# 2014

# WATER DISTRIBUTION ANNUAL REPORT



## CITY OF FINDLAY WATER DISTRIBUTION DEPARTMENT

136 N. BLANCHARD ST.

FINDLAY, OHIO 45840

The City of Findlay Water Distribution Department had 13 full time employees at the end of 2014.

Employees are:

Maintenance Supervisor
Secretary
Waterline Maintenance Workers III
Waterline Maintenance Workers I
Waterline Maintenance Workers I
Waterline Maintenance Technician
Water Meter Technician

Collectively, the Water Distribution Department totals 199 years of service.

### Members of the Water Distribution staff are:

Jeff Betts-Maintenance Supervisor

Betty Jones-Administrative Assistant

Jeff Kolhoff-Waterline Maintenance Worker III

Ken Paul-Waterline Maintenance Worker III

Bob Wagner-Waterline Maintenance Worker III

Bryan Miller-Waterline Maintenance Worker II / Meter Technician

Mike Rader-Waterline Maintenance Technician

Jordan Endicott- Waterline Maintenance Worker II

Casey Glick-Waterline Maintenance Worker II

Jason Ruhlen-Waterline Maintenance Worker II

Michael Knight-Waterline Maintenance Worker I

Travis Bohn- Waterline Maintenance Worker I

Jacob Rayle- Waterline Maintenance Worker I

#### Retirements

Larry Pocock w/23 years of service

#### DEPARTMENT RESPONSIBILITIES

At the end of 2014 the City of Findlay's Water Distribution Department was responsible for 309.32 miles of city water main. There are 19,325 water service connections, meter settings, and 2,415 fire hydrants.

The department also documents all activities handled including major activities such as: installation of water lines, water taps, service line renewals, main break repairs, hydrant repairs, locating of water lines for other utilities and contractors, repairs to streets, driveways, and sidewalks damaged by our activities, inspections of water service line installations, collection of bacteria samples for new water line installations and leak detection, review of all proposed construction plans, to make sure the proposed water lines are in compliance with Ohio EPA rules and regulations and AWWA Standards, and maintenance and minor repairs to the department's vehicles and equipment.

### **NEW WATER SERVICE CONNECTIONS**



From 1989 through 2014, over a twenty five (26) year period, we have added 5,348 new water service connections to our system.

| 1989<br>1990<br>1991<br>1992 | 140<br>186<br>187<br>162 | 2002<br>2003<br>2004<br>2005 | 316<br>242<br>275<br>271 |
|------------------------------|--------------------------|------------------------------|--------------------------|
| 1993                         | 209                      | 2006                         | 234                      |
| 1994                         | 272                      | 2007                         | 145                      |
| 1995                         | 245                      | 2008                         | 107                      |
| 1996                         | 268                      | 2009                         | 66                       |
| 1997                         | 285                      | 2010                         | 79                       |
| 1998                         | 346                      | 2011                         | 80                       |
| 1999                         | 360                      | 2012                         | 91                       |
| 2000                         | 403                      | 2013                         | 86                       |
| 2001                         | 293                      | 2014                         | 127                      |

For the year 2014,  $69 - \frac{3}{4}$  inch services were installed taking 750 man-hours and 100.25 backhoe hours, 44 - 1 inch services were installed taking 289 man-hours and 48 backhoe hours,  $1 - 1\frac{1}{2}$  inch service was installed taking 60 man-hours and 8 backhoe hours, 2 - 2 inch service was installed taking 39 man-hours and 8 backhoe hours. There was another 11 additional main line taps, 2 - 4 inch, 2 - 6 inch, 3 - 8" inch, 2 - 10" inch and 2 - 12" inch services requiring 49.50 man-hours and 8.50 backhoe hours.

## WATER SERVICE RENEWALS



A total of 64 water services were renewed taking 750 man-hours and 109 backhoe hours. There were 61  $-\frac{3}{4}$  inch services, 1-1 inch service and 1-2" inch service.

## LINE LOCATING

Combined with the leak-locating program is the line locating program. This program is for locating our water lines for other utilities, contractors, developers and consultants.

We are a member of the Ohio Utilities Protection Service. They send us locates via the fax machine and we in turn notify other city departments as needed.

| 1989 | 222  | 2002 | 5960 |
|------|------|------|------|
| 1990 | 784  | 2003 | 5146 |
| 1991 | 1217 | 2004 | 6079 |
| 1992 | 2072 | 2005 | 6506 |
| 1993 | 2446 | 2006 | 6748 |
| 1994 | 2112 | 2007 | 5897 |
| 1995 | 3162 | 2008 | 5713 |
| 1996 | 3528 | 2009 | 5162 |
| 1997 | 4070 | 2010 | 5225 |
| 1998 | 4410 | 2011 | 5956 |
| 1999 | 3829 | 2012 | 6182 |
| 2000 | 6725 | 2013 | 6758 |
| 2001 | 5817 | 2014 | 7036 |

Growth in locates from 1989 to 2014:

This figures out to be 28.03 locates per day for the 251 working days in a year. Along with line locating, there is also the collection of bacteria samples for testing of new water main installations. There were 89 bacteria samples collected this year.

## METER SHOP REPAIRS, TESTING, Field Testing large Meters

| Tested    | 239 |
|-----------|-----|
| Repaired  | 251 |
| Junked    | 23  |
| Sent Back | 821 |

#### FIRE HYDRANT FLUSHING



The Water Dist. Department performs all of the flushing, tagging, and pumping of hydrants in our system. We constructed three truck mounted flushing units that allow us to open the hydrant completely to allow the needed velocity to properly flush the main line. Without these units, water would be flushed clear across the street potentially causing motorists harm, as it was experienced in the past. Also, since we have taken over the hydrant flushing, we have found that we can properly maintain the hydrant while we are there, saving time in return trips therefore saving money.

## **METER CHANGES**

The Water Distribution Department changed a total of 2 meters in 2014 for use with the new meter reading system. These activities took 4.50 hours of labor and .75 hours of vactor to accomplish.

## GOALS FOR 2015

Continue maintenance of the new Badger Meter Galaxy meter reading system.

Continue to update all waterline maps in house for future reference for GIS and EPA Net 2 for water hydraulics.

Start a valve, locate and exercise program.

Continue the annual large meter test and repair program.

Continue the leak detection survey.

Complete small waterline Capital improvement projects for ca

I would like to thank the employees of the Water Distribution Staff, who work diligently in providing clean safe drinking water. Along with helping in storm disaster cleanup and snow removal our Water Distribution employees provide an excellent service to our community. Thank you to our Administrative Assistant, Maintenance Workers and locator.

Thank You,

Jeff Betts

# LIST OF DEPARTMENTAL ACTIVITIES PERFORMED

| Cold Mix repairs temporary patch to street excavations22 different sitesMan-hours   |           |         | Backhoe Hrs.                               | 10.25         |
|---|-----------|---------|--|---------------|
| 1 gates installed   | Man-hours | 4.50    | Backhoe Hrs.                               | 1             |
| 52 gate box repairs   | Man-hours | 115.25  | Backhoe Hrs.<br>Vactor Hrs.                | 2.50<br>16    |
| 13 gate valves repaired   | Man-hours | 220.50  | Backhoe Hrs.<br>Vactor Hrs.                | 26.50<br>2.00 |
| 4 fire hydrants installed or replaced   | Man-hours | 62      | Backhoe Hrs.<br>Vactor Hrs.                | 12<br>2       |
| 39 fire hydrants repaired   | Man-hours | 183.25  | Backhoe Hrs.                               | 13.25         |
| 9 fire hydrants checked for damage  | Man-hours | 7       |  |               |
| 12 hydrants checked for leaks   | Man-hours | 13.75   |  |               |
| 15 hydrants pumped  | Man-hours | 15.50   |  |               |
| 12 meter lids replaced  | Man-hours | 16.50   | Vactor Hrs.                                | 2             |
| 14 hydrant flow test  | Man-hours | 18.50   |  |               |
| 84 broken mains varying in sizes<br>From 1 inch and up. Includes regular<br>hours, overtime hours and call out<br>stand-by hours. | Man-hours | 1384.25 | Backhoe Hrs.<br>Vactor Hrs.<br>Bobcat Hrs. | 204<br>4<br>2 |
| 123 leaks checked out   | Man-hours | 173.50  | Backhoe Hrs.<br>Vactor Hrs.                | 7<br>1.25     |
| 4 meters set in   | Man-hours | 5       |  |               |
| 2 meter reductions  | Man-hours | 3.50    |  |               |
| 12 meters taken out   | Man-hours | 28      | Vactor Hrs.                                | .50           |
| 2 meters changed  | Man-hours | 4.50    | Vactor Hrs                                 | .75           |
| 13 pressure checks  | Man-hours | 14      |  |               |

| 18 turn on service                      | Man-hours | 16.50    | Vactor Hrs.                  | 1.50                |
|---|-----------|----------|------------------------------|---------------------|
| 101 turn off for repairs regular hours, | Man-hours | 87.70    | Backhoe Hrs.                 | 4.15                |
| Overtime hours and call out stand-by    | Man-hours | 1157.50  | Backhoe Hrs.<br>Vactor Hrs.  | 166<br>5.50         |
| 26 services killed                      | Man-hours | 189.75   | Backhoe Hrs.<br>Vactor Hrs.  | 31.25<br>3.25       |
| 8 rusty water complaints                | Man-hours | 7.75     |                              |                     |
| 5 service lines repairs                 | Man-hours | 55.50    | Backhoe Hrs.                 | 9                   |
| 6 settings lowered                      | Man-hours | 50       | Backhoe Hrs.<br>Vactor Hrs.  | 2.25<br>9.25        |
| 8 settings moved                        | Man-hours | 68       | Backhoe Hrs.                 | 8                   |
| 8 settings raised                       | Man-hours | 9.75     |                              |                     |
| 52 settings repaired                    | Man-hours | 144      | Backhoe Hrs.<br>Vactor Hrs.  | 14<br>6.25          |
| 152 no water calls                      | Man-hours | 422.75   | Backhoe Hrs.<br>Welder Hrs.  | 38.45<br>76.50      |
| 92 nipples installed                    | Man-hours | Included | in no water call t           | otal                |
| 34 temporary meter set and removed      | Man-hours | 58       |                              |                     |
| 15 pools Filled                         | Man-hours | 51.50    |                              |                     |
| 56 asphalt prep work                    | Man-hours | 172      |                              |                     |
| 26 concrete repairs                     | Man-hours | 144.50   | Backhoe Hrs.<br>Dump Truck I | 16.50<br>Hrs. 16.50 |
| 131grade and seeds                      | Man-hours | 234.25   | Backhoe Hrs.                 | 54                  |
| 25 vactor work                          | Man-hours | 46.25    | Vactor Hrs.                  | 15.50               |

#### **MISCELLANEOUS JOBS**

There were 156 different miscellaneous jobs done by water distribution for a total of 362 labor hours with 42.75 backhoe hours, 3 vactor hours, and 5.50 hours used with the welder: Picked up barricades, stoned holes, locate shut off for plumber, check holes, met with many contractors and customers over water lines, set up arrow boards for Police Department for parades, set fishing docks, dig out holes for Street Department to hot patch, work gate valves for contractors installing new main lines, and many other miscellaneous jobs too numerous to mention.