jun-08	1,322.311	13.288	1,335.599	1,303.844	6.451	1,297.393	266.621	262.578	768.194
Jul-08	1,469.273	21.153	1,490.426	1,445.831	6.715	1,439.116	300.162	298.788	854.467
Aug-08	1,531.891	17.169	1,549.060	1,513.449	7.338	1,506.111	327.093	312.688	866.330
Sep-08	1,267.351	11.083	1,278.434	1,240.202	6.368	1,233.834	267.445	255.820	710.569
Oct-08	1,178.883	10.457	1,189.340	1,147.552	7.318	1,140.234	258.032	226.964	655.238
Nov-08	1,084.628	9.380	1,094.008	1,073.968	5.921	1,068.047	223.797	221.183	623.067
Dec-08	1,134.633	10.362	1,144.995	1,138.541	4.178	1,134.363	246.331	220.324	667.708
Jan-09	1,211.791	4.389	1,216.180	1,215.901	4.153	1,211.748	242.794	256.351	712.603
Feb-09	1,100.583	4.617	1,105.200	1,106.212	4.043	1,102.169	255.475	200.576	646.118
Annual Total	**14,872.552**	**134.595**	**15,007.147**	**14,693.877**	**67.581**	**14,626.296**	**3,089.536**	**2,961.341**	**8,589.720**

2008/09 YEARLY PUMPAGE REPORT (Million Gallons)

Pumping

Month	Lake Water Pumpage	Wash Water Recycled	Total Raw Water Pumpage	Finished Water Pumpage	Plant Use	Pumpage To			
						Distribution	Evanston	Skokie	N.W.C.
2008	14,872.552	134.595	15,007.147	14,693.877	67.581	14,626.296	3,089.536	2,961.341	8,589.720
2007	15,905.381	192.088	16,097.469	15,771.451	66.705	15,704.746	3,140.717	3,564.781	8,999.248
2006	15,332.651	160.528	15,493.179	15,174.631	58.810	15,115.821	2,891.989	3,329.305	8,894.627
2005	16,823.362	184.937	17,008.299	16,634.025	61.313	16,572.712	3,303.763	3,544.779	9,724.170
2004	15,760.615	126.348	15,886.963	15,550.728	56.788	15,493.940	3,200.427	3,365.418	8,928.095
2003	16,387.185	152.037	16.539.222	16,204.109	51.259	16,152.850	3,448.090	3,624.902	9,079.858
2002	16,868.610	162.518	17,031.128	16,685.830	46.900	16,638.930	3,428.938	3,761.222	9,448.570
2001	16,490.952	156.279	16,647.231	16,252.079	45.342	16,206.737	3,443.723	3,643.839	9,119.175
2000	16,907.373	131.332	17,038.705	16,675.416	47.524	16,627.892	3,441.921	3,793.561	9,392.410
1999	17,559.875	188.211	17,748.086	17,501.266	62.212	17,439.054	3,717.297	3,891.257	9,830.500

* Figures based on fiscal year - March 1 - February 28


PUMPAGE TO DISTRIBUTION
AS RELATED TO POPULATION SERVED
(1989-2008)
BILLION GALLONS PUMPED
POPULATION SERVED (Thousands)
0
2
4
6
8
10
12
14
16
18
20
0
50
100
150
200
250
300
350
400
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
YEAR
Pumpage
Population

AVERAGE DAILY PER CAPITA CONSUMPTION

Pumping

Average Daily Per Capita Consumption

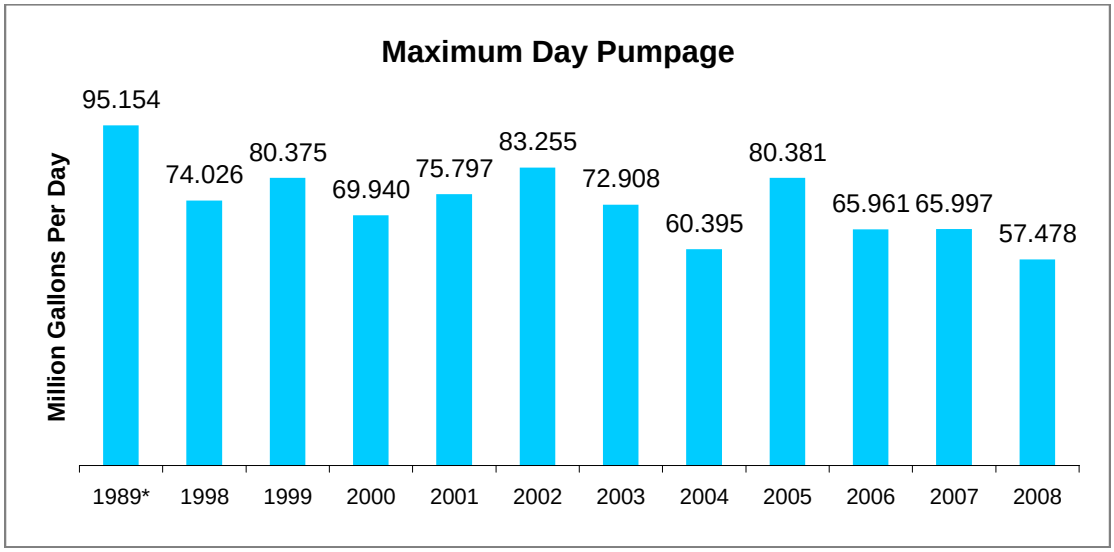
	Evanston		Skokie		NWC	
Year	Population	Gallons Per Capita Use	Population	Gallons Per Capita Use	Population	Gallons Per Capita Use
2008	74,360	114	63,333	128	221,364	106
2007	74,360	115	63,333	153	221,364	111
2006	74,360	106	63,633	143	221,364	110
2005	74,360	122	63,633	153	221,364	120
2004	74,360	118	63,633	145	221,364	111
2003	73,421	128	63,126	157	221,643	112

Combined Total

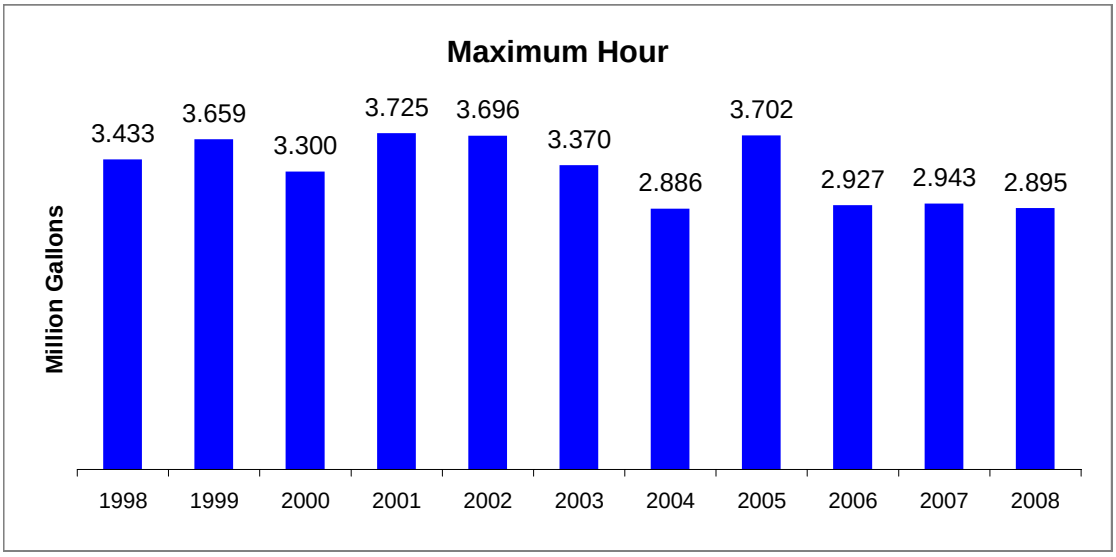
Year	Population	Gallons Per Capita Use
2008	359,357	112
2007	359,357	119
2006	359,357	115
2005	359,357	126
2004	359,357	123
2003	358,190	123

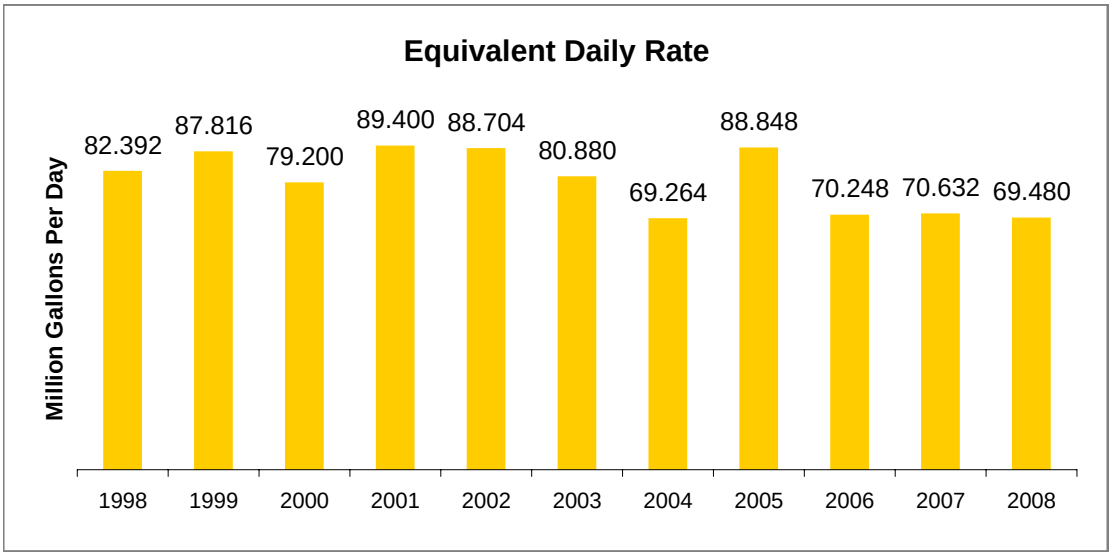
MAXIMUM PUMPAGE TO DISTRIBUTION

Pumping



*Historical Maximum Day Pumpage: July 7, 1989 @ 95.154 MG





MAXIMUM PUMPAGE AND DEMAND DAYS IN MGD

Pumping

	Evanston Water Plant		City of Evanston		Village of Skokie		Northwest Water Comm.	
Calendar Year	Max Pumpage to Distribution	Max Day Demand	Max Day Pumpage	Max Day Demand	Max Day Pumpage	Max Day Demand	Max Day Pumpage	Max Day Demand
2008	July 30th 57.478	July 30th 56.649	July 30th 11.788	July 30th 11.667	July 30th 11.495	July 30th 11.327	July 29th 33.670	July 29th 33.178
2007	August 2nd 65.997	August 2nd 65.034	August 2nd 17.774	August 2nd 15.612	June 11th 16.493	June 11th 16.723	August 2nd 35.946	August 2nd 37.136
2006	August 1st 65.961	August 1st 66.486	July 29th 14.127	August 1st 13.115	August 1st 15.236	August 1st 15.236	August 1st 37.221	August 1st 38.221
2005	June 24th 80.381	June 24th 80.457	July 17th 16.926	July 17th 18.176	June 24th 17.268	June 24th 17.075	June 24th 47.233	June 25th 50.309
2004	August 2nd 60.395	August 2nd 60.981	August 3rd 14.497	August 2nd 14.801	July 2nd 11.895	July 2nd 11.297	July 30th 35.471	August 2nd 36.15
2003	July 2nd 72.908	July 2nd 73.165	July 2nd 16.650	July 2nd 16.368	July 2nd 16.269	July 2nd 16.814	July 3rd 40.619	July 2nd 41.557
2002	July 3rd 83.255	July 3rd 75.499	July 2nd 17.136	July 2nd 16.602	July 3rd 16.741	July 3rd 16.887	July 3rd 49.709	July 3rd 47.559
2001	July 16th 75.797	July 16th 75.499	July 21st 15.079	July 21st 14.492	July 16th 16.204	July 16th 16.493	July 16th 45.966	July 16th 45.946
2000	August 15th 69.94	August 15th 69.121	July 28th 14.319	July 28th 13.917	Sept. 1st 16.575	Sept. 1st 16.954	August 15th 39.274	August 15th 37.364
1999	July 30th 80.375	July 30th 80.744	July 30th 18.328	July 30th 18.525	July 30th 18.598	July 30th 22.776	July 31st 43.991	July 31st 46.791
1998	June 25th 74.026	June 25th 73.401	June 25th 15.769	June 25th 15.696	June 25th 16.951	June 25th 16.399	July 28th 43.169	July 28th 41.669
1997	July 16th 82.683	July 16th 81.627	July 16th 17.663	July 16th 17.056	July 16th 19.361	July 16th 18.912	July 12th 48.804	July 16th 44.171
1996	July 8th 76.446	July 8th 76.63	July 24th 15.266	September 4th 14.755	July 6th 17.043	July 8th 16.954	July 14th 46.357	July 8th 45.123
1995	July 14th 81.49	July 14th 81.113	July 14th 18.066	July 14th 17.976	July 14th 21.461	July 14th 21.174	June 20th 43.583	June 24th 43.952
1994	June 18th 82.79	June 18th 81.952	June 6th 19.101	June 6th 19.335	June 18th 20.216	June 18th 19.93	June 17th 45.257	June 16th 46.941

ENERGY COSTS

Pumping

Electric Power - Kilowatt Hours (KWH) Used

Year	Total KWH	For High Lift Pumping	For Low Lift Pumping	For Other Plant Use (Motors & Lights)	Total Cost	Average Cost $/KWH
2008	13,721,463	7,947,533	2,997,940	2,775,990	$934,832	$0.068129
2007	12,390,377	8,196,766	2,513,469	1,683,051	$955,552	$0.077120
2006	11,737,729	7,789,013	2,325,846	1,622,870	$797,307	$0.067927
2005	13,047,056	8,556,536	2,773,774	1,716,746	$851,054	$0.065230
2004	12,279,661	8,008,895	2,651,074	1,619,692	$794,401	$0.064692

Natural Gas Used for Pumping and Emergency Generator

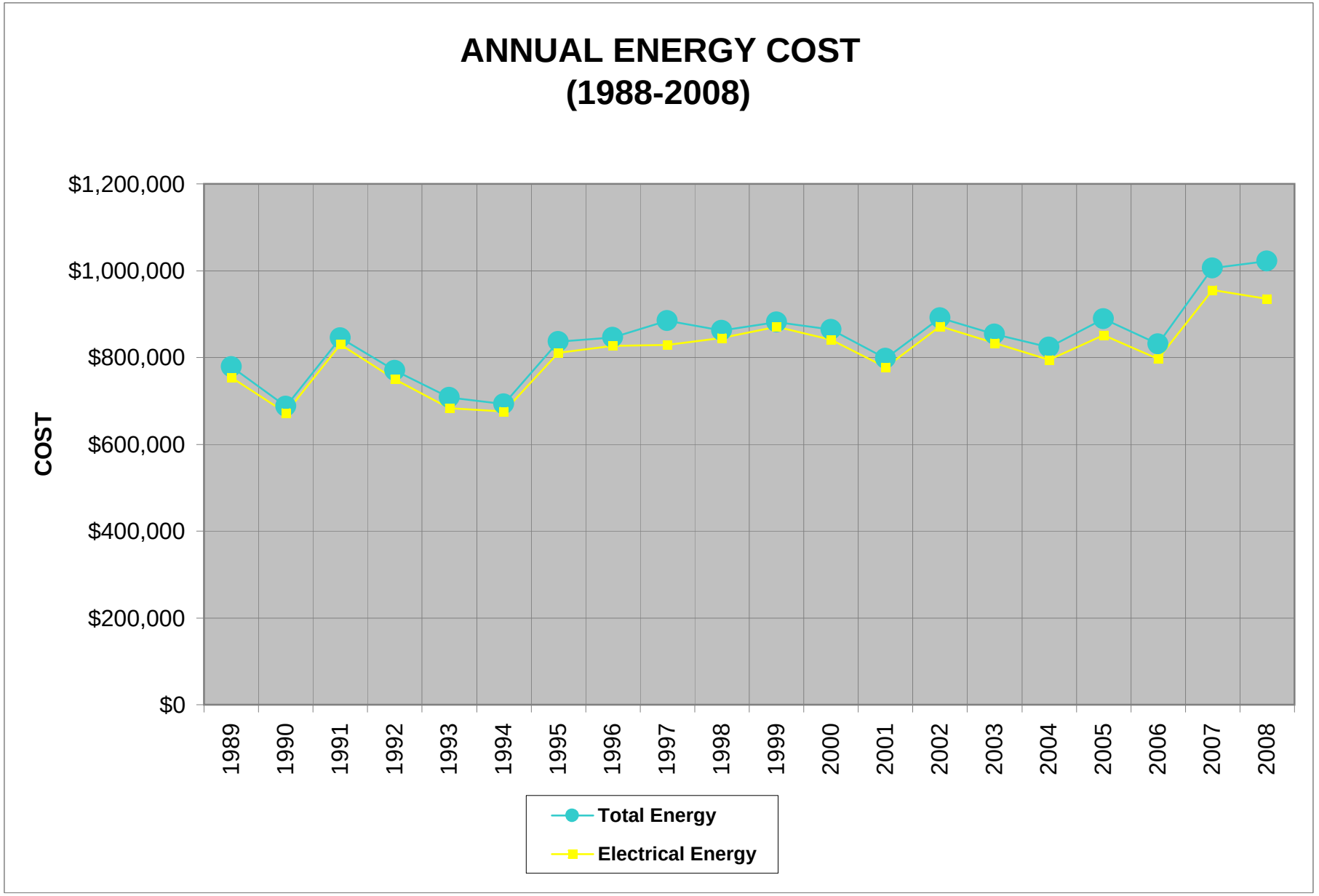
Year	Therms	Total Cost	Average Cost/Therm
2008	41,795	$87,324	$2.09
2007	43,324	$50,284	$1.16
2006	27,938	$33,381	$1.19
2005	28,646	$37,877	$1.32
2004	34,039	$28,680	$0.84

Total Energy Cost (Electric & Gas)

Year	High Lift	Low Lift	Plant Use	Total
2008	$592,037	$223,326	$206,792	$1,022,156
2007	$665,404	$204,040	$136,628	$1,006,072
2006	$551,234	$164,602	$114,852	$830,688
2005	$582,980	$188,985	$116,967	$888,931
2004	$536,820	$177,696	$108,565	$823,081

Total Energy Cost Per Million Gallons of Finished Water Pumped

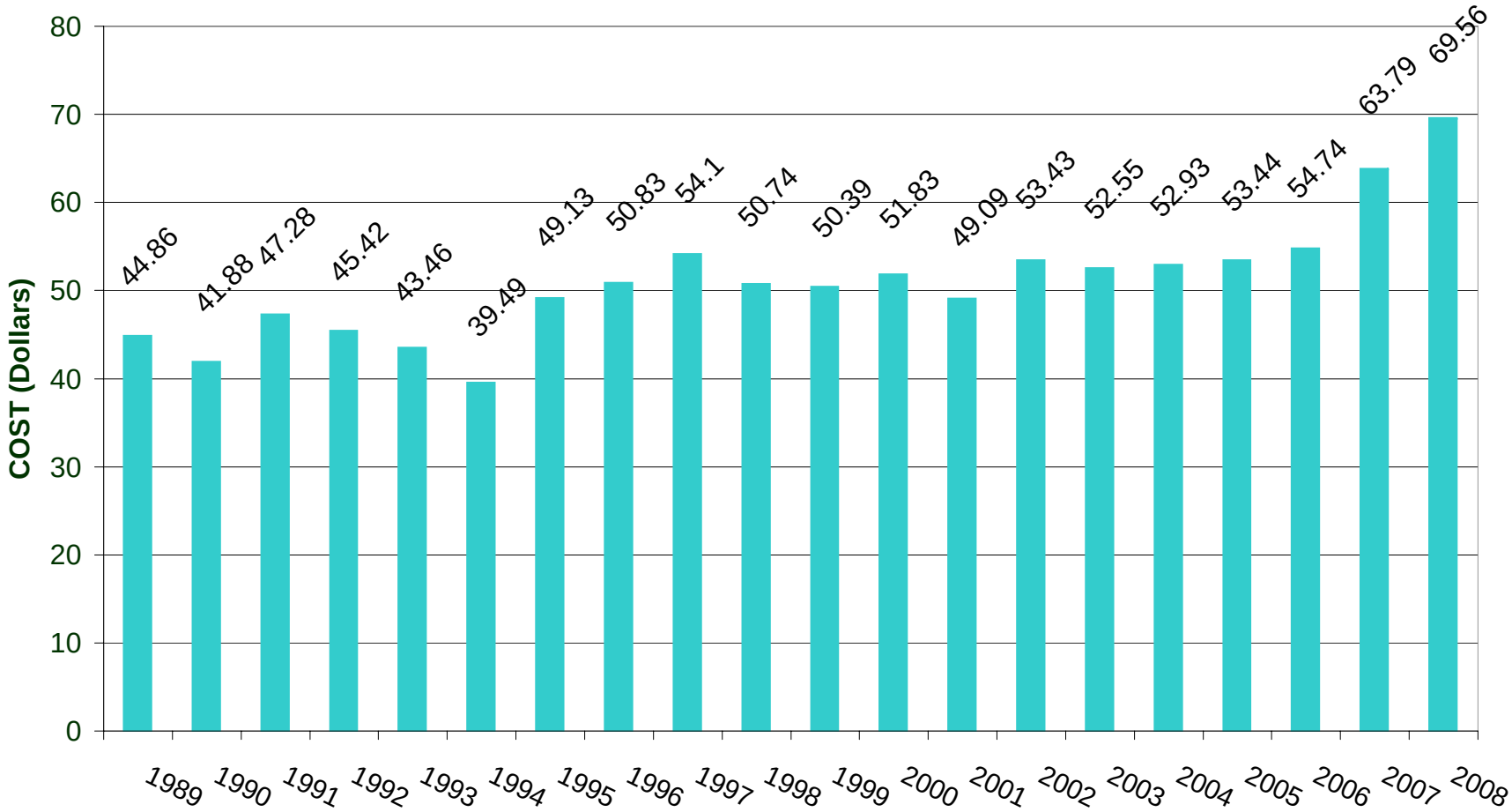
2008	$69.56
2007	$63.79
2006	$54.74
2005	$53.44
2004	$52.93


ANNUAL ENERGY COST
(1988-2008)
COST
$1,200,000
$1,000,000
$800,000
$600,000
$400,000
$200,000
$0
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
Total Energy
Electrical Energy

ANNUAL TOTAL ENERGY COST

PER M.G. FINISHED WATER PUMPED

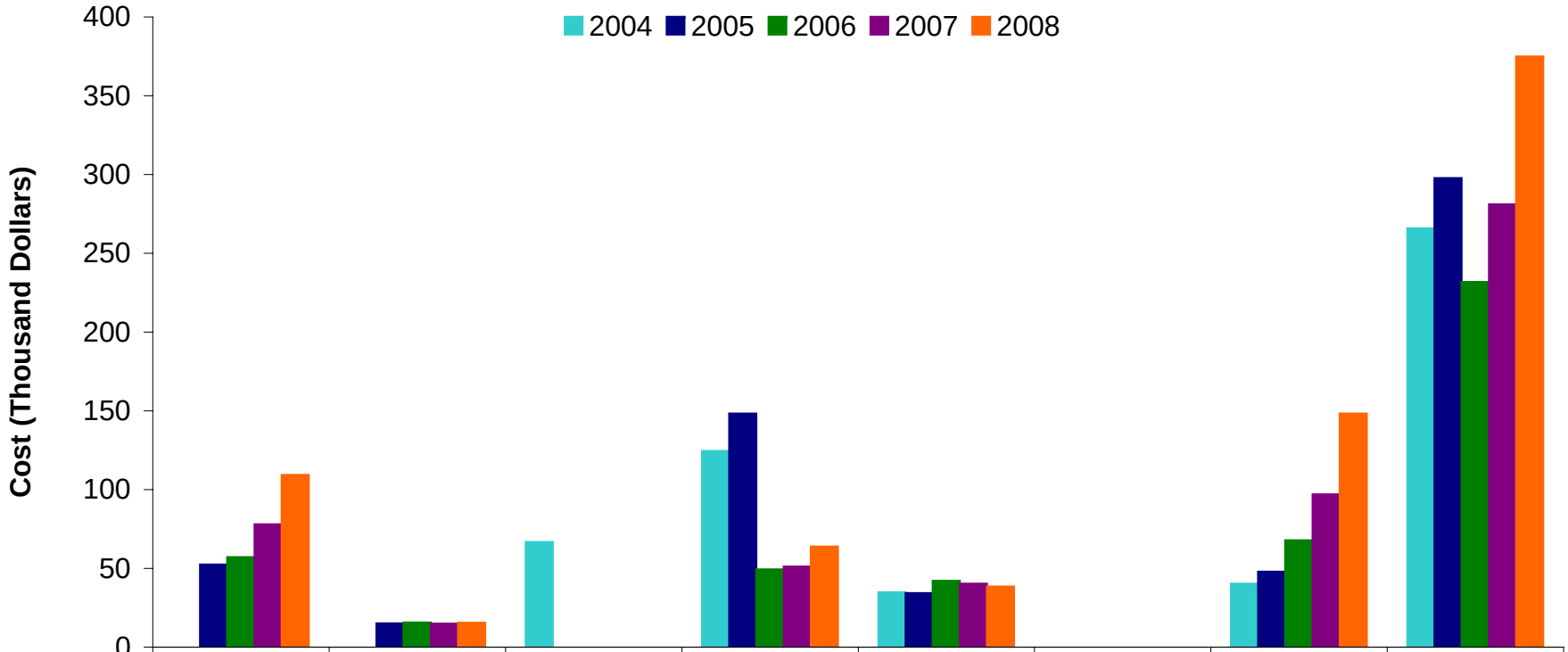
(1989 - 2008)



Filtration Section

A Filter Section operator is on duty at all times to monitor the operation of treatment equipment and perform laboratory tests.

ANNUAL CHEMICAL COST (2004-2008)



	Alum	Polymer	Alumer	Phosphate	Chlorine	Carbon	Acid	Total Cost
2004	0	0	66.58161	124.3889	34.71589	0	40.13168	265.81808
2005	52.34941	15.10447	0	148.13926	34.32183	0	47.81297	297.72794
2006	56.98627	15.65215	0	49.3391	41.98367	0	67.80131	231.76250
2007	77.88381	14.9146	0	51.0948	40.20074	0	96.93885	281.03280
2008	109.18630	15.44933	0	63.69111	38.42265	0	148.09825	374.84764

CHEMICAL TREATMENT

Filtration

	Cost Per Unit	Pounds Per Year	Avg. Daily	Max. Day	Min. Day	Total Cost	Cost Per M.G. Treated
Aluminum Sulfate							
2008	$261.28 / dry ton	835,780	56.3	92.4	39.2	$109,186.30	$7.27
2007	$187.91 / dry ton	828,948	52.0	90.0	16.1	$77,883.81	$4.84
2006	$137.91 / dry ton	826,427	53.8	95.2	38.1	$56,986.27	$3.68
2005	$117.91 / dry ton	879,822	52.2	92.3	27.5	$52,349.41	$3.08
2004	$122.00 / dry ton	0	0	0	0.0	$0.00	$0.00
Alumer*							
2004	$122.00/ dry ton	476,768	30.1	55.6	18.1	$66,581.61	$4.19
Chlorine							
2008	$420.00 / ton	182,965	138.2	16.5	8.2	$38,422.65	$2.56
2007	$423.50 / ton	189,850	11.6	16.8	8.5	$40,200.74	$2.50
2006	$423.50 / ton	198,270	12.7	19.6	13.8	$41,983.67	$2.71
2005	$412.00 / ton	223,595	13.0	16.9	9.6	$34,321.83	$2.02
2004	$304.00 / ton	228,394	14.2	20.2	10	$34,715.89	$2.18
Activated Carbon**							
2008	0	0	0	0	0	$0.00	$0.00
2007	0	0	0	0	0	$0.00	$0.00
2006	0	0	0	0	0	$0.00	$0.00
2005	0	0	0	0	0	$0.00	$0.00
2004	0	0	0	0	0	$0.00	$0.00
Hydrofluosilic Acid (Fluoride)							
2008	$507.00 / ton	584,214	38.9	64.7	27.6	$148,098.25	$9.86
2007	$300.00 / ton	646,259	40.2	45.7	31.4	$96,938.85	$6.02
2006	$212.00 / ton	639,635	41.3	44.5	38.6	$67,801.31	$4.38
2005	$139.00 / ton	664,069	39.1	42.2	32.0	$47,812.97	$2.81
2004	$137.00 / ton	585,864	36.5	41.8	0.0	$40,131.68	$2.53
Polymer							
2008	$612.00 / ton	50,488	3.4	5.7	2.2	$15,449.33	$1.03
2007	$596.00 / ton	50,049	3.1	5.4	2.2	$14,914.60	$0.93
2006	$596.00 / ton	52,524	3.4	6.3	2.4	$15,652.15	$1.01
2005	$500.00 / ton	56,998	3.3	6.7	0.0	$15,104.47	$0.89
2004	0	0	0.0	0.0	0.0	$0.00	$0.00
Post Treatment Phosphate							
2008	$3.58 / gallon	204,336	13.9	14.8	12.4	$63,691.11	$4.24
2007	$2.70 / gallon	217,626	13.8	15	12.2	$51,094.80	$3.17
2006	$2.70 / gallon	210,148	13.8	16	11.1	$49,339.10	$3.19
2005	$5.10 / gallon	222,693	13.4	15.1	11.2	$148,139.26	$8.70
2004	$7.10 / gallon	201,462	13.0	15.6	10.8	$124,380.89	$7.83

*Alumer is a combination of Aluminum Sulfate and Polymer - tested during 2004.

**Carbon is fed for control of taste and odor. In the last five years we have not experienced problems with taste and odor, therefore we have not had to feed carbon.

FILTER OPERATIONS

Filtration

Filter Run

Year	Average Hours / Run / Filter		Total Hours / Year	
	3 MGD	6 MGD	3 MGD	6 MGD
2008	266.7	228.5	97,050	100,601
2007	234.9	200.7	91,395	104,530
2006	245.4	226.9	105,043	105,059
2005	224.7	201.7	104,595	105,031
2004	266.7	249.5	105,965	105,110
2003	231.4	191.4	104,419	105,419
2002	232.7	183.0	104,344	105,088
2001	231.2	169.2	104,270	94,246
2000	254.3	165.9	105,108	90,300
1999	220.3	158.5	100,344	105,906
1998	193.6	142.8	76,104	104,879

Filter Washes

Year	Total / Year		Maximum Number in One Day	
	3 MGD	6 MGD	3 MGD	6 MGD
2008	369	460	6	6
2007	425	569	6	7
2006	453	503	5	6
2005	522	614	6	8
2004	404	419	6	7
2003	687	620	7	8
2002	501	697	7	8
2001	468	594	7	8
2000	413	573	6	5
1999	494	733	7	9
1998	420	785	7	10

Wash Water

Year	Total M.G. Used	Avg. Daily %	Max. Daily
2008	145.593	0.95	4.15
2007	192.135	1.15	4.86
2006	160.264	1.01	3.25
2005	184.088	1.03	3.45
2004	127.261	0.79	4.22
2003	151.751	0.88	2.93
2002	161.887	0.90	2.98
2001	158.120	0.92	4.83
2000	130.513	0.75	2.48
1999	165.339	0.92	4.45
1998	167.802	0.93	3.37

BACTERIOLOGICAL WATER ANALYSIS (Membrane Filter Method)

Report of Water Quality Control Laboratory

The E.P.A. Standard is based on the presence or absence of coliform in a water sample. The E.P.A. requires that no more than 5.0% of the required monthly samples from the distribution system may be found positive for the presence of coliform. Evanston is required to collect 80 samples per month.

Distribution System		Positive for	Positive for
Year	Number Sampled	Total Coliform	Fecal Coliform
2008	992	2	0
2007	969	1	0
2006	978	0	0

Additional Bacteriological Samples analyzed for the Village of Skokie

Year	Number Sampled
2008	927
2007	933
2006	972

Raw Water		*Colony Count*	
Year	Number Sampled	Average	Maximum
2008	730 (Twice Daily)	46	>200
2007	732 (Twice Daily)	44	>200
2006	730 (Twice Daily)	38	>200
2005	730 (Twice Daily)	41	>200
2004	730 (Twice Daily)	10	101

After Primary Treatment		*Colony Count*	
Year	Number Sampled	Average	Maximum
2008	732 (Twice Daily)	0	0
2007	732 (Twice Daily)	0	0
2006	730 (Twice Daily)	0	0
2005	730 (Twice Daily)	0	0
2004	730 (Twice Daily)	0	0

Plant Tap A.M. and P.M. Samples		*Colony Count*	
Year	Number Sampled	Average	Maximum
2008	1460 (4 times Daily)	0	0
2007	1464 (4 times Daily)	0	0
2006	1458 (4 times Daily)	0	0
2005	1460 (4 times Daily)	0	0
2004	1460 (4 times Daily)	0	0

Taste & Odor, Turbidity, Temperature and Fluoride

Report of Water Quality Control Laboratory

Taste & Odor

Year	Number of Tests
2008	2190
2007	2196
2006	2190
2005	2172
2004	2190

Turbidity (Expressed in Nephelometric Turbidity Units (NTUs))

E.P.A. Standard <0.3 NTUs in 95% of Samples and Never >1 NTU in any single sample of finished water.

	Raw Water			After Primary Treatment			Plant Tap		
Year	Avg.	Max.	Min.	Avg.	Max.	Min.	Avg.	Max.	Min.
2008	8.27	65.40	0.41	0.68	1.62	0.21	0.08	0.14	0.06
2007	6.90	100.00	0.53	0.8	2.71	0.25	0.10	0.46	0.06
2006	6.99	76.30	0.25	0.88	2.71	0.26	0.10	0.31	0.06
2005	7.01	61.50	0.38	0.95	3.00	0.29	0.05	0.25	0.01
2004	8.25	59.70	0.46	1.09	3.82	0.03	0.03	0.55	0.01

Temperature

Year	Average	Maximum	Minimum
2008	11.2°c/52.2°F	24.1°c/75.4°F	1.0°c/33.8°F
2007	10.8°c/51.5°F	25.0°c/77.0°F	1.0°c/33.8°F
2006	11.4°c/52.5°F	26.0°c/78.8°F	1.0°c/33.8°F
2005	10.9°c/51.6°F	27.0°c/80.6°F	1.0°c/33.8°F
2004	11.2°c/52.2°F	22.0°c/71.6°F	1.0°c/33.8°F

Fluoride Content (mg/l or parts per million)

E.P.A. Standard 0.9 to 1.2 mg/l

	Plant Tap			Distribution		
Year	Avg.	Max.	Min.	Avg.	Max.	Min.
2008	1.01	1.20	0.90	1.03	1.19	0.92
2007	1.02	1.14	0.92	1.03	1.14	0.91
2006	0.96	1.08	0.90	0.98	1.11	0.90
2005	0.96	1.12	0.90	0.97	1.12	0.90
2004	1.03	1.18	0.91	1.01	1.25	0.90

CHLORINE RESIDUAL (in parts per million)

Report of Water Quality Control Laboratory

Filter Influent

	Free Residual			Total Residual		
Year	Avg.	Max.	Min.	Avg.	Max.	Min.
2008	0.65	0.90	0.41	0.82	1.12	0.36
2007	0.70	1.03	0.48	1.13	1.23	0.62
2006	0.80	1.09	0.48	0.97	1.31	0.67
2005	0.88	1.13	0.64	1.04	1.31	0.10
2004	0.92	1.37	0.61	1.09	1.59	0.75

Filter Effluent

	Free Residual			Total Residual		
Year	Avg.	Max.	Min.	Avg.	Max.	Min.
2008	0.54	0.76	0.27	0.70	0.92	0.43
2007	0.62	0.91	0.41	0.79	1.09	0.55
2006	0.70	1.12	0.40	0.86	1.33	0.50
2005	0.75	0.97	0.53	0.91	1.22	0.70
2004	0.76	1.03	0.47	0.93	1.31	0.61

Plant Tap

	Free Residual			Total Residual		
Year	Avg.	Max.	Min.	Avg.	Max.	Min.
2008	0.68	0.91	0.51	0.84	1.08	0.64
2007	0.66	0.92	0.33	0.83	1.08	0.56
2006	0.72	1.19	0.53	0.86	1.37	0.67
2005	0.74	0.91	0.56	0.90	1.10	0.68
2004	0.89	1.15	0.54	0.96	1.35	0.67

Distribution Tap

	Free Residual			Total Residual		
Year	Avg.	Max.	Min.	Avg.	Max.	Min.
2008	0.44	0.65	0.02	0.61	0.88	0.11
2007	0.45	0.91	0.12	0.63	1.05	0.26
2006	0.49	0.82	0.09	0.67	1.02	0.20
2005	0.52	1.00	0.11	0.69	1.21	0.23
2004	0.54	1.09	0.04	0.70	1.20	0.20

pH, ALKALINITY AND HARDNESS

Report of Water Quality Control Laboratory

pH (Hydrogen Ion Concentration)

Recommended E.P.A. Standard 6.5 - 8.5 average / year

		Raw Water			Plant Tap		
Year	Number of Tests	Avg.	Max.	Min.	Avg.	Max.	Min.
2008	730	8.20	8.50	7.70	7.60	7.80	7.10
2007	732	8.30	8.70	7.90	7.60	7.80	7.40
2006	730	8.30	8.60	8.00	7.60	7.70	7.30
2005	730	8.20	8.60	7.90	7.60	7.80	7.30
2004	730	7.90	8.10	7.60	7.60	7.90	7.30

Alkalinity (parts per million)

		Raw Water			Plant Tap		
Year	Number of Tests	Avg.	Max.	Min.	Avg.	Max.	Min.
2008	730	106	134	11	98	130	86
2007	732	108	121	90	100	114	84
2006	730	109	141	98	101	138	90
2005	730	107	118	90	100	113	85
2004	730	106	118	93	102	120	89

Hardness (parts per million as $CaCo_3$)

		Raw Water			Finished Water		
Year	Number of Tests	Avg.	Max.	Min.	Avg.	Max.	Min.
2008	730	132	144	123	131	150	120
2007	732	133	148	104	132	155	120
2006	730	134	150	106	132	152	102
2005	730	131	152	120	129	154	116
2004	730	131	152	119	129	160	120

EVANSTON 2008 WATER QUALITY DATA

Report of Water Quality Control Laboratory

Detected Substances

Substance	MCLG	Highest Allowed (MCL)	Evanston Result	Evanston Minimum	Evanston Maximum	Source of Contamination
Turbidity (NTU)	NA	TT=Monitored by % Exceeding 0.3 NTU and max allowed is 1 NTU	100% of samples meet 0.3 NTU	0.06	0.14	Soil runoff
Fluoride (ppm)	4	4	1.0	0.90	1.20	Fluoride is added to promote dental health.
Sodium (ppm)	NA	NA	8	7.7	7.7	Runoff and natural erosion
Lead (ppb)	0	Action Level = 15	<5	<5	9.4	Corrosion of household plumbing
Copper (ppm)	1.3	Action Level =1.3	0.1	<0.1	0.36	Corrosion of household plumbing
Total Coliform Bacteria	0	5% of Monthly Samples are Positive	1.2	NA	2	Naturally present in the environment

Disinfection By-Products

Substance	MCLG	Highest Allowed (MCL)	Evanston Result	Evanston Minimum	Evanston Maximum	Source of Contamination
Total Trihalomethanes (ppb)	NA	80	28	15.9	39.7	By-product of drinking water chlorination
Total Haloacetic Acids (ppb)	NA	60	11.0	9.0	14.3	By-product of drinking water chlorination
Chlorine	4 MRLDG	4 MRDL	0.4	0.3898	0.4786	Water additive used to control microbes

EVANSTON 2008 WATER QUALITY DATA
NON-DETECTED CONTAMINANTS
Report of Water Quality Control Laboratory

Inorganic Contaminants	MCLG	MCL	UL MRL	Level Found
Arsenic (ppb)	0	10	2	nd
Barium (ppb)	2	2	2000	nd
Cadmium (ppb)	5	5	5	nd
Chromium (ppb)	100	100	100	nd
Cyanide (ppb)	200	200	0.2	nd
Iron (ppb)	n/a	1000	0.3	nd
Manganese (ppb)	n/a	150	50	nd
Mercury (Inorganic) (ppb)	2	2	2	nd
Nickel	n/a	100	100	nd
Selenium (ppb)	50	50	50	nd
Sulfate			250	nd
Antimony (ppb)	6	6	6	nd
Beryllium (ppb)	4	4	4	nd
Thallium (ppb)	0.5	2	2	nd
Zinc (ppb)	n/a	5000	5000	nd
Nitrate as N(NO3)	10	10	5	nd
Nitrite (as Nitrogen) (ppm)	1	1	0.5	nd

Synthetic Organic Contaminants	MCLG	MCL	UL MRL	Level Found
Endrin (ppb)	2	2	0.1	nd
BHC- GAMMA (Lindane)	200	200	0.1	nd
Methoxychlor (ppb)	40	40	0.1	nd
Toxaphene (ppb)	0	3	1	nd
Diquat (ppb)	20	20	2	nd
Dalapon (ppb)	200	200	5	nd
Simazine (ppb)	100	100	9	nd
Di(2-ethylhexyl) adipate (ppb)	400	400	0.6	nd
Oxamyl (Vydate) (ppb)	200	200	2	nd
Simazine (ppb)	4	4	0.35	nd
Di(2-ethylhexyl) phthalate (ppb)	0	6	0.6	nd
Pichloram (ppb)	500	500	1	nd
Dinoseb (ppb)	7	7	1	nd
Hezachlorocyclopentadiene (ppb)	50	50	0.5	nd
Aldicarb Sulfoxide	n/a	n/a	1	nd
Aldicarb Sulfone	n/a	n/a	1	nd
Carbofuran (ppb)	40	40	0.9	nd
Aldicarb	n/a	n/a	1	nd
Atrazine (ppb)	3	3	0.3	nd
Alachlor (Lasso) (ppb)	0	2	0.2	nd
Heptachlor	0	100	0.04	nd
Heptachlor Epoxide (ppt)	0	100	0.02	nd
Dieldrin	n/a	1	0.05	nd
2,4-Dichloro-Phenoxyacetic Acid (**2,4-D**) (ppb)	10	10	1	nd
2,4,5-TP (Silvex) (ppb)	50	50	1	nd
Hexachlorobenzene (ppb)	0	1	0.1	nd
Benzo (A) Pyrene (ppb)	0	200	0.1	nd
Pentalchlorophenol (PCP) (ppb)	0	1	0.4	nd
Aldrin (ppb)	n/a	1	0.05	nd
Polychlorinated Biphenyls (PCB) (ppb)	0	500		nd
DDT Total	n/a	n/a	1	nd
1,2 Dibromo-3-Chloropropane (DBCP)(ppb) same as **Dibromochloropropane**	0	0.2	0.02	nd
Ethylene Dibromide (EDB) (ppb)	0	50	0.01	nd
Chlordane (ppb)	0	2	0.2	nd

EVANSTON 2008 WATER QUALITY DATA
NON-DETECTED CONTAMINANTS
Report of Water Quality Control Laboratory

Volatile Organic Contaminants

(Tested 2008, tested every 3 years next test 2011)	**MCLG**	**MCL**	**UL MRL**	**vel Found**
Methyl Tert-Butyl Ether (MTBE) (ppb)	n/a	n/a	0.5	nd
1,2,4-Trichlorobenzene (ppb)	70	70	0.5	nd
CIS-1,2-Dichloroethylene (ppb)	70	70	0.5	nd
Xylenes (ppm)	10	10	0.5	nd
Dichloromethane (ppb)	0	5	0.5	nd
O-Dichlorobenzene (ppb)	600	600	0.5	nd
P-Dichlorobenzene (ppb)	75	75	0.5	nd
1,1-Dichloroethane (ppb)	7	7	0.5	nd
Trans-1,2-Dichloroethylene (ppb)	100	100	0.5	nd
1,2-Dichloroethane (ppb)	0	5	0.5	nd
1,1,1-TRICHLOROETHANE (ppb)	200	200	0.5	nd
Carbon Tetrachloride (ppb)	0	5	0.5	nd
1,2-Dichloropropane (ppb)	0	5	0.5	nd
Trichloroethylene (ppb)	0	5	0.5	nd
1,1,2-Trichloroethane (ppb)	3	5	0.5	nd
Tetrachloroethylene (ppb)	0	5	0.5	nd
Monochlorobenzene (ppb)same as CHLOROBENZENE	100	100	0.5	nd
Benzene (ppb)	0	5	0.5	nd
Toluene (ppm)	1	1	0.5	nd
Ethylbenzene (ppb)	700	700	0.5	nd
Styrene (ppb)	100	100	0.5	nd

THM/HAAs	**MCLG**	**MCL**	**UL MRL**	**vel Found**
Monchloracetic Acid (ppb)	70	70	2.0	nd
Monobromoacetic Acid (ppb)	na	na	1.0	nd
Dibromoacetic Acid (ppb)	na	na	1.0	nd

LT2

Cryptosporidium (oocysts)	0	NA	nd
Giardia (cysts/L)	0	0.089	nd

UCMR2 (ppb)

Method 529		
1,3- Dinitrobenzene	0.8	nd
RDX (Hexahydro-1,3,5-trinitro-1,3,5-triazine)	1.0	nd
TNT (2,4,6-Trinitrotoluene)	0.8	nd
Method 521		
N-Nitrosodiethylamine (NDEA)	0.0050	nd
N- Nitrosodimethylamine (NDMA)	0.0020	nd
N-Nitrosodi-N-butylamine (NDBA)	0.0040	nd
N-Nitrosodi-N-propylsamine (NDPA)	0.0070	nd
N-Nitrosomethylethylamine (NMEA)	0.0030	nd
N-Nitrosopyrrolidine (NPYR)	0.0020	nd
Method 525.2		
Acetochlor	2.0	nd
Alachlor	2.0	nd
Metolachlor	1.0	nd
Method 535		
Acetochlor ESA	1.0	nd
Acetochlor OA	2.0	nd
Alachlor ESA	1.0	nd
Alachlor OA	2.0	nd
Metolachlor ESA	1.0	nd
Metolachlor OA	2.0	nd
Method 527		
Dimethoate	0.7	nd
2,2',4,4',5,5'-Hexabromobiphenyl (HBB)	0.7	nd
2,2',4,4',5,5'-Hexabromobiphenyl ether (BDE-153)	0.8	nd
2,2',4,4',5-Pentabromodiphenyl ether (BDE-99)	0.9	nd
2,2',4,4',6-Pentabromodiphenyl ether (BDE-100)	0.5	nd
Terbufos-sulfone	0.4	nd
2,2',4,4'-Tetrabromodiphenyl ether (BDE-47)	0.3	nd

Lead and Copper Statement

Report of Water Quality Control Laboratory

To minimize contamination resulting from corrosion, the EPA established a lead action level of 15 parts per billion (ppb) in 1992. The 90th percentile result of samples analyzed for lead and copper content in homes with lead pipes must be less than the action level of 15 ppb and 1.3 ppm respectively. In 2008, Evanston sampled water from thirty homes with lead service lines and analyzed them for lead and copper content. All results were below the action levels. The 90th percentile level for Lead was less than detection limit of 5 ppb. The 90th percentile level for copper was 0.36 ppm as illustrated as the Evanston Result in Water Quality Data table. The Evanston Water Utility is proud to have been in compliance with this rule since November of 1992!

Definitions and General Explanations for Use with Water Quality Data

Definitions:

Action Level – The concentration of a contaminant which, if exceeded, triggers treatment or other required actions by the water supply.

Disinfection by-products – Total Trihalomethanes and Total Haloacetic Acids are used to regulate the amount of allowable by-products of chlorination.

Fluoride - The Illinois Department of Public Health recommends an optimal fluoride range of 0.9 ppm to 1.2 ppm

Lead and Copper- There is no detectable lead in the water provided to the Evanston community. Lead enters the water from lead solder, lead pipes or plumbing fixtures in the home. To minimize contamination resulting from corrosion, the EPA established a lead action level of 15 parts per billion (ppb) in 1992. The 90th percentile result of samples analyzed for lead and copper content in homes with lead pipes must be less than the action level of 15 ppb and 1.3 ppm respectively. In 2008, Evanston sampled water from thirty homes with lead service lines and analyzed them for lead and copper content. All results were below the action levels. The 90th percentile level for Lead was less than detection limit of 5 ppb. The 90th percentile level for copper was 0.36 ppm as illustrated as the Evanston Result in above table.

MCL – Maximum Contaminant Level, the highest level of a contaminant that is allowed in drinking water. A MCL is set as close to a MCLG as feasible using the best available treatment technology.

MCLG – Maximum Contaminant Level Goal, the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
mg $CaCO_3$/L – milligrams of calcium carbonate per liter.

mrem/yr- Millirems Per Year- Measure of radiation absorbed by the body.

MRDL – Maximum Residual Disinfection Level – The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial
contaminants.

MRDLG – Maximum Residual Disinfection Level Goal – The level of disinfectant in drinking water below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NA- Not applicable.

NTU – Nephelometric turbidity units, measures water clarity.

pCi/L- picocuries per liter- Measure of radioactivity.

ppm – parts per million or milligrams per liter (mg/L).

ppb – parts per billion or micrograms per liter (µg/L).

Definitions and General Explanations for Use with Water Quality Data

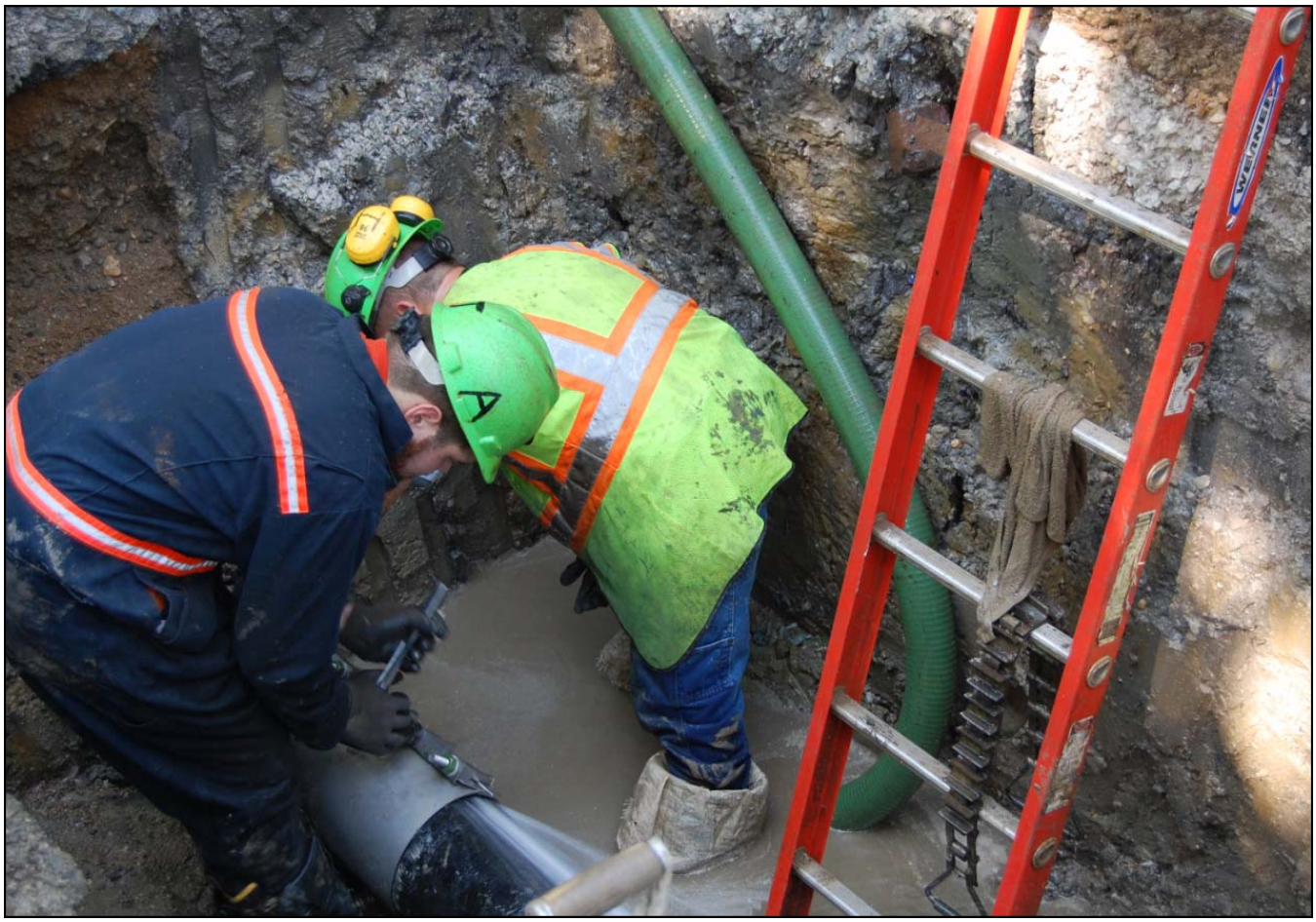
Sodium – There is not a state or federal MCL for sodium. Sodium levels below 20 mg/l (ppm) are not considered to be a health issue.

TT - Treatment Technique, a required process to reduce the level of a contaminant.

Turbidity- a measurement of the cloudiness of the water caused by suspended particles. This is monitored because it is a good indicator of water quality as well as well as verifying the effectiveness of the filtration and disinfection processes.

TOC - The Evanston Water Supply monitored the percentage of Total Organic Carbon (TOC) removal quarterly and met all TOC removal requirements set by the IEPA.

Distribution Section



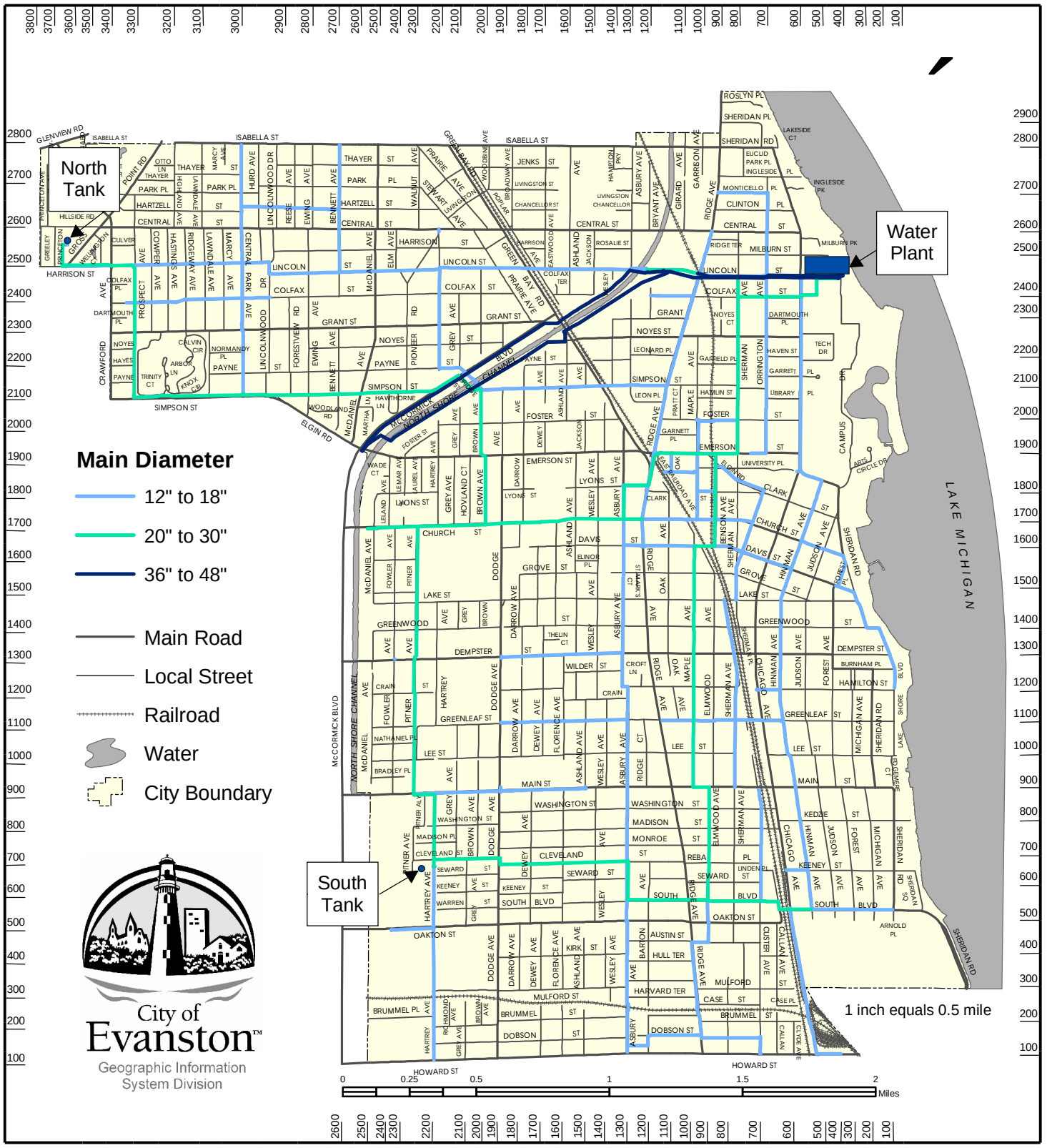
Classification of Water Main Breaks:

Shear Break: A crack around the circumference of the water main pipe caused by uneven loading on the water main due to settlement, frost or poor bedding.

Blow Out / Linear Split: A hole in the water main pipe caused by an increase of water pressure inside the pipe (frequently created by water hammer) due to the water main pipe wall thickness being thin as a result of corrosion.

Damage: A break in the water main pipe created by construction activities nearby.

EVANSTON WATER AND SEWER DIVISION
Major Water System (2008)



Annual_Report_WATERMAINS.mxd 9/24/2009

FIRE HYDRANTS

Distribution System

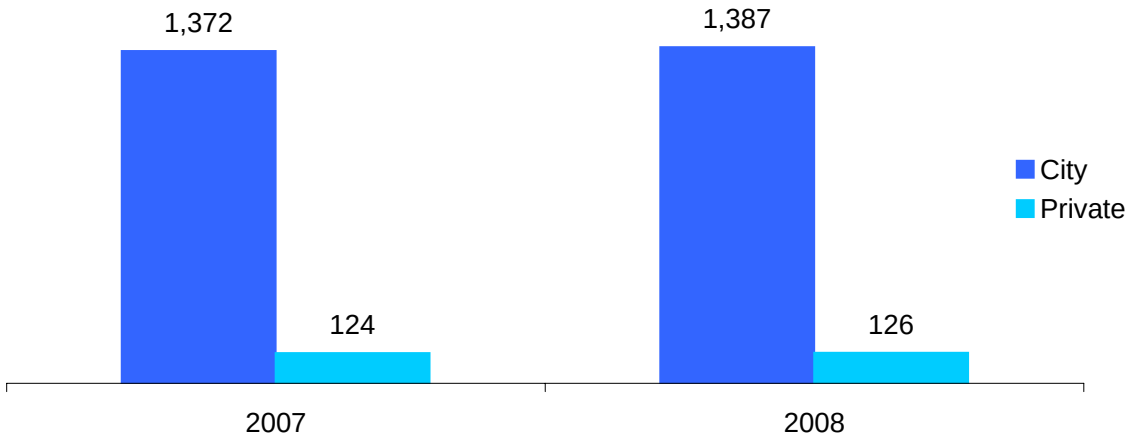
Hydrants Tested for Proper Operation	2007	**2008**
Fire Department	1,299	**1,330**
Water Department	50	**57**

System Improvements	2007		**2008**	
In-House *Hydrants*	Count	Average Cost	**Count**	**Average Cost**
Installed (new)*	8	$5,811.43	**11**	**$4,844.09**
Replaced**	12	$3,359.21	**19**	**$3,940.96**
Repaired	100	$187.47	**33**	**$313.69**

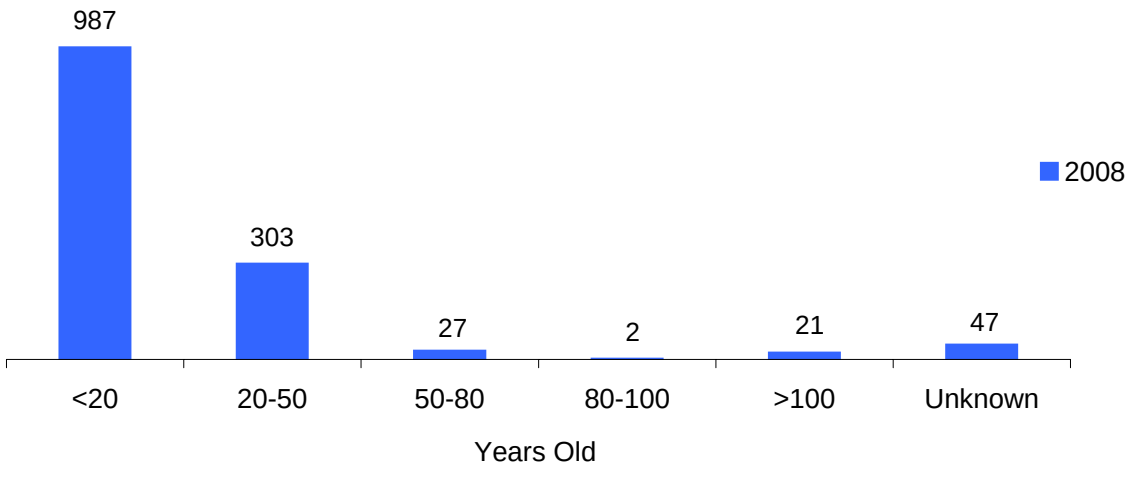
*In 2008, 8 hydrants were installed by contractor

**In 2008, 13 hydrants were replaced by contractor

Number of Fire Hydrants by Responsibility



Age of City Fire Hydrants



VALVES

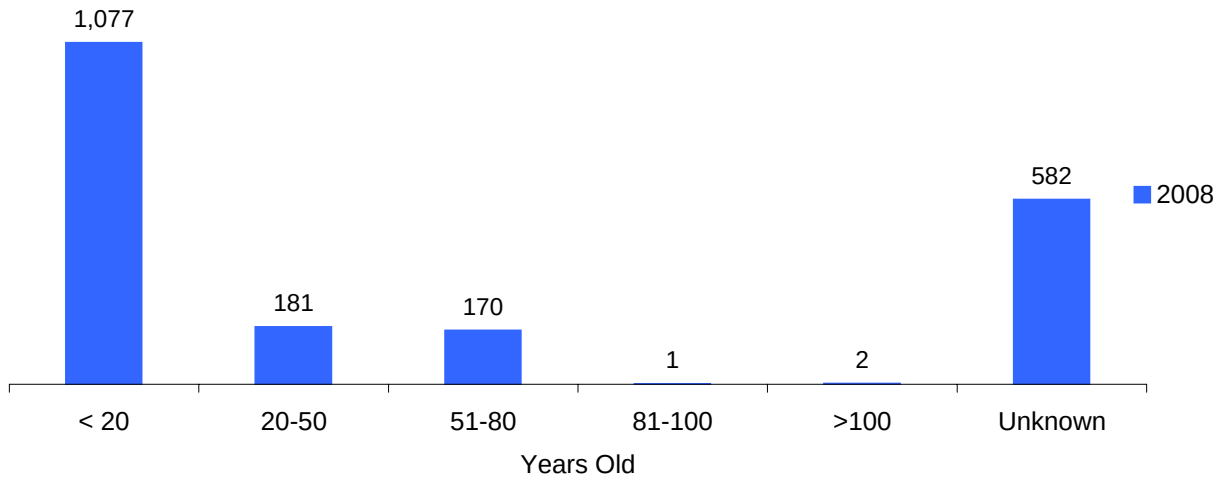
Distribution System

Valves Turned for Proper Operation	2007	**2008**
In-House	730	**267**
Contractor	468	**488**

System Improvements	2007		**2008**	
In-House *Valves*	Count	Average Cost	**Count**	**Average Cost**
Installed (new)	16	$2,907.25	**11**	**$2,123.67**
Replaced	16	$2,965.92	**20**	**$3,549.10**
Repaired	5	$679.63	**19**	**$1,447.85**

Number of Distribution Valves by Size	2007	**2008**
3"	1	**1**
4"	31	**30**
6"	1,063	**1,053**
8"	422	**433**
10"	165	**178**
12"	204	**205**
14"	2	**2**
16"	44	**48**
18"	4	**4**
20"	2	**2**
24"	30	**30**
30"	11	**11**
36"	13	**12**
42"	2	**2**
48"	2	**2**
Total	*1,996*	***2,013***

Age of Distribution System Valves



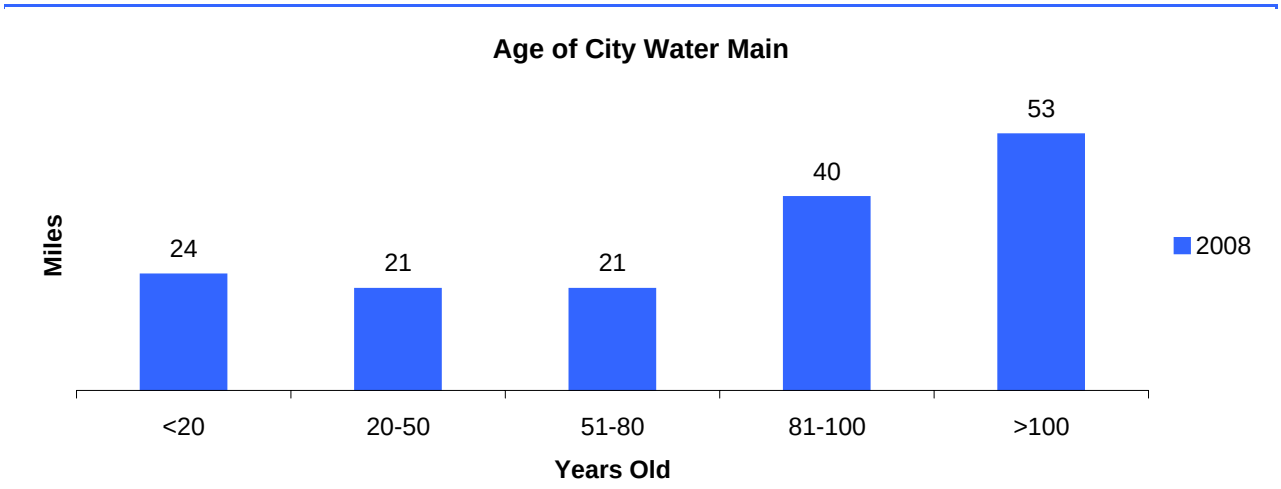
Water Mains

Distribution System

Water Main Installed In-House	2007	**2008**
Feet Installed	484'	**-**
Average Cost (per foot)	$102	**-**

Water Main	2007		**2008**	
Repaired In-House	Count	Average Cost	**Count**	**Average Cost**
Blow-Out	22	$1,984.74	**23**	**$3,021.08**
Shear Break	13	$1,605.67	**32**	**$2,731.71**
Damage	1	$316.74	**1**	**$1,829.02**
Total	*36*	*$3,907.15*	***56***	***$7,581.81***

Length of	2007		**2008**	
Water Main by Diameter	Feet	Miles	**Feet**	**Miles**
3"	784	0.15	**784**	**0.15**
4"	11,736	2.22	**11,736**	**2.22**
6"	427,997	81.06	**424,335**	**80.36**
8"	126,924	24.04	**131,141**	**24.84**
10"	62,940	11.92	**64,056**	**12.13**
12"	82,207	15.57	**83,309**	**15.78**
14"	1,948	0.37	**1,948**	**0.37**
16"	33,491	6.34	**33,544**	**6.35**
18"	4,386	0.83	**4,386**	**0.83**
20"	2,960	0.56	**2,960**	**0.56**
24"	43,549	8.25	**43,549**	**8.25**
30"	8,933	1.69	**8,933**	**1.69**
36"	17,327	3.28	**17,327**	**3.28**
42"	186	0.04	**186**	**0.04**
48"	3,571	0.68	**3,571**	**0.68**
Total	*828,939*	*157.00*	***831,765***	***157.53***



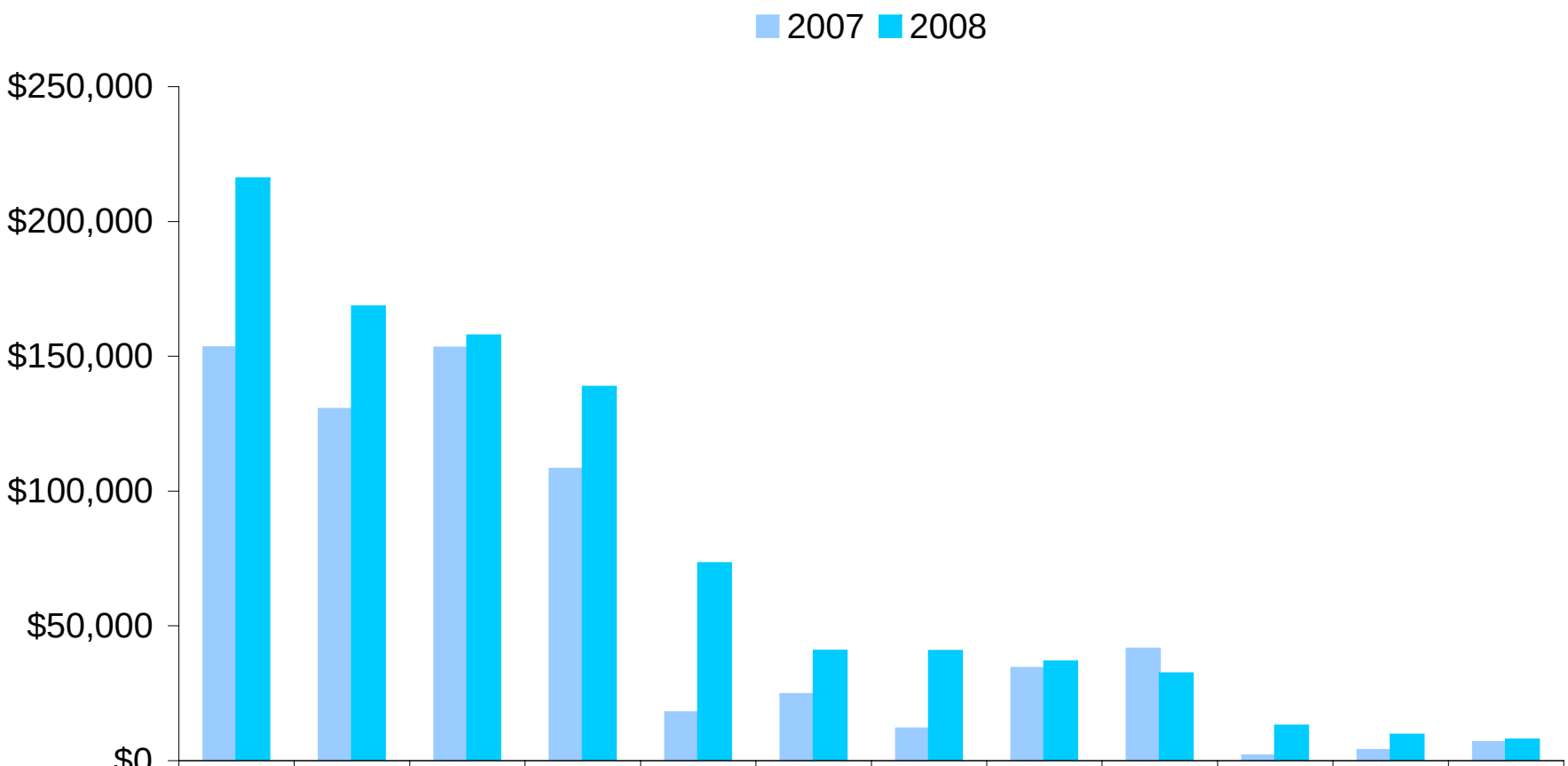
Water Services

Distribution System

2008 Total Number of Water Service Connections - 15,177

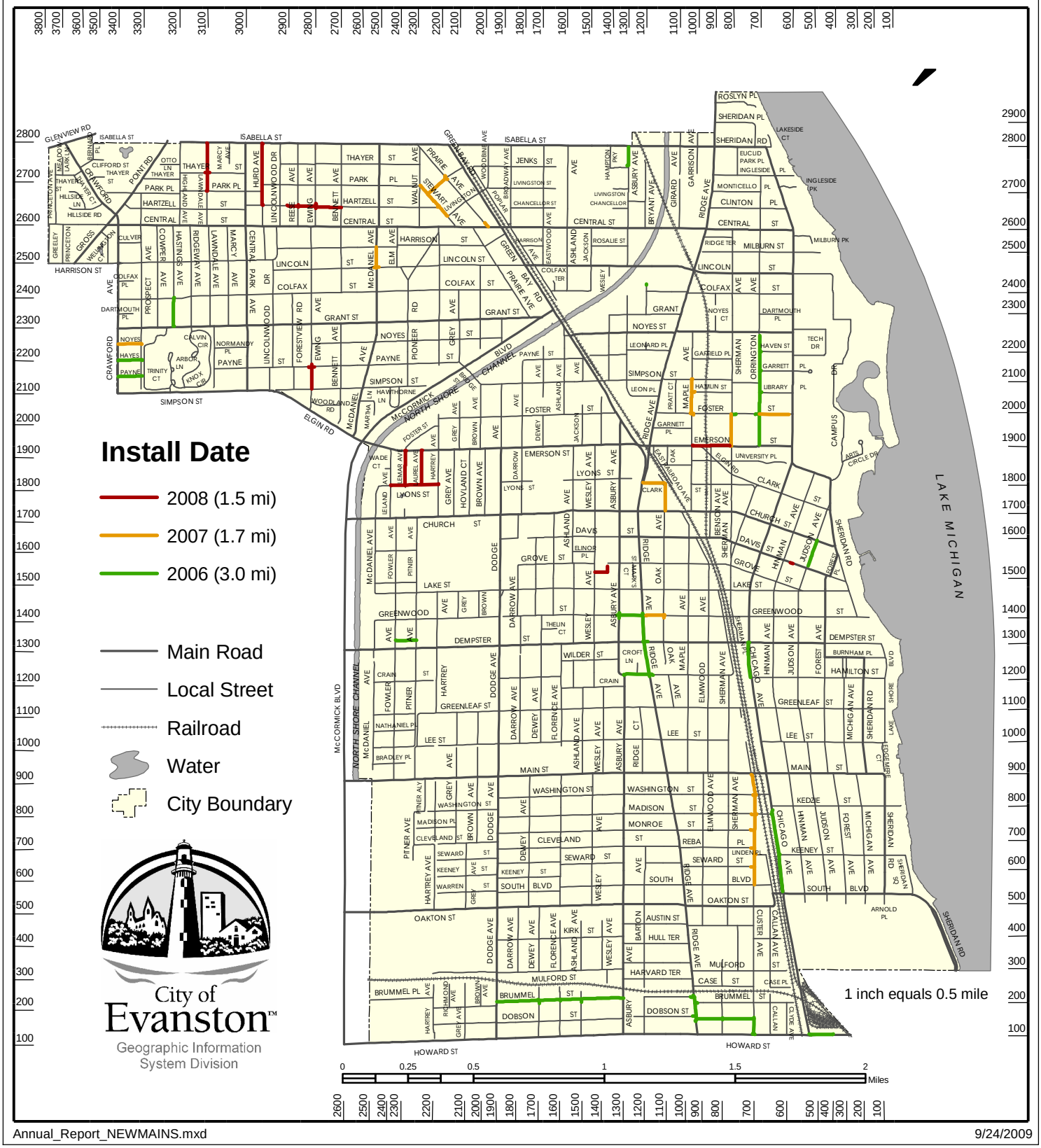
System Improvements	2007		**2008**	
In-House *Water Services*	Count	Average Cost	**Count**	**Average Cost**
Installed (new)	72	$638.00	**59**	**$674.22**
Repaired	50	$1,242.35	**25**	**$1,739.02**

2008 Distribution Division - Division of Costs



	Water Mains	Fire Hydrants	Water Services	Valves	Snow & Ice Removal	Assist Contractor	JULIE Locates	Equip/ Facility Maint.	Misc.	Assist Other City Departs.	Assist W&S Sections	Safety & Training
2007	$153,257	$130,392	$153,164	$108,161	$17,872	$24,680	$11,874	$34,319	$41,532	$1,930	$3,853	$6,831
2008	$215,959	$168,458	$157,686	$138,592	$73,201	$40,793	$40,632	$36,763	$32,366	$12,995	$9,556	$7,831

DISTRIBUTION SECTION
Water Main Installed 2006-2008



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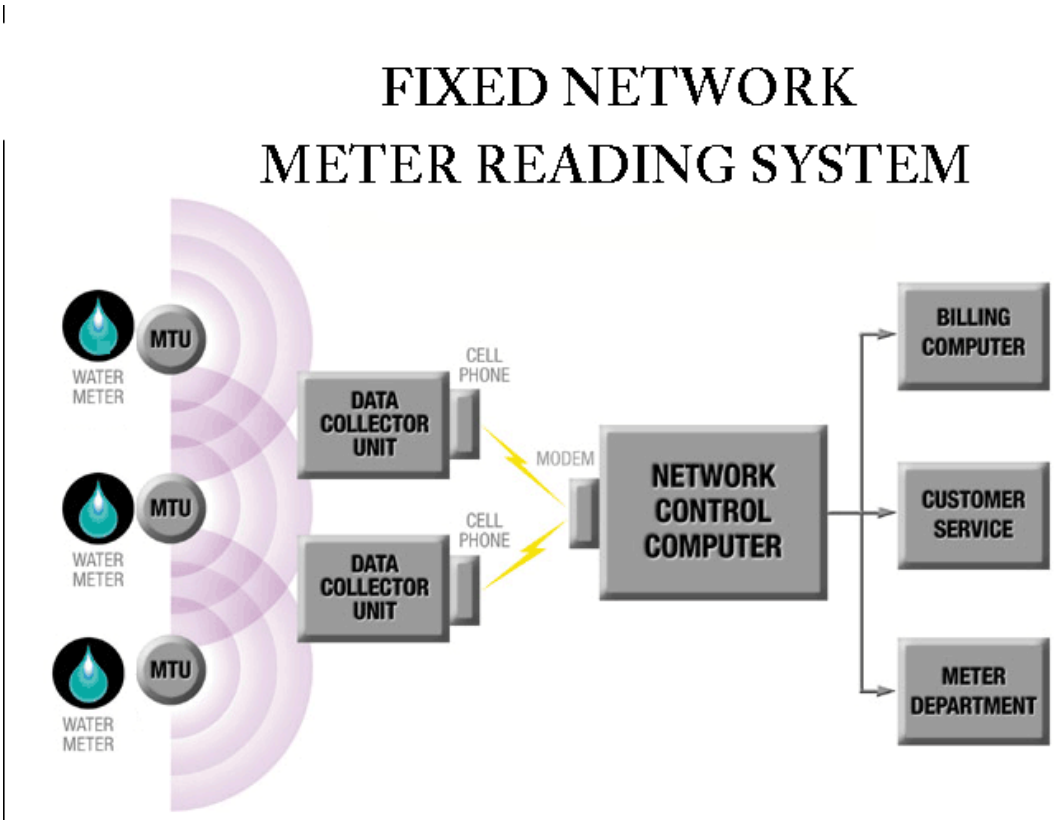
Meter Section

Our Meter Section is responsible for maintaining water meters and remote meter reading equipment, locating service boxes, shutting off water for plumbing repairs, collecting water samples for quality testing and locating Water & Sewer underground utilities for contractors.



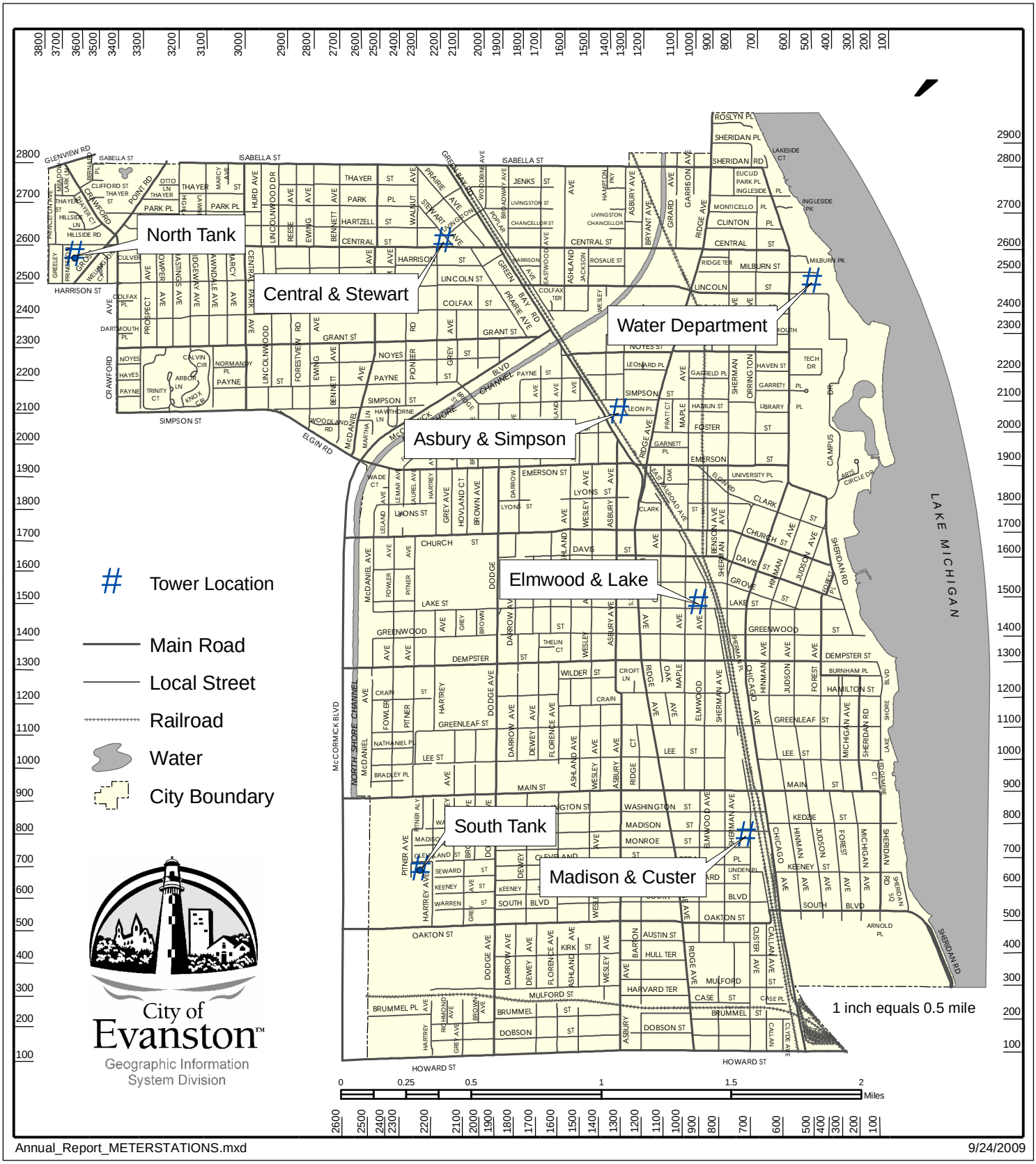
Here's how it works:

- The Meter Transmission Unit (MTU) is attached to every water meter in Evanston. Each MTU contains a radio transmitter that, twice per day, broadcasts the meter reading.

- The Data Collector Unit (DCU) receives the MTU radio transmissions and stores the meter reading. Evanston currently has 7 DCUs located on various buildings. Daily each DCU sends its meter reading information to the Network Control System at the Water Plant.

- The Network Control System supports customer service and system management activities and transfers the meter readings to the billing system.

EVANSTON WATER AND SEWER DIVISION
Water Meter Reading Transmitter Tower Locations



Annual_Report_METERSTATIONS.mxd 9/24/2009

2008
Water Rate
To Evanston Customer

Billed Bi-Monthly in hundreds of Cubic Feet

Minimum demand charge every two months based on water meter size as follows:

5/8 “ & ¾”	$5.40
1”	$10.80
1 ½”	$20.20
2”	$31.80
3”	$56.00
4”	$89.70
6”	$158.20
8”	$267.80

The minimum demand service charge includes the first five hundred cubic feet (500 cu.ft.) of water consumed, or 3740 gallons of water.

$1.52 per 100 cubic feet of usage over the minimum charge ($2.03 per 1000 gallons)

100 cubic feet is equal to 748 gallons.

2008 Water Meter Inventory by Class and Size

Size of Meter	Meter Style	Commercial	Industrial	School	City	Park	Multi-Family	Residential	TOTAL
8" Meter	Compound	1							1
	Turbine	2							2
6" Meter	Compound	1		1					2
	Turbine	2							2
4" Meter	Compound	11					4		15
	Turbine	5		1			1		7
3" Meter	Compound	12		1			13		26
	Turbine	11		3			6		20
2" Meter	Compound	8					1		9
	Turbine/T-10	149	7	14	11		248	4	433
1.5" Meter	T-10	86	5	4	5		103	31	234
1" Meter	T-10	196	11	3	5	1	433	360	1009
3/4" Meter	T-10	20	1				213	355	589
5/8" Meter	T-10	436	11	2	8	61	1505	9968	11991
TOTAL		**940**	**35**	**29**	**29**	**62**	**2527**	**10718**	**14340**

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2008 METER SERVICES

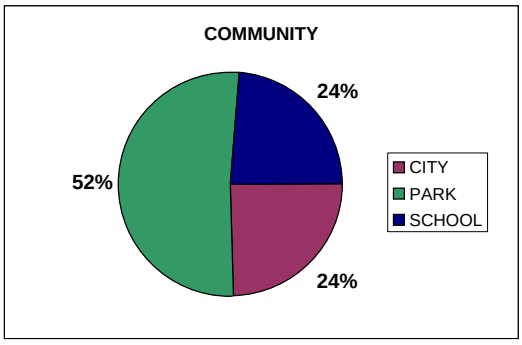
BILLED BY CATEGORY AND WATER USAGE FOR 2008

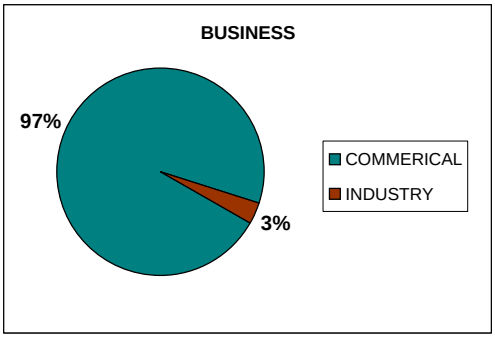
	NUMBER OF SERVICES	2008 USAGE
SINGLE FAMILY	10,713	1,053,738
MULTI-FAMILY	2,524	1,206,546
COMMERICAL	946	1,193,241
INDUSTRY	34	15,722
CITY	30	15,169
PARK	64	18,913
SCHOOL	29	55,338
TOTAL	**14,340**	**3,558,667**

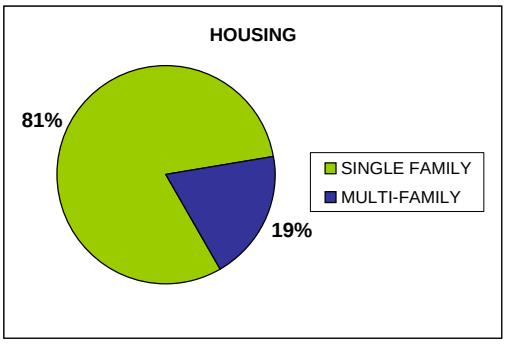
*usage in hundreds of cubic feet

FIRE SERVICES	362	(BILLED SEMI-ANNUALLY)
WATER COOLED AIR CONDITIONING	8	(BILLED ANNUALLY)

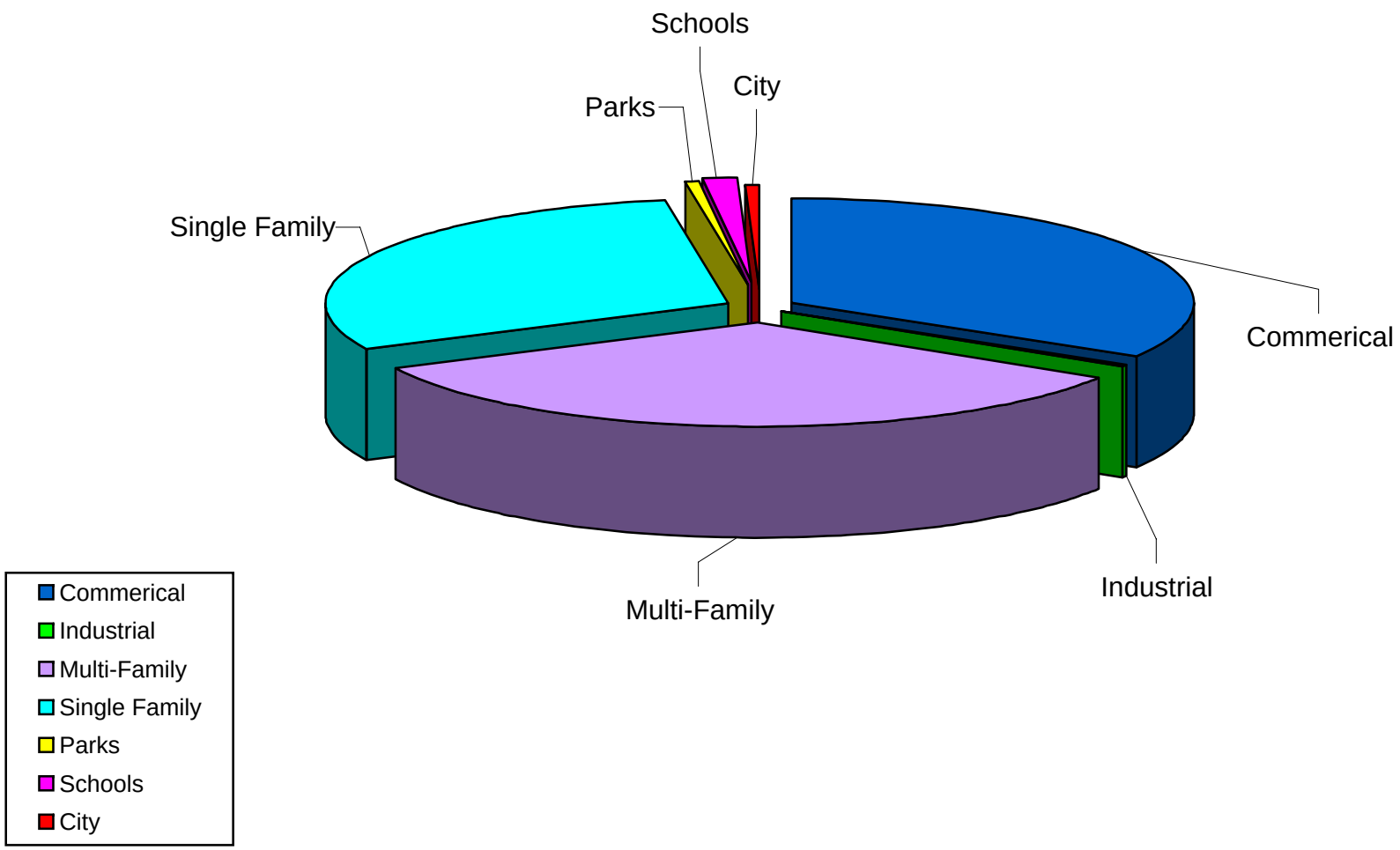
SERVICES BY CLASS CODE:

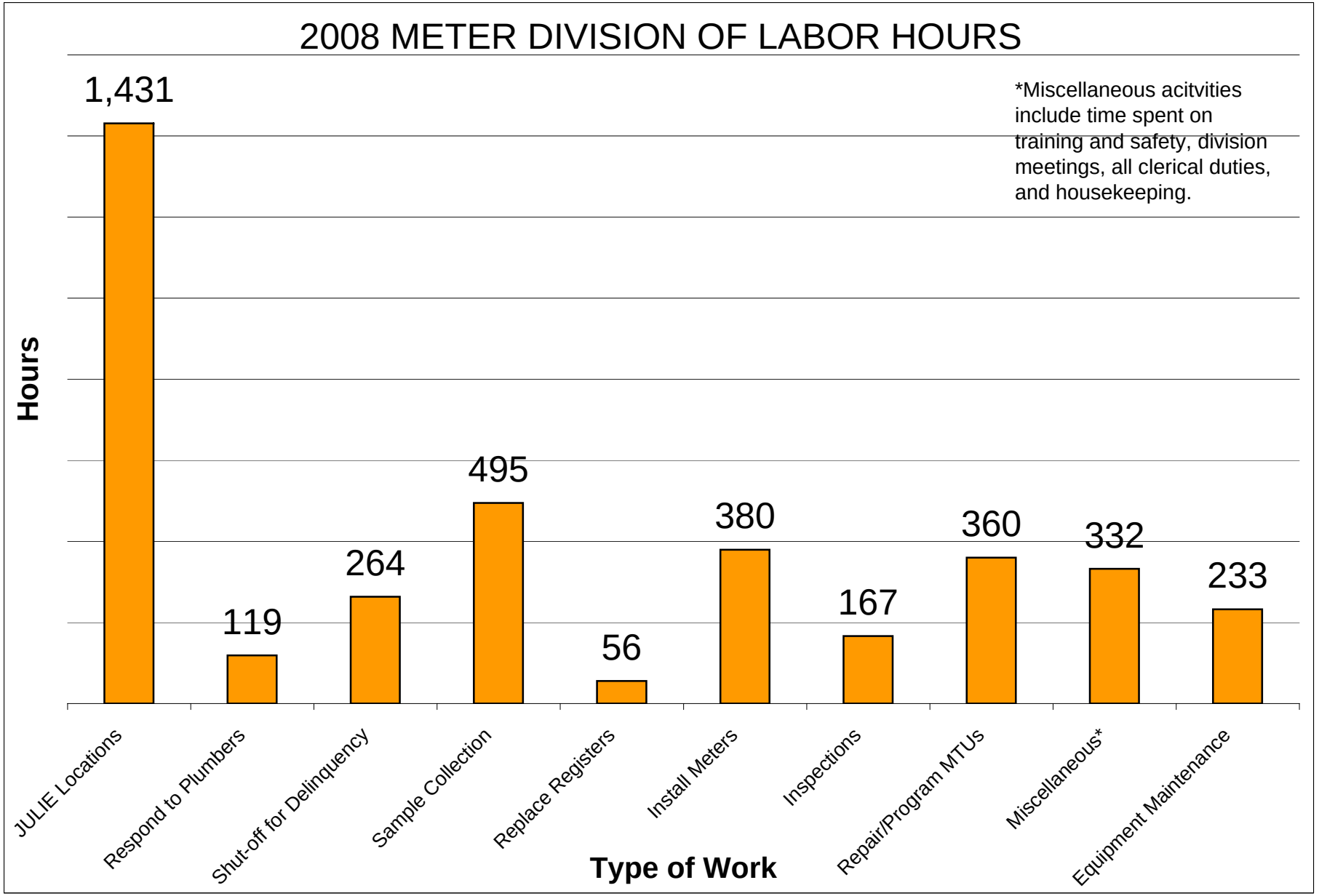




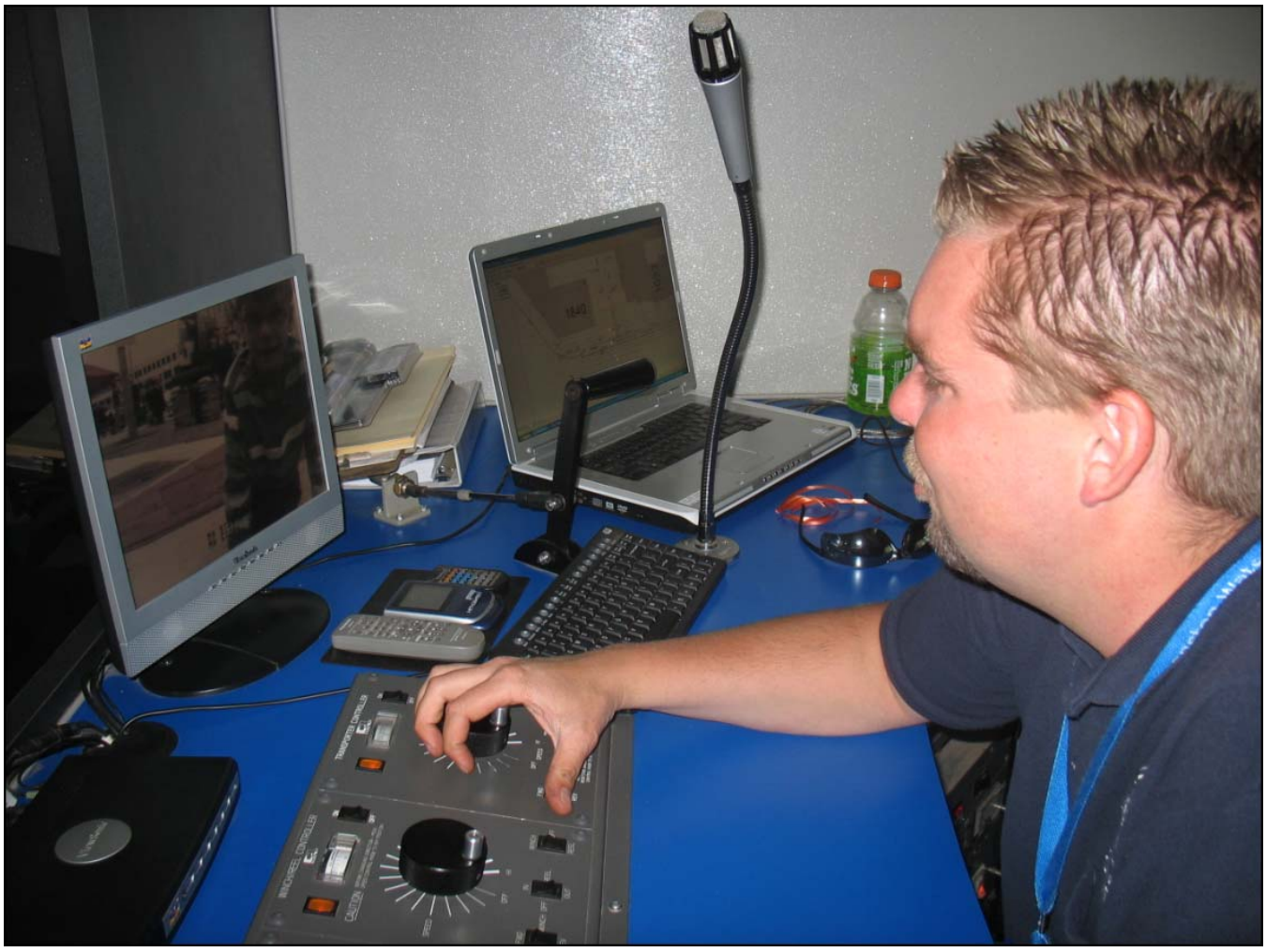


2008 Water Usage by Evanston Customers



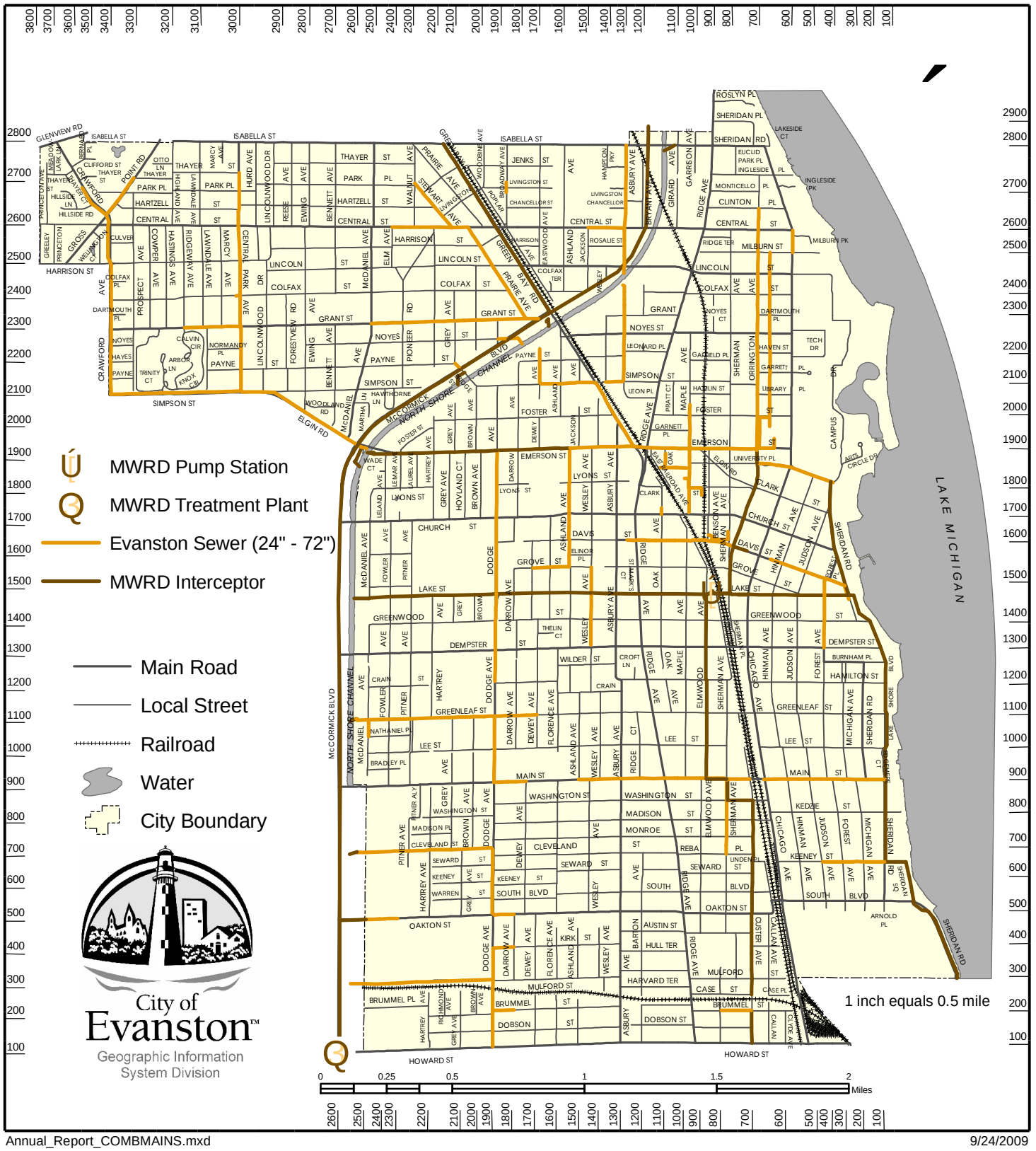

2008 METER DIVISION OF LABOR HOURS
*Miscellaneous acitvities include time spent on training and safety, division meetings, all clerical duties, and housekeeping.
Hours
1,431
119
264
495
56
380
167
360
332
233
JULIE Locations
Respond to Plumbers
Shut-off for Delinquency
Sample Collection
Replace Registers
Install Meters
Inspections
Repair/Program MTUs
Miscellaneous*
Equipment Maintenance
Type of Work

Sewer Section



Our Closed Circuit TV (CCTV) crew inspects selected sewer mains annually to evaluate their condition. CCTV inspection allows us to identify problems with sewer mains early and repair them before the damage becomes more costly to fix.

EVANSTON WATER AND SEWER DIVISION
Major Combined Sewer System



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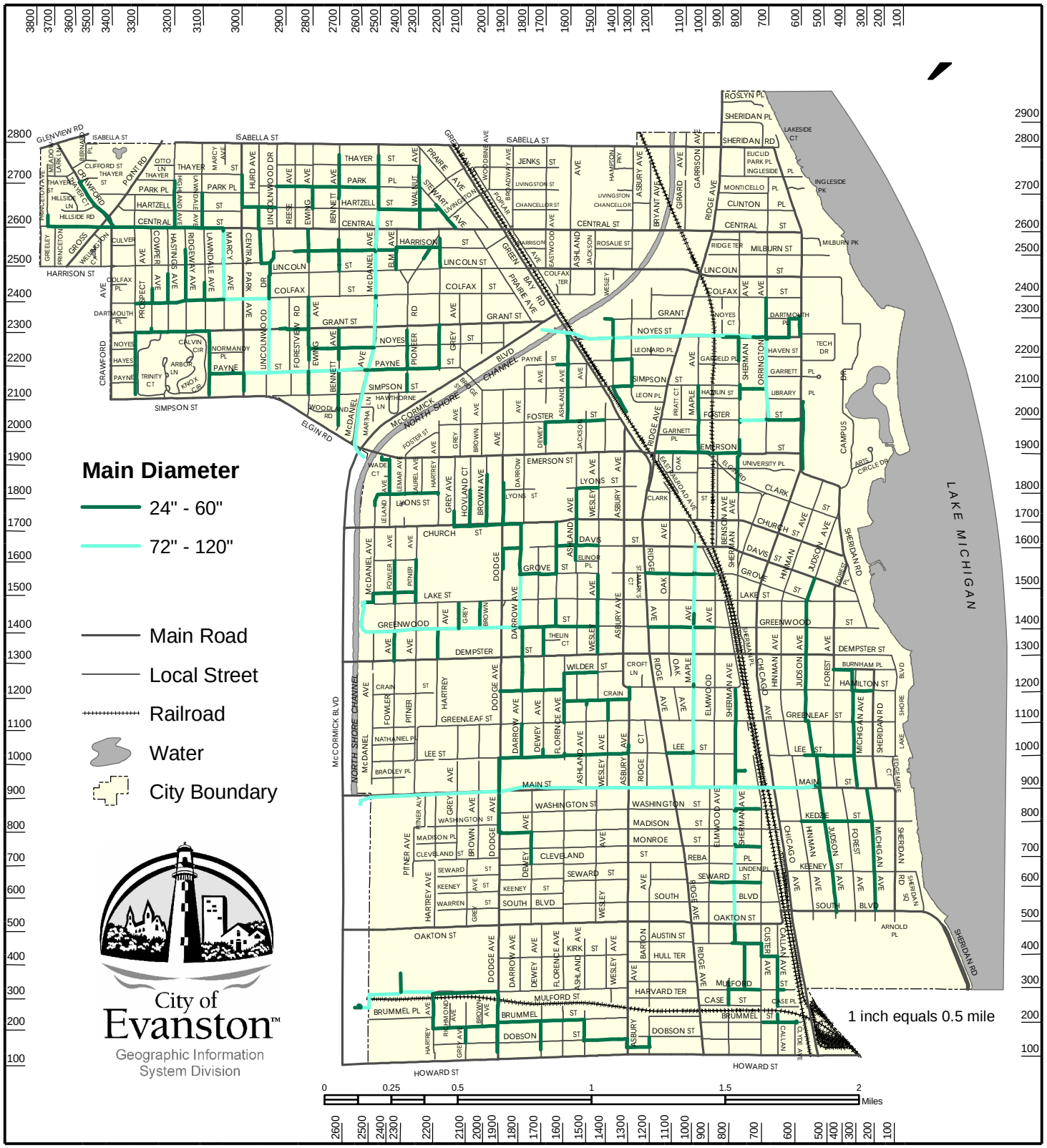
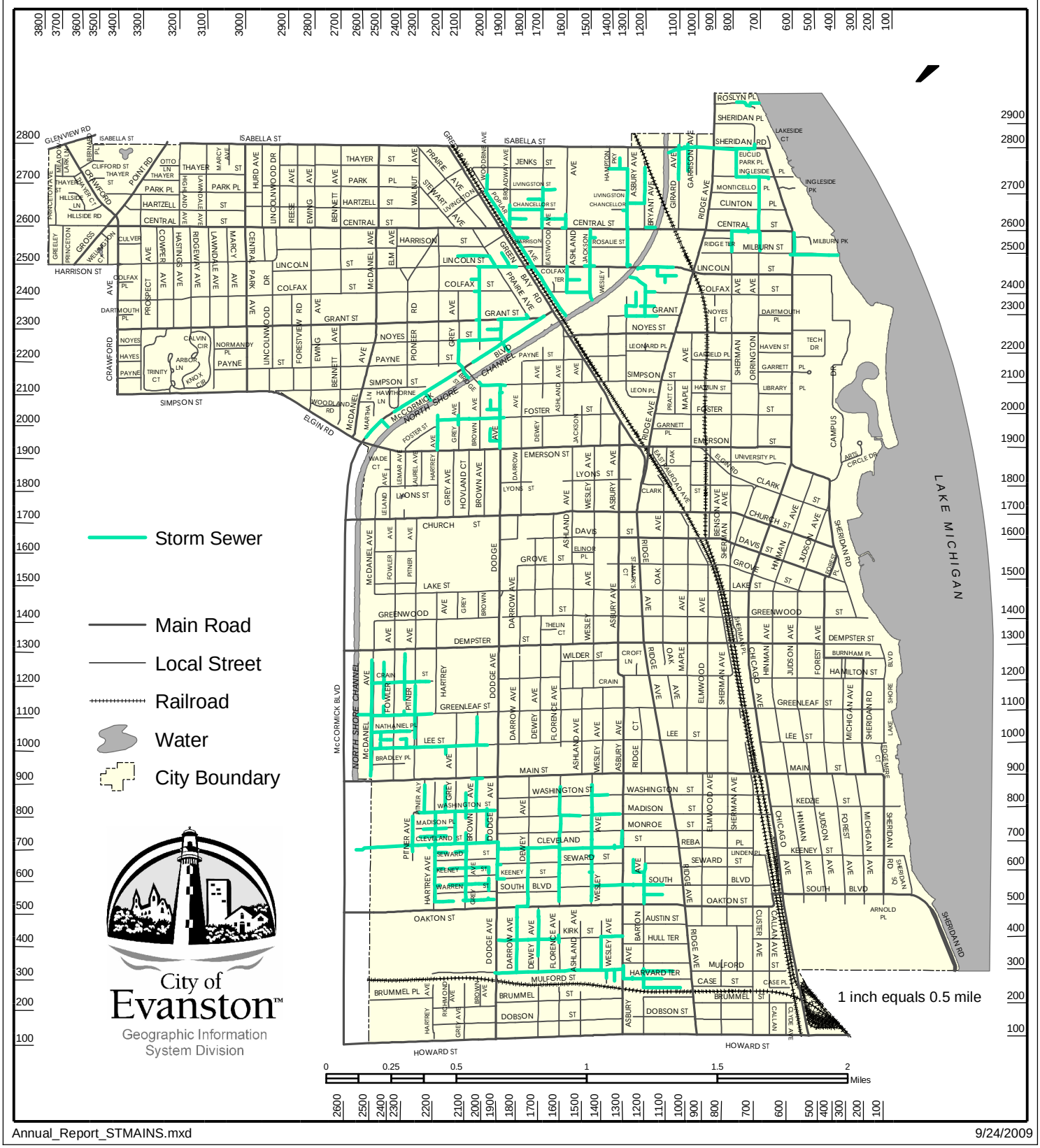
This map is provided "as is" without warranties of any kind. See www.cityofevanston.org/mapdisclaimers.html for more information.

EVANSTON WATER AND SEWER DIVISION
Major Relief Sewer System



Annual_Report_RELMAINS.mxd 9/24/2009

EVANSTON WATER AND SEWER DIVISION
Storm Sewer System



Annual_Report_STMAINS.mxd 9/24/2009

SEWER MAINS

Sewer

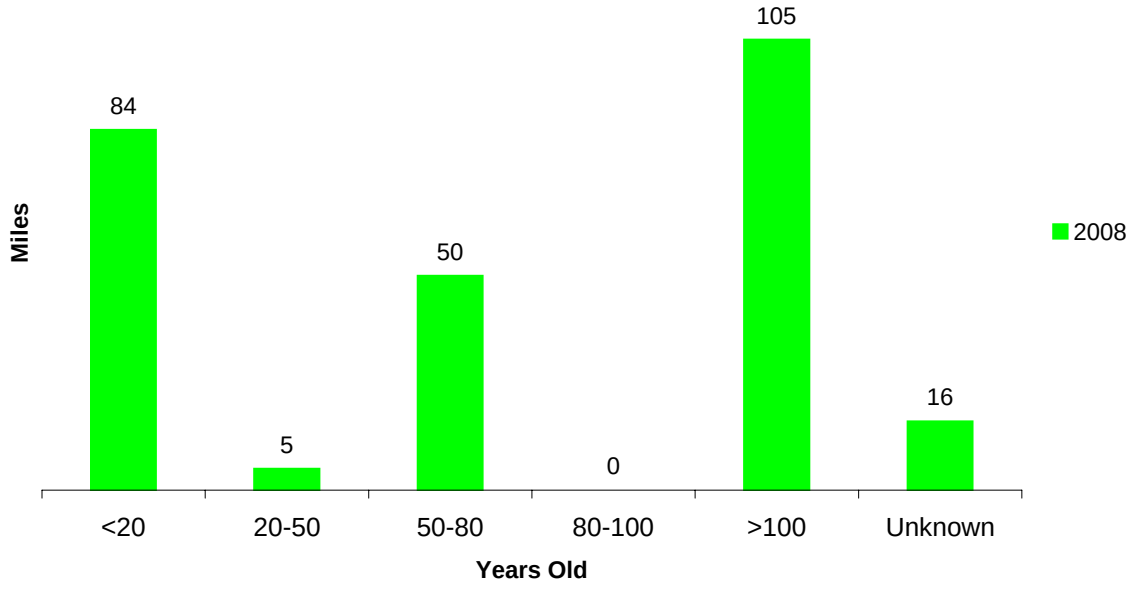
Length of Sewer Main by Type*

Sewer System Type	Feet	Miles
Combined	753,986	142.00
Relief	245,607	46.53
Storm	97,202	18.41
Total	*1,096,795*	*206.94*

*For detailed table of Length of Sewer Main by Type and Diameter see page 52

System Improvements	2007		**2008**	
In-House *Sewer Main*	Count	Average Cost	**Count**	**Average Cost**
Installed (new)	239 ft.	$76.33 per ft.	**28 ft.**	**$80.10 per ft.**
Replaced	178 ft.	$19.48 per ft.	**17 ft.**	**$17.66 per ft.**
Spot Repair	3,810 ft.	done by DNB	**4,444 ft.**	**$7.57 per ft.**
Clean- Hydroflush	53,749 ft.	$0.89 per ft.	**125,505 ft.**	**$1.06 per ft.**
Clean- Root Cut	1,265 ft.	$1.93 per ft.	**2,252 ft.**	**$2.37 per ft.**
Closed Circuit TV Inspect	62,353 ft.	$1.75 per ft.	**59,654 ft.**	**$0.82 per ft.**
Inspect	87,318 ft.	$0.31 per ft.	**34,150 ft.**	**$0.79 per ft.**
Inspect (Storm)	35,713 ft.	$0.36 per ft.	**33,394 ft.**	**$0.38 per ft.**

Age of City Sewer Mains



SEWER MAINS

Sewer

Length of Sewer Main by Type and Diameter	Combined		Relief		Storm	
	Feet	Miles	Feet	Miles	Feet	Miles
6"	3,180	0.60	243	0.05	-	-
8"	18,404	3.49	8,116	1.54	3,095	0.59
9"	123,491	23.39	6,591	1.25	895	0.17
10"	107,816	20.42	19,447	3.68	12,565	2.38
12"	226,310	42.86	17,157	3.25	13,592	2.57
14"	1,019	0.19	-	-	-	-
15"	92,774	17.57	2,678	0.51	6,249	1.18
16"	1,621	0.31	5,588	1.06	724	0.14
18"	59,978	11.36	13,404	2.54	8,832	1.67
20"	9,004	1.71	109	0.02	-	-
21"	15,494	2.93	1,167	0.22	3,488	0.66
22"	1,081	0.20	-	-	-	-
24"	19,605	3.71	43,570	8.25	16,679	3.16
27"	6,399	1.21	5,713	1.08	3,900	0.74
30"	6,965	1.32	17,755	3.36	4,198	0.79
33"	3,771	0.71	1,300	0.25	482	0.09
36"	19,792	3.75	18,742	3.55	*6,730*	*1.27*
39"	421	0.08	-	-	-	-
40"	378	0.07	-	-	-	-
41"	190	0.04	-	-	-	-
42"	6,700	1.27	12,257	2.32	3,570	0.68
45"	1,072	0.20	-	-	-	-
48"	13,076	2.48	22,500	4.26	7,963	1.51
51"	1,514	0.29	-	-	-	-
54"	1,591	0.30	3,159	0.6	609	0.12
57"	784	0.15	-	-	-	-
60"	7,433	1.41	4,916	0.93	3,631	0.69
72"	4,123	0.78	11,661	2.21	-	-
78"	-	-	5,440	1.03	-	-
84"	-	-	88	0.02	-	-
96"	-	-	2,366	0.45	-	-
108"	-	-	5,025	0.95	-	-
113"	-	-	9,275	1.76	-	-
120"	-	-	7,340	1.39	-	-
Total	*753,986*	*142.80*	*245,607*	*46.53*	*97,202*	*18.41*

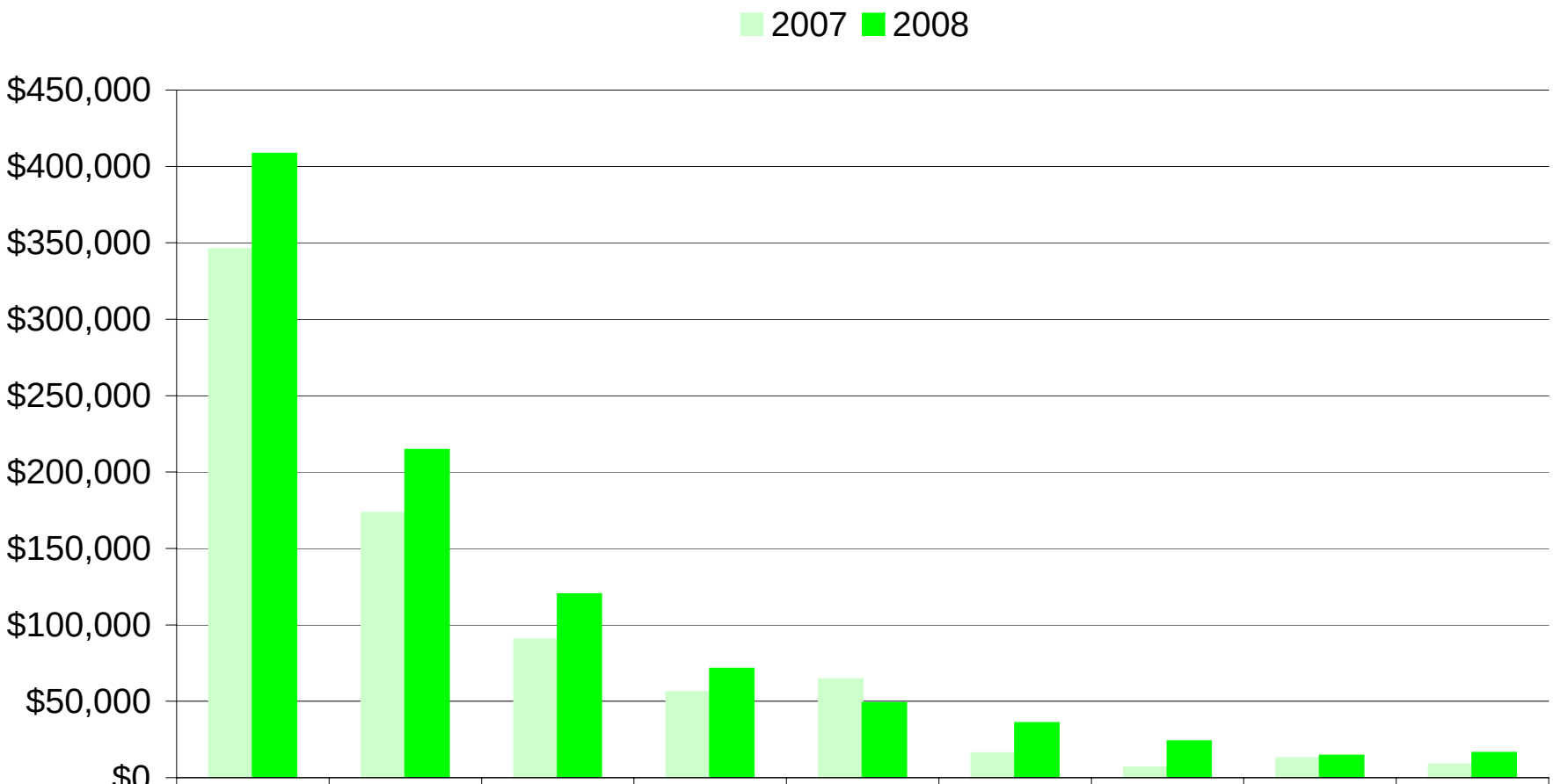
SEWER STRUCTURES

Sewer

Number of Sewer Structures	**2008**
Manholes	**5,353**
Inlets	**2,785**
Catchbasins	**6,210**
Total Sewer Structures	**14,348**

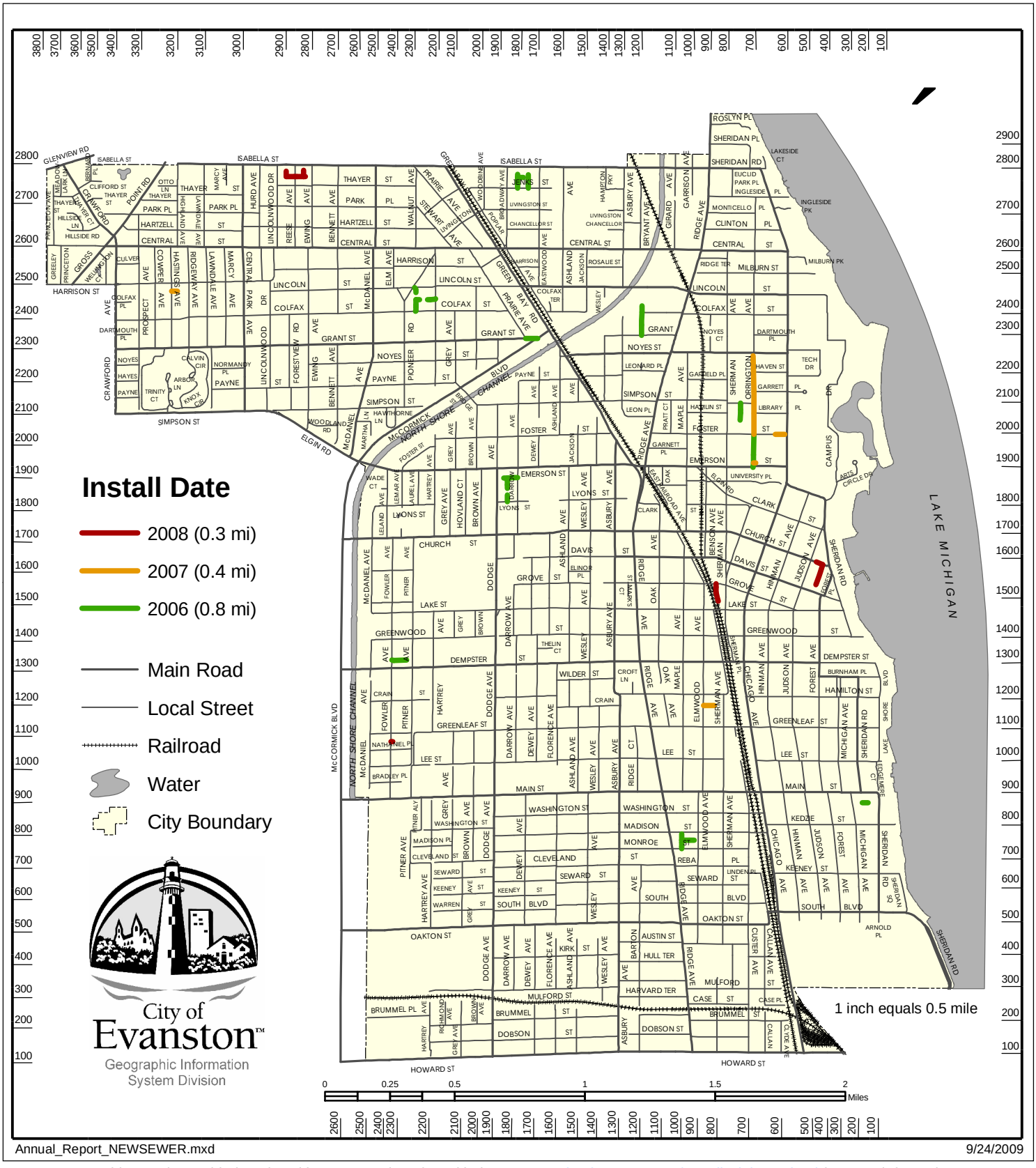
System Improvements	2007		**2008**	
In-House *Sewer Structures*	Count	Average Cost	**Count**	**Average Cost**
Installed (new)	1	$2,092.78	**5**	**$5,976.97**
Replaced	34	$1,211.84	**33**	**$2,249.79**
Repair	227	$280.98	**169**	**$303.30**
Clean	4,166	$43.71	**3,277**	**$57.42**
Inspect	113	$188.46	**164**	**$142.40**
Inspect (Storm)	497	$37.72	**734**	**$56.35**

2008 Sewer Division - Division of Costs



	Sewer Structures	Sewer Mains	Equip/Facility Maint.	Assist W&S Divisions	Snow & Ice Removal	Assist Contractors	Assist Other City Depts.	Safety & Training	Misc.
2007	$345,836	$173,115	$90,423	$55,915	$64,427	$15,946	$6,551	$12,750	$8,638
2008	$408,271	$214,438	$119,995	$71,203	$48,743	$35,705	$23,782	$14,319	$16,234

SEWER SECTION
Combined Sewer Main Installed 2006-2008



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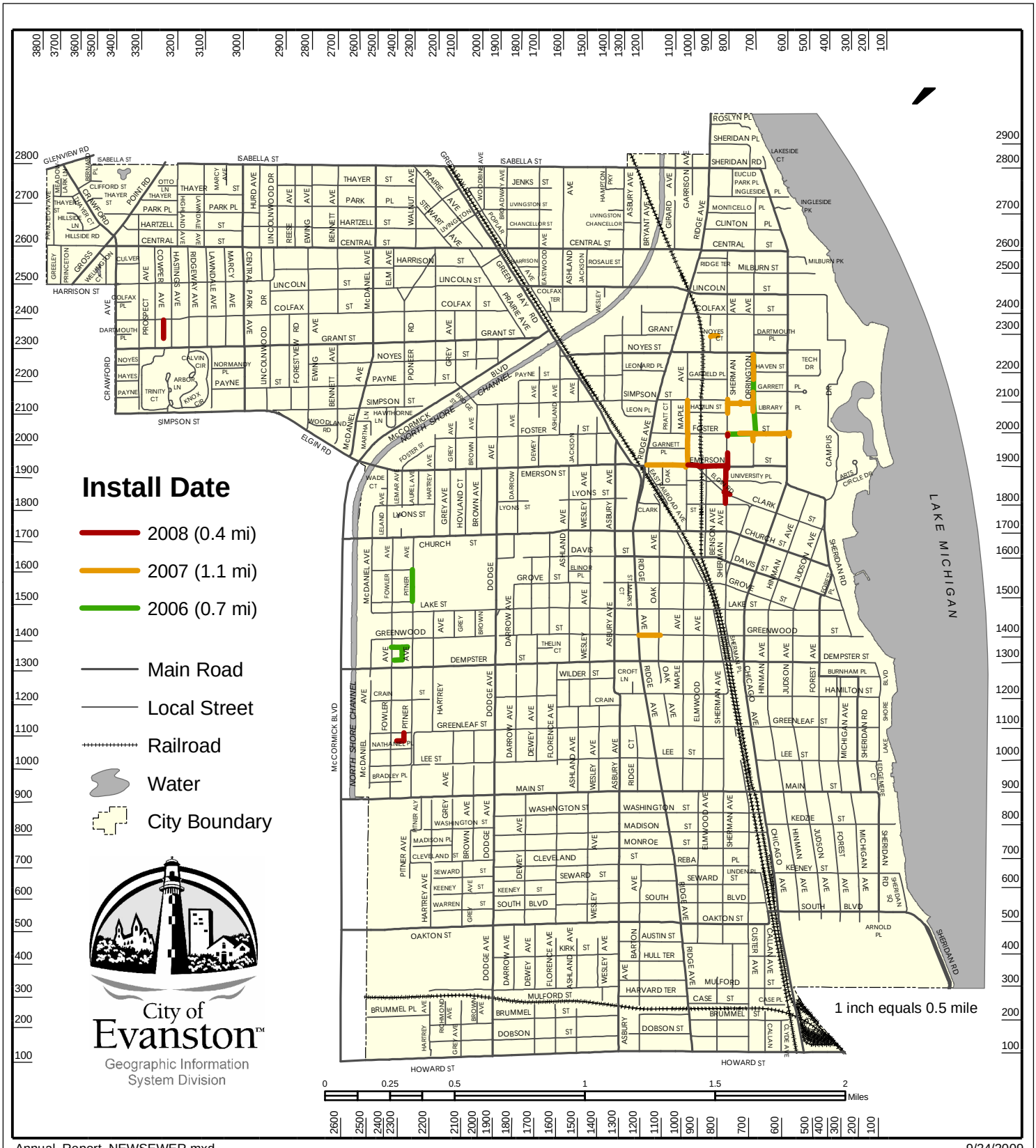
SEWER SECTION
Relief Sewer Main Installed 2006-2008



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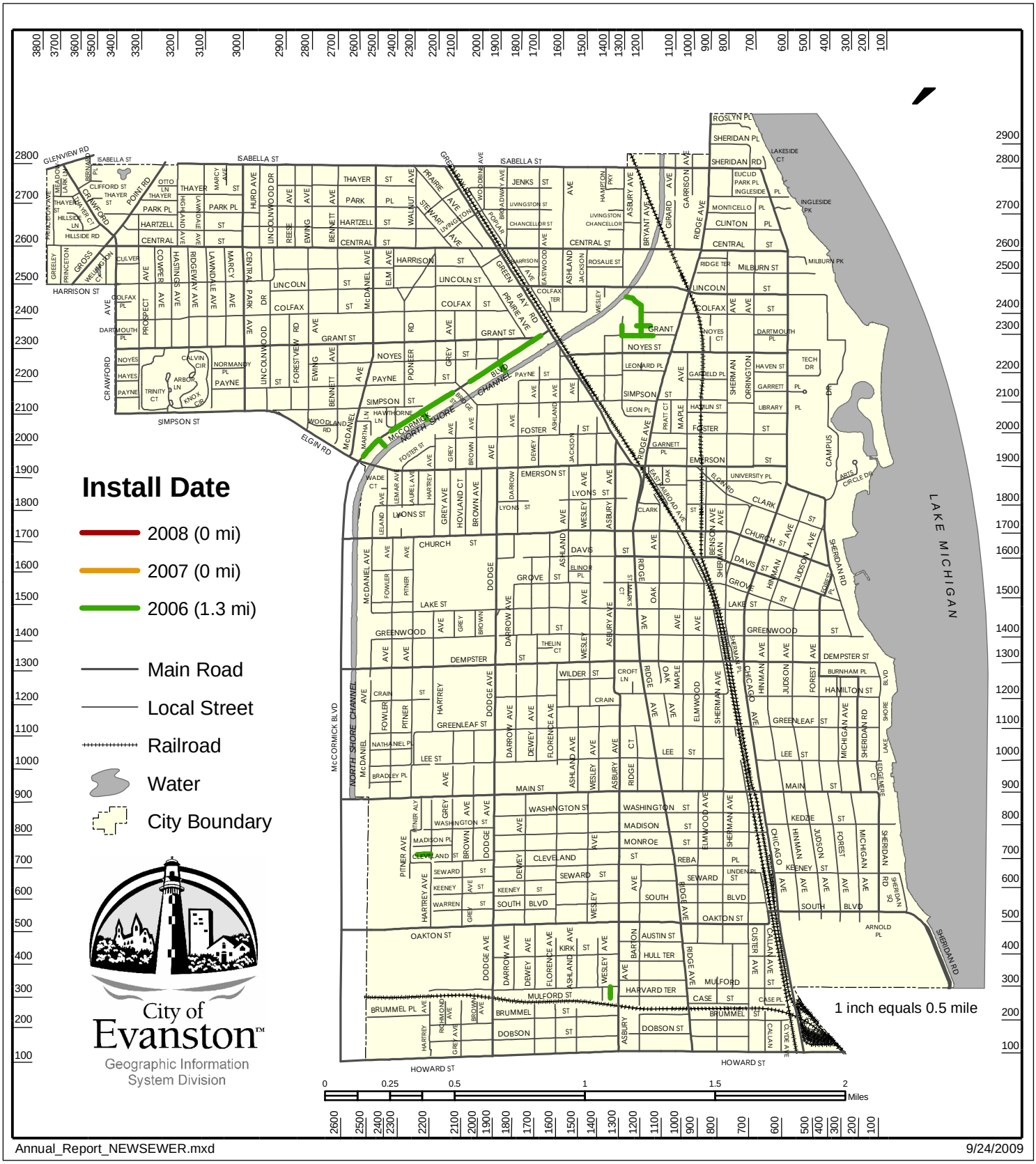
SEWER SECTION
Storm Sewer Main Installed 2006-2008



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