



## LEHIGH COUNTY AUTHORITY

**LCA Main Office:**  
1053 Spruce Road  
Wescosville, PA 18106  
610-398-2503

**Agendas & Minutes Posted:**  
[www.lehighcountyauthority.org](http://www.lehighcountyauthority.org)

Published: August 19, 2019

### BOARD MEETING AGENDA – August 26, 2019

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](http://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

- *August 12, 2019 Board meeting minutes*

4. Public Comments

5. Action / Discussion Items:

#### **FINANCE AND ADMINISTRATION**

##### **WATER**

- *Suburban Division – Buss Acres Pump Station Replacement Construction (Approval) (salmon)*
- *Suburban Division – CLD Auxiliary Pumping Station and Water Main Extension Project – Construction Change Order (Approval) (blue)*

##### **WASTEWATER**

- *Suburban Division – Sand Spring WWTP Upgrade Project Construction (Approval) (yellow)*
- *Western Lehigh Service Area – Sewer Capacity Exploration (Presentation & discussion only)*
- *Allentown Division – Wastewater Treatment Plant Max Month Capacity Evaluation (white)*

6. Monthly Project Updates / Information Items (1<sup>st</sup> Board meeting per month)

7. Monthly Financial Review (2<sup>nd</sup> Board meeting per month) – **July report attached**

8. Monthly System Operations Overview (2<sup>nd</sup> Board meeting per month) – **July report attached**

9. Staff Comments

10. Solicitor's Comments

11. Public Comments / Other Comments

12. Executive Sessions

13. Adjournment

#### **UPCOMING BOARD MEETINGS**

*Meetings begin at Noon at LCA's Main Office, unless noted otherwise below.*

September 9, 2019

September 23, 2019

October 7, 2019

#### **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**

### **August 12, 2019**

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The Regular Meeting of the Lehigh County Authority Board of Directors was called to order at 12:00 p.m. on Monday, August 12, 2019, Chairman Brian Nagle presiding. Other Members present at the commencement of the meeting were: Linda Rosenfeld, Jeff Morgan, Richard Bohner, Norma Cusick, and Amir Famili. Authority Staff present were Liesel Gross, Brad Landon, Ed Klein, Pat Mandes, John Parsons, Chris Moughan, Susan Sampson, Todd Marion, Phil DePoe and Lisa Miller.

Chairman Nagle announced that today's Board meeting is being videotaped and streaming live and recordings will be posted to the Authority's website.

#### **REVIEW OF AGENDA**

Liesel Gross stated there are no changes to the agenda and there will be an Executive Session at the end of the regular meeting to discuss matters of potential litigation.

Scott Bieber arrived at 12:01 p.m.

Chairman Nagle announced that the Board received their packet in the mail prior to the meeting.

#### **APPROVAL OF MINUTES**

##### **July 22, 2019 Regular Meeting Minutes**

Richard Bohner requested that *Board of Directors* be added after *Lehigh County Authority* in the initial paragraph of the Minutes. On a motion by Richard Bohner, seconded by Norma Cusick, the Board approved the minutes of the July 22, 2019 meeting as corrected (7-0).

#### **PUBLIC COMMENTS**

None.

#### **ACTION AND DISCUSSION ITEMS**

##### **Budget Amendment Request – Allentown Division: Water Main Cycle 4**

Ed Klein explained the budget amendment request is due to an overrun in the capital budget of \$524,885.00 due to the timing of the project. The project was budgeted for start and completion in 2018 but needed to be rebid due to the reduction in the scope which caused a two-month delay to the start of the project.

On a motion by Jeff Morgan, seconded by Linda Rosenfeld, the Board approved the Budget Amendment request for the Allentown Division Water Main Cycle 4 in the amount of \$524,885.00 (7-0).

##### **Allentown Division – Water Filtration Plant: High Lift Pump VFD Replacements**

Phil DePoe gave an overview of the project which consists of the replacement of the existing two Variable Frequency Drives (VFDs) and adding a third VFD. The additional VFD will increase the life of the pumps. Mr. DePoe explained that it was decided to award the bid for engineering design services to Borton-Lawson because of their value-added engineering services.

The City of Allentown has reviewed and approved the project as a Major Capital Improvement allowing the cost to be recovered via a capital cost recovery charge in the LCA Allentown Division. The project is currently listed as “unfunded” in LCA’s Capital Plan but may be supported through a PennVEST loan. Design and permitting work is required before a decision can be made about funding the project. Mr. DePoe is requesting approval of the Capital Project Authorization – Design Phase in the amount of \$88,500.00 which includes the Professional Services Authorization to be awarded to Borton-Lawson in the amount of \$68,500.00.

Amir Famili noted in the memo that Board approval is being requested for the design phase to ensure loan application time lines can be met in the event agreement can be reached with the City and asked if this agreement has indeed been reached. Liesel Gross explained the current status of the project is that both LCA and the City agree it’s a Major Capital Improvement and agree fundamentally it should be funded through the PennVEST program. However, discussions are ongoing with the City regarding financing of these types of projects and how that will work in the overall effort to achieve financial sustainability in the Allentown water / sewer lease.

On a motion by Norma Cusick, seconded by Linda Rosenfeld, the Board approved the Capital Project Authorization – Design Phase in the amount of \$88,500.00 which includes the Professional Services Authorization to be awarded to Borton-Lawson in the amount of \$68,500.00 (7-0).

#### **Northampton Borough Municipal Authority (NBMA) – Water Service Agreement Amendment**

Brad Landon explained that with the abandonment of Well NL6 because of high manganese levels it is necessary to increase the amount of water purchased from the NBMA interconnection in the North Whitehall Division. The amendment would allow for water usage from the NBMA system up to 1,000,000 gallons per day instead of the contract limit of 260,000 gallons per day. The consecutive system permit with DEP will need to be amended. There was some discussion on contracts and agreements. If contracts or agreement changes are complex, Chairman Nagle would like to see negotiations for an entirely new, consolidated contract versus revisions and amendments to the prior agreements which can be difficult to interpret. Mr. Landon agreed that is generally desirable, but a more simple amendment in this case was preferred since there is only one term of the agreement proposed to be changed.

On a motion by Norma Cusick, seconded by Jeff Morgan to approve the Amendment to the July 15, 1997 Water Service Agreement with Northampton Borough Municipal Authority (7-0).

#### **MONTHLY PROJECT UPDATES / INFORMATION ITEMS**

Liesel Gross highlighted items for the meeting on August 26, 2019 noting that the resolution for the Suburban Division Water Tapping Fees may or may not be on the agenda. John Parsons gave an overview of the Suburban Division – Watershed Monitoring Program. He noted that the Little Lehigh Watershed was picked as a targeted area by the National Next Generation Integrated Water Observing System (NGWOS) allowing for additional surface water and ground water monitoring stations to be developed by the USGS (United States Geological Survey) at its cost. There was some discussion on the Authority’s drought monitoring program.

Brian Nagle asked for an update on the Heidelberg Heights Sewer System Corrective Action Plan. Chuck Volk stated that the Plan was submitted to DEP and the Authority is already implementing the provisions of the plan as part of the annual sewer line replacement project. Liesel Gross also noted that the Lynn Township Corrective Action Plan will be submitted to DEP in August. DEP is requiring an update to the condition assessment of the sanitary sewer system which will be submitted at the

end of August and will outline what needs to be done to address ongoing wet-weather operational issues in this system.

Scott Bieber asked for clarification on the WLI High Flow Emergency Declaration and the long-term bypass or relief lines that are being put in place. John Parsons explained the bypass line in the area along Spring Creek Road would only be in place for several weeks while investigation and rehabilitation work is being completed.

### **STAFF COMMENTS**

Liesel Gross informed the Board that the Authority Staff is kicking off Budget preparation tasks. Preliminary discussions with the Board will take place at a meeting in September.

### **SOLICITOR'S COMMENTS**

None.

### **PUBLIC COMMENTS / OTHER COMMENTS**

None.

Chairman Nagle called a recess at 12:34 p.m. The meeting reconvened at 12:46 p.m.

### **EXECUTIVE SESSION**

An Executive Session was held at 12:46 p.m. to discuss matters of potential litigation.

The Executive Session ended at 1:28 p.m.

The regular meeting was convened at 1:28 p.m. for additional discussion.

The Board discussed the recent boil water advisories happening at the Pine Lakes water system in Lynn Township. John Parsons reported that the most recent incident occurred due to a level sensor in a water tank that was not working properly, which caused pump controls to not operate as planned and creating a loss of pressure in the system. The boil water advisories are put in place as a precaution when the water system loses pressure because disinfection processes can be disrupted when such incidents occur. Several other similar incidents have occurred over the past year within the Pine Lakes system and the Authority is working on a permanent fix to address problems with the pumping control system. Liesel Gross explained that during each of the prior incidents there has been no indication of a water quality problem, and all laboratory tests confirm not signs of bacteria in the tap water following these incidents.

### **ADJOURNMENT**

There being no further business, the Chairman adjourned the meeting at 1:33 p.m.

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Richard H. Bohner  
Secretary

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## MEMORANDUM

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**Date:** August 15, 2019

**To:** Authority Board  
**From:** Amy Kunkel, Chuck Volk  
**Subject:** Suburban Division – Buss Acres Pump  
Station Replacement- Construction Phase

**MOTIONS / APPROVALS REQUESTED:**

No.	Item	Amount
1	<b>Capital Project Authorization – Construction Phase</b>	<b>\$2,267,778.00</b>
2	Construction Contract - General: Blooming Glen Contractors, WW	\$1,641,848.00
3	Construction Contract – Electrical BSI	\$395,000.00
4	Professional Services – Construction Phase Engineering Buchart Horn, Inc	\$53,350.00
5	Professional Services – Construction Phase Inspection Cowan Associates, Inc	\$27,580.00

**PROJECT OVERVIEW:**

The Buss Acres Water System (also known as the Upper Milford Central Division) is a small “developer built” system that was acquired by LCA in 2006 and serves 98 residential homes and 2 commercial properties. There are two wells, each with its own well station and hydropneumatic tank. UMCD-3 is permitted at 79 GPM and is located at the end of Gary Drive and UMCD-2 is permitted at 45 GPM and is located at the end of Laurie Drive. Water from the two wells is treated with sodium hydroxide for pH adjustment and liquid sodium hypochlorite for chlorination at each station and discharged into the distribution system from each station’s buried hydropneumatic tanks. The hydropneumatic tanks at both facilities have exceeded their useful life and are not in compliance with regulatory requirements for pressure vessels. In addition, both well house facilities were evaluated as part of the 2016 Asset Evaluation Study and numerous deficiencies were identified.

Prior studies have been completed to determine feasibility of water supply options for this development including interconnection with the Borough of Macungie water system, and interconnection with LCA’s Upper Milford Division. These options were rejected as infeasible and/or cost-prohibitive.

The proposed project involves the consolidation of both stations on the largest well station parcel (Gary Drive) with a single new well/pump station and a new, larger water storage tank. The new station will be a variable frequency drive controlled double pumping system with full SCADA telemetry/control. Prior studies have indicated radon is present in the source water in this system, but no treatment is currently in place because radon not regulated by state or federal drinking water standards. Design provisions will be incorporated to facilitate the future addition of radon mitigation equipment should a regulatory limit be established in the future.

**FUNDING:**

This Project will be funded by the LCA Suburban Division

**BUDGET AMENDMENT**

Not required for this approval

**PROJECT STATUS:**

Pending Board approval of the Construction Phase.

**THIS APPROVAL-CONSTRUCTION PHASE**

**BIDDING SUMMARY**

This project consists of two contracts. The project was advertised for bid on July 12, 2019. A mandatory pre-bid meeting was held on July 23, 2019. Bids were received via PennBid on August 13, 2019, the results of which are as follows:

<b>General Construction</b>	
<b>Bidder</b>	<b>Bid Amount</b>
<b>Blooming Glen Contractors, WW</b>	<b>\$1,641,848.00</b>
<b>Electrical Construction</b>	
<b>Bidder</b>	<b>Bid Amount</b>
<b>BSI</b>	<b>\$395,000.00</b>
<b>G. R. Noto Electrical Construction, Inc.</b>	<b>\$474,000.00</b>
<b>Diefenderfer Electrical Contractors</b>	<b>\$487,000.00</b>

Blooming Glen Contractors has successfully completed numerous projects at the Kline's Island Wastewater Treatment Plant, and current projects for LCA include the Park Pump Station Upgrade and the CLD Pump Station. Although they were the only General Construction bidder, their price was in line with the engineer's estimate. BSI has extensive water and wastewater facility electrical construction experience, and is the electrical contractor for the Kohler Tract project. Our electrical engineer has worked with them on several projects, and a check of their references revealed satisfactory performance on a wide range of projects. Both firm's qualifications and experience statements indicate numerous projects of similar scope and type. The bid documents are in order and the firms appear well qualified to perform the work.

The total construction cost for the project is \$2,036,848 and the Engineer's construction cost estimate was \$2,000,000.

**PROFESSIONAL SERVICES**

Construction engineering is to be performed by Buchart Horn, Inc., the design engineer for the project. Part-time inspection services are to be performed by Cowan Associates, Inc.

**PROJECT SCHEDULE**

Based on contract award following the August 26, 2019 Board meeting, it is anticipated that the project will be completed by August 2020.

**FUTURE AUTHORIZATIONS- CONSTRUCTION PHASE**

None.

# CAPITAL PROJECT AUTHORIZATION

<b>PROJECT NO.:</b>	<u>SD-W-17-4</u>	<b>BUDGET FUND:</b>	<u>Suburban Div\Water\Capital</u>
<b>PROJECT TITLE:</b>	<u>Buss Acres Pump Station Replacement – Construction Phase</u>	<b>PROJECT TYPE:</b>	<input checked="" type="checkbox"/> Construction <input type="checkbox"/> Engineering Study <input type="checkbox"/> Equipment Purchase <input type="checkbox"/> Amendment
<b>THIS AUTHORIZATION:</b>	<u>\$2,267,778</u>		
<b>TO DATE (W/ ABOVE)</b>	<u>\$2,439,183</u>		

## DESCRIPTION AND BENEFITS:

This Project will include combining two well booster stations into a single double pumping system and new water storage with a consolidated treatment system, and upgrade of the SCADA system. This authorization takes us through construction phase.

Reference the attached Memorandum for additional information.

Previous Authorizations	
Design Phase	\$171,405

REQUESTED THIS AUTHORIZATION	
Construction Phase	
Staff	\$50,000
Professional Services	
Construction Engineering – Buchart Horn, Inc.	\$53,350
Construction Inspection – Cowan Associates, Inc.	\$27,580
Contract 1-General Construction – Blooming Glen Contractors, WW	\$1,641,848
Contract 2-Electrical Construction - BSI	\$395,000
Contingency	\$100,000
Total This Authorization	\$2,267,778

Future Authorization	
None	

Total Estimated Project	\$2,439,183
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## REVIEW AND APPROVALS:

_____	_____	_____	_____
Project Manager	Date	Chief Executive Officer	Date
_____	_____	_____	_____
Chief Capital Works Officer	Date	Chairman	Date



**Lehigh County Authority**

1053 Spruce Road \* P.O. Box 3348 \* Allentown, PA 18106-0348  
(610)398-2503 \* FAX (610)398-8413

## PROFESSIONAL SERVICES AUTHORIZATION

**Professional:** Buchart Horn  
2 Eves Drive  
Suite 110  
Marlton, NJ 08053-3127

**Date:** August 16, 2019

**Requested By:** Amy Kunkel

**Approvals**

**Department Head:**

**Chief Executive**

**Officer:**

### Suburban Division- Buss Acres Pump Station Replacement

Previous Authorizations- Design Phase: \$92,405

**This Authorization – Construction Phase: \$53,350**

Buchart Horn will provide construction engineering related services for the aforementioned project.

Professional Services
1. Attend Pre-Construction Meeting and Prepare/distribute Minutes
2. Attend Progress Meetings
3. Respond to design related RFIs
4. Log, review and process shop drawing submittals
5. Attend Substantial and Final Completion Inspections
6. Perform site visits as required

**Cost Estimate** (not to be exceeded without further authorization): **\$53,350**

**Time Table and Completion Deadline:** As required to meet design timeline requirements

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(For Authority Use Only)

**Authorization Completion:**

**Approval:** \_\_\_\_\_ **Actual Cost:** \_\_\_\_\_ **Date:** \_\_\_\_\_



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## PROFESSIONAL SERVICES AUTHORIZATION

**Professional:** Cowan Associates, Inc.  
120 Penn Am Drive  
PO Box 949  
Quakertown, PA 18951

**Date:** August 15, 2019

**Requested By:** Amy Kunkel

**Approvals**

**Department Head:**

**Chief Executive**

**Officer:**

### Suburban Division- Buss Acres Pump Station Replacement

**This Authorization- Construction Phase: \$27,580**

Cowan Associates, Inc. will provide part-time construction inspection related services for the aforementioned project

Professional Services
1. Attend Pre-Construction Meeting
2. Attend Progress Meeting
3. Provide Part-Time Inspection Services
4. Review contractor applications for payment; recommend applications for payment.
5. Attend substantial and final completion inspections; compile punch lists for contractor work completion.
6. Compile and review as-built drawings from Contractors

**Cost Estimate** (not to be exceeded without further authorization): **\$27,580**

**Time Table and Completion Deadline:** As required to meet construction timeline requirements.

**(For Authority Use Only)**

**Authorization Completion:**

**Approval:** \_\_\_\_\_ **Actual Cost:** \_\_\_\_\_ **Date:** \_\_\_\_\_

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## MEMORANDUM

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**Date:** August 16, 2019

**To:** Lehigh County Authority Board of Directors  
**From:** Edward Hoyle, Chief Engineer  
**Subject:** Suburban Division – CLD Auxiliary Pumping Station and Water Main Extension Project - Construction Phase Change Order

**MOTIONS / APPROVALS REQUESTED:**

No.	Item	Amount
1	Capital Project Authorization – Construction Phase Amendment No. 3:  Blooming Glen Contractors WW – Construction phase change order	\$46,078.20

**PROJECT OVERVIEW:**

The project consists of installation of a new water booster pumping station and 12” water main extension along Werley Road in Upper Macungie Township, with emergency generator and SCADA system, to pump water from the Central Lehigh Division’s Lower Pressure System into the Upper Pressure System.

**CHANGE ORDER SUMMARY:**

This construction phase change order requested by the general contractor (Blooming Glen Contractors WW ) is to raise the site to match grading proposed by the owner of the tract the pumping station easement is situated on. The owner is developing the remainder of the tract as a townhouse development that is currently in the design stage. The owner revised his grading plan causing grades in the area to be approximately 2 feet higher after the project was bid and thus impacting the pump station design.

**FINANCIAL:**

This project is funded by the LCA Suburban Division.

**PROJECT STATUS:**

Under construction.

**PROJECT SCHEDULE:**

No change.

**FUTURE AUTHORIZATIONS:**

None. anticipated.

# CAPITAL PROJECT AUTHORIZATION AMENDMENT NO. 3

<b>PROJECT NO.:</b>	<u>SD-W-15-2</u>	<b>BUDGET FUND:</b>	<u>Suburban Div\Water\Capital</u>
<b>PROJECT TITLE:</b>	<u>CLD Auxiliary Pumping Station and Water Main Extension Project - Construction Phase</u>	<b>PROJECT TYPE:</b>	<input checked="" type="checkbox"/> Construction <input type="checkbox"/> Engineering Study <input type="checkbox"/> Equipment Purchase <input checked="" type="checkbox"/> Amendment No. 3
<b>THIS AUTHORIZATION:</b>	<u>\$46,078.20</u>		
<b>TO DATE (W/ ABOVE)</b>	<u>\$1,954,892.20</u>		

## CAPITAL PROJECT AMENDMENT NO. 3 – CONSTRUCTION PHASE CHANGE ORDER

### DESCRIPTION AND BENEFITS:

This construction phase change order requested by the general contractor (Blooming Glen Contractors WW) is to raise the site to match grades proposed by the owner of the lot the pumping station easement is situated on.

This capital project will be funded by the Suburban Division.

Please see attached Board Memo for further project details.

### Authorization Status:

<i>Previous Authorizations</i>	
<i>Planning, Design, Construction Phases</i>	<i>\$1,908,814</i>

<b>Requested This Authorization</b>	
<b><i>Amendment No. 3 (Construction Phase)</i></b>	
<b>General Contractor:</b> Blooming Glen Contractors WW	<b>\$46,078.20</b>
<b>Total This Authorization</b>	<b>\$46,078.20</b>

Future Authorizations Anticipated	None
Total Estimated Project	\$1,954,892.20

### REVIEW AND APPROVALS:

_____ Project Manager	_____ Date	_____ Chief Executive Officer	_____ Date
_____ Chief Capital Works Officer	_____ Date	_____ Chairman	_____ Date



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### MEMORANDUM

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**Date:** August 26, 2019

**To:** Lehigh County Authority Board of Directors

**From:** Charles Volk, P.E., Chief Capital Works Officer

**Subject:** Suburban Division – Sand Spring Wastewater Treatment  
Plant Upgrade Construction Phase

#### **MOTIONS /APPROVALS REQUESTED:**

No.	Item	Amount
1	<u>Capital Project Authorization – Construction Phase</u>	\$4,389,300
2	<u>Construction Contract – General:</u> <u>Lobar, Inc.</u>	\$3,233,800
3	<u>Construction Contract- Electrical:</u> <u>Brenden Stanton, Inc. (BSI)</u>	\$524,500
4	<u>Construction Contract – HVAC/Plumbing:</u> <u>W.C. Eshenaur &amp; Son, Inc.</u>	\$104,400
5	<u>Professional Services Authorization:</u> <u>Construction Phase Engineering – Entech Engineering</u>	\$251,000

*Note: Capital Project Authorization includes all construction and engineering contracts*

#### **PROJECT BACKGROUND**

Sand Spring WWTP is located along Sand Spring Road in Schnecksville PA. The facility was constructed and put into operation in 1972 by the developer to serve the Sand Spring Development in North Whitehall Township, Lehigh County. LCA took over ownership and operations of the WWTP in 2005. There sewer service area includes approximately 248 apartment units, 8 commercial properties, and an elementary school.

The plant, while meeting effluent limits, has reached the end of its useful life. The facility is constructed of steel tanks that are in poor condition, with areas of advanced corrosion and loss of structural integrity. The mechanical equipment, including pumps, blowers, valves and piping, is generally at the end of its service life and in need of replacement. Operator safety and maintenance access are in need of improvement in order to comply with current OSHA regulations. Electrical and communication equipment require replacement in order to comply with current Electrical Code regulations and allow for remote SCADA monitoring. The proposed project includes replacement of the existing treatment facilities in entirety utilizing concrete tanks and current technology appropriate for the wastewater flows and loading characteristics at the site. The new facility will meet the current effluent discharge limits established in the DEP and DRBC permits, as well as stricter limits which could be imposed by DEP in the future.

### **PROJECT OBJECTIVE**

The purpose of this project is to extend the service life of the facility, satisfy regulatory criteria for treatment, enhance operational flexibility and safety, meet current Code requirements, enable meeting future stringent discharge limits, provide SCADA monitoring capability, and adequately serve the future wastewater disposal needs of LCA customers in the Wynnewood sewer service area.

### **FINANCIAL**

The Project will be funded by the LCA Suburban Division.

### **PROJECT STATUS**

The DEP Part 2 Water Quality Management Permit was approved on 12/20/18 and design was completed by early Summer 2019. The project was advertised for bid (via PennBid) on 7/10/19, the pre-bid meeting was held on 7/24/19, and bids were opened on 8/15/19.

**THIS APPROVAL:** Construction Phase

### **BID SUMMARY**

Eight (8) bids were received for the General Construction Contract, summarized in Table No. 1 as follows:

<b>Table 1 – Bid Results</b>	
<b>GENERAL CONSTRUCTION</b>	
<b>Contractor</b>	<b>Total Bid</b>
<i>Lobar, Inc.</i>	<b>\$3,233,800</b>
<i>Walabax Construction Services, Inc..</i>	<b>\$3,374,000</b>
<i>Blooming Glen Contractors WW.</i>	<b>\$3,475,844</b>
<i>DESCCO Construction, Inc.</i>	<b>\$4,114,742</b>
<i>Pact Two, LLC</i>	<b>\$3,272,750</b>
<i>LB Industries, Inc.</i>	<b>\$4,123,000</b>
<i>M2 Construction, LLC</i>	<b>\$4,249,850</b>
<i>Mohawk Contracting Development.</i>	<b>\$4,440,570</b>

The low bidder for the General Contract is Lobar, Inc. (Lobar) from Dillsburg PA. The company has been in operation for over 50 years, and performs primarily institutional and municipal work, primarily comprised of school and water and wastewater treatment plant construction, respectively. Our engineer has reviewed their qualifications and experience documents and checked on their references, and received positive comments regarding their work on similar projects. The firm appears well qualified to perform the work, and Capital Works recommends authorization to award the General Contract to Lobar.

Six (6) bids were received for the Electrical Construction Contract, summarized in Table No.2 as follows:

<b>Table 2 – Bid Results</b>	
<b>ELECTRICAL CONSTRUCTION</b>	
<b>Contractor</b>	<b>Total Bid</b>
<b><i>Brenden Stanton, Inc. (BSI Electrical)</i></b>	<b><i>\$524,500</i></b>
<i>Diefenderfer Electrical Contractors</i>	<i>\$649,325</i>
<i>G.R. Noto Electrical Construction, Inc.</i>	<i>\$669,000</i>
<i>A.N. Lynch Co., Inc.</i>	<i>\$687,000</i>
<i>Garden Spot Electric, Inc.</i>	<i>\$710,500</i>
<i>George J. Haden, Inc..</i>	<i>\$729,000</i>

The low bidder for the electrical contract is Brenden Stanten Inc. (BSI) from Montgomeryville PA. The electrical contracting firm has completed numerous similar wastewater projects, including a large electrical contract for the City of Reading WWTP upgrade project, along with numerous water and wastewater treatment and conveyance projects in the southeastern PA. The firm appears well qualified to perform the work, and Capital Works recommends authorization to award the EC contract to BSI.

Two (2) bids were received for the HVAC/Plumbing Contract, summarized in Table No.3 as follows:

<b>Table 3 – Bid Results</b>	
<b>HVAC/PLUMBING CONSTRUCTION</b>	
<b>Contractor</b>	<b>Total Bid</b>
<b><i>W.C. Eshenaur &amp; Son, Inc.</i></b>	<b><i>\$104,400</i></b>
<i>K.C. Mechanical Service, Inc.</i>	<i>\$127,000</i>

The low bidder for the HVAC/Plumbing contract is W.C. Eshenaur & Son, Inc. (Eshenaur) from Harrisburg PA. The firm performs HVAC and plumbing work for primarily municipal and institutional projects, including water and wastewater treatment facilities, schools, and government buildings. Our engineer has reviewed their qualifications and experience documents and checked on their references, and received positive comments regarding their work, which is generally located in central and northern PA. Capital Works recommends authorization to award the HVAC/Plumbing contract to Eshenaur.

The engineer's estimate for the total project construction cost is \$3,948,595. The total of the low bids for all three contracts is \$3,862,700.

**MATERIAL PROCUREMENT:** N/A

**PROFESSIONAL SERVICES**

Professional Services will be required for construction engineering and construction inspection services. The design engineer, Entech Engineering, is intimately familiar with the project and will provide construction engineering and construction inspection services (see attached Professional Services Authorization). Note that Entech is currently providing construction phase services for the Wynnewood WWTP Upgrade project.

**SCHEDULE**

Assuming approval at the August 26, 2019 Board meeting, the Notice to Proceed is anticipated to be issued by mid-September with construction completed by the end of 2020.

**FUTURE AUTHORIZATIONS**

None

# CAPITAL PROJECT AUTHORIZATION

<b>PROJECT NO.:</b>	SD-S-13	<b>BUDGET FUND:</b>	Suburban Div\Wastewater\Capital
<b>PROJECT TITLE:</b>	Sand Spring Wastewater Treatment Plant Upgrade – Construction Phase	<b>PROJECT TYPE:</b>	<input checked="" type="checkbox"/> Construction <input type="checkbox"/> Engineering Design <input type="checkbox"/> Equipment Purchase <input type="checkbox"/> Amendment
<b>THIS AUTHORIZATION:</b>	\$ 4,389,300		
<b>TO DATE (W/ ABOVE)</b>	\$ 4,548,424		

**DESCRIPTION AND BENEFITS:**

**Sand Spring WWTP Upgrade – Construction Contracts:**

This project consists of three construction contracts (general, electrical, and HVAC/plumbing) for the upgrade of the Sand Spring Treatment Plant. The project includes replacement of the existing treatment facility in entirety utilizing concrete tanks and current technology to treat the wastewater flows and loading characteristics at the site. The new facility will meet the current effluent limits criteria established in the DEP and DRBC permits, and also be able to meet more stringent limits which could be imposed by regulators in the future.

The objective of this project is extend the service life of the facility, enhance operational flexibility and safety, meet current Code requirements, enable meeting current and future effluent discharge permit limits, provide SCADA monitoring capability, and adequately serve the future wastewater disposal needs of LCA customers in the Sand Spring sewer service area.

Previous Authorizations	
Design Phase (Entech Engineering)	\$159,124

REQUESTED THIS AUTHORIZATION	
Construction Phase	
<b>General Construction – Lobar, Inc.</b>	<b>\$3,233,800</b>
<b>Electrical Construction - Brenden Stanton, Inc. (BSI)</b>	<b>\$524,500</b>
<b>HVAC/Plumbing Construction – W.C. Eshenaur &amp; Son, Inc.</b>	<b>\$104,000</b>
<b>Staff</b>	<b>\$80,000</b>
<b>Professional Services:</b>	
<b>Construction Engineering – Entech Engineering</b>	<b>\$251,000</b>
<b>Contingency</b>	<b>\$175,000</b>
<b>Total This Authorization</b>	<b>\$4,389,300</b>

Future Authorization	
<i>none</i>	

<b>Total Estimated Project</b>	<b>\$4,548,424</b>
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**REVIEW AND APPROVALS:**

Project Manager	Date	Chief Executive Officer	Date
Chief Capital Works Officer	Date	Chairman	Date



Lehigh County Authority

1053 Spruce Road \* P.O. Box 3348 \* Allentown, PA 18106-0348  
(610)398-2503 \* FAX (610)398-8413

## PROFESSIONAL SERVICES AUTHORIZATION

(To be signed by Professional and returned to the Authority)

**Professional:** Entech Engineering, Inc.  
201 Penn Street  
Reading, PA 19603

**Date:** August 26, 2019

**Requested By:** Charles Volk, P.E.

**Approvals**

**Department Head:**

**CEO:**

### Wynnewood Wastewater Treatment Plant Upgrade Project – Construction Engineering Services

#### Description of Services:

The design engineer, Entech Engineering, will provide the following construction phase services:

#### 1) CONSTRUCTION ENGINEERING:

- Arrange and attend an initial pre-construction conference with the Contractor; prepare meeting minutes.
- Review and process Contractor shop drawings of material and equipment proposed for installation, prescribing mill, shop, and laboratory inspection and testing, by approved laboratories designed to perform such work, together with review of such inspection and testing.
- Evaluate and determine the acceptability of substitute materials and equipment proposed by the Contractor. Recommendation to LCA will be provided on significant deviations from Contract Documents requested by Contractors.
- Issue necessary clarifications and interpretations of the contract documents, as required.
- Schedule and conduct periodic field meetings with LCA, Contractors, and LCA's Construction Representative (CR) during the construction phase of the project (estimated 10 meetings). Prepare meeting minutes for each meeting.
- Coordinate the project and work closely with LCA, Operating Staff, Contractor, and CR.
- Attend start-up operations and monitor training.
- Communicate / coordinate with regulatory agencies as necessary during construction.
- Prepare, review, and comment on Change Orders, if required, for approval by LCA.
- Review Contractor's construction schedules and identify schedule issues.
- Check and approve monthly and final estimates for Contractor payment.
- Facilitate the cooperation between the Contractor and other public entities, as required.
- Prepare a list of items to be completed or corrected, as submitted by the Contractor, with his request for a certificate of substantial completion. Review the work, and if in agreement, issue the certificate of substantial completion.
- Sign off as the Engineer on the PADEP Certificate of Construction/Modification Completion Form.
- Administer contract closeout.
- Prepare the complete set of project record drawings after the final completion of the project. The record drawings will be prepared from information supplied by the Contractor, as per the requirements of the contract documents. Two sets of record drawings and computer file will be submitted to LCA.

2) **CONSTRUCTION INSPECTION:**

- Confirm materials and equipment compliance with all approved shop drawings and specifications
- Coordinate with design engineer as necessary to resolve conflicts and field issues
- Observe and monitor work and materials to be incorporated into the project for conformance with the plans and specifications; conduct part-time on-site construction observation services (assume 684 man-hours)
- Complete inspection report for each on-site visit and distribute report to design engineer and LCA
- Maintain continuing records of quantities constructed for use in preparing monthly payment estimates; review all items for payment and execute and distribute payment applications
- Identify cost overruns and communicate to design engineer and LCA; work with design engineer regarding change orders
- Conduct regular progress meetings
- Attend Substantial Completion inspection and review punchlist
- Attend Final Completion inspection
- Attend start-up operations and monitor training to insure compliance with specifications
- Review as-built drawings for accuracy and completeness
- 

**Cost Estimate** *(not to be exceeded without further authorization):*

The tasks outlined in the above-mentioned Proposal will be performed under this PSA for the total not-to-exceed fee of **\$251,000**.

**Timetable and Completion Deadline:**

The work shall begin immediately and conclude by the end of 2020.

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I am or represent the Professional indicated above, and as such I am authorized to:

- Accept the terms of the professional authorization set forth above; and
- Agree to indemnify, hold harmless and defend the Authority, its employees, agents, officials, successors and assigns (hereinafter all jointly referred to as "Authority"), from any and all loss and liability for claims, demands, suits or causes of action at law or in equity for damages and injuries (including death of every kind and nature) to persons (including employees of the Professional) and property arising out of error, omission or negligent act of Professional, or any person under contract to it, in rendering professional services under this authorization. The indemnification shall include, but not be limited to, payment of reasonable attorney fees and reasonable incidental litigation expenses of the Authority. Professional shall not, however, be liable for any portion of a judgment nor associated litigation expenses, including attorney's fees, ultimately determined to be the result of the negligence of the Authority.

\_\_\_\_\_  
Name (Signature)

\_\_\_\_\_  
Name (printed):

Title: \_\_\_\_\_

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**(For Authority Use Only)**

**Authorization Completion:**

**Approval:** \_\_\_\_\_ **Actual Cost:** \_\_\_\_\_ **Date:** \_\_\_\_\_

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## MEMORANDUM

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**Date:** August 22, 2019

**To:** LCA Board of Directors  
Liesel Gross, C.E.O.

**From:** Phil DePoe, LCA Capital Program Manager

**Subject:** Allentown Division: Kline's Island Wastewater Treatment Plant Max  
Monthly Flow Capacity Evaluation

**MOTIONS / APPROVALS REQUESTED:**

No.	Item	Amount
1	Professional Services Authorization – Kleinfelder	\$50,000

**PROJECT OVERVIEW**

Upon discussion and review with the City of Allentown and the Pa. Department of Environmental Protection (DEP), it was noted that the Kline's Island Wastewater Treatment Plant (KIWWTP) in Allentown has been performing at a high level and meeting its permitted effluent quality limits during a period of prolonged wet weather since early 2018. Also in 2018, Kleinfelder (KLF) completed a master plan study to evaluate each unit process at the KIWWTP and develop a long-range master plan and capital improvements plan for Lehigh County Authority's planning purposes. This study will provide the basis for confirming the plant's maximum monthly average that can be sustained during prolonged periods of wet weather while remaining in full compliance with effluent quality requirements of the plant's permit. DEP, LCA and the City agree this is an important update to prior similar engineering work that was completed in 2009 and will be useful in evaluating the plant's capability to accept current and future flows during similar future periods of excessive rainfall.

**FINANCIAL**

This project will be funded directly by the City of Allentown due to its alignment with work currently being completed for compliance with the prior EPA Administrative Order (AO) related to wet-weather operation of the system.

*Note: The terms of the concession lease agreement between LCA and the City specify that the City will directly fund projects associated with the AO, and LCA will collect fees from City customers to pay any associated debt service for these projects. The City determines the projects to be completed and directs LCA to complete the projects in the manner desired by the City.*

**PROJECT STATUS**

This is a one-time engineering study that will supplement prior master planning work completed in 2018.

### **THIS APPROVAL - PLANNING PHASE**

Lehigh County Authority (LCA) intends to retain the services of an engineering consulting firm to provide the services for Tasks 1-6. The following table summarizes the professional services to be performed under this approval:

<b>Professional Services</b>
1. Update KIWWTP Influent Wastewater Characteristics
2. Update KIWWTP Performance Assessment
3. Update Unit Process by Unit Process Capacity Assessment
4. Prepare and Discuss Draft Report
5. Prepare Final Report
6. Address DEP Comments

- Task 1: Kleinfelder (KLF) will updated the detailed influent wastewater characterization performed as part of the KIWWTP Master Plan
- Task 2: The performance summary through the KIWWTP's major unit processes that was performed as part of the KIWWTP Master Plan will be updated
- Task 3: The unit process by unit process capacity analysis performed as part of the Master Plan will be updated based on the updated influent wastewater characterization from Task 1 and the updated performance assessment from Task 2
- Task 4: A draft report will be prepared presenting the information generated by the assessments performed in Tasks 1, 2, and 3
- Task 5: Following LCA and the City's review of the draft report, KLF will prepare the final report, which LCA or the City will submit to DEP
- Task 6: KLF will address any questions or comments from DEP

### **CONSULTANT SELECTION PROCESS**

The City has instructed LCA to utilize Kleinfelder for this study. Over the course of several years, Kleinfelder has been retained by the City to develop prior engineering studies to comply with EPA's Administrative Order. LCA recently retained Kleinfelder to complete the Master Plan for the Kline's Island Wastewater Treatment Plant, which was presented to the LCA Board in early 2019. In addition, LCA also recently retained Kleinfelder to design the City's five-year Inflow & Infiltration Source Reduction Program, which was presented to the LCA Board in May 2019.

LCA finds the selection of this firm to be acceptable as their work has been satisfactory, on time and cost-effective.

### **PROJECT SCHEDULE**

Draft report will be submitted to LCA and the City for review within five (5) weeks following authorization to proceed.

### **FUTURE AUTHORIZATIONS**

None anticipated.



**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:** KLEINFELDER  
150 College Road West, Suite 100  
Princeton, NJ 08540

**Date:** August 26, 2019

**Requested By:** Phil DePoe

**Approvals**

**Department Head:** \_\_\_\_\_

**Chief Executive**

**Officer:** \_\_\_\_\_

**Allentown Division: Kline's Island Wastewater Treatment Plant (KIWWTP) Max Monthly Average Flow Capacity Evaluation – Planning Phase**

KLEINFELDER will determine the KIWWTP's maximum monthly average flow capacity during prolonged periods of wet weather while remaining in full compliance with the KIWWTP's NPDES Permit effluent limitations.

Professional Services <sup>(1)</sup>
1. Update KIWWTP Influent Wastewater Characteristics
2. Update KIWWTP Performance Assessment
3. Update Unit Process by Unit Process Capacity Assessment
4. Prepare and Discuss Draft Report
5. Prepare Final Report
6. Address PADEP Comments

(1) For Planning Phase Only.

**Planning Phase:**

**Cost Estimate (not to be exceeded without further authorization):** \$50,000

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

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(For Authority Use Only)

**Authorization Completion:**

**Approval:** \_\_\_\_\_ **Actual Cost:** \_\_\_\_\_ **Date:** \_\_\_\_\_



August 22, 2019

VIA EMAIL

Philip M. DePoe  
Lehigh County Authority  
P.O. Box 3348  
1053 Spruce Street  
Allentown, PA 18106

**RE: KLINE'S ISLAND WASTEWATER TREATMENT PLANT (KIWTP)  
PROPOSAL FOR EVALUATION OF MAXIMUM MONTHLY AVERAGE FLOW CAPACITY**

Dear Mr. DePoe:

Kleinfelder, Inc. (KLF) is pleased to present this proposal to determine the KIWWTP's maximum monthly average flow capacity during prolonged periods of wet weather while remaining in full compliance with the KIWWTP's NPDES Permit effluent limitations. The proposed scope of services, schedule, and cost proposal follow.

**SCOPE OF SERVICES**

**Task 1 – Update KIWWTP Influent Wastewater Characteristics**

KLF will update the detailed influent wastewater characterization performed as part of the KIWWTP Master Plan. The influent wastewater characterization presented in the Master Plan was based on data for the years 2015, 2016 and 2017. The wastewater characterization update will extend the period of data analysis through the second quarter of 2019, which will encompass a period of sustained wet weather. This analysis will include the impact of plant recycle flows and loads.

**Task 2 – Update KIWWTP performance Assessment**

The performance summary through the KIWWTP's major unit processes that was performed as part of the KIWWTP Master Plan will be updated. The performance summary will be extended from December 2017 through the second quarter of 2019 to capture the KIWWTP's performance during a sustained wet period. Consistent with the performance assessment prepared as part of the Master Plan, the updated performance assessment will include a performance assessment at annual average flows, maximum monthly average flows and maximum daily flows.

**Task 3 – Update Unit Process by Unit Process Capacity Analysis**

The unit process by unit process capacity analysis performed as part of the Master Plan will be updated based on the updated influent wastewater characterization from Task 1 and the updated performance assessment from Task 2.

#### **Task 4 – Prepare and Discuss Draft Report**

A draft report will be prepared presenting the information generated by the assessments performed in Tasks 1,2 and 3, and the resulting determination of the KIWWTP's maximum monthly average flow capacity during a sustained wet period. The draft report will be submitted to LCA and the City of Allentown for review.

KLF will discuss any questions or comments LCA or the City may have either in a meeting or by conference call.

#### **Task 5 – Prepare Final Report**

Following LCA and the City's review of the draft report, KLF will prepare the final report, which LCA or the City will submit to PADEP

#### **Task 6 – Address PADEP Comments**

In this task, Kleinfelder will address any questions or comments that PADEP may have.

### **SCHEDULE**

KLF will submit the draft report to LCA and the City of review within five (5) weeks following authorization to proceed

### **COST PROPOSAL**

KLF's estimated cost to execute the Scope of Services described above is presented in the table below.

<b>TASK</b>	<b>DESCRIPTION</b>	<b>COST</b>
1	Update KIWWTP Influent Wastewater Characteristics	\$6,240
2	Update KIWWTP Performance Assessment	\$5,180
3	Update Unit Process by Unit Process Capacity Assessment	\$12,160
4	Prepare and Discuss Draft Report	\$14,740
5	Prepare Final Report	\$6,680
6	Address PADEP Comments	\$5,000
	<b>TOTAL</b>	<b>\$50,000</b>

The total fee of \$50,000 will not be exceeded without a change in scope and LCA's and the City's prior approval.

We appreciate the opportunity to assist LCA and the City with this important matter.

If you have any questions or need additional information, please contact me at (609) 454-4555 or via email at TBradley@Kleinfelder.com.

Sincerely,

A handwritten signature in blue ink, appearing to be 'T. Bradley', with a stylized flourish at the end.

Timothy D. Bradley, P.E.  
Vice President

**LEHIGH COUNTY AUTHORITY  
FINANCIAL STATEMENTS  
JULY 2019**

LEHIGH COUNTY AUTHORITY  
FINANCIAL STATEMENTS - SUMMARY  
JULY 2019

MONTH						YEAR-TO-DATE					FULL YEAR				
Actual	Forecast	Prior Year	FC Var	PY Var		Actual	Forecast	Prior Year	FC Var	PY Var	Forecast	Budget	Prior Year	Bud Var	PY Var
					<b>JULY 2019</b>										
					<b>Income Statement</b>										
134,424	122,229	222,160	12,195	(87,736)	Suburban Water	549,862	537,667	252,239	12,195	297,623	281,095	236,452	1,813,064	44,643	(1,531,969)
(289,080)	(282,525)	(484,187)	(6,555)	195,107	Suburban Wastewater	(251,975)	(245,420)	(406,638)	(6,555)	154,663	(1,153,260)	(969,731)	(743,133)	(183,529)	(410,127)
(30,462)	(35,201)	(239,654)	4,739	209,192	City Division	(1,314,488)	(1,319,227)	(2,414,778)	4,739	1,100,290	(4,020,934)	(4,036,377)	(6,134,152)	15,443	2,113,218
(185,118)	(195,497)	(501,681)	10,379	316,563	Total LCA	(1,016,601)	(1,026,980)	(2,569,178)	10,379	1,552,577	(4,893,099)	(4,769,656)	(5,064,221)	(123,443)	171,122
					<b>Cash Flow Statement</b>										
546,849	122,647	680,107	424,202	(133,258)	Suburban Water	2,504,696	2,080,494	2,826,320	424,202	(321,624)	(321,930)	(2,378,358)	(287,896)	2,056,428	(34,034)
(1,114,144)	(1,834,842)	244,530	720,698	(1,358,674)	Suburban Wastewater	(4,050,207)	(4,770,905)	2,237,083	720,698	(6,287,290)	(2,406,212)	(3,026,596)	2,533,964	620,384	(4,940,176)
2,403,434	2,333,799	1,078,462	69,635	1,324,972	City Division	2,360,316	2,290,681	1,151,232	69,635	1,209,084	2,052,318	2,127,423	8,179,138	(75,105)	(6,126,820)
1,836,139	621,604	2,003,099	1,214,535	(166,960)	Total LCA	814,805	(399,730)	6,214,635	1,214,535	(5,399,830)	(675,824)	(3,277,531)	10,425,206	2,601,707	(11,101,030)
					<b>Debt Service Coverage Ratio</b>										
1.85	1.76	1.03	0.08	0.82	Suburban Water	1.62	1.36	1.38	0.26	0.25	1.41	1.40	1.39	0.01	0.02
2.05	2.07	(1.21)	(0.03)	3.25	Suburban Wastewater	6.55	6.54	6.54	0.01	0.01	5.27	5.52	5.75	(0.25)	(0.48)
1.51	1.50	1.63	0.00	(0.12)	City Division	1.40	1.40	1.47	-	(0.07)	1.39	1.37	1.65	0.03	(0.26)

LEHIGH COUNTY AUTHORITY  
MONTHLY FINANCIAL STATEMENTS - CONSOLIDATED  
JULY 2019

MONTH					YEAR-TO-DATE				FULL YEAR FORECAST			
Suburban Water	Suburban Wastewater	City Division	LCA TOTAL		Suburban Water	Suburban Wastewater	City Division	LCA TOTAL	Suburban Water	Suburban Wastewater	City Division	LCA TOTAL
				JULY 2019 INCOME STATEMENT								
				<b>Operating Revenues</b>								
945,607	782,334	3,341,378	5,069,319	Charges For Services	5,579,838	8,324,434	21,387,523	35,291,795	9,785,911	14,425,933	37,090,226	61,302,070
10,188	-	-	10,188	Rent	73,401	-	-	73,401	111,213	-	-	111,213
20,021	-	36,575	56,596	Other Income	52,642	-	274,834	327,476	100,621	-	531,111	631,732
975,816	782,334	3,377,953	5,136,103	Total Operating Revenues	5,705,881	8,324,434	21,662,357	35,692,672	9,997,745	14,425,933	37,621,337	62,045,015
				<b>Operating Expenses</b>								
80,882	42,911	438,861	562,654	Salaries and Wages	593,607	310,696	3,180,091	4,084,394	1,022,669	556,785	5,606,749	7,186,203
139,333	63,401	687,010	889,744	General and Administrative	833,837	388,063	4,197,479	5,419,379	1,418,704	627,662	6,840,123	8,886,489
32,654	37,727	211,141	281,522	Utilities	269,337	260,120	1,330,017	1,859,474	601,683	422,393	2,168,481	3,192,557
66,979	39,794	103,687	210,460	Materials and Supplies	195,350	189,250	680,097	1,064,697	492,663	350,914	1,429,483	2,273,060
219,206	501,845	128,147	849,198	Miscellaneous Services	1,382,104	3,650,303	939,771	5,972,178	2,866,526	6,405,866	2,031,779	11,304,171
-	40,447	4,628	45,075	Treatment & Transportation	-	1,975,892	4,628	1,980,520	-	3,545,445	12,000	3,557,445
229,166	383,527	490,000	1,102,693	Depreciation and Amortization	1,604,162	2,684,689	3,430,000	7,718,851	2,749,994	4,602,324	5,880,000	13,232,318
768,220	1,109,652	2,063,474	3,941,346	Total Operating Expenses	4,878,397	9,459,013	13,762,083	28,099,493	9,152,239	16,511,389	23,968,615	49,632,243
207,596	(327,318)	1,314,479	1,194,757	<b>Operating Income</b>	827,484	(1,134,579)	7,900,274	7,593,179	845,506	(2,085,456)	13,652,722	12,412,772
				<b>Non-Operating Revenues (Expenses)</b>								
12,100	30,211	-	42,311	Tapping and Capital Recovery fees	351,375	790,052	440,794	1,582,221	471,990	824,841	315,294	1,612,125
5,239	-	-	5,239	Meter Sales	56,069	-	8,159	64,228	107,907	-	13,159	121,066
19,585	-	1,000	20,585	Inspection and Plan Reviews	75,117	-	20,183	95,300	160,772	-	179,846	340,618
-	1,020	19,231	20,251	Project Reimbursements	-	21,302	19,231	40,533	-	20,282	20,000	40,282
16,894	23,135	106,252	146,281	Interest Income	103,831	169,221	670,864	943,916	158,937	266,086	1,164,612	1,589,635
4,633	5,342	5,805	15,780	Other Income	34,781	46,282	29,545	110,608	35,445	46,940	34,742	117,127
(131,623)	(18,260)	(1,419,385)	(1,569,268)	Interest Expense	(895,404)	(124,003)	(10,188,236)	(11,207,643)	(1,496,071)	(208,913)	(18,943,851)	(20,648,835)
-	(3,210)	(57,844)	(61,054)	Other Expense	(3,391)	(20,250)	(215,302)	(238,943)	(3,391)	(17,040)	(457,458)	(477,889)
(73,172)	38,238	(1,344,941)	(1,379,875)	Total Non-Operating Revenues (Expenses)	(277,622)	882,604	(9,214,762)	(8,609,780)	(564,411)	932,196	(17,673,656)	(17,305,871)
134,424	(289,080)	(30,462)	(185,118)	<b>Net Income Before Capital Contributions</b>	549,862	(251,975)	(1,314,488)	(1,016,601)	281,095	(1,153,260)	(4,020,934)	(4,893,099)
-	-	-	-	<b>Capital Contributions</b>	-	-	-	-	-	-	-	-
134,424	(289,080)	(30,462)	(185,118)	<b>NET INCOME</b>	549,862	(251,975)	(1,314,488)	(1,016,601)	281,095	(1,153,260)	(4,020,934)	(4,893,099)

LEHIGH COUNTY AUTHORITY  
MONTHLY FINANCIAL STATEMENTS - CONSOLIDATED  
JULY 2019

MONTH				YEAR-TO-DATE				FULL YEAR FORECAST				
Suburban Water	Suburban Wastewater	City Division	LCA TOTAL	JULY 2019 CASH FLOW STATEMENT	Suburban Water	Suburban Wastewater	City Division	LCA TOTAL	Suburban Water	Suburban Wastewater	City Division	LCA TOTAL
				Cash Flows From Operating Activities								
975,816	782,334	3,377,953	5,136,103	Operating Revenues	5,705,881	8,324,434	21,662,357	35,692,672	9,997,745	14,425,933	37,621,337	62,045,015
(539,054)	(726,125)	(1,573,474)	(2,838,653)	Operating Expenses (ex D&A)	(3,274,235)	(6,774,324)	(10,332,083)	(20,380,642)	(6,402,245)	(11,909,065)	(18,088,615)	(36,399,925)
35,237	(483,552)	900,655	452,340	Non-Cash Working Capital Changes	(799,757)	(909,688)	(548,512)	(2,257,957)	10,946	(391,136)	-	(380,190)
471,999	(427,343)	2,705,134	2,749,790	Net Cash Provided by (Used in) Operating Activ	1,631,889	640,422	10,781,762	13,054,073	3,606,446	2,125,732	19,532,722	25,264,900
				Cash Flows From Financing Activities								
-	-	-	-	Lease Payments to City	-	-	-	-	-	-	-	-
-	-	-	-	Capital Contributions	-	-	-	-	-	-	-	-
-	-	-	-	Proceeds New Borrowing	-	-	-	-	-	-	-	-
(6,245)	(15,265)	-	(21,510)	Interest Payments	(748,261)	(103,853)	(6,775,522)	(7,627,636)	(1,496,071)	(208,913)	(14,961,810)	(16,666,794)
(30,242)	(40,873)	-	(71,115)	Principal Payments	(210,544)	(286,307)	-	(496,851)	(1,724,544)	(484,500)	-	(2,209,044)
(36,487)	(56,138)	-	(92,625)	Net Cash Provided by (Used in) Financing Activ	(958,805)	(390,160)	(6,775,522)	(8,124,487)	(3,220,615)	(693,413)	(14,961,810)	(18,875,838)
				Cash Flows from Capital and Related Activities								
41,557	35,553	6,805	83,915	Non-Operating Revenues	517,342	836,334	498,681	1,852,357	776,114	871,781	543,041	2,190,936
-	1,020	19,231	20,251	Project Reimbursement	-	21,302	19,231	40,533	-	20,282	20,000	40,282
-	92	-	92	Non-Operating Expenses	-	-	(258,931)	(258,931)	-	(92)	(521,362)	(521,454)
(365,990)	(683,928)	(433,988)	(1,483,906)	Capital Expenditures	(1,692,292)	(3,293,299)	(2,575,769)	(7,561,360)	(8,249,662)	(11,452,292)	(3,724,885)	(23,426,839)
(324,433)	(647,263)	(407,952)	(1,379,648)	Net Cash Provided By (Used In) Capital and Re	(1,174,950)	(2,435,663)	(2,316,788)	(5,927,401)	(7,473,548)	(10,560,321)	(3,683,206)	(21,717,075)
				Cash Flows From Investing Activities								
665,377	519,196	-	1,184,573	Investments Converting To Cash	4,507,017	3,376,626	-	7,883,643	7,049,635	12,365,626	-	19,415,261
(246,501)	(525,731)	-	(772,232)	Purchased Invesments	(1,604,286)	(5,410,653)	-	(7,014,939)	(442,785)	(5,909,922)	-	(6,352,707)
16,894	23,135	106,252	146,281	Interest Income	103,831	169,221	670,864	943,916	158,937	266,086	1,164,612	1,589,635
435,770	16,600	106,252	558,622	Net Cash Provided By (Used In) Investing Activ	3,006,562	(1,864,806)	670,864	1,812,620	6,765,787	6,721,790	1,164,612	14,652,189
546,849	(1,114,144)	2,403,434	1,836,139	FUND NET CASH FLOWS	2,504,696	(4,050,207)	2,360,316	814,805	(321,930)	(2,406,212)	2,052,318	(675,824)
				DEBT SERVICE RATIO								
495,213	114,897	1,876,476	2,486,586	Total Cash Available For Debt Service	3,052,819	2,555,665	12,227,162	17,835,646	4,530,551	3,654,735	20,840,195	29,025,481
268,385	56,138	1,246,381	1,570,904	Debt Service	1,878,695	390,160	8,724,667	10,993,522	3,220,620	693,413	14,956,576	18,870,609
1.85	2.05	1.51	1.58	DSCR	1.62	6.55	1.40	1.62	1.41	5.27	1.39	1.54

LEHIGH COUNTY AUTHORITY  
MONTHLY FINANCIAL STATEMENTS - CONSOLIDATED COMPARATIVE  
JULY 2019

MONTH					YEAR-TO-DATE					FULL YEAR FORECAST					
Actual	Forecast	Prior Yr	FC Var	PY Var	JULY 2019 INCOME STATEMENT	Actual	Forecast	Prior Yr	FC Var	PY Var	Forecast	Budget	Prior Yr	FC Var	PY Var
5,069,319	5,058,874	4,643,303	10,445	426,016	Operating Revenues										
10,188	8,000	10,844	2,188	(656)	Charges For Services	35,291,795	35,281,350	32,987,639	10,445	2,304,156	61,302,070	60,471,236	59,614,467	830,834	1,687,603
56,596	57,309	42,564	(713)	14,032	Rent	73,401	71,213	53,226	2,188	20,175	111,213	87,860	98,405	23,353	12,808
5,136,103	5,124,183	4,696,711	11,920	439,392	Other Income	327,476	328,189	415,899	(713)	(88,423)	631,732	696,864	466,744	(65,132)	164,988
					Total Operating Revenues	35,692,672	35,680,752	33,456,764	11,920	2,235,908	62,045,015	61,255,960	60,179,616	789,055	1,865,399
					Operating Expenses										
562,654	566,910	541,625	4,256	(21,029)	Salaries and Wages	4,084,394	4,088,650	3,986,021	4,256	(98,373)	7,186,203	7,094,831	6,917,656	(91,372)	(268,547)
889,744	857,310	763,967	(32,434)	(125,777)	General and Administrative	5,419,379	5,386,945	4,798,897	(32,434)	(620,482)	8,886,489	8,281,923	8,565,904	(604,566)	(320,585)
281,522	250,605	69,379	(30,917)	(212,143)	Utilities	1,859,474	1,828,557	1,585,272	(30,917)	(274,202)	3,192,557	3,026,040	2,697,837	(166,517)	(494,720)
210,460	192,505	141,044	(17,955)	(69,416)	Materials and Supplies	1,064,697	1,046,742	830,609	(17,955)	(234,088)	2,273,060	2,561,120	1,787,455	288,060	(485,605)
849,198	920,578	972,728	71,380	123,530	Miscellaneous Services	5,972,178	6,043,558	5,704,539	71,380	(267,639)	11,304,171	11,352,878	10,680,843	48,707	(623,328)
45,075	50,000	171,106	4,925	126,031	Treatment & Transportation	1,980,520	1,985,445	1,536,216	4,925	(444,304)	3,557,445	2,661,555	3,553,830	(895,890)	(3,615)
1,102,693	1,102,694	1,110,364	1	7,671	Depreciation and Amortization	7,718,851	7,718,852	7,772,548	1	53,697	13,232,318	13,170,765	13,122,963	(61,553)	(109,355)
3,941,346	3,940,602	3,770,213	(744)	(171,133)	Total Operating Expenses	28,099,493	28,098,749	26,214,103	(744)	(1,885,390)	49,632,243	48,149,112	47,326,489	(1,483,131)	(2,305,754)
1,194,757	1,183,581	926,498	11,176	268,259	Operating Income	7,593,179	7,582,003	7,242,661	11,176	350,518	12,412,772	13,106,848	12,853,128	(694,076)	(440,356)
					Non-Operating Revenues (Expenses)										
42,311	49,500	74,607	(7,189)	(32,296)	Tapping and Capital Recovery fees	1,582,221	1,589,410	841,096	(7,189)	741,125	1,612,125	1,591,000	1,308,953	21,125	303,172
5,239	5,000	11,506	239	(6,267)	Meter Sales	64,228	63,989	50,097	239	14,131	121,066	120,000	93,656	1,066	27,410
20,585	21,000	65,026	(415)	(44,441)	Inspection and Plan Reviews	95,300	95,715	131,944	(415)	(36,644)	340,618	376,000	761,209	(35,382)	(420,591)
20,251	20,000	-	251	20,251	Project Reimbursements	40,533	40,282	(0)	251	40,533	40,282	1,645,000	372,527	(1,604,718)	(332,245)
146,281	132,000	137,025	14,281	9,256	Interest Income	943,916	929,635	676,827	14,281	267,090	1,589,635	619,000	1,520,789	970,635	68,846
15,780	2,833	7,697	12,947	8,083	Other Income	110,608	97,661	42,677	12,947	67,931	117,127	47,000	682,374	70,127	(565,247)
(1,569,268)	(1,559,411)	(1,536,098)	(9,857)	(33,170)	Interest Expense	(11,207,643)	(11,197,786)	(10,750,600)	(9,857)	(457,043)	(20,648,835)	(20,629,504)	(20,584,072)	(19,331)	(64,763)
(61,054)	(50,000)	(187,941)	(11,054)	126,887	Other Expense	(238,943)	(227,889)	(803,880)	(11,054)	564,937	(477,889)	(1,645,000)	(3,901,477)	1,167,111	3,423,588
(1,379,875)	(1,379,078)	(1,428,178)	(797)	48,303	Total Non-Operating Revenues (Expenses)	(8,609,780)	(8,608,983)	(9,811,839)	(797)	1,202,059	(17,305,871)	(17,876,504)	(19,746,041)	570,633	2,440,170
(185,118)	(195,497)	(501,681)	10,379	316,563	Net Income Before Capital Contributions	(1,016,601)	(1,026,980)	(2,569,178)	10,379	1,552,577	(4,893,099)	(4,769,656)	(6,892,913)	(123,443)	1,999,814
-	-	-	-	-	Capital Contributions	-	-	-	-	-	-	-	1,828,692	-	(1,828,692)
(185,118)	(195,497)	(501,681)	10,379	316,563	NET INCOME	(1,016,601)	(1,026,980)	(2,569,178)	10,379	1,552,577	(4,893,099)	(4,769,656)	(5,064,221)	(123,443)	171,122

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MONTH					JULY 2019					YEAR-TO-DATE					FULL YEAR FORECAST				
Actual	Forecast	Prior Yr	FC Var	PY Var	CASH FLOW STATEMENT					Actual	Forecast	Prior Yr	FC Var	PY Var	Forecast	Budget	Prior Yr	FC Var	PY Var
					<b>Cash Flows From Operating Activities</b>														
5,136,103	5,124,183	4,696,711	11,920	439,392	Operating Revenues					35,692,672	35,680,752	33,456,764	11,920	2,235,908	62,045,015	61,255,960	60,179,616	789,055	1,865,399
(2,838,653)	(2,837,908)	(2,659,849)	(745)	(178,804)	Operating Expenses (ex D&A)					(20,380,642)	(20,379,897)	(18,441,555)	(745)	(1,939,087)	(36,399,925)	(34,978,347)	(34,203,526)	(1,421,578)	(2,196,399)
452,340	490,940	(2,257,545)	(38,600)	2,709,885	Non-Cash Working Capital Changes					(2,257,957)	(2,219,357)	(3,602,631)	(38,600)	1,344,674	(380,190)	-	520,935	(380,190)	(901,125)
2,749,790	2,777,215	(220,683)	(27,425)	2,970,473	Net Cash Provided by (Used in) Operating Activities					13,054,073	13,081,498	11,412,578	(27,425)	1,641,495	25,264,900	26,277,613	26,497,026	(1,012,713)	(1,232,126)
					<b>Cash Flows From Financing Activities</b>														
-	-	-	-	-	Capital Contributions					-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	Proceeds New Borrowing					-	-	-	-	-	-	-	18,735,000	-	(18,735,000)
(21,510)	(22,411)	(21,167)	901	(343)	Interest Payments					(7,627,636)	(7,628,537)	(7,385,067)	901	(242,569)	(16,666,794)	(16,629,504)	(15,026,432)	(37,290)	(1,640,362)
(71,115)	(70,604)	(70,035)	(511)	(1,080)	Principal Payments					(496,851)	(496,340)	(487,639)	(511)	(9,212)	(2,209,044)	(2,203,250)	(20,913,047)	(5,794)	18,704,003
(92,625)	(93,015)	(91,202)	390	(1,423)	Net Cash Provided by (Used in) Financing Activities					(8,124,487)	(8,124,877)	(7,872,705)	390	(251,782)	(18,875,838)	(18,832,754)	(17,204,479)	(43,084)	(1,671,359)
					<b>Cash Flows from Capital and Related Activities</b>														
83,915	78,333	158,836	5,582	(74,921)	Non-Operating Revenues					1,852,357	1,846,775	1,065,814	5,582	786,543	2,190,936	2,134,000	2,846,192	56,936	(655,256)
20,251	20,000	-	251	20,251	Project Reimbursement					40,533	40,282	(0)	251	40,533	40,282	1,645,000	372,527	(1,604,718)	(332,245)
92	-	(6,654)	92	6,746	Non-Operating Expenses					(258,931)	(259,023)	(262,434)	92	3,503	(521,454)	(516,200)	(883,046)	(5,254)	361,592
(1,483,906)	(2,710,500)	(1,043,273)	1,226,594	(440,633)	Capital Expenditures					(7,561,360)	(8,787,954)	(4,876,505)	1,226,594	(2,684,855)	(23,426,839)	(24,675,040)	(15,890,144)	1,248,201	(7,536,695)
(1,379,648)	(2,612,167)	(891,091)	1,232,519	(488,557)	Net Cash Provided By (Used In) Capital and Related Activities					(5,927,401)	(7,159,920)	(4,073,125)	1,232,519	(1,854,276)	(21,717,075)	(21,412,240)	(13,554,471)	(304,835)	(8,162,604)
					<b>Cash Flows From Investing Activities</b>														
1,184,573	1,182,571	3,069,051	2,002	(1,884,478)	Investments Converting To Cash					7,883,643	7,881,641	6,071,061	2,002	1,812,582	19,415,261	10,070,850	20,946,833	9,344,411	(1,531,572)
(772,232)	(765,000)	-	(7,232)	(772,232)	Purchased Investments					(7,014,939)	(7,007,707)	-	(7,232)	(7,014,939)	(6,352,707)	-	(7,780,492)	(6,352,707)	1,427,785
146,281	132,000	137,025	14,281	9,256	Interest Income					943,916	929,635	676,827	14,281	267,090	1,589,635	619,000	1,520,789	970,635	68,846
558,622	549,571	3,206,076	9,051	(2,647,454)	Net Cash Provided By (Used In) Investing Activities					1,812,620	1,803,569	6,747,888	9,051	(4,935,268)	14,652,189	10,689,850	14,687,130	3,962,339	(34,941)
1,836,139	621,604	2,003,099	1,214,535	(166,960)	<b>FUND NET CASH FLOWS</b>					814,805	(399,730)	6,214,635	1,214,535	(5,399,830)	(675,824)	(3,277,531)	10,425,206	2,601,707	(11,101,030)
					<b>DEBT SERVICE RATIO</b>														
2,486,586	2,464,310	1,976,828	22,276	509,758	Total Cash Available For Debt Service					17,835,646	17,339,399	15,900,317	496,247	1,935,329	29,025,481	28,651,699	29,885,633	373,782	(860,152)
1,570,904	1,571,806	1,408,806	(902)	162,098	Debt Service					10,993,522	10,994,424	9,594,131	(902)	1,399,391	18,870,609	18,832,754	16,930,918	37,855	1,939,691
1.58	1.57	1.40	0.02	0.18	DSCR					1.62	1.58	1.66	0.05	(0.03)	1.54	1.52	1.77	0.02	(0.23)

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FINANCIAL STATEMENTS - SUBURBAN WATER  
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MONTH					JULY 2019	YEAR-TO-DATE					FULL YEAR				
Actual	Forecast	Prior Yr	FC Var	PY Var	INCOME STATEMENT	Actual	Forecast	Prior Yr	FC Var	PY Var	Forecast	Budget	Prior Yr	Bud Var	PY Var
					<b>Operating Revenues</b>										
945,607	933,786	888,329	11,821	57,278	Charges For Services	5,579,838	5,568,017	5,281,203	11,821	298,635	9,785,911	9,772,570	9,140,848	13,341	645,063
10,188	8,000	10,844	2,188	(656)	Rent	73,401	71,213	53,226	2,188	20,175	111,213	87,860	98,405	23,353	12,808
20,021	10,000	7,931	10,021	12,090	Other Income	52,642	42,621	76,844	10,021	(24,202)	100,621	129,158	109,632	(28,537)	(9,011)
975,816	951,786	907,104	24,030	68,712	Total Operating Revenues	5,705,881	5,681,851	5,411,273	24,030	294,608	9,997,745	9,989,588	9,348,885	8,157	648,860
					<b>Operating Expenses</b>										
80,882	79,490	76,236	(1,392)	(4,646)	Salaries and Wages	593,607	592,215	629,350	(1,392)	35,743	1,022,669	1,020,940	1,037,882	(1,729)	15,213
139,333	120,700	114,152	(18,633)	(25,181)	General and Administrative	833,837	815,204	742,248	(18,633)	(91,589)	1,418,704	1,399,959	1,261,241	(18,745)	(157,463)
32,654	51,000	6,134	18,346	(26,520)	Utilities	269,337	287,683	268,875	18,346	(462)	601,683	592,750	437,253	(8,933)	(164,430)
66,979	42,048	9,708	(24,931)	(57,271)	Materials and Supplies	195,350	170,419	123,971	(24,931)	(71,379)	492,663	504,580	294,937	11,917	(197,726)
219,206	237,437	214,432	18,231	(4,774)	Miscellaneous Services	1,382,104	1,400,335	1,267,893	18,231	(114,211)	2,866,526	2,905,325	2,703,594	38,799	(162,932)
-	-	-	-	-	Treatment & Transportation	-	-	-	-	-	-	-	-	-	-
229,166	229,167	245,832	1	16,666	Depreciation and Amortization	1,604,162	1,604,163	1,720,824	1	116,662	2,749,994	2,750,000	2,768,133	6	18,139
768,220	759,842	666,493	(8,378)	(101,727)	Total Operating Expenses	4,878,397	4,870,019	4,753,161	(8,378)	(125,236)	9,152,239	9,173,554	8,503,041	21,315	(649,198)
207,596	191,944	240,611	15,652	(33,015)	<b>Operating Income</b>	827,484	811,832	658,112	15,652	169,372	845,506	816,034	845,845	29,472	(339)
					<b>Non-Operating Revenues (Expenses)</b>										
12,100	19,500	18,755	(7,400)	(6,655)	Tapping and Capital Recovery fees	351,375	358,775	127,705	(7,400)	223,670	471,990	467,000	221,405	4,990	250,585
5,239	5,000	11,234	239	(5,995)	Meter Sales	56,069	55,830	44,693	239	11,376	107,907	108,000	85,259	(93)	22,648
19,585	16,000	48,285	3,585	(28,700)	Inspection and Plan Reviews	75,117	71,532	94,198	3,585	(19,081)	160,772	144,000	183,148	16,772	(22,376)
-	-	-	-	-	Project Reimbursements	-	-	(0)	-	0	-	-	(0)	-	0
16,894	12,000	21,504	4,894	(4,610)	Interest Income	103,831	98,937	135,254	4,894	(31,423)	158,937	144,000	255,438	14,937	(96,501)
4,633	-	3,525	4,633	1,108	Other Income	34,781	30,148	15,590	4,633	19,191	35,445	24,000	86,971	11,445	(51,526)
(131,623)	(122,215)	(117,057)	(9,408)	(14,566)	Interest Expense	(895,404)	(885,996)	(816,809)	(9,408)	(78,595)	(1,496,071)	(1,466,582)	(1,576,659)	(29,489)	80,588
-	-	(4,696)	-	4,696	Other Expense	(3,391)	(3,391)	(6,504)	-	3,113	(3,391)	-	(82,141)	(3,391)	78,750
(73,172)	(69,715)	(18,450)	(3,457)	(54,722)	Total Non-Operating Revenues (Expenses)	(277,622)	(274,165)	(405,873)	(3,457)	128,251	(564,411)	(579,582)	(826,579)	15,171	262,168
134,424	122,229	222,160	12,195	(87,736)	<b>Net Income Before Capital Contributions</b>	549,862	537,667	252,239	12,195	297,623	281,095	236,452	19,266	44,643	261,829
-	-	-	-	-	<b>Capital Contributions</b>	-	-	-	-	-	-	-	1,793,798	-	(1,793,798)
134,424	122,229	222,160	12,195	(87,736)	<b>NET INCOME</b>	549,862	537,667	252,239	12,195	297,623	281,095	236,452	1,813,064	44,643	(1,531,969)

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MONTH					JULY 2019	YEAR-TO-DATE					FULL YEAR				
Actual	Forecast	Prior Yr	FC Var	PY Var	CASH FLOW STATEMENT	Actual	Forecast	Prior Yr	FC Var	PY Var	Forecast	Budget	Prior Yr	Bud Var	PY Var
<b>Cash Flows From Operating Activities</b>															
975,816	951,786	907,104	24,030	68,712	Operating Revenues	5,705,881	5,681,851	5,411,273	24,030	294,608	9,997,745	9,989,588	9,348,885	8,157	648,860
(539,054)	(530,675)	(420,661)	(8,379)	(118,393)	Operating Expenses (ex D&A)	(3,274,235)	(3,265,856)	(3,032,337)	(8,379)	(241,898)	(6,402,245)	(6,423,554)	(5,734,908)	21,309	(667,337)
35,237	65,940	(2,210,431)	(30,703)	2,245,668	Non-Cash Working Capital Changes	(799,757)	(769,054)	(1,629,305)	(30,703)	829,548	10,946	-	(5,441,123)	10,946	5,452,069
471,999	487,051	(1,723,988)	(15,052)	2,195,987	Net Cash Provided by (Used in) Operating Activities	1,631,889	1,646,941	749,631	(15,052)	882,258	3,606,446	3,566,034	(1,827,145)	40,412	5,433,591
<b>Cash Flows From Financing Activities</b>															
-	-	-	-	-	Capital Contributions	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	Proceeds New Borrowing	-	-	-	-	-	-	-	-	-	-
(6,245)	(5,215)	(6,889)	(1,030)	644	Interest Payments	(748,261)	(747,231)	(760,493)	(1,030)	12,232	(1,496,071)	(1,466,582)	(1,508,149)	(29,489)	12,078
(30,242)	(30,760)	(29,597)	518	(645)	Principal Payments	(210,544)	(211,062)	(206,070)	518	(4,474)	(1,724,544)	(1,725,120)	(1,693,208)	576	(31,336)
(36,487)	(35,975)	(36,487)	(512)	(1)	Net Cash Provided by (Used in) Financing Activities	(958,805)	(958,293)	(966,563)	(512)	7,758	(3,220,615)	(3,191,702)	(3,201,357)	(28,913)	(19,258)
<b>Cash Flows from Capital and Related Activities</b>															
41,557	40,500	81,799	1,057	(40,242)	Non-Operating Revenues	517,342	516,285	282,186	1,057	235,156	776,114	743,000	576,783	33,114	199,331
-	-	-	-	-	Project Reimbursement	-	-	(0)	-	0	-	-	(0)	-	0
-	-	(4,119)	-	4,119	Non-Operating Expenses	-	-	(4,119)	-	4,119	-	-	(82,142)	-	82,142
(365,990)	(803,500)	(235,119)	437,510	(130,871)	Capital Expenditures	(1,692,292)	(2,129,802)	(1,968,595)	437,510	276,303	(8,249,662)	(10,210,540)	(5,348,970)	1,960,878	(2,900,692)
(324,433)	(763,000)	(157,439)	438,567	(166,994)	Net Cash Provided By (Used In) Capital and Related Activities	(1,174,950)	(1,613,517)	(1,690,528)	438,567	515,578	(7,473,548)	(9,467,540)	(4,854,329)	1,993,992	(2,619,219)
<b>Cash Flows From Investing Activities</b>															
665,377	662,571	2,576,516	2,806	(1,911,139)	Investments Converting To Cash	4,507,017	4,504,211	4,598,526	2,806	(91,509)	7,049,635	6,570,850	11,501,487	478,785	(4,451,852)
(246,501)	(240,000)	-	(6,501)	(246,501)	Purchased Investments	(1,604,286)	(1,597,785)	-	(6,501)	(1,604,286)	(442,785)	-	(2,161,990)	(442,785)	1,719,205
16,894	12,000	21,504	4,894	(4,610)	Interest Income	103,831	98,937	135,254	4,894	(31,423)	158,937	144,000	255,438	14,937	(96,501)
435,770	434,571	2,598,020	1,199	(2,162,250)	Net Cash Provided By (Used In) Investing Activities	3,006,562	3,005,363	4,733,780	1,199	(1,727,218)	6,765,787	6,714,850	9,594,935	50,937	(2,829,148)
546,849	122,647	680,107	424,202	(133,258)	<b>FUND NET CASH FLOWS</b>	2,504,696	2,080,494	2,826,320	424,202	(321,624)	(321,930)	(2,378,358)	(287,896)	2,056,428	(34,034)
<b>DEBT SERVICE RATIO</b>															
495,213	473,611	274,721	21,602	220,492	Total Cash Available For Debt Service	3,052,819	2,557,606	2,206,630	495,213	846,189	4,530,551	4,453,034	4,446,199	77,517	84,352
268,385	268,385	266,780	-	1,605	Debt Service	1,878,695	1,878,695	1,600,680	-	278,015	3,220,620	3,191,702	3,201,357	28,918	19,263
1.85	1.76	1.03	0.08	0.82	<b>DSCR</b>	1.62	1.36	1.38	0.26	0.25	1.41	1.40	1.39	0.01	0.02

LEHIGH COUNTY AUTHORITY  
FINANCIAL STATEMENTS - SUBURBAN WATER  
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FORECAST VARIANCES - MONTH

INCOME STATEMENT	Actual	Forecast	Variance	Comments
<b>Operating Revenues</b>				
Charges For Services	945,607	933,786	11,821	
Rent	10,188	8,000	2,188	
Other Income	20,021	10,000	10,021	
Total Operating Revenues	975,816	951,786	24,030	Higher user charges and higher miscellaneous revenues
<b>Operating Expenses</b>				
Salaries and Wages	80,882	79,490	(1,392)	
General and Administrative	139,333	120,700	(18,633)	
Utilities	32,654	51,000	18,346	
Materials and Supplies	66,979	42,048	(24,931)	
Miscellaneous Services	219,206	237,437	18,231	
Treatment & Transportation	-	-	-	
Depreciation and Amortization	229,166	229,167	1	
Total Operating Expenses	768,220	759,842	(8,378)	Higher G&A and materials/Supplies expenses mostly offset by lower utilities and lower spending on services
<b>Operating Income</b>	207,596	191,944	15,652	Higher operating revenues with a partial offset from slightly higher operating expenses
<b>Non-Operating Revenues (Expenses)</b>				
Tapping and Capital Recovery fees	12,100	19,500	(7,400)	
Meter Sales	5,239	5,000	239	
Inspection and Plan Reviews	19,585	16,000	3,585	
Project Reimbursements	-	-	-	
Interest Income	16,894	12,000	4,894	
Other Income	4,633	-	4,633	
Interest Expense	(131,623)	(122,215)	(9,408)	
Other Expense	-	-	-	
Total Non-Operating Revenues (Expenses)	(73,172)	(69,715)	(3,457)	Lower tapping fees and higher interest expense mostly offset by higher interest and other incomes
<b>Net Income Before Capital Contributions</b>	134,424	122,229	12,195	Higher operating income partially reduced by lower non-operating revenues
<b>Capital Contributions</b>	-	-	-	No contributions forecasted for the month
<b>NET INCOME</b>	<b>134,424</b>	<b>122,229</b>	<b>12,195</b>	

FORECAST VARIANCES - MONTH

CASH FLOW STATEMENT	Actual	Forecast	Variance	Comments
<b>Cash Flows From Operating Activities</b>				
Operating Revenues	975,816	951,786	24,030	
Operating Expenses (ex D&A)	(539,054)	(530,675)	(8,379)	
Non-Cash Working Capital Changes	35,237	65,940	(30,703)	
Net Cash Provided by (Used in) Operating Activities	471,999	487,051	(15,052)	Higher income from operations offset by unfavorable working capital movements
<b>Cash Flows From Financing Activities</b>				
Capital Contributions	-	-	-	
Proceeds New Borrowing	-	-	-	
Interest Payments	(6,245)	(5,215)	(1,030)	
Principal Payments	(30,242)	(30,760)	518	
Net Cash Provided by (Used in) Financing Activities	(36,487)	(35,975)	(512)	
<b>Cash Flows from Capital and Related Activities</b>				
Non-Operating Revenues	41,557	40,500	1,057	
Project Reimbursement	-	-	-	
Non-Operating Expenses	-	-	-	
Capital Expenditures	(365,990)	(803,500)	437,510	Favorable timing effect on capex
Net Cash Provided By (Used In) Capital and Related Activities	(324,433)	(763,000)	438,567	Lower capex
<b>Cash Flows From Investing Activities</b>				
Investments Converting To Cash	665,377	662,571	2,806	No major variances with respect to net investments
Purchased Investments	(246,501)	(240,000)	(6,501)	
Interest Income	16,894	12,000	4,894	
Net Cash Provided By (Used In) Investing Activities	435,770	434,571	1,199	
<b>FUND NET CASH FLOWS</b>	<b>546,849</b>	<b>122,647</b>	<b>424,202</b>	Lower capex

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MONTH					JULY 2019 INCOME STATEMENT	YEAR-TO-DATE					FULL YEAR				
Actual	Forecast	Prior Yr	FC Var	PY Var		Actual	Forecast	Prior Yr	FC Var	PY Var	Forecast	Budget	Prior Yr	Bud Var	PY Var
<b>Operating Revenues</b>															
782,334	790,838	743,979	(8,504)	38,355	Charges For Services	8,324,434	8,332,938	7,871,909	(8,504)	452,525	14,425,933	13,676,460	14,023,121	749,473	402,812
-	-	-	-	-	Rent	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	Other Income	-	-	-	-	-	-	-	-	-	-
782,334	790,838	743,979	(8,504)	38,355	Total Operating Revenues	8,324,434	8,332,938	7,871,909	(8,504)	452,525	14,425,933	13,676,460	14,023,121	749,473	402,812
<b>Operating Expenses</b>															
42,911	44,000	39,587	1,089	(3,324)	Salaries and Wages	310,696	311,785	237,931	1,089	(72,765)	556,785	420,095	462,145	(136,690)	(94,640)
63,401	50,000	43,054	(13,401)	(20,347)	General and Administrative	388,063	374,662	243,775	(13,401)	(144,288)	627,662	474,363	511,800	(153,299)	(115,862)
37,727	25,000	5,279	(12,727)	(32,448)	Utilities	260,120	247,393	160,656	(12,727)	(99,464)	422,393	338,035	290,201	(84,358)	(132,192)
39,794	31,730	40,391	(8,064)	597	Materials and Supplies	189,250	181,186	110,546	(8,064)	(78,704)	350,914	459,324	295,370	108,410	(55,544)
501,845	522,910	601,616	21,065	99,771	Miscellaneous Services	3,650,303	3,671,368	3,684,894	21,065	34,591	6,405,866	6,458,708	6,175,835	52,842	(230,031)
40,447	50,000	166,482	9,553	126,035	Treatment & Transportation	1,975,892	1,985,445	1,531,592	9,553	(444,300)	3,545,445	2,649,555	3,544,003	(895,890)	(1,442)
383,527	383,527	397,865	-	14,338	Depreciation and Amortization	2,684,689	2,684,689	2,785,055	-	100,366	4,602,324	4,540,765	4,490,397	(61,559)	(111,927)
1,109,652	1,107,167	1,294,275	(2,485)	184,623	Total Operating Expenses	9,459,013	9,456,528	8,754,448	(2,485)	(704,565)	16,511,389	15,340,845	15,769,751	(1,170,544)	(741,638)
(327,318)	(316,329)	(550,296)	(10,989)	222,978	Operating Income	(1,134,579)	(1,123,590)	(882,539)	(10,989)	(252,040)	(2,085,456)	(1,664,385)	(1,746,630)	(421,071)	(338,826)
<b>Non-Operating Revenues (Expenses)</b>															
30,211	30,000	45,278	211	(15,067)	Tapping and Capital Recovery fees	790,052	789,841	459,066	211	330,986	824,841	800,000	523,626	24,841	301,215
-	-	-	-	-	Meter Sales	-	-	-	-	-	-	-	-	-	-
-	-	15,541	-	(15,541)	Inspection and Plan Reviews	-	-	15,852	-	(15,852)	-	25,000	38,363	(25,000)	(38,363)
1,020	-	-	1,020	1,020	Project Reimbursements	21,302	20,282	-	1,020	21,302	20,282	-	-	20,282	20,282
23,135	20,000	25,501	3,135	(2,366)	Interest Income	169,221	166,086	122,160	3,135	47,061	266,086	75,000	217,721	191,086	48,365
5,342	1,000	75	4,342	5,267	Other Income	46,282	41,940	1,010	4,342	45,272	46,940	1,000	394,585	45,940	(347,645)
(18,260)	(17,196)	(16,307)	(1,064)	(1,953)	Interest Expense	(124,003)	(122,939)	(114,653)	(1,064)	(9,350)	(208,913)	(206,346)	(197,000)	(2,567)	(11,913)
(3,210)	-	(3,979)	(3,210)	769	Other Expense	(20,250)	(17,040)	(7,534)	(3,210)	(12,716)	(17,040)	-	(8,692)	(17,040)	(8,348)
38,238	33,804	66,109	4,434	(27,871)	Total Non-Operating Revenues (Expenses)	882,604	878,170	475,901	4,434	406,703	932,196	694,654	968,603	237,542	(36,407)
(289,080)	(282,525)	(484,187)	(6,555)	195,107	Net Income Before Capital Contributions	(251,975)	(245,420)	(406,638)	(6,555)	154,663	(1,153,260)	(969,731)	(778,027)	(183,529)	(375,233)
-	-	-	-	-	Capital Contributions	-	-	-	-	-	-	-	34,894	-	(34,894)
(289,080)	(282,525)	(484,187)	(6,555)	195,107	NET INCOME	(251,975)	(245,420)	(406,638)	(6,555)	154,663	(1,153,260)	(969,731)	(743,133)	(183,529)	(410,127)

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MONTH					JULY 2019					YEAR-TO-DATE					FULL YEAR				
Actual	Forecast	Prior Yr	FC Var	PY Var	CASH FLOW STATEMENT					Actual	Forecast	Prior Yr	FC Var	PY Var	Forecast	Budget	Prior Yr	Bud Var	PY Var
					<b>Cash Flows From Operating Activities</b>														
782,334	790,838	743,979	(8,504)	38,355	Operating Revenues					8,324,434	8,332,938	7,871,909	(8,504)	452,525	14,425,933	13,676,460	14,023,121	749,473	402,812
(726,125)	(723,640)	(896,410)	(2,485)	170,285	Operating Expenses (ex D&A)					(6,774,324)	(6,771,839)	(5,969,393)	(2,485)	(804,931)	(11,909,065)	(10,800,080)	(11,279,354)	(1,108,985)	(629,711)
(483,552)	(475,000)	158,459	(8,552)	(642,011)	Non-Cash Working Capital Changes					(909,688)	(901,136)	(538,676)	(8,552)	(371,012)	(391,136)	-	2,166,774	(391,136)	(2,557,910)
(427,343)	(407,802)	6,028	(19,541)	(433,371)	Net Cash Provided by (Used in) Operating Activities					640,422	659,963	1,363,840	(19,541)	(723,418)	2,125,732	2,876,380	4,910,541	(750,648)	(2,784,809)
					<b>Cash Flows From Financing Activities</b>														
-	-	-	-	-	Capital Contributions					-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	Proceeds New Borrowing					-	-	-	-	-	-	-	-	-	-
(15,265)	(17,196)	(14,277)	1,931	(988)	Interest Payments					(103,853)	(105,784)	(100,713)	1,931	(3,140)	(208,913)	(206,346)	(197,000)	(2,567)	(11,913)
(40,873)	(39,844)	(40,438)	(1,029)	(435)	Principal Payments					(286,307)	(285,278)	(281,569)	(1,029)	(4,738)	(484,500)	(478,130)	(484,839)	(6,370)	339
(56,138)	(57,040)	(54,716)	902	(1,422)	Net Cash Provided by (Used in) Financing Activities					(390,160)	(391,062)	(382,281)	902	(7,879)	(693,413)	(684,476)	(681,839)	(8,937)	(11,574)
					<b>Cash Flows from Capital and Related Activities</b>														
35,553	31,000	60,894	4,553	(25,341)	Non-Operating Revenues					836,334	831,781	475,928	4,553	360,406	871,781	826,000	956,574	45,781	(84,793)
1,020	-	-	1,020	1,020	Project Reimbursement					21,302	20,282	-	1,020	21,302	20,282	-	-	20,282	20,282
92	-	(2,535)	92	2,627	Non-Operating Expenses					-	(92)	(2,535)	92	2,535	(92)	-	(8,692)	(92)	8,600
(683,928)	(1,416,000)	(283,177)	732,072	(400,751)	Capital Expenditures					(3,293,299)	(4,025,371)	(812,564)	732,072	(2,480,735)	(11,452,292)	(9,619,500)	(2,687,185)	(1,832,792)	(8,765,107)
(647,263)	(1,385,000)	(224,818)	737,737	(422,445)	Net Cash Provided By (Used In) Capital and Related Activities					(2,435,663)	(3,173,400)	(339,171)	737,737	(2,096,492)	(10,560,321)	(8,793,500)	(1,739,303)	(1,766,821)	(8,821,018)
					<b>Cash Flows From Investing Activities</b>														
519,196	520,000	492,535	(804)	26,661	Investments Converting To Cash					3,376,626	3,377,430	1,472,535	(804)	1,904,091	12,365,626	3,500,000	5,445,346	8,865,626	6,920,280
(525,731)	(525,000)	-	(731)	(525,731)	Purchased Investments					(5,410,653)	(5,409,922)	-	(731)	(5,410,653)	(5,909,922)	-	(5,618,502)	(5,909,922)	(291,420)
23,135	20,000	25,501	3,135	(2,366)	Interest Income					169,221	166,086	122,160	3,135	47,061	266,086	75,000	217,721	191,086	48,365
16,600	15,000	518,036	1,600	(501,436)	Net Cash Provided By (Used In) Investing Activities					(1,864,806)	(1,866,406)	1,594,695	1,600	(3,459,501)	6,721,790	3,575,000	44,565	3,146,790	6,677,225
<u>(1,114,144)</u>	<u>(1,834,842)</u>	<u>244,530</u>	<u>720,698</u>	<u>(1,358,674)</u>	<b>FUND NET CASH FLOWS</b>					<u>(4,050,207)</u>	<u>(4,770,905)</u>	<u>2,237,083</u>	<u>720,698</u>	<u>(6,287,290)</u>	<u>(2,406,212)</u>	<u>(3,026,596)</u>	<u>2,533,964</u>	<u>620,384</u>	<u>(4,940,176)</u>
					<b>DEBT SERVICE RATIO</b>														
114,897	118,198	(66,036)	(3,301)	180,933	Total Cash Available For Debt Service					2,555,665	2,558,966	2,500,604	(3,301)	55,061	3,654,735	3,777,380	3,918,062	(122,645)	(263,327)
56,138	57,040	54,716	(902)	1,422	Debt Service					390,160	391,062	382,281	(902)	7,879	693,413	684,476	681,839	8,937	11,574
<u>2.05</u>	<u>2.07</u>	<u>(1.21)</u>	<u>(0.03)</u>	<u>3.25</u>	<b>DSCR</b>					<u>6.55</u>	<u>6.54</u>	<u>6.54</u>	<u>0.01</u>	<u>0.01</u>	<u>5.27</u>	<u>5.52</u>	<u>5.75</u>	<u>(0.25)</u>	<u>(0.48)</u>

LEHIGH COUNTY AUTHORITY  
FINANCIAL STATEMENTS - SUBURBAN WASTEWATER  
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FORECAST VARIANCES - MONTH				
INCOME STATEMENT	Actual	Forecast	Variance	Comments
<b>Operating Revenues</b>				
Charges For Services	782,334	790,838	(8,504)	Lower signatory charges mostly offset by higher industrial charges
Rent	-	-	-	
Other Income	-	-	-	
Total Operating Revenues	782,334	790,838	(8,504)	Slightly lower user charges
<b>Operating Expenses</b>				
Salaries and Wages	42,911	44,000	1,089	
General and Administrative	63,401	50,000	(13,401)	Higher Internal Service Charges
Utilities	37,727	25,000	(12,727)	
Materials and Supplies	39,794	31,730	(8,064)	Higher equipment purchases
Miscellaneous Services	501,845	522,910	21,065	Lower maintenance services
Treatment & Transportation	40,447	50,000	9,553	
Depreciation and Amortization	383,527	383,527	-	
Total Operating Expenses	1,109,652	1,107,167	(2,485)	Unfavorable spending on G&A, utilities, and equipment, almost offset by favorable spendin for salaries & wages, maintenance services, and treatment & transportation
<b>Operating Income</b>	(327,318)	(316,329)	(10,989)	Lower operating revenues and slightly higher operating expenses
<b>Non-Operating Revenues (Expenses)</b>				
Tapping and Capital Recovery fees	30,211	30,000	211	
Meter Sales	-	-	-	
Inspection and Plan Reviews	-	-	-	
Project Reimbursements	1,020	-	1,020	
Interest Income	23,135	20,000	3,135	
Other Income	5,342	1,000	4,342	
Interest Expense	(18,260)	(17,196)	(1,064)	
Other Expense	(3,210)	-	(3,210)	
Total Non-Operating Revenues (Expenses)	38,238	33,804	4,434	Higher interest income
<b>Net Income Before Capital Contributions</b>	(289,080)	(282,525)	(6,555)	
<b>Capital Contributions</b>	-	-	-	
<b>NET INCOME</b>	(289,080)	(282,525)	(6,555)	Lower operating income offset by higher interest income

  

FORECAST VARIANCES - MONTH				
CASH FLOW STATEMENT	Actual	Forecast	Variance	Comments
<b>Cash Flows From Operating Activities</b>				
Operating Revenues	782,334	790,838	(8,504)	
Operating Expenses (ex D&A)	(726,125)	(723,640)	(2,485)	
Non-Cash Working Capital Changes	(483,552)	(475,000)	(8,552)	
Net Cash Provided by (Used in) Operating Activities	(427,343)	(407,802)	(19,541)	Lower cash from operating income and unfavorable working capital movements
<b>Cash Flows From Financing Activities</b>				
Capital Contributions	-	-	-	
Proceeds New Borrowing	-	-	-	
Interest Payments	(15,265)	(17,196)	1,931	
Principal Payments	(40,873)	(39,844)	(1,029)	
Net Cash Provided by (Used in) Financing Activities	(56,138)	(57,040)	902	
<b>Cash Flows from Capital and Related Activities</b>				
Non-Operating Revenues	35,553	31,000	4,553	
Project Reimbursement	1,020	-	1,020	
Non-Operating Expenses	92	-	92	
Capital Expenditures	(683,928)	(1,416,000)	732,072	Favorable timing on capex
Net Cash Provided By (Used In) Capital and Related Activities	(647,263)	(1,385,000)	737,737	
<b>Cash Flows From Investing Activities</b>				
Investments Converting To Cash	519,196	520,000	(804)	
Purchased Invesments	(525,731)	(525,000)	(731)	
Interest Income	23,135	20,000	3,135	
Net Cash Provided By (Used In) Investing Activities	16,600	15,000	1,600	
<b>FUND NET CASH FLOWS</b>	(1,114,144)	(1,834,842)	720,698	Lower capex

LEHIGH COUNTY AUTHORITY  
FINANCIAL STATEMENTS - CITY DIVISION  
JULY 2019

MONTH					JULY 2019					YEAR-TO-DATE					FULL YEAR				
Actual	Forecast	Prior Yr	FC Var	PY Var	INCOME STATEMENT					Actual	Forecast	Prior Yr	FC Var	PY Var	Forecast	Budget	Prior Yr	Bud Var	PY Var
					<b>Operating Revenues</b>														
3,341,378	3,334,250	3,010,995	7,128	330,383	Charges For Services					21,387,523	21,380,395	19,834,527	7,128	1,552,996	37,090,226	37,022,206	36,450,498	68,020	639,728
-	-	-	-	-	Rent					-	-	-	-	-	-	-	-	-	-
36,575	47,309	34,633	(10,734)	1,942	Other Income					274,834	285,568	339,055	(10,734)	(64,221)	531,111	567,706	357,112	(36,595)	173,999
3,377,953	3,381,559	3,045,628	(3,606)	332,325	Total Operating Revenues					21,662,357	21,665,963	20,173,582	(3,606)	1,488,775	37,621,337	37,589,912	36,807,610	31,425	813,727
					<b>Operating Expenses</b>														
438,861	443,420	425,802	4,559	(13,059)	Salaries and Wages					3,180,091	3,184,650	3,118,740	4,559	(61,351)	5,606,749	5,653,796	5,417,629	47,047	(189,120)
687,010	686,610	606,761	(400)	(80,249)	General and Administrative					4,197,479	4,197,079	3,812,875	(400)	(384,604)	6,840,123	6,407,601	6,792,863	(432,522)	(47,260)
211,141	174,605	57,966	(36,536)	(153,175)	Utilities					1,330,017	1,293,481	1,155,741	(36,536)	(174,276)	2,168,481	2,095,255	1,970,383	(73,226)	(198,098)
103,687	118,727	90,945	15,040	(12,742)	Materials and Supplies					680,097	695,137	596,092	15,040	(84,005)	1,429,483	1,597,216	1,197,148	167,733	(232,335)
128,147	160,231	156,680	32,084	28,533	Miscellaneous Services					939,771	971,855	751,753	32,084	(188,018)	2,031,779	1,988,845	1,801,414	(42,934)	(230,365)
4,628	-	4,624	(4,628)	(4)	Treatment & Transportation					4,628	-	4,624	(4,628)	(4)	12,000	12,000	9,827	-	(2,173)
490,000	490,000	466,667	-	(23,333)	Depreciation and Amortization					3,430,000	3,430,000	3,266,669	-	(163,331)	5,880,000	5,880,000	5,864,433	-	(15,567)
2,063,474	2,073,593	1,809,445	10,119	(254,029)	Total Operating Expenses					13,762,083	13,772,202	12,706,493	10,119	(1,055,590)	23,968,615	23,634,713	23,053,697	(333,902)	(914,918)
1,314,479	1,307,966	1,236,183	6,513	78,296	<b>Operating Income</b>					7,900,274	7,893,761	7,467,088	6,513	433,186	13,652,722	13,955,199	13,753,913	(302,477)	(101,191)
					<b>Non-Operating Revenues (Expenses)</b>														
-	-	-	-	-	Tapping and Capital Recovery fees					440,794	440,794	254,325	-	186,469	315,294	324,000	563,922	(8,706)	(248,628)
-	-	10,574	-	(10,574)	Meter Sales					8,159	8,159	5,404	-	2,755	13,159	12,000	8,397	1,159	4,762
-	-	272	-	(272)	Inspection and Plan Reviews					20,183	24,183	21,895	(4,000)	(1,712)	179,846	207,000	539,698	(27,154)	(359,852)
1,000	5,000	1,200	(4,000)	(200)	Project Reimbursements					19,231	20,000	-	(769)	19,231	20,000	1,645,000	372,527	(1,625,000)	(352,527)
19,231	20,000	-	(769)	19,231	Interest Income					670,864	664,612	419,412	6,252	251,452	1,164,612	400,000	1,047,630	764,612	116,982
106,252	100,000	90,019	6,252	16,233	Other Income					29,545	25,573	26,077	3,972	3,468	34,742	22,000	200,818	12,742	(166,076)
5,805	1,833	4,097	3,972	1,708	Interest Expense					(10,188,236)	(10,188,851)	(9,819,138)	615	(369,098)	(18,943,851)	(18,956,576)	(18,810,413)	12,725	(133,438)
(1,419,385)	(1,420,000)	(1,402,734)	615	(16,651)	Other Expense					(215,302)	(207,458)	(789,842)	(7,844)	574,540	(457,458)	(1,645,000)	(3,810,644)	1,187,542	3,353,186
(57,844)	(50,000)	(179,266)	(7,844)	121,422	Total Non-Operating Revenues (Expenses)					(9,214,762)	(9,212,988)	(9,881,867)	(1,774)	667,105	(17,673,656)	(17,991,576)	(19,888,065)	317,920	2,214,409
(1,344,941)	(1,343,167)	(1,475,837)	(1,774)	130,896															
(30,462)	(35,201)	(239,654)	4,739	209,192	<b>Net Income Before Capital Contributions</b>					(1,314,488)	(1,319,227)	(2,414,778)	4,739	1,100,290	(4,020,934)	(4,036,377)	(6,134,152)	15,443	2,113,218
					<b>Capital Contributions</b>														
-	-	-	-	-						-	-	-	-	-	-	-	-	-	-
(30,462)	(35,201)	(239,654)	4,739	209,192	<b>NET INCOME</b>					(1,314,488)	(1,319,227)	(2,414,778)	4,739	1,100,290	(4,020,934)	(4,036,377)	(6,134,152)	15,443	2,113,218

LEHIGH COUNTY AUTHORITY  
FINANCIAL STATEMENTS - CITY DIVISION  
JULY 2019

MONTH					JULY 2019					YEAR-TO-DATE					FULL YEAR				
Actual	Forecast	Prior Yr	FC Var	PY Var	CASH FLOW STATEMENT					Actual	Forecast	Prior Yr	FC Var	PY Var	Forecast	Budget	Prior Yr	Bud Var	PY Var
					<b>Cash Flows From Operating Activities</b>														
3,377,953	3,381,559	3,045,628	(3,606)	332,325	Operating Revenues	21,662,357	21,665,963	20,173,582	(3,606)	1,488,775	37,621,337	37,589,912	36,807,610	31,425	813,727				
(1,573,474)	(1,583,593)	(1,342,778)	10,119	(230,696)	Operating Expenses (ex D&A)	(10,332,083)	(10,342,202)	(9,439,824)	10,119	(892,259)	(18,088,615)	(17,754,713)	(17,189,264)	(333,902)	(899,351)				
900,655	900,000	(205,573)	655	1,106,228	Non-Cash Working Capital Changes	(548,512)	(549,167)	(1,434,650)	655	886,138	-	-	3,795,284	-	(3,795,284)				
2,705,134	2,697,966	1,497,277	7,168	1,207,857	Net Cash Provided by (Used in) Operating Activities	10,781,762	10,774,594	9,299,107	7,168	1,482,655	19,532,722	19,835,199	23,413,630	(302,477)	(3,880,908)				
					<b>Cash Flows From Financing Activities</b>														
-	-	-	-	-	Capital Contributions	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	Proceeds New Borrowing	-	-	-	-	-	-	-	18,735,000	-	(18,735,000)				
-	-	-	-	-	Interest Payments	(6,775,522)	(6,775,522)	(6,523,861)	-	(251,661)	(14,961,810)	(14,956,576)	(13,321,283)	(5,234)	(1,640,527)				
-	-	-	-	-	Principal Payments	-	-	-	-	-	-	-	(18,735,000)	-	18,735,000				
-	-	-	-	-	Net Cash Provided by (Used in) Financing Activities	(6,775,522)	(6,775,522)	(6,523,861)	-	(251,661)	(14,961,810)	(14,956,576)	(13,321,283)	(5,234)	(1,640,527)				
					<b>Cash Flows from Capital and Related Activities</b>														
6,805	6,833	16,143	(28)	(9,338)	Non-Operating Revenues	498,681	498,709	307,701	(28)	190,980	543,041	565,000	1,312,835	(21,959)	(769,794)				
19,231	20,000	-	(769)	19,231	Project Reimbursement	19,231	20,000	-	(769)	19,231	20,000	1,645,000	372,527	(1,625,000)	(352,527)				
-	-	-	-	-	Non-Operating Expenses	(258,931)	(258,931)	(255,780)	-	(3,151)	(521,362)	(516,200)	(792,212)	(5,162)	270,850				
(433,988)	(491,000)	(524,978)	57,012	90,990	Capital Expenditures	(2,575,769)	(2,632,781)	(2,095,347)	57,012	(480,422)	(3,724,885)	(4,845,000)	(7,853,989)	1,120,115	4,129,104				
(407,952)	(464,167)	(508,834)	56,215	100,882	Net Cash Provided By (Used In) Capital and Related Activities	(2,316,788)	(2,373,003)	(2,043,426)	56,215	(273,362)	(3,683,206)	(3,151,200)	(6,960,839)	(532,006)	3,277,633				
					<b>Cash Flows From Investing Activities</b>														
-	-	-	-	-	Investments Converting To Cash	-	-	-	-	-	-	-	4,000,000	-	(4,000,000)				
-	-	-	-	-	Purchased Investments	-	-	-	-	-	-	-	-	-	-				
106,252	100,000	90,019	6,252	16,233	Interest Income	670,864	664,612	419,412	6,252	251,452	1,164,612	400,000	1,047,630	764,612	116,982				
106,252	100,000	90,019	6,252	16,233	Net Cash Provided By (Used In) Investing Activities	670,864	664,612	419,412	6,252	251,452	1,164,612	400,000	5,047,630	764,612	(3,883,018)				
<b>2,403,434</b>	<b>2,333,799</b>	<b>1,078,462</b>	<b>69,635</b>	<b>1,324,972</b>	<b>FUND NET CASH FLOWS</b>	<b>2,360,316</b>	<b>2,290,681</b>	<b>1,151,232</b>	<b>69,635</b>	<b>1,209,084</b>	<b>2,052,318</b>	<b>2,127,423</b>	<b>8,179,138</b>	<b>(75,105)</b>	<b>(6,126,820)</b>				
					<b>DEBT SERVICE RATIO</b>														
1,876,476	1,872,501	1,768,143	3,975	108,333	Total Cash Available For Debt Service	12,227,162	12,222,827	11,193,084	4,335	1,034,078	20,840,195	20,421,285	21,521,372	418,910	(681,177)				
1,246,381	1,246,381	1,087,310	-	159,071	Debt Service	8,724,667	8,724,667	7,611,170	-	1,113,497	14,956,576	14,956,576	13,047,722	-	1,908,854				
<b>1.51</b>	<b>1.50</b>	<b>1.63</b>	<b>0.00</b>	<b>(0.12)</b>	<b>DSCR</b>	<b>1.40</b>	<b>1.40</b>	<b>1.47</b>	<b>0.00</b>	<b>(0.07)</b>	<b>1.39</b>	<b>1.37</b>	<b>1.65</b>	<b>0.03</b>	<b>(0.26)</b>				

LEHIGH COUNTY AUTHORITY  
FINANCIAL STATEMENTS - CITY DIVISION  
JULY 2019

FORECAST VARIANCES - MONTH

INCOME STATEMENT	Actual	Forecast	Variance	Comments
<b>Operating Revenues</b>				
Charges For Services	3,341,378	3,334,250	7,128	
Rent	-	-	-	
Other Income	36,575	47,309	(10,734)	
Total Operating Revenues	3,377,953	3,381,559	(3,606)	
<b>Operating Expenses</b>				
Salaries and Wages	438,861	443,420	4,559	
General and Administrative	687,010	686,610	(400)	
Utilities	211,141	174,605	(36,536)	
Materials and Supplies	103,687	118,727	15,040	
Miscellaneous Services	128,147	160,231	32,084	
Treatment & Transportation	4,628	-	(4,628)	
Depreciation and Amortization	490,000	490,000	-	
Total Operating Expenses	2,063,474	2,073,593	10,119	Higher utility spending and higher treatment & transportation costs more than offset by lower salaries & wages, along with lower supplies and services
<b>Operating Income</b>	1,314,479	1,307,966	6,513	Lower operating expenses to partially offset lower operating revenues
<b>Non-Operating Revenues (Expenses)</b>				
Tapping and Capital Recovery fees	-	-	-	
Meter Sales	-	-	-	
Inspection and Plan Reviews	1,000	5,000	(4,000)	
Project Reimbursements	19,231	20,000	(769)	
Interest Income	106,252	100,000	6,252	
Other Income	5,805	1,833	3,972	
Interest Expense	(1,419,385)	(1,420,000)	615	
Other Expense	(57,844)	(50,000)	(7,844)	
Total Non-Operating Revenues (Expenses)	(1,344,941)	(1,343,167)	(1,774)	
<b>Net Income Before Capital Contributions</b>	(30,462)	(35,201)	4,739	
<b>Capital Contributions</b>	-	-	-	
<b>NET INCOME</b>	(30,462)	(35,201)	4,739	

FORECAST VARIANCES - MONTH

CASH FLOW STATEMENT	Actual	Forecast	Variance	Comments
<b>Cash Flows From Operating Activities</b>				
Operating Revenues	3,377,953	3,381,559	(3,606)	
Operating Expenses (ex D&A)	(1,573,474)	(1,583,593)	10,119	
Non-Cash Working Capital Changes	900,655	900,000	655	
Net Cash Provided by (Used in) Operating Activities	2,705,134	2,697,966	7,168	
<b>Cash Flows From Financing Activities</b>				
Capital Contributions	-	-	-	
Proceeds New Borrowing	-	-	-	
Interest Payments	-	-	-	
Principal Payments	-	-	-	
Net Cash Provided by (Used in) Financing Activities	-	-	-	
<b>Cash Flows from Capital and Related Activities</b>				
Non-Operating Revenues	6,805	6,833	(28)	
Project Reimbursement	19,231	20,000	(769)	
Non-Operating Expenses	-	-	-	
Capital Expenditures	(433,988)	(491,000)	57,012	Favorable timing on capex
Net Cash Provided By (Used In) Capital and Related Activities	(407,952)	(464,167)	56,215	
<b>Cash Flows From Investing Activities</b>				
Investments Converting To Cash	-	-	-	
Purchased Investments	-	-	-	
Interest Income	106,252	100,000	6,252	
Net Cash Provided By (Used In) Investing Activities	106,252	100,000	6,252	
<b>FUND NET CASH FLOWS</b>	2,403,434	2,333,799	69,635	

**CASH & INVESTMENT SUMMARY**  
**JULY 2019**  
**YTD CHANGES IN CASH BALANCES**

	Suburban Water	Suburban Wastewater	City Division
<b>CURRENT MONTH</b>			
CASH			
Operating	11,139,595.47	2,109,076.32	16,359,702.03
Capital	5,404,792.34	6,894,835.90	1,946,334.90
Restricted	1,581,328.14	337,774.04	36,319,582.96
Escrow	4,600,212.30	-	6,361.54
Total Cash	22,725,928.25	9,341,686.26	54,631,981.43
INVESTMENTS			
Operating	2,136,622.88	-	-
Capital	1,744,267.24	8,489,731.40	-
Restricted	25,526.72	-	3,940,640.00
Total Investments	3,906,416.84	8,489,731.40	3,940,640.00
TOTAL CASH & INVESTMENTS	<b>26,632,345.09</b>	<b>17,831,417.66</b>	<b>58,572,621.43</b>
<b>BEGINNING OF YEAR</b>			
CASH			
Operating	8,283,969.69	5,314,951.71	18,017,729.33
Capital	5,772,084.72	7,739,379.19	42,935.90
Restricted	1,564,965.39	337,562.23	34,161,520.50
Escrow	4,990,657.44	-	6,361.22
Total Cash	20,611,677.24	13,391,893.13	52,228,546.95
INVESTMENTS			
Operating	3,356,991.39	-	-
Capital	3,426,629.74	6,455,704.16	-
Restricted	25,521.88	-	3,940,640.00
Total Investments	6,809,143.01	6,455,704.16	3,940,640.00
TOTAL CASH & INVESTMENTS	<b>27,420,820.25</b>	<b>19,847,597.29</b>	<b>56,169,186.95</b>
<b>YTD CHANGE IN BALANCES</b>			
CASH			
Operating	2,855,625.78	(3,205,875.39)	(1,658,027.30)
Capital	(367,292.38)	(844,543.29)	1,903,399.00
Restricted	16,362.75	211.81	2,158,062.46
Escrow	(390,445.14)	-	0.32
Total Cash	2,114,251.01	(4,050,206.87)	2,403,434.48
INVESTMENTS			
Operating	(1,220,368.51)	-	-
Capital	(1,682,362.50)	2,034,027.24	-
Restricted	4.84	-	-
Total Investments	(2,902,726.17)	2,034,027.24	-
TOTAL CASH & INVESTMENTS	<b>(788,475.16)</b>	<b>(2,016,179.63)</b>	<b>2,403,434.48</b>
<b>CASH WITHOUT ESCROW</b>	<b>2,504,696.15</b>	<b>(4,050,206.87)</b>	<b>2,403,434.16</b>

Lehigh County Authority
System Operations Review - July 2019
Presented: August 26, 2019

Lehigh County Authority
System Operations Review - July 2019
Presented: August 26, 2019

Lehigh County Authority
System Operations Review - July 2019
Presented: August 26, 2019

Critical Activities	System	Description	Jul-19	2019 Totals	2018 Totals	Permit
			Daily Avg (MGD)	Daily Avg (MGD)	Daily Avg (MGD)	Daily Max (MGD)
Water Production	Allentown	Total	22.02	21.65	21.48	39.0
		Schantz Spring	8.10	7.99	6.90	9.0
		Crystal Spring	3.89	3.89	3.88	4.0
		Little Lehigh Creek	10.03	9.76	10.69	30.0
		Lehigh River	0.00	0.00	0.02	28.0
	Central Lehigh	Total	10.29	9.95	9.46	19.04 MGD Avg
		Feed from Allentown	7.03	7.06	6.74	7.0 MGD Avg 10.5 MGD Max
		Well Production (CLD)	3.26	2.89	2.71	8.54 MGD Avg
		Sum of all (12) other Suburban Water Systems	0.17	0.18	0.18	1.71 Sum of all wells
Wastewater Treatment		Kline's Island	40.39	41.25	36.08	40.0
		Pretreatment Plant	6.88	6.50	5.46	5.75 (design capacity)
		Sum of all (5) other Suburban WW Systems	0.20	0.20	0.20	0.36
			Jul-19	2019 Totals	2018 Totals	2017 Totals
Precipitation Totals (inches)			9.55	41.5	66.96	50.18
Compliance Reports Submitted to Allentown			29	183	285	291
Notices of Violation (NOVs)		(Allentown + Suburban)	0	1	1	3
Sanitary Sewer Overflows (SSOs)/Bypasses		(Allentown + Suburban)	6	29	78	22
Main Breaks Repaired		Allentown	1	17	33	19
		Suburban	0	3	23	12
Customer Service Phone Inquiries		(Allentown + Suburban)	1,889	14,143	26,440	27,313
Water Shutoffs for Non-Payment		(Allentown + Suburban)	156	1,033	1,838	1,577
Injury Accidents		(Allentown + Suburban)	1	7	14	8
Emergency Declarations		Allentown	(1)@ \$136,877	(2)@ \$152,053	(5) @ \$76,469	(2) @ \$51,235
		Suburban	0	(1) @ \$19,335	(1) @ \$21,197	(1) @ \$72,554

**Significant Repairs/Upgrades:** Recent problems at the Pine Lakes development have led to several changes attempting to rectify the problems. In one of the water storage tanks, a level sensor that was still under warrantee was bad and was replaced. SCADA upgrades were in the process of installation when the last low pressure issue occurred. A second storage tank from the recent upgrade project is now on-line so there are redundant level sensors should one go bad.

<p><b>Description of NOV's and/or SSO's:</b> There were two (2) bypasses in July 2019, with both occurring at Heidelberg Heights. The bypasses happened on 7/12 and 7/22. There were four (4) SSO's that were recorded during July. Two (2) of them happened on 7/22, one (1) in the City Lehigh Parkway and one (1) in Upper Milford. Two (2) other bypasses occurred in Upper Macungie Township on 7/29. There were no (0) NOV's issued during July 2019.</p>
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<p><b>Other Highlights:</b> As of 8/16, three (3) watershed monitoring stations are running and three (3) more are to be running by the end of August. In September, automatic data transfers back to LCA Main Office will begin. Calibrations of the flow gauging stations are underway, and they are expected to run into the first half of 2020.</p>
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## Western Lehigh Interceptor High Flow Emergency Project

### Status as of 8/19/2019

<b><u>Phase 1</u></b>	MH Start Point	U84-7	MH End Point	U6
	<b>CCTV Work and Cleaning/Grouting: 100% Complete</b>			
<b><u>Phase 2</u></b>	MH Start Point	U6	MH End Point	L274
	Remediation work began in Phase 2 on 7/1/2019.			
	Nine (9) segments need to be CCTV'd yet. Short bypasses are needed.			
	<b>CCTV Work and Cleaning/Grouting: ~70% Complete</b>			
<b><u>Phase 3</u></b>	MH Start Point	L274	MH End Point	L255 (SCPS)
	Bypass system is set up and ready. Start-up scheduled 8/19.			
	Cleaning/CCTV work and grouting repairs expected to take 4-6 weeks.			
	Phase 3 completion will be a priority so equipment can be removed ASAP.			
<b><u>Phase 4</u></b>	MH Start Point	L255 (SCPS)	MH End Point	L90 (Alburtis Line)
	Several segments remain to be CCTV'd.			
	Large amounts of debris in upstream segments need to be removed ASAP.			
<b><u>Phase 5</u></b>	MH Start Point	L90	MH End Point	L1 (Meter Station 5)
	Several segments remain to be CCTV'd.			
<b><u>Phase 6</u></b>	MH Start Point	L1	MH End Point	B1 (PPS)
	Several segments remain to be CCTV'd.			

Other than Phase 3, only a short list of segments remain within the entire project area that have not been CCTV'd yet. The remaining areas all have site specific problems to overcome, i.e. access problems, area is flooded, etc. As far as cleaning and grouting work is concerned, the vast majority of Phase 2 has been completed. No cleaning and grouting has been done at all for Phases 3-6.

The remaining timetable for the project in 2019 still has a lot of variables. We anticipate Phase 3 taking no longer than four weeks, but depending on what's found during the camera inspections, that may take longer. After Phase 3 is completed, Phase 2 will need to be finished but is currently almost done anyway. Completing Phases 2 and 3 could realistically take two months, and maybe longer, which will get us to mid-October. Bad weather could delay things even further as we are in hurricane season.

As mentioned above, there are significant amounts of debris in the line below SCPS and this should all be removed this year yet. We may not complete all of Phase 4 but we should do a good portion of it this year yet. Assuming the partial completion of Phase 4 takes an additional month, we are now approaching Thanksgiving. Once the cold weather arrives, this project will become nearly impossible to continue so the remainder would need to be delayed until spring when the weather breaks.