



PAINESVILLE WATER DIVISION

July 2011

OVERVIEW AND HIGHLIGHT

The Water Division repaired nine main breaks in the month of July. On July 3, 2011 the 8" ductile iron water main at 6290 Beres Dr. was discovered with a hole in the pipe, which was created by corrosion. A repair clamp was placed over the hole to repair the 23-year old main. On July 4th 2011, a 6" cast iron water main at 824 Marshall Dr. was discovered with a hole in the pipe that was created by corrosion. A repair clamp was placed over the hole to repair the 58-year old main. On July 7, 2011, the 12" cast iron water main at 314 E. Walnut St. was discovered with a 4'8" split. Two couplers and 4' of pipe were used to repair the 51-year old main. On July 10, 2011, the 6" cast iron water main at 745 Skinner Ave. was discovered with a 3' split. Two couplers and a 3' piece of pipe were used to repair the 85-year old main. On July 12, 2011, the 6" cast iron water main at 1087 Skinner Ave. was discovered with a 3" split. A repair clamp was placed over the split to repair the 85-year old main. On July 12, 2011, the 8" cast iron water main at 599 Williams St. was discovered with a hole in the pipe created by excess pressure within the distribution system. A repair clamp was placed over the hole to repair the 51-year old main. On July 19, 2011, the 8" ductile iron water main at 7288 Pinehill Dr. was discovered with a hole in the pipe created by corrosion. A repair clamp was placed over the hole to repair the 27-year old main. On July 22, 2011, the 8" cast iron water main at 599 Williams St. was discovered with a hole in the pipe created by corrosion. A repair clamp was placed over the hole to repair the 51-year old main. On July 28, 2011, the 12" cast iron water main at 835 Richmond Rd. was discovered with a 7' split in it. Two repair clamps and a piece of pipe were used to repair the 49-year old main.

There was one hydrant repaired in the system for the month of July in Concord Township.

There was one service replaced with copper in the City of Painesville and one copper service line repaired in Concord Township.

A new method was designed, with the cooperation of Streets Service Director Kevin Lynch, to accelerate the repairs of roads and driveway/lawn restorations. Progress charts have been created and include data such as date of the water break, repair of the water break, restoration of the water break hole and complete restoration. These progress charts are available for all departments to access and are updated as the work is being performed.

Goals achieved

Water Distribution #1 and Water Plant Goal #1- To maintain a safe, reliable and high quality water supply to our customers/Optimize Water Plant operations

Actions - All breaks were repaired

Actions - Completed Uni-Directional flushing

Actions – Continue abandoning service lines, which are no longer needed.

Actions – Continue monitoring Elm St. water quality

Actions – Continued pilot study to determine the correct application point to dose polymer. After jar tests indicated improvements in water quality, a pump was relocated and temporarily installed so that the chemical can be applied at a different point in the chemical process. The data will be studied during these periods as we continue to reassess the application point of the polymer.

Water Distribution #2- Optimize system operations

Actions – Received new backhoe with extended boom, hammer and tamper. This backhoe will enable safe efficient operation during water breaks and enable quicker more proficient road restorations.

Actions - Distribution employees working in Lab and Plant operations

Actions - Distribution employees Bruce Hook and Leonard Crosby are helping with plant maintenance and plant employee Edward Bardall helping with maintenance at tanks and pump stations.

Actions - Ronald Foresi (Heavy Equipment Operator) is hauling sludge from the plant on a semi-regular basis.

Water Distribution #3 and Water Plant Goal #4 – Responsiveness to the community/Employee relations and communications

Action - Meet with employees every morning.

Water Distribution Goal #4 and Water Plant Goal #5 - Provide the highest qualified, professional workforce/Responsiveness to the community

Action - Requested from customers and received backflow tests.

Action - Performed new service line inspections.

Action - Susan Fuerst attended all Lake County Safety Council meetings.

Action - Verifying pool slips.

Action – Cross-training Shawn Knebusch for full certification in the Wet Chemistry Laboratory.

Action – Cross-training Terrance Baidme for operational certification in the Wet Chemistry Laboratory.

Water Plant Goal #2- Good working relationship with the EPA and being in compliance with all regulations.

Action – Had multiple discussions with EPA representative Stephen Bopple.

Action - T.O.C. phosphate and nitrate collected and sent to Alloway for monthly compliance.

Action – Ohio EPA performed an on-site unannounced lab survey to evaluate: testing procedures, on-duty personnel, chemical analysis, record keeping, etc. Mr. Todd Bidlack, the Ohio EPA microbiological representative, sent a letter to my office stating “No deviations were noted during his inspection.”

Action- Sent Ohio EPA state reports to different representatives of the Ohio EPA to ensure compliance.

Water Plant Goal #6 - Organize Plant procedures in the laboratory, maintenance and operations.

Action - Continued performing chemical analysis of Elm St.

Action - Monthly laboratory quality controls on all laboratory equipment.

Action – Repaired pump #3 at Crile pump station.

Action – Replaced fan in low service #2 VFD cabinet.

Action – Installed light in #2 Alum tank.

Action – Greased #4 low service pump and tightened packing.

CITY OF PAINESVILLE WATER PLANT MONTHLY REPORT

July 2011

Pumpage, Turbidity & Chemical Use

Pumpage (MG)

Finished Flow 135.03
 Raw Flow 141.24
 Wash Water 2.81
 Plant Usage Service water 3.31

Turbidity

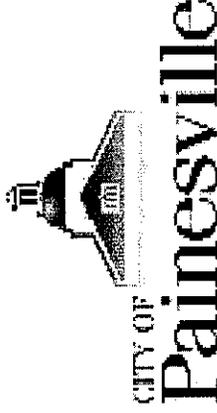
Average Raw 5.90
 Average Applied 0.60
 Average Tap 0.10

Chemicals Use (LBS)

Alum 20250
 Zinc OrthoPhosphate 3299
 Potassium Permanganat 255
 Fluoride 65% 1552
 Chlorine 3836
 Cationic Polymer 50
 Caustic * 0

Chemical Use Dosage (mg/L)

Alum 17.19
 Zinc OrthoPhosphate 2.80
 Potassium Permanganat 0.22
 Fluoride 65% 0.80
 Chlorine 3.26
 Cationic Polymer 0.04
 Caustic * 0.00



Chemical	Price / lb	Total Chem Cost	Cost / MG
Alum	\$ 0.14905	\$ 3,018.26	\$ 21.37
Zinc OrthoPhosphate	\$ 0.5570	\$ 1,837.54	\$ 13.01
Potassium Permanganate	\$ 2.9800	\$ 759.90	\$ 5.38
Fluoride 65%	\$ 0.4250	\$ 659.60	\$ 4.67
Chlorine	\$ 0.2390	\$ 916.80	\$ 6.49
Cationic Polymer	\$ 0.5600	\$ 28.00	\$ 0.20
Caustic *	\$ 0.1800	\$ -	\$ -
TOTAL	\$ 5.09	\$ 7,220.11	\$ 51.12

AVERAGE CHEMICAL COST/MG FINNISHED \$ 53.47
 AVERAGE CHEMICAL COST/MG \$ 51.12
 AVERAGE DAILY CHEMICAL COST \$ 232.91
 TOTAL CHEMICAL COST FOR THE MONTH \$ 7,220.11

Electrical Usage Per Million Gallons High Service

KW'S/MG 1626.34
 MAX DEMAND 476.10
 COST / MG \$174.82



DIVISION OF WATER
JULY 2011 REPORT
 ALL FLOW IN MILLION GALLONS

	Last Year To Date	This Year To Date	This Month Last Year	This Month
Finished Water Pumped to System (Million Gallons)	756.17	613.09	150.762	135.027
Water Purchased from AquaOhio	6.954	4.211	1.206	1.156
Water Sold to AquaOhio	3.331	0.005	0.000	0.000
Chestnut Pump Station	194.000	191.313	52.000	47.382
Crile Pump Station	113.890	106.994	35.860	30.798
Hermitage Pump Station	1.649	0.636	0.579	0.075
New Service City	31	16	5	1
New Service Outside City	22	18	7	3
Abandon Service City	4	4	2	1
Abandon Service Outside City	0	2	0	0
Service Line Replaced With Copper Or Plastic	1-P, 10-C	4-C.	0	1
Footage New Main Installed City	155' of 6" PVC	0	0	0
Footage New Main Installed Out of City	PRI-75' of 8" D.I. PUB-4,070' of 8" PVC	Pri. - 94' of D.I.	0	Pri. - 94' of D.I.
Hydrants Repaired	50	21	27	1
New Hydrants installed	5	2	1	0
Inspector Hours billed	357 Reg. 48 O.T.	0	0	0
Inspector Hours worked	115 Reg. 7.5 O.T.	0	0	23 Reg. 1.5 O.T.

Water Main Breaks:

- 7-3-11, Hole on 8" D.I. Water Main at 6290 Beres Dr. (Concord)
- 7-4-11, Hole on 6" C.I. Water Main at 824 Marshall Dr. (City)
- 7-7-11, 4'-8" Split on 12 C.I. Water Main at 314 E. Walnut St. (City)
- 7-10-11, 3' Split on 6" C.I. Water Main at 745 Skinner Ave. (City)
- 7-12-11, 3" Split on 6" C.I. Water Main at 1087 Skinner Ave. (City)
- 7-22-11, Hole on 8" C.I. Water Main at 599 Williams St. (City) 28 Backflow Tested
- 7-19-11, Hole on 8" D.I. Water Main at 7288 Pinehill Dr. (Concord) 4 Service Line Inspections
- 7-12-11, Hole on 8" C.I. Water Main at 599 Williams St. (City) 142 O.U.P.S Tickets completed
- 7-28-11, 7' Split on 12" C.I. Water Main at 835 Richmond Rd. (Pain. Town.) 11 Pool Slips

Miscellaneous:

- 7-7-11, Re-new 3/4" Leaking service at 25 Orchard Ave. (City)
- 7-11-11, Repair 1" Leaking service at 7204 Lancaster Ct. (Concord)
- 7-15-11, Abandoned 3/4" Galv. Service in back yard of 1137 Christina Ct. (Pain. Town.)
- 7-20-11, Finished The Uni-Directional flushing Of the Complete System (ALL)

George P. Ginnis
Mark Connor
Frank Mckeon

Water Division Superintendent
Water Distribution Supervisor
Water Treatment Plant Chief Operator