



LEHIGH COUNTY AUTHORITY

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Agendas & Minutes Posted:
www.lehighcountyauthority.org

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BOARD MEETING AGENDA – October 26, 2020 – 12:00 p.m.

Notice of COVID-19 Pandemic Meeting Format: Effective March 23, 2020 and until further notice, meetings of the LCA Board of Directors will be held virtually using the Zoom Meetings application, to avoid risk of infection during the national COVID-19 pandemic emergency. Public participation is welcomed via Zoom, and instructions for joining the meeting online or by phone are posted on the LCA website in the morning on the day of the meeting, prior to the start of each meeting. You may also issue comment to LCA via email to LCABoard@lehighcountyauthority.org in advance of any meeting, or view the meeting at a later time by visiting the LCA website. Please visit <https://www.lehighcountyauthority.org/about/lca-board-meeting-videos/> for specific instructions to join the meeting.

1. Call to Order

• NOTICE OF MEETING RECORDINGS

Meetings of Lehigh County Authority's Board of Directors that are held at LCA's Main Office at 1053 Spruce Road, Wescosville, PA, may be recorded for viewing online at lehighcountauthority.org. Recordings of LCA meetings are for public convenience and internal use only and are not considered as minutes for the meeting being recorded, nor are they part of public record. Recordings may be retained or destroyed at LCA's discretion.

• *Public Participation Sign-In Request*

2. Review of Agenda / Executive Sessions

3. Approval of Minutes

• *October 12, 2020 Board meeting minutes*

4. Public Comments

5. Action / Discussion Items:

FINANCE AND ADMINISTRATION

- *2021 Budget Approval (Approval) (white)*
- *LCA Pension Plan – Mandatory Municipal Obligation (Information) (tan)*

WATER

- *Allentown Division – 36" DI Water Main Condition Assessment (Approval) (yellow)*
- *Allentown Division – Resolution No. 10-2020-1 – PENNVEST Application – WFP High Service Pump VFD Project (Approval) (blue)*

WASTEWATER

6. Monthly Project Updates / Information Items (1st Board meeting per month)
7. Monthly Financial Review (2nd Board meeting per month) – **September report to be distributed under separate cover**
8. Monthly System Operations Overview (2nd Board meeting per month) – **September report attached**
9. Staff Comments
10. Solicitor's Comments
11. Public Comments / Other Comments
12. Executive Sessions

13. Adjournment

UPCOMING BOARD MEETINGS		
November 9, 2020	November 23, 2020	December 14, 2020

PUBLIC PARTICIPATION POLICY

In accordance with Authority policy, members of the public shall record their name, address, and discussion item on the sign-in sheet at the start of each meeting; this information shall also be stated when addressing the meeting. During the Public Comment portions of the meeting, members of the public will be allowed 5 minutes to make comments/ask questions regarding non-agenda items, but time may be extended at the discretion of the Chair; comments/questions regarding agenda items may be addressed after the presentation of the agenda item. Members of the public may not request that specific items or language be included in the meeting minutes.

REGULAR MEETING MINUTES

October 12, 2020

The Regular Meeting of the Lehigh County Authority Board of Directors was called to order at 12:02 p.m. on Monday, October 12, 2020, Chairman Brian Nagle presiding. The meeting was held via video and audio advanced communication technology ("ACT"), using the Zoom internet application, due to the COVID-19 pandemic emergency. Each Board member and other attendees of the meeting were able to hear each other attendee and be heard by each other attendee. The public could also participate in the meeting via ACT, using the Zoom internet application. A Roll Call of Board members present was taken. Chairman Brian Nagle, Scott Bieber, Richard Bohner, Norma Cusick, Ted Lyons, Kevin Baker, Linda Rosenfeld, Jeff Morgan, and Amir Famili were present for the duration of the meeting.

Solicitor Michael Gaul of KingSpry was present along with Authority Staff, Liesel Gross, Ed Klein, John Parsons, Chris Moughan, Chuck Volk, Andrew Moore, Phil DePoe, Susan Sampson and Todd Marion.

REVIEW OF AGENDA

Chairman Nagle announced that the Board received their packet in advance of the meeting and received a revised copy of the WLI User Charge Report via email later in the week.

Liesel Gross stated there are no changes to the agenda; however, there will be an item to review under the Staff Comments portion of the meeting. There are no topics for Executive Session.

APPROVAL OF MINUTES

September 28, 2020 Meeting Minutes

Richard Bohner presented minor corrections to the September 28, 2020 minutes. On a motion by Richard Bohner, seconded by Norma Cusick, the Board approved the minutes of the September 28, 2020 Board meeting as corrected (7-0). Scott Bieber and Linda Rosenfeld abstained.

PUBLIC COMMENTS

None.

ACTION AND DISCUSSION ITEMS

2021 Preliminary Budget Review (Discussion)

Liesel Gross reviewed the budget development timeline. Today is the Board's third review of the 2021 Budget. Discussion will focus on the changes to the budget figures since the Board's last meeting in September, along with a review of proposed rates for the Suburban Water Division. Today's presentation was sent to the Board in advance of the meeting, and posted on the Authority's website for public viewing.

Ed Klein gave a PowerPoint presentation, which reviewed the changes to the 2021 Preliminary Budget since the last presentation in September. He reviewed the budget summary including expected outcomes related to net income, cash flows, capital spending, debt service coverage ratios and operating days cash on hand.

Amir Famili noted the 2020 Budget included \$21 million for capital projects, but the forecast shows the Authority expects to complete only \$11 million of work. He asked whether the Authority borrowed money on the basis of spending the higher amount, and what the impact is if the Authority spends significantly less than budgeted and borrowed. Mr. Klein explained that the Authority did not undertake any borrowing in 2020 for the \$21 million in budgeted capital improvements. As a result, the impact of spending only \$11 million is only seen on the cash flow side. Mr. Famili asked how the 2021 capital budget of \$17 million would be funded. Mr. Klein explained that the Authority plans to use operating cash and reserves for the majority of the 2021 capital program.

Mr. Klein reviewed the Suburban Water Division proposed budget, noting that the primary change since the prior presentation was an increase in revenue. The revenue projections were increased to allow the Authority to achieve its internal target of 1.20 debt service coverage, which is important for providing capital funding as well as coverage for emergencies.

Liesel Gross then reviewed the proposed 2021 rate increases for the Suburban Water Division, which are needed to achieve the revenue targets included in the proposed budget. She explained that an overall revenue increase of 12 percent is needed, but only 10.5 percent will come from rate increases, with the remainder being generated by growth. She reviewed the rate structure in place for the Suburban Water Division, including fixed charges and volume charges applied to customers in different rate classes. In order to distribute the rate increase proportionately to all customers, both the fixed charge and volume charges would be increased. The average residential customer will pay \$28 per year more in 2021 based on the proposed rate structure. All customers would pay between 7 and 12 percent more depending on the volume of water used.

Amir Famili asked how the \$160,000 in new revenue generated by economic growth was estimated and whether it is a conservative figure. Ms. Gross explained that the Authority staff have information provided by new and existing industrial customers regarding their estimated production trends in 2021 that informed the calculation of this figure; however, it is a conservative figure due to the speculative nature of some of the growth projections provided. Housing growth continues to supplement industrial growth. The Authority staff expects the budgeted figure can be achieved realistically. Mr. Famili noted that there is significant upside potential in this figure if it is underestimated, and the impact of the rate increase will be compounded over time if growth is more robust than currently estimated.

Additional discussion followed regarding the adequacy of the proposed rate increase. Scott Bieber noted that the Suburban Water rates will continue to be very low and that there is potential room for higher increases that could further bolster the Authority's capital program. Jeff Morgan noted the Authority's proposed fixed charges and current volume charge of \$2.76 per 1000 gallons is very low when compared across the region.

Ted Lyons asked about the rate structure and how costs are allocated between the fixed charge and volume charge. Ms. Gross explained that a water rate study was conducted by a rate expert three years ago, using an industry-accepted methodology, to allocate fixed and variable costs to different customer classes. She also noted that water utilities are increasingly relying on fixed charges to generate required revenue as many utility costs are not variable, and declining water usage puts revenue at risk when the fixed charge is too low.

Ed Klein then reviewed the Suburban Wastewater Division proposed budget, which was unchanged from the prior presentation.

Mr. Klein reviewed the City Division proposed budget, noting two changes related to capital improvements. The water filtration plant project to replace variable frequency drives for the high-lift pumps was excluded from the prior budget presentation. The Authority expect to spend \$800,000 on that project in 2021. In addition, the Authority staff would like to pursue PENNVEST funding for this project, and this borrowing was added to the budget proposal. Liesel Gross noted City Division water and sewer rates would be increasing by the terms of the amended Lease Agreement, and would be presented to the Board for adoption in November.

Mr. Klein reviewed the Internal Services expenses, and the dashboard of financial metrics for all funds included in the 2021 Proposed Budget. He reviewed the next steps in the budget development process, including budget adoption, which will be requested at the October 26, 2020 meeting. Rates for 2021 will be presented for adoption in November, and updated tapping fees for the Suburban Wastewater Division would be presented in December.

WLI User Charge Report

Jennifer Montero, the Authority's Contracts Administrator, provided a report of the proposed 2021 Western Lehigh Interceptor, Little Lehigh Relief Interceptor Phase 1 and 2 rates. The rates are developed using a cost-of-service methodology outlined in the intermunicipal agreements with the Authority's signatories. The rates also include funding for capital reserves. The billing process includes developing rates for budgeting purposes for the upcoming calendar year, and then actual costs, sewage flows and waste strength data is used to reconcile the charges applied to the municipalities after the end of the calendar year. Based on the budgeted costs and estimated sewage flows and waste strength, the calculated rates result in an estimated 4 percent increase to the average residential sewer customer. Ms. Montero explained that the report was submitted to the municipalities for comment prior to the Authority Board's review.

Chairman Nagle asked if any comments or concerns were received from the municipal signatories. Ms. Montero stated that only a few comments were received, and they were focused on the rate calculation methodology. She stated she was able to answer the questions to the municipalities' satisfaction.

Liesel Gross commented that this report is prepared for municipal signatories, so they have a basis for developing their municipal budgets. The Authority provides preliminary approval of the report in order to communicate with the municipalities that the rates are finalized, which also helps with their municipal budgets. The rates included in the report are incorporated into the Authority's 2021 Preliminary Budget reviewed earlier in the meeting.

On a motion by Linda Rosenfeld, seconded by Richard Bohner, the Board approved the 2021 Western Lehigh Interceptor User Charge Report on a preliminary basis (9-0).

A roll call vote was taken with the following votes cast:

Brian Nagle – yes
Scott Bieber – yes
Richard Bohner – yes
Norma Cusick – yes
Ted Lyons – yes
Kevin Baker – yes
Linda Rosenfeld – yes
Jeff Morgan – yes

Amir Famili – yes

MONTHLY PROJECT UPDATES / INFORMATION ITEMS

Liesel Gross highlighted the items noted in the report for the upcoming meeting, including the approval of the 2021 Budget.

STAFF COMMENTS

Liesel Gross reviewed information received from the Pennsylvania Public Utility Commission (PUC) regarding utility service termination for customer nonpayment as it relates to the COVID-19 pandemic. Last week, the PUC issued a new ruling that utility service terminations may resume for customer nonpayment, effective November 9, 2020, but with restrictions to protect customers who meet certain economic thresholds for low-income households. Even though the Authority is not under PUC jurisdiction, the rules issued by the PUC provide guidance on how the Authority might proceed with its collection of delinquent accounts. Ms. Gross stated that the Authority staff are working to develop protocols to begin applying late fees and conducting service terminations effective January 1, 2021. The plans developed for collections activity will be communicated to the impacted customers over the next three months, along with information about any customer assistance programs the Authority may develop in the intervening time period. More information about a potential customer relief fund will be presented to the Board at a later date. Some Board discussion followed.

SOLICITOR'S COMMENTS

None.

PUBLIC COMMENTS / OTHER COMMENTS

None.

EXECUTIVE SESSION

ADJOURNMENT

There being no further business, the Chairman adjourned the meeting at 1:29 p.m.

Richard Bohner
Secretary

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2021 Budget - PROPOSED

With Comparative Data for years ended December 31:
2019 Actual, 2020 Forecast & 2020 Budget

Presented to Board of Directors on October 26, 2020

LEHIGH COUNTY AUTHORITY
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Executive Summary



LEHIGH COUNTY AUTHORITY

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2021 BUDGET – EXECUTIVE SUMMARY

Submitted by: Liesel M. Gross, Chief Executive Officer
October 19, 2020

Most years, when we begin to think about the year ahead and develop our plans for the upcoming budget year, Lehigh County Authority (LCA) staff and Board of Directors talk about lofty goals and strategies for the future. It is a time to reflect on what we have accomplished so far and to think about the needs of the community we serve and the water and sewer systems we manage.

Developing a budget for 2021 was decidedly different. LCA's best laid plans for 2020 were derailed very early in the year with the emergence of the COVID-19 pandemic in early March. Like most organizations in the Lehigh Valley and across the nation, many of our plans for 2020 were put to the side to allow us to focus on keeping employees healthy and ensuring a sustainable operation in uncertain times. Never has it been more apparent what a vital role public water and sewer service plays in protecting public health. All other goals for 2020 paled in comparison to the mission of providing safe and reliable service to our community.

LCA has sustained financial and operational impacts from the pandemic, including:

Residential Customer Impact – Customers who have been hardest hit by unemployment during the pandemic have had difficulty paying their water and sewer bills.

Collections Performance – Suspension of all normal collections activity – applying late fees and terminating service to non-paying customers – was the right thing to do but has resulted in ever-increasing unpaid past-due receivables. By October 2020, after seven months of suspended collections activity, unpaid past-due receivables have increased by approximately \$900,000.

Impact of Business Closures – Many commercial and retail establishments ceased operation for nearly three full months from March until June, and then gradually reopened in accordance with state mandates that remain in place today. For LCA, this resulted in a marked decrease in water usage by commercial customers, and resulting loss of revenue. This loss was felt most deeply within the City of Allentown where a revitalized downtown retail and restaurant district shut down and remains at or below 50 percent capacity for the foreseeable future.

Projects Deferred – For several months of 2020, all work with external contractors was placed on hold, so major capital improvements and ongoing operations and maintenance work were deferred for a period of time. This resulted in some cost savings to offset the loss of revenues described above.

Operational Adjustments to Protect Employees – Especially during the first three months of the pandemic, LCA shifted operationally several times to respond to changing circumstances. Our spending shifted dramatically to reallocate funds into our technology program to allow non-operational employees to work remotely, and into the purchase of safety equipment, cleaning

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supplies and services, emergency accommodations for critical on-site workers, and much more. Payroll expenses increased to accommodate increases in overtime and other expenses as our operational employees worked in isolated shifts to prevent cross-infection in case someone became sick. These expenses have totaled more than \$600,000 so far this year.

These unplanned but necessary adjustments, coupled with the uncertain future of the pandemic impacts on our world, complicated LCA's process of thinking ahead for 2021. In developing the 2021 budget, we considered:

- *How and when will the economy recover? How will customer growth be impacted?*
- *Will our commercial customers be able to fully reopen in 2021?*
- *Will customers who face financial hardships be able to pay their utility bills next year?*
- *Can we move forward with collections activity to support improved cash flow, and when?*
- *Can we move forward on our non-pandemic goals while maintaining a strong focus on keeping employees healthy and ensuring safe and reliable service to the community?*

Certainly we do not have all the answers, and so LCA's 2021 Budget is an imperfect document. But it captures our best estimation of what is likely to occur in 2021. In addition, we have incorporated plans to move forward on a few important organizational strategies and have made some difficult choices regarding water and sewer rates.

Strategic Imperatives for 2021

While LCA's primary focus in 2021 will be to monitor and then recover from the impact of the pandemic, our staff has identified several important goals for the year ahead. The top three are:

1. Targeted Operational Improvements:

For our Suburban Division, this means a dedicated focus on evaluating and upgrading LCA's Supervisory Control and Data Acquisition (SCADA) system. We have added staff, technology and consulting resources into the 2021 Budget to support this program which is needed to bring our system up to current standards for automation, access, security and control.

For our City Division, a top priority is to replace or repair the mobile equipment used every day to maintain our water and sewer systems. Our dedicated employees required updated tools to perform their jobs and maintain this aging, urban system.

2. Process Improvements:

LCA staff have identified several administrative areas that would benefit from dedicated process improvement efforts. These areas span the organization and cover customer service, billing, sewer signatory billing, human resources, and capital project accounting. To achieve improvements in these areas, the following resources have been included in the 2021 Budget:

- Additional Staff Support
- Information Technology Solutions
- External Financial Consultant Services
- Internal Team Development
- Training Resources for Continuous Improvement

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By taking a multi-faceted approach to process improvement, LCA expects to improve efficiency and accountability in these critical administrative functions.

3. Targeted Capital Funding for Critical Projects & System Planning:

The 2021 Budget includes funding for LCA's capital improvements program, but pared down in certain areas to ensure focus is placed on completing the most critical projects.

In LCA's Suburban Wastewater Division, the 2021 Budget includes funding to continue working aggressively toward a regional Act 537 Sewage Facilities Plan, which is due to be submitted to state regulators in 2025. Next year, system modeling and engineering work will be focused on developing short- and long-term solutions to address bottlenecks in the system in the area near Trexlertown, which cause sewage overflows during wet-weather events.

For our City Division, LCA's 2021 Budget includes funding to begin important projects to replace aging infrastructure. Projects include one mile of water main replacement, replacement of variable frequency drives for the high lift pumps at the water filtration plant, and replacement of disinfection systems and boilers at the wastewater treatment plant.

Facing the Challenge of Increasing Utility Rates

Like many water and sewer utilities across the nation, LCA faces a significant burden of caring for and replacing aging infrastructure. In the City of Allentown, many water and sewer lines are 100 years old or older and face significant integrity challenges. In addition, much of our water and wastewater treatment plant equipment is at the end of its useful life and needs to be replaced or upgraded. In our Suburban service areas, while the systems may be "younger" in many cases, LCA's infrastructure requires greater attention in the form of preventive maintenance and strategic asset management.

Also like many utilities across the nation, LCA's water and sewer rates will need to increase to pay for these system improvements. Everywhere, water and sewer rate increases are expected to outpace inflation for many years into the future. Included in the 2021 Budget are rate increases to LCA customers that are necessary but may be difficult for some customers to bear.

City Division

In July 2020, LCA and the City of Allentown agreed to amend the 50-year water and sewer Concession Lease Agreement that was signed in 2013. The amendment was needed to improve LCA's financial performance under the terms of the Lease with the key goal of providing funding to complete the critical system improvements described above.

As part of this amendment, rate structures have been modified to provide additional revenue to the City Division. This includes an approximate increase of 20 percent for an average residential customer in Allentown. Several other terms of the new agreement provide ways to control future rate increases, including provisions for future rate reductions when LCA's financial picture improves. However, we recognize the initial rate impact to customers over the next several years will be significant.

Throughout the multi-year negotiation process, LCA and the Allentown officials have sought ways to leverage LCA's non-profit, municipal authority structure to increase reinvestment in the

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water and sewer system. We believe the amended agreement offers regional solutions and provides value back to the community. The long-term benefits of this Lease amendment will be felt for decades to come. More information about the Lease amendment is available on LCA's website at: <https://www.lehighcountyauthority.org/leaseupdate/>

Suburban Division

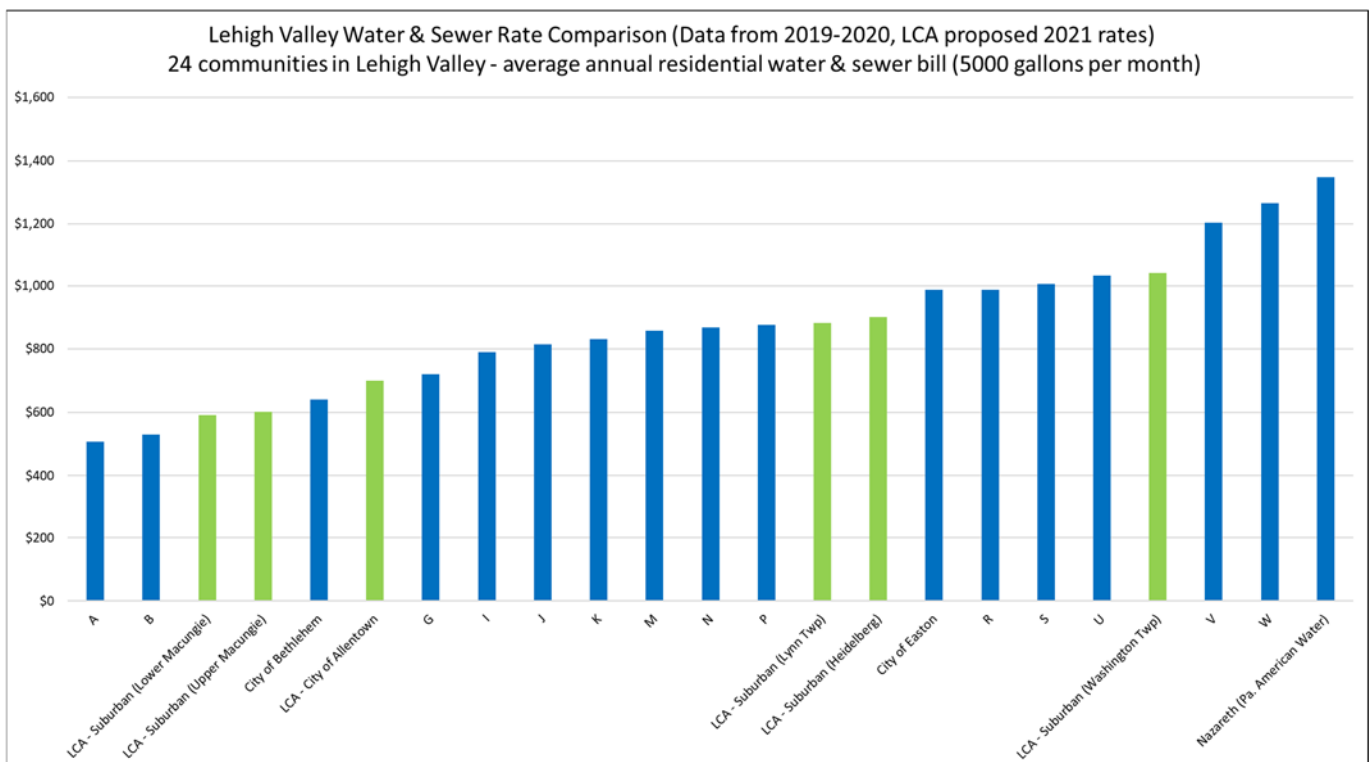
While LCA has openly discussed the need for annual rate increases to bolster our preventive maintenance program and reduce our reliance on debt for capital improvements, the 2021 Budget offered additional challenges that will result in higher-than-expected rate increases for our Suburban Water customers.

In 2021, the cost to purchase water from the City of Allentown water system will increase by approximately \$675,000. This is a one-time increase reflecting terms of an updated Water Purchase Agreement between LCA and the City. The benefits of the agreement revision include a 30+ year extension to the term of the agreement and equitable cost-of-service rates for all water users. However, LCA's Suburban Division will be required to pay more to cover its proportionate cost of water production and treatment.

To address this issue and meet other critical financial goals, a rate increase of approximately 10.5 percent is included in the 2021 Budget. For the average Suburban Water customer, this equates to an increase of \$28 per year.

Regional Rate Comparisons

While LCA would always prefer to keep rates as low as possible, the increases described above are necessary. The graph below illustrates how LCA's 2021 proposed rates compare to other communities in the Lehigh Valley. Notably, with the 2021 increases included, most LCA customers will continue to enjoy some of the lowest water and sewer rates in our region.



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2021 BUDGET – SUMMARY OF EXPECTED RESULTS

The sections above describe the breadth of issues that were evaluated and discussed through the development of the 2021 Budget. The summary below shows that the 2021 Budget is presented with positive cash flows, meeting debt service requirements, and providing alternative funding for capital improvements that limits the borrowing required to pay for these investments. In 2021, we also see positive movement toward our target for operational cash balances, which supports overall financial sustainability of the organization.

Budget Overview	Suburban Water	Suburban Wastewater	City Division	Total
Operating, Non-Operating & Other Revenue	\$12,836,751	\$20,223,056	\$44,066,704	\$77,126,511
Operating Expenses (net of depreciation)	\$8,637,776	\$13,248,399	\$20,170,389	\$42,056,564
Net Revenues Available for Debt Service	\$4,198,975	\$6,974,657	\$23,896,315	\$35,069,947
Debt Service	\$3,499,146	\$731,029	\$14,115,086	\$18,345,261
Debt Service Coverage Ratio (indenture based)	1.20	9.54	1.69	1.91
Capital Budget Overview	Suburban Water	Suburban Wastewater	City Division	Total
Capital Expenses	\$4,190,000	\$3,921,800	\$8,877,500	\$16,989,300
Funding from 2021 Revenue & Operating Reserves	\$4,190,000	\$3,749,781	\$8,877,500	\$16,817,281
Funding from Existing Project Reserves	-	\$172,019	-	\$172,019
Funding from New Borrowing	-	-	-	-
Year-End Project Reserve Balance	-	\$2,500,000	\$169,980	\$2,669,980
Total Cash Flow	Suburban Water	Suburban Wastewater	City Division	Total
Beginning Operations Cash Balance (2020 forecast)	\$6,700,850	\$6,993,901	\$6,167,443	\$19,862,194
2021 Surplus	\$699,829	\$6,243,627	\$13,541,047	\$20,484,503
Provided From (To) Capital	\$(4,190,000)	\$(3,749,781)	\$(8,877,500)	\$(16,817,281)
Ending Operations Cash Balance	\$3,210,679	\$9,487,747	\$10,830,990	\$23,529,416
Operating Days Cash on Hand	136	243	181	192
Project Reserve Balance	-	\$2,500,000	\$100,000	\$2,600,000
Other Reserves & Investments (includes restricted)	\$10,948,484	\$8,095,208	\$55,676,307	\$74,719,999
Ending Total Fund Balance - 2021 Budget	\$14,159,163	\$20,082,955	\$66,607,297	\$100,849,415

Operating Activities

Lehigh County Authority

2021 Budget and Comparative Prior Period Data

Operating Budgets Overview

The funds of the Authority are grouped in the financial statements as –Enterprise funds, which are used to account for business-like activities provided to the general public. These activities are financed primarily by user charges, and the measurement of financial activity focuses on net income measurement similar to the private sector, in addition to cash flows used more traditionally by the public utility sector. The following enterprise funds are reported as major funds:

- A. Suburban Water Division** – Used to account for the operations of the Suburban Water system’s supply, storage, pumping and treatment facilities and distribution system. The Suburban Water system is a public utility service, which is intended to be maintained on a self-supporting basis.
- B. Suburban Wastewater Division** – Used to account for the operations of the Suburban Wastewater system’s interceptors, collector systems, pump stations, and treatment facilities. The suburban wastewater system is a public utility service, which intends to be maintained on a self-supporting basis.
- C. City Division** – Used to account for the operations of the City of Allentown water and sewer system. The City Division fund is a public utility service, which intends to be maintained on a self-supporting basis. This fund was added in 2013 as a result of the Authority entering into a 50-year Concession Lease Agreement with the City.

A. Suburban Water Division:

The Authority currently owns and operates water systems in three areas of Lehigh County - the Western Lehigh (WLSA), the Northern Lehigh (NLSA) and the Southern Lehigh (SLSA) Service Areas. In addition, the Authority owns and operates one system in Northampton County. Within each service area, separate systems are further designated as divisions. The Authority is funding all expenses in the majority of the divisions through a common rate. By municipal agreement, there are 35 customers within the Washington Township Division that are not part of the common rate structure.

Responsibilities for water service include monitoring water quality, operating and maintaining the various supply sources, reservoirs, transmission and distribution pipe networks and customer metering, billing and response to other related customer service needs.

Each division is affected to varying degrees by the Federal and Pennsylvania Safe Drinking Water Act requirements. Depending on the source (groundwater or purchased surface water), differing analyses are required for water quality monitoring.

Major Budget activities continue to place an emphasis on providing customers with outstanding service. Maintenance programs intended to prolong the useful life of existing facilities, including preventive maintenance, leakage monitoring and repairs, exercising of system valves and fire hydrants, and station improvements and repairs, are on-going.

B. Suburban Wastewater Division:

The Authority is responsible for providing a variety of wastewater services. Current operation and maintenance responsibilities include; the Western Lehigh Interceptor (WLI), Little Lehigh Relief Interceptor (LLRI), the LCA Pre-Treatment Plant (formerly the County of Lehigh Pre-Treatment Plant), collection and treatment in Heidelberg Township, North Whitehall Township, Weisenberg Township and Lynn Township and collector systems within Lowhill Township, Upper Milford Township, Weisenberg Township and Washington Township.

Lehigh County Authority 2021 Budget and Comparative Prior Period Data Operating Budgets Overview

Western Lehigh Interceptor system:

This budget addresses transportation and City treatment services provided to various municipalities and assumes an average daily flow of 8 million gallons per day (MGD) from the communities served including the Boroughs of Alburtis and Macungie, and the Townships of Lower Macungie, Upper Macungie, Upper Milford, Weisenberg, Lowhill and the LCA Pre-Treatment Plant (the "Municipalities"). The Municipalities are billed based upon wastewater strength, flow and reserved capacity. The budget (including the LLRI, described below) includes an estimated 4 percent rate increase for the typical residential customer. In addition, the Borough of Emmaus discharges a portion of its flow through the WLI and is billed in accordance with a service agreement.

Personnel time is included for the operation and maintenance of the gravity interceptors and the Spring Creek Pump Station (SCPS) and force main. The budget anticipates that the SCPS will operate daily to meet the demand of volume as well as in response to wet weather events according to current wet weather operating protocols.

As part of a comprehensive Infiltration and Inflow (I/I) removal program, flow monitoring of the Authority and Signatory collector system connections has been completed on an ongoing basis over many years, beginning in 2007. The results of the flow monitoring is used to plan I/I removal programs conducted by all Municipalities to lower wet-weather flows and ensure future capacity is available for new system users. In 2020, the Authority and Municipalities developed an Interim Act 537 Plan to address the capacity requirements for the time period of 2021 to 2025. The 2021 Budget includes implementation of planning activities outlined in this regional Interim Act 537 Plan.

Sampling and analysis for billing purposes of the LCA Pre-Treatment Plant and Municipality industrial/commercial users, and flow entering the City system and that from Emmaus are included.

Little Lehigh Relief Interceptor (LLRI) system

Phase 1

This system phase, including the Park Pump Station (PPS) and Force Main, serves the Municipalities and the Townships of Salisbury and South Whitehall. The PPS, which has been in service since 1983, provides 20 MGD of relief pumping capacity to bypass a critical portion of the City of Allentown's interceptor system. In 2020, the Authority completed a major upgrade to the PPS including replacement of aged pumps and equipment, and installation of updated variable frequency drives and control systems, which will serve to optimize the facility and increase efficiency. The 2021 Budget includes increased costs for the operation of the PPS to account for final start-up costs of the renovated facility.

Phase 2

This system phase includes the gravity relief line from Keck's Bridge to the PPS and serves the Municipalities. The 2021 Budget anticipates the continuation of increased maintenance costs for cleaning the inverted siphons on this system. It is now anticipated that this will be an annual expense based upon the blockage experienced in recent years.

Common Rate Collector System:

Upper Milford system

As the wastewater service agency for Upper Milford Township (UMiT), Lehigh County Authority (LCA) provides all wastewater-related services for the 936 residential and 48 commercial customers in the

Lehigh County Authority 2021 Budget and Comparative Prior Period Data Operating Budgets Overview

township as of October 19, 2020. Except for significant matters requiring inter-municipal negotiations or consultations, LCA provides general representation for UMiT on wastewater issues.

Weisenberg system

In 2002, LCA finalized an agreement with Weisenberg Township, which designates LCA as the provider of public wastewater service within specific areas of the township. Currently LCA provides collection system service to 146 residential and 3 commercial customers in the Pointe West subdivision, to the former Penn State campus and Glasbern Inn.

Heidelberg Heights system

This system, serving 145 customers in Heidelberg Township was purchased by LCA in September 1998. The system includes approximately 6,500 linear feet of collector sewers and a 60,000 GPD Sequencing Batch Reactor (SBR) Activated Sludge Wastewater Treatment Plant, which was placed in operation in 2000. The budget includes maintenance activities related to the collection system, emphasizing identification and removal of extraneous flow into the system. The Authority operates the system using LCA personnel and outside operators.

Wynnewood Terrace system

The budget includes the operation and maintenance of the Wynnewood Terrace wastewater system in North Whitehall Township. The Authority took over ownership and operational responsibilities in July of 2003. The system includes a 60,000 GPD extended air activated sludge package treatment plant, three pump stations and collection system currently serving 217 residential and 2 commercial customers. The treatment plant is in the process of being replaced, with startup of new facilities planned for late 2020. The budget includes maintenance activities related to the collection system, emphasizing identification and removal of extraneous flow into the system. The Authority operates the system using LCA personnel and outside operators.

Sand Spring system

The budget includes the operation and maintenance of the Sand Spring wastewater system in North Whitehall Township, which was acquired at the end of 2004. The system includes a 35,000 GPD extended air activated sludge package treatment plant and collection system currently serving 248 residential apartment units and 9 commercial customers. The treatment plant is in the process of being replaced, with startup of new facilities planned for 2021. The Authority operates the system using LCA personnel and outside operators.

Lowhill Township system

LCA acquired the Lowhill Township sewer collection system effective April 1, 2016. The system serves 43 residential customers and is comprised of approximately 3,500 feet of 8" PVC sewer.

Western Weisenberg system

The Authority owns and operates a 40,000 GPD wastewater treatment plant at the Arcadia West Industrial Park (AWIP). The new plant serves the AWIP and other properties in the New Smithsville area of Weisenberg Township. Currently there are 16 commercial customers and 1 institutional customer in this system.

Lynn Township system

The budget includes the operation and maintenance of the Lynn Township wastewater system in Lynn Township. The system includes an 80,000 GPD cast in place extended air plant and collection system currently serving approximately 364 residential properties, 20 commercial customers and the

Lehigh County Authority 2021 Budget and Comparative Prior Period Data Operating Budgets Overview

Northwestern Lehigh School District Complex. The Authority operates the system using LCA personnel exclusively.

Washington Township system

LCA provides operating services for this system that serves approximately 591 residential and commercial customers in the Slatedale and Emerald areas of Washington Township. Approximately 130,000 GPD of wastewater is conveyed to and treated at the Borough of Slatington's wastewater treatment plant. Ownership of the system remains with Washington Township.

LCA Pre-Treatment Plant (PTP)

LCA took over the operation in May 2006 and ownership in October 2009 of this 5.75 MGD facility built by the County of Lehigh in 1990. Currently the facility provides pre-treatment of high strength waste, predominantly generated by food and beverage industrial customers, along with domestic-strength waste generated by upstream commercial and residential properties located in Lowhill, Weisenberg and Upper Macungie Townships. The PTP also treats hauled waste, which is a significant revenue source for this plant. 2021 revenues are anticipated to increase slightly with an improved waste hauler program in place. The plant is operated through a professional services contract with Jacobs. A 10-year operations contract was negotiated in 2017 with Jacobs (formerly CH2M) to provide significant savings in the operational costs, which will be reinvested in plant capital that is reaching the end of its useful life.

Boston Beer Company (BBC) started brewing operations at the former Pabst Brewery in April 2008. The brewery waste has become a very significant source of both waste and income for the PTP. BBC is the plant's largest customer and continues to increase production annually.

Over the past decade, significant capital investment has been made in the PTP to rehabilitate aging, inefficient and inoperable equipment in anticipation of an increase in industrial wastewater flows and strength, which in turn places added demands on plant equipment. Over the past five years, energy conservation measures have been implemented to reduce electrical demands and improve equipment and operational efficiencies. The projects included the addition of a truck receiving station and the completion of the digester mixer replacements, which increased biogas production and reduced electrical needs. Recently completed projects include the rebuild of two belt filter presses, new grease receiving station, access drive reconstruction, and yard process piping replacements.

C. City Division

Water System

The Authority operates the water system for the City of Allentown under a long term lease/concession agreement. The water system consists of a 30 MGD water treatment plant, (2) water intake structures, (10) storage tanks and reservoirs and (5) pump stations. There are two Water Fund divisions – Treatment Plant Division and Distribution Division. Separate budgets are presented for each division to track and maintain expenses.

Responsibilities for services include monitoring water quality; operating and maintaining the supply sources for the treatment facility, reservoirs, tanks, transmission and distribution pipe networks, customer metering, billing and response to customer service needs.

The consumer base is located throughout the City of Allentown. Water is also provided to surrounding municipalities through the use of system interconnections. Sources of supply include two groundwater sources, namely Schantz Spring and Crystal Spring. In addition, two surface water sources include the Little Lehigh Creek and the Lehigh River. Customer growth in the Allentown Division is expected to be

Lehigh County Authority 2021 Budget and Comparative Prior Period Data Operating Budgets Overview

minimal, and there is no expected increase in consumption through the interconnection with the Suburban Division.

Major budget activities place an emphasis on providing consumers with outstanding quality water and service. A Preventive Maintenance Program continues to prolong the useful life of existing facilities and equipment. Programs for valve exercising, leak detection, fire hydrant repair/replacement will continue. Maintenance programs for the treatment plant processes such as filter evaluations, plant equipment repair/replacement will continue to meet the stringent regulations mandated by EPA and DEP. Continued membership with the Partnership for Safe Water Program for the Treatment Plant and Distribution System will provide a means and method for improvement to the overall performance of the system and water quality. Significant activities include:

- Cost effective use of all 4 water sources
- Optimization of the Treatment Process through the Partnership for Safe Water
- Preventative maintenance programs, utilizing the CMMS
- Aggressive leak detection program
- Use/Upgrade of the SCADA system to allow for more cost effective operations
- Long term service contract for reservoir/tank maintenance program
- Enhanced CMMS to maintain cost control
- Fleet management to control/maintain vehicle expenses
- Upgrade/replace aging/ineffective equipment that is beyond its useful life

Wastewater System:

LCA's operation and maintenance responsibilities include the operation of the Kline's Island Wastewater Treatment Plant and the portion of the collection system that resides in the geographic boundaries of the City of Allentown. There are two Wastewater System budgets – the Treatment Plant budget and Collection System budget. Separate budgets are presented to track and maintain expenses for improved cost control as well as to implement cost-sharing rates with the 14 municipalities that utilize the system outside the City of Allentown. Rate setting for the municipalities is established via service contracts that specify how operating, maintenance and capital costs are distributed.

The 2021 Budget was developed to provide compliance with applicable regulatory requirements utilizing recognized operational, maintenance and industrial pretreatment procedures to effectively convey and process the wastewater generated in the service area of the treatment facility. Compliance with the Standards of Practice established as part of the concession and lease agreement with the City of Allentown will be an on-going and essential focus for the wastewater staff of the city division.

Consolidated Statements

LEHIGH COUNTY AUTHORITY
FINANCIAL SUMMARY
2021 Budget and Comparative Prior Period Data

Budget Overview	Sub. Water	Sub. Wastewater	City Division	Total
Operating, Non-Operating & Other Revenue	12,836,751	20,223,056	44,066,704	77,126,511
Operating Expenses (net of depreciation)	8,637,776	13,248,399	20,170,389	42,056,564
Net Revenues Available for Debt Service	4,198,975	6,974,657	23,896,315	35,069,947
Debt Service	3,499,146	731,029	14,115,086	18,345,261
Debt Service Coverage Ratio (indenture based)	1.20	9.54	1.69	1.91

Capital Budget Overview	Sub. Water	Sub. Water	Sub. Water	Total
Capital Expenses	4,190,000	3,921,800	8,877,500	16,989,300
Funding from 2021 Revenue & Operating Reserves	4,190,000	3,749,781	8,877,500	16,817,281
Funding from Existing Project Reserves	-	172,019	-	172,019
Funding from New Borrowing	-	-	-	-
Year-End Project Reserve Balance	-	2,500,000	169,980	2,669,980

Total Cash Flow	Sub. Water	Sub. Water	City Division	Total
Beginning Operations Cash Balance (2020 forecast)	6,700,850	6,993,901	6,167,443	19,862,194
2021 Surplus	699,829	6,243,627	13,541,047	20,484,503
Provided From (To) Capital	(4,190,000)	(3,749,781)	(8,877,500)	(16,817,281)
Ending Operations Cash Balance	3,210,679	9,487,747	10,830,990	23,529,416
Operating Days Cash on Hand	136	243	181	192
Project Reserve Balance	-	2,500,000	100,000	2,600,000
Other Reserves & Investments (includes restricted)	10,948,484	8,095,208	55,676,307	74,719,999
Ending Total Fund Balance - 2021 Budget	14,159,163	20,082,955	66,607,297	100,849,415
Ending Total Fund Balance - 2020 Forecast	17,649,334	17,761,128	61,943,750	97,354,212

LEHIGH COUNTY AUTHORITY
RESERVES SUMMARY
2021 Budget and Comparative Prior Period Data

	Sub W	Sub WW	City	Total
Operating Expenses for DCOH	8,641,176	14,248,399	21,882,064	44,771,639
Cash	136	243	181	192
Cash + Invest	226	416	181	264
RESERVES EVALUATION				
Cash + Investment Balances	6,347,609	19,745,023	10,930,990	37,023,622
Operating Reserve Requirement				
Reserve %	50.00%	50.00%	50.00%	50.00%
Reserve Amount Required	4,320,588	7,124,200	10,941,032	22,385,820
EXCESS (SHORTAGE) AGAINST OPERATING RESERVES	2,027,021	12,620,823	(10,042)	14,637,802
Capital Reserve Requirement				
Depreciation Expense	2,605,699	4,616,783	5,893,862	13,116,344
Replacement Rate	1.50	1.50	1.50	1.50
Reinvestment	3,908,549	6,925,175	8,840,793	19,674,517
Reserve %	50.00%	100.00%	25.00%	56.37%
Reserve Amount Required	1,954,275	6,925,175	2,210,198	11,089,648
EXCESS (SHORTAGE) AGAINST CAPITAL RESERVES	72,746	5,695,648	(2,220,240)	3,548,154

LEHIGH COUNTY AUTHORITY
BUDGET OVERVIEW SUMMARY
2021 Budget and Comparative Prior Period Data

	SUBURBAN WATER			SUBURBAN WASTEWATER			CITY DIVISION			TOTAL LCA		
Budget Overview	Current	Previous	Change	Current	Previous	Change	Current	Previous	Change	Current	Previous	Change
Operating, Non-Operating & Other Revenue	12,836,751	12,532,891	303,860	20,223,056	20,223,056	-	44,066,704	44,066,704	-	77,126,511	76,822,651	303,860
Operating Expenses (net of depreciation)	8,637,776	8,637,776	-	13,248,399	13,248,399	-	20,170,389	19,425,389	745,000	42,056,564	41,311,564	745,000
Net Revenues Available for Debt Service	4,198,975	3,895,115	303,860	6,974,657	6,974,657	-	23,896,315	24,641,315	(745,000)	35,069,947	35,511,087	(441,140)
Debt Service	3,499,146	3,499,146	-	731,029	731,029	-	14,115,086	13,984,318	(130,768)	18,345,261	18,214,493	(130,768)
Debt Service Coverage Ratio (indenture based)	1.20	1.11	0.09	9.54	9.54	-	1.69	1.76	(0.07)	1.91	1.95	(0.04)
Capital Budget Overview												
Capital Spending	4,190,000	3,460,000	730,000	3,921,800	3,921,800	-	8,877,500	8,077,500	800,000	16,989,300	15,459,300	1,530,000
Funding from 2021 Revenue & Operating Reserves	4,190,000	3,460,000	730,000	3,749,781	3,749,781	-	8,877,500	8,077,500	800,000	16,817,281	15,287,281	1,530,000
Funding from Existing Project Reserves	-	-	-	172,019	172,019	-	-	-	-	172,019	172,019	-
Funding from New Borrowing	-	-	-	-	-	-	-	-	-	-	-	-
Year-End Project Reserve Balance	-	-	-	2,500,000	2,500,000	-	169,980	169,980	-	2,669,980	2,669,980	-
Total Cash Flow												
Beginning Operations Cash Balance (2019 forecast)	6,700,850	6,700,850	-	6,993,901	6,993,901	-	6,167,443	6,167,443	-	19,862,194	19,862,194	-
2021 Surplus (deficit)	699,829	395,969	303,860	6,243,627	6,243,627	-	13,541,047	13,541,047	-	20,484,503	20,180,643	303,860
Provided From (To) Capital	(4,190,000)	(3,460,000)	(730,000)	(3,749,781)	(3,749,781)	-	(8,877,500)	(8,077,500)	(800,000)	(16,817,281)	(15,287,281)	(1,530,000)
Ending Operations Cash Balance	3,210,679	3,636,819	(426,140)	9,487,747	9,487,747	-	10,830,990	11,630,990	(800,000)	23,529,416	24,755,556	(1,226,140)
Operating Days Cash on Hand	136	154	(18)	243	243	-	181	201	(20)	192	205	(13)
Project Reserve Balance	-	-	-	2,500,000	2,500,000	-	100,000	100,000	-	2,600,000	2,600,000	-
Other Reserves & Investments (includes restricted)	10,948,484	10,948,484	-	8,095,208	8,095,208	-	55,676,307	55,676,307	-	74,719,999	74,719,999	-
Ending Total Fund Balance - 2021 Budget	14,159,163	14,585,303	(426,140)	20,082,955	20,082,955	-	66,607,297	67,407,297	(800,000)	100,849,415	102,075,555	(1,226,140)
Ending Total Fund Balance - 2020 Forecast	17,649,334	17,649,334		17,761,128	17,761,128		61,943,750	61,943,750		97,354,212	97,354,212	

LEHIGH COUNTY AUTHORITY
STATEMENTS OF NET POSITION
2021 Budget and Comparative Prior Period Data

	Suburban Water				Suburban Wastewater				City Division				Total LCA			
	Budget 2021	Forecast 2020	Budget 2020	Actual 2019	Budget 2021	Forecast 2020	Budget 2020	Actual 2019	Budget 2021	Forecast 2020	Budget 2020	Actual 2019	Budget 2021	Forecast 2020	Budget 2020	Actual 2019
Current Assets:																
Cash and Cash Equivalents	3,210,679	6,700,850	9,701,644	9,242,611	11,987,747	9,665,920	24,669,763	7,057,187	19,808,346	15,144,799	9,918,160	12,660,402	35,006,772	31,511,568	44,289,567	28,960,200
Certificates of Deposit	3,136,930	3,136,930	1,785,733	3,136,930	7,757,276	7,757,276	-	7,757,276	-	-	-	-	10,894,206	10,894,206	1,785,733	10,894,206
Accounts Receivable:	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Customers (Net of Allowance)	1,760,403	1,760,403	1,652,884	1,760,403	3,188,238	3,188,238	4,118,091	3,188,238	6,542,331	7,142,331	6,606,583	6,542,331	11,490,972	12,090,972	12,377,558	11,490,972
Financing Contracts	-	-	-	-	323,767	323,767	316,797	323,767	-	-	-	-	323,767	323,767	316,797	323,767
Others	280,007	280,007	203,148	280,007	675,091	675,091	509,247	675,091	2,941,090	2,941,090	4,147,552	2,941,090	3,896,188	3,896,188	4,859,947	3,896,188
Due from (to) Other Funds	1,599,692	1,599,692	-	1,599,692	(1,570,176)	(1,570,176)	2,817,997	(1,570,176)	(29,516)	(29,516)	-	(29,516)	-	-	2,817,997	-
Inventory	36,074	36,074	16,190	36,074	-	-	-	-	-	-	-	-	36,074	36,074	16,190	36,074
Accrued Interest Receivable	6,411	6,411	14,724	6,411	39,898	39,898	23,832	39,898	56,425	56,425	100,851	56,425	102,734	102,734	139,407	102,734
Prepaid Expenses	185,993	185,993	198,131	185,993	131,300	131,300	123,026	131,300	414,562	414,562	374,996	414,562	731,855	731,855	696,153	731,855
Total Current Assets	10,216,189	13,706,360	13,572,454	16,248,121	22,533,141	20,211,314	32,578,753	17,602,581	29,733,238	25,669,691	21,148,142	22,585,294	62,482,568	59,587,364	67,299,349	56,435,996
Noncurrent Assets:																
Restricted:																
Restricted Cash and Cash Equivalents	2,532,181	2,532,181	203,046	2,532,181	337,932	337,932	337,562	337,932	9,114,754	9,114,754	9,807,084	9,114,754	11,984,867	11,984,867	10,347,692	11,984,867
Restricted for Debt Service	1,043,094	1,043,094	1,380,654	1,043,094	-	-	-	-	37,684,197	37,684,197	37,684,197	37,684,197	38,727,291	38,727,291	39,064,851	38,727,291
Restricted Certificates of Deposit	25,527	25,527	25,522	25,527	-	-	-	-	-	-	-	-	25,527	25,527	25,522	25,527
Investment U.S. Treasury Obligations	-	-	2,214,267	-	-	-	-	-	24,117,855	25,297,674	3,940,640	-	24,117,855	25,297,674	6,154,907	-
Developer Escrow Deposit	4,210,752	4,210,752	4,386,200	4,210,752	-	-	-	-	-	-	-	-	4,210,752	4,210,752	4,386,200	4,210,752
Total Restricted Assets	7,811,554	7,811,554	8,209,689	7,811,554	337,932	337,932	337,562	337,932	70,916,806	72,096,625	51,431,921	46,798,951	79,066,292	80,246,111	59,979,172	54,948,437
Capital Assets																
Non-depreciable Assets:																
Land	2,114,884	2,114,884	2,043,265	2,114,884	1,888,430	1,888,430	1,837,891	1,888,430	-	-	-	-	4,003,314	4,003,314	3,881,156	4,003,314
Construction in Progress	21,015,645	16,825,645	5,023,631	12,504,370	27,366,955	23,445,155	10,052,683	18,974,421	11,871,364	2,993,864	-	-	60,253,964	43,264,664	15,076,314	31,478,791
Total Capital Assets Not Being Depreciated	23,130,529	18,940,529	7,066,896	14,619,254	29,255,385	25,333,585	11,890,574	20,862,851	11,871,364	2,993,864	-	-	64,257,278	47,267,978	18,957,470	35,482,105
Depreciable Assets:																
Wells & Reservoirs	9,709,252	9,709,252	9,554,770	9,709,252	3,494,643	3,494,643	3,494,643	3,494,643	-	-	-	-	13,203,895	13,203,895	13,049,413	13,203,895
Transmission & Distribution Mains	80,498,411	80,498,411	78,963,688	80,498,411	-	-	-	-	-	-	-	-	80,498,411	80,498,411	78,963,688	80,498,411
Services & Hydrants	17,571,410	17,571,410	17,144,642	17,571,410	-	-	-	-	-	-	-	-	17,571,410	17,571,410	17,144,642	17,571,410
Interceptor & Collector Systems	-	-	-	-	38,259,619	38,259,619	38,036,405	38,259,619	-	-	-	-	38,259,619	38,259,619	38,036,405	38,259,619
Building Structure & Appurtenances	23,797,378	23,797,378	23,632,286	23,797,378	55,828,047	55,828,047	54,910,406	55,828,047	-	-	-	-	79,625,425	79,625,425	78,542,692	79,625,425
Metering System	10,672,043	10,672,043	10,539,291	10,672,043	429,778	429,778	429,777	429,778	-	-	-	-	11,101,821	11,101,821	10,969,068	11,101,821
Equipment and Furnishings	7,769,506	7,769,506	23,553,963	7,769,506	23,175,902	23,175,902	39,446,165	23,175,902	3,268,879	3,268,879	8,488,911	3,268,879	34,214,287	34,214,287	71,471,039	34,214,287
Capacity	1,207,901	1,207,901	1,207,901	1,207,901	953,831	953,831	2,062,956	953,831	-	-	-	-	2,161,732	2,161,732	3,270,857	2,161,732
Total Capital Assets Being Depreciated	151,225,901	151,225,901	164,578,541	151,225,901	122,141,820	122,141,820	138,380,352	122,141,820	3,268,879	3,268,879	8,488,911	3,268,879	276,636,600	276,636,600	311,447,804	276,636,600
Less accumulated depreciation																
Wells & Reservoirs	(3,365,888)	(3,365,888)	(3,365,888)	(3,365,888)	(603,220)	(603,220)	(603,220)	(603,220)	-	-	-	-	(3,969,108)	(3,969,108)	(3,969,108)	(3,969,108)
Transmission & Distribution Mains	(13,722,746)	(13,722,746)	(13,722,746)	(13,722,746)	-	-	-	-	-	-	-	-	(13,722,746)	(13,722,746)	(13,722,746)	(13,722,746)
Services & Hydrants	(4,580,883)	(4,580,883)	(4,580,883)	(4,580,883)	-	-	-	-	-	-	-	-	(4,580,883)	(4,580,883)	(4,580,883)	(4,580,883)
Interceptor & Collector Systems	-	-	-	-	(11,136,593)	(11,136,593)	(11,136,593)	(11,136,593)	-	-	-	-	(11,136,593)	(11,136,593)	(11,136,593)	(11,136,593)
Building Structure & Appurtenances	(9,294,442)	(9,294,442)	(9,294,442)	(9,294,442)	(20,126,163)	(20,126,163)	(20,126,163)	(20,126,163)	(8,762)	(8,762)	-	(8,762)	(29,429,367)	(29,429,367)	(29,420,605)	(29,429,367)
Metering System	(5,332,817)	(5,332,817)	(5,332,817)	(5,332,817)	(264,381)	(264,381)	(264,381)	(264,381)	-	-	-	-	(5,597,198)	(5,597,198)	(5,597,198)	(5,597,198)
Equipment and Furnishings	(11,257,659)	(8,651,960)	(8,928,793)	(6,007,460)	(29,360,103)	(24,743,320)	(24,765,358)	(20,076,068)	(3,065,282)	(2,737,920)	(8,453,447)	(2,424,420)	(43,683,043)	(36,133,200)	(42,147,598)	(28,507,948)
Capacity	(751,043)	(751,043)	(751,043)	(751,043)	-	-	-	-	-	-	-	-	(751,043)	(751,043)	(751,043)	(751,043)
Total Accumulated Depreciation	(48,305,478)	(45,699,779)	(45,976,612)	(43,055,279)	(61,490,460)	(56,873,677)	(56,895,715)	(52,206,425)	(3,074,044)	(2,746,682)	(8,453,447)	(2,433,182)	(112,869,982)	(105,320,138)	(111,325,774)	(97,694,886)
Total Capital Assets	126,050,953	124,466,651	125,668,825	122,789,876	89,906,745	90,601,728	93,375,211	90,798,246	12,066,198	3,516,061	35,464	835,697	228,023,896	218,584,440	219,079,500	214,423,819
Other Assets:																
Long-Term Portion of Receivables - Financing Contracts	-	-	-	-	1,532,516	1,532,516	1,856,283	1,532,516	-	-	-	-	1,532,516	1,532,516	1,856,283	1,532,516
Intangible Service Concession Arrangement	-	-	-	-	-	-	-	-	235,559,576	241,126,076	232,056,776	241,126,076	235,559,576	241,126,076	232,056,776	241,126,076
Less Accumulated Amortization	-	-	-	-	-	-	-	-	(5,566,500)	(5,566,500)	-	-	(5,566,500)	(5,566,500)	-	-
OPEB Asset	1,244,053	1,244,053	736,708	1,244,053	-	-	-	-	-	-	-	-	1,244,053	1,244,053	736,708	1,244,053
Other Assets	-	-	-	-	-	-	-	-	3,216,983	3,216,983	1,902,429	3,216,983	3,216,983	3,216,983	3,012,429	3,216,983
Facilities Planning Costs (Net of Accumulated Amortization)	24,442	24,442	24,749	24,442	58,589	58,589	102,827	58,589	-	-	-	-	83,031	83,031	127,576	83,031
Total Other Assets	1,268,495	1,268,495	761,457	1,268,495	1,591,105	1,591,105	1,959,110	1,591,105	233,210,059	238,776,559	233,959,205	244,343,059	236,069,659	241,636,159	236,679,772	247,202,659
Total Noncurrent Assets	135,131,002	133,546,700	134,639,971	131,869,925	91,835,782	92,530,765	95,671,883	92,727,283	316,193,063	314,389,245	285,426,590	291,977,707	543,159,847	540,466,710	515,738,444	516,574,915
Total Assets	145,347,190	147,253,060	148,212,425	148,118,046	114,368,924	112,742,079	128,250,636	110,329,864	345,926,301	340,058,936	306,574,732	314,563,001	605,642,415	600,054,074	583,037,793	573,010,911
Deferred Outflows of Resources																
Pensions	679,620	679,620	883,237	679,620	342,115	342,115	256,424	342,115	2,523,498	2,523,498	1,891,432	2,523,498	3,545,233	3,545,233	3,031,093	3,545,233
OPEB	56,117	56,117	-	56,117	-	-	-	-	662,093	662,093	-	662,093	718,210	718,210	-	718,210
Refunding Loss on Bonds	24,954	24,954	118,891	24,954	-	-	-	-	-	-	-	-	24,954	24,954	118,891	24,954
Total Deferred Outflows	760,691	760,691	1,002,128	760,691	342,115	342,115	256,424	342,115	3,185,591	3,185,591	1,891,432	3,185,591	4,288,397	4,288,397	3,149,984	4,288,397
Total Assets and Deferred Outflows of Resources	146,107,881	148,013,751	149,214,553													

LEHIGH COUNTY AUTHORITY
STATEMENTS OF NET POSITION
2021 Budget and Comparative Prior Period Data

	Suburban Water				Suburban Wastewater				City Division				Total LCA			
	Budget 2021	Forecast 2020	Budget 2020	Actual 2019	Budget 2021	Forecast 2020	Budget 2020	Actual 2019	Budget 2021	Forecast 2020	Budget 2020	Actual 2019	Budget 2021	Forecast 2020	Budget 2020	Actual 2019
Current Liabilities:																
Accounts Payable - Trade	1,381,509	1,378,109	1,048,854	1,374,709	4,819,043	3,819,043	2,434,731	2,819,043	2,828,820	2,285,896	2,098,809	997,972	9,029,372	7,483,048	5,582,394	5,191,724
Accounts Payable - Capital	246,336	246,336	70,921	246,336	312,403	312,403	150,835	312,403	2,010,714	10,714	149,529	10,714	2,569,453	569,453	371,285	569,453
Accrued Interest Payable	233,600	233,600	237,699	233,600	3,346	3,346	3,346	3,346	1,105,780	1,105,780	1,128,362	1,105,780	1,342,726	1,342,726	1,369,407	1,342,726
Notes Payable	257,775	253,032	243,812	248,378	443,723	434,775	420,205	427,162	-	-	-	-	701,498	687,807	664,017	675,540
Revenue Bonds Payable	1,889,764	1,839,786	1,473,132	1,832,994	118,358	114,259	65,572	114,905	1,661,079	2,461,487	1,230,893	1,837,406	3,669,201	4,415,532	2,769,597	3,785,305
Developer Deposits and Other	554,977	554,977	195,273	554,977	2,950	2,950	6,019	2,950	19,805	19,805	26,016	19,805	577,732	577,732	227,308	577,732
Accrued Payroll & Other	226,234	226,234	220,498	226,234	132,867	132,867	136,100	132,867	494,941	494,941	509,717	494,941	854,042	854,042	866,315	854,042
Total Current Liabilities	4,790,195	4,732,074	3,490,189	4,717,228	5,832,690	4,819,643	3,216,808	3,812,676	8,121,139	6,378,623	5,143,326	4,466,618	18,744,024	15,930,340	11,850,323	12,996,522
Noncurrent Liabilities:																
Developer Deposits and Other	4,210,752	4,210,752	4,974,553	4,210,752	19,064	19,064	-	19,064	10,000	10,000	-	10,000	4,239,816	4,239,816	4,974,553	4,239,816
Service Concession Arrangement Payable	-	-	-	-	-	-	-	-	49,168,997	48,227,748	46,842,091	47,694,490	49,168,997	48,227,748	46,842,091	47,694,490
Notes Payable	1,727,302	1,985,077	2,486,487	2,238,109	4,723,957	5,167,680	6,029,617	5,602,455	-	-	-	-	6,451,259	7,152,757	8,516,104	7,840,564
OPEB Liability	-	-	-	-	-	-	-	-	2,944,923	2,944,923	2,020,079	2,944,923	2,944,923	2,944,923	2,020,079	2,944,923
Net Pension Liability	956,221	956,221	336,866	956,221	481,353	481,353	351,481	481,353	3,550,538	3,550,538	1,250,814	3,550,538	4,988,112	4,988,112	1,939,161	4,988,112
Revenue Bonds Payable(Net of Premium/Discount)	31,797,039	33,686,803	38,943,024	35,526,589	1,134,475	1,252,833	22,832,476	1,367,092	344,325,374	342,007,464	311,169,773	314,470,387	377,256,888	376,947,100	372,945,273	351,364,068
Total Noncurrent Liabilities	38,691,314	40,838,853	46,740,830	42,931,671	6,358,849	6,920,930	29,213,574	7,469,964	399,999,832	396,740,673	361,282,757	368,670,338	445,049,995	444,500,456	437,237,261	419,071,973
Total Liabilities	43,481,509	45,570,927	50,231,119	47,648,899	12,191,539	11,740,573	32,430,382	11,282,640	408,120,971	403,119,296	366,426,083	373,136,956	463,794,019	460,430,796	449,087,584	432,068,495
Deferred Inflows of Resources																
Pensions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OPEB	119,297	119,297	361,361	119,297	-	-	-	-	-	-	1,341,769	-	119,297	119,297	1,703,130	119,297
Total Deferred Inflows	119,297	119,297	361,361	119,297	-	-	-	-	-	-	1,341,769	-	119,297	119,297	1,703,130	119,297
Net Position:																
Net Investment in Capital Assets	126,050,953	124,466,651	125,668,825	122,789,876	89,906,745	90,601,728	93,375,211	90,798,246	12,066,198	3,516,061	35,464	835,697	228,023,896	218,584,440	219,079,500	214,423,819
Restricted for Debt Service	1,043,094	1,043,094	1,380,654	1,043,094	-	-	-	-	37,684,197	37,684,197	37,684,197	37,684,197	38,727,291	38,727,291	39,064,851	38,727,291
Unrestricted	(24,586,971)	(23,186,218)	(28,427,406)	(22,722,429)	12,612,754	10,741,893	2,701,467	8,591,093	(108,759,474)	(101,075,027)	(97,021,349)	(93,908,258)	(120,733,691)	(113,519,353)	(122,747,288)	(108,039,594)
Total Net Position	102,507,075	102,323,527	98,622,073	101,110,541	102,519,500	101,343,621	96,076,678	99,389,339	(59,009,078)	(59,874,770)	(59,301,688)	(55,388,364)	146,017,497	143,792,378	135,397,063	145,111,516
Total Liabilities, Deferred Inflows of Resources and Net Position	146,107,881	148,013,751	149,214,553	148,878,737	114,711,039	113,084,194	128,507,060	110,671,979	349,111,892	343,244,527	308,466,164	317,748,592	609,930,812	604,342,471	586,187,777	577,299,308

LEHIGH COUNTY AUTHORITY
CASH & INVESTMENT SUMMARY
2021 Budget and Comparative Prior Period Data

	Suburban Water				Suburban Wastewater				City Division				Total LCA			
	Budget 2021	Forecast 2020	Budget 2020	Actual 2019	Budget 2021	Forecast 2020	Budget 2020	Actual 2019	Budget 2021	Forecast 2020	Budget 2020	Actual 2019	Budget 2021	Forecast 2020	Budget 2020	Actual 2019
Cash																
Operating																
Unrestricted	1,168,222	4,658,393	7,664,396	7,205,363	4,315,728	1,993,900	16,997,744	(614,832)	19,638,366	14,974,819	9,748,180	12,490,422	25,122,316	21,627,112	34,410,320	19,080,953
Restricted	2,532,181	2,532,181	203,046	2,532,181	0	0	(370)	0	1,614,754	1,614,754	2,307,084	1,614,754	-	-	-	-
Total Operating	3,700,403	7,190,574	7,867,442	9,737,544	4,315,728	1,993,900	16,997,374	(614,832)	21,253,120	16,589,573	12,055,264	14,105,176	25,122,316	21,627,112	34,410,320	19,080,953
Capital																
Unrestricted	2,042,457	2,042,457	2,037,248	2,037,248	7,672,019	7,672,019	7,672,019	7,672,019	169,980	169,980	169,980	169,980	9,884,456	9,884,456	9,879,247	9,879,247
Restricted	-	-	-	-	337,932	337,932	337,932	337,932	7,500,000	7,500,000	7,500,000	7,500,000	7,837,932	7,837,932	7,837,932	7,837,932
Total Capital	2,042,457	2,042,457	2,037,248	2,037,248	8,009,951	8,009,951	8,009,951	8,009,951	7,669,980	7,669,980	7,669,980	7,669,980	17,722,388	17,722,388	17,717,179	17,717,179
Other Restricted																
Debt Reserves	1,043,094	1,043,094	1,380,654	1,043,094	-	-	-	-	37,684,197	37,684,197	37,684,197	37,684,197	38,727,291	38,727,291	39,064,851	38,727,291
Escrow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Other Restricted	1,043,094	1,043,094	1,380,654	1,043,094	-	-	-	-	37,684,197	37,684,197	37,684,197	37,684,197	38,727,291	38,727,291	39,064,851	38,727,291
Total Cash	6,785,954	10,276,125	11,285,344	12,817,886	12,325,679	10,003,852	25,007,325	7,395,119	66,607,297	61,943,750	57,409,441	59,459,353	81,571,995	78,076,791	91,192,350	75,525,423
Investments																
Operating																
Unrestricted	2,136,930	2,136,930	785,733	2,136,930	6,757,276	6,757,276	(1,000,000)	6,757,276	-	-	-	-	8,894,206	8,894,206	(214,267)	8,894,206
Restricted	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Operating	2,136,930	2,136,930	785,733	2,136,930	6,757,276	6,757,276	(1,000,000)	6,757,276	-	-	-	-	8,894,206	8,894,206	(214,267)	8,894,206
Capital																
Unrestricted	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	-	-	-	-	2,000,000	2,000,000	2,000,000	2,000,000
Restricted	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Capital	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	-	-	-	-	2,000,000	2,000,000	2,000,000	2,000,000
Other Restricted																
Debt Reserves	-	-	2,214,267	-	-	-	-	-	24,117,855	-	3,940,640	-	24,117,855	-	6,154,907	-
Escrow	4,236,279	4,236,279	4,411,722	4,236,279	-	-	-	-	-	-	-	-	4,236,279	4,236,279	4,411,722	4,236,279
Total Other Restricted	4,236,279	4,236,279	6,625,989	4,236,279	-	-	-	-	24,117,855	-	3,940,640	-	28,354,134	4,236,279	10,566,629	4,236,279
Total Investments	7,373,209	7,373,209	8,411,722	7,373,209	7,757,276	7,757,276	-	7,757,276	24,117,855	-	3,940,640	-	39,248,340	15,130,485	12,352,362	15,130,485
Total Cash and Investments	14,159,163	17,649,334	19,697,066	20,191,095	20,082,955	17,761,128	25,007,325	15,152,395	90,725,152	61,943,750	61,350,081	59,459,353	120,820,335	93,207,276	103,544,712	90,655,908
Summary																
Cash																
Unrestricted	3,210,679	6,700,850	9,701,644	9,242,611	11,987,747	9,665,920	24,669,763	7,057,187	19,808,346	15,144,799	9,918,160	12,660,402	35,006,772	31,511,568	44,289,567	28,960,200
Restricted	3,575,275	3,575,275	1,583,700	3,575,275	337,932	337,932	337,562	337,932	46,798,951	46,798,951	47,491,281	46,798,951	50,712,158	50,712,158	49,412,543	50,712,158
Total Cash	6,785,954	10,276,125	11,285,344	12,817,886	12,325,679	10,003,852	25,007,325	7,395,119	66,607,297	61,943,750	57,409,441	59,459,353	85,718,930	82,223,726	93,702,110	79,672,358
Investments																
Unrestricted	3,136,930	3,136,930	1,785,733	3,136,930	7,757,276	7,757,276	-	7,757,276	-	-	-	-	10,894,206	10,894,206	1,785,733	10,894,206
Restricted	4,236,279	4,236,279	6,625,989	4,236,279	-	-	-	-	24,117,855	-	3,940,640	-	28,354,134	4,236,279	10,566,629	4,236,279
Total Investments	7,373,209	7,373,209	8,411,722	7,373,209	7,757,276	7,757,276	-	7,757,276	24,117,855	-	3,940,640	-	39,248,340	15,130,485	12,352,362	15,130,485
Total Cash and Investments	14,159,163	17,649,334	19,697,066	20,191,095	20,082,955	17,761,128	25,007,325	15,152,395	90,725,152	61,943,750	61,350,081	59,459,353	124,967,270	97,354,211	106,054,472	94,802,843

LEHIGH COUNTY AUTHORITY
STATEMENTS OF CASH FLOWS - CONDENSED
2021 Budget and Comparative Prior Period Data

	Suburban Water				Suburban Wastewater				City Division				Total LCA			
	Budget 2021	Forecast 2020	Budget 2020	Actual 2019	Budget 2021	Forecast 2020	Budget 2020	Actual 2019	Budget 2021	Forecast 2020	Budget 2020	Actual 2019	Budget 2021	Forecast 2020	Budget 2020	Actual 2019
CONDENSED CASH FLOWS																
Operating Revenues	12,742,424	11,342,949	11,358,510	10,948,822	20,032,585	19,029,103	17,292,436	15,679,444	46,003,744	37,595,382	41,672,288	39,313,514	78,778,752	67,967,435	70,323,234	65,941,780
Operating Expenses	(8,637,776)	(6,134,848)	(7,334,728)	(6,027,132)	(13,248,399)	(11,391,541)	(12,355,646)	(11,716,436)	(19,229,140)	(18,501,175)	(18,659,910)	(18,165,550)	(41,115,315)	(36,027,565)	(38,350,284)	(35,909,118)
Net Cash Available for Debt Service	4,104,648	5,208,101	4,023,782	4,921,690	6,784,186	7,637,562	4,936,790	3,963,008	26,774,603	19,094,207	23,012,378	21,147,964	37,663,437	31,939,870	31,972,950	30,032,662
Debt Service	(3,499,146)	(3,517,659)	(3,341,564)	(3,270,166)	(731,029)	(737,954)	(1,616,435)	(712,225)	(14,225,917)	(12,648,837)	(15,421,170)	(13,416,749)	(18,456,092)	(16,904,450)	(20,379,169)	(17,399,140)
Net Cash After Debt Service	605,502	1,690,442	682,218	1,651,524	6,053,157	6,899,608	3,320,355	3,250,783	12,548,686	6,445,370	7,591,208	7,731,215	19,207,345	15,035,420	11,593,781	12,633,522
Interest Income	94,327	89,072	160,000	179,193	190,471	179,859	200,000	332,846	172,960	166,148	900,000	1,193,617	457,758	435,079	1,260,000	1,705,656
Other Payments	-	-	-	-	-	-	-	-	(1,230,600)	(533,258)	(533,258)	(524,861)	(1,230,600)	(533,258)	(533,258)	(524,861)
Investment Activity	-	-	-	3,465,332	-	-	-	(1,266,225)	-	-	-	4,000,000	-	-	-	6,199,107
Non-Cash Working Capital Dec (Inc)	-	-	-	6,150,814	-	-	-	6,668,638	50,000	(600,000)	-	(11,066,614)	50,000	(600,000)	-	1,752,838
Net Available for Capex	699,829	1,779,514	842,218	11,446,863	6,243,627	7,079,467	3,520,355	8,986,042	11,541,047	5,478,260	7,957,950	1,333,357	18,484,503	14,337,241	12,320,523	21,766,262
New Borrowing	-	-	5,119,500	-	-	-	22,635,000	-	2,000,000	-	-	-	2,000,000	-	27,754,500	-
Capex	(4,190,000)	(4,321,275)	(8,010,000)	(8,764,955)	(3,921,800)	(4,470,734)	(8,670,500)	(10,671,537)	(8,877,500)	(2,993,864)	(4,815,000)	(4,399,156)	(16,989,300)	(11,785,873)	(21,495,500)	(23,835,648)
NET CASH FLOWS	(3,490,171)	(2,541,761)	(2,048,282)	2,681,907	2,321,827	2,608,733	17,484,855	(1,685,495)	4,663,547	2,484,397	3,142,950	(3,065,798)	3,495,203	2,551,368	18,579,523	(2,069,386)
Beginning Unrestricted Cash Balance	6,700,850	9,242,611	11,749,926	6,560,704	9,665,920	7,057,187	7,184,908	8,742,682	6,267,443	3,783,046	6,775,210	6,848,844	22,634,213	20,082,844	25,710,044	22,152,230
ENDING UNRESTRICTED CASH BALANCE	3,210,679	6,700,850	9,701,644	9,242,611	11,987,747	9,665,920	24,669,763	7,057,187	10,930,990	6,267,443	9,918,160	3,783,046	26,129,416	22,634,212	44,289,567	20,082,844

	Budget 2021	Forecast 2020	Budget 2020	Actual 2019	Budget 2021	Forecast 2020	Budget 2020	Actual 2019	Budget 2021	Forecast 2020	Budget 2020	Actual 2019	Budget 2021	Forecast 2020	Budget 2020	Actual 2019
KEY METRICS																
Operating Ratio with D&A	1.13	1.29	1.13	1.27	1.06	1.12	0.96	0.96	1.66	1.46	1.53	1.56	1.36	1.32	1.27	1.31
Debt Service Coverage Ratio	1.20	1.51	1.25	1.56	9.54	10.59	3.18	6.03	1.68	1.48	1.52	1.63	1.90	1.88	1.60	1.79
Capital Coverage Ratio	0.17	0.41	0.11	0.21	1.59	1.58	0.41	0.34	1.29	2.03	1.65	1.91	1.09	1.27	0.57	0.58
Unrestricted Days Cash on Hand	135.62	398.45	482.56	559.73	307.09	284.72	674.21	219.85	182.33	115.60	117.89	71.12	213.02	215.60	357.73	197.26
Unrestricted Investment Balances	3,136,930	3,136,930	1,785,733	3,136,930	7,757,276	7,757,276	-	7,757,276	-	-	-	-	10,894,206	10,894,206	1,785,733	10,894,206

LEHIGH COUNTY AUTHORITY
STATEMENTS OF CASH FLOWS - SUMMARY
2021 Budget and Comparative Prior Period Data

	Suburban Water				Suburban Wastewater				City Division				Total LCA			
	Budget 2021	Forecast 2020	Budget 2020	Actual 2019	Budget 2021	Forecast 2020	Budget 2020	Actual 2019	Budget 2021	Forecast 2020	Budget 2020	Actual 2019	Budget 2021	Forecast 2020	Budget 2020	Actual 2019
Cash Flows From Operating Activities																
Cash Received From Customers	11,770,317	10,519,685	10,445,176	9,606,687	19,122,546	15,579,443	15,365,176	14,672,863	42,247,349	35,164,897	36,907,592	37,928,276	73,140,212	61,264,025	62,717,944	62,207,826
Cash Payments To Suppliers For Goods And Services	(4,606,174)	(3,411,942)	(4,054,234)	(3,198,288)	(10,285,608)	(9,097,000)	(11,271,004)	(9,944,018)	(5,371,334)	(3,565,971)	(4,782,506)	(6,171,993)	(20,263,116)	(16,074,913)	(20,107,744)	(19,314,298)
Cash Payments To Employees For Services	(3,953,337)	(2,646,822)	(3,280,494)	(2,374,299)	(1,916,369)	(1,249,472)	(1,469,340)	(1,311,675)	(13,300,911)	(13,633,715)	(12,518,341)	(12,550,723)	(19,170,616)	(17,530,009)	(17,268,175)	(16,236,698)
Other Operating Cash Receipts	29,124	26,719	136,834	168,051	43,823	47,381	172	79,277	349,165	223,554	456,111	418,299	422,112	297,654	593,117	665,627
Net Cash Provided By Operating Activities	3,239,929	4,487,640	3,247,282	4,202,150	6,964,393	5,280,353	2,625,004	3,496,447	23,924,270	18,188,764	20,062,856	19,623,859	34,128,592	27,956,757	25,935,142	27,322,456
Cash Flows From Noncapital Financing Activities																
Interest Paid on Revenue Bonds and Notes	-	-	-	-	-	-	-	-	(11,565,086)	(10,608,837)	(13,978,238)	(13,416,749)	(11,565,086)	(10,608,837)	(13,978,238)	(13,416,749)
Facility Improvement Payments	-	-	-	-	-	-	-	-	-	-	-	(3,148,443)	-	-	-	(3,148,443)
Payments to the City of Allentown	-	-	-	-	-	-	-	-	(1,230,600)	(533,258)	(533,258)	(524,861)	(1,230,600)	(533,258)	(533,258)	(524,861)
Refunding Gain on Bonds	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Transfers To/From Other Funds	-	-	-	5,976,539	-	-	-	4,388,173	-	-	(29,516)	(10,364,712)	-	-	(29,516)	-
Net Cash Provided By (Used in) Noncapital Financing Activities	-	-	-	5,976,539	-	-	-	4,388,173	(12,795,686)	(11,142,095)	(14,541,012)	(27,454,765)	(12,795,686)	(11,142,095)	(14,541,012)	(17,090,053)
Cash Flows From Capital And Related Financing Activities																
Receipts/(Release) of Developer Deposits	-	-	-	476,525	-	-	-	15,995	-	-	-	-	-	-	-	492,520
Payments of Developer Deposits	-	-	-	(705,174)	-	-	-	-	-	-	(3,789)	3,789	-	-	(3,789)	(701,385)
Payments of Facilities Planning Costs	-	-	-	(23,210)	-	-	-	(10,800)	-	-	-	-	-	-	-	(34,010)
Acquisition and Construction of Property and Equipment	(4,190,000)	(4,321,275)	(8,010,000)	(8,764,955)	(3,921,800)	(4,470,734)	(8,670,500)	(9,612,987)	(8,877,500)	(2,993,864)	(4,815,000)	(128,624)	(16,989,300)	(11,785,873)	(21,495,500)	(18,506,566)
Cash Received from Tapping and Capital Recovery Fees	443,721	500,109	472,000	418,775	835,098	3,396,323	800,000	1,573,749	1,773,409	1,460,927	1,534,700	1,707,127	3,052,228	5,357,358	2,806,700	3,699,651
Cash Received from Meter Sales	100,744	55,361	108,000	94,763	-	-	-	-	23,387	39,787	292,000	22,466	124,131	95,148	400,000	117,229
Cash Received from Inspection, Plan Reviews, and Project R	367,574	211,855	161,000	393,187	30,489	5,364	45,282	42,518	2,151,185	934,544	2,495,100	448,401	2,549,248	1,151,763	2,701,382	884,105
Other Capital Cash Receipts	30,944	29,220	35,500	93,928	628	593	1,000	615	59,249	56,915	35,000	59,659	90,821	86,728	71,500	154,202
Other Capital Cash Payments	(78,264)	(76,084)	-	90,946	(1,046,422)	(1,045,070)	(299,707)	117,811	(2,377,545)	(2,186,729)	(1,329,547)	(1,281,395)	(3,502,231)	(3,307,883)	(1,629,254)	(1,072,638)
Revenue Bond and Note Issuance Proceeds	-	-	5,119,500	-	-	-	22,500,000	-	-	-	-	-	2,000,000	-	27,619,500	-
Principal Paid On Revenue Bonds	(1,839,786)	(1,832,994)	(1,588,963)	(1,481,325)	(114,259)	(114,905)	(114,905)	(78,904)	(2,570,000)	(2,040,000)	(1,442,932)	(1,245,000)	(4,524,045)	(3,987,899)	(3,146,800)	(2,805,229)
Notes Payable	(253,032)	(248,378)	(243,812)	(243,812)	(434,775)	(427,162)	(427,162)	(420,205)	-	-	-	-	(687,807)	(675,540)	(670,974)	(664,017)
Interest Paid on Revenue Bonds and Notes	(1,406,328)	(1,436,287)	(1,508,789)	(1,468,258)	(181,995)	(195,887)	(803,082)	(213,115)	-	-	-	-	(1,588,323)	(1,632,174)	(2,311,871)	(1,681,373)
Net Cash Provided by (Used in) Capital and Related Financing A	(6,824,427)	(7,118,473)	(5,455,564)	(11,118,611)	(4,833,035)	(2,851,479)	13,030,926	(8,585,323)	(7,817,815)	(4,728,421)	(3,234,468)	(413,576)	(19,475,278)	(14,698,373)	4,340,894	(20,117,510)
Cash Flows From investing Activities																
Maturities of Certificates Of Deposit	-	-	-	3,808,000	-	-	1,612,859	14,866,203	-	-	-	-	-	-	1,612,859	18,674,203
Purchase of Certificates Of Deposit	-	-	-	(2,572,668)	-	-	-	(16,147,680)	-	-	-	-	-	-	-	(18,720,348)
Purchase of U.S. Treasury Obligations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maturities of U.S. Treasury Obligations	-	-	-	2,230,000	-	-	-	-	1,179,819	-	-	4,000,000	1,179,819	-	-	6,230,000
Interest Received On Investments	94,327	89,072	160,000	156,496	190,471	179,859	216,066	296,685	172,960	166,148	855,574	1,178,684	457,758	435,079	1,231,640	1,631,865
Net Cash Provided by (Used in) Investing Activities	94,327	89,072	160,000	3,621,828	190,471	179,859	1,828,925	(984,792)	1,352,779	166,148	855,574	5,178,684	1,637,577	435,079	2,844,499	7,815,720
Net Increase (Decrease) in Cash	(3,490,171)	(2,541,761)	(2,048,282)	2,681,907	2,321,828	2,608,733	17,484,855	(1,685,495)	4,663,547	2,484,397	3,142,950	(3,065,798)	3,495,204	2,551,368	18,579,523	(2,069,386)
Cash:																
Beginning	10,276,125	12,817,886	13,333,626	10,135,979	10,003,852	7,395,119	7,522,470	9,080,614	61,943,750	59,459,353	54,266,491	62,525,151	82,223,726	79,672,358	75,122,587	81,741,744
Ending	6,785,954	10,276,125	11,285,344	12,817,886	12,325,679	10,003,852	25,007,325	7,395,119	66,607,297	61,943,750	57,409,441	59,459,353	85,718,930	82,223,726	93,702,110	79,672,358
Cash Consisted of the Following:																
Cash and Cash Equivalents	3,210,679	6,700,850	9,701,644	9,242,611	11,987,747	9,665,920	24,669,763	7,057,187	19,808,346	15,144,799	9,918,160	12,660,402	35,006,772	31,511,568	44,289,567	28,960,200
Restricted Cash and Cash Equivalents	3,575,275	3,575,275	1,583,700	3,575,275	337,932	337,932	337,562	337,932	46,798,951	46,798,951	47,491,281	46,798,951	50,712,158	50,712,158	49,412,543	50,712,158
Total Cash and Cash Equivalents	6,785,954	10,276,125	11,285,344	12,817,886	12,325,679	10,003,852	25,007,325	7,395,119	66,607,297	61,943,750	57,409,441	59,459,353	85,718,930	82,223,726	93,702,110	79,672,358

LEHIGH COUNTY AUTHORITY
STATEMENTS OF ACTIVITIES AND CHANGES IN NET POSITION
2021 Budget and Comparative Prior Period Data

	Suburban Water				Suburban Wastewater				City Division				Total LCA			
	Budget 2021	Forecast 2020	Budget 2020	Actual 2019	Budget 2021	Forecast 2020	Budget 2020	Actual 2019	Budget 2021	Forecast 2020	Budget 2020	Actual 2019	Budget 2021	Forecast 2020	Budget 2020	Actual 2019
OPERATING FUNDS																
Operating Revenues:																
User Charges																
Charges for Services	11,770,317	10,519,685	10,445,176	9,780,119	19,122,546	15,579,443	16,445,982	13,983,285	41,647,349	35,764,897	36,859,377	36,657,562	72,540,212	61,864,025	63,750,535	60,420,966
Rent	-	-	111,213	125,253	-	-	-	-	-	-	-	-	-	-	111,213	125,253
Other Income	29,124	26,719	25,621	42,798	43,823	47,381	172	79,277	349,165	223,554	456,111	418,299	422,112	297,654	481,904	540,374
Total User Charges	11,799,441	10,546,404	10,582,010	9,948,169	19,166,369	15,626,824	16,446,154	14,062,562	41,996,514	35,988,451	37,315,488	37,075,861	72,962,324	62,161,679	64,343,652	61,086,592
Connection & System Charges																
Supply/Tapping Fees	382,712	411,960	387,000	360,815	-	-	-	-	22,342	3,579	18,500	21,462	405,054	415,539	405,500	382,277
Capital Cost Recovery	-	-	-	-	359,513	1,525,234	295,000	1,199,847	1,150,235	1,405,513	1,397,000	1,105,691	1,509,748	2,930,747	1,692,000	2,305,538
Distribution Tapping Fees	61,009	88,149	85,000	57,960	475,585	1,871,089	505,000	373,902	600,832	51,834	119,200	579,975	1,137,426	2,011,072	709,200	1,011,836
Meter Sales	100,744	55,361	108,000	94,763	-	-	-	-	23,387	39,787	292,000	22,466	124,131	95,148	400,000	117,229
Inspection & Review Fees	77,000	103,287	161,000	119,665	-	857	45,282	13,727	31,569	39,345	180,100	30,326	108,569	143,489	386,382	163,718
Developer Reimbursement	290,574	108,568	-	273,522	30,489	4,507	-	28,791	2,119,615	895,199	2,315,000	418,075	2,440,679	1,008,274	2,315,000	720,387
Total Connection & System Charges	912,039	767,325	741,000	906,725	865,588	3,401,686	845,282	1,616,267	3,947,981	2,435,257	4,321,800	2,177,994	5,725,607	6,604,268	5,908,082	4,700,985
Other Income	30,944	29,220	35,500	93,928	628	593	1,000	615	59,249	56,915	35,000	59,659	90,821	86,728	71,500	154,202
Total Operating Revenues	12,742,423	11,342,949	11,358,510	10,948,822	20,032,585	19,029,103	17,292,436	15,679,444	46,003,744	38,480,623	41,672,288	39,313,514	78,778,752	68,852,675	70,323,234	65,941,780
Operating Expenses:																
Personnel	3,289,603	2,383,805	3,127,169	2,402,145	1,760,954	1,130,381	1,464,464	1,340,615	11,561,494	12,145,543	10,869,860	11,387,931	16,612,051	15,659,728	15,461,493	15,130,692
General & Administrative	663,734	263,018	130,143	(4,664)	155,415	119,091	(36,072)	12,007	1,739,417	1,488,173	1,648,481	1,810,565	2,558,565	1,870,281	1,742,552	1,817,908
Utilities	543,917	461,746	616,038	432,898	449,485	369,199	481,172	374,031	2,154,519	1,878,480	2,199,029	2,083,543	3,147,920	2,709,425	3,296,239	2,890,473
Materials and Supplies	547,582	409,504	563,004	401,908	649,208	341,189	575,139	333,195	1,932,267	1,429,441	1,871,949	1,328,712	3,129,057	2,180,134	3,010,092	2,063,814
Miscellaneous Services	3,518,076	2,544,092	2,898,374	2,681,591	6,209,376	5,977,489	6,510,976	6,227,262	1,815,472	1,534,709	2,058,591	1,535,878	11,542,924	10,056,290	11,467,941	10,444,732
Treatment and Transportation	-	-	-	-	3,977,539	3,409,122	3,327,679	3,385,568	12,000	11,265	12,000	9,547	3,989,539	3,420,387	3,339,679	3,395,115
Depreciation and Amortization	2,605,699	2,644,500	2,750,000	2,602,179	4,616,783	4,667,252	4,603,000	4,571,072	5,893,862	5,880,000	5,880,000	5,835,507	13,116,343	13,191,752	13,233,000	13,008,758
Major Maintenance Expenses	3,400	3,400	3,400	-	1,000,000	1,000,000	1,000,000	-	542,924	1,287,924	2,782,916	1,250,412	1,546,324	2,291,324	3,786,316	1,250,412
Other Miscellaneous	74,864	72,684	-	113,254	46,422	45,070	32,288	43,757	2,123,972	898,805	-	9,373	2,245,258	1,016,559	32,288	166,384
Total Operating Expenses	11,246,874	8,782,748	10,088,128	8,629,311	18,865,181	17,058,793	17,958,646	16,287,508	27,775,927	26,554,340	27,322,826	25,251,468	57,887,982	52,395,881	55,369,600	50,168,287
Net Operating Profit	1,495,549	2,560,201	1,270,382	2,319,511	1,167,404	1,970,310	(666,210)	(608,064)	18,227,817	11,926,283	14,349,462	14,062,046	20,890,770	16,456,794	14,953,634	15,773,492
Non-Operating Income (Expense)																
Investment Earnings	94,327	89,072	160,000	179,193	190,471	179,859	200,000	332,846	172,960	166,148	900,000	1,193,617	457,758	435,079	1,260,000	1,705,656
Interest (Expense)	(1,406,328)	(1,436,287)	(1,508,789)	(1,545,029)	(181,995)	(195,887)	(803,082)	(213,115)	(17,535,086)	(16,578,837)	(19,356,023)	(19,386,584)	(19,123,409)	(18,211,011)	(21,667,894)	(21,144,727)
Capital Grant	-	-	-	1,716,419	-	-	-	15,000	-	-	-	-	-	-	-	1,731,419
Capital Assets Provided by Developers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Non-Operating Income (Expense)	(1,312,001)	(1,347,215)	(1,348,789)	350,583	8,475	(16,028)	(603,082)	134,731	(17,362,125)	(16,412,689)	(18,456,023)	(18,192,967)	(18,665,651)	(17,775,932)	(20,407,894)	(17,707,652)
Net Income (Loss)	183,548	1,212,986	(78,407)	2,670,094	1,175,879	1,954,282	(1,269,292)	(473,333)	865,692	(4,486,406)	(4,106,561)	(4,130,921)	2,225,119	(1,319,138)	(5,454,260)	(1,934,160)
Net Position at Beginning of Year (As Restated)	102,323,527	101,110,541	98,700,480	98,440,447	101,343,621	99,389,339	97,345,970	99,862,672	(59,874,770)	(55,388,364)	(55,195,127)	(51,257,443)	143,792,378	145,111,516	140,851,323	147,045,676
Cumulative Effect of Change in Accounting principle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Position at Beginning of Year	102,323,527	101,110,541	98,700,480	98,440,447	101,343,621	99,389,339	97,345,970	99,862,672	(59,874,770)	(55,388,364)	(55,195,127)	(51,257,443)	143,792,378	145,111,516	140,851,323	147,045,676
Net Position at End of Year	102,507,075	102,323,527	98,622,073	101,110,541	102,519,500	101,343,621	96,076,678	99,389,339	(59,009,078)	(59,874,770)	(59,301,688)	(55,388,364)	146,017,497	143,792,378	135,397,063	145,111,516
CAPITAL RESERVE FUNDS																
Capital Water Reserve Funds	4,190,000	4,321,275	8,010,000	8,764,955	-	-	-	-	4,692,500	1,381,564	1,375,000	2,016,987	8,882,500	5,702,839	9,385,000	10,781,943
Capital WasteWater Reserve Funds	-	-	-	-	3,921,800	4,470,734	8,670,500	10,671,537	4,185,000	1,612,300	3,440,000	2,382,168	8,106,800	6,083,034	12,110,500	13,053,705
Total Capital Reserve Funds	4,190,000	4,321,275	8,010,000	8,764,955	3,921,800	4,470,734	8,670,500	10,671,537	8,877,500	2,993,864	4,815,000	4,399,156	16,989,300	11,785,873	21,495,500	23,835,648

LEHIGH COUNTY AUTHORITY
STATEMENTS OF ACTIVITIES AND CHANGES IN NET POSITION - AUDIT FORMAT
2021 Budget and Comparative Prior Period Data

	Suburban Water				Suburban Wastewater				City Division				Total LCA			
	Budget 2021	Forecast 2020	Budget 2020	Actual 2019	Budget 2021	Forecast 2020	Budget 2020	Actual 2019	Budget 2021	Forecast 2020	Budget 2020	Actual 2019	Budget 2021	Forecast 2020	Budget 2020	Actual 2019
OPERATING FUNDS																
Operating Revenues:																
Charges for Services	11,770,317	10,519,685	10,445,176	9,780,119	19,122,546	15,579,443	16,445,982	13,983,285	41,647,349	35,764,897	36,859,377	36,657,562	72,540,212	61,864,025	63,750,535	60,420,966
Rent	-	-	111,213	125,253	-	-	-	-	-	-	-	-	-	-	111,213	125,253
Other Income	29,124	26,719	25,621	42,798	43,823	47,381	172	79,277	349,165	223,554	456,111	418,299	422,112	297,654	481,904	540,374
Total Operating Revenues	11,799,441	10,546,404	10,582,010	9,948,169	19,166,369	15,626,824	16,446,154	14,062,562	41,996,514	35,988,451	37,315,488	37,075,861	72,962,324	62,161,679	64,343,652	61,086,592
Operating Expenses:																
Personnel	3,289,603	2,383,805	3,127,169	2,402,145	1,760,954	1,130,381	1,464,464	1,340,615	11,561,494	12,145,543	10,869,860	11,387,931	16,612,051	15,659,728	15,461,493	15,130,692
General & Administrative	663,734	263,018	130,143	(4,664)	155,415	119,091	(36,072)	12,007	1,739,417	1,488,173	1,648,481	1,810,565	2,558,566	1,870,281	1,742,552	1,817,908
Utilities	543,917	461,746	616,038	432,898	449,485	369,199	481,172	374,031	2,154,519	1,878,480	2,199,029	2,083,543	3,147,920	2,709,425	3,296,239	2,890,473
Materials and Supplies	547,582	409,504	563,004	401,908	649,208	341,189	575,139	333,195	1,932,267	1,429,441	1,871,949	1,328,712	3,129,057	2,180,134	3,010,092	2,063,814
Miscellaneous Services	3,518,076	2,544,092	2,898,374	2,681,591	6,209,376	5,977,489	6,510,976	6,227,262	1,815,472	1,534,709	2,058,591	1,535,878	11,542,924	10,056,290	11,467,941	10,444,732
Treatment and Transportation	-	-	-	-	3,977,539	3,409,122	3,327,679	3,385,568	12,000	11,265	12,000	9,547	3,989,539	3,420,387	3,339,679	3,395,115
Depreciation and Amortization	2,605,699	2,644,500	2,750,000	2,602,179	4,616,783	4,667,252	4,603,000	4,571,072	5,893,862	5,880,000	5,880,000	5,835,507	13,116,343	13,191,752	13,233,000	13,008,758
Total Operating Expenses	11,168,610	8,706,664	10,084,728	8,516,057	17,818,760	16,013,723	16,926,358	16,243,751	25,109,031	24,367,611	24,539,910	23,991,684	54,096,400	49,087,998	51,550,996	48,751,492
Operating Income	630,831	1,839,740	497,282	1,432,112	1,347,609	(386,900)	(480,204)	(2,181,189)	16,887,484	11,620,840	12,775,578	13,084,177	18,865,924	13,073,680	12,792,656	12,335,100
Capital Related Revenues (Expenses)																
Supply/Tapping Fees	382,712	411,960	387,000	360,815	-	-	-	-	22,342	3,579	18,500	21,462	405,054	415,539	405,500	382,277
Capital Cost Recovery	-	-	-	-	359,513	1,525,234	295,000	1,199,847	1,150,235	1,405,513	1,397,000	1,105,691	1,509,748	2,930,747	1,692,000	2,305,538
Distribution Tapping Fees	61,009	88,149	85,000	57,960	475,585	1,871,089	505,000	373,902	600,832	51,834	119,200	579,975	1,137,426	2,011,072	709,200	1,011,836
Meter Sales	100,744	55,361	108,000	94,763	-	-	-	-	23,387	39,787	292,000	22,466	124,131	95,148	400,000	117,229
Inspection & Review Fees	77,000	103,287	161,000	119,665	-	857	45,282	13,727	31,569	39,345	180,100	30,326	108,569	143,489	386,382	163,718
Developer Reimbursement	290,574	108,568	-	273,522	30,489	4,507	-	28,791	2,119,615	9,958	2,315,000	418,075	2,440,679	123,033	2,315,000	720,387
Other Income	30,944	29,220	35,500	93,928	628	593	1,000	615	59,249	56,915	35,000	59,659	90,821	86,728	71,500	154,202
Major Maintenance Expenses	(3,400)	(3,400)	(3,400)	-	(1,000,000)	(1,000,000)	(1,000,000)	-	(2,652,924)	(1,287,924)	(2,782,916)	(1,250,412)	(3,656,324)	(2,291,324)	(3,786,316)	(1,250,412)
Other Miscellaneous	(74,864)	(72,684)	-	(113,254)	(46,422)	(45,070)	(32,288)	(43,757)	(13,972)	(13,565)	-	(9,373)	(135,258)	(131,318)	(32,288)	(166,384)
Total Capital Related Revenues (Expenses)	864,719	720,461	773,100	887,399	(180,206)	2,357,210	(186,006)	1,573,125	1,340,334	305,443	1,573,884	977,868	2,024,846	3,383,114	2,160,978	3,438,392
PROFIT (LOSS) FROM OPERATING ACTIVITIES	1,495,549	2,560,201	1,270,382	2,319,511	1,167,403	1,970,310	(666,210)	(608,064)	18,227,817	11,926,283	14,349,462	14,062,046	20,890,770	16,456,794	14,953,634	15,773,492
Non-Operating Income (Expense)																
Investment Earnings	94,327	89,072	160,000	179,193	190,471	179,859	200,000	332,846	172,960	166,148	900,000	1,193,617	457,758	435,079	1,260,000	1,705,656
Interest (Expense)	(1,406,328)	(1,436,287)	(1,508,789)	(1,545,029)	(181,995)	(195,887)	(803,082)	(213,115)	(17,535,086)	(16,578,837)	(19,356,023)	(19,386,584)	(19,123,409)	(18,211,011)	(21,667,894)	(21,144,727)
Capital Grant	-	-	-	1,716,419	-	-	-	15,000	-	-	-	-	-	-	-	1,731,419
Capital Assets Provided by Developers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Non-Operating Income (Expense)	(1,312,001)	(1,347,215)	(1,348,789)	350,583	8,475	(16,028)	(603,082)	134,731	(17,362,126)	(16,412,689)	(18,456,023)	(18,192,967)	(18,665,651)	(17,775,932)	(20,407,894)	(17,707,652)
NET INCOME (LOSS)	183,548	1,212,986	(78,407)	2,670,094	1,175,879	1,954,282	(1,269,292)	(473,333)	865,692	(4,486,406)	(4,106,561)	(4,130,921)	2,225,119	(1,319,138)	(5,454,260)	(1,934,160)
Net Position at Beginning of Year (As Restated)	102,323,527	101,110,541	98,700,480	98,440,447	101,343,621	99,389,339	97,345,970	99,862,672	(59,874,770)	(55,388,364)	(55,195,127)	(51,257,443)	143,792,378	145,111,516	140,851,323	147,045,676
Cumulative Effect of Change in Accounting principle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Position at Beginning of Year	102,323,527	101,110,541	98,700,480	98,440,447	101,343,621	99,389,339	97,345,970	99,862,672	(59,874,770)	(55,388,364)	(55,195,127)	(51,257,443)	143,792,378	145,111,516	140,851,323	147,045,676
Net Position at End of Year	102,507,075	102,323,527	98,622,073	101,110,541	102,519,499	101,343,621	96,076,678	99,389,339	(59,009,078)	(59,874,770)	(59,301,688)	(55,388,364)	146,017,496	143,792,378	135,397,063	145,111,516

System Statements

LEHIGH COUNTY AUTHORITY
STATEMENTS OF ACTIVITIES - SUBURBAN - WATER FUND
2021 Budget and Comparative Prior Period Data

	Suburban - Water Systems													Total					
	Int Serv 100	Undesignated 200	Western Lehigh Service Area			S. Lehigh Beverly Hills 207	Northern Lehigh Service Area					Northampton CFE 208	Buss Acres 210	Budget 2021	Total		Actual 2019		
			Central Lehigh 201	Arcadia West 211	Emmaus 209		North Whiteha 202	Washington 203	Mill Creek 204	Heidelberg 205	PL of Lynn 206				Madison North 221	Forecast 2020		Budget 2020	
Operating Revenues:																			
User Charges																			
Large Industrial		-	1,357,824	-	-	-	-	-	-	-	-	-	-	-	1,357,824	1,245,710	1,191,187	1,118,032	
Other Industrial/Commercial		-	4,308,847	26,446	3,221	-	50,801	3,787	-	-	-	-	-	248	4,393,350	3,751,826	3,697,016	3,404,641	
Residential		-	4,100,157	-	92,035	8,340	208,809	73,854	6,921	36,604	11,091	23,749	13,182	21,950	4,596,692	4,217,149	4,067,530	3,889,306	
Penalties		-	24,035	242	247	20	373	372	22	135	32	82	35	31	25,627	23,511	96,138	103,807	
Private Fire Service		-	722,542	211,210	-	-	5,061	1,633	-	-	-	-	-	-	940,447	862,795	881,402	846,199	
Public Fire Service		-	420,155	-	-	-	19,215	9,219	-	-	-	-	-	-	448,588	411,549	436,903	378,629	
User Charges - Municipal		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
User Charges - Residential & Commercial		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
User Charges - Hauler		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hauler Fees		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Industrial Charges		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Industrial Pretreatment Revenues		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Municipal		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Leachate Program Revenues		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Income		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Water Sales		-	7,788	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Provision for Doubtful Debts		-	-	-	-	-	-	-	-	-	-	-	-	-	7,788	7,145	75,000	51,553	
Total Charges for Services	-	-	10,941,348	237,898	95,504	8,360	284,260	88,865	6,943	36,739	11,123	23,831	13,217	22,229	11,770,317	10,519,685	10,445,176	9,780,119	
Rental Income	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	111,213	125,253	
Miscellaneous	-	-	29,124	-	-	-	-	-	-	-	-	-	-	-	29,124	26,719	25,621	42,798	
Total User Charges	-	-	10,970,472	237,898	95,504	8,360	284,260	88,865	6,943	36,739	11,123	23,831	13,217	22,229	11,799,441	10,546,404	10,582,010	9,948,169	
Connection & System Charges																			
Supply/Tapping Fees	-	-	372,244	-	-	-	10,468	-	-	-	-	-	-	-	382,712	411,960	387,000	360,815	
Capital Cost Recovery	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Distribution Tapping Fees	-	-	46,395	-	-	-	14,614	-	-	-	-	-	-	-	61,009	88,149	85,000	57,960	
Meter Sales	-	-	95,339	-	-	-	5,405	-	-	-	-	-	-	-	100,744	55,361	108,000	94,763	
Inspection & Review Fees	-	-	75,337	-	-	-	1,663	-	-	-	-	-	-	-	77,000	103,287	161,000	119,665	
Developer Reimbursement	-	-	287,738	-	-	-	2,837	-	-	-	-	-	-	-	290,574	108,568	-	273,522	
Total Connection & System Charges	-	-	877,052	-	-	-	34,987	-	-	-	-	-	-	-	912,039	767,325	741,000	906,725	
Other Miscellaneous Revenues																			
Other Income	-	-	28,237	-	883	-	750	427	29	177	15	280	44	103	30,944	29,220	35,500	93,928	
Total Other Miscellaneous Revenues	-	-	28,237	-	883	-	750	427	29	177	15	280	44	103	30,944	29,220	35,500	93,928	
Total Operating Revenues	-	-	11,875,761	237,898	96,386	8,360	319,997	89,291	6,972	36,916	11,138	24,110	13,261	22,332	12,742,423	11,342,949	11,358,510	10,948,822	
Operating Expenses:																			
Personnel																			
Salaries and Wages	658,245	-	910,116	29,604	12,732	16,505	73,137	13,187	15,474	29,881	22,548	16,411	17,617	28,805	1,844,261	1,460,145	1,783,421	1,568,044	
Overtime	1,434	-	108,218	6,313	2,035	1,010	11,392	1,363	1,761	4,393	2,815	1,749	1,386	1,163	145,031	86,511	96,833	92,322	
Taxes	52,991	-	78,621	2,760	1,160	1,388	6,562	1,156	1,363	2,682	2,002	1,433	1,516	2,404	156,038	117,282	144,062	124,429	
Fringe Benefits	356,459	-	600,945	21,112	8,876	10,619	50,201	8,844	10,433	20,518	15,317	10,962	11,593	18,393	1,144,272	719,866	1,082,607	617,351	
Other Personnel Related	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20,246	-	-
Total Personnel	1,069,128	-	1,697,900	59,790	24,802	29,522	141,293	24,550	29,032	57,473	42,681	30,554	32,112	50,765	3,289,603	2,383,805	3,127,169	2,402,145	
Purchase of Services																			
General & Administrative	(1,095,178)	-	1,527,515	10,654	22,395	5,358	126,665	22,314	5,264	10,353	7,729	5,532	5,851	9,282	663,734	263,018	130,143	(4,664)	
Utilities	19,849	-	420,418	17,754	234	5,768	28,450	1,530	6,268	16,086	4,969	7,623	7,839	7,129	543,917	461,746	616,038	432,898	
Compliance	6,201	-	28,000	2,458	2,373	873	4,500	1,410	675	1,410	873	873	873	873	51,392	57,482	67,745	57,166	
Contract Operating Svcs	-	-	2,520	2,240	-	1,850	10,400	-	2,240	7,640	2,240	2,240	2,600	4,300	38,270	54,460	38,270	53,784	
Engineering	-	-	55,000	-	-	-	-	-	-	-	-	-	-	-	55,000	52,960	42,000	52,245	
Extraordinary Expenditures	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Exceptional Strength Analysis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fleet Management Services	-	-	28,000	-	-	-	-	-	-	-	-	-	-	-	28,000	59,426	24,500	23,937	
General Analyses	-	-	40,000	4,000	900	2,600	5,000	1,000	700	5,800	2,400	3,000	2,160	5,076	72,636	35,591	83,856	21,403	
Industrial Meter Testing	-	-	8,500	-	-	-	-	-	-	-	-	-	-	-	8,500	-	7,500	-	
Maintenance Services	-	-	242,453	36,350	16,000	2,800	34,600	550	3,150	53,000	7,900	5,550	5,100	7,400	414,853	182,946	401,803	385,878	
Miscellaneous Services	-	-	24,750	50	-	100	25	-	-	-	100	-	-	-	25,025	110,964	83,300	109,428	
Rental	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Residuals	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Purchases	-	-	2,210,400	-	26,000	-	458,000	130,000	-	-	-	-	-	-	2,824,400	1,990,262	2,149,400	1,977,750	
System Planning / Capital Management	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LCA WWTP Treatment/Removals	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Treatment and Transportation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Purchase of Services	(1,069,128)	-	4,587,556	73,505	67,902	19,349	667,640	156,803	18,297	94,290	26,211	24,818	24,422	34,060	4,725,726	3,268,855	3,644,555	3,109,825	

LEHIGH COUNTY AUTHORITY
STATEMENTS OF ACTIVITIES - SUBURBAN - WATER FUND
2021 Budget and Comparative Prior Period Data

	Suburban - Water Systems													Total				
	Int Serv 100	Undesignated 200	Central Lehigh 201	Arcadia West 211	Emmaus 209	S. Lehigh Beverly Hills 207	North Whiteha 202	Washington 203	Mill Creek 204	Heidelberg 205	PL of Lynn 206	Madison North 221	Northampton CFE 208	Buss Acres 210	Budget 2021	Forecast 2020	Budget 2020	Actual 2019
Materials & Supplies	-	-	45,000	3,300	-	200	900	-	300	800	200	200	200	7,300	58,400	38,899	59,600	38,611
Purification Chemicals	-	-	27,000	2,200	-	1,800	2,100	3,800	4,200	2,500	3,447	3,100	1,800	4,100	56,047	36,043	60,000	35,487
Purification Supplies	-	-	21,500	5,050	-	1,400	4,500	-	150	6,300	-	2,500	2,950	1,650	46,000	46,176	37,900	45,610
Misc. Materials & Supplies	-	-	36,480	900	-	300	3,000	50	1,000	2,200	300	1,000	700	500	46,430	39,182	41,524	38,648
Fuel & Mileage	-	-	45,500	1,800	800	950	4,600	1,250	950	1,350	950	900	1,000	1,100	61,150	43,828	66,300	43,382
Fleet Management Supplies	-	-	3,800	-	-	-	-	-	-	-	-	-	-	-	3,800	5,018	2,500	2,036
Equipment	-	-	67,865	6,800	-	7,000	7,000	-	1,800	11,800	2,800	-	12,600	150	117,815	71,693	139,720	70,589
Leased Equipment	-	-	46,000	-	-	-	-	-	-	-	-	-	-	-	46,000	-	46,000	-
Distribution & Transmission Supplies	-	-	78,600	810	4,600	300	18,500	4,210	1,200	1,500	1,720	-	-	500	111,940	128,665	109,460	127,546
Collection System Supplies	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Materials & Supplies	-	-	371,745	20,860	5,400	11,950	40,600	9,310	9,600	26,450	9,417	7,700	19,250	15,300	547,582	409,504	563,004	401,908
Depreciation and Amortization	-	-	2,605,699	-	-	-	-	-	-	-	-	-	-	-	2,605,699	2,644,500	2,750,000	2,602,179
Other Expenses	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Major Maintenance Expenses	-	3,400	-	-	-	-	-	-	-	-	-	-	-	-	3,400	3,400	3,400	-
Other Miscellaneous	-	-	74,864	-	-	-	-	-	-	-	-	-	-	-	74,864	72,684	-	113,254
Total Other Expenses	-	3,400	74,864	-	-	-	-	-	-	-	-	-	-	-	78,264	76,084	3,400	113,254
Total Operating Expenses	-	3,400	9,337,765	154,155	98,104	60,822	849,533	190,663	56,928	178,213	78,310	63,073	75,785	100,125	11,246,874	8,782,748	10,088,128	8,629,311
Net Operating Profit (Loss)	-	(3,400)	2,537,996	83,744	(1,718)	(52,461)	(529,536)	(101,372)	(49,956)	(141,297)	(67,171)	(38,962)	(62,523)	(77,793)	1,495,549	2,560,201	1,270,382	2,319,511
Non-Operating Income (Expense)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Investment Earnings	-	72,039	22,288	-	-	-	-	-	-	-	-	-	-	-	94,327	89,072	160,000	179,193
Interest (Expense)	-	(13,616)	(1,388,787)	-	-	-	-	(3,925)	-	-	-	-	-	-	(1,406,328)	(1,436,287)	(1,508,789)	(1,545,029)
Capital Contributed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,716,419
Other Miscellaneous	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Non-Operating Income (Expense)	-	58,423	(1,366,499)	-	-	-	-	(3,925)	-	-	-	-	-	-	(1,312,001)	(1,347,215)	(1,348,789)	350,583
Net Income (Loss)	-	55,023	1,171,497	83,744	(1,718)	(52,461)	(529,536)	(105,297)	(49,956)	(141,297)	(67,171)	(38,962)	(62,523)	(77,793)	183,548	1,212,986	(78,407)	2,670,094

LEHIGH COUNTY AUTHORITY
STATEMENTS OF ACTIVITIES - SUBURBAN - WASTEWATER FUND
2021 Budget and Comparative Prior Period Data

	Suburban - Wastewater Systems															Total			
	Int Serv 100	Interceptor Group			CRCS						W.Weisenberg					Budget 2021	Forecast 2020	Budget 2020	Actual 2019
	312	LLRI 1 313	LLRI 2 314	Heidelberg 305	Upper Milford 315	Wynnewood 316	Weisenberg 317	Sand Spring 319	Lowhill Twp. 323	NLSA 318	Washington 303	Lynn Twp. 322	WWTP 320	Arcadia West 311					
Operating Revenues:																			
User Charges																			
Large Industrial	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Other Industrial/Commercial	-	-	-	-	-	-	-	-	-	-	-	-	-	49,962	-	49,962	29,365	40,000	
Residential	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Penalties	155,954	-	-	-	2,089	6,741	1,782	952	48	195	(0)	11,300	7,428	2,686	-	189,176	173,556	261,950	
Private Fire Service	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Public Fire Service	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
User Charges - Municipal	8,539,091	573,623	52,466	-	-	-	-	-	-	-	-	-	-	-	-	9,165,180	6,354,798	7,713,159	
User Charges - Residential & Commercial	-	-	-	-	78,939	383,634	152,274	61,619	96,005	14,648	0	352,882	4,213,802	339,440	-	5,693,243	5,727,709	5,035,059	
User Charges - Hauler	-	-	-	-	-	-	-	-	-	-	-	-	3,876,343	-	-	3,876,343	3,109,771	3,249,705	
Hauler Fees	-	-	-	-	-	-	-	-	-	-	-	-	31,828	-	-	31,828	16,000	15,000	
Industrial Charges	-	-	-	-	-	-	-	-	-	-	-	-	58,860	-	-	58,860	71,232	-	
Industrial Pretreatment Revenues	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Municipal	35,058	-	-	-	-	20,854	-	1,097	-	-	-	-	945	-	-	57,954	86,947	130,100	
Leachate Program Revenues	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Other Income	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10,066	1,009	
Other Water Sales	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Provision for Doubtful Debts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total Charges for Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(314,537)	
	-	8,730,103	573,623	52,466	81,028	411,229	154,057	63,667	96,054	14,842	-	0	364,183	8,189,207	392,088	-	19,122,546	15,579,443	16,445,982
Rental Income	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Miscellaneous	-	23,604	90	-	-	101	-	73	75	-	-	101	19,776	3	-	43,823	47,381	172	
Total User Charges	-	8,753,707	573,713	52,466	81,028	411,330	154,057	63,740	96,129	14,842	-	0	364,283	8,208,982	392,091	-	19,166,369	15,626,824	16,446,154
Connection & System Charges																			
Supply/Tapping Fees	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Capital Cost Recovery	278,869	80,644	-	-	-	-	-	-	-	-	-	-	-	-	-	359,513	1,525,234	295,000	
Distribution Tapping Fees	460,023	-	-	-	15,562	-	-	-	-	-	-	-	-	-	-	475,585	1,871,089	505,000	
Meter Sales	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Inspection & Review Fees	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Developer Reimbursement	-	-	-	-	-	28,361	-	265	784	-	-	1,080	-	-	-	30,489	4,507	45,282	
Total Connection & System Charges	-	738,892	80,644	-	15,562	28,361	-	265	784	-	-	-	1,080	-	-	865,588	3,401,686	845,282	
Other Miscellaneous Revenues																			
Other Income	-	-	-	-	-	250	66	-	-	-	89	210	-	13	-	628	593	1,000	
Total Other Miscellaneous Revenues	-	-	-	-	-	250	66	-	-	-	89	210	-	13	-	628	593	1,000	
Total Operating Revenues	-	9,492,600	654,358	52,466	96,590	439,940	154,122	64,005	96,913	14,842	-	89	365,573	8,208,982	392,104	-	20,032,585	19,029,103	17,292,436
Operating Expenses:																			
Personnel																			
Salaries and Wages	323,524	143,616	61,585	6,677	58,650	53,191	48,712	4,331	36,299	1,423	-	4,385	84,555	26,180	53,470	906,600	640,256	876,544	
Overtime	983	9,437	2,553	1,109	1,646	588	1,295	278	1,445	-	-	528	606	-	1,653	22,120	61,971	66,386	
Taxes	24,453	11,925	5,050	572	4,763	4,271	3,973	357	2,965	113	-	407	6,734	2,062	4,361	72,005	60,492	66,479	
Fringe Benefits	146,448	153,914	65,177	7,381	61,476	55,121	51,293	4,615	38,262	1,446	-	5,259	86,921	26,612	56,304	760,228	367,662	444,778	
Other Personnel Related	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10,277	-	
Total Personnel	495,408	318,892	134,365	15,740	126,534	113,171	105,274	9,581	78,970	2,981	-	10,579	178,816	54,854	115,788	1,760,954	1,130,381	1,464,464	
Purchase of Services																			
General & Administrative	(511,536)	231,953	98,113	11,112	18,506	82,976	15,440	1,389	11,518	435	-	7,915	130,842	39,803	16,948	155,415	119,091	(36,072)	
Utilities	15,503	111,216	203,488	116	11,747	544	32,292	96	15,037	-	-	214	31,612	-	27,620	449,485	369,199	481,172	
Compliance	624	-	125	-	5,375	-	1,441	-	1,441	-	-	-	1,753	-	815	11,574	23,766	6,819	
Contract Operating Svcs	-	-	-	-	9,000	-	15,000	-	12,200	-	-	-	-	5,389,877	-	5,426,077	5,552,783	5,725,909	
Engineering	-	-	5,000	-	-	-	-	-	-	-	-	-	60,000	2,000	-	67,000	106,150	67,000	
Extraordinary Expenditures	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Exceptional Strength Analysis	-	43,000	-	-	-	-	-	-	-	-	-	-	-	-	-	43,000	-	43,000	
Fleet Management Services	-	16,000	-	-	-	-	-	-	-	-	-	-	-	-	-	16,000	10,701	18,000	
General Analyses	-	3,300	-	-	20,000	-	7,000	-	5,000	-	-	-	7,000	500	10,000	52,800	54,920	52,800	
Industrial Meter Testing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Maintenance Services	-	107,750	81,800	8,000	48,350	3,000	29,200	-	9,400	5,000	-	19,000	61,200	1,000	16,000	389,700	161,207	329,300	
Miscellaneous Services	-	4,650	300	-	1,850	-	1,300	-	305	-	-	1,300	315	89,900	305	100,225	30,070	93,400	
Rental	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	73,748	
Residuals	-	-	-	-	10,000	-	20,000	-	10,000	-	-	-	48,000	-	15,000	103,000	37,893	101,000	
Water Purchases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
System Planning / Capital Management	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LCA WWTP Treatment/Removals	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Treatment and Transportation	-	3,687,295	-	-	-	251,355	-	31,282	-	7,607	-	-	-	-	-	3,977,539	3,409,122	3,327,679	
Total Purchase of Services	(495,408)	4,205,164	388,826	19,228	124,828	337,876	121,673	32,767	64,901	13,042	-	28,428	280,721	5,581,080	88,688	10,791,815	9,874,901	10,283,755	

LEHIGH COUNTY AUTHORITY
STATEMENTS OF ACTIVITIES - SUBURBAN - WASTEWATER FUND
2021 Budget and Comparative Prior Period Data

	Suburban - Wastewater Systems															Total			
	Interceptor Group				CRCS										W.Weisenberg	Budget 2021	Forecast 2020	Budget 2020	Actual 2019
	Int Serv 100	WLI 312	LLRI 1 313	LLRI 2 314	Heidelberg 305	Upper Milford 315	Wynnewood 316	Weisenberg 317	Sand Spring 319	Lowhill Twp. 323	NLSA 318	Washington 303	Lynn Twp. 322	WWTP 320	Arcadia West 311				
Materials & Supplies																			
Purification Chemicals	-	-	-	-	8,800	-	9,200	-	15,200	-	-	-	39,900	-	13,800	86,900	59,950	88,650	59,472
Purification Supplies	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pump Supplies	-	3,000	5,000	-	10,000	-	6,500	-	3,000	-	-	1,500	10,500	-	7,000	46,500	13,955	44,100	8,467
Misc. Materials & Supplies	-	36,728	5,200	1,500	24,300	2,300	7,750	2,200	6,500	2,000	-	1,400	16,600	6,500	17,300	130,278	52,874	121,209	52,361
Fuel & Mileage	-	10,000	3,000	350	1,500	650	3,200	350	2,600	150	-	500	3,600	43,250	1,000	70,150	19,739	27,000	19,538
Fleet Management Supplies	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,130	1,500	1,114
Equipment	-	30,835	13,000	15,000	54,000	3,000	5,700	200	9,200	1,000	-	-	23,000	1,000	10,800	166,735	47,810	147,680	47,477
Leased Equipment	-	148,645	-	-	-	-	-	-	-	-	-	-	-	-	-	148,645	145,731	145,000	144,765
Distribution & Transmission Supplies	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Collection System Supplies	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Materials & Supplies	-	229,208	26,200	16,850	98,600	5,950	32,350	2,750	36,500	3,150	-	3,400	93,600	50,750	49,900	649,208	341,189	575,139	333,195
Depreciation and Amortization	-	578,562	65,511	54,788	21,011	90,073	24,697	10,188	3,412	-	-	-	122,884	3,508,976	136,680	4,616,783	4,667,252	4,603,000	4,571,072
Other Expenses																			
Major Maintenance Expenses	-	-	-	-	-	-	-	-	-	-	-	-	-	1,000,000	-	1,000,000	1,000,000	1,000,000	-
Other Miscellaneous	-	27,102	4,814	704	-	1,040	-	-	-	-	-	502	11,204	1,056	-	46,422	45,070	32,288	43,757
Total Other Expenses	-	27,102	4,814	704	-	1,040	-	-	-	-	-	502	11,204	1,001,056	-	1,046,422	1,045,070	1,032,288	43,757
Total Operating Expenses	-	5,358,928	619,717	107,310	370,974	548,109	283,994	55,286	183,784	19,173	-	42,909	687,226	10,196,716	391,056	18,865,181	17,058,793	17,958,646	16,287,508
Net Operating Profit (Loss)	-	4,133,671	34,641	(54,844)	(274,384)	(108,169)	(129,872)	8,719	(86,871)	(4,330)	-	(42,820)	(321,652)	(1,987,734)	1,048	1,167,404	1,970,310	(666,210)	(608,064)
Non-Operating Income (Expense)																			
Investment Earnings	-	128,412	2,578	59,098	-	-	-	-	-	-	-	-	-	-	382	190,471	179,859	200,000	332,846
Interest (Expense)	-	(72,134)	-	-	(6,250)	-	(57,507)	-	(1,675)	-	-	(14,835)	-	-	(29,594)	(181,995)	(195,887)	(803,082)	(213,115)
Capital Contributed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15,000
Other Miscellaneous	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Non-Operating Income (Expense)	-	56,278	2,578	59,098	(6,250)	-	(57,507)	-	(1,675)	-	-	(14,835)	-	-	(29,212)	8,475	(16,028)	(603,082)	134,731
Net Income (Loss)	-	4,189,949	37,219	4,254	(280,634)	(108,169)	(187,379)	8,719	(88,546)	(4,330)	-	(57,655)	(321,652)	(1,987,734)	(28,163)	1,175,879	1,954,282	(1,269,292)	(473,333)

LEHIGH COUNTY AUTHORITY
STATEMENTS OF ACTIVITIES - CITY - DIVISION FUND
2021 Budget and Comparative Prior Period Data

	City Division							Total			
	Undesignated 400	Int Serv 490	WFP 491	DIST 492	WWTP 493	WWCOLL 494	LAB 495	Budget 2021	Forecast 2020	Budget 2020	Actual 2019
Operating Revenues:											
User Charges											
Large Industrial	-	-	-	-	-	-	-	-	-	-	-
Other Industrial/Commercial	-	-	-	3,941,434	-	-	-	3,941,434	3,597,900	3,786,200	3,822,489
Residential	-	-	-	12,346,260	-	-	-	12,346,260	11,905,279	11,860,000	11,488,844
Penalties	-	-	-	101,545	-	191,906	-	293,452	281,894	456,782	510,752
Private Fire Service	-	-	-	78,130	-	-	-	78,130	55,652	75,053	59,377
Public Fire Service	-	-	-	-	-	-	-	-	-	1,000	585
User Charges - Municipal	-	-	-	-	-	6,538,225	-	6,538,225	6,320,851	6,419,939	6,559,055
User Charges - Residential & Commercial	-	-	-	-	-	13,449,887	-	13,449,887	9,102,181	9,302,597	9,270,882
User Charges - Hauler	-	-	-	-	54,132	-	-	54,132	78,765	76,647	90,380
Hauler Fees	-	-	-	-	-	-	-	-	-	-	-
Industrial Charges	-	-	-	-	-	-	-	-	-	-	-
Industrial Pretreatment Revenues	-	-	-	-	82,014	-	-	82,014	97,656	95,615	127,183
Municipal	-	-	-	-	-	28,260	12,204	40,464	63,378	75,000	133,226
Leachate Program Revenues	-	-	-	-	582,828	-	-	582,828	681,679	1,040,598	1,050,769
Other Income	-	-	-	-	-	-	-	-	-	-	4,193
Other Water Sales	-	-	-	4,240,523	-	-	-	4,240,523	3,579,663	3,669,946	3,779,627
Provision for Doubtful Debts	-	-	-	-	-	-	-	-	-	-	(239,800)
Total Charges for Services	-	-	-	20,707,893	718,974	20,208,278	12,204	41,647,349	35,764,897	36,859,377	36,657,562
Rental Income	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	349,165	-	-	349,165	223,554	456,111	418,299
Total User Charges	-	-	-	20,707,893	1,068,139	20,208,278	12,204	41,996,514	35,988,451	37,315,488	37,075,861
Connection & System Charges											
Supply/Tapping Fees	-	-	-	22,342	-	-	-	22,342	3,579	18,500	21,462
Capital Cost Recovery	-	-	-	884,740	-	265,495	-	1,150,235	1,405,513	1,397,000	1,105,691
Distribution Tapping Fees	-	-	-	384,136	-	216,696	-	600,832	51,834	119,200	579,975
Meter Sales	-	-	-	23,387	-	-	-	23,387	39,787	292,000	22,466
Inspection & Review Fees	-	-	-	17,806	-	13,763	-	31,569	39,345	180,100	30,326
Developer Reimbursement	2,110,000	-	-	7,336	-	2,279	-	2,119,615	895,199	2,315,000	418,075
Total Connection & System Charges	2,110,000	-	-	1,339,748	-	498,233	-	3,947,981	2,435,257	4,321,800	2,177,994
Other Miscellaneous Revenues											
Other Income	-	-	-	48,026	-	-	11,222	59,249	56,915	35,000	59,659
Total Other Miscellaneous Revenues	-	-	-	48,026	-	-	11,222	59,249	56,915	35,000	59,659
Total Operating Revenues	2,110,000	-	-	22,095,667	1,068,139	20,706,511	23,427	46,003,744	38,480,623	41,672,288	39,313,514
Operating Expenses:											
Personnel											
Salaries and Wages	-	1,742,509	1,126,334	1,083,260	2,154,535	791,120	376,783	7,274,541	7,450,238	6,960,095	6,770,792
Overtime	-	9,366	284,511	124,254	400,266	46,975	10,688	876,060	718,269	653,671	690,010
Taxes	-	137,726	106,480	92,843	195,009	65,181	30,320	627,558	642,823	660,698	553,262
Fringe Benefits	-	688,402	455,400	397,072	834,019	278,766	129,676	2,783,335	3,334,212	2,509,645	3,373,868
Other Personnel Related	-	-	-	-	-	-	-	-	-	85,751	-
Total Personnel	-	2,578,004	1,972,725	1,697,428	3,583,829	1,182,041	547,467	11,561,494	12,145,543	10,869,860	11,387,931
Purchase of Services											
General & Administrative	-	(2,676,417)	960,179	837,199	1,757,284	587,759	273,413	1,739,417	1,488,173	1,648,481	1,810,565
Utilities	-	82,488	902,633	32,360	1,107,975	29,063	-	2,154,519	1,878,480	2,199,029	2,083,543
Compliance	-	15,925	-	-	-	-	18,598	34,523	-	-	-
Contract Operating Svcs	-	-	-	2,500	-	102,400	-	104,900	114,227	116,200	113,503
Engineering	-	-	15,500	-	16,000	-	-	31,500	67,802	31,500	67,162
Extraordinary Expenditures	-	-	5,000	25,000	-	-	-	30,000	-	30,000	15,176
Exceptional Strength Analysis	-	-	-	-	-	-	-	-	-	-	-
Fleet Management Services	-	-	5,000	50,000	55,000	40,000	-	150,000	187,795	157,000	186,521
General Analyses	-	-	-	-	18,000	-	29,285	47,285	15,934	37,000	15,905
Industrial Meter Testing	-	-	1,000	5,000	-	-	-	6,000	-	6,000	250
Maintenance Services	-	-	252,550	150,325	255,414	111,975	14,007	784,271	672,380	1,105,318	665,386
Miscellaneous Services	-	-	112,750	67,750	31,613	37,300	3,000	252,413	178,613	199,493	176,883
Rental	-	-	-	-	-	-	-	-	-	-	-
Residuals	-	-	30,000	-	344,580	-	-	374,580	297,804	374,580	295,039
Water Purchases	-	-	-	-	-	-	-	-	154	1,500	52
System Planning / Capital Management	-	-	-	-	-	-	-	-	-	-	-
LCA WWTP Treatment/Removals	-	-	-	-	-	-	-	-	-	-	-
Treatment and Transportation	-	-	-	-	-	12,000	-	12,000	11,265	12,000	9,547
Total Purchase of Services	-	(2,578,004)	2,284,611	1,170,134	3,585,866	920,497	338,303	5,721,407	4,912,627	5,918,101	5,439,534

LEHIGH COUNTY AUTHORITY
STATEMENTS OF ACTIVITIES - CITY - DIVISION FUND
2021 Budget and Comparative Prior Period Data

	City Division							Total			
	Undesignated 400	Int Serv 490	WFP 491	DIST 492	WWTP 493	WWCOLL 494	LAB 495	Budget 2021	Forecast 2020	Budget 2020	Actual 2019
Materials & Supplies											
Purification Chemicals	-	-	342,600	-	460,835	-	-	803,435	534,112	743,354	530,450
Purification Supplies	-	-	14,000	-	-	-	-	14,000	12,467	14,000	12,330
Pump Supplies	-	-	28,750	-	25,000	-	-	53,750	29,049	53,750	28,880
Misc. Materials & Supplies	-	-	71,500	25,680	264,700	103,400	22,087	487,367	396,364	533,955	392,703
Fuel & Mileage	-	-	7,000	29,000	46,500	29,000	-	111,500	100,401	112,250	99,347
Fleet Management Supplies	-	-	2,000	3,000	5,000	4,000	-	14,000	34,821	29,100	16,054
Equipment	-	-	77,100	18,740	62,300	17,800	19,650	195,590	152,676	190,840	151,176
Leased Equipment	-	-	-	-	69,313	86,313	-	155,625	71,201	88,500	-
Distribution & Transmission Supplies	-	-	-	97,000	-	-	-	97,000	98,350	106,200	97,771
Collection System Supplies	-	-	-	-	-	-	-	-	-	-	-
Total Materials & Supplies	-	-	542,950	173,420	933,648	240,513	41,737	1,932,267	1,429,441	1,871,949	1,328,712
Depreciation and Amortization	5,893,862	-	-	-	-	-	-	5,893,862	5,880,000	5,880,000	5,835,507
Other Expenses											
Major Maintenance Expenses	542,924	-	-	-	-	-	-	542,924	1,287,924	2,782,916	1,250,412
Other Miscellaneous	2,123,972	-	-	-	-	-	-	2,123,972	898,805	-	9,373
Total Other Expenses	2,666,896	-	-	-	-	-	-	2,666,896	2,186,729	2,782,916	1,259,785
Total Operating Expenses	8,560,758	-	4,800,286	3,040,983	8,103,342	2,343,050	927,507	27,775,927	26,554,340	27,322,826	25,251,468
Net Operating Profit (Loss)	(6,450,758)	-	(4,800,286)	19,054,684	(7,035,203)	18,363,461	(904,081)	18,227,817	11,926,283	14,349,462	14,062,046
Non-Operating Income (Expense)											
Investment Earnings	172,960	-	-	-	-	-	-	172,960	166,148	900,000	1,193,617
Interest (Expense)	(17,535,086)	-	-	-	-	-	-	(17,535,086)	(16,578,837)	(19,356,023)	(19,386,584)
Capital Contributed	-	-	-	-	-	-	-	-	-	-	-
Other Miscellaneous	-	-	-	-	-	-	-	-	-	-	-
Net Non-Operating Income (Expense)	(17,362,125)	-	-	-	-	-	-	(17,362,125)	(16,412,689)	(18,456,023)	(18,192,967)
Net Income (Loss)	(23,812,883)	-	(4,800,286)	19,054,684	(7,035,203)	18,363,461	(904,081)	865,692	(4,486,406)	(4,106,561)	(4,130,921)

Internal Services

Lehigh County Authority 2021 Budget and Comparative Prior Period Data Internal Service Budgets Overview

Lehigh County Authority's Internal Service budget serves as a pass-through mechanism to move shared expenses appropriately to the enterprise funds they support.

The Internal Services budget captures expenses in two different categories:

1. **Enterprise Fund Specific** – Internal Service expenses that are specific to the Suburban or City Divisions are shared with those specific enterprise funds based on the services provided to each fund.
2. **Global (Organizational)** – Internal Service expenses that are not specific to one of the Authority's enterprise funds, but which support the organization as a whole, are captured separately in the Global Internal Service budget and allocated to the funds based on a pro-rata share of salaries.

These Internal Service budgets capture expenses related to the following functions: Executive, Human Resources, Risk Management, Planning, Finance, Information Technology, Customer Care and Billing, Capital Works, and General and Administration. By showing these expenses separately, and broken out by function, it allows for increased transparency about the Authority's overhead expenses. The Internal Service expenses outlined in this section of the Authority's 2021 Budget are also captured within the enterprise fund budgets detailed in previous sections of this publication, allocated to those funds based on the methodology described above.

LEHIGH COUNTY AUTHORITY
INTERNAL SERVICE BREAKDOWN (WITH ALLOCATIONS)
2021 Budget and Comparative Prior Period Data

	Suburban Internal Service 1	Suburban Water 2	Suburban Wastewater 3	City Internal Service 490	City Division 4	Lab Compliance 495	Global 9				
										YTD	
										Budget 2021	Forecast 2020
										Budget 2020	Actual 2019
OPERATING FUNDS											
Operating Expenses:											
Personnel											
Salaries and Wages	488,613	1,186,017	583,075	591,812	5,155,249	376,783	1,643,853			10,025,402	9,550,639
Overtime	2,416	143,598	21,138	9,366	856,006	10,688	-			1,043,212	866,752
Taxes	38,661	103,047	47,552	47,233	459,512	30,320	129,276			855,601	820,597
Fringe Benefits	295,774	787,813	613,781	205,092	1,965,256	129,676	690,443			4,687,835	4,421,740
Other Personnel Related	-	-	-	-	-	-	-			-	116,274
Total Personnel	825,465	2,220,475	1,265,546	853,503	8,436,024	547,467	2,463,573			16,612,051	15,659,728
Purchase of Services											
General & Administrative:	(1,310,663)	1,758,911	666,951	(1,813,702)	4,142,420	273,413	(3,717,331)			-	(394,475)
Temporary Contract Service	-	-	-	-	-	-	-			-	(950,321)
Office Related	60,805	-	-	92,167	-	-	154,218			307,189	287,698
Computer Software / Hardware	29,876	-	-	17,620	-	-	381,659			429,155	366,007
Advertising	101	-	-	203	-	-	811			1,116	1,094
Audit	-	-	-	-	-	-	53,040			53,040	52,000
Bank and Credit Card Fees	61,237	-	-	120,241	-	-	7,245			188,723	185,023
Dues and Subscriptions	2,105	-	-	6,314	-	-	42,096			50,515	49,525
Travel and Entertainment	789	-	-	482	-	-	5,610			6,881	6,203
Education & Training	26,693	-	-	67,415	-	-	106,638			200,745	44,547
Insurance & Risk Management	280,294	-	-	512,591	-	-	82,829			875,714	871,965
Human Resources and Related	-	-	-	-	-	-	110,850			110,850	74,526
Professional Consulting & Legal	8,636	-	-	115,721	-	-	55,710			180,067	243,885
Public Relations	14,609	-	-	27,392	-	-	107,449			149,449	79,943
Contributions & Sponsorships	54	-	-	54	-	-	214			321	315
Activity Committee	-	-	-	-	-	-	4,800			4,800	545
Utilities	-	524,068	433,981	-	2,072,031	-	117,840			3,147,920	2,709,425
Compliance	-	45,191	10,950	-	-	18,598	22,750			97,489	81,247
Contract Operating Svcs	-	38,270	5,426,077	-	104,900	-	-			5,569,247	5,721,471
Engineering	-	55,000	67,000	-	31,500	-	-			153,500	226,912
Extraordinary Expenditures	-	-	-	-	30,000	-	-			30,000	-
Exceptional Strength Analysis	-	-	43,000	-	0	-	-			43,000	-
Fleet Management Services	-	28,000	16,000	-	150,000	-	-			194,000	257,922
General Analyses	-	72,636	52,800	-	18,000	29,285	-			172,721	106,446
Industrial Meter Testing	-	8,500	-	-	6,000	-	-			14,500	-
Maintenance Services	-	414,853	389,700	-	770,264	14,007	-			1,588,824	1,016,533
Miscellaneous Services	-	25,025	100,225	-	249,413	3,000	-			377,663	319,647
Rental	-	-	-	-	-	-	-			-	-
Residuals	-	-	103,000	-	374,580	-	-			477,580	335,697
Water Purchases	-	2,824,400	-	-	-	-	-			2,824,400	1,990,415
System Planning / Capital Management	-	-	-	-	-	-	-			-	-
LCA WWTP Treatment/Removals	-	-	-	-	-	-	-			-	-
Treatment and Transportation	-	-	3,977,539	-	12,000	-	-			3,989,539	3,420,387
Total Purchase of Services	(825,465)	5,794,854	11,287,223	(853,503)	7,961,108	338,303	(2,463,573)			21,238,948	18,056,384
Materials & Supplies											
Purification Chemicals	-	58,400	86,900	-	803,435	-	-			948,735	632,961
Purification Supplies	-	56,047	-	-	14,000	-	-			70,047	48,510
Pump Supplies	-	46,000	46,500	-	53,750	-	-			146,250	89,180
Misc. Materials & Supplies	-	46,430	130,278	-	465,280	22,087	-			664,075	488,420
Fuel & Mileage	-	61,150	70,150	-	111,500	-	-			242,800	163,968
Fleet Management Supplies	-	3,800	-	-	14,000	-	-			17,800	40,970
Equipment	-	117,815	166,735	-	175,940	19,650	-			480,140	272,179
Leased Equipment	-	46,000	148,645	-	155,625	-	-			350,270	216,932
Distribution & Transmission Supplies	-	111,940	-	-	97,000	-	-			208,940	227,014
Collection System Supplies	-	-	-	-	-	-	-			-	-
Total Materials & Supplies	-	547,582	649,208	-	1,890,530	41,737	-			3,129,057	2,180,134
Depreciation and Amortization	-	2,605,699	4,616,783	-	5,893,862	-	-			13,116,343	13,191,752
Other Expenses											
Major Maintenance Expenses	-	3,400	1,000,000	-	2,123,972	-	-			3,127,372	2,291,324
Other Miscellaneous	-	74,864	46,422	-	542,924	-	-			664,210	1,016,559
Total Other Expenses	-	78,264	1,046,422	-	2,666,896	-	-			3,791,582	3,307,883
Total Operating Expenses	0	11,246,874	18,865,181	(0)	26,848,419	927,507	-			57,887,982	52,395,881
										55,369,600	50,168,287

Capital Spending

Lehigh County Authority **2021 Budget and Comparative Prior Period Data** **Capital Budgets Overview**

Suburban Water Division:

The Suburban Water Division Capital Budget includes projects that provide or lead to long-term improvements and reliability to the system. The following table provides information regarding significant water projects:

Project	2021 Budget	2021 Project Stage
Fixed Base Advanced Metering Infrastructure	\$100,000	Design & Permitting
Central Lehigh to Upper Milford System Interconnection Pump Station (Kohler Tract)	200,000	Complete Construction
Upper Milford Central System Improvements - Buss Acres	850,000	Finish Construction
Addition Redundant Supply – Madison Park North Water System	100,000	Design & Permitting
Arcadia West Water Tank Replacement	500,000	Finish Design / Start Construction

Annual Projects These projects are part of recurring annual capital work that includes the following: 1) new water main installations; 2) distribution main development and service connections; 3) distribution mains upsizing; 4) reservoir rehabilitation and maintenance; 5) general water system improvements; 6) water company acquisitions; 7) main office improvements; 8) mobile equipment; 9) water facilities asset management improvements; 10) other equipment; 11) capital management; and 12) capital works miscellaneous expenses. Includes staff and consultant work. (2021 Cap Ex \$1,960,000)

Water Main Replacement Projects

This is an on-going project to replace aging spun cast iron water mains in acquired water systems that have high break rates or exhibit a high risk of failure. The 2021 budget assumes a pause in the program and re-start in 2022. (2021 Cap Ex \$0)

Upper Milford Central System Improvements – Buss Acres

This multi-year project includes: (1) The abandonment of the two existing aged, problematic hydro-pneumatic operated well stations in need of electrical, structural and other repairs; (2) abandonments of the two pressurized 6,000 gallon water storage tanks at both facilities that have exceeded their useful life and are not in compliance with regulatory requirements for pressure vessels; and (3) the construction on the largest existing well station parcel of one new well/pump station (PS) and a water storage tank. The new PS will be a variable frequency drive-controlled double pumping system with full SCADA telemetry/control. In addition, given that the water supply has a high level of radon (currently there is no regulatory limit), provisions will be incorporated into the design to readily enable connection with radon mitigation equipment in the future pending establishment of a regulatory limit. Construction began in February 2020, with completion anticipated in Spring 2021. (2021 Cap Ex \$850,000)

Additional (Redundant) Water Supply - Small Satellite Systems (Madison Park North)

This project focuses on the development of an additional well for the Madison Park North (MPN) development to have a backup source of water supply. In 2020 a Pre-Drilling and Aquifer Test Plan was approved by DEP and wells were drilled and tested on two locations of a neighboring property to the development. Design and permitting will be completed in 2021. (2021 Cap Ex \$100,000)

Lehigh County Authority 2021 Budget and Comparative Prior Period Data Capital Budgets Overview

CLD Well Improvements

Three large producing wells in the CLD system are not being used because of water quality issues. Well 3 has a capacity of 1000 GPM but has high levels of Manganese. Well 2 has a capacity of 200 GPM but must maintain a high chlorine residual to meet contact time. Well 12 has a capacity of 700 GPM but has high turbidity levels. An engineering study was performed in 2020 to determine the options and costs to bring the wells back in to service. The study will help to determine the value of having the wells as sources should DEP implement "use it or lose it" regulations on groundwater sources. The wells could be used as additional sources to supplement flow, pressure, and chlorine residuals should water demand increase in the western Lehigh service area. Additional options to treatment of Wells 3 and 12 are being evaluated to possibly restore partial capacity at a reduced cost. (2020 Cap Ex \$60,000)

CLD Distribution System Improvements

Engineering study to determine how to best provide service to existing and future customers and potential large users in the CLD system. Additional growth may require increasing well usage to provide chlorine residuals throughout the system and upsizing of water mains. Changes to the system may be required to accommodate the addition of a large water user or general development in the area. (2021 Cap Ex \$50,000)

Central Lehigh to Upper Milford System Interconnection (Kohler Tract)

This multi-year project consists of the design and construction of approximately 4,550 linear feet of 12-inch diameter main extending from the CLD to the proposed water mains in the Kohler Tract Subdivision in Upper Milford Township, and a new water booster pumping station located in Upper Milford Township near Indian Creek Road. Additionally, the pump station will be designed to supply both domestic demand and fire protection with the domestic capacity to serve 330 EDUs (residential properties) broken down as follows: 71 EDUs will be utilized for the existing customer properties in Upper Milford Township; 123 EDUs are dedicated for the Kohler Tract Development; and 136 EDUs are for future customers. Easements will be required for the pump station site and overland segments of the water main extension. The existing Upper Milford supply facilities will be abandoned. Design work was substantially completed in 2017, permitting and easement procurement were finalized in 2019, construction began in 2020, and the project is anticipated to be completed by early 2021,. (2021 Cap Ex \$200,000)

Arcadia West Water Storage Tank Replacement

The Arcadia West water storage tank has had several leaks in recent years and the coating has reached the end of its useful life. This project is for the replacement of the tank with a new concrete reservoir. Design phase authorization was awarded to Entech Engineering at the April 27, 2020 Board meeting. This project will be funded by the LCA Suburban Division. Design is underway and expected to be completed and ready for bid at the end of 2020. The DEP Public Water Supply Permit Application will be submitted in October. Design will be completed, the project will be bid and construction will begin in 2021. (2021Cap Ex \$500,000)

Fixed Base Advanced Metering Infrastructure

Development of a fixed base meter reading system for the Suburban Water Division. The new system will allow for more efficient meter reading, consistent billing and faster dispute resolution. Communication studies were performed by Sensus in 2019 and 2020 to evaluate the number and location of antenna towers for Suburban area coverage. Five to seven towers are anticipated in order to provide adequate coverage of the Suburban system. An Engineer will be retained in 2021 to prepare land development plans for the antenna sites. Construction of the towers will begin in 2021 and extend into future years. (2021 Capex Ex. \$100,000)

Lehigh County Authority **2021 Budget and Comparative Prior Period Data** **Capital Budgets Overview**

Suburban Wastewater Division:

The major activities included in the Suburban Wastewater Division Capital Budget are continuation of the on-going work associated with WLI Signatory I/I Investigation & Remediation program and the implementation of improvements required to address system bottlenecks and sanitary sewer overflows. Other projects include starting design on the Trexlertown Area Storage Facility, and finishing construction of the Sand Spring wastewater treatment plant. The following table provides information regarding significant wastewater projects:

Project	2021 Budget	2021 Project Stage
Pre-Treatment Plant Improvements	\$700,000	Complete Construction
Central Lehigh County Wastewater Capacity Planning & Expansion	799,300	Planning
Sand Spring WWTP Replacement	500,000	Complete Construction
Heidelberg Heights I/I Remediation & Replacement	300,000	Complete Construction
Park Pump Station Improvements	100,000	Design & Permitting
Park Pump Station Force Main Rehabilitation	100,000	Design
Signatory I/I Investigation & Remediation Program	270,000	Design & Construction
Trexelertown Area Storage Facility	200,000	Design & Permitting

Annual Projects These projects are part of recurring annual capital work that includes the following: 1) mobile equipment; 2) sewer company acquisitions; 3) other equipment; 4) wastewater facility asset management mechanical upgrade work; 5) capital management; 6) sewer main connections; and 7) general sewer system improvements. (2021 Cap Ex. \$622,500)

Wastewater Pre-Treatment Plant - General Improvements

This is an on-going multi-year program to upgrade/replace equipment and optimize processes in accordance with asset management protocol to address the continued reliability and maintain a high level of service for LCA's industrial pre-treatment plant. (2021 Cap Ex \$700,000)

Central Lehigh County Wastewater Capacity Planning & Expansion

This project is for the planning of additional treatment capacity for the Western Lehigh Interceptor (WLI) service area and construction of the selected alternative. This project is needed for future wastewater treatment capacity and includes two primary engineering alternatives: expanding the Kline's Island Wastewater Treatment Plant (KIWWTP) permitted capacity from 40 to approximately 44 MGD, or upgrading the LCA Pre-Treatment Plant to full treatment with discharge to the Lehigh River. This 2021 project only includes planning costs for these activities.. (2021 Cap Ex. \$799,300)

Signatory I/I Investigation & Remediation Program

This multiyear on-going inflow and infiltration (I/I) reduction project was primarily composed of flow monitoring in LCA and Signatory sewage collection systems tributary to the Western Lehigh Interceptor (WLI). Level of Service Modeling, Flow Metering, recalibration of the 2014 KISS model, and many other tasks are required and in progress for determining and prioritizing the physical work necessary to facilitate the removal of excess wet weather flow in segments of systems have been identified with unacceptable levels of I/I. The 2020 budget included flow metering within the Western Lehigh Sewer Partners (approximately 35 meters). As the Regional Act 537 Plan is now underway, the 2021 budget continues to

Lehigh County Authority 2021 Budget and Comparative Prior Period Data Capital Budgets Overview

includes manhole rehabilitation and corrective work to eliminate I/I in the WLI. All planning related to the Regional Act 537 is included in the project listed above. (2021 Cap Ex \$270,000)

WLI – Trexlertown Area Storage Facility

A conveyance capacity “bottleneck” has been identified in the Trexlertown area of the Western Lehigh Interceptor, and this area was assigned a high priority due to occurrence of sanitary sewer overflows and basement backups in the vicinity during wet weather events. A parallel interceptor was originally conceived to run approximately from Cetronia Rd to Spring Creek Rd. The concept was modified to focus on providing storage capacity in the system for this area, due to concerns about downstream hydraulic impacts. This project is an interim solution to address local impacts of the system bottleneck, and will become part of the future long-term solution to alleviate regional conveyance capacity challenges. A pre-design feasibility study is being performed to evaluate various engineering alternatives, including an “in-line” parallel storage tank, conventional concrete tank (flow equalization basin), or other options and will be completed once expanded modeling work, reevaluation of downstream impacts, and storm design parameters have been finalized. (2021 Cap Ex \$200,000)

Park Pump Station Force Main Rehabilitation

This multi-year project will address the internal rehabilitation needs as determined from an upcoming internal condition assessment of the existing Park Pump Station Force Main. The existing concrete pipe construction is susceptible to deterioration from corrosive sewer gases, therefore, an internal inspection of the force main will be conducted in late 2020 and the results of the inspection will determine the scope of rehabilitation work, which will be designed in 2021, and may consist of internal lining technology and/or dig-up repairs. (2021 Cap Ex \$100,000)

Wynnewood Terrace Sanitary Sewer System I/I Investigation and Remediation Program

This multi-year project includes flow metering, inspecting manholes, televising sewer mains and laterals, test and seal work and replacement of targeted sections of damaged sewer main. Dig up repairs were completed in 2020, and the 2021 work will involve CCTV inspection work and updated needs assessment. (2021 Cap Ex \$25,000)

Sand Spring WWTP Remediation & Replacement

This multi-year project will replace the aged 35 year old 35,000 GPD steel tank wastewater treatment plant, which was developer-built and is at the end of its useful service life, as determined by an engineering condition assessment/feasibility study. Mechanical equipment and structures display a high risk of failure, and the facility requires complete replacement. The new facility will feature a concrete tank sequencing batch reactor process, with UV disinfection and a tertiary filter to meet new NPDES permit discharge criteria and provide a high level of service. Construction phase commenced in late 2019 and is anticipated to finish in early 2021. (2021 Cap Ex \$500,000)

Heidelberg Heights I/I Investigation and Remediation Program

This multi-year project involves investigation and remediation of damaged and deteriorating sewer lines in the developer-built sanitary sewer system, which allow for wet weather inflow and infiltration, and creates hydraulic overload conditions at the system’s wastewater treatment plant. Work includes the replacement of all sections of old VCP sewer main pipe and VCP sewer laterals in accordance with the Corrective Action Plan submitted to DEP in 2019. The 2021 work will involve replacement of approximately 1,000 feet of sewer main and connecting laterals. (2021 Cap Ex \$300,000)

Lehigh County Authority

2021 Budget and Comparative Prior Period Data

Capital Budgets Overview

Heidelberg Heights WWTP Rehabilitation

This multi-year project will provide needed upgrades to the existing steel tank wastewater treatment plant. Future projects include installation of a new catwalk grating system over the SBR tanks to improve maintenance access, and installation of a mechanical screen at the headworks of the plant. 2021 work will focus on preliminary design of a mechanical screen for removal of bulky inorganic from the raw sewage. (2021 Cap Ex \$40,000)

Lynn Township WWTP Upgrades & Expansion

This multi-year project is being executed in two phases. Phase 1 included influent chamber modifications, new mechanical screen, and valve chamber with flowmeter and chemical feed system that was completed in 2018. Phase 2 is the expansion of the WWTP capacity from 80,000 GPD to around 160,000 GPD (expanded capacity determination pending township completion of updated Act 537 Plan, as required by DEP). Timing for the construction of the WWTP expansion will be dependent upon I/I remediation efforts and growth demands in the sewer service area. Preliminary Design for the Phase 2 work will start in 2021. (2021 Cap Ex \$50,000)

Lynn Township I/I Investigation & Remediation Program

This multi-year project is in progress and includes a flow metering study, easement clearing/stabilization, updated system condition assessment via updated system-wide CCTV inspection, updated manhole inspection, data review and prioritization of repair/rehabilitation work, internally-performed isolated repairs, and capital project construction of system-wide rehabilitation project. The program is part of a DEP-mandated Corrective Action Plan, intended to remove hydraulic overloads at the WWTP due to excess wet weather inflow and infiltration. 2020 work consisted of a comprehensive manhole rehabilitation project. 2021 work is anticipated to include private side sewer system inspection. (2021 Cap Ex \$50,000)

Regional Park Pump Station

This multi-year project is the result of continued regional sewer studies performed by Arcadis for the Western Lehigh Interceptor signatories. Based on a 20-year planning window, it was determined that a conveyance capacity of 45 mgd will be required at the Park Pump Station. The recommended alternative for providing this significant additional capacity is the construction of a "Sister Station" in proximity to the Park Pump Station. Construction work is not anticipated within the next 5 years. (2021 Cap Ex \$0)

Park Pump Station Rehabilitation & Improvements

Phase 1 of this multi-year project included replacement of the existing pumps, pump speed controllers (replace with variable frequency drives), motor control center (MCC) panel, SCADA system, HVAC system, level control system, discharge surge valve and related mechanical improvements to maintain the level of service, prolong station life and restore station to its design capacity. Also included were roof replacement, electrical service upgrade and miscellaneous structural improvements, the majority of which were outlined in Option 3 of the 2016 Park Pump Station Evaluation Technical Memorandum prepared by Arcadis. Construction work for Phase 1 was completed in 2020. Phase 2 is to consist of the installation of a new generator and associated equipment, and will commence design phase in 2021. (2021 Cap Ex \$100,000)

SSES (Weisenberg, UMiT, Lowhill)

Lehigh County Authority 2021 Budget and Comparative Prior Period Data Capital Budgets Overview

This project involves a Sanitary Sewer Evaluation Study for the LCA Owned Interceptor Systems in Weisenberg, UMiT, and Lowhill Townships. Survey is anticipated to commence in 2021. (2021 Cap Ex \$75,000)

City Division: Water System:

Water projects in the 2021 Budget focus on regulatory compliance, immediate and future needs at the Water Filtration Plant (WFP) and addressing the Lease operating standards. Annual projects remain in the 2021 budget as well. These include but are not limited to equipment purchases, general water system replacements, general WFP improvements, and indenture report upgrades.

The projects identified in the water Budget fall into to two primary categories: those funded by LCA Allentown Division (LCA-AD) and those funded by the City, with the latter pertaining to Uncompleted Work (UW).

Uncompleted Work Projects (UW): Are projects that were the City's responsibility to fund and complete prior to the closing of the Concession Lease. The City has requested that LCA execute these projects. Funding will be provided by the City. The following table provides information regarding significant water projects:

Project	2021 Budget	2021 Project Stage
Annual Water Main Replacement – Cycle 5	\$1,900,000	Complete Construction
WFP High Service VFD Replacement Project	800,000	Start Construction
Itron/AMR Meter Project	85,000	Complete

Annual Projects

This annual project includes general water system replacements, mobile equipment, new & replacement meter installations, other equipment, Water Filtration Plant general improvements. Also included is a portion of the Administration Capital Expenses that directly benefit the Allentown Division. (2021 Cap Ex \$1,590,000)

Annual Water Main Replacement – Cycle 5

The annual replacement of one mile of water main is a lease requirement, with the objective of replacing aging spun cast and pit cast iron pipe in the system. Annual project scope is prioritized based on break and leak history. (2021 Cap Ex \$1,900,000)

WFP High Service VFD Replacement Project

This multi-year project is to replace variable frequency drives (VFDs) for the high service pumps in the water treatment plant. The high service pumps supply finished water to the City distribution system and are critical infrastructure. The high service pump station has a history of electrical failures from aging VFDs and the upgrade work with extend the reliability and service life of the station. (2021 Cap Ex \$800,000)

Itron/AMR Meter Project

Lehigh County Authority 2021 Budget and Comparative Prior Period Data Capital Budgets Overview

This multi-year project completes the remaining work of the City's AMR project (the installation of 747 meters were not completed because the sites were either vacant or not accessible). This project also includes the purchase and implementation of Water Analytics software package to a repository to store data gathered from the meters in the division for use in identifying customer metering issues. (2021 Cap Ex \$85,000) **Uncompleted Work, City Funded.**

City Division: Wastewater System:

Wastewater projects in 2021 will focus on regulatory compliance, immediate and future needs at the Wastewater Treatment Plant (WWTP) and addressing the Lease operating standards. Project at the WWTP includes the conversion of the existing chlorine disinfection system to sodium hypochlorite. Funding is also provided for the replacement and/or rehabilitation of defective sewer mains.

Project	2021 Budget	2021 Project Stage
Boiler Replacement & Solids Process HVAC Upgrade Project	\$200,000	Design & Permitting
Regional Flow Management Strategy	775,000	Planning
Flow Characterization Study	1,250,000	Planning

Annual Projects

These annual projects include mobile equipment, other equipment, sanitary sewer main replacements and rehabilitation, inderture report upgrades, and Wastewater Treatment Plant general improvements. Included within general improvements is the multi-year Sodium Hypochlorite Conversion Project (non-CCRC project). Also included is a portion of the Administration Capital Expenses that directly benefit the Allentown Division. (2020 Cap Ex \$1,960,000)

Boiler Replacement and Solids Process HVAC Upgrade Project

In 2021 the detailed design phase of the Boiler Replacement and Solids Process HVAC Upgrade Project will be completed. This multi-year project consists of replacement of the 3 boilers used to heat the digesters, the digester building, and sludge dewatering areas. The project scope also includes replacement of related HVAC equipment in the digester building and sludge dewatering areas. A preliminary engineering study with basis of design is being completed in 2020 to facilitate Major Capital Improvement project approval from the City in late 2020. (2021 Cap Ex \$200,000)

Regional Flow Management Strategy

This multi-year project involves a five-year "Inflow and Infiltration Source Reduction" effort to comply with a regional flow management strategy submitted to EPA in August of 2018. 2021 includes "Year 2" construction efforts. (2021 Cap Ex \$775,000)

Flow Characterization Study

This project was a requirement of the prior Administrative Order (AO) and is now a requirement of the recently submitted Interim Act 537 Plan. Approximately 105 meters (80 or so of which will be temporary) will be utilized to characterize the dry day, wet day, and peak flows throughout the entire KISS collection system. Also included in this project is a thorough QA/QC of the meter data. Upon collection of the data, the development of an updated regional sanitary sewer model will begin. (2021 Cap Ex \$1,250,000).

**2021 BUDGET
SUBURBAN DIVISION
WATER FUND
CAPITAL EXPENDITURES**

Project	Primary Project Category	Estimated Project Cost	Estimated Costs Through 2020	2021 Budget	Estimated Costs 2022 - 2026
<u>LCA Funded Projects</u>					
Annual Projects	AM - Varies	\$ 10,541,521	1,126,021	\$ 1,747,500	7,668,000
Water Main Replacement Projects	AM - Varies	\$ 9,600,000	-	-	9,600,000
<u>New Borrowing Funded Projects</u>					
Upper Milford Central Div. Improvements - Buss Ac	AM-High	\$ 2,190,000	1,340,000	850,000	-
Additional (Redundant) Water Supply - Small Satellite Divisions	Sys Imp	\$ 715,000	265,000	100,000	350,000
CLD Auxiliary Pump Station & Main Extension	Sys Imp	\$ 1,700,000	1,700,000	-	-
Fixed Base Metering Reading System	Sys Imp	\$ 740,000	40,000	100,000	600,000
North Whitehall Division System Improvements - Study Phase	Sys Imp	\$ 100,000	-	50,000	50,000
Arcadia Water Tank Replacement	AM-High	\$ 1,107,000	107,000	500,000	500,000
Water Meter Reading Equipment Upgrade	AM-Med	\$ -	870,000	100,000	-
Central Lehigh to Upper Milford Division Interconnection - Kohler Tract	New Cust	\$ -	-	200,000	-
CLD Well Improvements - Study Phase	Sys Imp	\$ 40,000	30,000	60,000	40,000
CLD Distribution System Improvements	Sys Imp	\$ 1,530,000	480,000	50,000	1,000,000
		\$ -			
		\$ -			
Admin Allocation				432,500	
Total Suburban Division Water Capital Expenditures (Funded):			\$ 5,958,021	\$ 4,190,000	\$ 19,808,000

**2021 BUDGET
SUBURBAN DIVISION
WASTEWATER FUND
CAPITAL EXPENDITURES**

Project	Primary Project Category	Estimated Project Cost	Estimated Costs Through 2020	2021 Budget	Estimated Costs 2022 - 2026
OPERATING/CAPITAL RESERVE FUNDS					
<u>General:</u>					
Annual Projects	AM - Varies	\$ 3,106,145	\$ 483,145	\$ 622,500	\$ 2,000,500
Subtotal			483,145	622,500	2,000,500
<u>LCA Wastewater Treatment Plant</u>					
Pretreatment Plant Improvements	AM - Varies	4,200,000	-	700,000	3,500,000
Subtotal			-	700,000	3,500,000
<u>Western Lehigh Interceptor System:</u>					
Central Lehigh County WW Capacity Planning & Expansion	New Cust	3,219,300	620,000	799,300	1,800,000
Spring Creek Force Main A/V Valve Replacements	Sys Imp	95,000	25,000	40,000	30,000
Spring Creek Force Main Condition Assessment	AM-Med			-	300,000
Subtotal			645,000	839,300	2,130,000
<u>Satellite Systems</u>					
Wynnewood I/I Investigation and Remediation Program	Regulatory	200,000	25,000	25,000	150,000
Wynnewood Terrace WWTP Remediation & Replacement	AM - High	3,300,000	3,300,000	-	-
Arcadia West WWTP Mechanical Screen	Efficiency	325,000	-	-	325,000
SSES (Weisenberg, UMiT, Lowhill)	Regulatory	375,000	75,000	75,000	225,000
Sand Spring WWTP Remediation & Replacement	AM - High	4,100,000	3,600,000	500,000	-
Heidelberg Heights I/I Investigation and Remediation Program	Regulatory	1,300,000	300,000	300,000	700,000
Heidelberg Heights WWTP Rehabilitation	AM - Med	360,000	20,000	40,000	300,000
Lynn Township WWTP Improvements & Expansion	Sys Imp	300,000	-	50,000	250,000
Lynn Township I/I Investigation and Remediation Program	Regulatory	300,000	50,000	50,000	200,000
Subtotal			7,370,000	1,040,000	2,150,000
<u>Little Lehigh Relief Interceptor System:</u>					
Park Pump Station Force Main Rehabilitation	AM - High	1,300,000		100,000	1,200,000
Park Pump Station Rehabilitation/Improvements	AM - High	1,080,000	20,000	100,000	960,000
Regional Park Pump Station	Sys Imp	170,000	20,000	50,000	100,000
Subtotal			40,000	250,000	2,260,000
SUBTOTAL OPERATING/CAPITAL RESERVE FUNDS					
NEW BORROWING FUNDS					
<u>Western Lehigh Interceptor System:</u>					
Signatory I/I Investigation & Remediation Program	Regulatory	1,570,000	300,000	270,000	1,000,000
WLI-Trexlerstown Area Storage Facility	Regulatory	12,300,000	100,000	200,000	12,000,000
Subtotal			400,000	470,000	13,000,000
Total Suburban Wastewater Division Capital Expenditures (Funded):			\$ 8,938,145	\$ 3,921,800	\$ 25,040,500

**2021 BUDGET
CITY DIVISION
WATER FUND
CAPITAL EXPENDITURES**

Project	Primary Project Category	Estimated Project Cost	Estimated Costs Through 2020	2021 Budget	Estimated Costs 2022 - 2026						
<u>LCA Funded Projects</u>											
Annual Projects	AM - Varies	10,822,500	-	1,590,000	9,232,500						
Various Water System Related Studies	CA/OS	150,000	-	-	150,000						
Sub-total Allentown Division Water Capital Funded by LCA		10,972,500	-	1,590,000	9,382,500						
<u>CCRC Projects</u>											
Annual Water Main Replacements	AM - High	11,400,000	-	1,900,000	9,500,000						
High Service Pump VFD Replacement Project	AM - High	2,000,000		800,000	1,200,000						
Sub-total Allentown Division Water CCRC		13,400,000	-	2,700,000	10,700,000						
<u>City Funded Projects</u>											
Itron/AMR Meter Project ⁽¹⁾	CA/OS	85,000	-	85,000	-						
Sub-total Allentown Division Water Capital Funded by the City			-	85,000	-						
Administration Fund Capital Allocation				317,500	1,270,000						
Total Allentown Division Water Capital Expenditures (Funded):			<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: right;">\$</td><td style="text-align: center;">-</td><td style="text-align: right;">\$</td><td style="text-align: right;">4,692,500</td><td style="text-align: center;">\$</td><td style="text-align: right;">10,652,500</td></tr> </table>			\$	-	\$	4,692,500	\$	10,652,500
\$	-	\$	4,692,500	\$	10,652,500						

(1) "Uncompleted Work" City Projects that were supposed to be complete by the time of settlement or executed by City personnel after settlement.
The City will fund these projects but has requested that LCA execute them.

**2021 BUDGET
CITY DIVISION
WASTEWATER SYSTEM
CAPITAL EXPENDITURES**

Project	Primary Project Category	Estimated Project Cost	Estimated Costs Through 2020	2021 Budget	Estimated Costs 2022 - 2026
<u>LCA Funded Projects</u>					
Annual Projects *	AM - High	9,460,000	-	1,960,000	7,500,000
Various Wastewater System Related Studies	CA/OS	150,000	-	-	150,000
			-	-	-
Sub-total Allentown Division Wastewater Capital Funded by LCA			\$ -	\$ 1,960,000	\$ 7,650,000
<u>CCRC Projects</u>					
Boiler Replacement and Solids Process HVAC Upgrade Project	AM - High	1,400,000	-	200,000	1,200,000
Sub-total Allentown Division Wastewater CCRC		\$ 1,400,000	\$ 200,000	\$ 1,200,000	
<u>City Funded Projects</u>					
Regional Flow Management Strategy ⁽¹⁾	Regulatory	3,145,000	-	775,000	1,580,000
Flow Characterization Study ⁽¹⁾	Regulatory	1,600,000	-	1,250,000	350,000
Sub-total Allentown Division Wastewater Capital Funded by the City			\$ -	\$ 2,025,000	\$ 1,930,000
Total Allentown Division Wastewater Capital Expenditures (Funded):			\$ -	\$ 4,185,000	\$ 9,580,000

* Includes Sodium Hypo project in 2021

(1) "Administrative Order" Projects as per the Agreement are to be Funded by the City and executed by LCA.

**2021 BUDGET
ADMINISTRATION
CAPITAL EXPENDITURES**

Project	Primary Project Category	Estimated Project Cost	Estimated Costs Through 2019	2021 Budget	Estimated Costs 2022 - 2026
<u>LCA Funded Projects</u>					
SCADA Programming, Hardware Upgrades, Software & Training	AM - Varies	178,000	28,000	150,000	-
Computer System Hardware & Software Upgrades	AM - High	142,000	42,000	100,000	-
GIS Upgrades & Application Development	Efficiency	81,960	31,960	50,000	-
Information Technology Master Plan Update	Planning	145,000	20,000	125,000	-
Document Management	Efficiency	200,000	-	200,000	-
Disaster Recovery/Security Upgrades	Efficiency	25,000	-	25,000	-
CMMS Upgrades	Efficiency	121,900	21,900	100,000	-
Sub-total Administration Capital Funded by LCA			\$ 143,860	\$ 750,000	\$ -
Total Administration Capital Expenditures (Funded):			\$ 143,860	\$ 750,000	\$ -

LEHIGH COUNTY AUTHORITY
CAPITAL EXPENDITURES - SUBURBAN - WATER FUND
2021 Budget and Comparative Prior Period Data

	Suburban - Water Systems													Total			
	Int Serv 100	Undesignated 200	Western Lehigh Service Area			S. Lehigh	Northern Lehigh Service Area					Northampton	Buss Acres 210	Budget 2021	Forecast 2020	Budget 2020	Actual 2019
			Central Lehigh 201	Arcadia West 211	Emmaus 209	Beverly Hills 207	North Whiteha 202	Washington 203	Mill Creek 204	Heidelberg 205	PL of Lynn 206	Madison North 221					
CAPITAL WATER RESERVE FUNDS																	
Annual Projects																	
Capital Management	-	50,000	-	-	-	-	-	-	-	-	-	-	-	50,000	14,305	50,000	24,287
Capital Works Misc Expense	-	7,500	-	-	-	-	-	-	-	-	-	-	-	7,500	974	7,500	1,622
Distribution Mains - Development	-	200,000	-	-	-	-	-	-	-	-	-	-	-	200,000	253,115	200,000	426,326
Distribution Mains - Upsizing	-	180,000	-	-	-	-	-	-	-	-	-	-	-	180,000	23,728	45,000	270,859
Distribution System Improvements (3rd Party)	-	5,000	-	-	-	-	-	-	-	-	-	-	-	5,000	-	5,000	-
General Water System Replacements	-	250,000	-	-	-	-	-	-	-	-	-	-	-	250,000	17,295	250,000	276,695
Main Office Improvements	-	180,000	-	-	-	-	-	-	-	-	-	-	-	180,000	-	180,000	-
Mobile Equipment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60,000	31,075
New & Replacement Meter Installations	-	50,000	-	-	-	-	-	-	-	-	-	-	-	50,000	24,704	50,000	42,605
Other Equipment	-	200,000	-	-	-	-	-	-	-	-	-	-	-	200,000	170,461	200,000	193,964
Reservoir Rehab/Maintenance	-	320,000	-	-	-	-	-	-	-	-	-	-	-	320,000	12,603	320,000	154,081
Water Company Acquisitions	-	5,000	-	-	-	-	-	-	-	-	-	-	-	5,000	-	5,000	-
Water Condition Facility Assessments/Upgrades	-	300,000	-	-	-	-	-	-	-	-	-	-	-	300,000	22,638	300,000	348,825
	-	1,747,500	-	-	-	-	-	-	-	-	-	-	-	1,747,500	539,824	1,672,500	1,770,338
Multi Year Projects																	
Additional (Redundant) Water Supply - Small Satellite Divisions	-	100,000	-	-	-	-	-	-	-	-	-	-	-	100,000	69,859	300,000	68,856
Arcadia Water Tank Replacement	-	-	-	500,000	-	-	-	-	-	-	-	-	-	500,000	41,614	100,000	-
AWIA ACT - 2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	88	-	-
Central Lehigh to Upper Milford Division Interconnection - Kohle	-	-	200,000	-	-	-	-	-	-	-	-	-	-	200,000	1,337,992	1,320,000	-
CLD Auxiliary Pump Station & Main Extension	-	-	-	-	-	-	-	-	-	-	-	-	-	-	88,303	200,000	1,437,085
CLD Distribution System Improvements	-	-	50,000	-	-	-	-	-	-	-	-	-	-	50,000	75,788	60,000	-
CLD Well Improvements - Study Phase	-	-	60,000	-	-	-	-	-	-	-	-	-	-	60,000	25,150	60,000	24,341
Fixed Base Metering Reading System	-	100,000	-	-	-	-	-	-	-	-	-	-	-	100,000	8,859	50,000	-
North Whitehall Division System Improvements - Study Phase	-	-	-	-	-	-	50,000	-	-	-	-	-	-	50,000	-	50,000	-
Residential Svc Conn & Water Svc Inquiry	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7,145	-	4,524
Upper Milford Central Div. Improvements - Buss Ac	-	-	-	-	-	-	-	-	-	-	-	-	850,000	850,000	698,909	2,300,000	101,897
Upper Sys Evalua / Lower Sys Model	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14,277	-	49,762
Water Main Replacement Projects	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,043,432
Water Meter Reading Equipment Upgrade	-	-	100,000	-	-	-	-	-	-	-	-	-	-	100,000	542,764	1,500,000	2,578,724
Watershed Monitoring	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,007	-	1,623
	-	200,000	410,000	500,000	-	-	50,000	-	-	-	-	-	850,000	2,010,000	2,911,755	5,940,000	6,310,244
Administrative Projects																	
Accounting Area Renovation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,266	-	26,379
CMMS Upgrades	-	57,667	-	-	-	-	-	-	-	-	-	-	-	57,667	4,265	53,000	97,426
Computer System Hardware & Software Upgrades	-	57,667	-	-	-	-	-	-	-	-	-	-	-	57,667	4,632	53,000	68,892
COVID 19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	716,060	-	-
Disaster Recovery/Security Upgrades	-	14,417	-	-	-	-	-	-	-	-	-	-	-	14,417	9,048	13,250	88,629
Document Management	-	115,333	-	-	-	-	-	-	-	-	-	-	-	115,333	13,086	106,000	5,863
GIS Upgrades & Application Development	-	28,833	-	-	-	-	-	-	-	-	-	-	-	28,833	22,652	26,500	94,323
Information Technology Master Plan Update	-	72,083	-	-	-	-	-	-	-	-	-	-	-	72,083	54,037	66,250	33,610
Operations Center Improvements	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9,116	-	154,775
SCADA Programming, Hardware Upgrades, Software & Training	-	86,500	-	-	-	-	-	-	-	-	-	-	-	86,500	35,535	79,500	114,478
	-	432,500	-	-	-	-	-	-	-	-	-	-	-	432,500	869,697	397,500	684,373
	-																
Total Capital Water Reserve Fund	-	2,380,000	410,000	500,000	-	-	50,000	-	-	-	-	-	850,000	4,190,000	4,321,275	8,010,000	8,764,955

LEHIGH COUNTY AUTHORITY
CAPITAL EXPENDITURES - SUBURBAN - WASTEWATER FUND
2021 Budget and Comparative Prior Period Data

	Suburban - Wastewater Systems															Total			
	Interceptor Group				CRCS						W.Weisenberg								
	Int Serv 100	WLI 312	LLRI 1 313	LLRI 2 314	Heidelberg 305	Upper Milford 315	Wynnewood 316	Weisenberg 317	Sand Spring 319	Lowhill Twp. 323	NLSA 318	Washington 303	Lynn Twp. 322	WWTP 320	Arcadia West 311	Budget 2021	Forecast 2020	Budget 2020	Actual 2019
CAPITAL WASTEWATER RESERVE FUNDS																			
Annual Projects																			
General Sewer System Improvements*	-	-	-	-	-	-	-	-	-	-	-	-	-	200,000	-	200,000	-	-	192,434
LLRI Coll Sys Development & Svc Connections	-	-	5,000	-	-	-	-	-	-	-	-	-	-	-	-	5,000	-	-	-
Mobile Equipment	-	180,000	-	-	-	-	-	-	-	-	-	-	-	-	-	180,000	45,000	-	-
Other Equipment	-	200,000	-	-	-	-	-	-	-	-	-	-	-	-	-	200,000	25,590	200,000	232,735
Lynn Township Coll Sys Development & Svc Connections	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,000	-
Sewer Company Acquisitions	-	-	-	-	-	-	-	-	-	-	5,000	-	-	-	-	5,000	-	-	-
Upper Milford Coll Sys Development & Svc Connections	-	-	-	-	-	10,000	-	-	-	-	-	-	-	-	-	10,000	6,924	10,000	-
WLI Capital Management	-	7,500	-	-	-	-	-	-	-	-	-	-	-	-	-	7,500	8,528	7,500	11,049
WLI Coll Sys Development & Svc Connections	-	5,000	-	-	-	-	-	-	-	-	-	-	-	-	-	5,000	-	-	-
WLI High Flow Emergency Response	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WW Facility Condition Assessments/Upgrades	-	-	-	-	-	-	-	-	-	-	-	-	-	10,000	-	-	1,932	-	1,927,364
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10,000	-	100,000	-
	-	392,500	5,000	-	-	10,000	-	-	-	-	5,000	-	-	210,000	-	622,500	87,974	320,500	2,363,582
Multi Year Projects																			
537 CRB Tool	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26,527	-	-
Arcadia West WWTP Mechanical Screen	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central Lehigh County WW Capacity Planning & Expansion	-	799,300	-	-	-	-	-	-	-	-	-	-	-	-	-	799,300	127,546	620,000	51,606
Chestnut St Bridge Replacement	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8,846	-	3,120
Heidelberg Heights I/I Investigation and Remediation Program	-	-	-	-	300,000	-	-	-	-	-	-	-	-	-	-	300,000	25,077	275,000	385,822
Heidelberg Heights WWTP Rehabilitation	-	-	-	-	40,000	-	-	-	-	-	-	-	-	-	-	40,000	-	40,000	-
Hydraulic Model WLSP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	34,055	-	-
Lynn Township I/I Investigation and Remediation Program	-	-	-	-	-	-	-	-	-	-	-	-	50,000	-	-	50,000	52,944	300,000	149,718
Lynn Township WWTP Improvements & Expansion	-	-	-	-	-	-	-	-	-	-	-	-	50,000	-	-	50,000	89	50,000	416
Park Pump Station Cond. Assessm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	885	-	-
Park Pump Station Force Main Rehabilitation	-	-	100,000	-	-	-	-	-	-	-	-	-	-	-	-	100,000	-	100,000	-
Park Pump Station Rehabilitation/Improvements	-	-	100,000	-	-	-	-	-	-	-	-	-	-	-	-	100,000	450,777	400,000	3,602,549
Plan Review & Inspection, Development & Svc Connections	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,196	-	22,619
Pretreatment Plant Improvements	-	-	-	-	-	-	-	-	-	-	-	-	-	700,000	-	700,000	779,784	700,000	711,970
Regional Park Pump Station	-	-	50,000	-	-	-	-	-	-	-	-	-	-	-	-	50,000	-	-	-
Sand Spring WWTP Remediation & Replacement	-	-	-	-	-	-	-	-	500,000	-	-	-	-	-	-	500,000	1,368,403	3,600,000	161,090
Signatory I/I Investigation & Remediation Program	-	270,000	-	-	-	-	-	-	-	-	-	-	-	-	-	270,000	642,061	1,000,000	671,386
Spring Creek Force Main A/V Valve Replacements	-	40,000	-	-	-	-	-	-	-	-	-	-	-	-	-	40,000	9,321	40,000	25,494
Spring Creek Force Main Condition Assessment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spring Creek PS Upgrade	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,475	-	97,796
SSES (Weisenberg, UMIT, Lowhill)	-	-	-	-	-	25,000	-	25,000	-	25,000	-	-	-	-	-	75,000	-	75,000	-
Strawberry Acres Sewer	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60	-	902
WLI-Trexlerstown Area Storage Facility	-	200,000	-	-	-	-	-	-	-	-	-	-	-	-	-	200,000	14,209	400,000	55,844
WTP Upgrade Study	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	153	-	-
Wynnewood I/I Investigation and Remediation Program	-	-	-	-	-	-	25,000	-	-	-	-	-	-	-	-	25,000	9,423	50,000	5,001
Wynnewood Terrace WWTP Remediation & Replacement	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	828,931	700,000	2,362,622
	-	1,309,300	250,000	-	340,000	25,000	25,000	25,000	500,000	25,000	-	-	100,000	700,000	-	3,299,300	4,382,760	8,350,000	8,307,955
Total Capital WasteWater Reserve Fund	-	1,701,800	255,000	-	340,000	35,000	25,000	25,000	500,000	25,000	5,000	-	100,000	910,000	-	3,921,800	4,470,734	8,670,500	10,671,537

LEHIGH COUNTY AUTHORITY
CAPITAL EXPENDITURES - CITY - DIVISION FUND
2021 Budget and Comparative Prior Period Data

	City Division							Total			
	Undesignated	Int Serv	WFP	DIST	WWTP	WWCOLL	LAB	Budget	Forecast	Budget	Actual
	400	490	491	492	493	494	495	2021	2020	2020	2019
<u>CAPITAL WATER RESERVE FUNDS</u>											
<u>Annual Projects</u>											
Capital Management	10,000	-	-	-	-	-	-	10,000	3,876	22,500	-
Distribution Mains - Development	-	-	-	-	-	-	-	-	11,887	-	30,035
Distribution Mains - Upsizing	-	-	-	-	-	-	-	-	-	-	-
Indenture Report Upgrades	250,000	-	-	-	-	-	-	250,000	-	-	-
Mobile Equipment	-	-	-	-	-	-	-	-	-	-	95,925
New & Replacements Meter Installations	50,000	-	-	-	-	-	-	50,000	55,486	50,000	81,982
Other Equipment	200,000	-	-	-	-	-	-	200,000	114,514	100,000	76,601
PennDOT relocations	80,000	-	-	-	-	-	-	80,000	-	-	-
Reservoir Rehab/Maintenance	-	-	-	-	-	-	-	-	-	-	-
WFP General Improvements	500,000	-	-	-	-	-	-	500,000	478	500,000	-
WFP General System Replacements	-	-	-	500,000	-	-	-	500,000	40,160	300,000	225,070
	1,090,000	-	-	500,000	-	-	-	1,590,000	226,402	972,500	509,612
<u>Multi Year Projects</u>											
Annual Water Main Replacements	-	-	-	1,900,000	-	-	-	1,900,000	1,270	-	647,515
Cedar Creek Bridge Replacement	-	-	-	-	-	-	-	-	10,887	-	18,034
Collection System - Development & Service Connection	-	-	-	-	-	-	-	-	89	-	949
Distribution System Improvements	-	-	-	-	-	-	-	-	595,054	-	606,351
EPA AWIA Act 2020	-	-	-	-	-	-	-	-	33,837	-	31,285
Huck Ridge Main Break	-	-	-	-	-	-	-	-	140,659	-	-
High Service Pump VFD Replacement Project	-	-	-	800,000	-	-	-	800,000	-	-	-
Iron/AMR Meter Project (1)	-	-	-	85,000	-	-	-	85,000	237	85,000	1,951
Low Lift Painting	-	-	-	-	-	-	-	-	109,209	-	21,255
Misc Facility Permit	-	-	-	-	-	-	-	-	346	-	11,313
N 17th Main Replacement	-	-	-	-	-	-	-	-	118,452	-	-
Schantz Spring Exposed	-	-	-	-	-	-	-	-	-	-	10,714
SR 145 Bridge Project	-	-	-	-	-	-	-	-	142	-	392
Various Water System Related Studies	-	-	-	-	-	-	-	-	-	-	144
Water Capital Mgmt/WFP Master Plan	-	-	-	-	-	-	-	-	-	-	13,985
	-	-	-	2,785,000	-	-	-	2,785,000	1,010,182	85,000	1,363,886
<u>Administrative Projects</u>											
CMMS Upgrades	42,333	-	-	-	-	-	-	42,333	-	42,333	-
Computer System Hardware & Software Upgrades	42,333	-	-	-	-	-	-	42,333	-	42,333	61
Disaster Recovery/Security Upgrades	10,583	-	-	-	-	-	-	10,583	-	10,583	-
Document Management	84,667	-	-	-	-	-	-	84,667	-	84,667	-
GIS Upgrades & Application Development	21,167	-	-	-	-	-	-	21,167	-	21,167	-
Information Technology Master Plan Update	52,917	-	-	-	-	-	-	52,917	-	52,917	-
SCADA Programming, Hardware Upgrades, Software & Training	63,500	-	-	-	-	-	-	63,500	144,980	63,500	143,429
	317,500	-	-	-	-	-	-	317,500	144,980	317,500	143,489
Total Capital Water Reserve Fund	1,407,500	-	-	3,285,000	-	-	-	4,692,500	1,381,564	1,375,000	2,016,987
<u>CAPITAL WASTEWATER RESERVE FUNDS</u>											
<u>Annual Projects</u>											
2020 SBM Data Capture	-	-	-	-	-	-	-	-	8,187	-	-
Capital Management	10,000	-	-	-	-	-	-	10,000	1,798	10,000	10,524
Collection System - Development	-	-	-	-	-	-	-	-	35,481	-	12,854
Indenture Report Upgrades	500,000	-	-	-	-	-	-	500,000	-	-	-
Mobile Equipment	-	-	-	-	-	-	-	-	-	-	128,113
Other Equipment	350,000	-	-	-	-	-	-	350,000	246,490	300,000	344,395
PennDOT relocations	200,000	-	-	-	-	-	-	200,000	-	-	-
Roof Replacements	-	-	-	-	-	-	-	-	-	-	118
Sanitary Sewer Main Replacements & Rehab	100,000	-	-	-	-	-	-	100,000	39,176	100,000	59,839
Various Wastewater System Related Studies	-	-	-	-	-	-	-	-	6,193	-	1,041
WWTP Clarifier Mech	-	-	-	-	-	-	-	-	-	-	1,815
WWTP General Improvements	800,000	-	-	-	-	-	-	800,000	209,927	800,000	152,339
	1,960,000	-	-	-	-	-	-	1,960,000	547,254	1,210,000	711,037
<u>Multi Year Projects</u>											
Boiler Replacement and Solids Process HVAC Upgrade Project	200,000	-	-	-	-	-	-	200,000	-	-	-
Elec Substation	-	-	-	-	-	-	-	-	311	-	1,337,787
Flow Characterization Study (2)	-	-	-	-	1,250,000	-	-	1,250,000	-	1,500,000	-
I&I Source Reduction	-	-	-	-	-	-	-	-	-	-	185,903
KIWWTP Interim 537	-	-	-	-	-	-	-	-	118,739	-	14,186
KIWWTP Master Plan	-	-	-	-	-	-	-	-	-	-	21,376
KIWWTP Max Month Study	-	-	-	-	-	-	-	-	1,101	-	34,888
KIWWTP Peak Flow Study	-	-	-	-	-	-	-	-	57,334	-	-
Regional Flow Management Strategy (2)	-	-	-	-	775,000	-	-	775,000	885,004	730,000	-
SR 145 Bridge Project	-	-	-	-	-	-	-	-	2,557	-	76,992
	200,000	-	-	-	2,025,000	-	-	2,225,000	1,065,045	2,230,000	1,671,131
Total Capital WasteWater Reserve Fund	2,160,000	-	-	-	2,025,000	-	-	4,185,000	1,612,300	3,440,000	2,382,168
TOTAL CAPITAL EXPENSES:	3,567,500	-	-	3,285,000	2,025,000	-	-	8,877,500	2,993,864	4,815,000	4,399,156

(1) "Uncompleted Work" City Projects that were supposed to be complete by the time of settlement or executed by City personnel after settlement.
The City will fund these projects but has requested that LCA execute them.

(2) "Administrative Order" Projects as per the Agreement are to be Funded by the City and executed by LCA.

Note: Annual Water Projects Includes Sodium Hypo project in 2021

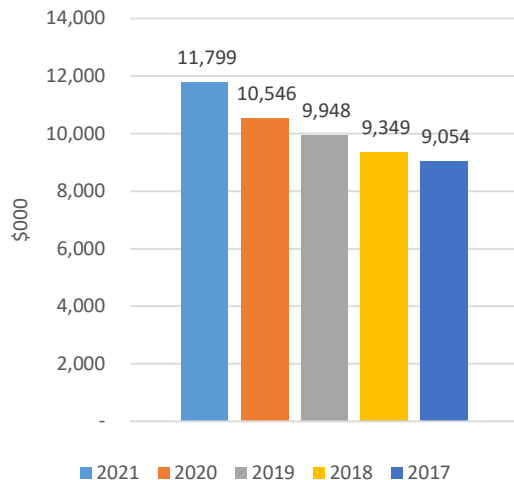
Supplemental Information

LEHIGH COUNTY AUTHORITY
DEBT SERVICE RATIO AND CAPITAL COVERAGE RATIO
2021 Budget and Comparative Prior Period Data

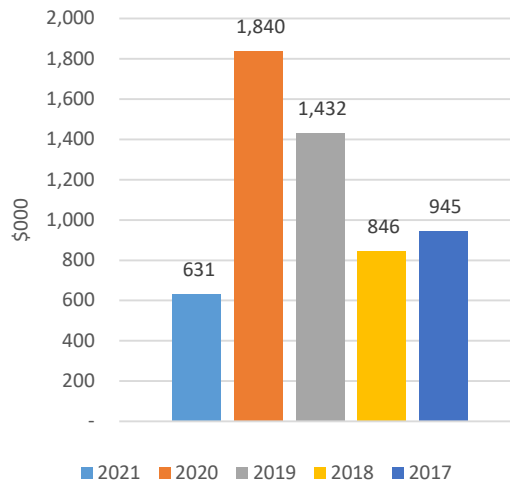
	Suburban Water				Suburban Wastewater				City Division				Total LCA			
	Budget 2021	Forecast 2020	Budget 2020	Actual 2019	Budget 2021	Forecast 2020	Budget 2020	Actual 2019	Budget 2021	Forecast 2020	Budget 2020	Actual 2019	Budget 2021	Forecast 2020	Budget 2020	Actual 2019
Debt Service Ratio (Indenture Based)																
Total Operating Revenues	11,799,441	10,546,404	10,582,010	9,948,169	19,166,369	15,626,824	16,446,154	14,062,562	41,996,514	35,988,451	37,315,488	37,075,861	72,962,324	62,161,679	64,343,652	61,086,592
Total Operating Expenses (Cash Based)	(8,637,775)	(6,134,848)	(7,334,728)	(6,027,132)	(13,248,398)	(11,391,541)	(12,355,646)	(11,716,436)	(19,758,093)	(19,386,416)	(18,659,910)	(18,165,550)	(41,644,267)	(36,912,805)	(38,350,284)	(35,909,118)
Interest Income	94,327	89,072	160,000	179,193	190,471	179,859	200,000	332,846	172,960	166,148	900,000	1,193,617	457,758	435,079	1,260,000	1,705,656
Annual Lease Payment (City)	-	-	-	-	-	-	-	-	(1,230,600)	(533,258)	(533,258)	(524,861)	(1,230,600)	(533,258)	(533,258)	(524,861)
Total Non-Operating Revenues (Expenses)	942,983	796,545	776,500	1,000,653	866,216	3,402,279	846,282	1,616,882	4,007,230	2,492,172	4,356,800	2,237,653	5,816,428	6,690,997	5,979,582	4,855,187
Cash Available For Debt Service	4,198,975	5,297,173	4,183,782	5,100,883	6,974,657	7,817,421	5,136,790	4,295,854	25,188,011	18,727,097	23,379,120	21,816,720	36,361,643	31,841,691	32,699,692	31,213,457
Interest and Fees Paid	1,406,328	1,436,287	1,508,789	1,545,029	181,995	195,887	803,082	213,115	11,565,086	10,608,837	13,978,238	12,185,856	13,153,409	12,241,011	16,290,109	13,943,999
Principal Paid	2,092,818	2,081,372	1,832,775	1,725,137	549,034	542,067	813,353	499,109	2,660,831	2,040,000	1,442,932	1,230,893	5,302,683	4,663,439	4,089,060	3,455,139
Total Debt Service	3,499,146	3,517,659	3,341,564	3,270,165	731,029	737,954	1,616,435	712,224	14,225,917	12,648,837	15,421,170	13,416,749	18,456,092	16,904,450	20,379,169	17,399,138
Debt Service Ratio	1.20	1.51	1.25	1.56	9.54	10.59	3.18	6.03	1.77	1.48	1.52	1.63	1.97	1.88	1.60	1.79
Capital Coverage Ratio																
Net Cash Available After Debt Service	(243,154)	982,969	65,718	830,065	5,377,412	3,677,188	2,674,073	1,966,748	6,954,865	3,586,088	3,601,150	6,162,319	12,089,123	8,246,244	6,340,941	8,959,131
Total Non-Operating Revenues	942,983	796,545	776,500	1,000,653	866,216	3,402,279	846,282	1,616,882	4,007,230	2,492,172	4,356,800	2,237,653	5,816,428	6,690,997	5,979,582	4,855,187
Net Cash Available For Capital	699,829	1,779,514	842,218	1,830,717	6,243,628	7,079,467	3,520,355	3,583,630	10,962,095	6,078,260	7,957,950	8,399,971	17,905,551	14,937,241	12,320,523	13,814,319
Net Capital Spending	4,186,600	4,317,875	8,006,600	8,764,955	2,921,800	3,470,734	7,670,500	10,671,537	6,753,528	1,705,939	2,032,084	3,148,744	13,861,928	9,494,549	17,709,184	22,585,236
Expensed Capex	3,400	3,400	3,400	-	1,000,000	1,000,000	1,000,000	-	2,123,972	1,287,924	2,782,916	1,250,412	3,127,372	2,291,324	3,786,316	1,250,412
Total Capital Spending	4,190,000	4,321,275	8,010,000	8,764,955	3,921,800	4,470,734	8,670,500	10,671,537	8,877,500	2,993,864	4,815,000	4,399,156	16,989,300	11,785,873	21,495,500	23,835,648
Capital Coverage Ratio	0.17	0.41	0.11	0.21	1.59	1.58	0.41	0.34	1.23	2.03	1.65	1.91	1.05	1.27	0.57	0.58

Dashboard – Suburban Water

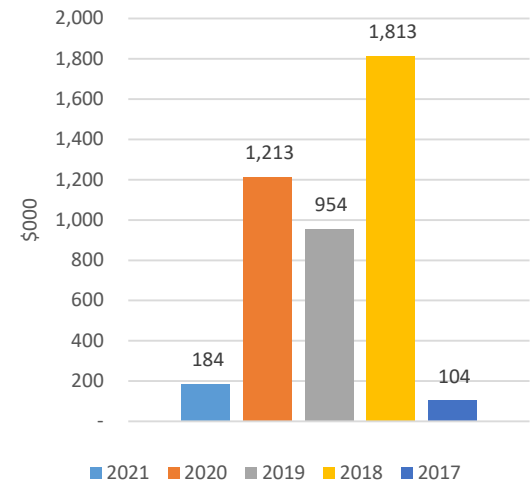
Operating Revenues



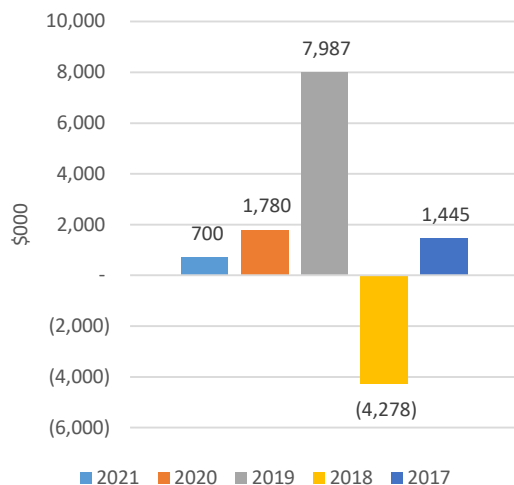
Operating Income



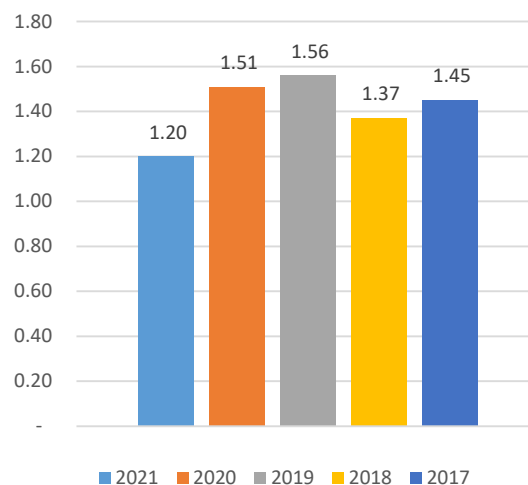
Net Income (Loss)



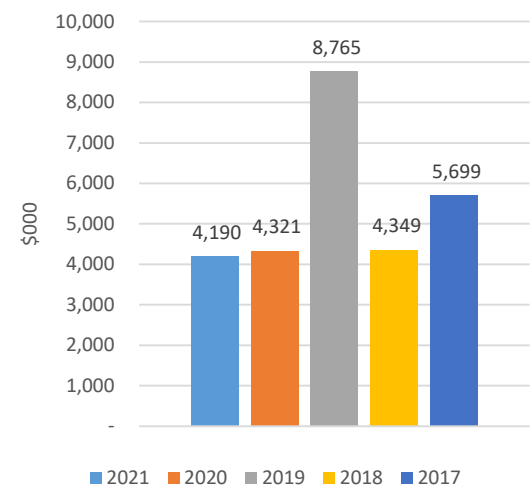
Net Cash Available For Capital



Debt Service Coverage Ratio

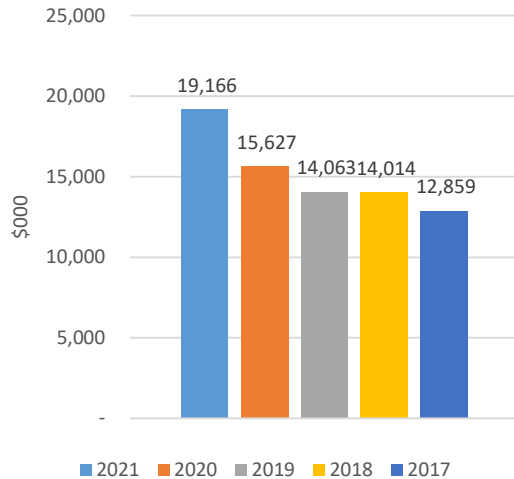


Capital Spending

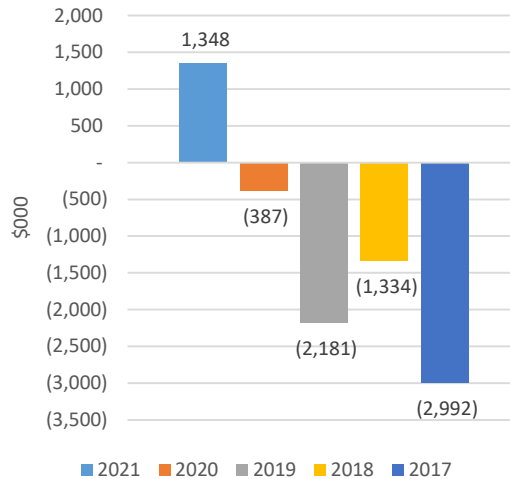


Dashboard – Suburban Wastewater

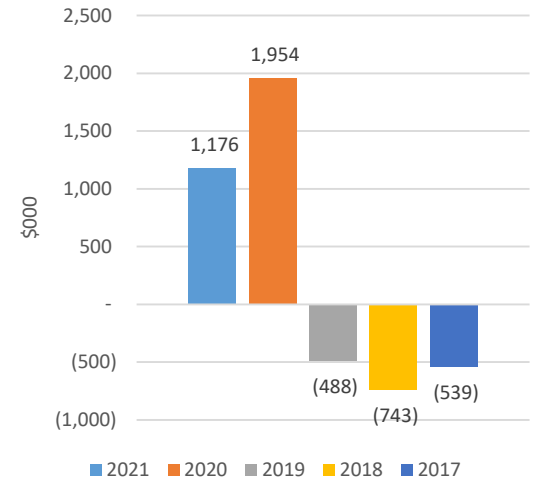
Operating Revenues



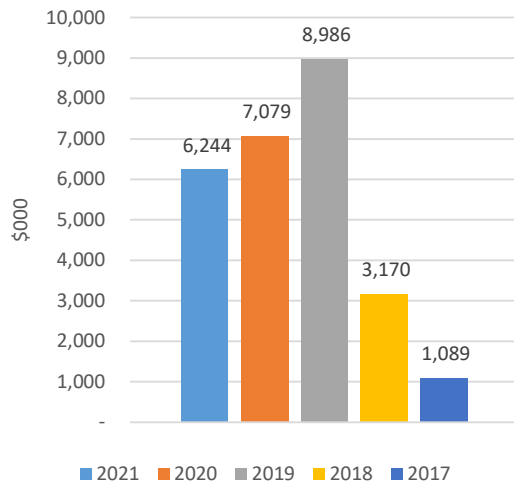
Operating Income



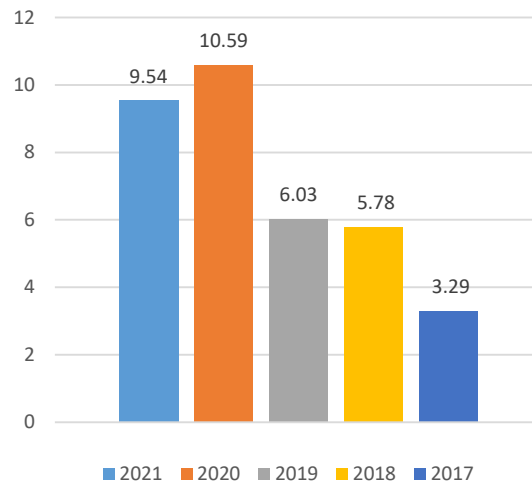
Net Income (Loss)



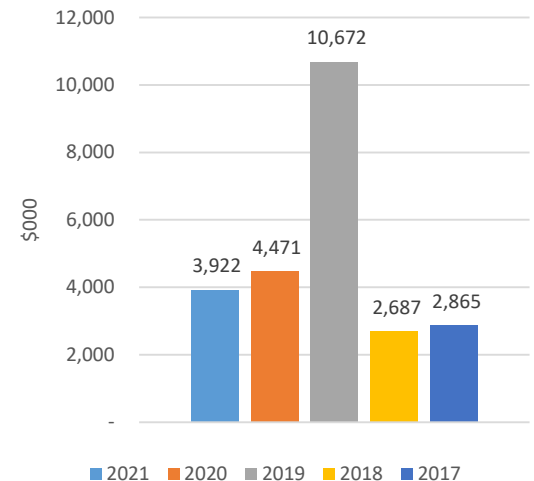
Net Cash Available For Capital



Debt Service Coverage Ratio

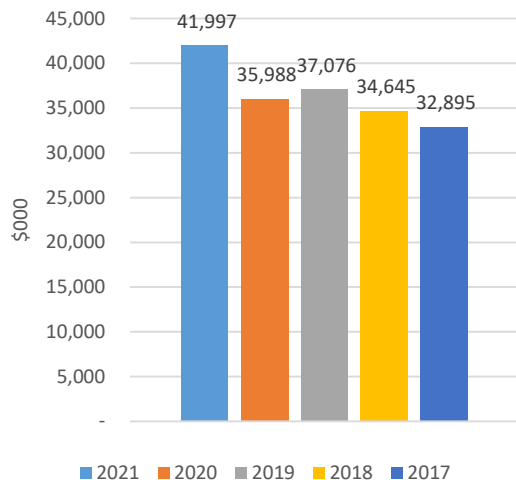


Capital Spending

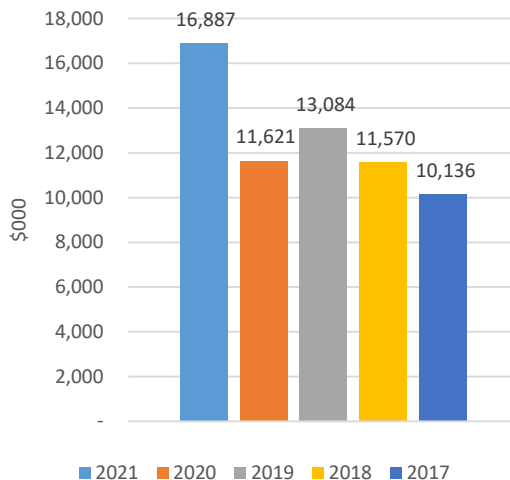


Dashboard – City Division

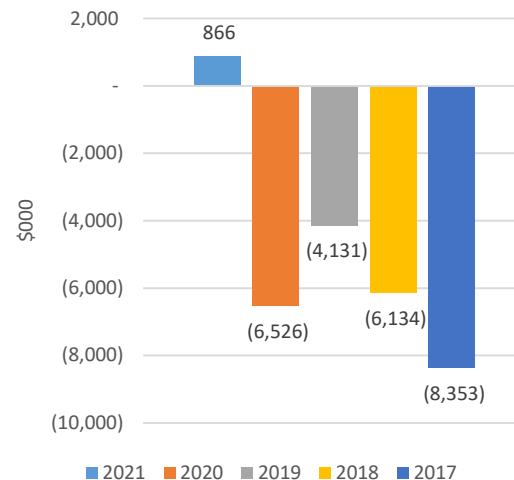
Operating Revenues



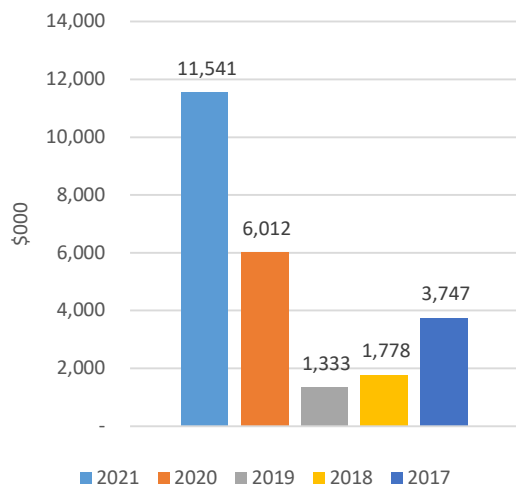
Operating Income



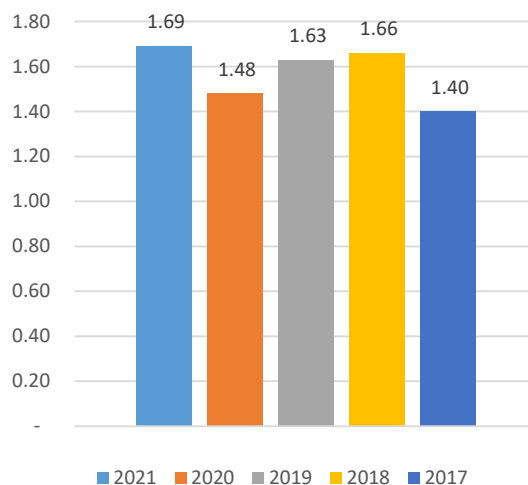
Net Income (Loss)



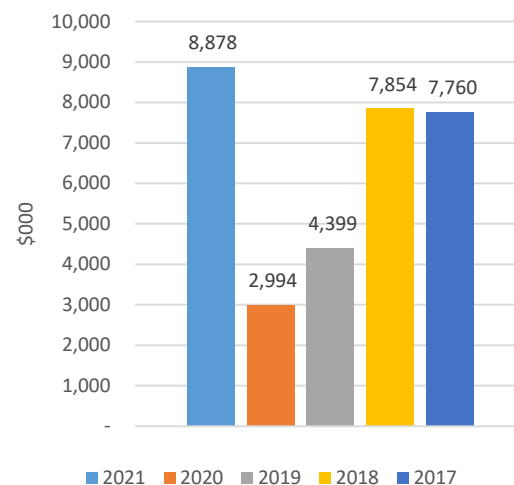
Net Cash Available For Capital



Debt Service Coverage Ratio



Capital Spending



LEHIGH COUNTY AUTHORITY
SUMMARY OF LONG TERM DEBT
2021 Budget and Comparative Prior Period Data

	Long Term Debt for 2020									Long Term Debt for 2021								
	December 31, 2019						December 31, 2020			December 31, 2020						December 31, 2021		
	Short Term Portion	Long Term Portion	Total Debt	Additions Accretions	Retirements		Short Term Portion	Long Term Portion	Total Debt	Short Term Portion	Long Term Portion	Total Debt	Additions Accretions	Retirements		Short Term Portion	Long Term Portion	Total Debt
Suburban Water Fund																		
Water Revenue Bonds Series of 2010 A	-	11,590,000	11,590,000	-	-		-	11,590,000	11,590,000	-	-	-	-	-		-	11,590,000	11,590,000
Water Revenue Bonds Series of 2011	122,044	191,245	313,289	-	(122,044)		116,581	74,664	191,245	116,581	74,664	191,245	-	(116,581)		74,664	-	74,664
Water Revenue Bonds Series of 2015	1,072,850	1,088,705	2,161,555	-	(1,072,850)		1,088,705	-	1,088,705	1,088,705	-	1,088,705	-	(1,088,705)		-	-	-
Water Revenue Bonds Series of 2015 A	318,100	7,717,300	8,035,400	-	(318,100)		304,500	7,412,800	7,717,300	304,500	7,412,800	7,717,300	-	(304,500)		1,475,100	5,937,700	7,412,800
Water Revenue Bonds Series of 2017	320,000	14,580,000	14,900,000	-	(320,000)		330,000	14,250,000	14,580,000	330,000	14,250,000	14,580,000	-	(330,000)		340,000	13,910,000	14,250,000
2007 State Pennworks Note	176,181	1,302,910	1,479,091	-	(176,181)		179,737	1,123,173	1,302,910	179,737	1,123,173	1,302,910	-	(179,737)		183,365	939,808	1,123,173
2011 Pennsylvania Infrastructure Investment Authority Note	72,197	935,199	1,007,396	-	(72,197)		73,295	861,904	935,199	73,295	861,904	935,199	-	(73,295)		74,410	787,494	861,904
Subtotal	2,081,372	37,405,359	39,486,731	-	(2,081,372)		2,092,818	35,312,541	37,405,359	2,092,818	35,312,541	37,405,359	-	(2,092,818)		2,147,539	33,165,002	35,312,541
Bond Premium / Discount	-	359,339	359,339	-	-		-	359,339	359,339	-	359,339	359,339	-	-		-	359,339	359,339
Net Suburban Water Fund Long-Term Debt	2,081,372	37,764,698	39,846,070	-	(2,081,372)		2,092,818	35,671,880	37,764,698	2,092,818	35,671,880	37,764,698	-	(2,092,818)		2,147,539	33,524,341	35,671,880
Suburban Wastewater Fund																		
2009 Pennsylvania Infrastructure Investment Authority Note	253,464	2,950,716	3,204,180	-	(253,464)		259,995	2,690,721	2,950,716	259,995	2,690,721	2,950,716	-	(259,995)		266,694	2,424,027	2,690,721
2011 Sewer Revenue Bonds Series A	114,905	1,367,092	1,481,997	-	(114,905)		114,259	1,252,833	1,367,092	114,259	1,252,833	1,367,092	-	(114,259)		118,358	1,134,475	1,252,833
2013 Pennsylvania Infrastructure Investment Authority Note	135,942	2,022,962	2,158,904	-	(135,942)		138,009	1,884,953	2,022,962	138,009	1,884,953	2,022,962	-	(138,009)		140,107	1,744,846	1,884,953
2015 Pennsylvania Infrastructure Investment Authority Note	37,756	628,777	666,533	-	(37,756)		36,771	592,006	628,777	36,771	592,006	628,777	-	(36,771)		36,922	555,084	592,006
Subtotal	542,067	6,969,547	7,511,614	-	(542,067)		549,034	6,420,513	6,969,547	549,034	6,420,513	6,969,547	-	(549,034)		562,081	5,858,432	6,420,513
Bond Premium / Discount	-	-	-	-	-		-	-	-	-	-	-	-	-		-	-	-
Net Suburban Wastewater Fund Long-Term Debt	542,067	6,969,547	7,511,614	-	(542,067)		549,034	6,420,513	6,969,547	549,034	6,420,513	6,969,547	-	(549,034)		562,081	5,858,432	6,420,513
City Division Fund																		
2013 Water and Sewer Revenue Bonds, Series A	137,975,000	107,615,000	245,590,000	-	(137,975,000)		-	107,615,000	107,615,000	-	107,615,000	107,615,000	-	-		-	107,615,000	107,615,000
2020 Water and Sewer Revenue Bonds, Series 2020	-	-	-	161,035,000	-		-	161,035,000	161,035,000	-	161,035,000	161,035,000	-	-		-	161,035,000	161,035,000
2013 Water and Sewer Capital Appreciation Revenue Bonds, Series B	882,406	60,760,810	61,643,216	3,434,704	(915,000)		1,286,487	62,876,433	64,162,920	1,286,487	62,876,433	64,162,920	3,748,807	(1,395,000)		1,661,079	64,855,649	66,516,728
2018 Water and Sewer Revenue Bonds (Federally Taxable) Series C	955,000	16,985,000	17,940,000	-	(17,940,000)		-	-	-	-	-	-	-	-		-	-	-
2020 Water and Sewer Revenue Bonds (Federally Taxable) Series A	-	-	-	18,150,000	(1,125,000)		1,175,000	15,850,000	17,025,000	1,175,000	15,850,000	17,025,000	-	(1,175,000)		-	15,850,000	15,850,000
Subtotal	139,812,406	185,360,810	325,173,216	182,619,704	(157,955,000)		2,461,487	347,376,433	349,837,920	2,461,487	347,376,433	349,837,920	3,748,807	(2,570,000)		1,661,079	349,355,649	351,016,728
Bond Premium / Discount	-	(8,865,423)	(8,865,423)	-	-		-	(8,865,423)	(8,865,423)	-	(8,865,423)	(8,865,423)	-	-		-	(8,865,423)	(8,865,423)
Net City Division Fund Long-Term Debt	139,812,406	176,495,387	316,307,793	182,619,704	(157,955,000)		2,461,487	338,511,010	340,972,497	2,461,487	338,511,010	340,972,497	3,748,807	(2,570,000)		1,661,079	340,490,226	342,151,305
Total Net Long-Term Debt	142,435,845	221,229,632	363,665,477	182,619,704	(160,578,439)		5,103,339	380,603,403	385,706,742	5,103,339	380,603,403	385,706,742	3,748,807	(5,211,852)		4,370,699	379,872,999	384,243,698

LEHIGH COUNTY AUTHORITY
SCHEDULE OF PRINCIPAL MATURITY AND DEBT SERVICE
2021 Budget and Comparative Prior Period Data

	Suburban Water			Suburban Wastewater			City Division			Total LCA		
	Principle Amount	Total Interest	Total Debt Service	Principle Amount	Total Interest	Total Debt Service	Principle Amount	Total Interest	Total Debt Service	Principle Amount	Total Interest	Total Debt Service
2019 - Audit	1,725,137	1,468,478	3,193,615	499,109	198,934	698,043	1,230,893	13,428,383	14,659,276	3,455,139	15,095,795	18,550,934
2020 - Forecast	2,081,372	1,436,287	3,517,659	542,067	195,887	737,954	157,922,406	10,801,197	168,723,603	160,545,845	12,433,371	172,979,216
SubTotal Prior Obligations	3,806,509	2,904,765	6,711,274	1,041,176	394,821	1,435,997	159,153,300	24,229,580	183,382,880	164,000,984	27,529,166	191,530,151
2021 - Budget	2,092,818	1,406,328	3,499,146	549,034	184,072	733,106	2,461,487	11,697,831	14,159,318	5,103,339	13,288,231	18,391,570
SubTotal Current Obligations	2,092,818	1,406,328	3,499,146	549,034	184,072	733,106	2,461,487	11,697,831	14,159,318	5,103,339	13,288,231	18,391,570
2022	2,147,539	1,351,168	3,498,707	562,081	169,411	731,492	2,871,079	11,744,932	14,616,011	5,580,699	13,265,511	18,846,210
2023	2,201,607	1,299,901	3,501,508	575,980	153,143	729,123	3,247,078	11,883,843	15,130,921	6,024,665	13,336,887	19,361,552
2024	2,194,031	1,250,434	3,444,465	590,251	136,418	726,669	3,586,247	12,078,569	15,664,816	6,370,529	13,465,421	19,835,950
2025	2,277,350	1,188,131	3,465,481	604,907	119,220	724,127	3,895,996	12,321,700	16,217,696	6,778,253	13,629,051	20,407,304
2026	2,380,063	1,123,270	3,503,333	619,957	101,536	721,493	3,940,919	12,845,192	16,786,111	6,940,939	14,069,998	21,010,937
2027	2,593,823	1,040,669	3,634,492	635,412	83,350	718,762	4,203,202	13,171,409	17,374,611	7,432,438	14,295,428	21,727,866
2028	2,681,461	914,681	3,596,142	651,287	64,649	715,936	4,439,300	13,546,062	17,985,361	7,772,048	14,525,392	22,297,439
2029	2,772,700	783,387	3,556,087	667,592	45,416	713,008	4,656,959	13,966,152	18,623,111	8,097,251	14,794,955	22,892,206
2030	2,868,957	641,754	3,510,711	684,340	25,636	709,976	4,856,002	14,416,609	19,272,611	8,409,299	15,083,999	23,493,298
2031	2,970,234	492,665	3,462,899	252,498	11,169	263,667	5,038,303	14,910,558	19,948,861	8,261,035	15,414,392	23,675,427
2032	559,776	335,822	895,598	206,875	7,674	214,549	5,206,038	15,445,824	20,651,861	5,972,689	15,789,320	21,762,008
2033	510,000	320,564	830,564	210,125	4,425	214,550	5,360,251	16,015,860	21,376,111	6,080,376	16,340,849	22,421,225
2034	525,000	304,626	829,626	101,197	1,616	102,813	4,090,406	17,005,955	21,096,361	4,716,603	17,312,197	22,028,800
2035	535,000	288,220	823,220	46,304	642	46,946	4,638,783	18,582,578	23,221,361	5,220,087	18,871,440	24,091,527
2036	560,000	271,501	831,501	11,707	34	11,741	4,865,398	19,810,963	24,676,361	5,437,105	20,082,498	25,519,603
2037	580,000	253,581	833,581	-	-	-	5,073,731	21,152,630	26,226,361	5,653,731	21,406,211	27,059,942
2038	595,000	234,731	829,731	-	-	-	5,354,630	21,876,731	27,231,361	5,949,630	22,111,462	28,061,092
2039	615,000	214,650	829,650	-	-	-	10,090,000	11,051,361	21,141,361	10,705,000	11,266,011	21,971,011
2040	635,000	193,894	828,894	-	-	-	11,130,000	10,546,861	21,676,861	11,765,000	10,740,755	22,505,755
2041	660,000	172,462	832,462	-	-	-	12,235,000	9,990,361	22,225,361	12,895,000	10,162,823	23,057,823
2042	680,000	150,187	830,187	-	-	-	13,425,000	9,378,611	22,803,611	14,105,000	9,528,798	23,633,798
2043	705,000	127,237	832,237	-	-	-	14,685,000	8,707,361	23,392,361	15,390,000	8,834,598	24,224,598
2044	730,000	103,444	833,444	-	-	-	10,665,000	7,973,111	18,638,111	11,395,000	8,076,555	19,471,555
2045	750,000	78,806	828,806	-	-	-	11,210,000	7,426,530	18,636,530	11,960,000	7,505,336	19,465,336
2046	780,000	53,494	833,494	-	-	-	11,785,000	6,852,017	18,637,017	12,565,000	6,905,511	19,470,511
2047	805,000	27,168	832,168	-	-	-	12,390,000	6,248,036	18,638,036	13,195,000	6,275,204	19,470,204
2048	-	-	-	-	-	-	11,100,000	5,613,049	16,713,049	11,100,000	5,613,049	16,713,049
2049	-	-	-	-	-	-	11,460,000	5,254,297	16,714,297	11,460,000	5,254,297	16,714,297
2050	-	-	-	-	-	-	11,830,000	4,883,910	16,713,910	11,830,000	4,883,910	16,713,910
2051	-	-	-	-	-	-	12,210,000	4,501,564	16,711,564	12,210,000	4,501,564	16,711,564
2052	-	-	-	-	-	-	12,635,000	4,076,412	16,711,412	12,635,000	4,076,412	16,711,412
2053	-	-	-	-	-	-	13,075,000	3,636,461	16,711,461	13,075,000	3,636,461	16,711,461
2054	-	-	-	-	-	-	13,530,000	3,181,190	16,711,190	13,530,000	3,181,190	16,711,190
2055	-	-	-	-	-	-	14,005,000	2,710,075	16,715,075	14,005,000	2,710,075	16,715,075
2056	-	-	-	-	-	-	14,490,000	2,222,421	16,712,421	14,490,000	2,222,421	16,712,421
2057	-	-	-	-	-	-	15,015,000	1,696,144	16,711,144	15,015,000	1,696,144	16,711,144
2058	-	-	-	-	-	-	15,560,000	1,150,799	16,710,799	15,560,000	1,150,799	16,710,799
2059	-	-	-	-	-	-	16,125,000	585,660	16,710,660	16,125,000	585,660	16,710,660
SubTotal Future Obligations	35,312,541	13,216,447	48,528,988	6,420,513	924,339	7,344,852	343,974,323	378,461,798	722,436,121	385,707,377	392,602,584	778,309,961
TOTAL PRINCIPAL MATURITY AND DEBT SERVICE	41,211,868	17,527,540	58,739,408	8,010,723	1,503,232	9,513,955	505,589,110	414,389,209	919,978,318	554,811,701	433,419,981	988,231,682

Lehigh County Authority
2021 Budget and Comparative Prior Period Data
Definitions and Explanations of Accounts

OPERATING REVENUES:

Large Industrial – This classification includes water revenue from utility billing customers classified as Large Industrial.

Other Industrial/Commercial – This classification includes water revenue from utility billing customers classified as Other Industrial and Commercial.

Residential – This classification includes water revenue from utility billing customers classified as Residential. The category includes apartments, mobile homes, single family attached and single family detached dwellings.

Penalties – Late fees assessed to past due accounts.

Private Fire Service – This classification includes charges for private fire protection for those industrial/commercial customers who have either a sprinkler system or private fire hydrants

Public Fire Service – This classification includes charges for public fire hydrants billed to municipalities in our service area.

User Charges – Municipal - The City is party to Municipal Sewer Service Agreements under which the Sewer Utility System provides sewer services to seven municipalities or municipal authorities: the Borough of Emmaus, Hanover Township, Salisbury Township, South Whitehall Township, Coplay-Whitehall Authority, Existing LCA System, and Lower Macungie Township. Pursuant to these agreements, LCA will act as the agent of the City and will perform all of the contractual obligations of the City under each Municipal Agreement, including the billing and collection of the revenues.

The Suburban division provides sewer service to Lower Macungie Township, Upper Macungie Township, Borough of Emmaus, Borough of Alburtis, and Borough of Macungie through the Western Lehigh Interceptor. Through the Little Lehigh Relief Interceptor, sewer service is provided to Lower Macungie, Upper Macungie, Salisbury and South Whitehall Townships and the Boroughs of Alburtis and Macungie.

User Charges - Residential & Commercial – This classification includes revenue from sewer service to residential and commercial customers in the Suburban and City Division.

User Charges – Hauler – This classification includes revenues from haulers based on strength and volume of waste brought to the wastewater treatment plants.

Hauler Fees – This classification includes revenue from annual permit fees.

Industrial Charges – This classification includes revenue from industrial strength surcharges to the Suburban Division Pretreatment Plant.

Industrial Pretreatment Revenues - This classification includes charges for the operation of the EPA approved Pretreatment Program, as described in 40 CFR 403.

Wastewater Analysis Reimbursement – This classification includes reimbursements for lab testing costs.

Leachate Program Revenues - This classification includes charges for the processing and treatment of hauled leachate to the Allentown WWTP.

Lehigh County Authority

2021 Budget and Comparative Prior Period Data

Definitions and Explanations of Accounts

Other Income – This classification includes reimbursement of Lehigh County Authority expenses by other entities.

Other Water Sales – This classification includes revenues from water sold to Municipal Signatories and for bulk water drawn from hydrants.

Provision for Doubtful Debts - The provision for doubtful debts is the estimated amount of bad debt that will arise from accounts receivable that have been issued but not yet collected.

Rental Income – This classification includes the annual reimbursement from the various funds for a portion of the Authority Operations Center costs and expansion.

Miscellaneous – This classification includes revenue from other miscellaneous categories not part of other revenue classifications.

CONNECTION & SYSTEM CHARGES:

Supply/Tapping Fees – This classification includes charges to new customers which are based on connection size. These revenues offset costs related to construction of storage and supply facilities.

Capital Cost Recovery – This classification includes the portion of major capital project costs being reimbursed by customers.

Distribution Tapping Fees – This classification includes charges to new customers which are based on connection size. These revenues offset costs related to construction of transmission and distribution facilities. These charges are generally not applicable to customers connecting within a developer-installed distribution system.

Meter Sales – This classification includes charges to new customers for initial meter and backflow prevention device costs and installation.

Inspection & Review Fees – This classification includes the deposits made by developers for LCA construction inspection and plan review costs.

Developer Reimbursement - This classification includes the reimbursement from developers for LCA inspection and plan review costs.

NON-OPERATING REVENUES:

Other Non-Operating Income - This classification includes revenue from other non-operating miscellaneous categories not part of other revenue classifications.

OPERATING EXPENSES:

Personnel:

Salaries and Wages - Salary is a consistent payment to an employee based on working a full-time position. Wages are hourly or daily payments for work done during the working day.

Overtime - Overtime refers to any hours worked by an employee that exceed their normally scheduled working hours.

Taxes – Comprised of Employer portion of FICA, Social Security and Medicare contributions.

Lehigh County Authority

2021 Budget and Comparative Prior Period Data

Definitions and Explanations of Accounts

Fringe Benefits - Comprised of medical coverage, defined benefit pension, long-term and short-term disability, flexible spending and unemployment insurance.

Purchase of Services:

Shared Services - General & Administrative - Overhead costs, which are not easily assignable to specific funds, are allocated based on a pro rate share of Salary and Wages and include the following types of expenses:

Postage - Represents cost to mail correspondence and customer billings.

Computer Services - Nominal services for computer services.

Advertising - Includes costs for advertising bid and meeting notices.

Building & Equipment Maintenance - Represents Operations Center costs, such as site and building maintenance and equipment maintenance.

Dues & Subscriptions - Organization membership fees and contributions and periodical subscriptions.

Travel and Mileage - Includes reimbursement to employees at prevailing IRS rate for personal vehicle use for business purposes.

Education and Training - Budget includes specifically identified training for employees, whether through participation in seminars or classes.

Workers Compensation - Workplace injury coverage.

Property & Liability Insurance – Insurance premiums for all properties, with the exception of the Wastewater Treatment Plant in Upper Macungie which is charged directly to that fund.

Legal/Litigation - Represents costs associated with labor relations, part-time Solicitor and other global legal issues.

Miscellaneous - Comprised of banking costs, printing services, contributions, employee activities and other miscellaneous expenses.

Risk Management - Includes safety equipment, training and miscellaneous expenses.

Public Relations - Represents costs associated with reaching out to stakeholders with educational programs and a host of interactive agendas.

Human Resources - Comprised of human resource projects.

Special Studies - Includes costs for conducting a customer survey, compensation study, strategic planning, and process improvement.

Utilities - This account includes electric costs, natural gas service, telephone and garbage hauling.

Compliance - This budget includes permit fees and renewals for the water and wastewater treatment plants

Lehigh County Authority

2021 Budget and Comparative Prior Period Data

Definitions and Explanations of Accounts

Contract Operating Svcs - Budget includes such services as root control program, Farland Development Dump Site, system check support services and Trenchless spot repairs.

Engineering - This budget line item is for miscellaneous consultant assistance with reporting to the Pa DEP on RDII removal efforts and unanticipated situations at facilities requiring engineering services.

Exceptional Strength Analysis - This account provides for external laboratory analysis of samples containing higher strength concentrations.

Extraordinary Expenditures - This budget line maintains the same level of insurance against an extraordinary leak repair and restoration in all systems. It includes items such as well and booster pump replacements, piping re-configurations and other services utilized in various systems.

Fleet Management Services - This budget includes maintenance services for vehicles and mobile equipment

General Analyses - This account provides for external laboratory analysis of samples to support the biosolids disposal and the residuals disposal programs.

Industrial Meter Testing – This budget includes cost to test large commercial meters for accuracy.

Maintenance Services - This budget includes expenses required for site and building maintenance, transmission and distribution maintenance services, equipment maintenance and rental, janitorial services, and other miscellaneous maintenance services.

Miscellaneous Services - This budget includes property self-insured, Enterprize fleet program lease, traffic control, after hours dispatching service, communication center, PA One Call system, easement brush & tree cleaning, radio repairs, Safety Kleen, Trimble software maintenance, TV truck Win Can, railroad easement fees, miscellaneous services and miscellaneous shipping.

Rental - Allocation of expenses related to the Authority Operations Center renovations and expansion are being allocated over 30 years.

Residuals - This budget includes residuals disposal costs.

Water Purchases - This budget includes the purchase of water from the Northampton Borough Municipal Authority for customers in the North Whitehall Division, the purchase of water from the Borough of Slatington for customers in the Washington Township Division, the purchase of water from the Borough of Emmaus for the LCA Out-of-Borough customers in Lower Macungie, Salisbury and Upper Milford Townships and the purchase of water from the City Division for customers in the Central Lehigh Division.

System Planning / Capital Management – This budget includes allocation of certain capital management costs to the operating budgets.

Treatment and Transportation - Represents charges to the Upper Milford, Weisenberg Township, and Lowhill Collector Systems for flow and strength based on sample strength or normal strength levels for non-sampled customers. This category also includes costs associated with the Western Lehigh Interceptor, the Little Lehigh Interceptors and Emmaus transportation charges.

Lehigh County Authority
2021 Budget and Comparative Prior Period Data
Definitions and Explanations of Accounts

Materials & Supplies:

Purification Chemicals - The treatment plant chemical budget includes: LOX, sodium hypochlorite, chlorine, polymer, larvicide, potassium permanganate and other chemicals.

Purification Supplies - This budget includes reagent sets, injectors and repair parts, analyzer supplies, and miscellaneous parts and supplies.

Pump Supplies - This budget includes pump supplies, well supplies and reservoir supplies.

Misc. Materials & Supplies - This budget includes SCADA / TELOG supplies, uniform costs, lab supplies, and miscellaneous supplies.

Fuel & Mileage – This budget includes the cost of unleaded and diesel fuels.

Fleet Management Supplies - This budget provides for mobile equipment supplies and lubricating oils.

Equipment - Funding to replace / update equipment used to maintain the distribution and collection systems. This budget includes line locators/metal and leak detector equipment, permaloggers, magnetic locators, curb/valve keys chemical pumps, valve replacement, sump pumps, prominent Cl2 analyzers, well depth probes, VFD purchase, dehumidifiers, booster pumps, TELOG equipment, pipe saws, trash pumps, hypo tanks, reservoir #5 mixer, submersible level transmitters, miscellaneous lab equipment, and miscellaneous tools & other minor equipment.

Leased Equipment – This budget includes costs to lease mobile and other equipment.

Distribution & Transmission Supplies - This item includes repair clamps, fittings, and pipes, “No-Lead” brass and copper, crushed stone and blacktop, valve and curb boxes, miscellaneous supplies, and hydrant supplies.

Collection System Supplies - This budget includes degreaser, inspection dye & deodorizer, concrete, manhole frames and covers, risers rings, ferncos & couplings / wrapid seal, SDR Pipe, hose lines paving material, salt, and topsoil, crushed clean stone, lubricating oils & grease, misc. supplies/gaskets/seals, and maintenance & construction materials.

Depreciation and Amortization - This expense is calculated by the straight-line method using standard depreciation periods. Annual amortization over the life of the financing is included.

Other Expenses:

Major Maintenance Expenses – Includes the City Capex charged to expense.

Other Miscellaneous – This expense includes financing costs related to new debt and annual fees from the Trustees overseeing the various bond series, cost of goods sold, and allocation of GIS capital costs to wastewater operating funds.

NON-OPERATING INCOME (EXPENSE):

Investment Earnings – Interest earned on Authority investments and deposit accounts.

Interest Expense – Interest paid on Authority bonds and Pennvest loans.

Capital Contributed – This includes infrastructure contributed by developers .



LEHIGH COUNTY AUTHORITY

1053 SPRUCE ROAD, PO BOX 3348, ALLENTOWN, PA 18106
Phone: (610-398-2503); FAX (610-351-8363)

MEMORANDUM

Date Presented: October 19, 2020
To: Lehigh County Authority Board of Directors
From: Edward Klein, Chief Financial Officer
Subject: 2021 Minimum Municipal Obligation (MMO) for the Lehigh County Authority Pension Plan (39-448-6N)

Act 205 of 1984, as amended, governs the funding requirements for all municipal pension plans. The law requires the Chief Administrative Officer of each pension plan to inform the governing board of the municipality of the plan's expected financial obligation for the coming year. This must be done by the last business day in September.

The calculation of the 2020 MMO required an estimate of the 2020 W-2 wages of the employees covered by the plan. I have indicated on the attached worksheet my best estimate of the same. Questions on the pension cost calculation may be addressed to either myself or the Pennsylvania Municipal Retirement System at (800) 622-7968.

The MMO is the municipality's 2021 bill for this pension plan and must be paid by December 31, 2021. The obligation must be met with general fund monies or with any General State Aid to Municipal Pensions to which we may be entitled to under Act 205.

Edward Klein
Chief Financial Officer
edwardklein@lehighcountyauthority.org
(610) 398-2503, extension 160

Attachment: 2021 MMO Worksheet

The Minimum Municipal Obligation Worksheet (MMO)
For The
Lehigh County Authority Pension Plan (39-100-8 N)
For Plan Year 2021

CHARGES

Estimated 2020 W-2 Payroll

For Covered Plan Members:

(A) \$10,951,335

PMRS Determined Normal Cost

Expressed as a Decimal:

(B) .1205

RESULT: (A) * (B) =

(C) \$1,319,636

Administrative Charge (PMRS Determined)

of Plan Members times \$20:

(D) 4,200.00

Amortization of Unfunded Liability

(PMRS Determined)

(E) 474,640.00

TOTAL CHARGES: (C) + (D) + (E) =

(F) \$1,798,476

CREDITS

Repeat Estimated 2020 W-2 Payroll

For Covered Plan Members:

(A) \$10,951,335

Employee Contribution Rate

Expressed as a Decimal:

(G) \$109,513

RESULT: (A) * (G) =

(H) \$109,513

Amortization of the Actuarial Surplus

(PMRS Determined)

(I) 0.00

TOTAL CREDITS: (H) + (I) =

(J) \$109,513

MINIMUM MUNICIPAL OBLIGATION

(Based on 1/1/2019 Actuarial Valuation)

(MMO) \$1,688,963

Equals TOTAL CHARGES Minus

TOTAL CREDITS (F) - (J) = (Please round numbers to dollars)

Prepared By: Kathy A. Martin

(Name)

Kathy A. Martin

(Signature)

Human Resources Manager

(Title)

(610) 351 - 6322

(Telephone #)

Please complete the above worksheet with your best estimates and return a copy to the Pennsylvania Municipal Retirement System by October 5. The official copy must be shared with the plan's governing board by the last business day in September.

MEMORANDUM

Date: October 16, 2020

To: Lehigh County Authority Board
From: John Parsons, Chief Operating Office
Subject: Allentown Water Distribution System – 36” Transmission Main Condition Assessment

MOTIONS / APPROVALS REQUESTED:

No.	Item	Amount
1	Professional Services Authorization – Gannett Fleming, Inc.	\$202,250.00

PROJECT OVERVIEW:

The Allentown Water Distribution System includes a 36” Ductile Iron (DI) transmission main that runs north along 17th Street and eventually feeds the Huckleberry Ridge Reservoir. This relatively young pipe, which was constructed in 1983, has had two (2) major main breaks recently. Upon excavation and repair, it was discovered that the piping at both breaks had very significant external corrosion. This was considered very abnormal and especially for a line that is only 37 years old.

Gannett Fleming, Inc. has been the consultant that LCA has used for our water distribution system projects for many years. Gannett Fleming approached several contractors about the project, with the most effective and cost-efficient proposal being that of Pure Technologies, which is a part of Xylem, Inc. Gannett Fleming will act as the Project Manager and subcontract the field investigations to Pure Technologies.

Pure Technologies will perform a Robotic Enhanced Electromagnetic Assessment of approximately 5,800’ of 36” DI that runs from 17th Street/Union Street to 22nd Street/Chew Street. The test area will include the areas of both recent breaks.

Cost Proposals for the Project include the following:

Pure Technologies

Project Planning and Mobilization	\$50,000.00
Robotic Electromagnetic Inspection	\$32,000.00
Electromagnetic Analysis	\$46,750.00
Draft Condition Assessment and Structural Evaluation	\$24,000.00
Final Report	\$16,000.00

Subtotal	\$168,750.00
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Gannett Fleming, Inc.

- Coordinate proposal and subcontractor agreement
- Participate in pre-inspection project coordination
- Attend on-site field investigations
- Review and comment on all Pure Technologies Reports
- Attend meeting to discuss final comments
- Evaluate and recommend repair/replacement options

Subtotal for (200) man-hours	\$33,500.00
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Total Project Cost	\$202,250.00
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Based on the assessment and evaluations, it will be determined what the next step(s) are for this pipe as far as remediation is concerned. After (2) major breaks, it is imperative that we consider potential problems for the entire reach before any more damage occurs.

TIMING

Pure Technologies is currently scheduled to begin work shortly after Thanksgiving, 2020. The duration of the project should only be a few days and no matter what, will be finished by the end of 2020.

FUNDING

Funds to pay for this project are currently available through a combination of remaining capital money and Operational Budget. The funding in the Water Distribution Operations Budget was specifically set aside for pipe assessment during 2020.



Lehigh County Authority

1053 Spruce Street * P.O. Box 3348 * Allentown, PA 18106-0348
(610)398-2503 * FAX (610)398-8413 * Email: service@lehighcountyauthority.org

PROFESSIONAL SERVICES AUTHORIZATION

Professional: GANNETT FLEMING INC.
PO Box 67100
Harrisburg, PA 17106-7100

Date: October 15, 2020

Requested By: John Parsons

Approvals

Department Head: _____

Chief Executive

Officer: _____

Allentown Transmission Main Condition Assessment

Gannett Fleming, Inc, along with their subcontractor, Xylem, Inc, will provide a condition assessment on ~5800' of 36" transmission main that was installed in 1983. The study area is where there were two major breaks recently. The condition assessment aims to determine if there is any systematic problem with the relatively new pipe.

Professional Services
1. Assess 5800' of 36" DI transmission main
2. Subcontract all field work through Xylem, Inc.
3. Review and comment on all reports
4. Provide technical assistance during all field inspections
5. Evaluate and recommend repair/replacement options

Please reference the cover Memo for additional information.

Design Phase:

Cost Estimate (not to be exceeded without further authorization): \$202,250

Time Table and Completion Deadline: As required to meet various critical deadlines as set forth in the proposal.

(For Authority Use Only)

Authorization Completion:

Approval: _____ **Actual Cost:** _____ **Date:** _____



GANNETT FLEMING, INC.
P.O. Box 67100
Harrisburg, PA 17106-7100

Location:
207 Senate Avenue
Camp Hill, PA 17011

Office: (717) 763-7211
Fax: (717) 763-1140
www.gannettfleming.com

October 2, 2020

Mr. John Parsons, Chief Operations Officer
Lehigh County Authority
1300 Martin Luther King Jr. Drive
Allentown, PA 18102

**Re: Condition Assessment
Allentown Division 30-inch and 36-inch Transmission Mains
Engineering Services Proposal**

Dear John:

As requested, we are providing this Engineering Services Proposal for condition assessment of 30-inch and 36-inch transmission mains in the Lehigh County Authority's (LCA) Allentown Division System. The assessment involves approximately 5,800 feet of ductile iron main installed in 1983 between the butterfly valve on 17th Street near the intersection with Union Street and the butterfly valve at the intersection of 22nd Street and Chew. This area of main has experienced two (2) recent failures including a notable break in May of this year. Information gathered by LCA during and following these events indicate that external corrosion was the likely cause. There is thus concern that the additional failures may occur in the section of pipe. Due to the size of the main and location, failures create significant system disturbance, impact to City residents, and result in notable costs. As a result, a robotic enhanced electromagnetic assessment of the main to be completed by Xylem d/b/a Pure Technologies U.S. Inc. (Pure Technologies) is proposed to assess the existing condition of the main. The results of the evaluation will then be used to optimize investments in addressing the main by identify and prioritizing necessary repairs and replacements to proactively minimize risk for future failures.

Gannett Fleming will sub-contract the inspection work to Pure Technologies to complete this assessment. Pure Technologies is an industry-leader in in-pipe condition assessment of water mains. Pure Technologies' proposal, which has been coordinated with LCA, is provided as an Attachment and serves as the primary scope of services for this assignment. In addition to the work to be performed by Pure Technologies, Gannett Fleming will complete the following scope of services for LCA:

- Coordinate proposal and subcontractor agreement with Pure Technologies.
- Participate in pre-inspection planning meeting with LCA and Pure Technologies.
- Attend the on-site field inspection.
- Review and comment on Pure Technologies draft structural and assessment reports.
- Attend meeting to discuss review comments with Pure Technologies and LCA.
- Review and comment on final structural and assessment reports.
- Evaluate and recommend repair/replacement options.

As noted in the attached Pure Technologies proposal, LCA will be responsible for the following:

- Remove butterfly valve at 17th Street and Chew Street and replace with 36x36x24-inch tee.
- Remove butterfly valve at 22nd Street and Chew Street and replace with a 30-inch gate valve.
- Work with Gannett Fleming to provide information about the pipeline to Pure Technologies including, but not limited to, plan and profile drawings, lay sheets, shop drawings, manufacturing details, and details of access structures, air valves, blow-offs, and main line valves – if available.
- Obtain any required legal right-of-entry on the property at no cost to Pure Technologies or Gannett Fleming.
- Provide support personnel during the inspection for locating the access man ways, traffic control, and other support as necessary.
- Excavate, de-water, shore up, and/or provide scaffolding of job area and other civil activity as necessary in compliance with OSHA and local standards and regulations.
- Prepare and/or modify existing pipeline fittings and structures as indicated in the Pure Technologies proposal to accommodate inspection.
- Provide and maintain safe and reasonable access to all insertion sites throughout the inspection and obtain permits, as required.
- Render confined space areas safe for the services, including locking and tagging pumps, valves and motors; de-watering areas to permit movement of persons and equipment; ventilation of de-watered pipeline including opening of access manholes; de-pressurization of pipe sections to create static pressure buffer zones immediately adjacent to inspection scope. Pure Technologies will provide confined space entry and ventilation equipment to support the inspection.

Proposed Cost and Schedule

Pure Technologies proposes to complete their condition assessment and provide an assessment report and structural evaluation of the main for a cost of \$168,750 as noted in the attachment. Gannett Fleming estimates our cost to complete the scope of services described above to be \$33,500 based on an estimate of approximately 200 man-hours. Thus, the total proposed effort to complete the condition assessment is \$202,250. Services will be completed in accordance with the attached standard terms and conditions, which are in place for ongoing work between Gannett Fleming and LCA. Gannett Fleming's effort will be billed on a cost-plus basis. Pure Technologies effort will be billed as direct expenses. Gannett Fleming will not exceed the estimated cost of \$202,750 without prior authorization from LCA. Pure Technologies tentatively plans to complete the inspection the week of Nov 30.

Mr. John Parsons
Lehigh County Authority

-3-

October 2, 2020

We look forward to the opportunity to continue to work jointly with LCA and build upon an already successful relationship. If you have any questions on our proposal or require additional information, please contact me at 717-649-3662 or David Marks at 717-886-5391.

Sincerely,

GANNETT FLEMING, INC.
Environmental Resources Division



Michael T. Brown, P.E.
Vice President

Cc: Jason Gruber, LCA
Dave Marks, Gannett Fleming

Attachment – Pure Technologies Proposal

September 17, 2020

Mr. David Marks
Gannett Fleming, Inc.
207 Senate Avenue
Camp Hill, PA 17011

**Subject: Lehigh County Authority
30 & 36-Inch Ductile Iron Transmission Main Condition Assessment**

Dear Mr. Marks:

Xylem Inc., d/b/a Pure Technologies U.S. Inc. (Pure Technologies) is pleased to offer our services to Gannett Fleming, Inc. for the Robotic Enhanced Electromagnetic Assessment of the 30 and 36-inch Ductile Iron Transmission Main located in Allentown, PA.

Gannett Fleming, Inc. is working with the Lehigh County Authority to assess the condition of the transmission main following a recent failure. The scope of the project will include approximately 5,800 feet of pipe between the butterfly valve on 17th Street near the intersection with Union Street (Station 17+25) and the Butterfly Valve at 22nd Street and Chew Street (Station 75+23). It is anticipated that the butterfly valve at 17th Street and Chew Street (Station 43+72) will be removed and replaced with a 36 x 36 x 24-inch Tee to facilitate the inspection. The inspection equipment will be launched from this location and travel in both the upstream and down stream directions to the limits of the inspection mentioned above. Below is an aerial image of the inspection limits.



1. Proposed Technology Services

Corrosion is the primary cause of failure in metallic pipelines. Because the only structural component is the pipe wall itself, any loss in cross-section area due to corrosion has an immediate impact on the overall strength of the pipe. Electromagnetics can be used to assess the condition of cylinder of the pipe and identify localized areas of wall loss. Structural engineering help to understand the structural capacity of the pipe under the current loading conditions. With this baseline and more detailed analysis, the significance of defects identified is understood and the data collected is made actionable.

2. PureRobotics® - Robotic Inspection

PureRobotics is a long range remotely operated inspection platform configured to deliver PureEM™ technology. The inspection equipment includes a tethered robotic vehicle of modular design allowing numerous configuration options for inspection of metallic pipe applications. The depth-rated tool can be operated in depressurized pipes as a single or multi-stage vehicle to handle a variety of different deployment scenarios. The vehicle traverses the pipe using independently operable tracks to offer inspection deployments greater than 1 mile. A trained operator navigates interactively with inertial sensors and a high definition pan-tilt-zoom camera equipped with high-intensity LEDs for visual inspection. Simultaneously, a trained PureEM specialist monitors enhanced electromagnetic data live and can direct a closer look at visual anomalies that may correlate. The HD CCTV and electromagnetic data are recorded for detailed post analysis.

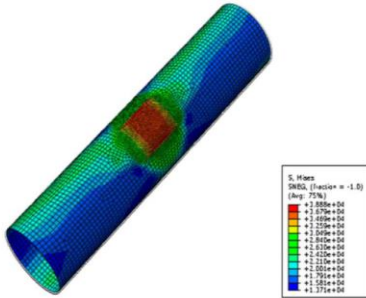
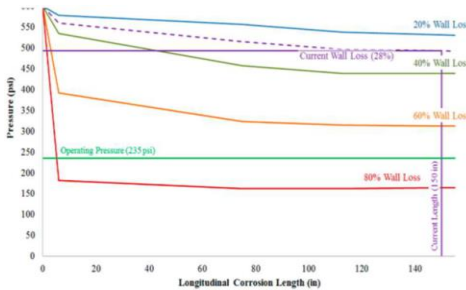


PureEM™ can be configured to identify localized areas of wall loss in metallic pipes. The tool creates an electromagnetic field that interacts with the pipe wall as it moves through the pipeline. Where wall loss exists, the electromagnetic field is changed. After the inspection is complete, the data is downloaded and analyzed. Analysts can identify areas of wall loss and locate them both circumferentially and longitudinally on the pipe.

The tool's ability to collect quality data is dependent on buildup in the pipeline such as tuberculation, which can cause mechanical vibration of the sensors or they may drag introducing noise into the data. Quantification of electromagnetic results depend on a number of variables including; accuracy of pipeline specifications, calibration data, repairs (cylinder or welds), presence of nearby electromagnetic fields, and the number and complexity of corrosion regions. Location of the damaged pipe section rely on the accuracy of correlation between the collected data and the pipeline, which relies on the accuracy and completeness of pipeline drawings.

3. Structural Evaluation

Pure Technologies will utilize the DIP AWWA Standard as a basis for evaluating the design of the force main as it was specified and installed.



- By using the equations presented in the standards, the minimum required wall thickness for current loading conditions is calculated over the length of the pipeline. With only the inputs of overburden, internal pressure, and pipe material, we can understand if the pipe that was installed meets or exceeds the standards (was the pipe over or under designed). This is a first and conservative step to evaluating the significance of any defects.

- After the robotic inspection, The Lehigh County Authority (LCA) and City of Allentown Division will select one location for advanced structural evaluation in order to assess the ability of the most distressed ductile iron pipe to resist internal pressures and external loads. The structural evaluation will integrate the AWWA design check, transient pressure results, and PureEM wall damage estimates to develop a three-dimensional, nonlinear finite element analysis of corrosion defects of high concern. The results of the structural evaluations will be documented in the Condition Assessment Report.

PROPOSED FEE AND PAYMENT SCHEDULE

Table 1 - Project Fee

Item	Description	Total Price
1	Project Planning & Mobilization (Invoiced Upon Delivery of the Planning Document)	\$ 50,000.00
2A	Robotic Electromagnetic Inspection (Invoiced Upon Completion of the Robotic Inspection)	\$ 32,000.00
2B	Electromagnetic Analysis (Invoiced Upon Completion of the Electromagnetic Report)	\$ 46,750.00
3	Draft Condition Assessment Report & Structural Evaluation (Invoiced Upon Delivery of the Draft Condition Assessment Report)	\$ 24,000.00
4	Final Condition Assessment Report & Structural Evaluation (Invoiced Upon Delivery of the Final Condition Assessment Report)	\$ 16,000.00
Not-to-Exceed Project Cost		\$ 168,750.00

Notes:

1. Standby charges: For standby time of the on-site inspection team once the field team mobilizes to the site. This item will be invoiced upon the completion of the field work. Additional cost \$16,000.00/day.

PROJECT EXECUTION AND LOCAL ASSISTANCE

During the inspection planning process, the following information will be requested of Gannett Fleming and Lehigh County Authority for the preparation and execution of the inspections.

- Provide information about the pipeline to Pure Technologies including, but not limited to, plan and profile drawings, lay sheets, shop drawings, manufacturing details, and details of access structures, air valves, blow-offs, and main line valves – if available.
- Obtain any required legal right-of-entry on the property at no cost to Pure Technologies.
- Provide support personnel during the inspection for locating the access man ways, traffic control, and other support as necessary.
- Excavate, de-water, shore up, and/or provide scaffolding of job area and other civil activity as necessary in compliance with OSHA and local standards and regulations.
- Prepare and/or modify existing pipeline fittings and structures as indicated by Pure Technologies to accommodate inspection.
- Provide and maintain safe and reasonable access to all insertion sites throughout the inspection and obtain public works and/or police permits, as required.
- Render confined space areas safe for the services, including locking and tagging pumps, valves and motors; de-watering areas to permit movement of persons and equipment; ventilation of de-watered pipeline including opening of access manholes; de-pressurization of pipe sections to create static pressure buffer zones immediately adjacent to inspection scope. Pure Technologies will provide confined space entry and ventilation equipment to support the inspection.

Pure Technologies is excited by the opportunity to perform the proposed scope of work. We are committed to providing you with a successful project. If you have any questions or comments, please do not hesitate to contact me.

Best regards,

A handwritten signature in blue ink, reading "David G. Smith".

David G. Smith P.E.
Business Development Manager
443-610-5467

RESOLUTION NO. 10-2020-1

(Duly adopted 26 October 2020)

A RESOLUTION OF LEHIGH COUNTY AUTHORITY APPROVING THE SUBMISSION OF A FINANCIAL ASSISTANCE APPLICATION TO THE PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY (PENNVEST) FOR FUNDING IN THE AMOUNT OF \$2,000,000.00 FOR THE REPLACEMENT AND ADDITION OF HIGH SERVICE PUMPING SYSTEM VARIABLE FREQUENCY DRIVES IN THE AUTHORITY'S ALLENTOWN DIVISION WATER SYSTEM, AND PROVIDING FOR OTHER MISCELLANEOUS MATTERS.

WHEREAS, the Lehigh County Authority (the "Authority") is a body corporate and politic organized by the Board of County Commissioners of the County of Lehigh, Pennsylvania under the provisions of the Pennsylvania Municipality Authorities Act, 53 Pa. C.S. §5601 *et seq.*, as amended (the "Act"); and

WHEREAS, the powers of the Authority are exercised by its Board of Directors, who have full authority to manage the properties and business of the Authority, *inter alia*; and

WHEREAS, the City of Allentown, Pennsylvania (the "City") owns the Allentown Sewer Utility System and the Allentown Water Utility System (the "System"); and

WHEREAS, pursuant to the terms and conditions of the Allentown Water and Sewer Utility System Concession and Lease Agreement, dated initially as of May 1, 2013, as amended, supplemented and restated from time to time (collectively, the "Concession Agreement"), by and between the City and the Authority, the City leased to the Authority, and the Authority leased from the City, the System, upon the terms and conditions set forth therein; and

WHEREAS, the Authority Board desires to undertake a project (the "Project") in the Allentown Water Utility System consisting of the replacement and addition of High Service Pumping System variable frequency drives; and

WHEREAS, the Authority Board desires to apply to the Pennsylvania Infrastructure Investment Authority (PENNVEST) for financial assistance in paying the Project's costs, which are estimated to be at least \$2,000,000.00.

NOW THEREFORE, be it resolved by the Board of this Authority, as follows:

Section 1. The Authority shall be, and is hereby, authorized to submit a Financial Assistance Application (the "Application") to the Pennsylvania Infrastructure Investment Authority (PENNVEST), substantially in the form presented at this meeting for the purpose of financing/partially financing the construction, rehabilitation and/or extension of the Authority's Allentown Water Utility System, including the Project.

Section 2. The Chair, Vice Chair of the Board, or the Chief Executive Officer or Chief Financial Officer of the Authority (the "Authority Officials") are hereby authorized, collectively and

individually, to execute all certifications and documentation required in connection with the Application. Further, any of the Authority Officials, or the Board Secretary or Assistant Secretary, Solicitor of the Authority, or Human Resources Manager of the Authority (the "Attesting Officials"), are authorized, collectively and individually, to attest to or witness the execution of such documentation on behalf of the Authority whenever such is necessary.

Section 3. The Authority Officials and Attesting Officials are authorized to take such further action as may be necessary or convenient to effectuate the provisions of this Resolution.

Section 4. All Resolutions, or parts of Resolutions, inconsistent with this Resolution are hereby repealed insofar, but only, insofar, as the same are inconsistent herewith.

Section 5. If any section, subsection, sentence, clause or phrase of this Resolution is, for any reason, held to be illegal or unconstitutional, such decision shall not affect the validity of the remaining portions of this Resolution.

On motion of _____, seconded by _____,
this Resolution was adopted the 26th day of October 2020.

Tally of Votes: Yeas _____ Nays _____



I, Michael A. Gaul, Esquire, of King, Spry, Herman Freund & Faul, LLC, Solicitor of Lehigh County Authority, do hereby certify that the foregoing is a true, correct and complete copy of a resolution which was duly adopted by the Authority at a public meeting of the Authority held on 26 October 2020, after notice thereof had been duly given as required by law, at which meeting a quorum was present and voting and which resolution No. 10-2020-1 is now in full force and effect on the date of this certification.

_____ Michael A. Gaul, Esquire King, Spry, Herman Freund & Faul, LLC Lehigh County Authority Solicitor	_____ Date
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Attest:

_____ Lisa A. Miller Executive Administrative Support Specialist	_____ Date
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Presented: October 26, 2020

Critical Activities	System	Description	Sep-20	2020 Totals	2019 Totals	Permit
			Daily Avg (MGD)	Daily Avg (MGD)	Daily Avg (MGD)	Daily Max (MGD)
Water Production	Allentown	Total	22.08	21.63	21.51	39.0
		Schantz Spring	7.23	7.40	7.77	9.0
		Crystal Spring	3.66	3.86	3.88	4.0
		Little Lehigh Creek	11.19	10.31	9.85	30.0
		Lehigh River	0.00	0.05	0.01	28.0
	Central Lehigh	Total	10.95	10.36	9.75	19.04 MGD Avg
		Feed from Allentown	6.90	6.88	6.93	7.0 MGD Avg 10.5 MGD Max
		Well Production (CLD)	4.05	3.48	2.80	8.54 MGD Avg
		Sum of all (12) other Suburban Water Systems	0.14	0.15	0.17	1.71 Sum of all wells
Wastewater Treatment		Kline's Island	30.80	32.33	37.63	40.0
		Pretreatment Plant	5.14	5.07	5.88	5.75 (design capacity)
		Sum of all (5) other Suburban WW Systems	0.19	0.21	0.19	0.36
			Sep-20	2020 Totals	2019 Totals	2018 Totals
Precipitation Totals (inches)			4.16	36.74	60.66	66.96
Compliance Reports Submitted to Allentown			17	215	278	285
Notices of Violation (NOVs)		(Allentown + Suburban)	0	1	1	1
Sanitary Sewer Overflows (SSOs)/Bypasses		(Allentown + Suburban)	2	36	37	78
Main Breaks Repaired		Allentown	1	14	20	33
		Suburban	0	13	12	23
Customer Service Phone Inquiries		(Allentown + Suburban)	1,102	12,241	22,992	26,440
Water Shutoffs for Non-Payment		(Allentown + Suburban)	0	280	1,956	1,838
Injury Accidents		(Allentown + Suburban)	0	7	10	14
Emergency Declarations		Allentown	0	(3)@\$334,354	(2)@ \$152,053	(5) @ \$76,469
		Suburban	0	(1)@\$110,000	(1) @ \$19,335	(1) @ \$21,197
Significant Repairs/Upgrades: WFP SCADA is in the middle of significant upgrades. Per SCADA Manager George Lill: The PLCs in all (8) Local Control Cabinets are being upgraded. Improvements are also being made for (2) redundant servers, the historical data server, network switches, (3) operator workstations, control software and PLC programming software. The PLC-5s that are being upgraded are at the end of their useful life and are in limited support from Allen-Bradley. Dynac Control software will be upgraded from Version 8.0 to 15.0. All of the servers being replaced are over (13) years old and are at/past the end of their useful lives.						
Description of NOVs and/or SSOs: There was one (1) SSO that occurred in September, happening in the city system on Sept 21. There was one (1) bypass that occurred in September, happening at the Heidelberg Heights WWTP on Sept 3. There were zero (0) NOVs in either system that were issued during September.						
Other Highlights: Nothing to report.						