



Semi-Annual Report



THE CITY OF
CHEBOYGAN

In order to provide City of Cheboygan with a summary of City staff activities for the previous first half of 2015, we have prepared this report for City Officials and record keeping purposes. We welcome any suggestions to improve the information contained in these reports. This report is intended to provide information to address issues that present obstacles and summarize some examples of completed or ongoing work performed by City Staff.

The purpose of this report is to focus on the non-routine issues in the system. The

Production and Use Statistics

The City of Cheboygan Water Supply System (WSS) produced safe drinking water for the users; all bacteriological tests were normal. These tests are run twice a month, with fourteen to sixteen samples taken per month, to ensure all areas of the City have safe water. Michigan Department of Environmental Quality required testing is completed according to the schedule sent annually. These results are available upon request.

The following table shows the year-to-year variation in the amount of water produced and distributed to the customers of the system.

required routine data collection and maintenance can be discussed, if understanding of these events is needed. Not all non-routine events will be discussed in this report, but examples were selected to help bring an understanding of the scope of work needed in the unseen areas of City Infrastructure. If you have ever been asked or have asked yourself “What is going on that (fill in the blank) is not fixed or addressed yet?” this is what the summary was intended to help with.

Please feel free to contact us if you have any questions or would like to schedule a tour to see these items.



Comparative Water Production

Historical Flow Data for the City of Cheboygan Treated Water Pumpage (Million Gallons)												
Month	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	% Change
January	24.086	18.087	17.619	18.588	19.902	18.046	17.291	14.298	15.212	16.651	16.812	0.97%
February	24.923	17.111	18.080	18.791	21.738	15.772	18.948	14.559	14.506	16.965	21.223	25.10%
March	25.542	20.670	22.055	19.968	23.003	16.671	15.678	14.387	16.490	25.262	28.977	14.71%
April	21.027	17.771	19.831	19.355	20.494	14.806	14.139	13.206	15.106	22.127	27.025	22.14%
May	20.360	19.430	20.332	19.213	21.101	18.999	17.146	17.593	14.907	18.452	19.600	6.22%
June	22.571	23.124	24.178	18.684	20.690	17.708	18.502	19.050	16.321	18.439	16.924	-8.22%
July	25.954	28.664	26.339	23.066	22.480	19.115	22.311	23.133	20.524	19.821		-3.43%
August	21.321	21.525	28.089	22.199	18.933	18.408	21.788	19.657	19.511	19.977		2.39%
September	20.531	17.503	21.768	18.987	17.656	14.954	18.184	16.633	15.623	14.561		-6.80%
October	19.972	16.962	19.089	16.568	15.174	15.498	18.150	14.758	14.971	14.347		-4.17%
November	17.565	15.326	16.459	15.216	14.312	13.475	14.058	13.085	13.275	13.486		1.59%
December	20.589	16.624	17.524	17.548	16.282	14.656	14.052	13.996	14.196	13.736		-3.24%
Totals	264.441	232.797	251.363	228.183	231.765	198.108	210.247	194.355	190.642	213.824	130.561	12.16%

Comparative Wastewater Treated

Historical Flow Data for the City of Cheboygan Wastewater Treatment Plant (Million Gallons)												
Month	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	% Change
January	52.616	65.201	53.153	89.043	45.405	45.615	36.815	35.466	47.963	34.204	33.502	-2.05%
February	42.717	50.531	35.484	57.897	62.955	32.842	29.342	30.755	42.668	28.284	27.364	-3.25%
March	50.304	82.557	68.651	62.863	94.013	54.263	39.805	74.720	83.333	48.098	59.437	23.57%
April	65.910	67.198	76.648	136.787	78.138	51.787	97.063	42.399	84.243	128.857	66.882	-48.10%
May	45.780	52.353	41.312	62.227	50.113	41.307	60.081	32.955	64.860	66.243	53.332	-19.49%
June	33.860	31.671	35.487	65.258	40.244	66.382	49.321	35.540	33.593	30.144	39.850	32.20%
July	28.393	30.796	38.375	37.298	32.704	32.494	37.536	24.923	27.236	25.906		-4.88%
August	41.475	35.158	36.119	35.683	51.919	43.718	29.006	22.726	22.841	25.853		13.19%
September	30.518	37.125	39.990	32.251	34.151	52.963	40.228	22.478	23.469	34.255		45.96%
October	39.352	92.885	48.297	29.197	78.760	37.735	67.444	56.462	48.389	76.293		57.67%
November	57.558	54.688	40.609	33.866	68.608	41.693	68.758	39.262	71.685	84.735		18.20%
December	52.765	82.488	49.304	54.101	67.818	34.683	40.247	45.204	39.225	57.315		46.12%
Totals	541.248	682.651	563.429	696.471	704.828	535.482	595.646	462.890	589.505	640.187	280.367	8.60%

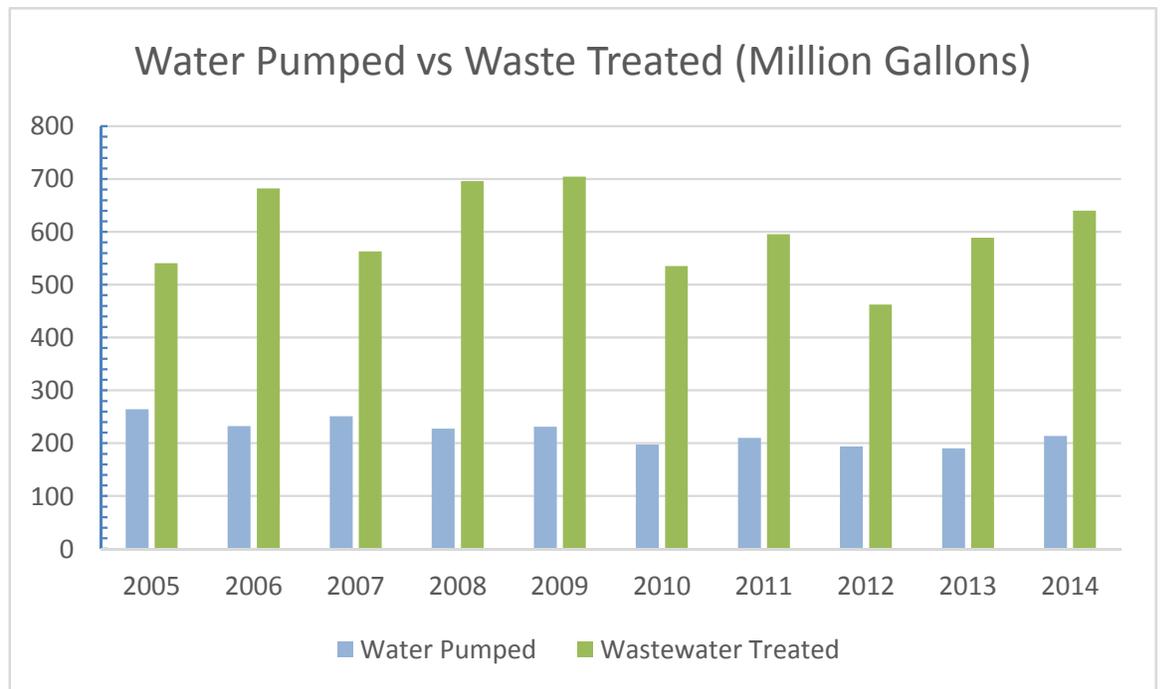
Bold numbers in both tables help to illustrate the numbers used when calculating the % change from year to year.

The table shows the treated wastewater flows discharged to the Cheboygan River for the past years. All monthly Wastewater Treatment Plant flows exceeded the amount of water produced for the past ten years. This is caused by two related measures of sanitary sewer integrity: Infiltration and Inflow (sometimes abbreviated I & I). Infiltration is caused by structural defects in the sewers that allow groundwater to enter the sewer. Root intrusion and settling of soil are two ways that gaps develop between sections of sewer pipe, allowing water to enter. Inflow, on the other hand, results from illegal connections to the sanitary sewer and by failed components of the sewer system. The most common illegal connections are roof drain connections and building footer drain connections. Building owners try to eliminate standing water on their property using these connections. Infiltration and Inflow causes the flow at the Wastewater Treatment Plant (WWTP) to rise, resulting in higher treatment costs.



Missing manhole covers and cross-connections with the storm water system are other ways that inflow can be introduced into the sanitary sewer system. Locating the sources of inflow can dramatically reduce the amount of wastewater that must be treated, lowering costs and improving effluent quality at the same time.

The table to the right uses the same total numbers as presented in the previous table but is configured to show the Water flow and Waste flow together. Wastewater systems will nearly always fall short of being sealed tight,



but a ten to twenty percent discrepancy from Water flow is what most communities aim for. This could be either 10%-20% greater than Water flow from rain or -10% to -20% from irrigation activity combined with dry conditions.

Water Treatment and Distribution Activity Summary

During the first half of 2015, communication failures from our radio system caused alarms to be triggered. These are of concern to the water system as they can cause wells or pumps to run too long and over fill storage devices. These calls were monitored manually until the radio telemetry was restored. These communication failures seem to happen



intermittently. The City has been provided a quote to help provide some manual controls for our staff to use in the event of this outage. Despite having the radio system looked at the cause of the interference remains unknown. This will be looked at again when the calibrations are due for this equipment. Our staff will provide updates as they become available.



Water Treatment Well #4 had electrical service feed issues soon after all of the test pumping, water quality testing, and approval to distribute to system. Northern Well is servicing the motor under warranty (pictured right), and Stan's Electric is helping



correct the power supply issues that exist with the City owned electrical service panels (pictured left).



The Chlorine Feed system needed minor repairs as a minor vacuum leak was causing less than the intended feed into the distribution system. This problem was discovered quickly and the repairs were made and the water was tested for any affects for this lower chlorine residual. The testing came back good and the system is now working as intended.

The following table is to summarize the Miss Dig Utility Marking activities during the first half of 2015. The number of utility location requests increase during the warmer months as construction and landscaping work increases.

Miss Dig Request Effort Jan-June 2015			
Requests	Marked	Avg/Day	Man-hours
269	201	1.10	301.5

Utility marking activity is extremely important, in order to keep contractors doing other work from hitting our underground Infrastructure. The staff sent to mark these are often mistaken as “the guys that wonder around”. They are looking for the spot that is to be excavated, comparing that to our utility location while marking. Accuracy and deliberate persistence are favored in this process, but persons that do not know what they are doing tend to guess something less favorable. Our staff has prevented damage to our Infrastructure for all 201 digs, prevention of damage may be the most important statistic.

Wastewater Treatment Activity Summary

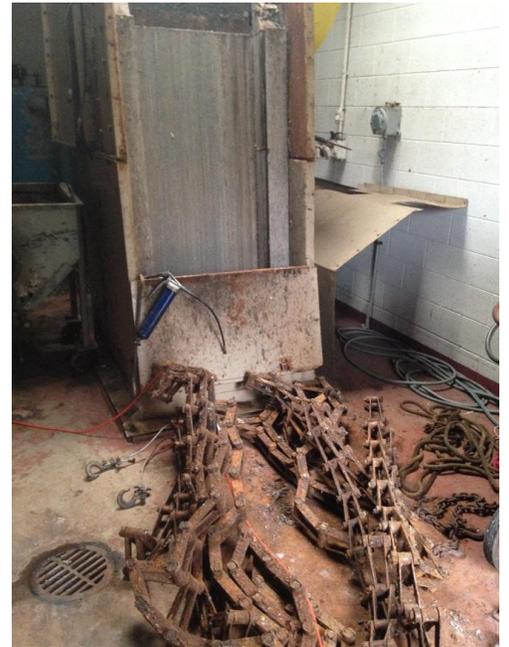
The City of Cheboygan has a Rotating Biological Contactor Process that was put into service in 1978. The expected life of a plant of this design is twenty to twenty five years. This continuation of service is commendable, although the plant has now outlived its usable life. WWTP is now using more operational time, money, and treatment is affected during these breakdowns.



The bearing and shaft sleeve replacement activity (pictured left, showing stages of removal) is hindered by lack of supply, available personnel and availability of metal fabrication for the custom made sleeve material. The RBC's have had six breakdowns during the first half of 2015, with four of those breaks repaired and two yet to be resolved when metal fabrication is complete.

The Bar Screen (pictured right) is at the beginning of the Wastewater

process and is used to remove large debris from the rest of the process. During some heavy rains at the end of June, a rock lodged in the chain system and broke a link of the drive chain.





The process contains eight RBC, each with a large gear reducer (pictured left) and two bearings. One of the breakdowns, currently in the process of being fixed, involved a gear reducer pulling out of the concrete. These bolts and anchors holding the part down gave way. An item such as this is a major repair affecting treatment.

The parts have doubled in price due to the fact that City of

Cheboygan is the only plant like this left in operation. With sixteen bearing in operation, the price doubling from \$1250.00 to \$2500.00 per bearing, restricts how far budgeted money will last. With one supplier of parts left, a monopoly is currently limiting our ability to maintain the mechanical monster with the same money and personnel resources as previously used in the past.

This is not limited to the RBC's or the Bar Screen, parts for the Clarifiers (pictured right) would be the next concern as they are needed to address minor issues before it becomes a major breakdown.

The current recommendation is to keep paying the higher cost for parts until a plan can be made to refurbish the plant. A refurbished plant would help



the City obtain equipment that parts are readily available from multiple suppliers. It would also help staffing issues, by limiting major repairs and provide a consistent clean discharge.

Pump Station Activity Summary



During the communication failures from our radio system caused alarms to be triggered. These alarms were less concerning than the ones that were received from the Water Treatment System as the Pump Stations will continue to function without radio communication. The Programmable Logic Controllers (PLC) keeps the pump station

pumping without the need for radio signals. These stations were monitored during these outages but did not need to be manned by employees to ensure the function of the station.

Power outages caused portable generators to be deployed to both a Township station, and a City station during the first half of 2015. This is a common concern with bad weather as multiple problems can surface during a power outage. These pump stations have controls that will fail eventually even with normal checks. Floats (pictured right) were changed in these stations as they were found to be inoperable.



Strategic Considerations

The City of Cheboygan urgently needs to look into sources of funding for the elimination of Storm water from the sanitary sewer flows. Previous grants, like the SAW grant, would help the

City in this endeavor. This investigation is necessary to stop treating excess water from unknown areas of infiltration. The charts and data that are prepared at the beginning of this Report are to illustrate the need to stop these flows that exceed the water production. The most economical way to regain the capacity and relieve the stress of sanitary infrastructure is to remove this excess water. The MDEQ grant application process will put emphasis on studying this inflow and putting together a systematic plan to eliminate this inflow. This plan would help to prioritize street and infrastructure improvements based on the how well the sewer trunk lines are holding up. In areas that need sewer improvements without street resurfacing, the pipes can be lined to improve these areas.

Department of Public Works had mostly routine work, with the exception that the Water Department constantly stealing labor to address repairs. The largest need of the department is to update the equipment on a regular schedule. Ten to twenty year old trucks require more money and man hours to maintain. Not constantly patching equipment would improve production without adding labor. We could improve the department with the following:

- 5 Year work and dump truck replacement program. This would provide them at least one truck that will not need work, and allow them to decommission a truck that is consuming more resources than it is worth. An eight page Dump Truck spec sheet has been written in anticipation that we will need one. This will allow bids to be apples to apples.
- Mini-Excavator would give all departments an option for digging smaller less intrusive holes for smaller repairs. The City has a large bucket as well as a medium bucket, and this third option would help save money on the restoration of the hole
- Push Plow for Rec Center parking lot that has been previously discussed to save money on plowing from contractor labor.



These cost and labor saving ideas will work if the right equipment is working and available to assist efficient production with our current staff. Doing more is possible if the right equipment allows for more production with current staff.

The City staff has not yet replaced Mr. Hart, so staffing has been a man short in this first half of 2015. It does appear we will need to fill this spot to help forward these repairs. If the City is unable to commit to some large improvements, more staff beyond this one laborer will be needed to hold the system together. If the City is able to make improvements, adding only one staff to the department will correct most of the labor void.

Other Considerations

If you still awake after the previous eight pages, you may have caught on to the theme that the City has some issues to address. Prioritizing these issues is difficult but only because compromises are made. Most of our labor and efforts are not down Main St. for everyone to see. This was the need for a report such as this. Some residents are unhappy that aesthetic issues with working equipment is not being fixed. With the list of broken equipment above, along with the list routine work, makes it difficult to stop working on issues that could be finable. These are mostly curb stops sticking to far up or down due to frost.

Additionally we have a resident that would like his working hydrant straightened to look better. These residents see these pieces every day, and we all

sympathize with them, although our staff is not at the point where everything is working and can schedule an excavation with the purpose of making something look better. This is a risky move at this point as many things can and will go wrong if we are digging up things that work. These residents can sometimes underestimate the effort needed and risks of breaking. The hydrant (pictured right) is leaning 6 degrees, but has been that way since 1997 and has worked well since that time. It has been requested that we straighten this and we are told this is easy, so why have we not done this? The reason is that we know the problem is six feet down and





would need to be re-piped to make it flat, so the 90 degree elbow sits straight. Our staff knows that the City has a number of hydrants that lean, are too short, and need painting. Down the street from this hydrant the City has a pump station panel (pictured left) that leans 6 degrees as well. The concern is that the complaints from residents could drive our priorities, and at what point does this continue. If our staff fixes this issue, be ready for the rest of the residents to follow suit (maybe including our staff to fix our leaning panels). Having a policy of the squeaky wheel getting the grease, will likely cause more wheels to rise up and squeak. Our staff is very happy to fix these items out of turn, if asked, although we see this is counterproductive when broken items still drive our priorities.

Report Supplement

A supplement has been included separately to include some information that is being tracked for future comparison and recordkeeping.

- Frozen Water List 2015
- Water Repair List 2015
- Frozen Water Notification 2016

Frozen Water List 2015

Number	Date	House Number	Street	Description	Resolution	Employee	Hours	Employee	Hours	Employee	Hours	Employee	Hours
1	January 13, 2015	426	James Street	Curb-stop	Homeowners Responsibility	Steve U.	1	Tom P.	1	Don D.		Tim W.	
2	January 13, 2015	311	Pine Street	Meter Bottom	Homeowners Responsibility	Steve U.		Tom P.		Don D.	2	Tim W.	2
3	January 13, 2015	299	South Main	Meter Bottom	Fixed and left water running	Steve U.		Tom P.		Don D.	2	Tim W.	2
4	January 13, 2015	223	North Main Street	Frozen in Street (shanty Boy)	Thaw Machine	Steve U.	4	Tom P.	4	Don D.		Tim W.	
5	January 13, 2015	200	North C Street	Frozen	Homeowners Responsibility	Steve U.	2	Tom P.	2	Don D.		Tim W.	
6	January 14, 2015	1257	Mackinaw Ave	Frozen	Homeowners Responsibility	Steve U.		Tom P.		Don D.	1	Tim W.	1
7	January 14, 2015	200	North C Street	Frozen	Homeowners Responsibility	Steve U.	1	Tom P.	1	Don D.		Tim W.	
8	January 15, 2015	1361	Court Street	Meter Bottom	Fixed and left water running	Steve U.		Tom P.		Don D.	2	Tim W.	2
9	January 29, 2015	207	Pinehill	Meter	Fixed	Steve U.		Tom P.		Don D.	2	Tim W.	2
10	February 1, 2015	1029	Fremont	Meter Pit full pressure	Homeowners Responsibility	Steve U.		Tom P.		Don D.	2	Tim W.	2
11	February 2, 2015	968	Mackinaw Ave	Frozen	Thaw Machine	Steve U.	6	Tom P.	6	Don D.		Tim W.	
12	February 2, 2015	502	Garfield	Meter Pit full pressure	Homeowners Responsibility	Steve U.	1	Tom P.	2	Don D.		Tim W.	
13	February 2, 2015	312	Dresser	Frozen in Pit	Warm Water Thaw	Steve U.		Tom P.		Don D.	3	Tim W.	3
14	February 4, 2015	1358	Mackinaw Ave	Frozen in Pit	Warm Water Thaw	Steve U.		Tom P.		Don D.	2	Tim W.	2
15	February 4, 2015	980	Mackinaw Ave	Frozen in Pit	Warm Water Thaw	Steve U.	2	Tom P.	2	Don D.		Tim W.	
16	February 8, 2015	740	S Huron	In Street	Thaw Machine	Steve U.	4	Tom P.	4	Don D.		Tim W.	
17	February 11, 2015	213	Backus	Frozen in Pit	Hose from Pit	Steve U.	3	Tom P.	3	Don D.		Tim W.	
18	February 12, 2015	400	South Western	Frozen in Street	Could not connect Hose	Steve U.	2	Tom P.	2	Don D.		Tim W.	
19	February 13, 2015	1361	Court Street	Frozen under house	Homeowners Responsibility	Steve U.	1	Tom P.	1	Don D.	3	Tim W.	3
20	February 13, 2015	327	Sammons	Frozen in Pit	Fixed	Steve U.		Tom P.		Don D.	2	Tim W.	2
21	February 13, 2015	313	Todd Street	Frozen	Homeowners Responsibility	Steve U.		Tom P.		Don D.	1	Tim W.	1
22	February 15, 2015	1514	Marquette	Frozen	Homeowners Responsibility	Steve U.	1	Tom P.	1	Don D.		Tim W.	
23	February 15, 2015	1150	Division	Meter Bottom	Gave new Meter Bottom	Steve U.		Tom P.	1	Don D.		Tim W.	
24	February 15, 2015	346	North Bailey	Frozen	Homeowners Responsibility	Steve U.	2	Tom P.	2	Don D.		Tim W.	
25	February 15, 2015	233	Duncan Ave	Meter Bottom	Gave new Meter Bottom	Steve U.	1	Tom P.		Don D.	1	Tim W.	1
26	February 15, 2015	207	North Western	Frozen	Homeowners Responsibility	Steve U.	2	Tom P.	2	Don D.		Tim W.	
27	February 15, 2015	119	North Bailey	Frozen in Pit	Warm Water Thaw	Steve U.		Tom P.		Don D.	2	Tim W.	2
28	February 16, 2015	1109	South Main Street	Frozen	Homeowners Responsibility	Steve U.		Tom P.		Don D.	3	Tim W.	3
29	February 16, 2015	744	South Huron	Frozen in Street	Hose to house next door	Steve U.		Tom P.		Don D.	3	Tim W.	3
30	February 16, 2015	708	East First Street	Meter Bottom	Gave new Meter Bottom	Steve U.		Tom P.		Don D.	1	Tim W.	
31	February 16, 2015	505	Duncan Ave	Meter Bottom	Gave new Meter Bottom	Steve U.		Tom P.		Don D.	1	Tim W.	
32	February 16, 2015	444	South Main	Frozen (Salvation Army)	Business Owners Responsibility	Steve U.	1	Tom P.	1	Don D.	1	Tim W.	1
33	February 16, 2015	415	West Seymore	Frozen	Homeowners Responsibility	Steve U.		Tom P.		Don D.	1	Tim W.	1
34	February 16, 2015	412	Water Street	Frozen (Plaunt Trans)	Business Owners Responsibility	Steve U.	1	Tom P.	1	Don D.		Tim W.	
35	February 16, 2015	332	Todd Street	Frozen	Homeowners Responsibility	Steve U.	1	Tom P.		Don D.		Tim W.	
36	February 16, 2015	325	West Dresser Street	Frozen	Warm Water Thaw	Steve U.	2	Tom P.	2	Don D.	2	Tim W.	2
37	February 16, 2015	305	Western Ave	Frozen	Homeowners Responsibility	Steve U.		Tom P.		Don D.	1	Tim W.	1
38	February 16, 2015	127	North Main Street	Frozen in Road (Modern Pharmacy)	Thaw Machine	Steve U.	6	Tom P.	6	Don D.	6	Tim W.	6
39	February 16, 2015	120	North Western	Frozen	Homeowners Responsibility	Steve U.	1	Tom P.	1	Don D.		Tim W.	
40	February 17, 2015	218	6th Street	Frozen	Homeowners Responsibility	Steve U.		Tom P.		Don D.	1	Tim W.	1
41	February 17, 2015	207	Sammons	Meter Bottom	Gave new Meter Bottom	Steve U.		Tom P.		Don D.	2	Tim W.	2
42	February 18, 2015	212	Riverside Drive	Meter Pit	Warm Water Thaw	Steve U.		Tom P.		Don D.	3	Tim W.	3
43	February 19, 2015	328	Dresser	Meter Pit	Warm Water Thaw	Steve U.		Tom P.		Don D.	1	Tim W.	1
44	February 19, 2015	308	Little Field	Frozen	Homeowners Responsibility	Steve U.		Tom P.		Don D.	1	Tim W.	1
45	February 19, 2015	301	North D Street	Frozen	Homeowners Responsibility	Steve U.		Tom P.		Don D.	2	Tim W.	2
46	February 20, 2015	1101	West State Street	Frozen	Homeowners Responsibility	Steve U.	1	Tom P.	1	Don D.		Tim W.	
47	February 20, 2015	359	Young Street	Meter Pit	Warm Water Thaw	Steve U.	2	Tom P.	2	Don D.		Tim W.	
48	February 20, 2015	351	Young Street	Meter Pit	Warm Water Thaw	Steve U.	2	Tom P.	2	Don D.		Tim W.	
49	February 20, 2015	304	Pine Street	Frozen	Homeowners Responsibility	Steve U.		Tom P.		Don D.	1	Tim W.	1
50	February 20, 2015	302	South Huron Street	Frozen (Norman Funeral Home)	Warm Water Thaw	Steve U.		Tom P.		Don D.	2	Tim W.	2

Frozen Water List 2015

51	February 21, 2015	1266	Howard	Meter Pit	Warm Water Thaw	Steve U.		Tom P.	Don D.	2	Tim W.	2	
52	February 21, 2015	914	North Western	Meter Pit	Warm Water Thaw	Steve U.	2	Tom P.	2	Don D.	2	Tim W.	2
53	February 21, 2015	416	West Seymore	Meter Pit	Warm Water Thaw	Steve U.	3	Tom P.	3	Don D.		Tim W.	
54	February 21, 2015	301	Clinton	In Street	Hose to house behind them	Steve U.	3	Tom P.	3	Don D.		Tim W.	
55	February 22, 2015	526	Taylor Street	In Street	Garden Hose	Steve U.		Tom P.		Don D.	2	Tim W.	2
56	February 23, 2015	218	E Street	Frozen	Homeowners Responsibility	Steve U.	1	Tom P.		Don D.	1	Tim W.	1
57	February 23, 2015	211	N. Bailey	Meter Pit Froze	City side (replaced Curbstop)	Steve U.	8	Tom P.	16	Don D.	16	Tim W.	8
58	February 23, 2015	158	Grove Street	Frozen Water and Sewer	Homeowners Responsibility	Steve U.		Tom P.		Don D.	1	Tim W.	1
59	February 25, 2015	1015	W State St	Meter Pit Froze	Warm Water Thaw	Steve U.		Tom P.		Don D.	3	Tim W.	3
60	February 25, 2015	702	S Main St	Meter Pit Froze (Little Ceasars)	Warm Water Thaw	Steve U.		Tom P.		Don D.	2	Tim W.	2
61	February 26, 2015	805	Cuyler St	In Street	Hose to house next door	Steve U.	3	Tom P.	3	Don D.		Tim W.	
62	February 26, 2015	627	Duncan Ave	Curb-stop	Homeowners Responsibility	Steve U.		Tom P.		Don D.	1	Tim W.	1
63	February 26, 2015	319	N. Bailey	Curb-stop	Homeowners Responsibility	Steve U.		Tom P.		Don D.	1	Tim W.	1
64	February 27, 2015	628	W First St.	Frozen	Hose to house next door	Steve U.		Tom P.		Don D.	2	Tim W.	2
65	February 27, 2015	513	Pine Street	In Street	Thaw Machine	Steve U.	4	Tom P.	4	Don D.		Tim W.	
66	February 27, 2015	110	N Bailey St.	Frozen	Hose to house next door	Steve U.		Tom P.		Don D.	3	Tim W.	3
67	February 28, 2015	1333	Court Street	Frozen	Homeowners Responsibility	Steve U.	1	Tom P.	1	Don D.		Tim W.	
68	February 28, 2015	1237	Mackinaw Ave	Meter Pit	Homeowners Responsibility	Steve U.	1	Tom P.	4	Don D.		Tim W.	
69	February 28, 2015	1107	Randolf St.	In Street	Hose to house next door	Steve U.		Tom P.		Don D.	3	Tim W.	3
70	February 28, 2015	427	Cleveland Ave	Meter Pit	Warm Water Thaw	Steve U.		Tom P.		Don D.	2	Tim W.	2
71	February 28, 2015	325	Young Street	In Street	Thaw Machine	Steve U.	4	Tom P.	4	Don D.		Tim W.	
72	February 28, 2015	321	Sammons	In Street	Thaw Machine	Steve U.	6	Tom P.	6	Don D.	2	Tim W.	2
73	March 1, 2015	612	Mackinaw Ave	In Street	Hose to house behind them	Steve U.	3	Tom P.	3	Don D.		Tim W.	
74	March 2, 2015	902	Mackinaw Ave	In Street	Thaw Machine	Steve U.	4	Tom P.	4	Don D.		Tim W.	
75	March 2, 2015	593	Neisen Dr	In Street	Hose to house next door	Steve U.		Tom P.		Don D.	2	Tim W.	2
76	March 2, 2015	512	Taylor Street	In Street	Hose to house next door	Steve U.		Tom P.		Don D.	3	Tim W.	3
77	March 2, 2015	419	W Seymour	Meter Pit Froze	Warm Water Thaw	Steve U.		Tom P.		Don D.	2	Tim W.	2
78	March 2, 2015	310	E State St	In Street	Thaw Machine	Steve U.	4	Tom P.	4	Don D.		Tim W.	
79	March 3, 2015	962	Mackinaw Ave	In Street	Thaw Machine	Steve U.	4	Tom P.	4	Don D.		Tim W.	
80	March 3, 2015	316	N Bellant St	In Street	Hose to house next door	Steve U.		Tom P.		Don D.	2	Tim W.	2
81	March 4, 2015	615	Duncan Ave	In Street	Thaw Machine	Steve U.	3	Tom P.	3	Don D.		Tim W.	
82	March 5, 2015	1417	Court Street	Frozen	Homeowners Responsibility	Steve U.		Tom P.		Don D.	1	Tim W.	1
83	March 5, 2015	1206	S Main St	Frozen	Homeowners Responsibility	Steve U.		Tom P.		Don D.	1	Tim W.	1
84	March 6, 2015	531	Antoine St	In Street	Hose to house next door	Steve U.		Tom P.		Don D.	2	Tim W.	2
85	March 7, 2015	2024	Harrison Ave	Frozen	Could not thaw or hose	Steve U.		Tom P.		Don D.	1	Tim W.	1
86	March 8, 2015	1101	Court Street	In Street	Thaw Machine	Steve U.	4	Tom P.	4	Don D.		Tim W.	
87	March 9, 2015	706	W First St.	Frozen	Could not thaw or hose	Steve U.		Tom P.		Don D.	1	Tim W.	1
88	March 10, 2015	644	W Lincoln	Meter Pit Froze	Warm Water Thaw	Steve U.		Tom P.		Don D.	2	Tim W.	2
89	March 11, 2015	543	N Bailey St.	Meter Pit Froze	Warm Water Thaw	Steve U.		Tom P.		Don D.	2	Tim W.	2
90	March 13, 2015	939	W First St.	Frozen	Could not thaw or hose	Steve U.		Tom P.		Don D.	1	Tim W.	1
91	March 13, 2015	718	S Huron	In Street	Hose to house next door	Steve U.		Tom P.		Don D.	2	Tim W.	2
92	March 13, 2015	319	Duncan Ave	In Street	Hose to house next door	Steve U.		Tom P.		Don D.	2	Tim W.	2
93	March 17, 2015	805	Cuyler St	In Street	Hose to house next door	Steve U.		Tom P.		Don D.	2	Tim W.	2
94	March 18, 2015	334	N Main St	Frozen	Could not thaw or hose	Steve U.		Tom P.		Don D.	1	Tim W.	1
95	March 20, 2015	512	Mackinaw Ave	In Street	Thaw Machine	Steve U.	4	Tom P.	4	Don D.		Tim W.	
96	March 23, 2015	744	South Huron	Frozen in Street	Replace Hose	Steve U.	1	Tom P.	1	Don D.		Tim W.	
97	March 23, 2015	718	S Huron	Frozen	Replace Hose	Steve U.	1	Tom P.	1	Don D.		Tim W.	
98	March 23, 2015	213	Backus	Frozen in Pit	Replace Hose	Steve U.	1	Tom P.	1	Don D.		Tim W.	
99	March 24, 2015	805	Cuyler St	In Street	Replace Hose	Steve U.	1	Tom P.	1	Don D.		Tim W.	
100	March 24, 2015	628	W First St.	Frozen	Replace Hose	Steve U.	1	Tom P.	1	Don D.		Tim W.	
101	March 24, 2015	526	Taylor Street	In Street	Replace Hose	Steve U.	1	Tom P.	1	Don D.		Tim W.	
102	March 24, 2015	301	Clinton	In Street	Replace Hose	Steve U.	1	Tom P.	1	Don D.		Tim W.	

Frozen Water List 2015

103	March 25, 2015	1107	Randolf St.	In Street	Replace Hose	Steve U.	1	Tom P.	1	Don D.	1	Tim W.	1
104	March 25, 2015	612	Mackinaw Ave	In Street	Replace Hose	Steve U.	1	Tom P.	1	Don D.	1	Tim W.	1
105	March 25, 2015	593	Neisen Dr	In Street	Replace Hose	Steve U.	1	Tom P.	1	Don D.	1	Tim W.	1
106	March 25, 2015	110	N Bailey St.	Frozen	Replace Hose	Steve U.	1	Tom P.	1	Don D.	1	Tim W.	1
107	March 26, 2015	718	S Huron	In Street	Replace Hose	Steve U.	1	Tom P.	1	Don D.	1	Tim W.	1
108	March 26, 2015	531	Antoine St	In Street	Replace Hose	Steve U.	1	Tom P.	1	Don D.	1	Tim W.	1
109	March 26, 2015	512	Taylor Street	In Street	Replace Hose	Steve U.	1	Tom P.	1	Don D.	1	Tim W.	1
110	March 26, 2015	319	Duncan Ave	In Street	Replace Hose	Steve U.	1	Tom P.	1	Don D.	1	Tim W.	1
111	March 26, 2015	316	N Bellant St	In Street	Replace Hose	Steve U.	1	Tom P.	1	Don D.	1	Tim W.	1
112	March 29, 2015	805	Cuyler St	In Street	Replace Hose	Steve U.	1	Tom P.	1	Don D.	1	Tim W.	1
113	March 29, 2015	213	Backus	Frozen in Pit	Checked for thaw	Steve U.		Tom P.		Don D.	2	Tim W.	2
114	April 6, 2015	744	South Huron	Frozen in Street	Checked for thaw	Steve U.		Tom P.		Don D.	2	Tim W.	2
115	April 7, 2015	805	Cuyler St	In Street	Checked for thaw	Steve U.	1	Tom P.	1	Don D.	2	Tim W.	2
116	April 7, 2015	526	Taylor Street	In Street	Checked for thaw	Steve U.		Tom P.		Don D.	1	Tim W.	
117	April 7, 2015	301	Clinton	In Street	Checked for thaw	Steve U.		Tom P.		Don D.	2	Tim W.	
118	April 8, 2015	1107	Randolf St.	In Street	Checked for thaw	Steve U.	1	Tom P.	1	Don D.	1	Tim W.	
119	April 8, 2015	628	W First St.	Frozen	Checked for thaw	Steve U.		Tom P.		Don D.	2	Tim W.	
120	April 8, 2015	110	N Bailey St.	Frozen	Checked for thaw	Steve U.		Tom P.		Don D.	2	Tim W.	
121	April 9, 2015	612	Mackinaw Ave	In Street	Checked for thaw	Steve U.	2	Tom P.	2	Don D.	2	Tim W.	2
122	April 9, 2015	593	Neisen Dr	In Street	Checked for thaw	Steve U.		Tom P.		Don D.	1	Tim W.	
123	April 9, 2015	512	Taylor Street	In Street	Checked for thaw	Steve U.	2	Tom P.	2	Don D.	3	Tim W.	3
124	April 9, 2015	316	N Bellant St	In Street	Checked for thaw	Steve U.		Tom P.		Don D.	2	Tim W.	
125	April 10, 2015	805	Cuyler St	In Street	Checked for thaw	Steve U.	2	Tom P.	2	Don D.	2	Tim W.	2
126	April 10, 2015	718	S Huron	In Street	Checked for thaw	Steve U.	2	Tom P.	2	Don D.	2	Tim W.	2
127	April 10, 2015	531	Antoine St	In Street	Checked for thaw	Steve U.		Tom P.		Don D.	1	Tim W.	1
128	April 10, 2015	319	Duncan Ave	In Street	Checked for thaw	Steve U.		Tom P.		Don D.	1	Tim W.	1
129	April 27, 2015	744	South Huron	Frozen in Street	Collect Hose	Steve U.		Tom P.		Don D.	2	Tim W.	2
130	April 27, 2015	526	Taylor Street	In Street	Collect Hose	Steve U.		Tom P.		Don D.	2	Tim W.	2
131	April 27, 2015	301	Clinton	In Street	Collect Hose	Steve U.		Tom P.		Don D.	1	Tim W.	1
132	April 27, 2015	213	Backus	Frozen in Pit	Collect Hose	Steve U.		Tom P.		Don D.	2	Tim W.	2
133	April 28, 2015	1107	Randolf St.	In Street	Collect Hose	Steve U.		Tom P.		Don D.	2	Tim W.	2
134	April 28, 2015	805	Cuyler St	In Street	Collect Hose	Steve U.		Tom P.		Don D.	1	Tim W.	1
135	April 28, 2015	628	W First St.	Frozen	Collect Hose	Steve U.		Tom P.		Don D.	2	Tim W.	2
136	April 28, 2015	612	Mackinaw Ave	In Street	Collect Hose	Steve U.		Tom P.		Don D.	1	Tim W.	1
137	April 28, 2015	110	N Bailey St.	Frozen	Collect Hose	Steve U.		Tom P.		Don D.	2	Tim W.	2
138	April 29, 2015	593	Neisen Dr	In Street	Collect Hose	Steve U.	2	Tom P.	2	Don D.		Tim W.	
139	April 29, 2015	531	Antoine St	In Street	Collect Hose	Steve U.	2	Tom P.	2	Don D.		Tim W.	
140	April 29, 2015	512	Taylor Street	In Street	Collect Hose	Steve U.	2	Tom P.	2	Don D.		Tim W.	
141	April 29, 2015	316	N Bellant St	In Street	Collect Hose	Steve U.	2	Tom P.	2	Don D.		Tim W.	
142	April 30, 2015	805	Cuyler St	In Street	Collect Hose	Steve U.	2	Tom P.	2	Don D.		Tim W.	
143	April 30, 2015	718	S Huron	In Street	Collect Hose	Steve U.	2	Tom P.	2	Don D.		Tim W.	
144	April 30, 2015	319	Duncan Ave	In Street	Collect Hose	Steve U.	2	Tom P.	2	Don D.		Tim W.	

Address in Bold had multiple service calls

Most calls produced overtime hours

Total Hours

Steve U. 153

Tom P. 163

Don D. 180

Tim W. 159

Water Distribution Repairs 2015

	Address	Attendant	Hours	Entrant	Hours2	Excavator	Hours3	Driver	Hours4	Equipment	Hours5	Assistant	Hours6
1	Howard & Watson	J. Karmol	9	D. Dailey	9	S. Schramm	9	J. Laudenslager	9	T. Pellens	9	S. Umphrey	9
2	George & N Eastern	J. Karmol	20	D. Dailey	18	S. Schramm	18	J. Laudenslager	18	T. Pellens	18	S. Umphrey	9
3	424 Riverside Dr.	J. Karmol	9	D. Dailey	9	S. Schramm	9	J. Laudenslager	9	T. Pellens		S. Umphrey	9
4	833 N Dresser	J. Karmol	6	D. Dailey	6	S. Schramm	6	J. Laudenslager	6	T. Pellens	6	S. Umphrey	
5	703 N Dresser	J. Karmol	6	D. Dailey	6							T. Wilkinson	6
6	504 Mackinaw Ave	J. Karmol	3	D. Dailey	1	S. Schramm		J. Laudenslager		T. Pellens	2	S. Umphrey	
7	950 Division	J. Karmol	6	D. Dailey	6							T. Wilkinson	6
8	208 Palmyra	J. Karmol	10	D. Dailey	10	S. Schramm	8	J. Laudenslager	8	T. Pellens	6	S. Umphrey	6
9	327 Young St	J. Karmol	8	D. Dailey	8	S. Schramm	8	N. Howell	8	T. Pellens	6	S. Umphrey	4
10	2515 Harrison Ave	J. Karmol	12	D. Dailey	8	S. Schramm		J. Laudenslager	4	T. Pellens		S. Umphrey	
11	275 Clinton St. Service	J. Karmol	2			Fred Wilkinson							
12	300 Clinton St. Service	J. Karmol	2			Fred Wilkinson							
13	825 S Huron (Health Dept.)	J. Karmol	2			Fred Wilkinson							
14	Palmyra & Center	J. Karmol	6	D. Dailey	6	S. Schramm	6	J. Laudenslager	6	T. Pellens	6		
15	Valve @ end of S. Huron	J. Karmol	2	D. Dailey	6	T. Wilkinson	6			T. Pellens	4	S. Umphrey	4
16	221 N. Bailey	J. Karmol	18	D. Dailey	18	T. Pellens	9					T. Wilkinson	9
17	Huron & Lincoln (BK)	J. Karmol	12	D. Dailey	12	S. Schramm	6	J. Laudenslager	6	T. Pellens	6	N. Howell	6
18	501 Filmore St	J. Karmol	12	D. Dailey	12	S. Schramm	8	J. Laudenslager	8	T. Pellens	6		
19	1020 Court St.	J. Karmol	6	D. Dailey	6	T. Wilkinson	6	Mike Fein	6				
18	1020 Court St. Round 2 & 3	J. Karmol	12	D. Dailey	12	S. Schramm	8	Mike Fein	6				
19	Hancock & Western	J. Karmol	2	D. Dailey	2	T. Wilkinson		J. Laudenslager					
18	198 S Western	J. Karmol	2	D. Dailey	2	S. Schramm		J. Laudenslager					
20													

Total Hours	167	157	107	94	69	68
						

Let Run Notice List

	Number	Address	Description
1	223	N. Main Street	Shanty Boy
2	334	N. Main Street	Bookstore
3	702	S. Main Street	Little Ceasars
4	712	S. Main Street	Sears
5	299	S. Main Street	Lanny's Rental
6	1262	Mackinaw Ave	Flower Station
7	1237	Mackinaw Ave	Johnson Motel
8	1346	Mackinaw Ave	Forsmark Dental
9	108	E. State Street	State Street Vet
10	1101	Court Street	Court Street Part Mart
11	351	Young Street	Repeat Frozen
12	512	Taylor Street	Repeat Frozen
13	718	S. Huron Street	Repeat Frozen
14	744	S. Huron Street	Repeat Frozen
15	501	O'Brein Drive	Repeat Frozen
16	213	Backus Street	Repeat Frozen
17	319	Duncan Ave	Repeat Frozen
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