



2021 ANNUAL REPORT

WATER DEPARTMENT

Introduction

The following is an overall summary of the water department for the City of Findlay. The water department consists of Water Treatment, Supply Reservoir, Water Distribution, and Utility Billing. The department is responsible for managing the 6.4 Billion-gallon reservoirs, the treatment of an average daily flow of 6.5 million gallons of treated water, the maintenance of 341.15 miles of water lines, and the collection of over \$16 million of billed services.

Key Activities & Accomplishments

A lot was accomplished in 2021. The largest accomplishment was the installation of the Data Collection Units and the first of the new transmitters to begin the transition to the new meter reading system. Unfortunately, just as the project started gaining traction the old Badger Gateway system stopped working. The team is currently evaluating the next step that needs to be taken to move forward.

The notification of being awarded \$1.8 Million from the State of Ohio gives us the opportunity to complete the installation of an overflow for the reservoirs as well as needed upgrades to the transfer piping. This project will help improve treatment process with the addition of a second Sodium Permanganate line for reservoir #2. We are excited to see the project get underway.

The distribution department removed 24 known and unknown lead services from the system. This bring the overall total to 267 known and known as well as active and inactive accounts. That total also includes galvanized services the goal has been set to have the all of these services renewed by the end of 2024.

Key Performance Indicators (KPIs)

More details on Key Performance Indicators can be found at: www.findlayohio.com/performance

Objectives for the Next Year

The goals for the department for 2022 are as follows:

1. Continue the transmitter replacement project
2. Rector Waterline lined
3. Leak Survey continued
 - a. Utilization of 12 wireless leak monitoring sensors
 - b. Utilization of inhouse employees to continue the program
4. Completion of new SCADA system at Treatment Plant
5. Installation of the new CO2 tanks and controls
6. Install second door in Utility Billing office, upgrade camera, and door locks
7. Finalize the design work on new generators
8. Begin the reservoir overflow and transfer line project
9. Continue to remove lead and unknown service connection

Budget Summary Sheet



Divisions: Reservoir
Treatment
Distribution
Utility Billing

WATER DEPARTMENT
Superintendent Jason Phillips

FINANCIAL DIVISION	BUDGET		2019 actual	2020 actual	2021 projection	Original 2021 request	2022 request	\$ change from 2021 request to 2022 request	% change from 2021 request to 2022 request
Supply Reservoir	Personal Services		\$ 107,811	\$ 93,631	\$ 105,893	\$ 114,987	\$ 142,553	\$ 27,566	23.97%
	Other		\$ 391,784	\$ 265,360	\$ 271,400	\$ 493,313	\$ 846,760	\$ 353,447	71.65%
Water Treatment	Personal Services		\$ 1,256,290	\$ 1,336,630	\$ 1,331,126	\$ 1,438,980	\$ 1,530,183	\$ 91,203	6.34%
	Other		\$ 2,214,618	\$ 1,488,754	\$ 1,504,371	\$ 2,069,831	\$ 2,081,284	\$ 11,453	0.55%
Water Distribution	Personal Services		\$ 1,085,386	\$ 1,082,000	\$ 1,065,530	\$ 1,162,243	\$ 1,274,858	\$ 112,615	9.69%
	Other		\$ 536,834	\$ 466,916	\$ 527,518	\$ 603,306	\$ 716,040	\$ 112,734	18.89%
Utility Billing	Personal Services		\$ 634,700	\$ 590,478	\$ 596,617	\$ 634,111	\$ 772,844	\$ 138,733	21.88%
	Other		\$ 201,551	\$ 222,929	\$ 298,539	\$ 285,663	\$ 418,935	\$ 133,272	46.65%
TOTAL			\$ 6,428,973	\$ 5,546,699	\$ 5,700,994	\$ 6,802,434	\$ 7,783,457	\$ 981,023	14.42%

BUDGET HIGHLIGHTS

- Security improvements for department
- Large increase in pipe, parts, and fittings for 2022
- Large increase in Chemical pricing for 2022
- Continued removal of unknown service connections
- Additional chemical for algae control
- 4.55% wage increase

WATER FUND EXPENSES



STAFFING	2018	2019	2020	2021	2022
Reservoir	1	1	1	1	1
Water Treatment	15	15	16	15	15
Water Distribution	14	15	15	15	15
Utility Billing	9	9	9	9	10

2021 CAPITAL IMPROVEMENT HIGHLIGHTS

- WD - Updated water line at East Street and Main Cross
- WT - SCADA project underway and updated camera system
- SR - Awarded \$1.8 to replace valves and install river overflow line
- UB - Transmitter replacement project began to move forward

2021 ACHIEVEMENTS

- Replaced exterior cameras at treatment plant
- Continued to replace lead service lines and update service line information
- Replaced waterlines in troubled areas
- Updated the Emergency Action Plan
- Improve security in Utility Billing new cameras adding second door
- Working on reducing flushing station flows
- Sealed three filter walls from water infiltration
- Installed 11 DCU's and started replacing transmitters

2022 OBJECTIVES

- Begin the transfer and overflow line at the reservoir
- Continue painting fire hydrants
- Spray line Rector water line
- Complete phase two of transmitter replacement project
- Replace generators at water treatment plant
- Replace CO2 tanks
- Continue find ways to reduce water loss
- Replace water lines on Morrill and Harrison

Introduction

The annual report of the operations of the Water Treatment Plant and Supply Reservoir for the year ending December 31,2021.

The City of Findlay Water Treatment Plant provides the citizens of Findlay and the surrounding area with high quality, pleasant tasting drinking water that meets or exceeds the parameters set by the Ohio EPA. The consumer costs have not increased on water since 2011.

The raw water supply for the City of Findlay is one of the most outstanding in the State of Ohio. The Water Department spends a great deal of time and resources monitoring the water quality in the reservoir. The quality of water is the primary focus of the treatment plant.

Staffing

Water Treatment Plant Employees

Name:	Position	Year Hired
Jason Phillips	Superintendent, Class IV	2017
Brett Young	Supervisor, Class III	2000
Tim Foust	Operator, Class I	2000
Tim Couch	Operator, Class III	2003
Matt Karl	Operator, Class I	2012
Jeremy Carter	Operator, Class III	2013
Dan Ward	Operator, Class II	2015
Ray Stelmaszak	Operator, Class I	2016
Mat Otto	Operator, Class I	2017
Rick Parker	Lab Tech I, Class III	2001
Dean Hoge	Assistant Operator	1989
Brian Egts	Maintenance Mechanic V	1990
Brad Eblen	Maintenance Mechanic I	1991
Randy Zacharias Sr.	Maintenance Mechanic III	2011
Jennifer Niederkohr	Administrative Asst.	2011

Supply Reservoir

Rich Cap	Maintenance Mechanic III	2001
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Key Activities & Accomplishments

Lab Items:

- Tested 202 additional bacteria samples for other public water systems, private individuals, new mains, new fire lines, and customer concerns
- Collected 12 QPCR samples for HAB screening
- Collected 26 samples for microcystin analysis
- Collected 120 lead and copper samples
- Completed all weekly, monthly, and annual quality control checks on analytical equipment as well as verifications of all inline meters throughout the Treatment Plant
- Operated Treatment Plant 333.25 hours
- Completed 1033.25 hours of work for compliance sampling
- Completed 463.5 hours of preventative, corrective, and special samplings
- Completed the installation of new filter turbidity meters

Maintenance Items:

- Installed new Sodium Hypochlorite line across the driveway
- Hauled 770 loads of sludge to beds and 81 loads directly to farm fields
- Began work on new maintenance tracking program/ condition assessment tool
- Implemented the SCADA upgrade work with DJE
- Operated Treatment Plant for 368 hours
- Completed 5610 hours of preventative maintenance
- Completed 964.5 hours of corrective maintenance

Reservoir Items:

- Repaired and reinstalled trash rake at river intake
- Installed cameras at parking lots
- Worked on telemetry upgrades as part of the SCADA upgrade
- Applied 1,050 pounds Green Clean Pro to Reservoir #1
- Applied 1,800 pounds Green Clean Pro to Reservoir #2
- Applied 560 gallons Earth Tech to transfer pit
- Applied 540 gallons Earth Tech to Reservoir #1
- Applied 3,500 pounds of Copper Sulfate to Reservoir #2

Objectives for the Next Year

Lab:

- Continue to improve algae analysis additional sampling in reservoir
- 120 lead and copper samples
- Increased distribution sample monitoring
- Install new filter bed expansion monitors

Maintenance:

- Complete SCADA upgrade with DJE
- Finalize cameras at reservoir and plant
- Get all preventative maintenance items into the new maintenance program
- Finalize condition assessment on all equipment
- Replace two CO2 tanks and controls
- Final stage of Treatment Plant roof replacement

Reservoir:

- Continue to improve treatment for algae
- Pave driveway at barns and house
- Start the overflow project
- Replace signs

Introduction

The Findlay Water Distribution Department has been providing water service to the Findlay residents for 205 years. We currently have 14 employees that range from Supervisor, Administrative Assistant, Waterline Maintenance Foreman, Waterline Maintenance Worker I – VI, Waterline Maintenance Technician and Assistant. Our duties and responsibility to include maintaining 341.15 mile of water main in and around Findlay and Van Buren. Flushing and maintaining fire hydrants, performing large and small water service taps for residential and commercial buildings, fixing, and maintaining water mains, and survey water main for leaks. We also work with Ohio Utility Protection Services (OUPS) to make sure all water lines are marked for residents and contractors that are excavating and manage a backflow program that helps protect our residents.

Staffing

Jeff Betts – Maintenance Supervisor

Betty Jones – Administrative Assistant

Kenny Paul – Waterline maintenance Foreman I

Jeff Kolhoff – Waterline maintenance Worker V

Bryan Miller – Waterline Maintenance Technician

Jordan Endicott – Waterline Maintenance Worker V

Jason Ruehlen – Waterline Technician Assistant

Michael Knight – Waterline Maintenance Worker V

Joe Francis – Waterline Maintenance Worker III

Cameron Freed – Waterline Maintenance Worker III

Ryan Cates – Waterline Maintenance Worker III

Maycen Ward – Waterline Maintenance Worker III

Marcus Gierke- Waterline Maintenance Worker I

Beau Veach – Waterline Maintenance Worker I

Key Activities & Accomplishments Leak Survey, installed new water mains on Monroe Ave, Logan Ave, East St, E Main Cross and First St. Renewed and fixed 125 customer water service line. Continuing to updating computer water service records. Tested 62 backflows. Responded to 7815 OUPS ticket locates. Fixed 64 water main break. The Water Distribution Department invested 1734hrs in labor, 223.5hrs of backhoe and 77hrs of Hydro Excavator in Preventive Maintenance. Also 5053.70hrs of labor, 635.5hrs of backhoe, 154.75hrs of Hydro Excavator and 398.5hrs of Dump Truck in Corrective Maintenance was used. As for overtime 627hr of labor, 19.50hrs of backhoe and 21.00hrs of Hydro Excavator was invested.

Objectives for the Next Year

Flushing fire hydrants

Valve operating

Backflow program

Updating maps

Renewing old iron and lead water service.

Verifying water service pipe types and update our records

Replace problem area water mains to provide great water service to the community.

Replacing Water Meter Transmitters.

Leak Survey.

Introduction

The City of Findlay Utility Billing Department monitors and maintains over 20,000 residential, commercial and industrial meters throughout the City. The Billing staff is passionate about providing excellent customer service to more than 30,000 customers in and around the City. Our services include; monitoring of water consumption, billing, collections and payment processing for Water, Sewer and Storm utilities supplied and supported by the City of Findlay Water Treatment and Water Pollution Control facilities.

The Utility Billing Departments total billing for calendar year 2021 was \$17,910,131.76.

In 2021, there were 126,639 total payments processed in the Billing Office through various funding channels. Amounts collected through each channel are detailed below:

- AUTOPAY = \$4,541,777.33
- CASH = \$625,047.31
- CHECK - \$8,670,669.96
- CREDIT CARDS = \$1,195,470.90
- LOCKBOX = \$2,804,461.58 (online banking)

Total collections = \$17,837,427.08

Things to remember when reviewing data from the Water/Sewer Billing Office

- There are three billing cycles; North end of the City, South end of the City, Industrial/Commercial
- Billing for commercial and industrial customers occurs monthly
- Billing for residential customers occurs bi monthly; therefore, payments received in December are from usage in September and October.
- The collection amounts above reflects December collections.

Staffing

The Utility Billing Department is comprised of 9 staff members:

Brandon Bohn - Meter Technician I

Jeff Fenimore - Meter Technician II

Mark Randolph - Meter Technician II

Ann Fenimore - Billing Clerk II

Ann Houpt - Billing Clerk II

Carol Toupalik - Billing Clerk II

Emily Zagar - Billing Clerk II

Raeanna Drake - Assistant Supervisor

Tammy Kirkpatrick - Supervisor

Key Activities & Accomplishments

The Utility Billing Department worked closely with a contractor to calibrate and test nearly 100 meters ranging in size from 3 inches to 10 inches throughout the City as best we could during the pandemic.

The project goals were to ensure that the City's largest meters were performing accurately based on AWWA standards and requirements. The Billing Office has continued to partner with our commercial and industrial customers to replace and plan the replacement of a total of 44 meters either based on failed tests or the age of the meter. There were 4 meters replaced in 2020, 9 replaced in 2021 and the remaining are scheduled to be replaced in the first half of 2022.

Through the Large Meter Replacement Project, a non-billed fire system (inside city limits) that was purging 40,000 gallons of water per month was identified. This is just a fraction of what this project has done for the advancement of our conservation efforts and has made a significant difference in our water loss key performance indicator.

Despite our efforts to replace dated cellular transmission equipment used for the meter reading software, the system went down in December. We were fortunate to get nearly 2,000 transmitters installed using the new meter reading infrastructure in 2021. Plans to increase the installation process are being discussed.

Objectives for the Next Year

A new work order system was selected and development is in process. This system allows the Billing Office to provide customer requests, meter details and location information in real time to our field staff to aid in the increase the level of service to our customers and reduce the costs in resources used in multiple trips to and from the billing office.

It is our hope that the installation of the remaining transmission equipment will go smoothly and will provide a path for us to begin development on our plans for a customer portal. Our goal is to enhance the customer experience by allowing customers to log in to their individual customer accounts to view billing and consumption information.

We are starting the fourth year of our Backflow Prevention Program. There are 3,395 backflow devices in our inventory. The goal for 2022 is to create a more fluid means to route the backflow inspection documents to the responsible parties for each property. We are also making efforts to improve the workflow in getting inspection documents from the responsible party back to us in a timely manner. We are currently in discussion with the work order management software developers to create an electronic routing system.

**TEN LARGEST SINGLE WATER CUSTOMERS
2021**

Customer Account	Volume HCF	Revenue	% of Total Revenue
Cooper Corp	118,425	\$ 325,844	4.59
Whirlpool	117,172	458,002	6.45
Ball Metal	73,247	299,025	4.21
Blanchard Valley Hospital	44,271	128,498	1.81
University of Findlay	30,294	106,625	1.50
Riverview Terrace	26,959	111,353	1.57
Sanoh America, Inc	26,891	72,757	1.03
Sonoco Products Company	25,337	69,159	0.97
Marathon Petroleum	23,344	68,339	0.96
Hamlet Protein Inc.	21,818	59,513	0.84
Total Top Ten	507,758	\$ 1,699,115	23.94
All Other Customers	1,675,636	\$ 5,399,096	76.06
Total	2,183,394	\$ 7,098,210	100.00

**TOTAL CUSTOMER USE
BY CLASS & LOCATION
2021**

Customer Class	HCF Water Use	Revenue	% of Total Water Use
Inside City/Residential	794,495	\$ 2,532,512	35.68
Inside City/Commercial	672,299	1,926,989	27.15
Inside City/Industrial	248,723	641,594	9.04
Outside City/Residential	189,508	891,569	12.56
Outside City/Commercial	83,394	369,738	5.21
Outside City/Industrial	194,975	735,808	10.37
Total	2,183,394	\$ 7,098,210	100.00

TOTAL WATER CUSTOMERS INSIDE CORP	17,290
TOTAL WATER CUSTOMERS OUTSIDE CORP	3,408
TOTAL WATER CUSTOMERS	20,698

**TEN LARGEST SINGLE WASTEWATER CUSTOMERS
2021**

Customer Account	Revenue	% of Total Revenue
University of Findlay	\$ 146,476	1.58
Cooper Tire	136,215	1.47
Blanchard Valley Hospital	108,653	1.17
Whirlpool Corp	99,279	1.07
Marathon Petroleum	76,811	0.83
Ball Metal	74,066	0.80
Findlay Board of Education	61,726	0.67
Sanoh America Inc.	58,001	0.63
Riverview Terrace	53,859	0.58
Village of Arcadia	52,078	0.56
Total Top Ten	\$ 867,165	9.37
All Other Customers	\$ 8,389,283	90.63
Total	\$ 9,256,448	100.00

**TOTAL CUSTOMER USE
BY CLASS AND LOCATION
2021**

Customer Class	Revenue	% of Total Revenue
Inside City/Residential	\$ 4,061,256	47.59
Inside City/Commercial	2,319,545	27.18
Inside City/Industrial	418,494	4.90
Outside City/Residential	1,201,065	14.07
Outside City/Commercial	310,835	3.64
Outside City/Industrial	223,509	2.62
Total	\$ 8,534,704	100.00

TOTAL WASTEWATER CUSTOMERS INSIDE CORP	16,825
TOTAL WASTEWATER CUSTOMERS OUTSIDE CORP	3,196
TOTAL WASTEWATER CUSTOMERS	20,021