



## The City of Lorain, Ohio UTILITIES DEPARTMENT Proposed FY 2024 Budget Executive Summary

The City of Lorain Utilities Department has prepared this report for the fiscal year 2024. The following gives an overview look into the Lorain Utilities Departments' revenue and expenditure budget objectives, projections, and requests that have been reviewed and appropriated by the City of Lorain City Council.

### **Department Mission**

The mission of the Utilities Department is to provide the public with safe drinking water and effective methods of wastewater treatment and disposal. Our goal is to continue to ensure the health of the residents of the City of Lorain and surrounding communities while maintaining superior fiscal responsibility.

### **Department Objective**

The City of Lorain Utilities Department (LUD) strives to continue to achieve an exceptional level of service to our water and wastewater customers. We aim to identify and address strategic system issues, provide an affordable rate structure, ensure a satisfactory long-term water supply and wastewater treatment infrastructure, improve workforce competency and growth, maintain regulatory compliance, and preserve financial stability and strength.

### **Projecting Revenues**

#### **Methodology**

Water and wastewater revenue projections are derived from analyzing system user accounts and characteristics. Specific characteristics include the number of active accounts, water consumption numbers, ancillary services rendered, meter charges, and wastewater treated. The following tables provide insight into historical budget-to-actual relationships, while also reflecting the removal of loans/grants. These amounts are removed as they can sometimes skew numbers and projections.

Water Works Revenues				
Fiscal Year	Budgeted	Actual	Variance	Percent Variance
2014	\$ 11,625,811	\$ 11,124,621	(\$ 501,190)	(4.31 %)
2015	\$ 13,172,861	\$ 13,072,972	(\$ 99,899)	(0.76 %)
2016	\$ 14,304,612	\$ 15,512,747	<b>\$ 1,208,135</b>	<b>8.45 %</b>
2017	\$ 13,644,075	\$ 15,725,179	<b>\$ 2,081,104</b>	<b>15.3 %</b>
2018	\$ 18,958,048	\$ 17,452,709	(\$ 1,505,339)	(7.94 %)
2019	\$ 19,789,698	\$ 19,482,018	(\$ 307,680)	(1.55 %)
2020	\$ 17,529,537	\$ 15,758,157	(\$ 1,771,380)	(10.1 %)
2021	\$ 19,678,635	\$ 15,186,204	(\$ 4,492,431)	(22.8 %)
2022	\$ 23,791,270	\$ 15,017,570	(\$ 8,773,700)	(36.9 %)
2023	\$ 15,924,773	\$ 14,939,149	(\$ 985,624)	(6.19 %)
2024	<i>\$ 15,312,933</i>	-	-	-

Table 1 – Water Works Revenues (Italicized #'s are Projections)

Water Pollution Control Revenues				
Fiscal Year	Budgeted	Actual	Variance	Percent Variance
2014	\$ 15,694,692	\$ 17,092,919	<b>\$ 1,398,227</b>	<b>8.91 %</b>
2015	\$ 16,757,214	\$ 17,689,993	<b>\$ 932,779</b>	<b>5.57 %</b>
2016	\$ 16,020,545	\$ 15,433,321	(\$ 587,224)	(3.67 %)
2017	\$ 13,650,231	\$ 15,710,218	<b>\$ 2,059,987</b>	<b>15.1 %</b>
2018	\$ 17,139,267	\$ 18,628,843	<b>\$ 1,489,576</b>	<b>8.69 %</b>
2019	\$ 19,429,620	\$ 18,720,012	(\$ 709,608)	(3.65 %)
2020	\$ 20,497,673	\$ 20,194,090	(\$ 303,583)	(1.5 %)
2021	\$ 19,097,099	\$ 17,401,265	(\$ 1,698,834)	(8.88 %)
2022	\$ 17,779,378	\$ 17,118,334	(\$ 661,044)	(3.72 %)
2023	\$ 13,094,676	\$ 17,045,389	<b>\$ 3,950,713</b>	<b>30.2 %</b>
2024	<i>\$ 18,133,480</i>	-	-	-

Table 2 – Water Pollution Control Revenues (Italicized #'s are Projections)

### Fiscal Year 2024 Revenue Projections

The LUD projected total revenue is anticipated to be \$33,446,413 (Table 3). This will be an approximate 4% increase from the 2023 FY projected total revenues for the LUD.

### Other Topics

#### Rate Structure

The LUD current rate structure for water and wastewater users was last adjusted in 2020. Current rates have provided modest revenues to meet a portion of needed expenditures to sustain a high quality of service for customers of the LUD. From the Performance Audit Report completed by the State of Ohio Auditor in 2021, "...the City should consider reevaluating its water and sewer rates in order to sufficiently cover the full cost of service in future years."<sup>1</sup> The Director of Utilities believes the current revenue streams as well as existing and projected fund balances can sustain the impact of projected expenditures in the near future. It is the current approach of the LUD leadership to maintain the existing rate structure for water and wastewater rates through 2027, at which point, there should be serious

<sup>1</sup> City of Lorain – Performance Audit – July 10, 2021

considerations of making incremental adjustment to both structures to reduce the prospect of deficit spending and to maintain a Fund Balance that can sustain any unforeseen emergencies. It must also be measured that the US EPA and Ohio EPA are continually pressing forward with new environmental regulations and requirements that could usurp any projections and plans in place for the LUD. As evidenced in Table 1, water revenues have remained in a moderate flat to downward trend which in turn makes it more difficult to address the immediate and long-term needs of the aging water infrastructure of the City of Lorain.

## Summary

The LUD strongly considers its fiduciary actions and responsibility an asset to the City of Lorain. By continuing to seek possibly avenues to optimize water and wastewater rate structures, affordability programs, and creative revenue sources (i.e. regionalization, grants, 0% loans, and loans with principal forgiveness), the LUD has been able to achieve a responsible budget while exploring options to decrease fixed and variable costs typically shouldered by the City of Lorain residents. This includes exploring new technologies and methodologies of operating and maintaining vital equipment.

## PROPOSED FY 2024 REVENUE BUDGET

### REVENUE SOURCES SUMMARY

Water Sales Revenues	\$15,116,533
Wastewater Sales Revenues	\$17,784,654
Miscellaneous Revenues & Other Sources	\$545,226
<b>Total of Revenue Sources</b>	<b>\$33,446,413</b>

Table 3 – LUD Revenue Sources

The following chart allows for visualization of the different revenue sources for the LUD.

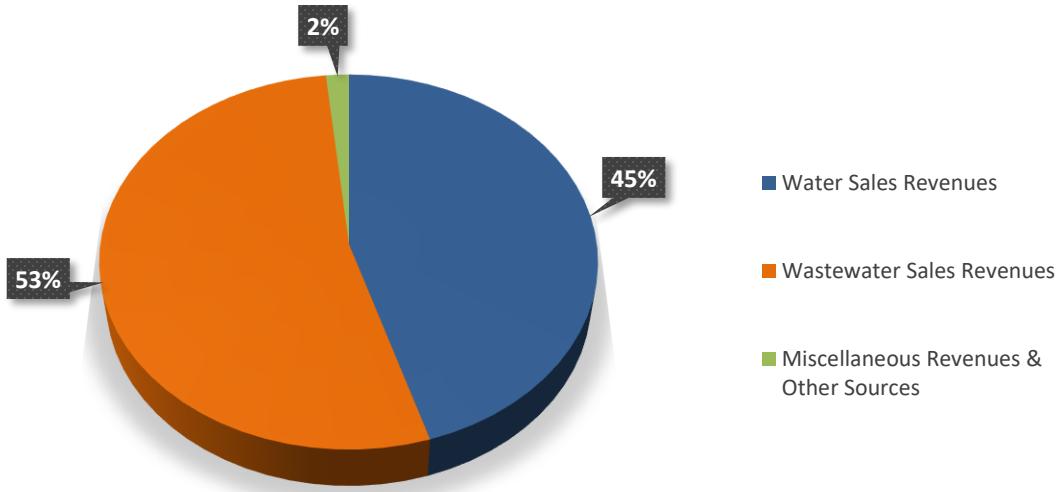


Figure 1 – LUD Revenue Sources

## **Water Revenues**

The projected FY 2024 revenue budget of \$15,495,875 is increasing by 3.7%, from the FY 2023 actual revenue budget of \$14,939,149. These revenues do not include loans or grants that the LUD may receive to complete capital improvement projects.

- ❖ Based on the current water rate block structure for regular customers, there will be no change to water rates charged for service provided per cubic foot of water consumed.
- ❖ Based upon authorization by the Safety/Service Director of the City of Lorain, there will be no changes to the Regulatory Capital Improvement Compliance Charge to water usage customers of the LUD.
- ❖ Based upon available data, the LUD maintains an Affordability Index of 2.16% for total water sales charge based on 100 cubic feet consumed.

The following graph depicts past actual water sales revenues (minus loans/grants) as well as projected water sales revenues for FY 2024.

### **Water Fund Revenues**

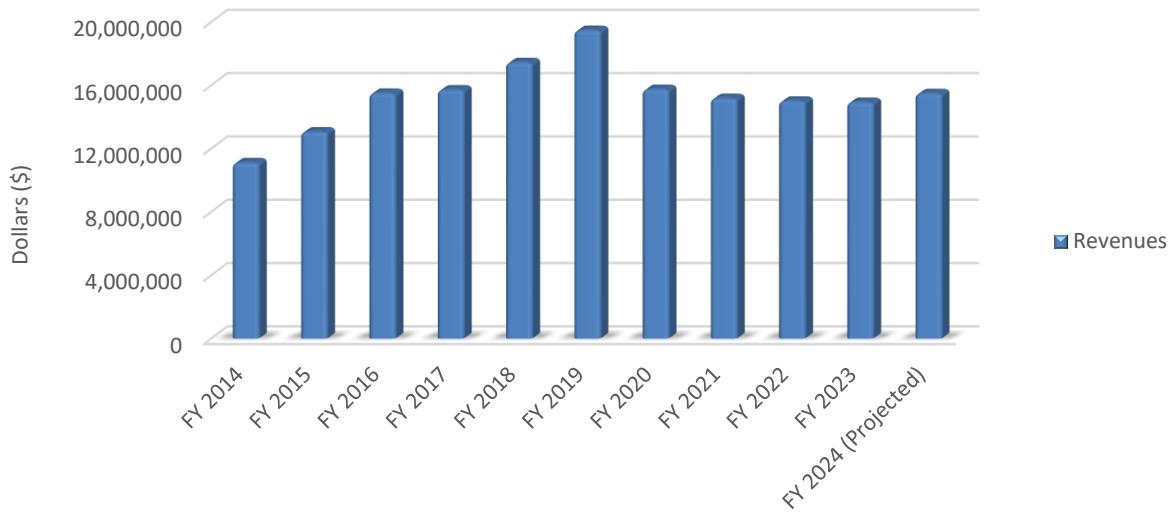


Figure 2 – Fiscal Year Water Revenue Comparison

## **Wastewater Revenues**

The proposed FY 2024 revenue budget of \$18,133,480 is increasing by 6.4%, from the FY 2023 actual revenue budget of \$17,045,389. These revenues do not include loans or grants that the LUD may receive to complete capital improvement projects.

- ❖ Based upon the current revenues and rate structure, there will be no increase to the sewer rental charge or fixed Regulatory Compliance Charge for wastewater treatment services.

- ❖ Based upon available data, the LUD maintains an Affordability Index of 2.39% for total wastewater charges based on 100 cubic feet consumed.

The following graph depicts past actual wastewater charges revenues (minus loans/grants) as well as projected wastewater charges revenues for FY 2024.

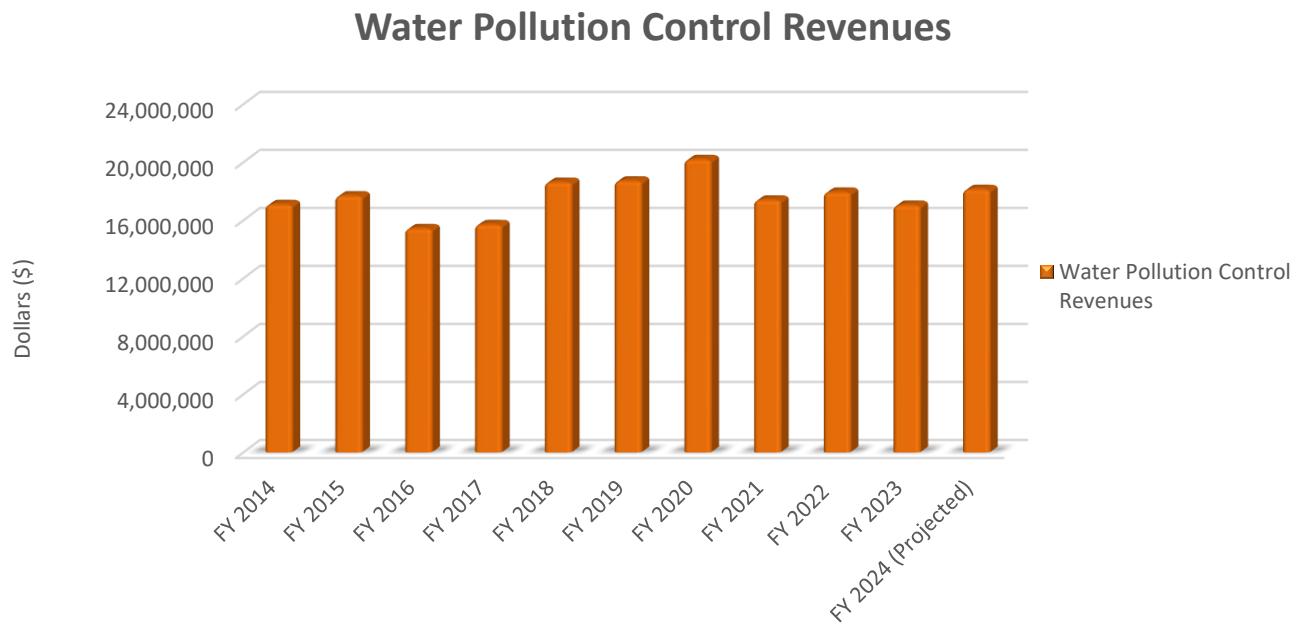


Figure 3 – Fiscal Year Wastewater Revenue Comparison

## **PROPOSED FY 2024 EXPENDITURE BUDGET**

The proposed FY 2024 expenditure budget is prepared annually in unison with the mission and strategic direction of the City of Lorain Utilities Department.

The proposed expenditure budget for FY 2024 provides operating and maintenance expenditures that will allow the Utilities Department to continue their mission to provide clean water and wastewater treatment services to the over twenty-five thousand plus customers of the LUD. These expenditures involve preventative maintenance measures such as repair of hydrants, valves, mainline sewers, pumps, controls, and equipment, debt service payments for capital improvement projects, and personnel to operate at peak functional capacity throughout the LUD. The LUD strives to foster a culture within the department to proactively evaluate operations, while continuing to make necessary changes to improve service efficiency and effectiveness. In 2023, this involved the implementation of Asset Management Software (AMS) that can provide an electronic database for work conducted throughout the respective infrastructure systems within the City of Lorain. The following FY 2024 budget expenditures have been thoroughly evaluated by the LUD to ensure the continued ability to provide quality service to its citizens and customers while exhibiting sound financial fortitude.

## Projecting Expenditures

### **Methodology**

Water and wastewater expense projections are derived from analyzing previous years' expenditures, sub-department immediate and long-term needs, anticipation of large-scale Capital Improvement Projects, debt service, requested personnel expenses, and inflation anticipated on materials and services. The following tables provide insight into historical budget-to-actual relationships, while all taking into account the removal of loans/grants. These amounts are removed as they can sometimes skew numbers and projections.

<b>Water Works Comparison</b>				
<b>Fiscal Year</b>	<b>Budgeted</b>	<b>Actual</b>	<b>Variance</b>	<b>Percent Variance</b>
2014	\$ 11,795,661	\$ 11,077,409	(\$ 718,252)	(6.09%)
2015	\$ 12,978,709	\$ 11,780,890	(\$ 1,197,819)	(9.23%)
2016	\$ 14,424,006	\$ 12,279,663	(\$ 2,144,343)	(14.9%)
2017	\$ 14,315,665	\$ 12,263,248	(\$ 2,052,417)	(14.3%)
2018	\$ 15,191,305	\$ 12,675,016	(\$ 2,516,289)	(16.6%)
2019	\$ 16,747,209	\$ 13,311,968	(\$ 3,435,241)	(20.5%)
2020	\$ 15,484,992	\$ 14,190,212	(\$ 1,294,780)	(8.36%)
2021	\$ 17,856,257	\$ 15,207,057	(\$ 2,649,200)	(14.8%)
2022	\$ 17,364,535	\$ 14,710,184	(\$ 2,654,351)	(15.3%)
2023	\$ 18,137,883	\$ 14,492,829	(\$ 3,645,054)	(20.1%)
2024	<i>\$ 18,541,696</i>	<i>\$ 16,199,179</i>	(\$ 2,342,517)	(12.6%)

Table 4 – Water Works Expenses (Italicized #'s are Projections)

<b>Water Pollution Control Comparison</b>				
<b>Fiscal Year</b>	<b>Budgeted</b>	<b>Actual</b>	<b>Variance</b>	<b>Percent Variance</b>
2014	\$ 15,007,971	\$ 13,099,973	(\$ 1,907,998)	(12.7%)
2015	\$ 14,252,130	\$ 12,802,091	(\$ 1,450,039)	(10.2%)
2016	\$ 18,069,812	\$ 16,174,561	(\$ 1,895,251)	(10.5%)
2017	\$ 18,111,633	\$ 15,965,467	(\$ 2,146,166)	(11.8%)
2018	\$ 21,235,506	\$ 18,219,635	(\$ 3,015,871)	(14.2%)
2019	\$ 22,770,544	\$ 18,137,275	(\$ 4,633,269)	(20.3%)
2020	\$ 21,532,052	\$ 19,462,352	(\$ 2,069,700)	(9.61%)
2021	\$ 22,985,779	\$ 20,247,454	(\$ 2,738,325)	(11.9%)
2022	\$ 30,766,067	\$ 18,799,626	(\$ 11,966,441)	(38.9%)
2023	\$ 23,688,200	\$ 19,484,106	(\$ 4,204,094)	(17.7%)
2024	<i>\$ 22,994,668</i>	<i>\$ 19,728,153</i>	(\$ 3,266,515)	(14.2%)

Table 5 – Water Pollution Control Expenses (Italicized #'s are Projections)

The FY 2024 proposed expenditure budget of \$41,536,364 is a 1.9% decrease compared to the FY 2023 actual expenditure budget of \$42,330,326. The categories comprising the proposed/requested FY 2024 expense budget are presented in the following table. All amounts represented are the requested expenditures that have been submitted to Lorain City Council for final approval.

## BUDGETED EXPENDITURE SUMMARY

Engineering Services (25% - LUD Portion)	\$269,631
General Administration	\$4,020,312
- Utilities (Electric, Gas, Cable)	\$1,605,000
Accounting Services	\$2,351,374
Plant Operations (Black River WWTP)	\$4,544,142
Distribution Maintenance	\$4,204,462
PQM Wastewater Treatment Plant	\$1,599,138
Maintenance of System (Sewer Department)	\$4,644,915
Water Purification Operations (Water Plant)	\$4,766,945
Water Works Debt Service	\$5,890,300
Water Pollution Control Debt Service	\$7,741,254
<b>Total Proposed Expenditures</b>	<b>\$41,536,364</b>

Table 6 – LUD Proposed Expenditure Division Allocations

The following chart allows for visualization of the different expenditure allocations for the LUD.

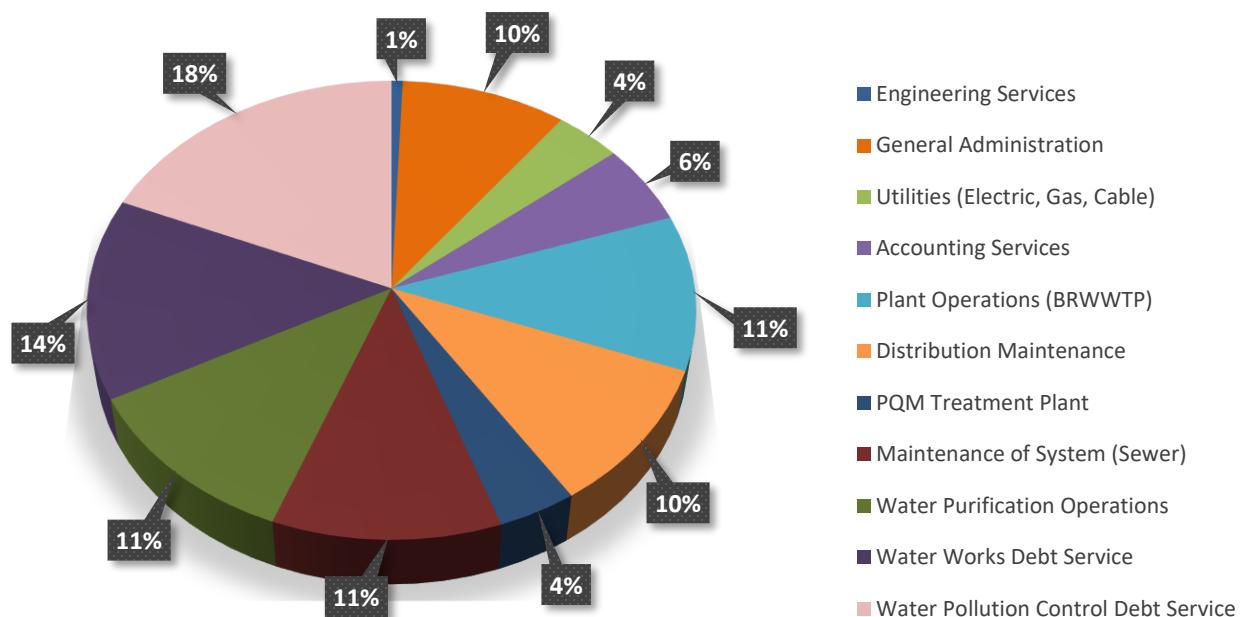


Figure 4 – LUD Expenditure Allocations

### Engineering Services

This accounts for the portion of the City of Lorain Engineering Department that is supported by the LUD, which is approximately 25% per fund. Services such as inspections of water and wastewater installations/repairs, GIS, surveying, and additional support actions are accounted for. Costs are split

between the Water Works and Water Pollution Control Funds. For FY 2024, the Utilities Department portion of the expenditure budget is proposed at \$269,631; an increase of 22.8% from the actual FY 2023 budget of \$219,487.57.

The projected FY 2024 expenditures to impact the Utilities Department are \$210,545.75, which would account for a decrease of 4.1% from the actual FY 2023 expenditures. This projection was calculated from years past actual expenditures and ratios as determined by the Utilities Department, through analysis of spending trends.

### **General Administration**

This accounts for all LUD utility/energy expenditures (i.e. electric, gas, telephone, etc.) in the Water Works and Water Pollution Control Funds as well as training costs for employees, capital outlay, and general administrative functions to operate the LUD. Costs are split between the Water Works and Water Pollution Control Funds. For FY 2024, the total expenditure budget including utilities is proposed at \$5,625,312; an increase of 34.3% from the actual FY 2023 budget of \$4,187,157. This large increase accounts for certain capital outlay expenditures that have consolidated into the General Administration budget for purchasing simplicity.

The projected FY 2024 expenditures are \$5,227,041, which would account for an increase of 24.8% from the actual FY 2023 expenditures. This projection was calculated from years past actual expenditures and ratios as determined by the Utilities Department, through analysis of spending trends. The increase takes into account certain expenditures that were funneled into the General Administration Budget for Capital Outlay purchases such as vehicles and large equipment that were historically within the sub-departments budgets.

### **Accounting Services**

This accounts for all LUD meter and billing office expenditures for operational needs. Expenditures include but are not limited to: meters, equipment, electronic equipment, postage, and software. Costs are split between the Water Works and Water Pollution Control Funds. For FY 2024, the total expenditure budget is proposed at \$2,351,374; an increase of 21.8% from the actual FY 2023 budget of \$1,929,569.

The projected FY 2024 expenditures are \$2,056,037, which would account for an increase of 6.2% from the actual FY 2023 expenditures. This projection was calculated from years past actual expenditures and ratios as determined by the Utilities Department, through analysis of spending trends. The increase takes into account the cost of services to implement the multiple software and programs necessary to produce utility bills and collect revenues for the Utilities Department as well as materials to meter water usage.

### **Plant Operations (BRWWTP)**

This accounts for all expenditures to ensure efficient and effective treatment of wastewater at the Black River WWTP. Operational and maintenance needs are addressed from this portion of the Water Pollution Control Fund. Costs associated with all of the City of Lorain's pump stations to transport wastewater from various areas of the City and County and operation of the Black River Storage Tunnel are accounted for here as well. For FY 2024, the total expenditure budget is proposed at \$4,544,142; an increase of 26.9% from the actual FY 2023 budget of \$3,578,848.

The projected FY 2024 expenditures are \$3,356,352, which would account for a decrease of 6.2% from the actual FY 2023 expenditures. This projection was calculated from years past actual expenditures and ratios as determined by the Utilities Department, through analysis of spending trends.

### **Distribution Maintenance**

This accounts for all expenditures associated with the operations and maintenance of the water distribution system. These costs are to ensure safe and potable water is continually transported to customers of the City of Lorain for drinking water purposes. These costs include but are not limited to: location services, emergency repairs, valve turning, asset management, and pavement restoration. For FY 2024, the total expenditure budget is proposed at \$4,204,462; an increase of 19.6% from the actual FY 2023 budget of \$3,516,100.

The projected FY 2024 expenditures are \$3,130,570, which would account for a decrease of 10.9% from the actual FY 2023 expenditures. This projection was calculated from years past actual expenditures and ratios as determined by the Utilities Department, through analysis of spending trends.

### **PQM Wastewater Treatment Plant**

This accounts for all expenditures to ensure the efficient and effective treatment of wastewater at the Philip Q. Maoriania (PQM) WWTP. Operational and maintenance needs are addressed from this portion of the Water Pollution Control Fund. Costs associated with pump stations tributary to the PQM WWTP are not expensed from this account. For FY 2024, the total expenditure budget is proposed at \$1,599,138; an increase of 12.8% from the actual FY 2023 budget of \$1,417,281.

The projected FY 2024 expenditures are \$1,278,507, which would account for a decrease 9.8% from the actual FY 2023 expenditures. This projection was calculated from years past actual expenditures and ratios as determined by the Utilities Department, through analysis of spending trends.

### **Maintenance of System (Sewer Dept.)**

This accounts for all expenditures associated with the operation and maintenance of the sanitary and storm sewer collection system. These costs are to ensure the sewerage system is operating as designed and to reduce the number of potential backups for City of Lorain residents. These costs include but are not limited to: emergency repairs, cleaning of pipes, inspections, ditching, and catch basin repairs. For FY 2024, the total expenditure budget is proposed at \$4,644,915; an increase of 13.1% from the actual FY 2023 budget of \$4,107,476.

The projected FY 2024 expenditures are \$3,205,727, which would account for a decrease of 22% from the actual FY 2023 expenditures. This projection was calculated from years past actual expenditures and ratios as determined by the Utilities Department, through analysis of spending trends.

### **Water Purification Operations (Water Plant)**

This accounts for all expenditures to ensure efficient and effective treatment of water from Lake Erie to deliver safe, potable water to all customers of the City of Lorain. Operational and maintenance needs are addressed from this portion of the Water Works Fund. Costs associated with all City of Lorain elevated storage tanks, reservoirs, and pump stations are accounted for here. For FY 2024, the total

expenditure budget is proposed at \$4,766,945; an increase of 48.3% from the actual FY 2023 budget of \$3,214,659.

The projected FY 2024 expenditures are \$3,804,000, which would account for an increase of 18.3% from the actual FY 2023 expenditures. This projection was calculated from years past actual expenditures and ratios as determined by the Utilities Department, through analysis of spending trends. The increase takes into account the need to continually keep the aging plant functional and in compliance with regulatory agencies as well as maintaining a healthy and safe drinking water supply. The longer the existing plant remains operational, the more costly the repairs will be come and negatively impact the Water Works Fund.

### **Water Works Debt Service**

This accounts for expenditures associated with the repayment of loans for water projects and leases for equipment/vehicles. For FY 2024, the total expenditure budget is proposed at \$5,890,300; an increase of 28.3% from the actual FY 2023 expensed budget of \$4,591,000. This increase is accounted for through the need to replace aging infrastructure and replacement of lead service lines as mandated by the EPA.

### **Water Pollution Debt Service**

This accounts for expenditures associated with the repayment of loans for wastewater projects and leases for equipment/vehicles. For FY 2024, the total expenditure budget is proposed at \$7,741,254; an increase of 17.6% from the actual FY 2023 expensed budget of \$6,585,357. This increase is accounted for through Capital Projects mandated under the Consent Decree, aging equipment in need of repair to maintain regulatory compliance, and the capital lease of vehicles and equipment.

## **Debt Service as a Result of Loans for Capital Improvements**

Historically, the City of Lorain Utilities Department has applied for and received funds from the Ohio Water Development Authority (OWDA) and the Ohio EPAs Department of Environmental & Financial Assistance (DEFA). These funds are made available by the State of Ohio to allow owners and operators of utility infrastructure to make improvements as a benefit to the public without having to immediately repay the cost of planning, design, and/or construction. Funds are dispersed as a long-term (5-40 yrs) low interest loan through what is known as the State Revolving Loan Fund (SRF); either the Water Pollution Control Loan Fund (WPCLF) or the Water Supply Revolving Loan Account (WSRLA). Please refer to Table 7 for an overview of the current Debt Service of the LUD as of the 1<sup>st</sup> Quarter FY 2024.

<b>Water Works Fund</b>	
2024 Annual Debt Service	\$ 5,436,882
2024 Number of Current Open Loans	29
2024 New Loans to Be Requested/Awarded	2
Total Estimated Amount of Outstanding Debt Service 2024 - 2040	\$ 74,053,674
<b>Water Pollution Control Fund</b>	
2024 Annual Debt Service	\$ 6,947,090
2024 Number of Current Open Loans	14
2024 New Loans to Be Requested/Awarded	3
Total Estimated Amount of Outstanding Debt Service 2024 - 2040	\$ 89,752,735

Table 7 – LUD Debt Service Breakdown

## **Department Analytics**

The City of Lorain Utilities Department incorporates analytical data tracking to monitor year-over-year expenditures for the four (4) largest measurable costs associated with operations of the LUD. The four (4) categories are: 1) Personnel Expenses; 2) Operation & Maintenance (O&M) Expenses; 3) Debt Service; and 4) Energy (Electricity, Gas, Telephone) Expenses. All expenditures are taken from Actual Annual Expenditures from “look-backs” at previous years of the LUD. For FY 2023, expenditures are as current to the Budget Performance Report for FY 2023 minus encumbered funds not yet expensed. For FY 2024, numbers presented are from internal projections of the LUD. The following tables and figures will provide a visualization of the performance of the LUD in these four (4) major categories.

Utilities Department Totals						
Year	Personnel	O&M	Debt Service	Energy	Total	Yr-Yr Change
2014	\$ 8,925,058	\$ 5,814,844	\$ 6,777,686	\$ 1,228,643	\$22,746,231	-
2015	\$ 9,516,463	\$ 5,680,254	\$ 7,638,511	\$ 1,345,249	\$24,180,477	6%
2016	\$ 9,792,901	\$ 5,283,922	\$12,564,664	\$ 1,137,685	\$28,779,172	19%
2017	\$ 9,860,315	\$ 4,672,333	\$12,274,013	\$ 1,165,887	\$27,972,549	(3%)
2018	\$ 9,973,972	\$ 7,379,064	\$11,687,172	\$ 1,346,779	\$30,386,981	9%
2019	\$10,620,327	\$ 6,723,389	\$12,544,997	\$ 1,293,025	\$31,181,738	3%
2020	\$10,324,564	\$ 9,312,091	\$12,673,510	\$ 1,199,703	\$33,509,867	7%
2021	\$11,701,990	\$10,972,342	\$11,934,855	\$ 1,157,626	\$35,766,814	7%
2022	\$11,859,899	\$9,585,761	\$11,062,556	\$ 1,171,693	\$33,679,909	(5%)
2023	\$11,984,841	\$8,308,155	\$11,176,358	\$ 1,122,765	\$32,592,119	(3%)

Table 8 – LUD Analytics Comparison

Water Works						
Year	Personnel	O&M	Debt Service	Energy	Total	Yr-Yr Change
2014	\$ 4,169,311	\$ 1,987,715	\$ 3,316,537	\$ 506,570	\$ 9,980,133	-
2015	\$ 4,457,730	\$ 2,140,787	\$ 4,296,155	\$ 576,617	\$11,471,289	15%
2016	\$ 4,617,217	\$ 2,223,874	\$ 4,738,284	\$ 443,021	\$12,022,395	5%
2017	\$ 4,718,025	\$ 2,250,423	\$ 4,583,795	\$ 461,144	\$12,013,387	0%
2018	\$ 4,692,861	\$ 2,866,667	\$ 4,020,843	\$ 510,252	\$12,090,622	1%
2019	\$ 4,689,794	\$ 2,974,720	\$ 4,826,296	\$ 486,793	\$12,977,602	7%
2020	\$ 4,537,301	\$ 4,009,666	\$ 4,964,700	\$ 441,154	\$13,952,820	8%
2021	\$ 5,237,762	\$ 4,990,007	\$ 4,818,780	\$ 418,890	\$15,465,439	11%
2022	\$ 5,250,140	\$ 4,788,239	\$ 4,171,007	\$ 416,599	\$14,625,985	(3%)
2023	\$ 5,307,756	\$ 4,084,278	\$ 4,591,000	\$ 420,223	\$14,403,258	(2%)

Table 9 – LUD Water Works Analytics Comparison

Water Pollution Control						
Year	Personnel	O&M	Debt Service	Energy	Total	Yr-Yr Change
2014	\$ 4,755,747	\$ 3,827,129	\$ 3,461,148	\$ 722,073	\$12,766,097	-
2015	\$ 5,058,733	\$ 3,539,467	\$ 3,342,356	\$ 768,632	\$12,709,188	0%
2016	\$ 5,175,685	\$ 3,060,049	\$ 7,826,380	\$ 694,664	\$16,756,777	32%
2017	\$ 5,142,290	\$ 2,421,910	\$ 7,690,218	\$ 704,743	\$15,959,161	(5%)
2018	\$ 5,281,112	\$ 4,512,397	\$ 7,666,329	\$ 836,527	\$18,296,365	15%
2019	\$ 5,930,534	\$ 3,748,669	\$ 7,718,701	\$ 806,232	\$18,204,135	(1%)
2020	\$ 5,787,263	\$ 5,302,425	\$ 7,708,810	\$ 758,549	\$19,557,047	7%
2021	\$ 6,464,228	\$ 5,982,336	\$ 7,116,075	\$ 738,736	\$20,320,375	4%
2022	\$ 6,609,759	\$ 4,797,522	\$ 6,891,550	\$ 755,094	\$19,053,925	(6%)
2023	\$ 6,677,085	\$ 4,223,876	\$ 6,585,358	\$ 702,542	\$18,188,861	(5%)

Table 10 – LUD Water Pollution Control Analytics Comparison

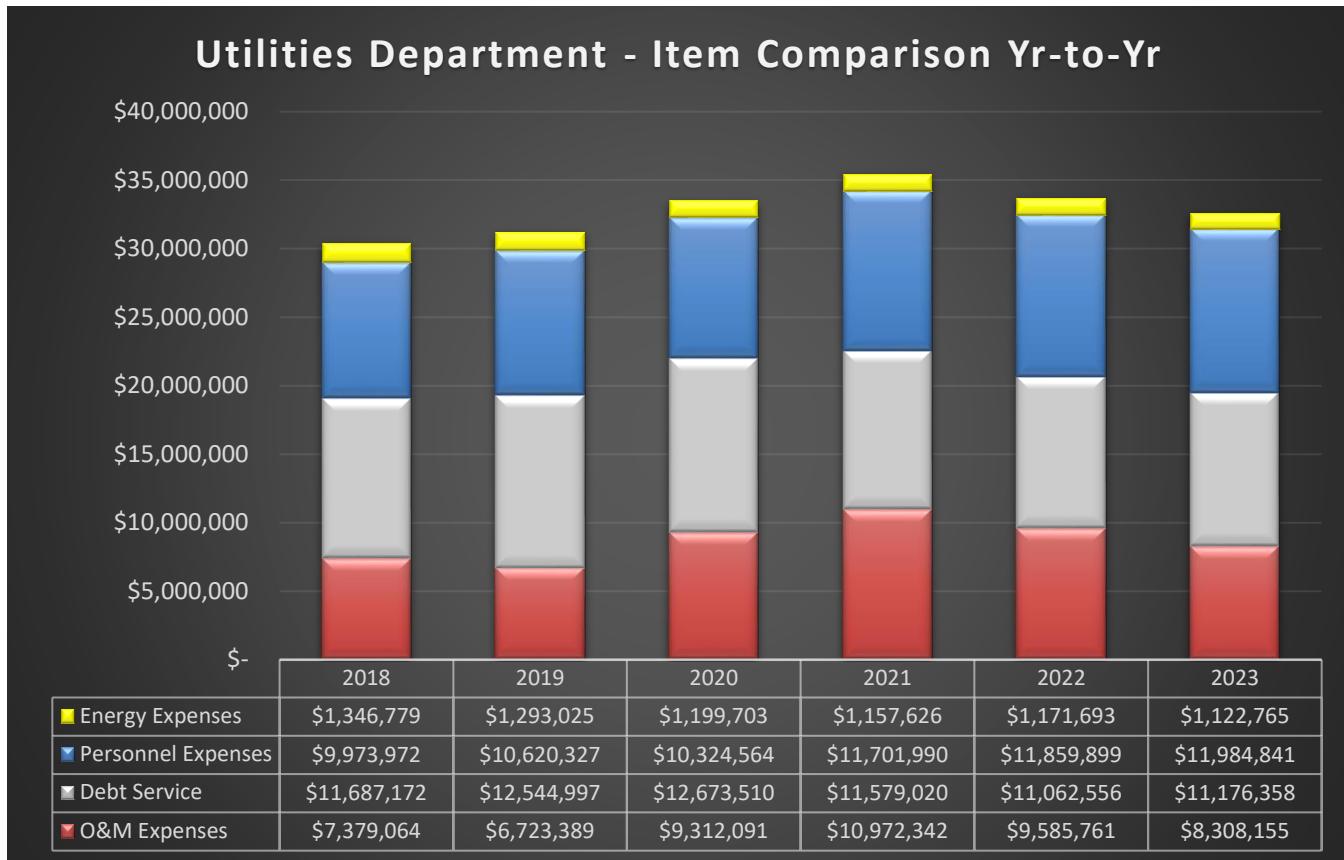


Figure 5 – Bar Chart of LUD Analytics Comparison

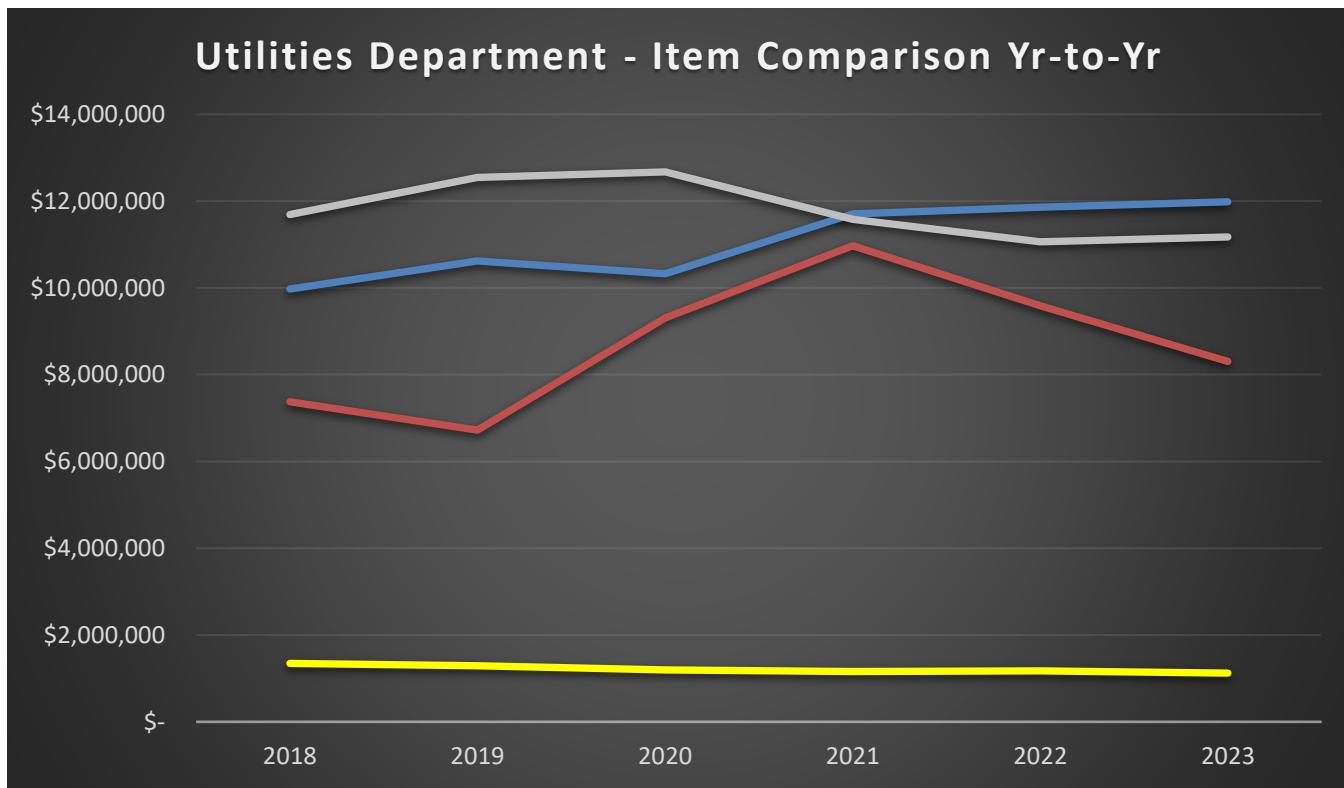


Figure 6 – Line Chart of LUD Analytics Comparison

## **Conclusion**

The City of Lorain Utilities Department believes in sound financial decision making to ensure that the revenues collected for water and wastewater services are utilized in the best interest of the general public (i.e. rate payers & customers). These decisions are made to determine not only immediate needs and actions to regulatory compliance but longer term outlook that will result in positive returns for the City of Lorain. Consequentially, immediate needs are paid for with a combination of budgetary funds and long term loans supplied by the Ohio EPA and OWDA. In limited occurrences, the Utilities Department has received loans with principal forgiveness and grants that have been approved due to the projects associated with these funding mechanisms addressing human health concerns.

Throughout these financial processes, there remains one constant, and that is the City of Lorain Utilities Department maintaining a fiscal responsibility to the general public. With this mindset as a core foundation, all expenditures are thoroughly reviewed prior to being finalized by the leadership of the LUD. This is conducted to warrant that any future rate increases on either or both the water and wastewater funds are done so with the utmost necessity to continue serving the best interests of the general public.

# Appendix A: Projected/Active Capital Improvement Projects for FY 2024

Capital Improvement Project	Type of Project	Estimated Cost	Reason	Funding
<b>Martin's Run Pump Station Replacement - Construction</b>	Wastewater Pump Station	\$7,500,000	- Failing equipment - SSO Elimination - Starting Summer 2024	25% Loan/ 75% Grant
<b>Lead Service Line Replacement – Phase 2</b>	Water Mains	\$5,000,000	- Removal of Lead Water Service Lines - On-Going	53% PF Loan/ 47% WSRLA 0% Loan
<b>Water Plant - Design</b>	Water Plant	\$4,250,000	- Failing Infrastructure - OEPA Violations - Water Quality Improvement - On-Going	WSRLA Loan
<b>Year 6 – Sewer Lining Program</b>	Sanitary Sewer	\$2,000,000	- EPA Mandate - Starting April 2024	Budget
<b>Jaeger Road Pump Station - Design</b>	Wastewater Pump Station	\$750,000	- Failing Infrastructure - On-Going	WPCLF 0% Loan
<b>Black River Digester Improvements - Construction</b>	WWTP/Energy	\$8,500,000	- Failing Equipment - Energy Efficiency - Cost Savings - On-Going	WPCLF Loan
<b>Year 2 – Water Main Replacement - Design</b>	Water Mains	\$750,000	- Improve Infrastructure - Water Quality - On-Going	WSRLA 0% Loan
<b>PQM Plant &amp; Generator Improvements Project - Construction</b>	WWTP	\$10,000,000	- Failing Equipment - OEPA Violations - Starting Summer 2024	WPCLF Loan
<b>Pearl &amp; Tacoma Pump Station Improvements - Design</b>	Wastewater Pump Station	\$1,150,000	- EPA Mandate - Failing Infrastructure - On-Going	WPCLF 0% Loan

Table 11 – LUD FY 2024 Projected/Active Capital Improvement Projects

# **Appendix B:**

## **Top Rated Expenditures Requested by LUD**

### **for FY 2024**

Requested Expenditure	Fund	Requested Cost	Reason
System Repairs & Upgrades (Valves, Mains, Etc.)	Water Works – Distribution Maintenance	\$400,000	- Critical Infrastructure - Age & Condition
Chemical Supplies - Purification	Water Works – Purification Operations	\$845,190	- Necessary chemicals to meet OEPA regulations for water purification
GAC Caps on Filters	Water Works – Purification Operations	\$250,000	- Critical Infrastructure - Maintain efficiency & water quality
Sludge Hauling	Water Pollution Control – Plant Operations (BRWWTP)	\$476,963	- Necessary to land apply and landfill sludge
Chemical Supplies - BRWWTP	Water Pollution Control – Plant Operations (BRWWTP)	\$302,902	- Necessary chemicals to meet OEPA regulations for wastewater treatment
Vehicles for Multiple Departments	Various Departments	\$355,000	- Replace obsolete equipment - Reduce costs
Pre-Aeration & aeration Equipment/Upgrades	Water Pollution Control – Plant Operations (BRWWTP)	\$300,000	- Necessary to upgrade due to age & use
Billing/Meter – Meters	Water Works – Accounting	550,000	- Preventative Maintenance - Critical Infrastructure - Age & Condition
Chemical Supplies – PQM WWTP	Water Pollution Control – PQM Treatment Plant	\$169,680	- Necessary chemicals to meet OEPA regulations for wastewater treatment
Sewer Lining – per EPA Requirements (Year 6)	Water Pollution Control – Maintenance of System	\$2,000,000	- Required work to meet EPA Consent Decree

Table 12 – LUD FY 2024 Top Expenditures

# Appendix C:

## Water Works & Water Pollution Control

### Year End Operating Account Balances

Water Works Year End Operating Account Balances (Millions)													
2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
\$21.8	\$23.9	\$24.2	\$23.7	\$22.9	\$23.2	\$22.8	\$17.0	\$11.3	\$6.1	\$1.0	(\$3.8)	(\$8.6)	(\$13.4)

Table 13 – LUD Water Works Projected Year End Operating Account w/ No Changes to Water Usage Rate or Fixed Fee

Water Works Year End Operating Account Balances (Millions)													
2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
\$21.8	\$23.9	\$24.2	\$23.7	\$22.9	\$23.2	\$22.8	\$17.6	\$13.2	\$9.5	\$6.1	\$3.2	\$0.6	(\$1.8)

Table 14 – LUD Water Works Projected Year End Operating Account w/ Water Usage Rate Increase and Increased Fixed Fee

Water Pollution Control Year End Operating Account Balances (Millions)													
2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
\$17.2	\$18.4	\$15.7	\$15.0	\$13.4	\$13.5	\$13.4	\$12.6	\$11.9	\$13.1	\$14.1	\$15.2	\$16.3	\$17.4

Table 15 – LUD Water Pollution Control Projected Year End Operating Account w/ No Changes to Sewer Usage Rate or Fixed Fee

Water Pollution Control Year End Operating Account Balances (Millions)													
2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
\$17.2	\$18.4	\$15.7	\$15.0	\$13.4	\$13.5	\$13.6	\$13.0	\$12.6	\$14.2	\$15.8	\$17.5	\$19.3	\$21.0

Table 16 –LUD Water Pollution Control Projected Year End Operating Account w/ Sewer Usage Rate Increase and \$9.25 Fixed Fee

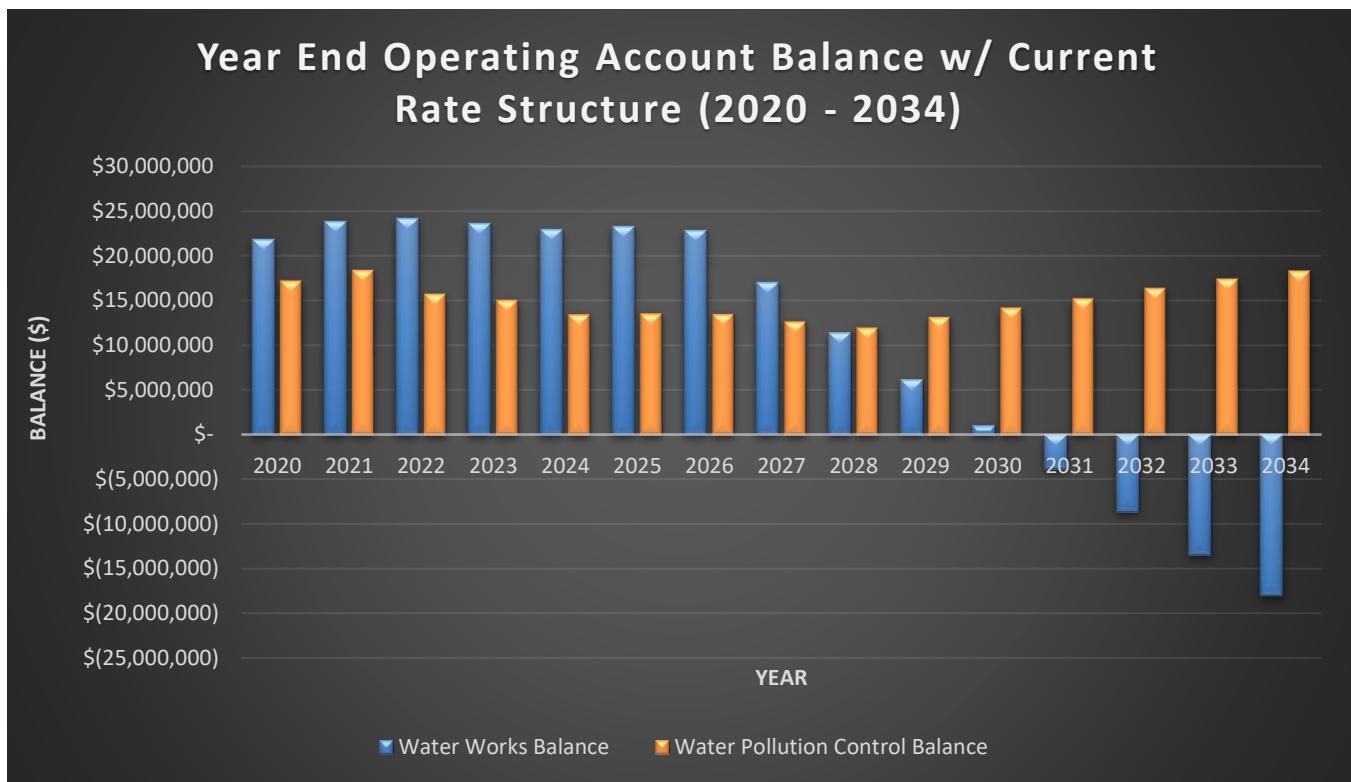


Figure 7 – LUD Year End Operating Account Balances w/ No Rate Changes

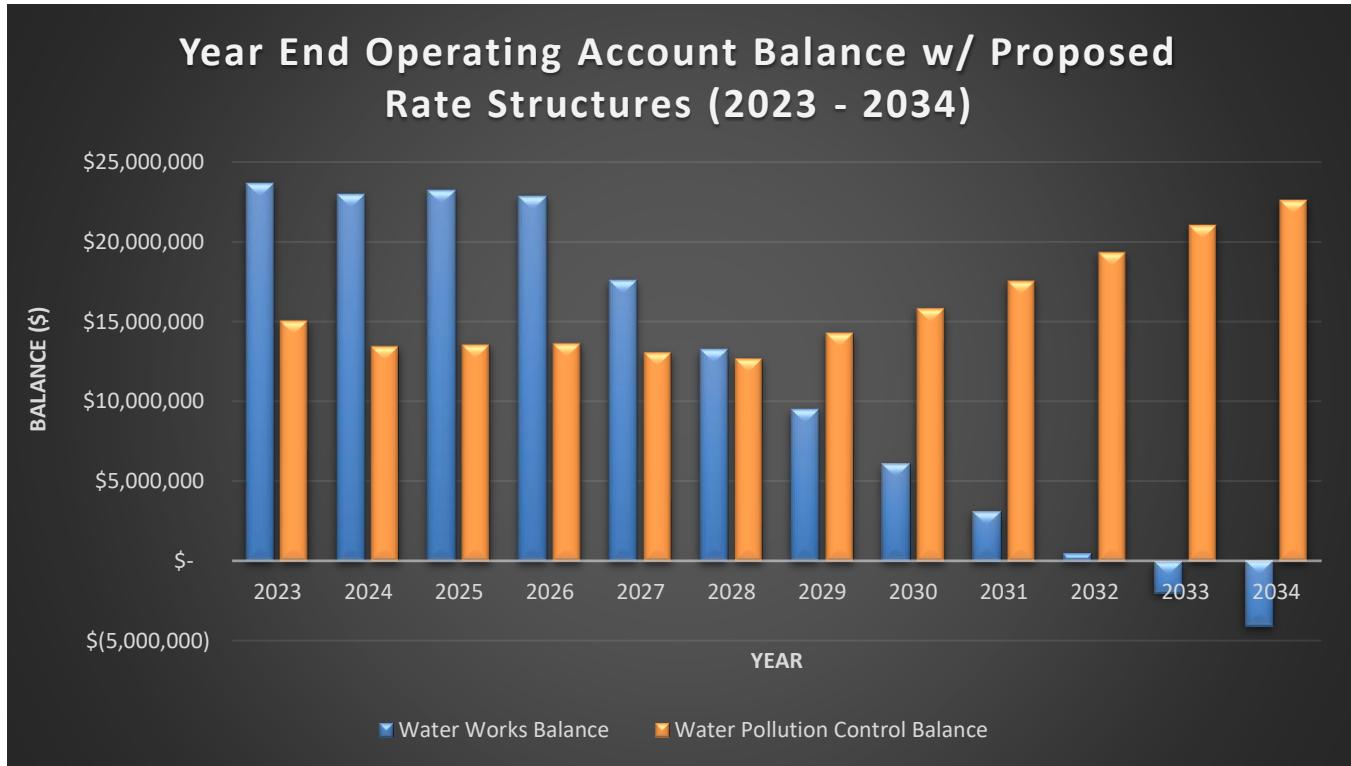


Figure 8 – LUD Year End Operating Account Balances w/ Rate Changes