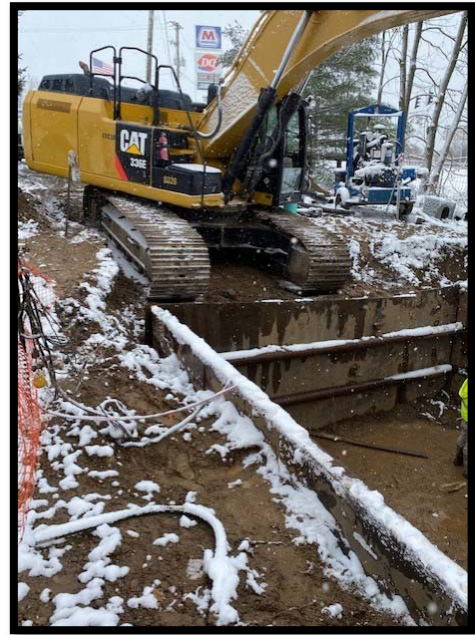




2020 ANNUAL REPORT



Bolivar Pump Station Rehabilitation

July 14, 2021

Tuscarawas County Metropolitan Sewer District
9944 Wilkshire Boulevard NE
Bolivar, OH 44612
www.tcmsd.org

Committed to providing safe, high quality water and wastewater services to Tuscarawas County

Contents

Our Mission..... 3

Description of the Tuscarawas County Metropolitan Sewer District..... 3

Water and Sewer Districts 4

Sewerage Collection and Treatment 7

Drinking Water Production and Distribution..... 8

Contracted Operations 8

Other Contracts..... 8

Goals and Objectives for 2020 8

Reserve Analysis 13

Fixed Assets Purchased (>\$5,000) 13

Capital Projects Completed (Total Value > \$5,000)..... 14

Construction in Progress (Total Project Budget > \$5,000) 15

Sewer District – Key Financial Performance Indicators..... 16

Water District – Key Financial Performance Indicators 17

Operational Statistics 18

Fleet and Fuel Management Summary 19

Our Mission

The Tuscarawas County Metropolitan Sewer District is committed to providing safe, high quality water and wastewater services to the communities we serve, while maintaining a standard of excellence in customer service and environmental conservation.

Description of the Tuscarawas County Metropolitan Sewer District

The Tuscarawas County Metropolitan Sewer District was formed in 1973 by the Board of County Commissioners under the provisions of Ohio Revised Code (ORC) 6117 and provides water service under the provisions of ORC 6103. The resolution authorizes the District to provide drinking water and sanitary service to all unincorporated areas of Tuscarawas County, excluding those areas served by the following regional districts, which were formed under the provisions of ORC 6119:

- Twin City Water & Sewer District, which provides service to the City of Uhrichsville, the Village of Dennison, and unincorporated areas of Mill Township
- Atwood Regional Water & Sewer District, which provides service to a portion of Warren Township in Tuscarawas County, as well as unincorporated areas within Carroll County.

In addition to authorization to provide service to unincorporated areas of Tuscarawas County, the original resolution of formation, along with authorizing ordinances from various municipalities, provide authorization to the County to provide services to the following municipalities: Village of Barnhill, Village of Bolivar, Village of Midvale, Village of Parral, Village of Roswell, Village of Stone Creek, and Village of Zoar

In 1973, the Board of Commissioners commissioned the *Report and General Plans of Sewerage and Water Systems for Portions of Lawrence and Sandy Townships, Tuscarawas County, Ohio* (“GENERAL PLAN”), which was prepared by W.E. Quicksall and Associates, Inc. At the time the plan was prepared, the existing Wilkshire Hills Water and Sewerage facilities were owned and operated by the developers of Wilkshire Hills. The GENERAL PLAN provided a framework for development of water and sewerage facilities to serve the northeastern portion of the County. Upon the recommendation of the GENERAL PLAN, the County developed the Wilkshire Hills-Bolivar-Zoar Sewer Districts as a regional sewer district, with sewerage from these three areas being treated at the Wilkshire Hills Wastewater Treatment Plant. At the time the study was prepared, Mineral City had already received a grant from Ohio EPA to construct a wastewater treatment facility, and as such, was excluded from the regional sewerage planning.

The GENERAL PLAN also recommended a regional solution for water supply, which included Wilkshire Hills, Zoar, Sandyville, Crossroads Area, Mineral City, and Zoarville.

In November, 1974 the Tuscarawas County Commissioners purchased the water distribution system and water wells from the developers of Wilkshire Hills to assure continuing proper development, operation and maintenance of the system. At the time, the water system consisted of three drilled wells and approximately 3.5 miles of 6”, 8” and 12” water mains.

Shortly after acquiring the water facilities, the Commissioners approved a regional water system for Wilkshire Hills and the Village of Zoar in conformance with the GENERAL PLAN. At this time, the Commissioners authorized the preparation of detailed plans for the construction of a 500,000 gallon storage tank for the system to provide fire protection and system storage. The tank was constructed during the winter and spring of 1975 – 1976. During this same period, the Commissioners also authorized the preparation of detailed plans for the construction of a water distribution system in the Village of Zoar.

In May 1976, the Commissioners received a letter from the Southeast District of the Ohio Environmental Protection Agency expressing concern that the existing well yield was not adequate for even the present demand, let alone the addition of the Village of Zoar water system. At this time the County retained W.E. Quicksall and Associates, Inc. for the preparation of a *Feasibility Study of a Supplemental Water Supply for the Wilkshire Hills-Zoar Water Distribution System*.

The Feasibility Study evaluated: connection to the City of Canton water supply; connection to the Village of Bolivar water supply; and drilling new wells in accordance with the GENERAL PLAN. Although the Feasibility Study recommended connecting to the Village of Bolivar, the County ultimately drilled a new well at the site of the present day Welton Rd. Well Field. The new well also included the construction of a new pump house. A second well was drilled at the Welton Rd. site in 1982, and sometime after Well #2 was placed into operation, the existing wells near Northwood Dr and Wilkshire Blvd were abandoned.

In January 1976, a *Facilities Plan of Sewerage for the Uhrichsville-Dennison Planning Area Including Barnhill, Brightwood, Midvale, Roswell and Parts of Tuscarawas County* was prepared by W.E. Quicksall and Associates, Inc. on behalf of the Tuscarawas County Commissioners and the City of Uhrichsville. This plan evaluated alternatives for providing sewer facilities to the areas tributary to the Twin City Water & Sewer District sewer collection system and treatment plant. The Midvale and Barnhill sewerage systems were ultimately constructed as a result of this facilities plan; however, the Village of Roswell and the Brightwood area remain unsewered.

The District boundaries have been amended several times to include the villages of Mineral City and Port Washington. The full service area of the District is more fully described in the following section.

Water and Sewer Districts

Kerr Sewer District (010)

The Kerr Sewerage system was constructed by Raymond E. Kerr in 1967. These facilities were transferred to the County for ownership, operation and maintenance in 1971.

Midvale/Barnhill Sewer District (015)

Service to the villages of Midvale and Barnhill was authorized as part of the 1973 resolution to form the District. The Midvale/Barnhill system is served with a small-diameter, variable grade sewerage system. With this type of system, each customer connection has a septic tank, which is owned and operated by the County.

The sewage from this system flows to the Twin City Water & Sewer District where it is transported through Twin City's sewerage system for treatment at its wastewater treatment facility. Twin City provides this service to the District through a sewer service agreement, which went into effect in 1986.

Since its original construction in 1988, the system has seen moderate growth through private development, which primarily occurred between the mid-1990's through the mid-2000's.

Wilkshire Hills Water & Sewer District (030/032)

Service to the Wilkshire Hills District was authorized as part of the 1973 resolution to form the District. The Wilkshire Hills District is located in Lawrence Township and is comprised of a number of different subdivisions that were developed primarily during the late 1960's through the early 1990's. The majority of the subdivisions in this district were developed by Rog-Win, Inc. Sewage from this system is discharged to the County's Wilkshire Hills wastewater treatment facility.

Zoar Water & Sewer District (040)

Service to the village of Zoar was authorized as part of the 1973 resolution to form the District. The Zoar sewerage system was constructed in 1980 as part of a joint project that included construction of the Bolivar sewerage system, the Zoar sewerage system, as well as improvements to the Wilkshire Hills WWTP. Sewage from the Village of Zoar is discharged into the Wilkshire Hills sewerage system where it is conveyed to the County's Wilkshire Hills wastewater treatment facility.

Water is supplied by the County's Wilkshire Hills Water Treatment Plant located in Lawrence Township. The Zoar water distribution system was constructed in 1979 and included water facility upgrades in the Wilkshire District in order to provide the required pressure and capacity for the Zoar system. These improvements included construction of a new water mains on Laurens Dr, Bimeler St, Lawnridge St, and an extension along State Route 212 to the Village.

Zoarville Water District (042)

In 2019, the District extended a water transmission line to connect the Zoarville Water Works to the Wilkshire Hills public water system. The connection became operational in December 2019, and final transfer of assets and customers from the Zoarville Water Works Co. to the County will be finalized in early 2020. Once the transfer is complete, the Zoarville Water Works Co. will be dissolved.

Mineral City Water & Sewer District (045)

On November 25, 1991, the limits of the District were amended to include the Village of Mineral City, at which time, the Village passed an ordinance authorizing the transfer of the Village's water facility assets, obligations and customers to the County. The Mineral City sewer district was established and the Village's existing water and wastewater facilities were transferred to the County on January 1, 1992. Wastewater from this system is conveyed to the Mineral City wastewater treatment facility, which is now owned and operated by the County.

Mineral City is part of the County's Wilkshire Hills Public Water System and receives its water from the Wilkshire Hills Water Treatment Facility located in Lawrence Township.

Dundee Water District (050)

Service to the Dundee Water District was authorized as part of the 1973 resolution to form the District. The Dundee Water system provides drinking water for the unincorporated community of Dundee and surrounding areas of Wayne Township. The Dundee water facilities were constructed in 1981. Facilities were subsequently expanded in 1981 to provide service to residents along Pleasant Hill Rd (TR 72), and in 1996 to provide service to residents along Hardy Dr (TR 443).

Bolivar Sewer District (060)

Service to the Village of Bolivar was authorized as part of the 1973 resolution to form the District. Sewage from the Village of Bolivar is pumped to the County's Wilkshire Hills wastewater treatment facility. The Bolivar sewerage facilities were constructed in 1980 in conjunction with the Zoar sewerage system and the Wilkshire Hills WWTP Upgrade.

The Village of Bolivar owns and operates a public drinking water system and is not served by County drinking water; however, there are two emergency interconnections between the County and the Village, if needed. The Village and County entered into an agreement for the purchase of water for emergency purposes on July 8, 1985.

Lawrence Township Industrial Park Water & Sewer District (061)

Service to this District was authorized as part of the 1973 resolution to form the District. Water for this district is supplied from the County's Wilkshire Hills Water Treatment Plant. Sewerage from this district discharges into the County's Bolivar Sewer District.

Bolivar Sewer District – Metered (062)

This district was established for those commercial and industrial customers in the Village of Bolivar whose monthly sewer rates are based upon their metered water usage. The water meters are the property of the Village of Bolivar; however, we obtain monthly readings of such meters for the purposes of sewer billing.

Hunters Green Sewer District (063)

Service to this District was authorized as part of the 1973 resolution to form the District. In the late 1990's, County water and sewer facilities were extended by a private developer to provide service to the proposed Hunters Green subdivision. Once constructed, these facilities were subsequently transferred to the County for ownership, operation and maintenance. The sewer facilities are tributary to the Wilkshire Hills Wastewater Treatment Plant. The water facilities are connected to the Wilkshire Hills water system.

Sandyville Sewer District (070)

Service to this District was authorized as part of the 1973 resolution to form the District. The facilities in this district were originally constructed in 1979 as part of a joint project between Tuscarawas County and Stark County. Stark County's East Sparta sewerage system discharges into the Sandyville Sewer District, which transports sewage to the Sandyville/East Sparta WWTP. The County provides sewer service to Stark County through a Sewer Service Agreement, which was most recently amended on December 15, 2016 to detail the proportionate share of each party relating to the upgrade of the WWTP.

Sandyville Water & Sewer District (071)

Service to this District was authorized as part of the 1973 resolution to form the District. Water facilities were extended to Sandyville in 2013 as part of a major capital improvement project. Water is supplied from the County's Wilkshire Hills WTP.

Sandy Valley Estates Water & Sewer District (072)

Water and sewer facilities within the Sandy Valley Estates Water & Sewer District are owned and operated by United Mobile Homes, Inc. ("UMH"). Water is supplied to this district through a water supply agreement between the County and UMH, which was most recently updated on February 25, 2016. Water is supplied from the County's Wilkshire Hills WTP.

Sewer service is provided through a sewer service agreement between the County and UMH dated June 4, 1980. Sewer from this District is discharged into the Sandyville Sewer District.

Jennie Brick/Dover Zoar & 183 from Eight Corner School House to Carroll Co. Line (073)

Service to this District was authorized as part of the 1973 resolution to form the District. Water facilities were extended to this area in 2013 as part of a major capital improvement project. Water is supplied from the County's Wilkshire Hills WTP.

Sandy Township (074)

Service to this District was authorized as part of the 1973 resolution to form the District. Water facilities were extended to this area in the mid 1990's following a petition requesting such extension

from property owners within the service area. Water is supplied from the County's Wilkshire Hills WTP.

Port Washington Sewer District (080)

The limits of the District were amended to include the Village of Port Washington in the District's service area. The Port Washington Sewer District was established to provide sewer service to the Village. The sewage from this system is pumped to the Village of Newcomerstown where it is transported through the Village's sewerage system for treatment at the Village's wastewater treatment facility. The Village provides this service to the District through a sewer service agreement, the most recent version of which was adopted December 19, 2016.

Stone Creek Sewer District (085)

Service to this District was authorized as part of the 1973 resolution to form the District. Sewer facilities serving this district were constructed in 2009, which included the construction of the County-owned Stone Creek WWTP.

Wainwright Water & Sewer District (090/091)

Service to this District was authorized as part of the 1973 resolution to form the District. The sewage from this system is pumped to the Village of Tuscarawas where it is transported through the Village's sewerage system for treatment at the Village's wastewater treatment facility. The Village provides this service to the District through a sewer service agreement dated June 30, 1980.

The water for this District is supplied by the Village of Tuscarawas Public Water System through a water service agreement with the Village, the most recent version of which went into effect on July 5, 1994.

Sewerage Collection and Treatment

The District provides sanitary sewer service to 4,515 equivalent dwelling units ("EDUs") in Tuscarawas County, which includes 529 EDUs from the East Sparta area in Stark County for a total estimated equivalent service population of 11,288.

The County currently owns and operates five separate wastewater treatment facilities:

- Wilkshire Hills WWTP - 0.75 MGD Extended Aeration Activated Sludge
- Sandyville/East Sparta WWTP – 0.50 MGD Extended Aeration Activated Sludge
- Mineral City WWTP – 0.15 MGD Extended Aeration Activated Sludge
- Stone Creek WWTP – 0.03 MGD Membrane Bioreactor
- Kerr WWTP – 0.08 MGD Extended Aeration Package Plant

The County also has a number of sewerage systems that discharge to other political subdivisions for treatment. These systems include:

- Midvale/Barnhill - discharges to the Twin City Water & Sewer District sewerage system
- Port Washington – discharges to the Village of Newcomerstown sewerage system
- Wainwright – discharges to the Village of Tuscarawas sewerage system

The District sewerage system is comprised of 84 miles of sewer mains, 23 major pump stations, numerous grinder pump stations, 550 septic tank systems, and 5 wastewater treatment plants.

Drinking Water Production and Distribution

The District provides water service to 2,511 customers with an equivalent service population of 6,740 in the following areas:

- Wilkshire Hills Public Water System
 - Crossroads Area, Wilkshire Hills area, Lawrence Township Industrial Park, Hunters Green
 - Sandyville/Jennie Brick Road Area
 - Mineral City
 - Zoar/Zoarville
- Dundee Public Water System
 - Serves the community of Dundee and surrounding unincorporated areas of Wayne Township
- Wainwright Public Water System
 - Unincorporated community of Wainwright and surrounding areas of Warwick Township

The District is responsible for operation and maintenance of 64 miles of water mains, 9 water storage tanks, 5 booster pump stations, and 2 water treatment plants.

Contracted Operations

In addition to those facilities owned by the County, the District is responsible for operation and/or maintenance of several other facilities through service agreements. These include:

- Tuscarawas Valley Local Schools WWTP – Contract operation of wastewater treatment plant as required to meet Ohio EPA minimum staffing requirements. The School is responsible for maintenance of the facility.
- Job & Family Services Grinder Pump Station – Contract operation and maintenance of the grinder pump station; however, Job & Family is responsible for the cost of major equipment replacement/repairs.

Other Contracts

- United Mobile Homes (Water & Sewer Agreements)
- Brightwood Mobile Home Park (Sewer Agreement)
- Eastport Estates Mobile Home Park (Sewer Agreement)
- Superior Mobile Homes (Sewer Agreement)
- Dutchtown Road Ext. – Dedicated Private Drive – (Agreement to share in the cost of operating and maintaining the reservoir access drive)

Goals and Objectives for 2020

Administrative and Engineering Goals

- Once Well #4 has been constructed as part of the Water Treatment Plant expansion, update the existing Source Water Protection Plan for Wilkshire Hills Water System to include the recently updated inventory of potential contaminant sources prepared by HzW Environmental in 2019.
- Annual Update of Comprehensive Drinking Water Contingency Plan and Desktop Training Exercises
 - *Contingency Plan was updated April 12, 2021*

- *Desktop training – Since training was cancelled in 2020 due to the COVID-19 pandemic, training will be doubled up in 2021. Training is scheduled for August 3, 2021.*
- Annual update of Water Facilities Asset Management Plan
- Finalize identified public system improvements needed to reduce I/I in the Wainwright Sewer System. Once public system improvements have been completed, begin work on eliminating sources of private property I/I, such as downspouts, yard drains, and foundation drains.
- Move forward with our contract hydrant replacement program. We also plan to utilize contract hydrant maintenance for certain hydrants in our systems.
- Prepare an RFP for blow-off assembly replacements in the Wainwright Water District.
- Retrofit Wainwright Booster Station based on Village of Tuscarawas Storage Tank Modifications.
 - *Work is essentially complete. As of the date of this report, we still need to complete start-up and testing of the new control valve.*
- Finalize Rehabilitation of Dundee Reservoir #1 and WTP Filter train #1 using OPWC grant. Construction commenced in 2020 and project is scheduled to resume in Spring 2021.
 - *Work is complete; however, final payment and documentation needs to be completed.*
- ROV Inspection of Dundee Reservoir #3 (TR 72)
 - *Work to be performed by Mid-Atlantic Storage*
- Implementation of the recommendations from the Sandyville Storage Tank #2 inspection

Water District – Level of Service Goals

Level of Service – Primary Goals and Objectives

- Quantity Goal
 - Meet average day demand with largest well/pump out of service 100% of the time
 - Limit total water loss to 15% for all District Water Systems
- Quality Goal
 - Meet all drinking water standards, as well as secondary standards for iron and manganese; provide adequate chlorine residual at all times, maintain compliance with fluoridation standards
- Reliability Goal
 - Limit unplanned service outages to 6 hours
 - Respond to customer service complaints and/or inquiries within 1 business day

Level of Service – Measure of Success

- Quantity Goals Measurable
 - Annual review of Average Daily Demand vs. known capacity of small component (i.e. well or pump)
 - Monthly and Annual review of daily pump production vs. water sales for the District water systems
 - *Water loss in the Wilkshire Hills water system exceeds 15%; however, we believe a portion of this loss is due to meter inaccuracies from manganese accumulation.*

Once the planned filtration plant is constructed, we will further evaluate the water loss in the Wilkshire Hills system.

- Quality Goal Measurable
 - Annual review of MOR submissions to determine if any exceedances or other violations have occurred.
 - *We are not currently able to meet the quality goal for manganese for the Wilkshire Hills system. Manganese is a secondary contaminant and not considered a health concern; however, we have received funding from USDA Rural Development to construct a filtration plant to address this issue and allow for expansion of our well field.*
- Reliability Goal Measurable
 - Report to the Sanitary Engineer any leak/disruption of service that exceeds 6 hours and review as necessary to determine what, if any, improvements can be made
 - *The system experienced one disruption of service longer than 6 hours. This was the result of negligence by a contractor working for the Village of Bolivar exercising valves.*

Water District – Operational Goals for 2021

- Operate all facilities in compliance with state and federal standards, as well as each facility's License to Operate
- Provide adequate staffing to meet Ohio's minimum staffing requirements for drinking water facilities
- Continue Implementation of a Computerized Maintenance Management System (CMMS) (Upkeep)
- Continue Reduction of Non-Revenue Water.
- Valve Exercising Program – Dedicated crew for valve exercising at least 1 day per week during warm weather months – Exercise 20% of all system valves every year, minimum.
- Hydrant Flushing Program –flush all water distribution systems at least once per year

Sewer District Operational Goals for 2021

- Operate all facilities in compliance with state and federal standards, as well as each facility's NPDES permit
- Provide adequate staffing to meet Ohio's minimum staffing requirements for wastewater facilities
- Maintain and continually improve wastewater facility housekeeping standards
- Complete the Sanitary Sewer Evaluation Survey of the Wilkshire Hills Sub-Sewershed #1, which is tributary to the Cedar Village Apartment area sewerage system. Work began in Fall 2020.
- Perform sewer line cleaning for the easement area between Buehler Rd. and N. Orchard Rd.
- Conduct a sewer condition assessment of the Welton Road easement area sanitary sewer.
- Conduction a sewer condition assessment of the Melrose Easement Area
- Septic tank maintenance – Inspection of 100 septic tanks and pumping/cleaning as needed.

Sewer District Cash Flow

Evaluation Period: January 1, 2020 through December 31, 2020

(Source: Auditor's Monthly Reports)

	Amount
Operating Revenue	
Sewer Sales	2,171,567
Penalties	35,630
Wholesale Sewer Sales (new code for Stark County)	0
Reimbursements	14
Refunds	650
Other Receipts	8,046
Total Operating Revenue	2,215,907
Non-Operating Revenue	
Contract Services Provided (new code for JFS & TVLS)	0
Proceeds from Sale of Assets	2,639
Interest	0
Total Non-Operating Revenue	2,639
Capital Contributions	
Customer/Developer Capital Contributions	66,637
Total Capital Contributions	66,637
Operating Expenses	
Current Year Expenses	(1,458,237)
Current Year Encumbrances	(115,711)
Total Operating Expenses	(1,573,948)
Investing Activities	
Property, Plant, Equipment	
<u>Capital Projects</u>	
<i>Current Year Expenses</i>	(195,310)
<i>Current Year Encumbrances</i>	(363,406)
<i>Prior Encumbrances</i>	(3,870)
<u>Equipment</u>	
<i>Current Year Expenses</i>	(72,300)
<i>Current Year Encumbrances</i>	(44,146)
<i>Prior Encumbrances</i>	(0)
<u>Grant Proceeds</u>	
<i>Amount Disbursed</i>	106,717
<i>Undisbursed Balance</i>	392,083
Net Cash from Investing Activities	(180,232)
Financing Activities	
Loan Proceeds	
<i>Amount Disbursed</i>	0
<i>Undisbursed Balance</i>	0
Principal & Interest Payments	(455,877)
Net Cash from Financing Activities	(455,877)
Net Income/Loss	75,126
Fund Balance – All Funds	781,035

Water District Cash Flow

Evaluation Period: January 1, 2020 through December 31, 2020

(Source: Auditor's Monthly Reports)

	Amount
Operating Revenue	
Water Sales	1,370,158
Penalties	26,595
Wholesale Water Sales	0
Reimbursements ¹	0
Refunds	534
Other Receipts	4,630
Total Operating Revenue	1,401,917
Non-Operating Revenue	
Contract Services Provided (new code for Bolivar Meter Reading)	0
Proceeds from Sale of Assets	2,155
Transfer In ²	13,200
Interest	0
Transfer of Cash Assets – Zoarville Water Works	25,916
Total Non-Operating Revenue	41,271
Capital Contributions	
Customer/Developer Capital Contributions	45,535
Total Capital Contributions	45,535
Operating Expenses	
Expenses	(815,522)
Encumbrances	(48,047)
Total Operating Expenses	(863,569)
Investing Activities	
Property, Plant, Equipment	
<u>Capital Projects</u>	
Expenses	(913,478)
2020 Encumbrances	(227,599)
Prior Year Encumbrances	(59,900)
<u>Equipment</u>	
Expenses	(60,066)
2020 Encumbrances	(4,237)
<u>Grant Proceeds</u>	
Amount Disbursed	233,541
Undisbursed Balance	352,459
Net Cash from Investing Activities	(679,280)
Financing Activities	
Loan Proceeds	
Amount Disbursed	602,033
Undisbursed Balance	59,900
Principal & Interest Payments	(423,989)
Net Cash from Financing Activities	237,944
Net Income/Loss	183,818
Fund Balance – All Funds	830,759

¹ 25,915.90 was collected in reimbursements from Zoarville. It should be booked to Capital Contributions

² Also had a transfer in of \$160,000. This is included in financing activities as an intra-fund loan.

Reserve Analysis

Reserve Requirements	Sewer District	Water District
Operating Cash Reserve > $1/8 \times$ Operating Expenses (AWWA)	\$196,750	\$107,950
Emergency Reserve > Cost of Most Vulnerable Facility (AWWA)	\$300,000 ³	\$750,000 ⁴
Total Reserve Requirement	\$496,750	\$857,950
Equity in Pooled Cash and Cash Equivalents	\$747,579	\$794,743
Cash and Cash Equivalents in Segregated Accounts	\$53,675	\$33,967
Reserve Surplus	\$304,504	\$29,240

Fixed Assets Purchased (>\$5,000)

Sewer District Fixed Assets

Description	Cost
20 HP Aerator Motor – North Aeration Tank, Sandyville WWTP	5,313
Safety Equipment	46,446
Total	51,759

Water District Fixed Assets

Project	Cost
Portable Valve Exerciser & Accessories	9,468
2020 Kobelco SK45SRX-6E Mini Excavator & Buckets (financed)	56,202
Totals	65,670

³ Assumes failure of mechanical screen or sludge press

⁴ Assumes failure of 500,000 gallon storage tank at \$1.50 per gallon

Capital Projects Completed (Total Value > \$5,000)

Sewer District Capital Projects

Project	2020 Expenses	Prior Year Expenses	Total Expenses to Date
Grinder Station - Mineral City Garage	34,489	0	34,489
Kerr WWTP - UV Tank Replacement	21,976	0	21,976
Logan St. Sanitary Sewer Lateral	900	10,225	11,125
Wilkshire Hills WWTP - Headworks Upgrade	5,253	648,664	653,917
Total	62,618	658,889	721,507

Water District – Capital Projects

Project	2020 Expenses	Prior Expenses	Total Expenses
McKinley/Dutchtown Waterline Replacement	202,651	25,623	228,274
Mineral/Zoar Road Culvert Repair ⁵	12,500	0	12,500
North Orchard Hydrant Relocation Project	3,200	0	3,200
Wilkshire Hills Well #3	175,018	0	175,018
Zoarville Water System Project	66,990	416,104	483,094
Totals	460,359	441,727	902,086

⁵ Not a Water District capital improvement. This project was done in partnership with Sandy Township using funds provided by the Commissioners as a “Transfer In” to the Water District from the General Fund. The Sanitary Engineer’s office provided contract management for the project.

Construction in Progress (Total Project Budget > \$5,000)

Sewer District Capital Projects

Project	2020 Expenses	Prior Year Expenses	Total Expenses to Date
Bolivar Lift Station Upgrade	113,979	12,400	126,379
Mineral City –High St Sewer Rehab	6,687	15,250	21,937
Mineral City – S. High Ext. Sewer	4,416	0	4,416
Old Orchard Sewer Rehab #3	549	0	549
Olde Hilltop Subdivision	64	0	64
Wilkshire Hills WWTP – Phase 2	191	0	191
Total	125,886	27,650	153,536

Water District – Capital Projects

Project	2020 Expenses	Prior Expenses	Total Expenses
Dundee Tank #1 & WTP Train #1 Rehabilitation	8,785	0	8,785
New Service Connections	9,160	0	9,160
Olde Hilltop Subdivision	43	0	43
Sandy Valley Estates Tank Decommissioning	3,400		
SR 212 Waterline Relocation	6,500	0	0
Wilkshire Hills WTP Upgrade	260,579	29,955	290,534
Wilkshire Hills Land Acquisition	157,311	18,959	176,270
Dundee Booster Station Replacement	0	5,000	5,000
Totals	445,778	53,914	471,804

Sewer District – Key Financial Performance Indicators

Financial Performance Indicator	Goal	2020⁶	2019⁷	2018	2017
Operating Ratio, including depreciation <i>Measures the profitability of the system. It shows whether the revenues from sales are sufficient to cover the cost of operations (O&M) and depreciation, which is used here as a surrogate for capital needs.</i>	1.20	0.98	0.94	0.83	1.02
Operating Ratio, not including depreciation <i>Measures whether the revenues from sales are sufficient to cover just the cost of operations and maintenance (without any consideration for capital expenses).</i>	1.50	1.32	1.19	1.04	1.33
Debt Service Coverage Ratio <i>Measures the ability to pay debt service with operating revenue. This means that after paying off operating and maintenance costs, adequate funds remain to pay existing debt service.</i>	1.20	1.30	0.78	0.21	1.47
Quick Ratio <i>Measures short-term liquidity: the system's ability to pay its bills with its unrestricted assets on the day the financial statements are recorded.</i>	2.00	2.60	2.85	1.43	1.69
Days Cash on Hand <i>Measures the ability of the system to weather a significant temporary reduction in revenue to continue paying for daily operations and maintenance.</i>	60	173	105	112	190
Percent Capital Assets Depreciated <i>An indicator that measures how much of the assessed value of all depreciable assets has already been depreciated.</i>	<50%	42%	46%	44%	
Operating Cost Ratio (\$/EDU) <i>Quantifies utility costs related to operations and maintenance normalized to cost per account.</i>	AWWA Median \$599 ⁸	\$375	\$420		

⁶ Calculated using data from Auditor's CAFR

⁷ Rates were increased approximately 5.8% effective January 1, 2020 to address shortfalls in Sewer District operating revenues

⁸ Based on AWWA Benchmarking Report, 2011 for systems with service population 0-10,000 and adjusted for inflation (3% per year)

Water District – Key Financial Performance Indicators

Financial Performance Indicator	Goal	2020⁹	2019	2018	2017
Operating Ratio, including depreciation <i>Measures the profitability of the system. It shows whether the revenues from sales are sufficient to cover the cost of operations (O&M) and depreciation, which is used here as a surrogate for capital needs.</i>	>1.20	1.17	1.16	1.28	1.30
Operating Ratio, not including depreciation <i>Measures whether the revenues from sales are sufficient to cover just the cost of operations and maintenance (without any consideration for capital expenses).</i>	>1.50	1.58	1.55	1.72	1.72
Debt Service Coverage Ratio <i>Measures the ability to pay debt service with operating revenue. This means that after paying off operating and maintenance costs, adequate funds remain to pay existing debt service.</i>	>1.20	1.27	1.33	1.41	1.45
Quick Ratio <i>Measures short-term liquidity: the system's ability to pay its bills with its unrestricted assets on the day the financial statements are recorded.</i>	>2.00	3.60	3.62	2.88	2.83
Days Cash on Hand <i>Measures the ability of the system to weather a significant temporary reduction in revenue to continue paying for daily operations and maintenance.</i>	>60	333	266	316	321
Percent Capital Assets Depreciated <i>An indicator that measures how much of the assessed value of all depreciable assets has already been depreciated.</i>	<50%	27%	28%	26%	24%
Operating Cost Ratio (\$/EDU) <i>Quantifies utility costs related to operations and maintenance normalized to cost per account.</i>	AWWA Median \$599 ¹⁰	\$336	\$369		

⁹ Calculated using data from Auditor's CAFR

¹⁰ Based on AWWA Benchmarking Report, 2011 for systems with service population 0-10,000 and adjusted for inflation (3% per year)

Operational Statistics

	2020	2019	2018	2017	2016
Alarms (Water & Sewer)	1,645	2,047	1,335	2,507	1,826
OUPS Marking Requests	3,789	3,831	5,904	4,668	4,228
Water System Operating Statistics					
Number of Customers	2,511	2,521			
Residential Equivalents	2,696	2,706			
Equivalent Population Served	6,740 ¹¹	6,765			
Number of Tap-Ins	12	62	8	14	9
Million Gallons Water Produced	187.80	179.73	179.41	189.05	205.64
Million Gallons Water Sold	129.07	128.85	131.32	130.71	135.89
Percent Non-Revenue Water, %	31	30	27	31	34
EPA Violations / Out of Compliance	1 ¹²	0	0	0	0
Water Main Breaks	10	9	8	6	10
<i>Per 100 miles of pipe</i>	<i>16</i>	<i>14</i>	<i>12</i>	<i>9</i>	<i>15</i>
AWWA Median	33.5	33.5	33.5	33.5	33.5
Service Line Breaks	7	11	37	14	16
Hydrants Repaired	8	0	8	7	10
Hydrants Replaced	3	2	0	1	1
Mn-Related Service Complaints	20	13	15	23	56
Full-Time Equivalents	6.3	6.5	6.5	6.25	6
Number of Vehicles	9	12	12	9	9
Sewer District Operating Statistics					
Number of Customers	3,362 ¹³	3,594			
Number of Residential Equivalents	4,515	4,780			
Equivalent Population	11,288	11,950			
Number of Tap-Ins	10	9	6	10	9
MG Treated at County WWTPs	353.13	377.41	378.10	328.9	277
Screenings Disposed in Landfill, tons	0 ¹⁴	42.38	46.47	66.59	91.78
Sludge Disposal (Landfill)					
<i>Transported to Landfill, wet tons</i>	<i>472.04</i>	<i>267.06</i>	<i>213.30</i>	<i>357.97</i>	<i>462.21</i>
<i>Actual Weight of Solids, dry tons</i>	<i>59.18</i>	<i>35.60</i>	<i>30.20</i>	<i>48.45</i>	<i>70.65</i>
<i>Average Solids Concentration, %</i>	<i>12.53</i>	<i>12.85</i>	<i>14.0</i>	<i>13.5</i>	<i>15.3</i>

¹¹ Reflects loss of Ridgewood customers to Dover and gain of customers from Zoarville

¹² Reporting violation for TTHM. District reported results after specified deadline.

¹³ Reflects loss of customers related to transfer of Parral, Lowden & Renner/Ridgewood sewers to the City of Dover

¹⁴ No longer tracked separately. Screenings are combined in the same roll-off container with dewatered sludge.

	2020	2019	2018	2017	2016
Sanitary Sewer Overflows (SSOs)	3	4	5	4	1
SSOs per 100 miles of pipe	3.6	4.4	5.6	4.4	1.1
AWWA Median (Benchmark)	2.5	2.5	2.5	2.5	2.5
Water-in-Basements (WIBs)	8	5	4	4	0
Sewer Line Video Inspection, feet	22,424	5,743	14,918	10,000	4,806
Sewer Line Cleaning, feet	10,030	3,460	13,418	6,000	5,493
Septic Tanks Cleaned	55	47	26	28	43
Number of Manhole Inspections	80	26	124	N/A	43
Full-Time Equivalents	10.8	10.5	10.5	10.5	12
Number of Vehicles	10	9	12	12	12
Miles of Sewer	84	84	90	90	N/A
Wastewater Treatment Facilities	5	5	5	5	N/A
Pumping Stations	23	23	25	25	N/A
Miles of Waterlines	64	64	66	66	N/A
Reservoirs	9	9	10	10	N/A
Water Treatment Facilities	3	3	4	4	N/A
Pumping Stations	5	5	5	5	N/A

Fleet and Fuel Management Summary

	2020	2019	2018	2017	2016
Non-CDL Vehicles	15	17	17	N/A	N/A
CDL Vehicles (Tankers, Vector, Dump)	4	3	4	N/A	N/A
Mileage					
Miles Drive, Water District	84,159	86,396	75,560	79,854	N/A
Miles Driven, Sewer District	123,591	89,080	84,069	85,111	N/A
Miles Driven, Total	207,750	176,016	159,629	164,966	N/A
Fuel					
Gasoline Used, gallons	15,513	16,453	14,970	15,012	N/A
Diesel (Clear) Used, gallons	4,767	-	2,088	3,261	N/A
Diesel (Dyed) Used, gallons	-	-	2,895	N/A	N/A
Diesel (Ultra) Used, gallons	-	4,051	333	N/A	N/A
Propane-Stone Creek WWTP, gallons	1,554	2,089	3,631	N/A	N/A
Total Vehicle Maintenance Cost	32,562	32,212	32,692	37,380	N/A