



MAHONING VALLEY SANITARY DISTRICT TRUMBULL COUNTY DECEMBER 31, 2022

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Attachment: Annual Comprehensive Financial Report

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INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS REQUIRED BY *GOVERNMENT AUDITING STANDARDS*

Mahoning Valley Sanitary District Trumbull County P.O. Box 4119 Youngstown, Ohio 44515

To the Board of Directors:

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States (*Government Auditing Standards*), the financial statements of the Mahoning Valley Sanitary District, Trumbull, (the District) as of and for the year ended December 31, 2022, and the related notes to the financial statements, which collectively comprise the District's basic financial statements and have issued our report thereon dated June 12, 2023, wherein we noted the District restated prior year capital assets and net position due to errors in the prior year, and the financial impact of COVID-19 and the continuing emergency measures may impact subsequent periods of the District.

Report on Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the District's internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the District's internal control. Accordingly, we do not express an opinion on the effectiveness of the District's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the District's financial statements will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies and therefore, material weaknesses or significant deficiencies may exist that were not identified. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. We identified a certain deficiency in internal control, described in the accompanying schedule of findings as item 2022-001 that we consider to be a significant deficiency.

Mahoning Valley Sanitary District Trumbull County Independent Auditor's Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Required by Government Auditing Standards Page 2

Report on Compliance and Other Matters

As part of obtaining reasonable assurance about whether the District's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the financial statements. However, providing an opinion on compliance with those provisions was not an objective of our audit and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of This Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the District's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the District's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

talu

Keith Faber Auditor of State Columbus, Ohio

June 12, 2023

MAHONING VALLEY SANITARY DISTRICT TRUMBULL COUNTY

SCHEDULE OF FINDINGS DECEMBER 31, 2022

FINDINGS RELATED TO THE FINANCIAL STATEMENTS REQUIRED TO BE REPORTED IN ACCORDANCE WITH GAGAS

FINANCIAL REPORTING

FINDING NUMBER 2022-001

SIGNIFICANT DEFICIENCY

In our audit engagement letter, as required by AU-C Section 210, Terms of Engagement, paragraph .06, management acknowledged its responsibility for the preparation and fair presentation of their financial statements; this responsibility includes designing, implementing and maintaining internal control relevant to preparing and fairly presenting financial statements free from material misstatement, whether due to fraud or error as discussed in AU-C Section 210 paragraphs .A14 & .A16. Governmental Accounting Standards Board (GASB) Cod. 1100 paragraph .101 states a governmental accounting system must make it possible both: (a) to present fairly and with full disclosure the funds and activities of the governmental unit in conformity with generally accepted accounting principles, and (b) to determine and demonstrate compliance with finance-related legal and contractual provisions.

The District was required to provide a surety account for the Dam Construction Project in the amount of \$2,530,000. The account was not recorded as restricted cash or restricted net position. The financial statements have been updated to reflect this. In addition, the District restated their opening net position by \$1,458,803, due to determining capital assets were overstated in the prior period.

The District did not have adequate controls in place to prevent or detect these errors.

The District should review the accounting system reports, GAAP compilation workpapers, and basic financial statements as applicable to help ensure all amounts are properly classified and recorded.

Officials' Response: No response provided.

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Mahoning Valley Sanitary District, Ohio

For the Year Ended December 31, 2022 Annual Comprehensive Financial Report

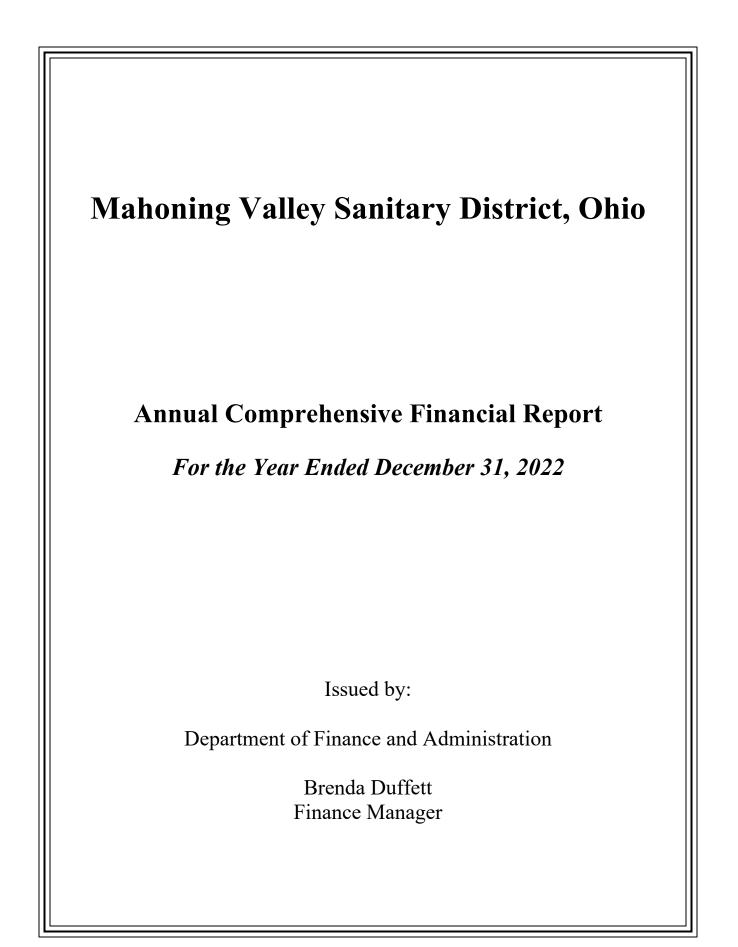


Our Mission Statement

The Mahoning Valley Sanitary District and its employees are committed to preserving the public health and the natural environment while providing a safe and reliable supply of potable water. The employees of the Mahoning Valley Sanitary District are well trained in order to serve the Mahoning Valley community in the most efficient, courteous way possible in providing quality service.

> Brenda Duffett Finance Manager

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Introductory Section

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STATE OF OHIO THE MAHONING VALLEY SANITARY DISTRICT

June 12, 2023

Member Cities of Youngstown and Niles, Village of McDonald and Members of the Board of Directors:

We are pleased to submit to you the Annual Comprehensive Financial Report of the Mahoning Valley Sanitary District (the District) for the year ended December 31, 2022. This is the fifth time that the District has submitted its financial report within the broader framework of a annual comprehensive financial report. The annual comprehensive financial report format provides the District with a better way to communicate its financial position with the public. In a annual comprehensive financial report, financial information is put within a larger context that provides the reader with the opportunity to understand how the District functions and the environment in which it operates. During 2018, the District changed its accounting year from a fiscal year basis to a calendar year basis.

Ohio Revised Code Section 117.38 requires that the District, as a public office, file a financial report for each year. The District's financial report conforms to generally accepted accounting principles (GAAP). The law requires that a financial report of this type be filed with the Auditor of State within 150 days after the close of the year. At the time the report is filed with Auditor of State, the District's Chief Fiscal Officer is required to publish a notice in the newspaper that the report has been completed and is available for public inspection.

The District's management assumes full responsibility for the contents of this report. The financial statements in the report are the work of District management, not the work of independent auditors. Management is responsible for maintaining appropriate internal control over financial reporting and for complying with applicable finance-related laws, regulations and provisions of grants and contracts.

To compile the information for the financial statements in conformity with GAAP, the District has a comprehensive framework of internal controls in place. Because the cost of internal controls should not outweigh the benefit, the framework has been designed to provide reasonable—not absolute—assurance that the financial statements are free from material misstatement.

Ohio law requires independent audits to be performed on all financial operations of the District either by the Ohio Auditor of State or an independent public accounting firm, if permitted by the Auditor of State. The Auditor of State has rendered an opinion on the District's financial statements, which includes an unmodified ("clean") opinion for the year ended December 31, 2022. The Independent Auditor's Report on the basic financial statements is included in the financial section of this report.

Immediately following the independent auditor's report is a narrative introduction, overview and analysis of the basic financial statements, entitled Management's Discussion & Analysis (MD&A). This letter of transmittal is meant to complement the MD&A, and is best read in conjunction with it.

Profile of the District

The Mahoning Valley Sanitary District is a political subdivision of the State of Ohio established in 1926 under the authority of the Sanitary District Act of Ohio (Revised Code Section 6115.01 to 6115.99) for the purpose of providing a public water supply to the member cities of Youngstown and Niles beginning in 1932; and by special contract to the Village of McDonald beginning in 1944. The members serve surrounding areas such as Girard, Canfield, Mineral Ridge, Lordstown and portions of 10 other townships to approximately 220,000 residents.

The organization consists of a Court of Jurisdiction composed of one Common Pleas Judge from Mahoning County and one from Trumbull County and a Board of Directors appointed by the member cities to oversee the District. The two judges are the Honorable Anthony Donofrio and the Honorable Ronald J. Rice, respectively. The District's Board of Directors consists of four members, two from the City of Youngstown and two from the City of Niles. Dr. Michael Neopolitan, the City of Niles mayoral appointment served as President of the Board. Other Board members included: DeMaine Kitchen, the City of Youngstown council appointment, Robin Bradley, City of Youngstown mayoral appointment, and Joseph Merlo, the City of Niles council appointment.



Joseph Merlo



Dr. Michael Neopolitan



DeMaine Kitchen



Robin Bradley

At the end of the year, the District staff consisted of 54 employees; 1 part time; 11 salaried employees; 42 hourly and/or non-supervisory personnel which are represented by the American Federation of State, County and Municipal Employees Local 1649.

Employees with Ohio EPA water licenses:

- 1 Certified Class IV (Water Supply Operators)
- 10 Certified Class III (Water Supply Operators)
- 12 Certified Class I (Water Supply Operators)

The Mahoning Valley Sanitary District and its employees are committed to preserving the public health and the natural environment while providing a safe and reliable supply of potable water. The employees of the Mahoning Valley Sanitary District are well trained in order to serve the Mahoning Valley community in the most efficient, courteous way possible in providing quality service.

District Facilities

The Mahoning Valley Sanitary District owns 5,570 acres of property. Meander Reservoir is seven miles long with 40 miles of shoreline and covers 2,167 acres. The property is enclosed by 35 miles of fence and the land forested with one million evergreen trees.

The dam and spillway, water intake and treatment works are located in Trumbull County, west of Mineral Ridge. Treatment facilities consist of coarse screening, coagulation, lime settling aids softening, mechanical settling, rapid sand filtration, taste and odor control, fluoridation, and chlorine and ammonia disinfection.

Electric motor-driven centrifugal pumps deliver water to Youngstown and Niles. Since 1944, the District, acting as agent for the two member cities, has supplied water directly from the plant to the Village of McDonald through a village owned pipeline.

Twin 36" District mains, each five miles long, carry water to the thirty million gallon District distributing reservoir in Youngstown and twin 42" feeder mains continue to the center of the city. A 2.8 mile 48" water main was laid in 1973 from the District plant to the City of Youngstown's Webb Road Pumping Station. Two 20" mains and a 24" main supply Niles and a 1.5 million gallon District owned standpipe. Each city owns and operates its own distribution system. The Village of McDonald is served off the Youngstown transmission lines, with one connection at the water plant and the other off County Line Road.

Berlin facilities include a water intake and pumping station located at Berlin Dam and a nine mile pipeline to carry the water to upper Meander Creek.

The cost of duplicating present District Works at today's prices would exceed \$215 million. An insurance appraisal report on the buildings, fixtures, machinery and equipment was completed by Industrial Appraisal Company in November 2010.

Below are arial views of the District.







North View of MVSD

South View of MVSD

East View of MVSD



West View of MVSD

Water Supply

Water supply for the District is obtained from Meander Creek Reservoir. Originally, at spillway elevation 905.00 feet above sea level, the reservoir had a capacity of ten billion gallons. Addition of a rubber dam to the original spillway now allows the District to store 11.00 billion gallons at spillway elevation 906.50 feet above sea level. The safe yield of Meander Creek Reservoir during drought periods is established at thirty-million gallons daily.

Berlin Facilities

An intake tower and pump station owned by the District is located at Berlin Reservoir to augment Meander Reservoir only if necessary. Water is obtained through a contract with the United States Army Corps of Engineers, who own Berlin Reservoir. The following table illustrates the District's historical raw water usage from Berlin Reservoir.

	MGD F	Reserved	Million Gallons	% Allocation	% of Total Raw
Year	1 st Half	2 nd Half	Use	Use	Water Use
1964-65	13	5	514.05	16	4
1965-66	5	8	1111.44	47	9
1966-67	8	10	2372.53	72	17
1967-68	10	13	2230.17	53	15
1968-69	13	14	1811.43	37	13
1969-70	14	15	2582.35	49	17
1970-71	15	15	.83	0	0
1971-72	15	15	2736.75	50	20
1972-73	15	15	0	0	0
1973-74	15	15	0	0	0
1974-75	15	15	0	0	0
1975-76	15	15	310.88	6	2
1976-77	15	15	160.58	3	1
1977-78	15	15	0	0	0
1978-79	15	15	0	0	0
1979-80	15	15	0	0	0
1980-81	10	10	0	0	0
1981-82	7	7	203.43	7	1
1982-83	8	8	1255.14	46	10
1983-84	5	5	728.04	31	6
1984-85	6	6	0	0	0
1985-86	6	6	114.00	5	1
1986-87	6	6	0	0	0
1987-88	6	6	0	0	0
1988-89	6	7	931.79	39	7
1989-90	7	5	0	0	0
1990-91	5	2	0	0	0
1991-92	2	3	803.92	88	7
1992-93	3	2	0	0	0
1993-94	2	2	0	0	0
1994-95	2	2	0	0	0
1995-96	2	2	0	0	0
1996-97	2	2	0	0	0
1997-98	2	2	0	0	0
1998-99	2	2	0	0	0
1999-00	2	2	0	0	0
2000-01	2	2	0	0	0
2001-02	2	2	0	0	0
2002-22	0	0	0	0	0

Precipitation

Since 1927, a weather station measuring temperature and precipitation has been maintained at the District Works at Mineral Ridge. The Youngstown Warren Regional Airport annual average rainfall is 38.91 inches. Maximum rainfall was 54.01 inches in the year 2011 and the minimum is 23.70 inches in 1963. Rainfall at the District amounted to 35.44 inches this calendar year and 37.27 inches at the Youngstown Warren Airport. Maximum rainfall at the District was 48.90 inches in the 2003-2004 fiscal year, and the minimum of 23.5 inches was in the 1962-1963 fiscal year.

Reservoir Storage

At the end of the year, Tuesday, December 20, 2022, the reservoir elevation was 903.2 feet above sea level (data was not available on December 31, 2022). This elevation corresponds to 9.00 billion gallons in storage.

The record low to date was 888.80 feet above sea level (FSL) and occurred on February 15, 1954. The record high to date was 909.25 on January 22, 1959.

Raw Water Use

Total water withdrawn from Meander Creek Reservoir during the year was 9,425.87 million gallons, or 25.82 million gallons daily.

Finished Water

Total water distributed from the Meander Water Treatment Plant during the year was 9,148.94 million gallons, or 25.07 million gallons daily. Total cash basis revenues from the sale of water were \$18,613,885. The average cost of treating water was \$2.04 per thousand gallons.

Water Quality and Treatment

The District Works continued to produce a clear, sparkling, palatable water of uniform low hardness and bacteriological free quality. Chemicals were purchased under contracts executed with the most responsive and responsible bidder.

Raw Water Quality

Meander Creek Reservoir is a relatively pure water supply; however, wastes from homes, commercial and industrial establishments, and strip mines drainage are contributing pollution. Oil and gas lines along with three major highways that cross the reservoir are potential hazards.

Eighteen sampling points in the watershed were established by the District and since 1964 they have made nine separate chemical and bacteriological analyses monthly at each point. In addition to these routine tests, the District also performs a more comprehensive analysis of the raw water.

The cost of chemical treatment is directly impacted by raw water quality and chemical purchase costs. While purchase costs are controlled by soliciting bids and awarding contracts based on the most responsive and responsible bids, raw water quality is contingent on various weather conditions including rainfall and temperature.

Chemical Costs

The total cost of chemicals purchased during the year was \$3,082,098. The actual cost of chemicals used for water treatment during the year was \$327 per million gallons based on a raw volume of water of 9,425.87 million gallons consisting of the following:

Contract Number	Chemical Name	Total Cost per Chemical	Cost per Million Gallons	
M - 573	Lime	\$384,158.51	\$40.76	
M - 578	Carbon	\$341,236.30	\$36.20	
M - 575	Fluoride	¢70 420 20	\$8.32	
101 - 575	Fluoride	\$78,432.30	φ0.3Z	
M - 576	NH3	\$33,912.00	\$3.60	
M - 574	Chlorine \$343,335.50		\$36.42	
	CO2	\$0.00	\$0.00	
M - 579	KMNO4	\$19,917.95	\$2.11	
M - 582	ACH	\$1,330,464.23	\$141.15	
M - 581	Anionic-Polymer	\$36,020.06	\$3.82	
M - 580	Poly-Amine \$264,910.48		\$28.10	
	,			
M - 577	Phosphate	\$249,710.88	\$26.49	

Total Chemical Costs and Cost per Million Gallons 2022

Total Cost all Chemicals

\$3,082,098.40

Cost per Million Gallons

\$326.98

Provided below is the chemical and bacterial analysis of the raw and finished water for the year 2022:

Total Non Carb Total Turbidity Temp pH s.u. Alkalinity Hardness Hardness TOC Fluoride Precipitation Month (NTU) (°C) (mg/L) (mg/l) (mg/L) (mg/L) (mg/L) (inches) 3.41 44 134 1.43 January 2.7 8.11 90 5.5 0.20 February 5.37 2.6 7.79 92 56 148 6.2 0.19 1.60 March 17.92 5.1 7.65 66 42 5.1 0.16 3.94 108 10.28 9.3 7.72 5.0 April 58 37 95 0.15 3.39 7.49 May 4.03 13.3 63 39 102 5.5 0.16 5.14 June 2.75 17.4 7.43 70 37 108 5.8 0.17 2.90 2.54 21.1 7.58 77 5.9 0.17 4.51 July 34 112 1.59 23.9 7.58 80 34 5.8 0.18 2.69 August 114 29.2 79 5.5 0.20 September 1.07 7.53 35 114 3.26 2.38 7.65 October 16.1 79 37 116 5.2 0.19 1.60 November 2.95 11.2 7.72 79 39 119 5.1 0.19 3.39 December 3.89 4.9 7.84 80 42 122 5.0 0.21 1.59 156.8 92.09 913 476 65.5 35.44 Total 58.18 1392 2.17 7.7 76 5.5 2.95 4.85 13.1 40 116 0.18 Average 29.2 Maximum 17.92 8.1 92 56 148 6.2 0.21 5.14 Minimum 1.07 2.6 7.4 58 34 95 5.0 0.15 1.43

Water Quality Report 2022 Raw Water Analysis 2022

System Analysis 2022

Month	Turbidity (NTU)	pH S.U.	Total Alkalinity (mg/L)	Non Carb Hardness (mg/L)	Total Hardness (mg/L)	Fluoride (mg/L)	Chlorine Combined (mg/L)	Chlorine Free (mg/L)	
January	0.10	9.32	49	51	100	0.96	1.82	0.05	
February	0.10	9.31	42	61	103	0.98	1.72	0.05	
March	0.12	9.36	39	50	89	1.01	1.76	0.05	
April	0.09	9.31	30	44	85	1.01	1.68	0.06	
Мау	0.08	9.27	28	46	73	1.00	1.80	0.06	
June	0.07	9.33	28	45	73	1.04	1.92	0.05	
July	0.08	9.40	30	44	73	1.01	1.85	0.05	
August	0.09	9.39	27	44	71	1.02	2.00	0.06	
September	0.09	9.44	27	44	71	1.03	2.13	0.06	
October	0.10	9.43	33	44	77	0.99	2.05	0.05	
November	0.12	9.43	40	47	86	0.95	1.73	0.05	
December	0.16	9.32	40	50	90	0.99	1.73	0.05	
Average	0.10	9.36	34	48	83	1.00	1.85	0.05	
Maximum	0.16	9.44	49	61	103	1.04	2.13	0.06	
Minimum	0.07	9.27	27	44	71	0.95	1.68	0.05	

Month	Turbidity (NTU)	Temp (°C)	pH s.u.	Phenol Alkalinity (mg/L)	Total Alkalinity (mg/L)	Non Carb Hardness (mg/L)	Total Hardness (mg/L)	Calcium (mg/L)
January	0.07	5.7	9.30	8	47	52	100	24
February	0.07	5.5	9.32	7	41	62	103	23
March	0.07	7.0	9.38	8	38	50	88	23
April	0.06	10.6	9.33	6	29	44	73	19
May	0.05	13.4	9.28	6	27	46	73	19
June	0.05	16.9	9.30	5	28	45	73	19
July	0.07	20.4	9.41	6	29	43	73	20
August	0.06	22.3	9.41	6	27	44	71	19
September	0.07	22.0	9.46	7	27	44	71	19
October	0.06	16.8	9.43	8	33	45	77	19
November	0.07	12.8	9.40	9	39	47	86	20
December	0.06	7.0	9.30	8	39	51	47	20
Average	0.06	13.4	9.36	7	34	48	78	20
Maximum	0.07	22.3	9.46	9	47	62	103	24
Minimum	0.05	5.5	9.28	5	27	43	47	19

Finished Water Analysis 2022

Month	Magnesium (mg/L)	Nitrate (mg/L)	TOC (mg/L)	Fluoride (mg/L)	Chlorine Combined (mg/L)	Chlorine Free (mg/L)	THM (ug/L)	Total Coliform (/100mL)
January	10	0.17	3.3	1.02	1.97	0.05		neg
February	11	0.38	3.5	1.00	1.94	0.05	40.6	neg
March	8	0.43	2.9	1.00	1.87	0.05		neg
April	6	0.44	2.6	1.03	1.83	0.06		neg
Мау	6	0.14	3.2	1.01	1.93	0.06	45.3	neg
June	6	0.20	3.4	1.03	2.12	0.05		neg
July	6	AA	3.6	1.01	2.11	0.06		neg
August	5	AA	3.2	1.02	2.37	0.06	65.6	neg
September	6	0.29	3.2	1.02	2.46	0.06		neg
October	7	0.17	3.0	0.99	2.30	0.05		neg
November	8	0.25	3.3	1.00	1.92	0.05	54.7	neg
December	9	0.25	3.2	1.07	1.90	0.05		neg
Average	7	0.272	3.2	1.02	2.06	0.05	51.6	neg
Maximum	11	0.440	3.6	1.07	2.46	0.06	65.6	neg
Minimum	5	AA	2.6	0.99	1.83	0.05	40.6	neg

AA - Below detectable limits <.10 mg/l

During the year, the District pumped to the Member Cities and McDonald a total of 9,148.94 million gallons of water for an average of 25.07 million gallons daily. Of this total, 6,699.62 million gallons or 73.23 percent was used by Youngstown, 2,316.97 million gallons or 25.32 percent used by Niles and 132.35 million gallons or 1.45 percent by McDonald.

Water Usage and Billing 2022

Month	Total Pumped MG	Total Billed MG	City of Youngstown Billed MG	% of Billed Water	City of Niles Billed MG	% of Billed Water	Village of McDonald Billed MG	% of Billed Water
January	785.929	760.341	569.182	74.86%	180.673	23.76%	10.486	1.38%
February	775.710	751.734	570.897	75.94%	170.699	22.71%	10.138	1.35%
March	817.060	790.958	608.231	76.90%	171.751	21.71%	10.976	1.39%
April	796.802	771.181	578.466	75.01%	182.141	23.62%	10.574	1.37%
May	828.174	805.047	596.405	74.08%	196.910	24.46%	11.732	1.46%
June	808.240	781.775	563.067	72.02%	206.436	26.41%	12.272	1.57%
July	827.972	801.132	559.095	69.79%	230.087	28.72%	11.950	1.49%
August	828.637	801.421	567.454	70.81%	222.494	27.76%	11.473	1.43%
September	745.057	725.380	521.354	71.87%	193.873	26.73%	10.151	1.40%
October	724.763	713.260	518.749	72.73%	183.416	25.72%	11.095	1.56%
November	709.584	693.708	503.020	72.51%	180.319	25.99%	10.369	1.49%
December	777.938	753.002	543.699	72.20%	198.167	26.32%	11.136	1.48%
Total	9425.866	9148.939	6699.618	73.23%	2316.966	25.32%	132.353	1.45%
Average	785.489	762.412	558.301	73.23%	193.081	25.33%	11.029	1.45%
Maximum	828.637	805.047	608.231	76.90%	230.087	28.72%	12.272	1.57%
Minimum	709.584	693.708	503.020	69.79%	170.699	21.71%	10.138	1.35%
Daily Average	25.824	25.066	18.355		6.348		0.363	

Monthly Billing in Million Gallons(MG) and Percent Usage

Daily Average Usage in Million Gallons

Raw Water	25.824	
Billed Water	25.066	
Youngstown	18.355	
Niles	6.348	
McDonald	0.363	

Daily Maximum Pumpage in Million Gallons

Youngstown	21.428	Occurred on 6/21/2022	
Niles	8.665	Occurred on 7/6/2022	
Max Daily	31.701	Occurred on 6/22/2022	

Cost of Water

Based on total revenue of \$18,613,885 for the sale of water in the total volume of 9,148.94 million gallons to McDonald, Niles and Youngstown in 2022, the yearly average cost for treating water was \$2.04 per thousand gallons.

Maximum Days

The maximum pumpage reached for this year was 31.701 million gallons on June 22, 2022. Maximum pumpage to Youngstown occurred on June 21, 2022, and was 21.43 million gallons. Maximum pumpage to Niles of 8.67 million gallons occurred on July 6, 2022.

Power

A total 13,405,300 KWH of power was used at the Meander Plant for lighting, plant process equipment and pumping at a cost of \$716,507. With the cost of power at the other auxiliary facilities added to the plant power costs, the total cost of power was \$747,298 and an average cost of \$79 per million gallons based on a plant raw water annual usage of 9,425.87 million gallons.

Water Rates

A cost of service study was conducted to establish the water rates charged by the District to the member cities to pay the costs of operating and maintaining the facilities of the District, pay debt, and finance improvement projects. The resulting schedule is then approved by the Court of Jurisdiction. The rates applied during 2022 were a continuation of rates approved for 2013-2016. The rate includes a fixed cost component of \$15,334,594 annually which is charged to the members monthly in the amount of \$1,277,883 and a variable component based on water pumped to the member cities. Currently the variable cost component is per 1,000 gallons: \$0.08 for electricity, \$0.33 for chemicals, and \$0.13 for sludge.

Water Use

The tables on the following pages illustrate the historical water use per day:

WATER	JSE	MOD D-	V	NIII	MaDawald	Tetel
No.		MGD Raw	Youngstown	Niles	McDonald	Total
01-20	1932-52		286.818	73.812	4.341	364.971
21-30	1952-62		255.874	58.879	6.938	291.671
31	1962-63	00.00	23.696	6.679	0.822	31.197
32	1963-64	32.20	23.353	6.332	0.812	30.497
33	1964-65	33.61	23.915	6.426	0.876	31.217
34	1965-66	34.58	25.240	6.708	0.908	32.856
35	1966-67	38.47	27.972	7.346	0.908	36.226
36	1967-68	39.50	28.830	7.408	0.929	37.167
37	1968-69	39.47	29.643	7.031	0.900	37.574
38	1969-70	41.21	31.150	6.863	0.935	38.947
39	1970-71	39.34	29.909	6.641	0.921	37.469
40	1971-72	37.98	28.980	6.027	0.868	35.875
41	1972-73	40.22	30.421	6.721	0.984	38126
42	1973-74	41.28	31.371	6.921	0.917	39.209
43	1974-75	38.31	29.144	6.124	0.906	36.174
44	1975-76	40.87	31.600	6.300	0.960	38.860
45	1976-77	42.38	32.580	6.590	1.130	40.300
46	1977-78	42.57	32.600	6.600	1.100	40.300
47	1978-79	42.99	32.830	6.560	1.090	40.480
48	1979-80	41.54	31.400	6.580	0.990	38.970
40	1980-81	37.06	28.480	6.000	0.420	34.900
49 50	1981-82			5,970	0.420	34.900
51	1982-83	37.22 34.36	28.350 27.19	6.11	0.380	34.700
52	1983-84	35.13	27.36	6.51	0.43	37.30
53	1984-85	36.27	27.65	6.74	0.42	34.80
54	1985-86	35.54	27.17	7.14	0.43	34.74
55	1986-87	35.52	27.20	5.656	0.49	34.25
56	1987-88	37.07	28.37	7.11	0.53	36.01
57	1988-89	35.60	27.17	6.76	0.55	34.48
58	1989-90	33.51	25.91	6.73	0.51	33.15
59	1990-91	30.71	22.61	6.96	0.51	30.08
60	1991-92	30.61	22.47	6.29	0.45	29.21
61	1992-93	30.12	22.64	6.00	0.45	29.09
62	1993-94	30.51	24.59	6.25	0.45	31.29
63	1994-95	29.49	22.91	6.24	0.48	29.63
64	1995-96	30.29	22.72	6.34	0.51	29.57
65	1996-97	29.07	21.76	6.11	0.51	28.38
66	1997-98	29.41	21.35	6.05	0.51	27.90
67	1998-99	30.26	21.95	6.29	0.53	28.77
68	1999-00	28.81	20.32	6.31	0.58	27.21
69	2000-01	29.91	20.47	6.13	0.55	27.15
70	2001-02	26.94	19.44	5.85	0.52	25.81
71	2002-03	27.94	21.72	5.56	0.58	27.86
72	2003-04	27.34	21.60	5.16	0.53	27.29
73	2004-05	26.78	20.6	5.21	0.47	26.28
74	2005-06	27.20	18.77	6.15	0.48	25.40
75	2006-07	27.361	17.98	6.53	0.45	24.96
76	2007-08	27.293	18.269	6.675	0.456	25.40
77	2008-09	25.38	17.949	6.118	0.453	24.52
78	2008-09	22.803		5.320	0.433	
78 79	2010-11		17.150			22.91
		23.699	17.666	5.506	0.448	23.62
80	2011-12	23.750	18.175	4.438	0.403	23.02
81	2012-13	24.880	18.946	4.646	0.417	24.00
82	2013-14	23.682	18.020	4.929	0.390	23.68
84	2014-15	21.345	16.487	4.101	0.386	20.978
85	2015-16	20.802	15.432	4.506	0.393	20.331
86	2016-17	22.076	15.863	5.261	0.428	21.557
87	2017-18	22.864	15.963	5.858	0.398	22.217
88	2019	24.39	16.846	6.555	0.358	23.759
89	2020	23.815	16.705	6.14	0.338	23.183
00						
90	2021	24.788	17.355	6.229	0.396	23.980

Local Economy

According to the United States Census Bureau from 2020 the population of Mahoning County has decreased by 4.3 percent and currently is 228,614 and Trumbull County has decreased by 4.0 percent and currently is 201,977 from the 2020 census. The average consumption for 2022 was 25.07 million gallons per day (mgd). This is a 4.5 percent increase in consumption from 2021 to 2022. (2021 - 23.98)

Long-Term Financial Planning

The District has major ongoing expense to its water purification plant built in 1926 and the maintenance of 20 buildings and 37 vehicles including heavy equipment. Rehabilitation or the replacement of obsolete infrastructure and equipment vital to the purification of water is a goal of management to ensure continued service without affecting the finished product. The District's Board and management look to implementing new, cutting edge technology in every area of the operation that is economically cost effective and efficient. The Official Plan's Amendment No. 5 and Amendment No. 6 incorporate some of the latest and best water treatment technology now available and used in the water industry as well as provide a complete overhaul of existing equipment (refurbishing) rather than purchasing new. These Amendments to the Official Plan of the District, which was originally established in 1926 were presented to the District's member cities through meetings with important stakeholders and memorialized in the District's five year Operating and Capital Improvement Plan. The five-year forecast is utilized by staff to manage the District's infrastructure resources effectively.

The District is currenting working with its financial advisors on Amendment No. 7 and the future rates to be charged for the additional capital improvements that will be necessary in the next five years. The cost of services study indicated that the current rates being charged to the member cities are not sufficient to cover the operating expenses, debt payments and fund capital projects being considered. Amendment No. 7 shall require an adjustment to the current rates.

Major projects expected to be undertaken in the next five years include:

- Mineral Ridge Dam Rehabilitation Project
- Phase V Valve Replacement / Youngstown Reservoir Improvements
- Administration/Filter Building Repair and Restoration
- Chemical Feed Improvements Project
- Water Treatment Process Improvements
- Youngstown West 36-inch Transmission Line Replacement

Chemical Feed Improvements Project

Description:

The project was originally developed as part of the MVSD Chemical Feed Improvement Project and broken up into multiple phases to secure external grant funding. This project was one of the phases. This project consists of the installation of three chemical bulk storage systems associated with the treatment of water. The project also consisted of ancillary piping, electrical wiring, control panel installation and process control connection for connection to the MVSD SCADA system.

Construction

Contractor:

Est. Const. Cost:

Construction Cost:

Status:	
Design Fee:	
Revised Fee:	
Consultant:	

\$272K N/A ms Consultants



Photo 1: Existing Temporary Chemical Feed Configuration to be replaced by new bulk chemical feed system.

stem.

Filter Gallery Improvement Project

Description:

Project consists of the rehabilitation of existing concrete walkways, beams and portions of the tank walls associated with the existing sand filters. Rehabilitation work consists of either full concrete replacement, crack repair and sealing. Additional scope consists of filter console PLC upgrades and masonry repairs to the Administration and Filter Gallery Building facade. The Consultant spent the year assessing the condition of the filter walkways and developing a plan for repair of the walk areas.

Status:		Design	
Design Fee:	\$498.6K	Estimated Cost:	\$2.4M
Revised Fee:	\$627.7K	Construction Cost:	\$2,320,768.60
Consultant:	CT Consultants, Inc.	Contractor:	A.P. O'Horo



Photo 1: Photograph of the repairs and paint job. Phase I & II complete.

Photo 2: Temporary pump/metering system for the application of corrosion chemicals.

\$1.5M

\$1.27M

A.P. O'Horo

Mineral Ridge Dam Rehabilitation Project

Description: The dam rehabilitation will address potential failure modes, bring the facility into compliance with ODNR and federal dam safety criteria and address needed upgrades and repairs. Several major components of the dam rehabilitation project include:

• abandonment of the existing twin emergency spillways and replacement with a rollercompacted concrete auxiliary spillway;

• extend existing embankment concrete core wall/curb to Elevation 918.0 feet and modify the top of dam roadway; flatten the downstream embankment slope from 2.0 Horizontal to 1.0 Vertical (2H:1V) to between 2.5H:1V and 3H:1V, and install internal filter drains to safely collect and convey potential seepage;

• modify and repair the principal (or primary) spillway, including raising and buttressing the existing training walls with new reinforced concrete walls to accommodate the flattened embankment slopes, lining the ogee surface and stilling basin with a new reinforced concrete liner slab, installing rock anchors in the stilling basin slab to improve stability and concrete surface repairs;

• install post-tensioned anchors into the dam's foundation to improve the stability of the principal spillway concrete ogee structure and the gate house structure.

• replace the existing inflatable rubber bladder and controls at the principal spillway.

In 2020, the Consultant completed the design of the dam and submitted to the Owner final plans for review. The District added to the scope of work the preparation of a 3-D BIM model of the plans to be added for better visualization of the roller compacted spill way. The District is currently evaluating funding options for the project, including to grants, WRSLA loans and WIFIA loans. The plans will need final review by the regulating agencies and the permit fee for ODNR will be required as well as negotiation of scope for CA/RE services by Gannet Fleming.

Status:		Final Design	
Design Fee:	\$550K	Estimated Cost:	50.5M
Revised Fee:	\$3.47M	Construction Cost:	TBD
Consultant:	Gannet Fleming	Contractor:	TBD



Photo 1: Photograph of the east side of the Carbon/Permanganate Building

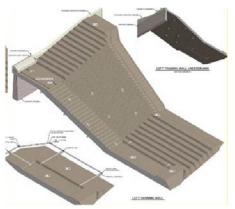


Photo2: BIM Model rendering of the proposed auxiliary spillway.

Plant Standby Power

Description:

Installation of new standby power generator to operate the entire physical plant. Removal of existing generators. The design was stated in 1st QTR 2020 for the installation of a new 3,900 kVA generator to provide standby power in the event the 2 existing plant feeds were down. Scope was added in 2020 for the replacement/reconfiguration of the existing transformer bank on the south side of the Pump Station Building. The Consultant recommended modification of the existing connections to the main switchgear was modified to account for the revised transformer configuration, and the new standby generator connection at the location of the existing 1500 kVA switchgear breaker. Relaying and breaker control logic was also modified to prevent paralleling the transformers. This project was also submitted for a \$300K grant through the Ohio Public Works Commission and was selected for funding in the fiscal year 2021. The generator is being purchased by the District at a cost of \$1,881,461. The contract for installation is with A.P. O'Horo at a cost of \$1,680,100.

Status:Design Cost:\$692KRevised Fee:\$748KConsultant:Stantec, Inc.

Design Estimated Cost: \$4.2M Construction Cost: \$1.68M Generator (Purchase): \$1,881,461.00 Contractor: A.P. O'Horo



Photo 1: Construction of standby generator



Photo 2: Generator housing installation.

Valve Replacement Project - Phase IV

Description:

The fourth Phase of the MVSD Valve Improvement Project per Amendment No. 6. Scope consists of the replacement of 29 various sized valves on the Youngstown and Niles Transmission Lines. The District spent a majority of 2020 developing the design for the replacement valves. There was a great deal of coordination undertaken by the District with Norfolk Southern Railroad as 2 of the valves required crossing of NS right of way in Niles. A decision was made to fully replace the value on Dunlap Ave. outside of the Youngstown Reservoir and add a external check valve in advance of replacing/decommissioning the existing check valve within the Gatehouse structure. An additional part of the design phase included coordination with the City of Youngstown due to several water-connection valves located along the District force mains servicing Youngstown. Through hydraulic modeling, the size of bypassing required to provide adequate service and fire protection to Youngstown was reduced at a cost savings/efficiency to the District. The City of Youngstown was also planning on installing 12-inch cut in valves to assist in isolation of Youngstown lines during replacement. The City wanted their own forces performing the work to assure confidence in the installation. The bid of the project was held for May 2021 with construction to follow.

Design

Estimated Cost:

Contractor:

Construction Cost:

Status:	
Design Fee:	\$702K
Revised Fee:	\$802.5K
Consultant:	Stantec, Inc.



Photo 1: GIS Map of the Youngstown Transmission System

\$10M \$5.9M Kirila Construction



Photo 2: Existing valve proposed for replacement in the Phase IV Project.

Chemical Feedline Project

Description:

The project was originally developed as part of the MVSD Chemical Feed Improvement Project and broken up into multiple phases to secure external grant funding. This project was one of the phases. This project consists of the replacement of the carbon and potassium permanganate feed lines to the gate house and raw water well in the pump station. An RFP was issued in 2nd QTR 2020 to secure services for professional design. The Project was generated mainly out of the need to have the chemical feedlines installed during work for the modification to the Reservoir earthen embankment. This scope was left out of the MRDR Project and was placed under a separate RFP to include the plant phase work. Gannet Fleming was selected as the most qualified to perform the work, due to the design and understanding of the MRDR project. The level of effort was negotiated, and an agreement entered into for the project.

Status:		Project Completed	
Design Fee:	\$320K	Estimated Cost:	\$1.01M
Revised Fee:	N/A	Construction Cost:	TBD
Consultant:	Gannet Fleming	Contractor	TBD



Photo 1: Project location map for the Chemical Feedline Improvement Project



Photo 2: Photograph of the east side of the Carbon/Permanganate Building

Fluoride Replacement Project Description:

The District is to Remove and replace three (3) Bulk Tanks 3300 GAL each and two (2) Day Tanks 300 GAL each including transfer pumps, Metering Pumps, Process Piping, Epoxy Coating of containment Pit, Electrical Upgrades and PLC (Programmable Logic Controller) Upgrades.

Status: Design Fee: Construction Services: Consultant:

In House Design by MVSD \$143,316.00

Project CompletedEstimated Cost:\$519,000.00Construction Cost:\$578,340.08ContractorCRS METALWORX, INC.



Photo 1: G-148 Fluoride System Replacement

Youngstown West 36-inch Transmission Line Replacement

Description:

The District is to replace 3,500 feet of 36-inch transmission main from the McDonald Meter House southwest to Seaborn Street in Mineral Ridge.

Status:		Project Completed	
Design Fee:	\$279,708.00	Estimated Cost:	\$2,893,608.00
Construction Services:	\$143,316.00	Construction Cost:	TBD
Consultant:	GPD Inc.	Contractor	TBD

Taste and Odor, PFAS, Decant and Backwash Improvements:

Description:

Engineering firms are evaluating water treatment process improvements regarding taste and odors, PFAS (Stantec) and the recycling of plant process water from the decant and backwash (ms consultants, inc.).

	Project Completed	
ms \$179,693.00	Estimated Cost:	TBD
Stantec \$204,828.49		
N/A	Construction Cost:	TBD
Stantec	Contractor	TBD
	Stantec \$204,828.49 N/A	ms \$179,693.00 Estimated Cost: Stantec \$204,828.49 Construction Cost:

Relevant Financial Policies

The mission of the District is to develop, maintain and implement financial accounting policies and procedures to protect and optimize the financial resources of the District. The District provides a sound accounting system for safeguarding the District's assets through the recording and reporting of financial transactions according to mandated laws and guidelines of Federal law, Ohio Revised Code and Generally Accepted Accounting Principles (GAAP). The departmental goals are to develop sound fiscal policies, provide solid fiscal management for the District, maintain reserves and fiscal integrity and protect the assets of the consumers of the water. The District also utilizes a financial planner to assist with the development and implementation of a five (5) year forecast involving the rates to be charged and establish an annual budget.

Awards and Acknowledgements

Mahoning Valley Sanitary District received the Certificate of Achievement for Excellence in Financial Reporting from the Government Finance Officers Association (GFOA) for the annual comprehensive financial report submission for the fiscal year ended June 30, 2021. This is the fifth year that the District has submitted a annual comprehensive financial report to GFOA for the prestigious Certificate of Achievement for Excellence in Financial Reporting. In order to receive a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized Annual Comprehensive Financial Report, whose contents conform to program standards. Such a report must satisfy both generally accepted accounting principles and applicable legal requirements. A Certificate of Achievement is valid for a period of one year only. We believe our current report conforms to the Certificate of Achievement program requirements, and we are submitting it to GFOA.

The preparation of this report could not have been accomplished without the efficient and dedicated service of various staff within the Administration. Their efforts are greatly appreciated. Credit must also be given to the Board of Directors for their unfailing support for maintaining the highest standards of professionalism in the management of the District's finances. Special appreciation is expressed to the Local Government Services Section of State Auditor Keith Faber's office for assistance in the planning, designing and reviewing of this financial report.

Respectfully submitted,

Brenda Duffett

Brenda Duffett Finance Manager

MAHONING VALLEY SANITARY DISTRICT

List of Principal Officials at December 31, 2022

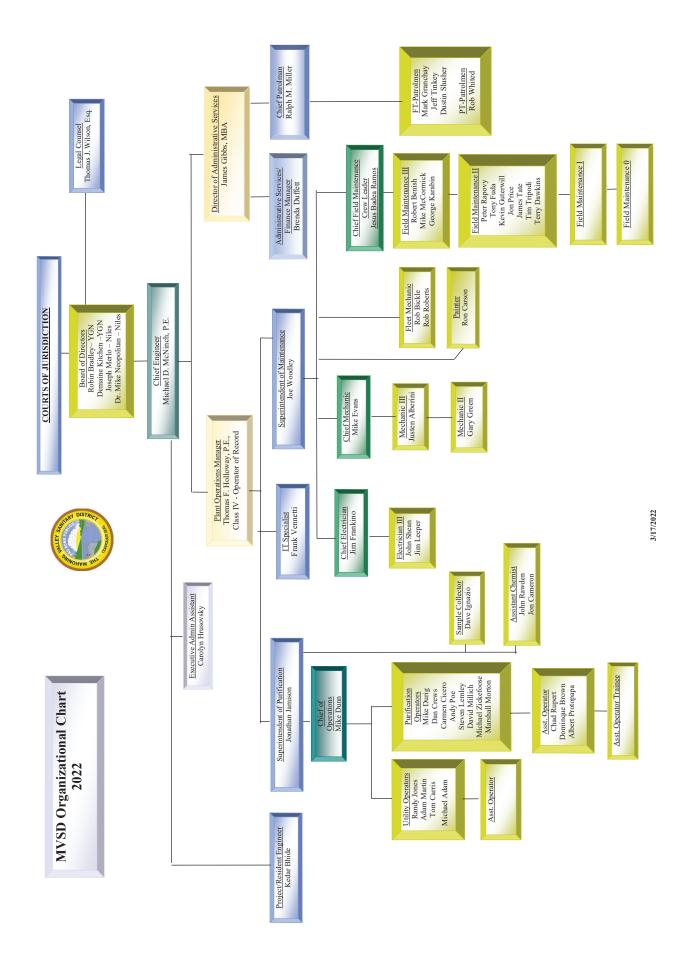
APPOINTED OFFICIALS

CITY OF NILES, MAYORAL APPOINTMENT CITY OF NILES, COUNCIL APPOINTMENT DR. MICHAEL NEOPOLITAN JOSEPH MERLO

CITY OF YOUNGSTOWN, MAYORAL APPOINTMENT CITY OF YOUNGSTOWN, COUNCIL APPOINTMENT ROBIN BRADLEY DeMAINE KITCHEN

ADMINISTRATIVE STAFF

CHIEF ENGINEER	MICHAEL D. MCNINCH
FINANCE MANAGER	BRENDA DUFFETT
DIRECTOR OF ADMINISTRATIVE SERVICES	JAMES GIBBS
OPERATIONS MANAGER/ CLASS IV OPERATOR OF RECORD	THOMAS HOLLOWAY
SUPERINTENDENT OF PURIFICATION	JON JAMISON
PROJECT/RESIDENT ENGINEER	KEDAR BHIDE
CHIEF OF OPERATIONS	MIKE DUNN
SUPERINTENDENT OF MAINTENANCE	JOE WOODLEY
INFORMATION TECHNOLOGY SPECIALIST	FRANK VENNETTI
CHIEF OF SECURITY	RALPH MILLER
ADMINISTRATIVE ASSISTANT	CAROLYN HRUSOVSKY



Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Mahoning Valley Sanitary District Ohio

For its Annual Comprehensive Financial Report For the Fiscal Year Ended

December 31, 2021

Christophen P. Morrill

Executive Director/CEO

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Financial Section

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88 East Broad Street Columbus, Ohio 43215 ContactUs@ohioauditor.gov (800) 282-0370

INDEPENDENT AUDITOR'S REPORT

Mahoning Valley Sanitary District Trumbull County P.O. Box 4119 Youngstown, Ohio 44515

To the Board of Directors:

Report on the Audit of the Financial Statements

Opinions

We have audited the financial statements of the Mahoning Valley Sanitary District, Trumbull, Ohio (District), as of and for the year ended December 31, 2022, and the related notes to the financial statements, which collectively comprise the District's basic financial statements as listed in the table of contents.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the respective financial position of the Mahoning Valley Sanitary District, Trumbull, Ohio as of December 31, 2022, and the respective changes in financial position and, where applicable, cash flows thereof for the year then ended in accordance with the accounting principles generally accepted in the United States of America.

Basis for Opinions

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards,* issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of our report. We are required to be independent of the District, and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Emphasis of Matter

As discussed in Note 14 to the financial statements, the District determined their capital assets were overstated in the prior year and restated their balances and net position. In addition, as discussed in Note 15 to the financial statements, during 2022, the financial impact of COVID-19 and the continuing emergency measures may impact subsequent periods of the District. Our opinion is not modified with respect to these matters.

Mahoning Valley Sanitary District Trumbull Independent Auditor's Report Page 2

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the District's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS and Government Auditing Standards, we

- exercise professional judgment and maintain professional skepticism throughout the audit.
- identify and assess the risks of material misstatement of the financial statements, whether due to
 fraud or error, and design and perform audit procedures responsive to those risks. Such procedures
 include examining, on a test basis, evidence regarding the amounts and disclosures in the financial
 statements.
- obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the District's internal control. Accordingly, no such opinion is expressed.
- evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the District's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Mahoning Valley Sanitary District Trumbull Independent Auditor's Report Page 3

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, and schedules of net pension and other post-employment benefit liabilities and pension and other post-employment benefit contributions be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Management is responsible for the other information included in the annual financial report. The other information comprises the introductory and statistical sections but does not include the basic financial statements and our auditor's report thereon. Our opinions on the basic financial statements do not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audit of the basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated June 12, 2023, on our consideration of the District's internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the District's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the District's internal control over financial reporting and compliance.

thetalm

Keith Faber Auditor of State Columbus, Ohio

June 12, 2023

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The discussion and analysis of the Mahoning Valley Sanitary District's (the District) financial performance provides an overall review of the District's financial activities for the year ended December 31, 2022. The intent of this discussion and analysis is to look at the District's financial performance as a whole; readers should also review the transmittal letter, the basic financial statements as well as the notes to the basic financial statements to enhance their understanding of the District's financial performance.

Financial Highlights

Key financial highlights for 2022 are as follows:

- The District's net position increased by \$6,285,089 from the prior period. This increase is due to a significant increase in the District's noncurrent assets coupled with a decrease in long-term liabilities.
- Capital assets increased from the prior fiscal year due to current year additions exceeding current year depreciation and deletions. Capital asset additions included additional work on several ongoing construction projects and several other additions to equipment, vehicles and land improvements. The District has several ongoing construction projects at year end.
- Long-term liabilities decreased as the District made an additional year of debt payments. All current OWDA loans have been finalized and have an existing amortization schedule. There were no loan proceeds received in 2022.

Using This Annual Comprehensive Financial Report

This annual report consists of financial statements and notes to those statements. These statements are presented following the requirements of Governmental Accounting Standards Board ("GASB") Statement No. 34, and are organized so the reader can understand the Mahoning Valley Sanitary District.

The Statement of Net Position and Statement of Revenues, Expenses and Changes in Net Position provide information about the activities of the District, and asks the questions, "Are we in a better financial position this year than last?" and "Why" or "Why not". The statements include all assets and deferred outflows of resources and liabilities and deferred inflows of resources using the accrual basis of accounting similar to the accounting used by most private-sector companies. This basis of accounting recognizes all of the current year's revenues and expenses regardless of when cash is received or paid.

The Sanitary District

Recall that the *Statement of Net Position* shows assets, liabilities, deferred outflows and inflows and the difference between them (net position).

Management's Discussion and Analysis For the Year Ended December 31, 2022 Unaudited

Table 1

Table 1 provides a summary of the District's net position for 2022 compared to 2021:

	Net Position		
	2022	2021	Change
Assets			
Current and Other Assets	\$49,150,884	\$51,366,980	(\$2,216,096)
Noncurrent Assets:			
Net Pension Asset	83,903	63,556	20,347
Net OPEB Asset	662,356	380,403	281,953
Capital Assets, Net	70,543,673	64,965,197	5,578,476
Total Assets	120,440,816	116,776,136	3,664,680
Deferred Outflows of Resources			
Pension	901,207	734,850	166,357
OPEB	48,783	320,571	(271,788)
Total Deferred Outflows of Resources	949,990	1,055,421	(105,431)
Liabilities			
Current and Other Liabilities	4,788,082	3,857,112	(930,970)
Long-Term Liabilities:	, ,	, ,	
Compensated Absences	232,691	230,567	(2,124)
Net Pension Liability	1,885,638	3,236,398	1,350,760
OWDA Loans	27,660,339	30,409,956	2,749,617
Total Liabilities	34,566,750	37,734,033	3,167,283
Deferred Inflows of Resources			
Pension	2,334,690	1,418,758	(915,932)
OPEB	687,798	1,162,287	474,489
Total Deferred Inflows of Resources	3,022,488	2,581,045	(441,443)
Net Position			
Net Investment in Capital Assets	39,337,506	31,566,451	7,771,055
Restricted	2,631,860	60,497	2,571,363
Unrestricted	41,832,202	45,889,531	(4,057,329)
Total	\$83,801,568	\$77,516,479	\$6,285,089

The net pension liability (NPL) is one of the largest liabilities reported by the District at December 31, 2022. GASB notes that pension and OPEB obligations, whether funded or unfunded, are part of the "employment exchange" – that is, the employee is trading his or her labor in exchange for wages, benefits, and the promise of a future pension and other postemployment benefits. GASB noted that the unfunded portion of this promise is a present obligation of the government, part of a bargained-for benefit to the employee, and should accordingly be reported by the government as a liability since they received the

benefit of the exchange. However, the District is not responsible for certain key factors affecting the balance of these liabilities. In Ohio, the employee shares the obligation of funding pension benefits with the employer. Both employer and employee contribution rates are capped by State statute. A change in these caps requires action of both Houses of the General Assembly and approval of the Governor. Benefit provisions are also determined by State statute. The Ohio Revised Code permits, but does not require the retirement systems to provide healthcare to eligible benefit recipients. The retirement systems may allocate a portion of the employer contributions to provide for these OPEB benefits.

Most long-term liabilities have set repayment schedules or, in the case of compensated absences (i.e. sick and vacation leave), are satisfied through paid time-off or termination payments. There is no repayment schedule for the net pension liability or the net OPEB liability. As explained above, changes in benefits, contribution rates, and return on investments affect the balance of these liabilities, but are outside the control of the local government. In the event that contributions, investment returns, and other changes are insufficient to keep up with required payments, State statute does not assign/identify the responsible party for the unfunded portion. Due to the unique nature of how the net pension liability and the net OPEB liability are satisfied, these liabilities are separately identified within the long-term liability section of the statement of net position.

There was a decrease in cash and cash equivalents due to the District spending down money previously set aside for future construction projects. There was an increase in capital assets due to significant additions to ongoing construction projects. Liabilities decreased due to decreases in the net pension liability and OWDA Loans. These changes resulted in an overall increase in net position for the District.

In order to further understand what makes up the changes in net position for the current year, the following table gives readers further details regarding the results of activities for the current year. Table 2 shows operating revenues, operating expenses, non-operating revenues and expenses and changes in net position for 2022 and 2021.

Management's Discussion and Analysis For the Year Ended December 31, 2022 Unaudited

Table 2

Changes in Net Position

	2022	2021	Change
Operating Revenues			
Charges for Services	\$18,675,117	\$18,499,363	\$175,754
Miscellaneous	96,744	101,215	(4,471)
Total Operating Revenues	18,771,861	18,600,578	171,283
Operating Expenses			
Personal Services	3,298,100	1,762,439	(1,535,661)
Supplies and Services	6,769,198	5,620,437	(1,148,761)
Depreciation	2,686,730	3,225,262	538,532
Claims	982,217	964,877	(17,340)
Miscellaneous	14,028	8,803	(5,225)
Total Operating Expenses	13,750,273	11,581,818	(2,168,455)
Operating Income (Loss)	5,021,588	7,018,760	(1,997,172)
Non-Operating Revenues (Expenses)			
Timber Sales	497,300	416,200	81,100
Royalties	75,480	38,196	37,284
Gain on Sale of Capital Assets	0	15,710	(15,710)
Loss on Disposal of Capital Assets	(4,942)	0	(4,942)
Investment Earnings/Interest	823,552	47,433	776,119
Interest and Fiscal Charges	(810,778)	(878,425)	67,647
Total Non-Operating Revenues (Expenses)	580,612	(360,886)	941,498
Income (Loss) before Capital Contributions	5,602,200	6,657,874	(1,055,674)
Capital Contributions	682,889	67,954	614,935
Change in Net Position	6,285,089	6,725,828	(440,739)
Net Position Beginning of Year	77,516,479	70,790,651	6,725,828
Net Position End of Year	\$83,801,568	\$77,516,479	\$6,285,089

For 2022, OPERS recognized a change in benefit terms for their OPEB plan. These changes contributed to OPEB expense increasing from a negative \$2,196,412 in 2021 to a negative OPEB expense of \$482,291 for 2022.

The District had an increase in their operating revenues due to an increase in charges for services due to increased water usage and some additional valve work being performed for the City of Youngstown. The District had an increase in interest revenue due to changes in economic conditions, which resulted in a greater return on investments.

Capital Assets and Long-Term Obligations

Capital Assets

At the end of year 2022, the District had, at cost, \$124,398,772 invested in land, easements, construction in progress, land improvements, buildings and improvements, furniture and equipment, vehicles and infrastructure. That total carries an accumulated depreciation of \$53,855,099.

In 2022, the District had various increases to construction in progress, equipment, vehicles and land improvements. The District has a few major construction projects ongoing as of December 31, 2022. The completed construction project was the Peterbilt Dump Truck. The ongoing projects include Dam Renovations, Headhouse Chemical System Improvement, Filter Gallery, Standby Power, Taste & Odor Project, Drainwater Building, Fluoride Feed Systems Improvement and Phase IV Valve Replacement. For additional information on capital assets, see Note 6 of the notes to the basic financial statements.

Long-Term Obligations

The District has several loans through the Ohio Water Development Authority (OWDA). As of December 31, 2022, the District has a total outstanding OWDA liability of \$30,409,956. In 2022 the District made payments of \$2,677,259.

For additional information on long-term obligations, see Note 11 of the notes to the basic financial statements.

Current Financial Related Activities

The District receives royalties from two gas wells that are located on District property. These wells were put on District property in the 1970's. No other wells have been drilled on District property since that time. Surrounding the District's property are many gas wells, some of which contribute to royalties that are received by the District. District revenues from royalties have increased over the past year as the District continues to seek out additional revenue sources.

The Mahoning Valley Sanitary District has committed itself to the highest standards of financial excellence for many years. The District received the Award for Small Government Cash Basis Reports from the Government Finance Officers Association (GFOA) for fiscal years 2014 through 2017. Beginning in fiscal year 2018, the District prepared an annual comprehensive financial report. The District has received the certificate of achievement from GFOA for each of the past four years. Management believes the annual comprehensive financial report conforms to the Certificate of Achievement program requirements and has submitted it to the GFOA.

Contacting the District's Financial Management

This financial report is designed to provide the reader with a broad overview of the District's financial position, as well as a general understanding of the financial operations of the District. If you have any questions about this report or need additional financial information, contact Brenda Duffett, Finance Manager, Mahoning Valley Sanitary District, P.O. Box 4119, Youngstown, OH 44515, telephone 330-652-3614.

Statement of Net Position December 31, 2022

Assets **Current** Assets Cash and Cash Equivalents \$44,632,322 Restricted Assets: Cash and Cash Equivalents 2,530,000 Receivables: Accounts 46,773 Intergovernmental 1,623,046 Materials and Supplies Inventory 291,599 Prepaid Items 27,144 **Total Current Assets** 49,150,884 Noncurrent Assets Restricted Assets: Net Pension Asset (See Note 9) 83,903 Net OPEB Asset (See Note 10) 662,356 Nondepreciable Capital Assets 16,964,456 Depreciable Capital Assets, Net 53,579,217 **Total Noncurrent Assets** 71,289,932 Total Assets 120,440,816 **Deferred Outflows of Resources** Pension 901,207 OPEB 48,783 Total Deferred Outflows of Resources 949,990 Liabilities Current Liabilities Accounts Payable 238.209 Accrued Wages 120,243 Contracts Payable 826,445 Intergovernmental Payable 80,182 Retainage Payable 307,355 Claims Payable 59,409 Compensated Absences Payable 406,622 OWDA Loans Payable 2,749,617 Total Current Liabilities 4,788,082 Long-Term Liabilities (net of current portion) Compensated Absences Payable 232,691 Net Pension Liability (See Note 9) 1,885,638 OWDA Loans Payable 27,660,339 Total Long-Term Liabilities 29,778,668 Total Liabilities 34,566,750 **Deferred Inflows of Resources** Pension 2,334,690 OPEB 687,798 Total Deferred Inflows of Resources 3,022,488 **Net Position** Net Investment in Capital Assets 39,337,506 Restricted for: **Capital Projects** 2,530,000 Pension and OPEB Plans 101,860 Unrestricted 41,832,202 Total Net Position \$83,801,568

See accompanying notes to the basic financial statements

Mahoning Valley Sanitary District Statement of Revenues, Expenses and Changes in Net Position For the Year Ended December 31, 2022

Operating Revenues	
Charges for Services	\$18,675,117
Miscellaneous	96,744
Total Operating Revenues	18,771,861
Operating Expenses	
Personal Services	3,298,100
Supplies and Services	6,769,198
Depreciation	2,686,730
Claims	982,217
Miscellaneous	14,028
Total Operating Expenses	13,750,273
Operating Income (Loss)	5,021,588
Non-Operating Revenues (Expenses)	
Timber Sales	497,300
Royalties	75,480
Loss on Disposal of Capital Assets	(4,942)
Investment Earnings/Interest	823,552
Interest and Fiscal Charges	(810,778)
	(***,,,,*)
Total Non-Operating Revenues (Expenses)	580,612
Income (Loss) before Capital Contributions	5,602,200
Capital Contributions	682,889
Change in Net Position	6,285,089
Net Position Beginning of Year - Restated (See Note 14)	77,516,479
Net Position End of Year	\$83,801,568

See accompanying notes to the basic financial statements

Mahoning Valley Sanitary District Statement of Cash Flows For the Year Ended December 31, 2022

<i>Increase (Decrease) in Cash and Cash Equivalents</i> Cash Flows from Operating Activities	
Cash Received from Customers	\$18,613,885
Cash Received from Timber Sales	497,300
Cash Received from Royalties	70,222
	58,107
Cash Received from Capital Charges Other Cash Received	38,107 85,164
	,
Cash Payments to Employees for Services	(4,387,092)
Cash Payments to Suppliers for Goods and Services	(6,524,361)
Cash Payments for Claims	(1,032,421)
Cash Payments for Capital Charges	(58,107)
Other Cash Payments	(14,028)
Net Cash Provided by (Used for) Operating Activities	7,308,669
Cash Flows from Capital and Related Financing Activities	
Capital Contributions	659,423
Redemption of Principal - OWDA Loans	(2,677,259)
Interest and Fiscal Charges - OWDA Loans	(810,778)
Acquisition of Capital Assets	(7,785,468)
Net Cash Provided by (Used for)	
Capital and Related Financing Activities	(10,614,082)
Cash Flows from Investing Activities	
Interest on Investments	823,552
Net Increase (Decrease) in Cash and Cash Equivalents	(2,481,861)
Cash and Cash Equivalents Beginning of Year	49,644,183
Cash and Cash Equivalents End of Year	\$47,162,322

(continued)

Statement of Cash Flows (continued) For the Year Ended December 31, 2022

Reconciliation of Operating Income (Loss) to Net Cash Provided by (Used for) Operating Activities

Operating Income (Loss)	\$5,021,588
Adjustment:	
Depreciation	2,686,730
Non-Operating Revenues (Expenses):	
Timber Sales	497,300
Royalties	70,222
Capital Charge Receipts	58,107
Capital Charge Disbursements	(58,107)
(Increase) Decrease in Assets and Deferred Outflows:	
Accounts Receivable	(15,170)
Intergovernmental Receivable	(57,642)
Materials and Supplies Inventory	(167,065)
Prepaid Items	2,778
Net Pension Asset	(9,578)
Net OPEB Asset	9,600
Deferred Outflows - Pension	782,502
Deferred Outflows - OPEB	333,667
Increase (Decrease) in Liabilities and Deferred Inflows:	
Accounts Payable	84,762
Accrued Wages	311
Contracts Payable	312,543
Compensated Absences Payable	19,577
Intergovernmental Payable	9,125
Claims Payable	(50,204)
Net Pension Liability	(108,337)
Deferred Inflows - Pension	(1,286,119)
Deferred Inflows - OPEB	(827,921)
Total Adjustments	2,287,081
Net Cash Provided by (Used for)	
Operating and Non-Operating Activities	\$7,308,669

Noncash Capital Financing Activities

At December 31, 2022, the District had intergovernmental receivables related to capital contributions of \$23,466.

At December 31, 2022, the District had contracts and retainage payable related to the acquisition of capital assets of \$488,856 and \$307,355, respectively.

At December 31, 2021, the District had contracts and retainage payable related to the acquisition of capital assets of \$288,539 and \$22,992, respectively.

See accompanying notes to the basic financial statements

Note 1 - Description of the District and Reporting Entity

The Mahoning Valley Sanitary District, Trumbull County (the District), is a political subdivision of the State of Ohio and a body corporate created under Section 6115.08 of the Ohio Revised Code (The Sanitary District Act of Ohio) for the purpose of providing a water supply for domestic, municipal and public use to the Cities of Youngstown and Niles and the Village of McDonald.

On February 5, 1998, Substitute House Bill 26 was enacted to amend various sections of the Revised Code. This bill altered the composition and method of appointment of the members of the Board of Directors of the District, limited the compensation paid and benefits provided to board members; required the members of the Board to file financial disclosure statements with the Ohio Ethics Commission, and subjected the District to financial certification requirements prior to expending moneys.

The Board of Directors of the Mahoning Valley Sanitary District is made up of four members. One is appointed by the Mayor of the City of Youngstown, one by the Mayor of the City of Niles, one by the Youngstown City Council, and one by the Niles City Council.

The Finance Manager is the fiscal officer of the District as well as the custodian of the records of the District and its corporate seal.

The Chief Engineer is the superintendent of all the public works and improvements.

In evaluating how to define the District for financial reporting purposes, management has considered all agencies, departments and organizations making up the District and its potential component units consistent with Governmental Accounting Standards Board Statement No. 14, "The Financial Reporting Entity" and Governmental Accounting Standard Board (GASB) Statement No. 61, "The Financial Reporting Entity: Omnibus."

Component units are legally separate organizations for which the District is financially accountable. The District is financially accountable for an organization if the District appoints a voting majority of the organization's governing board and (1) the District is able to significantly influence the programs or services performed or provided by the organization; or (2) the District is legally entitled to or can otherwise access the organization's resources; the District is legally obligated or has otherwise assumed the responsibility to finance the deficits of, or provide financial support to, the organization; or the District is obligated for the debt of the organization. Component units may also include organizations that are fiscally dependent on District in that District approves the budget, the issuance of debt or the levying of taxes. The District has no component units.

Note 2 - Summary of Significant Accounting Policies

The financial statements of the Mahoning Valley Sanitary District have been prepared in conformity with generally accepted accounting principles (GAAP) as applied to governmental units. The Governmental Accounting Standards Board (GASB) is the accepted standard-setting body for establishing governmental accounting and financial reporting principles. The more significant of the District's accounting policies are described below.

Basis of Presentation

The District's basic financial statements consist of a statement of net position, a statement of revenues, expenses and changes in net position and a statement of cash flows.

The District uses enterprise accounting to maintain its financial records during the year. Enterprise accounting focuses on the determination of operating income, change in net position, financial position and cash flows. Enterprise accounting may be used to account for any activity for which a fee is charged to external uses for goods or services.

The District uses fund accounting to maintain its financial records during the year. A fund is defined as a fiscal and accounting entity with a self-balancing set of accounts. The operations of the District are reported as a single enterprise fund.

Measurement Focus

The enterprise fund is accounted for on a flow of economic resources measurement focus. All assets and deferred outflows of resources and all liabilities and deferred inflows of resources associated with the operation of the District are included on the statement of net position. The statement of changes in net position presents increases (i.e., revenues) and decreases (i.e., expenses) in total net position. The statement of cash flows provides information about how the District finances and meets the cash flow needs of its enterprise activity.

Basis of Accounting

Basis of accounting determines when transactions are recorded in the financial records and reported on the financial statements. The District's financial statements are prepared using the accrual basis of accounting. On the accrual basis, revenue is recorded on exchange transactions when the exchange takes place. Nonexchange transactions, in which the District receives value without directly giving equal value in return, include capital contributions. Expenses are recognized at the time they are incurred.

Deferred Outflows/Inflows of Resources In addition to assets, the statement of net position will sometimes report a separate section for deferred outflows of resources. Deferred outflows of resources represent a consumption of net assets that applies to a future period and will not be recognized as an outflow of resources (expense/expenditure) until then. For the District, deferred outflows of resources are reported on the statement of net position for pension and OPEB plans. The deferred outflows of resources related to pension and OPEB plans are explained in Notes 9 and 10.

In addition to liabilities, the statement of net position reports a separate section for deferred inflows of resources. Deferred inflows of resources represent an acquisition of net assets that applies to a future period and will not be recognized until that time. For the District, deferred inflows of resources include pension and OPEB. Deferred inflows of resources related to pension and OPEB plans are reported on the statement of net position (See Notes 9 and 10).

Pensions/Other Postemployment Benefits (OPEB)

For purposes of measuring the net pension/OPEB asset/liability, deferred outflows of resources and deferred inflows of resources related to pension/OPEB, and pension/OPEB expense, information about the fiduciary net position of the pension/OPEB plans and additions to/deductions from their fiduciary net position have been determined on the same basis as they are reported by the pension/OPEB plan. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. The pension/OPEB plans report investments at fair value.

Capital Charges

Capital charges in the financial statements arise from the fee charged to the Village of McDonald by the City of Youngstown and the City of Niles. The fee is for the cities' capital investment of supply and plant. The District has no administrative involvement related to the capital charges.

Budgetary Process

Although the District reports a single enterprise fund, the Ohio Revised Code requires the District to account for its day-to-day activity using a maintenance fund and a bond fund. The maintenance fund accounts for all moneys received as compensation for providing a water supply for domestic, municipal and public use under Section 6115.19, Ohio Revised Code. The bond fund accounts for proceeds of levies made against the special assessments of benefits equalized and confirmed under Section 6115.01 to 6115.79, inclusive, of the Ohio Revised Code. Capital projects funds are used to account for financial resources to be used for the acquisition or construction of major capital facilities or equipment. The maintenance fund also receives all operating revenue due from the member Cities of Youngstown and Niles and from the Village of McDonald based on an approved water rate schedule.

The Ohio Revised Code requires that the maintenance fund be budgeted annually. The Mahoning Valley Sanitary District prepares a budget for the maintenance fund and the capital projects fund. The bond fund is currently not in use since the District has no bonds outstanding.

Budgetary expenses (that is, disbursements and encumbrances) may not exceed appropriations at the fund or function level of control, and appropriations may not exceed estimated resources. Appropriation authority includes current year appropriations plus encumbrances carried over from the prior year (if any). The Board of Directors must annually approve appropriation measures and subsequent amendments. Unencumbered appropriations lapse at year end.

Estimated resources include estimates of cash to be received (budgeted receipts) plus unencumbered cash as of January 1.

The Ohio Revised Code requires the District to reserve (encumber) appropriations when commitments are made. Encumbrances outstanding at year end are carried over and need not be re-appropriated.

Cash and Cash Equivalents

The District's cash and cash equivalents are considered to be cash on hand, demand deposits, savings accounts and short-term investments with original maturities of three months or less from the date of acquisition, including the District's participation in an external investment pool.

During 2022, the District invested in STAR Ohio (the State Treasury Asset Reserve of Ohio). STAR Ohio is an investment pool managed by the State Treasurer's Office which allows governments within the State to pool their funds for investment purposes. STAR Ohio is not registered with the SEC as an investment company, but has adopted Governmental Accounting Standards Board (GASB), Statement No. 79, *Certain External Investment Pools and Pool Participants*. The District measures their investment in STAR Ohio at the net asset value (NAV) per share provided by STAR Ohio. The NAV per share is calculated on an amortized cost basis that provides an NAV per share that approximates fair value.

For 2022, there were no limitations or restrictions on any participant withdrawals due to redemption notice periods, liquidity fees, or redemption gates. However, twenty-four hours advance notice for deposits and withdrawals of \$100 million or more is encouraged. STAR Ohio reserves the right to limit the transaction to \$250 million per day, requiring the excess amount to be transacted the following business day(s), but only to the \$250 million limit. All accounts of the participant will be combined for these purposes.

Inventory

Inventories are presented at cost on a first-in, first-out basis and are expensed when used. Inventory consists of expendable supplies held for consumption.

Prepaid Items

Payments made to vendors for services that will benefit periods beyond December 31, 2022 are recorded as prepaid items using the consumption method by recording a current asset for the prepaid amount and reflecting the expense in the year in which services are consumed.

Capital Assets

All capital assets are capitalized at cost (or estimated historical cost) and updated for additions and retirements during the year. Donated capital assets are recorded at their acquisition values as of the date received. The District maintains a capitalization threshold of five thousand dollars. Improvements are capitalized; the costs of normal maintenance and repairs that do not add to the value of the asset or materially extend an asset's life are not.

All reported capital assets except land, easements and construction in progress are depreciated. Improvements are depreciated over the remaining useful lives of the related capital assets. Useful lives for infrastructure were estimated based on the District's historical records of necessary improvements and replacement. Depreciation is computed using the straight-line method over the following useful lives:

	Governmental
	Activities
Description	Estimated Lives
Land Improvements	20 years
Buildings and Improvements	20 - 40 years
Furniture and Equipment	5 - 10 years
Vehicles	5 years
Infrastructure	10 - 50 years

The District's infrastructure consists of waterlines, the dam and roads within the District's property. All infrastructure acquired by the District since its inception is recorded.

Compensated Absences

Vacation benefits are accrued as a liability as the benefits are earned if the employees' rights to receive compensation are attributable to services already rendered and it is probable that the employer will compensate the employees for the benefits through paid time off or some other means. The District records a liability for accumulated unused vacation time when earned for all employees with more than one year of service.

Sick leave benefits are accrued as a liability using the vesting method. The liability includes the employees who are currently eligible to receive termination benefits and those that the District has identified as probable of receiving payment in the future (those employees who will be eligible to receive termination payments in the next twenty years). The amount is based on accumulated sick leave and employee wage rates at year end taking into consideration any limits specified in the District's termination policy.

Contributions of Capital

Contributions of capital in the financial statements arise from contributions of resources restricted to capital acquisition and construction.

Restricted Assets

Assets are reported as restricted when limitations on their use change the nature or normal understanding of the availability of the asset. Such constraints are either externally imposed by creditors, contributors, grantors, or laws of other governments, or imposed by law through constitutional provisions. Restricted assets represent amounts held in trust by the pension and OPEB plans for future benefits.

Net Position

Net position represents the difference between all other elements in a statement of financial position. Net investment in capital assets consists of capital assets, net of accumulated depreciation, reduced by the outstanding balances of any borrowings used for the acquisition, construction or improvement of those assets. Net position is reported as restricted when there are limitations imposed on their use through external restrictions imposed by creditors, grantors or laws or regulations of other governments. The District applies restricted resources first when an expense is incurred for purposes for which both restricted and unrestricted net position is available. Amounts restricted for Pension and OPEB plans represent the restricted asset after considering the related deferred outflows and deferred inflows.

Operating Revenues and Expenses

Operating revenues are those revenues that are generated directly from the primary activity of the enterprise fund. For the District, these revenues are charges for services and certain revenues collected through the special assessment process. Operating expenses are necessary costs that have been incurred in order to provide the good or service that is the primary activity of the fund. Any revenues and expenses not meeting the definitions of operating are reported as non-operating.

Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results may differ from those estimates.

Note 3 - Deposits and Investments

Monies held by the District are classified by State statute into three categories.

Active monies are public monies determined to be necessary to meet current demands upon the District treasury. Active monies must be maintained either as cash in the District treasury, in commercial accounts payable or withdrawable on demand, including negotiable order of withdrawal (NOW) accounts, or in money market deposit accounts.

Inactive deposits are public deposits that the Board has identified as not required for use within the current five year period of designation of depositories. Inactive deposits must either be evidenced by certificates of deposit maturing not later than the end of the current period of designation of depositories, or by savings or deposit accounts including, but not limited to, passbook accounts.

Interim deposits are deposits of interim monies. Interim monies are those monies which are not needed for immediate use but which will be needed before the end of the current period of designation of depositories. Interim deposits must be evidenced by time certificates of deposit maturing not more than one year from the date of deposit or by savings or deposit accounts, including passbook accounts.

Protection of the District's deposits is provided by the Federal Deposit Insurance Corporation (FDIC), by eligible securities pledged by the financial institution as security for repayment, or by the financial institution's participation in the Ohio Pooled Collateral System (OPCS), a collateral pool of eligible securities deposited with a qualified trustee and pledged to the Treasurer of State to secure the repayment of all public monies deposited in the financial institution.

Interim monies held by the District can be deposited or invested in the following securities:

- 1. United States Treasury bills, bonds, notes, or any other obligation or security issued by the United States Treasury, or any other obligation guaranteed as to principal and interest by the United States;
- 2. Bonds, notes, debentures, or any other obligations or securities issued by any federal government agency or instrumentality including, but not limited to, the Federal National Mortgage Association, Federal Home Loan Bank, Federal Farm Credit Bank, Federal Home Loan Mortgage Corporation, and Government National Mortgage Association. All federal agency securities shall be direct issuances of federal government agencies or instrumentalities;
- 3. No-load money market mutual funds consisting exclusively of obligations described in (1) or (2) and repurchase agreements secured by such obligations, provided that investments in securities described in this division are made only through eligible institutions;
- 4. Time certificates of deposit or savings or deposit accounts including, but not limited to, passbook accounts;
- 5. Bonds and other obligations of the State of Ohio, and, with certain limitations including a requirement for maturity within ten years from the date of settlement, bonds and other obligations of political subdivisions of the State of Ohio, if training requirements have been met;
- 6. The State Treasurer's investment pool (STAR Ohio);
- 7. Certain bankers' acceptances (for a period not to exceed one hundred eighty days) and commercial paper notes (for a period not to exceed two hundred seventy days) in an amount not to exceed 40 percent of the interim monies available for investment at any one time if training requirements have been met; and
- 8. Written repurchase agreements in the securities described in (1) or (2) provided the market value of the securities subject to the repurchase agreement must exceed the principal value of the agreement by at least two percent and be marked to market daily, and the term of the agreement must not exceed thirty days.

Investments in stripped principal or interest obligations, reverse repurchase agreements, and derivatives are prohibited. The issuance of taxable notes for the purpose of arbitrage, the use of leverage, and short selling are also prohibited. Except as noted above, an investment must mature within five years from the date of purchase, unless matched to a specific obligation or debt of the District, and must be purchased with the expectation that it will be held to maturity.

Investments may only be made through specified dealers and institutions. Payment for investments may be made only upon delivery of the securities representing the investments to the treasurer or, if the securities are not represented by a certificate, upon receipt of confirmation of transfer from the custodian.

At year end, the District had \$200 in undeposited cash on hand which is included as part of "Equity in Pooled Cash and Cash Equivalents".

Investments

As of December 31, 2022, the District had STAR Ohio as an investment. STAR Ohio is being held with an amount of \$38,310,149 which is measured at net asset value per share. The average maturity is 31.9 days.

Interest Rate Risk As a means of limiting its exposure to fair value losses caused by rising interest rates, the District's investment policy requires that operating funds be invested primarily in short-term investments maturing within five years from the date of purchase and that the District's investment portfolio be structured so that the securities mature to meet cash requirements for ongoing operations and/or long-term debt payments. The stated intent of the policy is to avoid the need to sell securities prior to maturity. To date, no investments have been purchased with a life greater than two years.

Credit Risk Ohio law requires that STAR Ohio maintain the highest rating provided by at least one nationally recognized standard service rating. The District has no investment policy that addresses credit risk.

Concentration of Credit Risk The District places no limit on the amount it may invest in any one issuer.

Note 4 - Receivables

Receivables at December 31, 2022, consisted of charges for services, royalties and Bureau of Workers' Compensation and insurance refunds. All receivables are considered collectible in full. All receivables are expected to be collected within one year.

A summary of principal items of intergovernmental receivables follows:

	Amount
City of Youngstown Water Billing	\$1,118,525
City of Niles Water Billing	407,679
City of Youngstown Valve Replacement Work	45,069
Village of McDonald Water Billing	27,793
OPWC Grant	23,466
Bureau of Workers' Compensation Refund	514
Total	\$1,623,046

Note 5 – Employee Benefits

Compensated Absences

The criteria for determining vacation and sick leave benefits are derived from negotiated agreements and State laws. Service and maintenance employees and patrolmen earn ten to thirty-five days of vacation per year, depending upon length of service and hours worked. Accumulated unused vacation time is paid to classified employees upon termination of employment. Each employee earns sick leave at a rate of 4.62 hours per pay period. Upon retirement or termination after ten years of consecutive service, payment is made for one half of the employee's accrued but unused sick days up to one half of 180 days. The maximum number of days to be paid out is 90 days. For purposes of retirement, the employee receiving such payment must meet the eligibility requirement provisions set by OPERS.

Deferred Compensation

District employees may participate in the Ohio Public Employees Deferred Compensation Plan. This plan was created in accordance with Internal Revenue Code Section 457 and is considered an other employee benefit plan. Participation is on a voluntary payroll deduction basis. The plan permits deferral of compensation until future years. According to the plans, the deferred compensation is not available until termination, retirement, death or an unforeseeable emergency.

Note 6 - Capital Assets

Capital asset activity for the year ended December 31, 2022, was as follows:

	Restated Balance 12/31/2021	Additions	Deletions	Balance 12/31/2022
Business-Type Activities				
Capital Assets, not being depreciated:				
Land	\$1,879,335	\$0	\$0	\$1,879,335
Easements	36,908	0	0	36,908
Construction in Progress	7,058,679	8,103,932	(114,398)	15,048,213
Total Capital Assets, not being depreciated	8,974,922	8,103,932	(114,398)	16,964,456
Capital Assets, being depreciated:				
Land Improvements	548,109	65,401	0	613,510
Buildings and Improvements	74,216,656	0	0	74,216,656
Furniture and Equipment	3,001,237	100,815	0	3,102,052
Vehicles	968,120	114,398	(49,424)	1,033,094
Infrastructure	28,469,004	0	0	28,469,004
Total Capital Assets, being depreciated	107,203,126	280,614	(49,424)	107,434,316
Less Accumulated Depreciation:				
Land Improvements	(231,345)	(27,207)	0	(258,552)
Buildings and Improvements	(35,391,278)	(1,950,449)	0	(37,341,727)
Furniture and Equipment	(2,061,307)	(122,672)	0	(2,183,979)
Vehicles	(667,183)	(85,453)	44,482	(708,154)
Infrastructure	(12,861,738)	(500,949)	0	(13,362,687)
Total Accumulated Depreciation	(51,212,851)	(2,686,730)	44,482	(53,855,099)
Total Capital Assets, being depreciated, net	55,990,275	(2,406,116)	(4,942)	53,579,217
Business-Type Activities Capital Assets, Net	\$64,965,197	\$5,697,816	(\$119,340)	\$70,543,673

Note 7 - Contingencies

Grants

The District receives financial assistance from state agencies in the form of grants. The disbursement of funds received under these programs generally requires compliance with terms and conditions specified in the grant agreements and are subject to audit by the grantor agencies. Any disallowed claims resulting from such audits could become a liability of the District's operating fund or any other applicable funds. However, in the opinion of management, any such disallowed claims will not have a material adverse effect on the overall financial position of the District at December 31, 2022.

Litigation

The District is not a party to any material legal proceedings.

Note 8 - Risk Management

Property and Liability

The District is exposed to various risks of loss to torts; thefts of, damage to and destruction of assets; errors and omissions; injuries to employees and natural disaster. During 2022, the District contracted with Love Insurance for various types of insurance coverage as follows:

Туре	Coverage	Deductible
Property/Inland Marine	\$217,798,481	\$10,000
Boiler & Machinery	217,798,481	10,000
Earthquake	1,000,000	100,000
Flood	1,000,000	250,000
General Liability	6,000,000/8,000,000	2,500
Public Official Liability	6,000,000/8,000,000	2,500
Employment Practices Liability	6,000,000/8,000,000	2,500
Fleet Vehicle		
Auto Liability	6,000,000	0
Physical Damage	10,000	500
Comprehensive	10,000	250
Crime Coverage		
Employee Dishonesty	100,000	1,000
Cyber Coverage	1,000,000	25,000
Malicious Act	1,000,000	0

Settled claims have not exceeded this commercial coverage in any of the past three years. There have been no significant reductions in coverage from last year.

Employee Benefits

The District provides health insurance to its employees. The District provides these benefits through a partially self-funded medical and drug benefits program. The District provides hospitalization and drug benefit coverage as outlined in the ERISA document provided to all employees which includes the Summary of Benefits and Coverage of our named plan, the Mahoning Valley Sanitary District Employee Benefits Plan. Medical Mutual of Ohio is the medical provider network and Mutual Health Services, Inc. as third party administrator for

claims. The District also has a contract with HCC Life Insurance Company; a reinsurer to protect the District against catastrophic illness situations. The District's monthly premium, which is paid to Mutual Health Services, provides for stop loss coverage and administration of all claims.

The District has stop loss coverage set at \$45,000 per member of our plan which includes all employees, their spouses and dependents. The District is responsible for all claims up to that point on all of its covered members. All stop loss premiums and claims are paid from the internal service account of the District and receives its funding from the revenue stream of the District. The hospitalization budget is established at January 1 of each year.

The claims liability of \$59,409 reported at December 31, 2022, is based on an estimate provided by the Treasurer and the requirements of Governmental Accounting Standards Board Statement No. 30 which requires that a liability for unpaid claims costs, including estimates of costs relating to incurred but not reported claims, be reported. The estimate was not affected by incremental claim adjustment expenses and does not include other allocated or unallocated claim adjustment expenses.

Changes in the fund's claims liability amount follows:

	Beginning	Current	Claim	Ending
	Balance	Claims	Payments	Balance
2021	\$71,565	\$964,877	\$926,829	\$109,613
2022	109,613	982,217	1,032,421	59,409

The average monthly cost per covered employee for stop loss protection and administration of claims is \$556. The annual premium for stop loss coverage and claims administration is \$353,299.

Workers' compensation is provided by the State. The District pays the State Workers' Compensation System a premium based on a rate per \$100 of salaries. This rate is calculated based on accident history and administrative costs.

Note 9 – Defined Benefit Pension Plans

The Statewide retirement systems provide both pension benefits and other postemployment benefits (OPEB).

Net Pension Liability (Asset)/Net OPEB Asset

The net pension liability (asset) and the net OPEB asset reported on the statement of net position represent liabilities to employees for pensions and OPEB, respectively. Pensions/OPEB are a component of exchange transactions-between an employer and its employees—of salaries and benefits for employee services. Pensions/OPEB are provided to an employee—on a deferred-payment basis—as part of the total compensation package offered by an employer for employee services each financial period. The obligation to sacrifice resources for pensions is a present obligation because it was created as a result of employment exchanges that already have occurred.

The net pension/OPEB liability (asset) represent the District's proportionate share of each pension/OPEB plan's collective actuarial present value of projected benefit payments attributable to past periods of service, net of each pension/OPEB plan's fiduciary net position. The net pension/OPEB liability (asset) calculations are dependent on critical long-term variables, including estimated average life expectancies, earnings on investments, cost of living adjustments and others. While these estimates use the best information available, unknowable future events require adjusting these estimates annually.

Ohio Revised Code limits the District's obligation for this liability to annually required payments. The District cannot control benefit terms or the manner in which pensions are financed; however, the District does receive the benefit of employees' services in exchange for compensation including pension and OPEB.

GASB 68/75 assumes the liability is solely the obligation of the employer, because (1) they benefit from employee services; and (2) State statute requires funding to come from these employers. All pension contributions to date have come solely from these employers (which also includes pension costs paid in the form of withholdings from employees). The retirement systems may allocate a portion of the employer contributions to provide for these OPEB benefits. In addition, health care plan enrollees pay a portion of the health care costs in the form of a monthly premium. State statute requires the retirement systems to amortize unfunded pension liabilities within 30 years. If the pension amortization period exceeds 30 years, each retirement system's board must propose corrective action to the State legislature. Any resulting legislative change to benefits or funding could significantly affect the net pension/OPEB liability (asset). Resulting adjustments to the net pension/OPEB liability (asset) would be effective when the changes are legally enforceable. The Ohio Revised Code permits but does not require the retirement systems to provide healthcare to eligible benefit recipients.

The proportionate share of each plan's unfunded benefits is presented as a *net pension/OPEB asset* or a long-term *net pension liability* on the accrual basis of accounting. Any liability for the contractually required pension/OPEB contribution outstanding at the end of the year is included in *intergovernmental payable*. The remainder of this note includes the required pension disclosures. See Note 10 for the required OPEB disclosures.

Ohio Public Employees Retirement System (OPERS)

Plan Description – District employees participate in the Ohio Public Employees Retirement System (OPERS). OPERS is a cost-sharing, multiple employer public employee retirement system which administers three separate pension plans. The traditional pension plan is a cost-sharing, multiple-employer defined benefit pension plan. The member-directed plan is a defined contribution plan and the combined plan is a combination cost-sharing, multiple-employer defined benefit/defined contribution pension plan. Participating employers are divided into state, local, law enforcement and public safety divisions. While members in the state and local divisions may participate in all three plans, law enforcement and public safety divisions exist only within the traditional plan.

OPERS provides retirement, disability, survivor and death benefits, and annual cost of living adjustments to members of the traditional and combined plans. Authority to establish and amend benefits is provided by Chapter 145 of the Ohio Revised Code. OPERS issues a stand-alone financial report that includes financial statements, required supplementary information and detailed information about OPERS' fiduciary net position that may be obtained by visiting <u>https://www.opers.org/financial/reports.shtml</u>, by writing to the Ohio Public Employees Retirement System, 277 East Town Street, Columbus, Ohio 43215-4642, or by calling 800-222-7377.

Notes to the Basic Financial Statements For the Year Ended December 31, 2022

Senate Bill (SB) 343 was enacted into law with an effective date of January 7, 2013. In the legislation, members in the traditional and combined plans were categorized into three groups with varying provisions of the law applicable to each group. The following table provides age and service requirements for retirement and the retirement formula applied to final average salary (FAS) for the three member groups under the traditional and combined plans as per the reduced benefits adopted by SB 343 (see OPERS Annual Comprehensive Financial Report referenced above for additional information, including requirements for reduced and unreduced benefits):

Group A	Group B	Group C
Eligible to retire prior to	20 years of service credit prior to	Members not in other Groups
January 7, 2013 or five years	January 7, 2013 or eligible to retire	and members hired on or after
after January 7, 2013	ten years after January 7, 2013	January 7, 2013
State and Local	State and Local	State and Local
Age and Service Requirements:	Age and Service Requirements:	Age and Service Requirements:
Age 60 with 60 months of service credit	Age 60 with 60 months of service credit	Age 57 with 25 years of service credit
or Age 55 with 25 years of service credit	or Age 55 with 25 years of service credit	or Age 62 with 5 years of service credit
 Traditional Plan Formula: 2.2% of FAS multiplied by years of service for the first 30 years and 2.5% for service years in excess of 30 Combined Plan Formula: 1% of FAS multiplied by years of service for the first 30 years and 1.25% for service years in excess of 30 	 Traditional Plan Formula: 2.2% of FAS multiplied by years of service for the first 30 years and 2.5% for service years in excess of 30 Combined Plan Formula: 1% of FAS multiplied by years of service for the first 30 years and 1.25% for service years in excess of 30 	 Traditional Plan Formula: 2.2% of FAS multiplied by years of service for the first 35 years and 2.5% for service years in excess of 35 Combined Plan Formula: 1% of FAS multiplied by years of service for the first 35 years and 1.25% for service years in excess of 35

Final Average Salary (FAS) represents the average of the three highest years of earnings over a member's career for Groups A and B. Group C is based on the average of the five highest years of earnings over a member's career.

Members who retire before meeting the age and years of service credit requirement for unreduced benefits receive a percentage reduction in the benefit amount. The amount of a member's pension benefit vests upon receipt of the initial benefit payment. The options for Public Safety and Law Enforcement permit early retirement under qualifying circumstances as early as age 48 with a reduced benefit.

When a traditional plan benefit recipient has received benefits for 12 months, the member is eligible for an annual cost of living adjustment (COLA). This COLA is calculated on the base retirement benefit at the date of retirement and is not compounded. Members retiring under the combined plan receive a cost–of–living adjustment on the defined benefit portion of their pension benefit. For those who retired prior to January 7, 2013, the cost-of-living adjustment is 3 percent. For those retiring on or after January 7, 2013, beginning in calendar year 2019, the adjustment is based on the average percentage increase in the Consumer Price Index, capped at 3 percent.

Defined contribution plan benefits are established in the plan documents, which may be amended by the Board. Member-directed plan and combined plan members who have met the retirement eligibility requirements may apply for retirement benefits. The amount available for defined contribution benefits in the combined plan consists of the member's contributions plus or minus the investment gains or losses resulting from the member's investment selections. Combined plan members wishing to receive benefits must meet the requirements for both the defined benefit and defined contribution plans. Member-directed participants must have attained the age of 55, have money on deposit in the defined contribution plan and have terminated public service to apply for retirement benefits. The amount available for defined contributions and investment gains or losses resulting from the members' investment selections, vested employer contributions and investment gains or losses resulting from the members' investment selections. Employer contributions and associated investment earnings vest over a five-year period, at a rate of 20 percent each year. At retirement, members may select one

of several distribution options for payment of the vested balance in their individual OPERS accounts. Options include the annuitization of the benefit (which includes joint and survivor options and will continue to be administered by OPERS), partial lump-sum payments (subject to limitations), a rollover of the vested account balance to another financial institution, receipt of entire account balance, net of taxes withheld, or a combination of these options. When members choose to annuitize their defined contribution benefit, the annuitized portion of the benefit is reclassified to a defined benefit.

Effective January 1, 2022, the Combined Plan is no longer available for member selection.

Funding Policy - The Ohio Revised Code (ORC) provides statutory authority for member and employer contributions as follows:

	State	
	and Local	
2022 Statutory Maximum Contribution Rates		
Employer	14.0	%
Employee *	10.0	%
2022 Actual Contribution Rates		
Employer:		
Pension **	14.0	%
Post-employment Health Care Benefits **	0.0	
Total Employer	14.0	%
Employee	10.0	%

* Member contributions within the combined plan are not used to fund the defined benefit retirement allowance.

** These pension and employer health care rates are for the traditional and combined plans. The employer contributions rate for the member-directed plan is allocated 4 percent for health care with the remainder going to pension.

Employer contribution rates are actuarially determined and are expressed as a percentage of covered payroll.

For 2022, the District's contractually required contribution was \$476,780 for the traditional plan, \$15,239 for the combined plan and \$5,909 for the member-directed plan. Of these amounts, \$25,784 is reported as an intergovernmental payable for the traditional plan, \$825 for the combined plan, and \$317 for the member-directed plan.

Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

The net pension liability (asset) for OPERS was measured as of December 31, 2021, and the total pension liability used to calculate the net pension liability (asset) was determined by an actuarial valuation as of that date. The District's proportion of the net pension liability (asset) was based on the District's share of contributions to the pension plan relative to the contributions of all participating entities. Following is information related to the proportionate share and pension expense of the District's defined benefit pension plans:

Notes to the Basic Financial Statements For the Year Ended December 31, 2022

	OPERS Traditional Plan	OPERS Combined Plan	Total
Proportion of the Net Pension			1000
Liability/Asset:			
Current Measurement Date	0.02167300%	0.02129500%	
Prior Measurement Date	0.02185600%	0.02201700%	
Change in Proportionate Share	-0.00018300%	-0.00072200%	
Proportionate Share of the:			
Net Pension Liability	\$1,885,638	\$0	\$1,885,638
Net Pension Asset	0	83,903	83,903
Pension Expense	(126,730)	(2,783)	(129,513)

2022 pension expense for the member-directed defined contribution plan was \$5,909. The aggregate pension expense for all pension plans was a negative \$123,604 for 2022.

At December 31, 2022, the District reported deferred outflows of resources and deferred inflows of resources related to defined benefit pensions from the following sources:

	OPERS	OPERS	
	Traditional Plan	Combined Plan	Total
Deferred Outflows of Resources			
Differences between expected and			
actual experience	\$96,127	\$521	\$96,648
Changes of assumptions	235,797	4,216	240,013
Changes in proportion and differences			
between District contributions and			
proportionate share of contributions	70,097	2,430	72,527
District contributions subsequent to the			
measurement date	476,780	15,239	492,019
Total Deferred Outflows of Resources	\$878,801	\$22,406	\$901,207
Deferred Inflows of Resources			
Differences between expected and			
actual experience	\$41,357	\$9,384	\$50,741
Net difference between projected			
and actual earnings on pension			
plan investments	2,242,898	17,988	2,260,886
Changes in proportion and differences			
between District contributions and			
proportionate share of contributions	22,645	418	23,063
Total Deferred Inflows of Resources	\$2,306,900	\$27,790	\$2,334,690

\$492,019 reported as deferred outflows of resources related to pension resulting from District contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability or increase to the net pension asset in 2023. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pension will be recognized in pension expense as follows:

Notes to the Basic Financial Statements For the Year Ended December 31, 2022

Year Ending December 31:	OPERS Traditional Plan	OPERS Combined Plan	Total
2			
2023	(\$242,703)	(\$5,192)	(\$247,895)
2024	(777,987)	(7,300)	(785,287)
2025	(527,396)	(4,678)	(532,074)
2026	(356,793)	(3,374)	(360,167)
2027	0	(194)	(194)
Thereafter	0	115	115
Total	(\$1,904,879)	(\$20,623)	(\$1,925,502)

Actuarial Assumptions - OPERS

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and cost trends. Actuarially determined amounts are subject to continual review or modification as actual results are compared with past expectations and new estimates are made about the future.

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employers and plan members) and include the types of benefits provided at the time of each valuation. The total pension liability was determined by an actuarial valuation as of December 31, 2021, using the following key actuarial assumptions and methods applied to all periods included in the measurement in accordance with the requirements of GASB 67. In 2021, the Board's actuarial consultants conducted an experience study for the period 2016 through 2020, comparing assumptions to actual results. The experience study incorporates both a historical review and forward-looking projections to determine the appropriate set of assumptions to keep the plan on a path toward full funding. Information from this study led to changes in both demographic and economic assumptions, with the most notable being a reduction in the actuarially assumed rate of return from 7.2 percent down to 6.9 percent, for the defined benefit investments. Key actuarial assumptions and methods used in the latest actuarial valuation, prepared as of December 31, 2021, reflecting experience study results, are presented below:

	OPERS Traditional Plan	OPERS Combined Plan
Wage Inflation	2.75 percent	2.75 percent
Future Salary Increases,	2.75 to 10.75 percent	2.75 to 8.25 percent
including inflation	including wage inflation	including wage inflation
COLA or Ad Hoc COLA:		
Pre-January 7, 2013 Retirees	3.0 percent, simple	3.0 percent, simple
Post-January 7, 2013 Retirees	3.0 percent, simple through 2022,	3.0 percent, simple through 2022,
	then 2.05 percent, simple	then 2.05 percent, simple
Investment Rate of Return	6.9 percent	6.9 percent
Actuarial Cost Method	Individual Entry Age	Individual Entry Age

Key actuarial assumptions and methods used in the prior actuarial valuation, prepared as of December 31, 2020, are presented as follows:

Notes to the Basic Financial Statements For the Year Ended December 31, 2022

	OPERS Traditional Plan	OPERS Combined Plan
Wage Inflation	3.25 percent	3.25 percent
Future Salary Increases,	3.25 to 10.75 percent	3.25 to 8.25 percent
including inflation	including wage inflation	including wage inflation
COLA or Ad Hoc COLA:		
Pre-January 7, 2013 Retirees	3.0 percent, simple	3.0 percent, simple
Post-January 7, 2013 Retirees	0.5 percent, simple through 2021,	0.5 percent, simple through 2021,
	then 2.15 percent, simple	then 2.15 percent, simple
Investment Rate of Return	7.2 percent	7.2 percent
Actuarial Cost Method	Individual Entry Age	Individual Entry Age

For 2021, pre-retirement mortality rates are based on 130 percent of the Pub-2010 General Employee Mortality tables (males and females) for State and Local Government divisions and 170 percent of the Pub-2010 Safety Employee Mortality tables (males and females) for the Public Safety and Law Enforcement divisions. Post-retirement mortality rates are based on 115 percent of the PubG-2010 Retiree Mortality Tables (males and females) for all divisions. Post-retirement mortality rates for disabled retirees are based on the PubNS-2010 Disabled Retiree Mortality Tables (males and females) for all divisions. For all the previously described tables, the base year is 2010 and mortality rates for a particular calendar year are determined by applying the MP-2020 mortality improvement scales (males and females) to all these tables.

For 2020, pre-retirement mortality rates are based on the RP-2014 Employees mortality table for males and females, adjusted for mortality improvement back to the observation period base year of 2006. The base year for males and females was then established to be 2015 and 2010, respectively. Post-retirement mortality rates are based on the RP-2014 Healthy Annuitant mortality table for males and females, adjusted for mortality improvement back to the observation period base year of 2006. The base year of sabled for mortality improvement back to the observation period base year of 2006. The base year for males and females was then established to be 2015 and 2010, respectively. Post-retirement mortality rates for disabled retirees are based on the RP-2014 Disabled mortality table for males and females, adjusted for mortality improvement back to the observation period base year of 2006. The base year for males and females was then established to be 2015 and 2010, respectively. Post-retirement mortality rates for disabled retirees are based on the RP-2014 Disabled mortality table for males and females, adjusted for mortality improvement back to the observation period base year of 2006. The base year for males and females was then established to be 2015 and 2010, respectively. Mortality rates for a particular calendar year are determined by applying the MP-2015 mortality improvement scale to all the above-described tables.

The most recent experience study was completed for the five-year period ended December 31, 2020.

During 2021, OPERS managed investments in three investment portfolios: the Defined Benefit portfolio, the Health Care portfolio, and the Defined Contribution portfolio. The Defined Benefit portfolio contains the investment assets for the Traditional Pension Plan, the defined benefit component of the Combined Plan and the annuitized accounts of the Member-Directed Plan. Within the Defined Benefit portfolio contributions into the plans are all recorded at the same time, and benefit payments all occur on the first of the month. Accordingly, the money-weighted rate of return is considered to be the same for all plans within the portfolio. The annual money-weighted rate of return expressing investment performance, net of investment expenses and adjusted for the changing amounts actually invested, for the Defined Benefit portfolio was 15.3 percent for 2021.

Notes to the Basic Financial Statements For the Year Ended December 31, 2022

The allocation of investment assets with the Defined Benefit portfolio is approved by the Board of Trustees as outlined in the annual investment plan. Plan assets are managed on a total return basis with a long-term objective of achieving and maintaining a fully funded status for the benefits provided through the defined benefit pension plans. The long-term expected rate of return on defined benefit investment assets was determined using a building-block method in which best-estimate ranges of expected future real rates of return are developed for each major asset class. These ranges are combined to produce the long-term expected real rate of return by weighting the expected future real rates of return by the target asset allocation percentage, adjusted for inflation. Best estimates of geometric rates of return were provided by the Board's investment consultant. For each major class that is included in the Defined Benefit portfolio's target asset allocation as of December 31, 2021, these best estimates are summarized below:

Asset Class	Target Allocation	Weighted Average Long-Term Expected Real Rate of Return (Geometric)
Fixed Income	24.00%	1.03%
Domestic Equities	21.00	3.78
Real Estate	11.00	3.66
Private Equity	12.00	7.43
International Equities	23.00	4.88
Risk Parity	5.00	2.92
Other investments	4.00	2.85
Total	100.00%	4.21%

Discount Rate The discount rate used to measure the total pension liability for the current year was 6.9 percent for the traditional plan and the combined plan. The discount rate for the prior year was 7.2 percent. The projection of cash flows used to determine the discount rate assumed that contributions from plan members and those of the contributing employers are made at the contractually required rates, as actuarially determined. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefits payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments for the traditional pension plan, combined plan and member-directed plan was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of the District's Proportionate Share of the Net Pension Liability (Asset) to Changes in the Discount Rate The following table presents the District's proportionate share of the net pension liability (asset) calculated using the current period discount rate assumption of 6.9 percent, as well as what the District's proportionate share of the net pension liability (asset) would be if it were calculated using a discount rate that is one-percentage-point lower (5.9 percent) or one-percentage-point higher (7.9 percent) than the current rate:

	1% Decrease (5.90%)	Discount Rate (6.90%)	1% Increase (7.90%)
District's proportionate share of the net pension liability (asset)			
OPERS Traditional Plan	\$4,971,569	\$1,885,638	(\$682,266)
OPERS Combined Plan	(62,607)	(83,903)	(100,512)

Note 10 - Defined Benefit OPEB Plans

See Note 9 for a description of the net OPEB asset.

Ohio Public Employees Retirement System (OPERS)

Plan Description – The Ohio Public Employees Retirement System (OPERS) administers three separate pension plans: the traditional pension plan, a cost-sharing, multiple-employer defined benefit pension plan; the member-directed plan, a defined contribution plan; and the combined plan, a cost-sharing, multiple-employer defined benefit pension plan that has elements of both a defined benefit and defined contribution plan.

OPERS maintains a cost-sharing, multiple-employer defined benefit post-employment health care trust, which funds multiple health care plans including medical coverage, prescription drug coverage and deposits to a Health Reimbursement Arrangement (HRA) to qualifying benefit recipients of both the traditional pension and the combined plans. Currently, Medicare-eligible retirees are able to select medical and prescription drug plans from a range of options and may elect optional vision and dental plans. Retirees and eligible dependents enrolled in Medicare Parts A and B have the option to enroll in a Medicare supplemental plan with the assistance of the OPERS Medicare Connector. The OPERS Medicare Connector is a relationship with a vendor selected by OPERS to assist retirees, spouses and dependents with selecting a medical and pharmacy plan. Monthly allowances, based on years of service and the age at which the retiree first enrolled in OPERS coverage, are deposited into an HRA. For non-Medicare retirees and eligible dependents, OPERS sponsors medical and prescription coverage through a professionally managed self-insured plan. An allowance to offset a portion of the monthly premium is offered to retirees and eligible dependents. The allowance is based on the retiree's years of service and age when they first enrolled in OPERS coverage.

OPERS provides a monthly allowance for health care coverage for eligible retirees and their eligible dependents. The base allowance is determined by OPERS. For those retiring on or after January 1, 2015, the allowance has been determined by applying a percentage to the base allowance. The percentage applied is based on years of qualifying service credit and age when the retiree first enrolled in OPERS health care. Monthly allowances range between 51 percent and 90 percent of the base allowance. Those who retired prior to January 1, 2015, will have an allowance of at least 75 percent of the base allowance.

The heath care trust is also used to fund health care for member-directed plan participants, in the form of a Retiree Medical Account (RMA). At retirement or separation, member directed plan participants may be eligible for reimbursement of qualified medical expenses from their vested RMA balance.

Effective January 1, 2022, OPERS discontinued the group plans currently offered to non-Medicare retirees and re-employed retirees. Instead, eligible non-Medicare retirees will select an individual medical plan. OPERS will provide a subsidy or allowance via an HRA allowance to those retirees who meet health care eligibility requirements. Retirees will be able to seek reimbursement for plan premiums and other qualified medical expenses.

In order to qualify for postemployment health care coverage, age and service retirees under the traditional pension and combined plans must have twenty or more years of qualifying Ohio service credit with a minimum age of 60. Members in Group A are eligible for coverage at any age with 30 or more years of qualifying service. Members in Group B are eligible at any age with 32 years of qualifying service, or at age 52 with 31 years of qualifying service. Members in Group C are eligible for coverage with 32 years of qualifying service and a minimum age of 55. Current retirees eligible (or who became eligible prior to January 1, 2022) to participate in the OPERS health care program will continue to be eligible after January 1, 2022. Eligibility requirements change for those retiring after January 1, 2022, with differing eligibility requirements for Medicare retirees and non-Medicare retirees. The health care coverage provided by OPERS meets. the definition of an Other Post Employment Benefit (OPEB) as described in GASB Statement 75. See OPERS' Annual Comprehensive Financial Report referenced below for additional information.

The Ohio Revised Code permits, but does not require, OPERS to provide health care to its eligible benefit recipients. Authority to establish and amend health care coverage is provided to the Board in Chapter 145 of the Ohio Revised Code.

Disclosures for the health care plan are presented separately in the OPERS financial report. Interested parties may obtain a copy by visiting <u>https://www.opers.org/financial/reports.shtml</u>, by writing to OPERS, 277 East Town Street, Columbus, Ohio 43215-4642, or by calling (614) 222-5601 or 800-222-7377.

Funding Policy - The Ohio Revised Code provides the statutory authority allowing public employers to fund postemployment health care through their contributions to OPERS. When funding is approved by OPERS Board of Trustees, a portion of each employer's contribution to OPERS is set aside to fund OPERS health care plans. Beginning in 2018, OPERS no longer allocated a portion of its employer contributions to health care for the traditional plan and the combined plan.

Employer contribution rates are expressed as a percentage of the earnable salary of active members. In 2022, state and local employers contributed at a rate of 14.0 percent of earnable salary and public safety and law enforcement employers contributed at 18.1 percent. These are the maximum employer contribution rates permitted by the Ohio Revised Code. Active member contributions do not fund health care.

Each year, the OPERS Board determines the portion of the employer contribution rate that will be set aside to fund health care plans. For 2022, OPERS did not allocate any employer contribution to health care for members in the Traditional Pension Plan and Combined Plan. The OPERS Board is also authorized to establish rules for the retiree or their surviving beneficiaries to pay a portion of the health care provided. Payment amounts vary depending on the number of covered dependents and the coverage selected. The employer contribution as a percentage of covered payroll deposited into the RMA for participants in the member-directed plan for 2022 was 4.0 percent.

Employer contribution rates are actuarially determined and are expressed as a percentage of covered payroll. The District's contractually required contribution was \$2,363 for 2022. Of this amount, \$127 is reported as an intergovernmental payable.

OPEB Liabilities, **OPEB** Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to **OPEB**

The net OPEB asset and total OPEB liability for OPERS were determined by an actuarial valuation as of December 31, 2020, rolled forward to the measurement date of December 31, 2021, by incorporating the expected value of health care cost accruals, the actual health care payment, and interest accruals during the year. The District's proportion of the net OPEB asset was based on the District's share of contributions to the retirement plan relative to the contributions of all participating entities. Following is information related to the proportionate share and OPEB expense:

Notes to the Basic Financial Statements For the Year Ended December 31, 2022

	OPERS
Proportion of the Net OPEB Asset:	
Current Measurement Date	0.02114700%
Prior Measurement Date	0.02135200%
Change in Proportionate Share	-0.00020500%
Proportionate Share of the Net	
OPEB Asset	\$662,356
OPEB Expense	(\$482,291)

At December 31, 2022, the District reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	OPERS
Deferred Outflows of Resources	
Changes in proportion and differences	
between District contributions and	
proportionate share of contributions	\$46,420
District contributions subsequent to the	
measurement date	2,363
Total Deferred Outflows of Resources	\$48,783
Deferred Inflows of Resources	
Differences between expected and	
actual experience	\$100,469
Changes of assumptions	268,114
Net difference between projected and	
actual earnings on OPEB plan investments	315,765
Changes in proportion and differences	
between District contributions and proportionate	
share of contributions	3,450
Total Deferred Inflows of Resources	\$687,798

\$2,363 reported as deferred outflows of resources related to OPEB resulting from District contributions subsequent to the measurement date will be recognized as an increase of the net OPEB asset in 2023. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

	OPERS
Year Ending December 31:	
2023	(\$379,074)
2024	(147,962)
2025	(68,993)
2026	(45,349)
Total	(\$641,378)

Actuarial Assumptions - OPERS

Actuarial valuations of an ongoing plan involve estimates of the values of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and cost trends. Actuarially determined amounts are subject to continual review or modification as actual results are compared with past expectations and new estimates are made about the future.

Projections of health care costs for financial reporting purposes are based on the substantive plan (the plan as understood by the employers and plan members) and include the types of coverage provided at the time of each valuation and the historical pattern of sharing of costs between OPERS and plan members. In 2021, the Board's actuarial consultants conducted an experience study for the period 2016 through 2020, comparing historical assumptions to actual results. The experience study incorporates both a historical review and forward-looking projections to determine the appropriate set of assumptions to keep the plan on a path toward full funding. Information from this study led to changes in both demographic and economic assumptions. The actuarial valuation used for 2021 compared to those used for 2020 are as follows:

	December 31, 2021	December 31, 2020
Wage Inflation	2.75 percent	3.25 percent
Projected Salary Increases,	2.75 to 10.75 percent	3.25 to 10.75 percent
	including wage inflation	including wage inflation
Single Discount Rate	6.00 percent	6.00 percent
Investment Rate of Return	6.00 percent	6.00 percent
Municipal Bond Rate	1.84 percent	2.00 percent
Health Care Cost Trend Rate	5.5 percent, initial	8.5 percent, initial
	3.50 percent, ultimate in 2034	3.50 percent, ultimate in 2035
Actuarial Cost Method	Individual Entry Age	Individual Entry Age

For 2021, pre-retirement mortality rates are based on 130 percent of the Pub-2010 General Employee Mortality tables (males and females) for State and Local Government divisions and 170 percent of the Pub-2010 Safety Employee Mortality tables (males and females) for the Public Safety and Law Enforcement divisions. Post-retirement mortality rates are based on 115 percent of the PubG-2010 Retiree Mortality Tables (males and females) for all divisions. Post-retirement mortality rates for disabled retirees are based on the PubNS-2010 Disabled Retiree Mortality Tables (males and females) for all divisions. For all the previously described tables, the base year is 2010 and mortality rates for a particular calendar year are determined by applying the MP-2020 mortality improvement scales (males and females) to all these tables.

For 2020, pre-retirement mortality rates are based on the RP-2014 Employees mortality table for males and females, adjusted for mortality improvement back to the observation period base year of 2006. The base year for males and females was then established to be 2015 and 2010, respectively. Post-retirement mortality rates are based on the RP-2014 Healthy Annuitant mortality table for males and females, adjusted for mortality improvement back to the observation period base year of 2006. The base year established to be 2015 and 2010, respectively. Post-retirement mortality improvement back to the observation period base year of 2006. The base year for males and females was then established to be 2015 and 2010, respectively. Post-retirement mortality rates for disabled retirees are based on the RP-2014 Disabled mortality table for males and females, adjusted for mortality improvement back to the observation period base year of 2006. The base year for males and females was then established to be 2015 and 2010, respectively. Post-retirement mortality rates for disabled retirees are based on the RP-2014 Disabled mortality table for males and females, adjusted for mortality improvement back to the observation period base year of 2006. The base year for males and females was then established to be 2015 and 2010, respectively. Mortality rates for a particular calendar year are determined by applying the MP-2015 mortality improvement scale to all the above-described tables.

The most recent experience study was completed for the five-year period ended December 31, 2020.

During 2021, OPERS managed investments in three investment portfolios: the Defined Benefit portfolio, the Health Care portfolio and the Defined Contribution portfolio. The Health Care portfolio includes the assets for health care expenses for the Traditional Pension Plan, Combined Plan and Member-Directed Plan eligible members. Within the Health Care portfolio, if any contributions are made into the plans, the contributions are assumed to be received continuously throughout the year based on the actual payroll payable at the time contributions are made. Health care-related payments are assumed to occur mid-year. Accordingly, the money-weighted rate of return is considered to be the same for all plans within the portfolio. The annual money-weighted rate of return expressing investment performance, net of investment expenses and adjusted for the changing amounts actually invested, for the Health Care portfolio was 14.3 percent for 2021.

The allocation of investment assets within the Health Care portfolio is approved by the Board of Trustees as outlined in the annual investment plan. Assets are managed on a total return basis with a long-term objective of continuing to offer a sustainable health care program for current and future retirees. OPERS' primary goal is to achieve and maintain a fully funded status for the benefits provided through the defined pension plans. Health care is a discretionary benefit. The long-term expected rate of return on health care investment assets was determined using a building-block method in which best-estimate ranges of expected future rates of return are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future rates of return by the target asset allocation percentage, adjusted for inflation. Best estimates of geometric rates of return were provided by the Board's investment consultant. For each major asset class that is included in the Health Care's portfolio's target asset allocation as of December 31, 2021, these best estimates are summarized in the following table:

		Weighted Average
		Long-Term Expected
	Target	Real Rate of Return
Asset Class	Allocation	(Geometric)
Fixed Income	34.00%	0.91%
Domestic Equities	25.00	3.78
Real Estate Investment Trust	7.00	3.71
International Equities	25.00	4.88
Risk Parity	2.00	2.92
Other investments	7.00	1.93
Total	100.00%	3.45%

Discount Rate A single discount rate of 6.0 percent was used to measure the OPEB liability on the measurement date of December 31, 2021. Projected benefit payments are required to be discounted to their actuarial present value using a single discount rate that reflects (1) a long-term expected rate of return on OPEB plan investments (to the extent that the health care fiduciary net position is projected to be sufficient to pay benefits), and (2) tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating as of the measurement date (to the extent that the contributions for use with the long-term expected rate are not met). This single discount rate was based on an expected rate of return on the health care investment portfolio of 6.00 percent and a municipal bond rate of 1.84 percent (Fidelity Index's "20-Year Municipal GO AA Index"). The projection of cash flows used to determine this single discount rate assumed that employer contributions will be made at rates equal to the actuarially determined contribution rate. Based on these assumptions, the health care fiduciary net position and future contributions were sufficient to finance health care investments was applied to projected costs through the year 2121, the duration of the projection period through which projected health care payments are fully funded.

Sensitivity of the District's Proportionate Share of the Net OPEB Asset to Changes in the Discount Rate The following table presents the District's proportionate share of the net OPEB asset calculated using the single discount rate of 6.00 percent, as well as what the District's proportionate share of the net OPEB asset would be if it were calculated using a discount rate that is one-percentage-point lower (5.00 percent) or onepercentage-point higher (7.00 percent) than the current rate:

	Current			
	1% Decrease	Discount Rate	1% Increase	
	(5.00%)	(6.00%)	(7.00%)	
District's proportionate share				
of the net OPEB asset	\$389,528	\$662,356	\$888,808	

Sensitivity of the District's Proportionate Share of the Net OPEB Asset to Changes in the Health Care Cost Trend Rate Changes in the health care cost trend rate may also have a significant impact on the net OPEB asset. The following table presents the net OPEB asset calculated using the assumed trend rates, and the expected net OPEB asset if it were calculated using a health care cost trend rate that is 1.0 percent lower or 1.0 percent higher than the current rate.

Retiree health care valuations use a health care cost-trend assumption that changes over several years built into the assumption. The near-term rates reflect increases in the current cost of health care; the trend starting in 2022 is 5.50 percent. If this trend continues for future years, the projection indicates that years from now virtually all expenditures will be for health care. A more reasonable alternative is the health plan cost trend will decrease to a level at, or near, wage inflation. On this basis, the actuaries project premium rate increases will continue to exceed wage inflation for approximately the next decade, but by less each year, until leveling off at an ultimate rate, assumed to be 3.50 percent in the most recent valuation.

	Current Health Care			
	Cost Trend Rate			
	1% Decrease	Assumption	1% Increase	
District's proportionate share				
of the net OPEB asset	\$669,514	\$662,356	\$653,865	

Note 11 - Long Term Obligations

The interest rate, original issue amount and date of maturity of each of the District's long-term obligations follows:

Debt Issue	Interest Rate	Original Issue	Year of Maturity
Business-Type Activities			
OWDA Loans from Direct Borrowings			
Filter System Improvement	3.35%	\$7,105,074	2026
Niles Standpipe Replacement	3.25%	1,298,746	2027
Chemical Feed Building Roof	3.25%	1,609,624	2027
Administration and Filter Building Roof	4.47%	302,790	2028
Valve Replacement/Gate House	0.00%	2,488,513	2031
Solids Contact Clarifier/Recarbonation	3.99%	14,327,587	2033
Solid Clarifiers/Recarbonation	2.00%	8,000,000	2033
Phase II Valve/Pipeline Replacement	2.00%	4,326,310	2037
Berlin Pump Station Improvements	2.00%	2,364,846	2037
SCADA/Instrumentation Improvements	2.94%	611,719	2036
SCADA/Enhanced Security Improvements	4.32%	3,202,817	2036
Chemical Feed Systems	0.81%	2,575,037	2037
Phase III Valve/Main Replacement	0.81%	6,408,951	2038

The changes in the District's long-term obligations during the 2022 consist of the following:

	Principal Outstanding 12/31/2021	Additions	(Reductions)	Principal Outstanding 12/31/2022	Amount Due in One Year
Business-Type Activities:					
OWDA Loans from Direct Borrowings					
Filter Systems Improvement	\$1,821,315	\$0	(\$432,896)	\$1,388,419	\$447,519
Niles Standpipe Replacement	444,055	0	(74,993)	369,062	77,450
Chemical Feed Building Roof	550,348	0	(92,944)	457,404	95,989
Administration and Filter Building Roof	120,192	0	(17,885)	102,307	18,694
Valve Replacement/Gate House	1,119,831	0	(124,426)	995,405	124,425
Solids Contact Clarifier/Recarbonation	9,245,245	0	(684,467)	8,560,778	712,051
Solid Clarifiers/Recarbonation	4,790,149	0	(393,444)	4,396,705	401,352
Phase II Valve/Pipeline Replacement	3,400,432	0	(196,490)	3,203,942	200,439
Berlin Pump Station Improvements	1,858,743	0	(107,405)	1,751,338	109,564
SCADA/Instrumentation Improvements	464,028	0	(27,228)	436,800	28,035
SCADA/Enhanced Security Improvements	2,509,762	0	(133,791)	2,375,971	139,633
Chemical Feed Systems	1,678,299	0	(102,047)	1,576,252	102,876
Phase III Valve/Main Replacement	5,084,816	0	(289,243)	4,795,573	291,590
Total OWDA Loans	\$33,087,215	\$0	(\$2,677,259)	\$30,409,956	\$2,749,617

Notes to the Basic Financial Statements For the Year Ended December 31, 2022

	Principal Outstanding 12/31/2021	Additions	(Reductions)	Principal Outstanding 12/31/2022	Amount Due in One Year
Business-Type Activities (continued):					
Other Long Term Obligations:					
Net Pension Liability	\$3,236,398	\$0	(\$1,350,760)	\$1,885,638	\$0
Compensated Absences	619,736	408,746	(389,169)	639,313	406,622
Total Other Long Term Obligation	3,856,134	408,746	(1,739,929)	2,524,951	406,622
Total Business-Type Activities	\$36,943,349	\$408,746	(\$4,417,188)	\$32,934,907	\$3,156,239

The District's outstanding OWDA loans from direct borrowings of \$30,409,956 contain provisions that in the event of default (1) the amount of such default shall bear interest at the default rate from the due date until the date of payment, (2) if any of the charges have not been paid within 30 days, in addition to the interest calculated at the default rate, a late charge of 1 percent on the amount of each default shall also be paid to the OWDA, and (3) for each additional 30 days during which the charges remain unpaid, the District shall continue to pay an additional late charge of 1 percent on the amount of the default until such charges are paid.

The District was approved for a \$7,105,074 Ohio Water Development Authority loan for improvements to the filtration system. This loan was issued for a twenty year period with a final maturity in 2026.

The District was approved for a \$1,298,746 Ohio Water Development Authority loan for the replacement of the Niles Standpipe. This loan was issued for a twenty year period with a final maturity in 2027.

The District was approved for a \$1,609,624 Ohio Water Development Authority loan for the replacement of the Chemical Feed roof. This loan was issued for a twenty year period with a final maturity in 2027.

The District was approved for a \$302,790 Ohio Water Development Authority loan for the replacement of the Administration and Filter Building roof. This loan was issued for a twenty year period with a final maturity in 2028.

The District was approved for a \$2,488,513 Ohio Water Development Authority loan for the Valve Replacement/Gate House project. This loan was issued for a twenty year period with a final maturity in 2031.

The District was approved for a \$14,327,587 Ohio Water Development Authority loan for the Solids Contact Clarifier/Recarbonation project. This loan was issued for a twenty year period with a final maturity in 2033.

The District was approved for an \$8,000,000 Ohio Water Development Authority loan for the Solid Clarifiers/Recarbonation project. This loan was issued for a twenty year period with a final maturity in 2033.

The District was approved for a \$4,326,310 Ohio Water Development Authority loan for the Phase II Valve/Pipeline Replacement project. This loan was issued for a twenty year period with a final maturity in 2037.

The District was approved for a \$2,364,846 Ohio Water Development Authority loan for the Berlin Pump Station Improvements project. This loan was issued for a twenty year period with a final maturity in 2037.

The District was approved for a \$611,719 Ohio Water Development Authority loan for the SCADA/Instrumentation Improvements project. This loan was issued for a twenty year period with a final maturity in 2036.

The District was approved for a \$3,202,817 Ohio Water Development Authority loan for the SCADA/Enhanced Security Improvements project. This loan was issued for a twenty year period with a final maturity in 2036.

The District was approved for a \$2,575,037 Ohio Water Development Authority loan for the Chemical Feed Systems project. This loan was issued for a twenty year period with a final maturity in 2037.

The District was approved for a \$6,408,951 Ohio Water Development Authority loan for the Phase III Valve/Main Replacement project. This loan was issued for a twenty year period with a final maturity in 2038.

The District has pledged future revenues, net of operating expenses, to repay OWDA loans. The debt is payable solely from net revenues through 2038. Annual principal and interest payments on the debt issues are expected to require 41.35 percent of net revenues. The total principal and interest remaining to be paid on the debt is \$34,895,666. Principal and interest paid for the current year and total net revenues available were \$3,488,037 and \$8,435,126, respectively.

Principal and interest requirements to retire long-term obligations outstanding at December 31, 2022, are as follows:

	From Direct Borrowings					
	OW	DA				
	200	Loans				
	Principal	Interest				
2023	\$2,749,617	\$740,886				
2024	2,824,385	668,679				
2025	2,901,646	594,066				
2026	2,487,073	520,636				
2027	2,453,449	455,907				
2028 - 2032	12,367,864	1,327,041				
2033 - 2037	4,461,665	177,830				
2038	164,257	665				
Total	\$30,409,956	\$4,485,710				

Note 12 – Significant Commitments

Contractual Commitments

As of December 31, 2022, the District had the following contractual construction commitments outstanding:

Vendor Name	Contract Amount	Amount Paid To Date	Remaining Contract
MS Consultants - Headhouse	\$272,743	\$265,609	\$7,134
AP O'Horo - Headhouse	1,229,000	1,165,129	63,871
Gannett Fleming - Dam Gannett Fleming - Chem Feedline	2,115,019 320,705	2,034,137 138,426	80,882 182,279
Stantec - Valve Phase IV Standby power	1,940,500	1,617,357	323,143
CT Consultants - Filter Gallery	627,686	559,879	67,807
AP O'Horo - Standby Power	1,680,100	1,193,444	486,656
CAT - Generator - Standby Power	1,881,461	1,787,388	94,073
Kirila - Phase IV Valve Replacement	5,851,691	3,076,692	2,774,999
Total	\$15,918,905	\$11,838,061	\$4,080,844

Remaining commitment amounts were encumbered at year end. The amounts of \$488,856 and \$307,355 of contracts and retainage payable, respectively, have been capitalized.

Encumbrances

Encumbrances are commitments related to unperformed contracts for goods or services. Encumbrance accounting is utilized to the extent necessary to assure effective budgetary control and accountability and to facilitate effective cash planning and control. At year end, the District had \$10,228,173 of encumbrances expected to be honored upon performance by the vendor in the next year.

Note 13 – Asset Retirement Obligation

The Governmental Accounting Standard Board's (GASB) Statement No. 83, *Certain Asset Retirement Obligations*, provides guidance to asset retirement obligations (AROs). An ARO is a legally enforceable liability associations with the retirement of a tangible capital asset. Ohio Revised Code Section 1521 requires the District, before commencing any repair, improvement, alteration, or removal to their dam, to file an application, including plans, specifications, and other required information with the division of water resources and to secure written approval of the application by the chief of the division of water resources. Any associated AROs are not reasonably estimable as there is significant uncertainty as to what items would need to be addressed.

Note 14 – Change in Accounting Principle and Restatement of Net Position

Change in Accounting Principle

For fiscal year 2022, the District implemented Governmental Accounting Standards Board (GASB) Statement No. 87, *Leases* and related guidance from (GASB) Implementation Guide No. 2019-3, *Leases*. The District also implemented GASB Statement No. 91, *Conduit Debt Obligations*, GASB Statement No. 92, *Omnibus 2020*, GASB Statement No. 97, *Certain Component Unit Criteria, and Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans*, and *Implementation Guide No. 2020-1*

GASB Statement 87 enhances the relevance and consistency of information of the government's leasing activities. It establishes requirements for lease accounting based on the principle that leases are financings of the right to use an underlying asset. A lessee is required to recognize a lease liability and an intangible right to use lease asset, and a lessor is required to recognize a lease receivable and a deferred inflow of resources. The District did not have any contracts that met the GASB 87 definition of a lease.

GASB 91 clarifies the existing definition of a conduit debt obligation; establishing that a conduit debt obligation is not a liability of the issuer; establishing standards for accounting and financial reporting of additional commitments and voluntary commitments extended by issuers and arrangements associated with conduit debt obligations; and improving required note disclosures.

GASB 97, among other items, requires that a Section 457 plan be classified as either a pension plan or an other employee benefit plan depending on whether the plan meets the definition of a pension plan.

The changes for GASB 87, GASB 91 and GASB 97 were incorporated in the District's 2022 financial statements; however, there was no effect on beginning net position/fund balance.

Restatement of Net Position

During 2022, it was determined that capital assets were overstated in the prior year. This restatement had the following effect on net position as of December 31, 2021:

	Proprietary Activities
Net Position, December 31, 2021	\$78,975,282
Capital Assets	(1,458,803)
Restated Net Position, December 31, 2021	\$77,516,479

Note 15 – COVID-19

The United States and the State of Ohio declared a state of emergency in March of 2020 due to the COVID-19 pandemic. Ohio's state of emergency ended in June 2021 while the national state of emergency ended in April 2023. During 2022, the District did not receive COVID-19 funding. The District's investment portfolio fluctuates with market conditions, and due to market volatility, the amount of gains or losses that will be realized in subsequent periods, if any, cannot be determined.

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Required Supplementary Information

Required Supplementary Information Schedule of the District's Proportionate Share of the Net Pension Liability Ohio Public Employees Retirement System - Traditional Plan Last Six Years (1) *

	2022	2021	2020
District's Proportion of the Net Pension Liability	0.02167300%	0.02185600%	0.02034400%
District's Proportionate Share of the Net Pension Liability	\$1,885,638	\$3,236,398	\$4,021,130
District's Covered Payroll	\$3,146,843	\$3,076,843	\$2,862,336
District's Proportionate Share of the Net Pension Liability as a Percentage of its Covered Payroll	59.92%	105.19%	140.48%
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	92.62%	86.88%	82.17%

(1) Although this schedule is intended to reflect information for ten years, information prior to 2017 is not available. An additional column will be added each year.

*Amounts presented for each year were determined as of the District's measurement date which is the prior calendar year end.

2019	2018	2017
0.01891500%	0.01916400%	0.02064600%
\$5,180,436	\$3,006,461	\$4,688,356
\$2,585,650	\$2,532,562	\$2,668,875
200.35%	118.71%	175.67%
74.70%	84.66%	77.25%

Required Supplementary Information Schedule of the District's Proportionate Share of the Net Pension Asset Ohio Public Employees Retirement System - Combined Plan Last Six Years (1) *

	2022	2021	2020
District's Proportion of the Net Pension Asset	0.02129500%	0.02201700%	0.02166300%
District's Proportionate Share of the Net Pension Asset	\$83,903	\$63,556	\$45,173
District's Covered Payroll	\$97,086	\$97,029	\$96,436
District's Proportionate Share of the Net Pension Asset as a Percentage of its Covered Payroll	-86.42%	-65.50%	-46.84%
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	169.88%	157.67%	145.28%

(1) Although this schedule is intended to reflect information for ten years, information prior to 2017 is not available. An additional column will be added each year.

*Amounts presented for each year were determined as of the District's measurement date which is the prior calendar year end.

2019	2018	2017
0.02268400%	0.02302500%	0.02366100%
\$25,366	\$31,345	\$13,168
\$97,014	\$94,300	\$92,100
-26.15%	-33.24%	-14.30%
126.64%	137.28%	116.55%

Required Supplementary Information Schedule of the District's Proportionate Share of the Net OPEB Liability (Asset) Ohio Public Employees Retirement System - OPEB Plan Last Six Years (1) *

	2022 2021		2020	
District's Proportion of the Net OPEB Liability	0.02114700%	0.02135200%	0.01993400%	
District's Proportionate Share of the Net OPEB Liability (Asset)	(\$662,356)	(\$380,403)	\$2,753,403	
District's Covered Payroll	\$3,299,054	\$3,227,797	\$3,011,597	
District's Proportionate Share of the Net OPEB Liability (Asset) as a Percentage of its Covered Payroll	-20.08%	-11.79%	91.43%	
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	128.23%	115.57%	47.80%	

(1) Although this schedule is intended to reflect information for ten years, information prior to 2017 is not available. An additional column will be added each year.

*Amounts presented for each year were determined as of the District's measurement date which is the prior calendar year end.

2019	2018	2017
0.01957600%	0.01891000%	0.02034300%
\$2,552,248	\$2,053,487	\$2,054,712
\$2,807,413	\$2,836,000	\$2,861,650
90.91%	72.41%	71.80%
46.33%	54.14%	54.05%

Required Supplementary Information Schedule of the District's Contributions Ohio Public Employees Retirement System - Traditional Plan Last Seven Years (1)

Net Pension Liability	2022	2021	2020	2019
Contractually Required Contribution	\$476,780	\$440,558	\$430,758	\$400,727
Contributions in Relation to the Contractually Required Contribution	(476,780)	(440,558)	(430,758)	(400,727)
Contribution Deficiency (Excess)	\$0	\$0	\$0	\$0
District Covered Payroll	\$3,405,571	\$3,146,843	\$3,076,843	\$2,862,336
Pension Contributions as a Percentage of Covered Payroll	14.00%	14.00%	14.00%	14.00%

(1) Although this schedule is intended to reflect information for ten years, information prior to fiscal year 2017 is not available. An additional column will be added each year.

(2) "2018 Interim" is a six month period to change from a Fiscal Year to Calendar Year basis.

2018 Interim (2)	Fiscal Year 2018	Fiscal Year 2017
\$186,320	\$341,627	\$333,539
(186,320)	(341,627)	(333,539)
\$0	\$0	\$0
\$1,330,857	\$2,531,377	\$2,674,827
14.00%	13.50%	12.47%

Required Supplementary Information Schedule of the District's Contributions Ohio Public Employees Retirement System - Combined Plan Last Seven Years (1)

	2022	2021	2020	2019
Net Pension Liability	2022	2021	2020	2017
Contractually Required Contribution	\$15,239	\$13,592	\$13,584	\$13,501
Contributions in Relation to the Contractually Required Contribution	(15,239)	(13,592)	(13,584)	(13,501)
Contribution Deficiency (Excess)	\$0	\$0	\$0	\$0
District Covered Payroll	\$108,850	\$97,086	\$97,029	\$96,436
Pension Contributions as a Percentage of Covered Payroll	14.00%	14.00%	14.00%	14.00%

(1) Although this schedule is intended to reflect information for ten years, information prior to fiscal year 2017 is not available. An additional column will be added each year.

(2) "2018 Interim" is a six month period to change from a Fiscal Year to Calendar Year basis.

2018 Interim (2)	Fiscal Year 2018	Fiscal Year 2017
\$6,888	\$12,966	\$11,306
(6,888)	(12,966)	(11,306)
\$0	\$0	\$0
\$49,200	\$96,060	\$90,379
14.00%	13.50%	12.51%

Required Supplementary Information Schedule of the District's Contributions Ohio Public Employees Retirement System - OPEB Plan Last Seven Years (1)

	2022	2021	2020	2019
Net OPEB Liability		2021	2020	2017
Contractually Required Contribution	\$2,363	\$2,205	\$2,157	\$2,113
Contributions in Relation to the Contractually Required Contribution	(2,363)	(2,205)	(2,157)	(2,113)
Contribution Deficiency (Excess)	\$0	\$0	\$0	\$0
District Covered Payroll	\$3,522,692	\$3,299,054	\$3,227,797	\$3,011,597
Pension Contributions as a Percentage of Covered Payroll	0.07%	0.07%	0.07%	0.07%

(1) Although this schedule is intended to reflect information for ten years, information prior to fiscal year 2017 is not available. An additional column will be added each year.

(2) "2018 Interim" is a six month period to change from a Fiscal Year to Calendar Year basis.

2018 Interim (2)	Fiscal Year 2018	Fiscal Year 2017
\$2,641	\$17,946	\$44,309
(2,641)	(17,946)	(44,309)
\$0	\$0	\$0
\$1,446,082	\$2,744,887	\$2,815,831
0.18%	0.65%	1.57%

Changes in Assumptions – OPERS Pension– Traditional Plan

Amounts reported beginning in 2022 incorporate changes in assumptions used by OPERS in calculating the total pension liability in the latest actuarial valuation. These new assumptions compared with those used in prior years are presented below:

	2022	2019	2018 and 2017	2016 and prior
Wage Inflation Future Salary Increases	2.75 percent 2.75 to 10.75 percent including wage inflation	3.25 percent 3.25 to 10.75 percent including wage inflation	3.25 percent 3.25 to 10.75 percent including wage inflation	3.75 percent 4.25 to 10.05 percent including wage inflation
COLA or Ad Hoc COLA:	-	-	-	-
Pre-January 7, 2013 Retirees Post-January 7, 2013 Retirees	3 percent, simple see below			
Investment Rate of Return	6.9 percent	7.2 percent	7.5 percent	8 percent
Actuarial Cost Method	Individual	Individual	Individual	Individual
	Entry Age	Entry Age	Entry Age	Entry Age

The assumptions related to COLA or Ad Hoc COLA for Post-January 7, 2013, Retirees are as follows:

COLA or Ad Hoc COLA, Post-January 7, 2013 Retirees:

2022	3.0 percent, simple through 2022 then 2.05 percent, simple
2021	0.5 percent, simple through 2021 then 2.15 percent, simple
2020	1.4 percent, simple through 2020
2017 through 2019	then 2.15 percent, simple 3.0 percent, simple through 2018
2016 and prior	then 2.15 percent, simple 3.0 percent, simple through 2018 then 2.80 percent, simple
	5.50 to 5.00 percent

Amounts reported beginning in 2022 use pre-retirement mortality rates based on 130 percent of the Pub-2010 General Employee Mortality tables (males and females) for State and Local Government divisions and 170 percent of the Pub-2010 Safety Employee Mortality tables (males and females) for the Public Safety and Law Enforcement divisions. Post-retirement mortality rates are based on 115 percent of the PubG-2010 Retiree Mortality Tables (males and females) for all divisions. Post-retirement mortality rates for disabled retirees are based on the PubNS-2010 Disabled Retiree Mortality Tables (males and females) for all divisions. For all the previously described tables, the base year is 2010 and mortality rates for a particular calendar year are determined by applying the MP-2020 mortality improvement scales (males and females) to all these tables.

Amounts reported beginning in 2017 use pre-retirement mortality rates are based on the RP-2014 Employees mortality table for males and females, adjusted for mortality improvement back to the observation period base year of 2006. The base year for males and females was then established to be 2015 and 2010, respectively. Post-retirement mortality rates are based on the RP-2014 Healthy Annuitant mortality table for males and females, adjusted for mortality improvement back to the observation period base year of 2006. The base year for mortality improvement back to the observation period base year of 2006. The base year for males and females was then established to be 2015 and 2010, respectively. Post-retirement mortality rates for disabled retirees are based on the RP-2014 Disabled mortality table for males and females, adjusted for mortality improvement back to the observation period base year of 2006. The base year for males and females was then established to be 2015 and 2010, respectively. Post-retirement mortality rates for disabled retirees are based on the RP-2014 Disabled mortality table for males and females, adjusted for mortality improvement back to the observation period base year of 2006. The base year for males and females was then established to be 2015 and 2010, respectively. Mortality rates for a particular calendar year are determined by applying the MP-2015 mortality improvement scale to all of the above described tables.

Amounts reported for 2016 and prior use mortality rates based on the RP-2000 Mortality Table projected 20 years using Projection Scale AA. For males, 105 percent of the combined healthy male mortality rates were used. For females, 100 percent of the combined healthy female mortality rates were used. The mortality rates used in evaluating disability allowances were based on the RP-2000 mortality table with no projections. For males 120 percent of the disabled female mortality rates were used set forward two years. For females, 100 percent of the disabled female mortality rates were used.

Changes in Assumptions – OPERS Pension – Combined Plan

	2022	2019	2018
Wage Inflation Future Salary Increases	2.75 percent 2.75 to 8.25 percent including wage inflation	3.25 percent 3.25 to 8.25 percent including wage inflation	3.25 percent 3.25 to 8.25 percent including wage inflation
COLA or Ad Hoc COLA: Pre-January 7, 2013 Retirees Post-January 7, 2013 Retirees Investment Rate of Return Actuarial Cost Method	3 percent, simple see below 6.9 percent Individual Entry Age	3 percent, simple see below 7.2 percent Individual Entry Age	3 percent, simple see below 7.5 percent Individual Entry Age

For 2022, 2021 and 2020, the Combined Plan had the same change in COLA or Ad Hoc COLA for Post-January 2, 2013, retirees as the Traditional Plan.

Changes in Assumptions – OPERS OPEB

Wage Inflation:	
2022	2.75 percent
2021 and prior	3.25 percent
Projected Salary Increases (including wage	e inflation):
2022	2.75 to 10.75 percent
2021 and prior	3.25 to 10.75 percent
Investment Return Assumption:	
Beginning in 2019	6.00 percent
2018	6.50 percent
Municipal Bond Rate:	
2022	1.84 percent
2021	2.00 percent
2020	2.75 percent
2019	3.71 percent
2018	3.31 percent
Single Discount Rate:	
2022	6.00 percent
2021	6.00 percent
2020	3.16 percent
2019	3.96 percent
2018	3.85 percent
Health Care Cost Trend Rate:	
2022	5.5 percent, initial
	3.5 percent, ultimate in 2034
2021	8.5 percent, initial
	3.5 percent, ultimate in 2035
2020	10.5 percent, initial
	3.5 percent, ultimate in 2030
2019	10.0 percent, initial
	3.25 percent, ultimate in 2029
2018	7.5 percent, initial
	3.25 percent, ultimate in 2028

Changes in Benefit Terms – OPERS OPEB

On January 15, 2020, the Board approved several changes to the health care plan offered to Medicare and non-Medicare retirees in efforts to decrease costs and increase the solvency of the health care plan. These changes are effective January 1, 2022, and include changes to base allowances and eligibility for Medicare retirees, as well as replacing OPERS-sponsored medical plans for non-Medicare retirees with monthly allowances, similar to the program for Medicare retirees. These changes are reflected in 2021.

Statistical Section

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Statistical Section

This part of the Mahoning Valley Sanitary District's annual comprehensive financial report presents detailed information as a context for understanding what the information in the financial statements, note disclosures, and required supplementary information says about the District's overall financial health.

<u>Contents</u>	Page(s)
Financial Trends These schedules contain trend information to help the reader understand how the District's financial performance and well-being have changed over time.	S2 - S5
Revenue Capacity These schedules contain information to help the reader assess the District's most significant local revenue source, charges for services.	S6 - S7
Debt Capacity These schedules present information to help the reader assess the affordability of the District's current levels of outstanding debt and the District's ability to issue additional debt in the future.	S9 - S11
Economic and Demographic Information These schedules offer economic and demographic indicators to help the reader understand the environment within which the District's financial activities take place.	S12 - S15
Operating Information These schedules contain service data to help the reader understand how the information in the District's financial report relates to the services the District provides and the activities it performs.	S16 - S21

Sources: Unless otherwise noted, the information in these schedules is derived from the annual comprehensive financial reports for the relevant fiscal year.

Net Position by Component Last Seven Years (1) (accrual basis of accounting)

	2022 Calendar	2021 Calendar	2020 Calendar	2019 Calendar
Net Investment in Capital Assets	\$39,337,506	\$31,566,451	\$31,379,714	\$30,339,832
Restricted for: Debt Service Pension and OPEB Plans Unrestricted	0 101,860 44,362,202	0 60,497 45,889,531	0 0 40,869,740	0 0 37,994,519
Total Net Position	\$83,801,568	\$77,516,479	\$72,249,454	\$68,334,351

Source: District Financial Records

(1) The District implemented an accrual basis of accounting beginning fiscal year 2018. Therefore, information prior to 2017 is not available.

(2) "2018 Interim" is a six month period to change from Fiscal to Calendar Year Basis.
 2019-2022 are reported on a Calendar Year Basis, 2017-2018 are reported on a Fiscal Year Basis.

2018	2018	2017
Interim (2)	Fiscal	Fiscal
\$28,766,427	\$23,474,961	\$17,089,717
106,104	2,696,074	4,172,643
0	0	0
34,230,281	32,622,512	31,694,700
\$63,102,812	\$58,793,547	\$52,957,060

Changes in Net Position Last Six Years (1) (accrual basis of accounting)

	2022 Calendar	2021 Calendar	2020 Calendar
Operating Revenues			
Charges for Services	\$18,675,117	\$18,499,363	\$18,385,867
Miscellaneous	96,744	101,215	318,614
Total Operating Revenues	18,771,861	18,600,578	18,704,481
Operating Expenses			
Personal Services	3,298,100	1,762,439	4,715,821
Supplies and Services	6,769,198	5,620,437	5,587,697
Depreciation	2,686,730	3,225,262	3,196,583
Claims	982,217	964,877	751,314
Miscellaneous	14,028	8,803	9,724
Total Operating Expenses	13,750,273	11,581,818	14,261,139
Operating Income (Loss)	5,021,588	7,018,760	4,443,342
Non-Operating Revenues (Expenses)			
Timber Sales	497,300	416,200	0
Royalties	75,480	38,196	13,023
Miscellaneous - Non Operating Revenue	0	0	0
Miscellaneous - Non Operating Expense	0	0	0
Gain on Sale of Capital Assets	0	15,710	0
Loss on Disposal of Capital Assets	(4,942)	0	(20,805)
Investment Earnings/Interest	823,552	47,433	293,923
Interest and Fiscal Charges	(810,778)	(878,425)	(943,910)
Total Non-Operating Revenues (Expenses)	580,612	(360,886)	(657,769)
Income (Loss) Before			
Capital Contributions	5,602,200	6,657,874	3,785,573
Capital Contributions	682,889	67,954	129,530
Change in Net Position	\$6,285,089	\$6,725,828	\$3,915,103

Source: District Financial Records

- (1) The District implemented an accrual basis of accounting beginning fiscal year 2018. Therefore, information prior to 2018 is not available.
- (2) "2018 Interim" is a six month period to change from Fiscal to Calendar Year Basis.2019-2022 are reported on a Calendar Year Basis, 2017-2018 are reported on a Fiscal Year Basis.

2019	2018	2018
Calendar	Interim (2)	Fiscal
\$18,463,625	\$9,175,830	\$18,024,450
133,212	70,248	589,075
18,596,837	9,246,078	18,613,525
4,778,313	1,712,291	3,902,045
4,840,658	1,309,919	4,186,781
3,171,330	1,601,180	2,573,366
606,848	306,177	563,761
9,676	6,868	623,675
13,406,825	4,936,435	11,849,628
5,190,012	4,309,643	6,763,897
5,170,012	+,507,045	0,705,077
67,250	71,000	100,000
22,815	16,736	34,217
0	2,688	0
0	(2,116)	0
0	0	0
(284,998)	(31,775)	0
841,669	230,084	136,943
(1,007,310)	(576,444)	(1,198,570)
<u>, , , , , , , , , , , , , , , , , </u>	<u></u>	, ·, ·,
(360,574)	(289,827)	(927,410)
4,829,438	4,019,816	5,836,487
402 101	200 440	0
402,101	289,449	0
\$5,231,539	\$4,309,265	\$5,836,487
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Charges for Services and Principal Payers

Last Seven Years (1)

Amount Billed							
	City of Yo	ungstown	City of	fNiles	Village of	McDonald	
Year	Revenue	Percentage	Revenue	Percentage	Revenue	Percentage	Total Billed
2022 Calendar	\$13,682,577	73.51 %	\$4,660,242	25.04 %	\$271,066	1.45 %	\$18,613,885
2021 Calendar	13,354,229	72.20	4,836,534	26.15	306,349	1.65	18,497,112
2020 Calendar	13,224,942	71.92	4,873,655	26.50	290,929	1.58	18,389,526
2019 Calendar	13,066,023	70.81	5,101,519	27.65	283,581	1.54	18,451,123
2018 Interim (4)	6,443,603	70.09	2,575,736	28.02	173,413	1.89	9,192,752
2018 Fiscal	13,301,354	73.79	4,375,673	24.28	347,787	1.93	18,024,814
2017 Fiscal	13,381,490	73.65	4,424,669	24.35	362,589	2.00	18,168,748

Source: District's Financial Records

- (1) Information prior to fiscal year 2017 is not available.
- (2) This information is presented on a cash basis.
- (3) The Cities of Youngstown and Niles and the Village of McDonald are the District's only customers.
- (4) "2018 Interim" is a six month period to change from Fiscal to Calendar Year Basis.
 2019-2022 are reported on a Calendar Year Basis, 2017-2018 are reported on a Fiscal Year Basis.

Water Billing Rate Last Seven Years (1)

Year	Rate per Million Gallons
2022 Calendar	\$2,057.25
2021 Calendar	2,164.80
2020 Calendar	2,143.81
2019 Calendar	2,242.93
2018 Interim (2)	2,287.76
2018 Fiscal	2,240.15
2017 Fiscal	2,466.10

Source: District's Financial Records

- (1) Information prior to fiscal year 2017 is not available.
- (2) "2018 Interim" is a six month period to change from Fiscal to Calendar Year Basis. 2019-2022 are reported on a Calendar Year Basis, 2017-2018 are reported on a Fiscal Year Basis.

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Pledged Revenue Coverage Last Six Years (1)

	Water	Direct		Debt Ser	vice (2)	
Year	Service Charges and Interest	Operating Expenses (3)	Net Available Revenue	Principal	Interest	Coverage
2022 Calendar	\$19,498,669	\$11,063,543	\$8,435,126	\$2,677,259	\$810,778	2.42
2021 Calendar	18,546,796	8,356,556	10,190,240	2,607,227	878,425	2.92
2020 Calendar	18,679,790	11,064,556	7,615,234	2,539,441	943,910	2.19
2019 Calendar	19,305,294	10,235,495	9,069,799	2,761,461	1,007,310	2.41
2018 Interim (4)	9,405,914	3,335,255	6,070,659	3,819,369	576,444	1.38
2018 Fiscal	18,161,393	9,276,262	8,885,131	4,827,321	1,198,570	1.47

(1) Information prior to fiscal year 2018 is not available.

(2) Revenue debt includes Water Revenue Bonds and OWDA loans payable solely from net revenues. Water Revenue Bonds were fully repaid in the 2018 Interim period.

- (3) Direct operating expenses do not include depreciation.
- (4) "2018 Interim" is a six month period to change from Fiscal to Calendar Year Basis. 2019-2022 are reported on a Calendar Year Basis, 2018 is reported on a Fiscal Year Basis.

Source: District Financial Records

Ratio of Debt per Capita Last Seven Years (1)

Fiscal	Personal		General Bonded Debt
Year	Income (2)	Population (2)	Outstanding
2022 Calendar	\$1,277,900,246	81,683	\$0
2021 Calendar	1,571,624,992	89,511	0
2020 Calendar	1,571,624,992	89,511	0
2019 Calendar	1,571,624,992	89,511	0
2018 Interim (3)	1,571,624,992	89,511	0
2018 Fiscal	1,571,624,992	89,511	2,592,264
2017 Fiscal	1,571,624,992	89,511	5,126,698

Source: District Financial Records

- (1) Information prior to fiscal year 2017 is not available.
- (2) From Demographics and Economic Statistics, S12-S13.
- (3) "2018 Interim" is a six month period to change from Fiscal to Calendar Year Basis. 2019-2022 are reported on a Calendar Year Basis, 2017-2018 are reported on a Fiscal Year Basis.

Loans	Total Debt	Ratio of Debt to Personal Income	Debt Per Capita
\$30,409,956	\$30,409,956	2.38%	\$372.29
33,087,215	33,087,215	2.11	369.64
35,694,442	35,694,442	2.27	398.77
38,233,883	38,233,883	2.43	427.14
40,983,605	40,983,605	2.61	457.86
42,214,649	44,806,913	2.85	500.57
41,815,738	46,942,436	2.99	524.43

Demographic and Economic Statistics Last Ten Years

		City of Youngstow	'n		City of Niles	
Year	Estimated Population	Total Personal Income	Personal Income Per Capita	Estimated Population	Total Personal Income	Personal Income Per Capita
2022 Calendar	60,068	\$805,093,080	13,403	18,443	\$381,451,530	\$20,683
2021 Calendar	66,982	1,052,488,166	15,713	19,266	444,081,300	23,050
2020 Calendar	66,982	1,052,488,166	15,713	19,266	444,081,300	23,050
2019 Calendar	66,982	1,052,488,166	15,713	19,266	444,081,300	23,050
2018 Interim (2)	66,982	1,052,488,166	15,713	19,266	444,081,300	23,050
2018 Fiscal	66,982	1,052,488,166	15,713	19,266	444,081,300	23,050
2017 Fiscal	66,982	1,052,488,166	15,713	19,266	444,081,300	23,050
2016 Fiscal	66,982	1,052,488,166	15,713	19,266	444,081,300	23,050
2015 Fiscal	66,982	1,052,488,166	15,713	19,266	444,081,300	23,050
2014 Fiscal	66,982	1,052,488,166	15,713	19,266	444,081,300	23,050
2013 Fiscal	66,982	1,052,488,166	15,713	19,266	444,081,300	23,050
Source:	2010 U.S. Cer	nsus Bureau, 2013 Fis	scal - 2021 Calenda	ar		
	2020 U.S. Cer	nsus Bureau, 2022 Ca	alendar			
	American Fac	t Finder, U.S. Census	s Bureau			
	Ohio Labor M	larket Information				

LAUS Results (ohiolmi.com)

(1) 2018 Interim and 2019-2022 Unemployment for the City of Youngstown as of December 31 per Ohio Labor Market Information.

"2018 Interim" is a six month period to change from Fiscal to Calendar Year Basis.
 2019-2022 are reported on a Calendar Year Basis, 2013-2018 are reported on a Fiscal Year Basis.

Vi	illage of McDonald			Total		
Estimated Population	Total Personal Income	Personal Income Per Capita	Estimated Population	Total Personal Income	Personal Income Per Capita	Unemployment Rate (1)
3,172	\$91,355,636	\$28,801	81,683	\$1,277,900,246	\$15,645	6.1%
3,263	75,055,526	23,002	89,511	1,571,624,992	17,558	5.2
3,263	75,055,526	23,002	89,511	1,571,624,992	17,558	8.4
3,263	75,055,526	23,002	89,511	1,571,624,992	17,558	6.1
3,263	75,055,526	23,002	89,511	1,571,624,992	17,558	7.5
3,263	75,055,526	23,002	89,511	1,571,624,992	17,558	8.1
3,263	75,055,526	23,002	89,511	1,571,624,992	17,558	8.4
3,263	75,055,526	23,002	89,511	1,571,624,992	17,558	7.7
3,263	75,055,526	23,002	89,511	1,571,624,992	17,558	7.6
3,263	75,055,526	23,002	89,511	1,571,624,992	17,558	9.0
3,263	75,055,526	23,002	89,511	1,571,624,992	17,558	11.9

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Principal Employers Current Year and Nine Years Ago

2022

Name of Employer	Nature of Business	Employees	Percentage of Total District Employment
		2	2
Mercy Health (Multi County)	Hospital Services	4,400	4.89%
Youngstown Air Reserve Base	Military	1,792	1.99
Windsor House (Multi County)	Nursing/Assisted Living	1,500	1.67
TJX-HomeGoods	Distribution	1,491	1.66
Steward Valley Systems (Multi County)	Hospital Services	1,400	1.56
Trumbull County	Government	1,280	1.42
Warren City School District	Education	1,211	1.35
AIM National Lease	Trucking	1,000	1.11
AVI Food Systems	Food Service	1,000	1.11
Ohio Security Systems	Security/Janitorial	600	0.67
Total		15,674	17.43%
Total Employment within the District		89,937	

2013

			Percentage of Total District
Employer	Nature of Business	Employees	Employment
General Motors Corporation	Car Manufacturing	4,500	4.85%
Youngstown Air Reserve Base	Military	2,125	2.29
Trumbull County	Government	1,627	1.76
West Corporation	Call Center	1,300	1.40
Delphi Packard	Auto Parts	1,100	1.19
Warren City School District	Education Service	810	0.87
Ohio Security Systems	Security/Janitorial	600	0.65
RTI Niles	RTI Niles	575	0.62
AVI Food Systems	Food Service	500	0.54
Covelli Enerprise (Panera)	Food Service	500	0.54
Total		13,637	14.71%
Total Employment within the District		92,700	

Source: Trumbull County 2021 Annual Comprehensive Financial Report

Operating Indicators

Last Seven Years (1)

Description	2022 Calendar	2021 Calendar	2020 Calendar
Annual Volume of Water Produced (Billions of gallons)	9.0	9.0	8.5
Water Treatment Plant Capacity (Millions of gallons per day)	60	60	60
Water Storage Capacity (Millions of gallons)	35.9	35.9	35.9
Average Daily Usage (Millions of gallons per day)	25.82	24.79	23.19
Population Served	220,000	220,000	220,000
Daily Average Gallons Pumped (Millions of gallons)			
City of Youngstown	18.36	17.40	16.75
City of Niles	6.35	6.25	6.16
Village of McDonald	0.36	0.40	0.34
Total Gallons Pumped (Millions of gallons)			
City of Youngstown	6,699.62	6,351.85	6,114.12
City of Niles	2,316.97	2,279.80	2,247.40
Village of McDonald	132.35	144.82	123.70

Source: District records

(1) Information prior to 2017 is not available.

(2) "2018 Interim" is a six month period to change from Fiscal to Calendar Year Basis.
 2019-2022 are reported on a Calendar Year Basis, 2017-2018 are reported on a Fiscal Year Basis.

2019 Calendar	2018 Interim (2)	2018 Fiscal	2017 Fiscal
8.9	4.4	7.5	7.9
60	60	60	60
35.9	35.9	35.9	35.9
23.76	23.09	20.46	21.56
220,000	220,000	220,000	220,000
16.85	16.08	15.10	15.86
6.55	6.61	4.97	5.26
0.36	0.40	0.39	0.43
6,148.85	2,958.20	5,511.39	5,789.91
2,392.48	1,216.07	1,813.36	1,921.99
130.57	73.73	143.93	156.34

Capital Asset Statistics Last Seven Years (1)

	2022 Calendar	2021 Calendar	2020 Calendar	2019 Calendar
Land				
Total Acres	5,570	5,570	5,570	5,570
Water/Reservoir Acres	2,167	2,167	2,167	2,167
Reservoir Capacity (in billions of gallons)	11	11	11	11
Buildings	20	20	20	20
Vehicles	37	38	35	35
Pipelines (in miles)	27.4	27.4	27.4	27.4

Source: District records

(1) Information prior to fiscal year 2017 is not available.

(2) "2018 Interim" is a six month period to change from Fiscal to Calendar Year Basis.2019-2022 are reported on a Calendar Year Basis, 2017-2018 are reported on a Fiscal Year Basis.

2018 Interim (2)	2018 Fiscal	2017 Fiscal
5,570 2,167 11	5,570 2,167 11	5,570 2,167 11
20	20	20
34	30	30
27.4	27.4	27.4

Full-Time Equivalent District Employees by Department Last Seven Years (1)

Department	2022 Calendar	2021 Calendar	2020 Calendar	2019 Calendar
Police	4.5	4.5	4.5	4.5
Field Maintenance	14.0	14.0	14.0	14.0
Pump Station	6.0	6.0	6.0	6.0
Purification	18.0	18.0	18.0	18.0
Administration	11.0	11.0	11.0	11.0
Total Employees	53.5	53.5	53.5	53.5

Method: Using 1.0 for each full-time employee and 0.5 for each part-time employee at year end.

- Source: District records
- (1) Information prior to fiscal year 2017 is not available.
- (2) "2018 Interim" is a six month period to change from Fiscal to Calendar Year Basis. 2019-2022 are reported on a Calendar Year Basis, 2017-2018 are reported on a Fiscal Year Basis.

2018 Interim (2)	2018 Fiscal	2017 Fiscal
3.5	3.5	3.5
12.0	12.0	12.0
8.0	8.0	9.0
16.0	16.0	13.0
10.0	10.0	9.0
49.5	49.5	46.5

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MAHONING VALLEY SANITARY DISTRICT

TRUMBULL COUNTY

AUDITOR OF STATE OF OHIO CERTIFICATION

This is a true and correct copy of the report, which is required to be filed pursuant to Section 117.26, Revised Code, and which is filed in the Office of the Ohio Auditor of State in Columbus, Ohio.



Certified for Release 7/6/2023

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