

LCA Main Office:

1053 Spruce Road Wescosville, PA 18106 610-398-2503 **Agendas & Minutes Posted:**

www.lehighcountyauthority.org

Published: June 19, 2017

BOARD MEETING AGENDA – June 26, 2017

- 1. Call to Order
 - NOTICE OF MEETING RECORDINGS

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

- Public Participation Sign-In Request
- 2. Review of Agenda / Executive Sessions
- 3. Approval of Minutes
 - May 22, 2017 Board meeting minutes
- 4. Public Comments
- 5. Action / Discussion Items:

FINANCE AND ADMINISTRATION

WATER

- Suburban Division Pine Lakes Pumping Station Improvements (blue)
- Suburban Division Asset Management Facility Upgrades (yellow)
- Allentown Division Pre-Lease Valve Replacements (green)
- Stormwater Injection Wells Discussion only

WASTEWATER

- Allentown Division Manhole Collars with Water Tight Frame and Covers: Cycle 4 (ivory)
- 6. Monthly Project Updates / Information Items (1st Board meeting per month) **June 2017 report** attached
- 7. Monthly Financial Review (2nd Board meeting per month) May 2017 report attached
- 8. Monthly System Operations Overview (2nd Board meeting per month) May 2017 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.

July 10, 2017 July 24, 2017 August 14, 2017

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 May 22, 2017

The Regular Meeting of the Lehigh County Authority was called to order at 12:02 p.m. on Monday, May 22, 2017, Chairman Nagle presiding. Other Members present at the commencement of the meeting were: Linda Rosenfeld, Jeff Morgan, Richard Bohner, Norma Cusick, Scott Bieber and Ted Lyons. Authority Staff present were Liesel Gross, Brad Landon, Chuck Volk, Ed Klein, Pat Mandes, Chris Moughan, John Parsons and Phil DePoe.

REVIEW OF AGENDA

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

Liesel Gross noted there are no Agenda changes and there will be an Executive Session regarding potential litigation.

APPROVAL OF MINUTES

May 8, 2017 Regular Meeting Minutes

On a motion by Richard Bohner, seconded by Linda Rosenfeld, the Board approved the Minutes of the May 8, 2017 meeting as presented (7-0).

PUBLIC COMMENTS

None.

ACTION AND DISCUSSION ITEMS

2016 Audit & Financial Statements

Brad Landon clarified that no Board action is required for this item other than an acknowledgement of receipt of the auditors' report.

Ed Klein introduced Corey Troutman and Nate Schwartz from Zelenkoske Axelrod, LLC, who conducted the Authority's 2016 audit. Mr. Troutman provided a brief overview of the audit process and explained that the audit report is presented with a clean opinion with no material issues or weaknesses noted. The audit was completed in accordance with generally accepted accounting principles, and there were no disagreements with Authority management in the preparation of audit statements. Mr. Schwartz provided a more detailed review of the financial statements and notes offered in the audit report. He explained the most notable item included in the Authority's financial outlook is the 2018 debt service payment anticipated, which includes a \$19 million principle payment that may require additional financing. He noted that the concession lease agreement with Allentown is a unique arrangement that makes the financial review more complicated, but that the staff was cooperative and responsive throughout the audit process. Mr. Klein provided additional recognition for the accounting department staff who put the extra effort into ensuring the accuracy of the Authority's financial reporting process.

After a series of questions from Board members that were answered by Mssrs. Troutman and Schwartz, Brian Nagle noted that the Board acknowledges receipt of the 2016 Audit & Financial Statements.

Suburban Water Capital Financing – Parameters Resolution (Resolution 5-2017-1)

Liesel Gross introduced Chris Gibbons from Concord Financial, the Authority's financial advisor, and Kevin Reid from King Spry, the Authority's bond counsel.

Mr. Gibbons reviewed key elements of the Preliminary Official Statement, the ratings review from Standard & Poors, and his firm's financial analysis relating to the issuance of approximately \$15.5 million in taxexempt bonds to fund capital improvements to the Authority's Suburban Division water system. Mr. Gibbons

drew attention the "AA/Stable" bond rating provided by Standard & Poors, which is a favorable rating allowing for lower interest expense over the life of the bonds. He explained that the Authority will issue bonds through a competitive online sale beginning as early as May 23, 2017, following the parameters outlined in Resolution 5-2017-1 and his financial report. Key components of the bond issue are total borrowing amount up to \$19 million, interest rate projections, and the requirement that the Authority utilize a minimum of 85 percent of the proceeds within three years of the issue.

Mr. Reid provided a more detailed overview of the role of Bond Counsel, and reviewed additional terms of Resolution 5-2017-1. He highlighted that the Resolution specifies that revenues only from the Suburban water system are pledged for this bond issue, and other key parameters. Acting as Bond Counsel, King Spring will manage the paperwork related to closing on the bond issue and will provide an opinion to the federal government that the Authority's bond issue qualifies for tax-exempt financing.

Ted Lyons inquired whether the Authority would receive multiple bidders for this bond issue. Mr. Gibbons explained that there may be multiple parties bidding, especially in light of the favorable bond rating, but that the sale will likely be with a single entity with the most favorable bid, and then that purchaser will distribute through its consortium.

Brian Nagle asked what happens if the Authority is unable to spend 85% of the bond proceeds within three years. Mr. Reid explained that the tax-exempt status of the bond issue may be jeopardized in that case. Liesel Gross also explained that the total funding amount of \$14.9 million was based on the project needs outlined in the first three years of the current capital plan, so that it is expected this threshold will be met.

On a motion by Linda Rosenfeld, seconded by Norma Cusick, the Board adopted Resolution 5-2017-1 authorizing the issuance of bonds for the Suburban Division water system in accordance with the parameters set forth therein (7-0).

Chris Gibbons, Kevin Reid, Corey Troutman and Nate Schwartz left the meeting at 12:32 p.m.

Tank Painting Project - Heidelberg Heights Wastewater Treatment Plant

Chuck Volk provided an overview of the project, which includes repainting of the sequencing batch reactor tanks at the wastewater treatment plant in Heidelberg Township. Three bids were received, and the staff recommends awarding the work to J.P. Smith Contractors, Inc.

Some discussion followed. Mr. Volk explained that this contractor has extensive experience with this work. The bids were issued and managed through the PennBid program online.

Jeff Morgan noted that he is familiar with this contractor and has had satisfactory experience with their work.

On a motion by Linda Rosenfeld, seconded by Norma Cusick, the Board approved the Capital Project Authorization – Construction Phase in the amount of \$82,770.00, which includes the Construction Contract awarded to J.P. Smith Contractors, Inc., in the amount of \$70,770.00 (7-0).

Allentown Division – Wastewater Treatment Plant: Security Upgrades

Phil DePoe explained the project, which includes the installation of security upgrades at the wastewater treatment plant in Allentown. The equipment for this project was purchased through a prior Board authorization. This projected is categorized as "Uncompleted Work" in the lease agreement with Allentown, which means the City will pay for the work, but also approves the project scope. Any items that were not approved by the City may be completed at a later date as an expense to the Authority.

On a motion by Norma Cusick, seconded by Jeff Morgan, the Board approved the Capital Project Authorization – Construction Phase in the amount of \$251,719.00, which includes the Electrical Contract awarded to Albarell Electric in the amount of \$189,864.00 (7-0).

MONTHLY FINANCIAL REVIEW

Ed Klein gave an overview of the April 2017 Financial Report, including a short PowerPoint presentation outlining key performance indicators.

MONTHLY SYSTEM OPERATIONS OVERVIEW

John Parsons reviewed the April 2017 Operations Report that was attached to the Board agenda. Mr. Parsons noted the Pennsylvana Department of Environmental Protection has lifted the Drought Watch for all counties in Pennsylvania. He also noted that the investigation regarding the available technology to implement the recommended stream monitoring program is continuing and will be presented the Board at a later time. Scott Bieber asked if the staff had ruled out the use of stream gages provided by the U.S. Geological Service. Mr. Parsons responded that this will be part of the overall cost evaluation prior to moving forward with the monitoring program.

Brian Nagle asked for additional details about the emergency declaration that was noted in the April 2017 Operations Report. Mr. Parsons explained that a sanitary sewer overflow occurred in April due to a blockage of a manhole, not caused by a rain event. Due to the size of the blockage, specialized equipment was required, including bypass pumping to eliminate the discharge of sewage to the environment during the repair. This incident was reported to the appropriate regulatory agencies, as well as to the City of Allentown for inclusion in their project to repair manholes.

STAFF COMMENTS

None.

SOLICITOR'S COMMENTS

None.

PUBLIC COMMENTS / OTHER COMMENTS

None.

EXECUTIVE SESSION

Chairman Nagle called an Executive Session at 1:15 p.m. to discuss potential litigation. Attorneys Alessandra Hylander and Devin Chwastyk of McNees Wallace & Nurick LLC entered the meeting at this time.

The Executive Session ended at 2:07 p.m.

REGULAR SESSION

Scott Bieber inquired about the progress on investigating the permit process for stormwater injection wells. Brad Landon responded that the staff has a meeting scheduled with the Department of Environmental Protection on June 22, 2017, so the topic may be appropriate to discuss again with the Board at the June 26, 2017 meeting.

ADJOURNMENT

There being no further business, the Chairman adjourned the meeting at 2:08 p.m.

Richard H. Boh	ner

Secretary

MEMORANDUM

Date: June 26, 2017

To: Lehigh County Authority Board

From: Amy Kunkel, LCA Project Engineer

Subject: Suburban Division – Pine Lakes Pumping Station Improvements –

Construction Phase

MOTIONS / APPROVALS REQUESTED:

No.	Item	Amount
1	Capital Project Authorization – Construction Phase	\$540,994.00
2	Construction Contract - General:	
	DESCCO Design Construction, Inc	\$366,879.00
3	Construction Contract – Electrical (*)	\$81,300.00
	PSI Pumping Solutions, Inc	
4	Professional Services – Construction Phase Engineering (*)	\$9,050.00
	JMT, Inc	
5	Professional Services – Construction Phase Inspection (*)	\$8,765.00
	Cowan Associates, Inc	

^(*) Included in Capital Project Authorization

BACKGROUND

The Pine Lakes Division is located in Lynn Township and was acquired from a developer in 2002. The system provides service to 60 customers in the Pine Lakes of Lynn Subdivision. The water supply source is two wells which pump into a below-grade hydro-pneumatic tank.

PROJECT OVERVIEW

This project includes the conversion of the aged existing hydro-pneumatic station serving the development to a variable frequency drive controlled double-pumping system. The project will also include the addition of a new 10,000 gallon steel non-pressure class underground water storage tank and other miscellaneous improvements. A SCADA (supervisory control and data acquisition) system will be installed to allow full remote control and monitoring of the facilities.

FUNDING

The Project will be funded by the LCA Suburban Division.

BUDGET AMENDMENT

Not required

PROJECT STATUS

Board approval is requested for the Construction Phase.

THIS APPROVAL - CONSTRUCTION PHASE

BIDDING SUMMARY

This project consists of two contracts. The project was originally bid in July 2016. Bids for construction came in at \$599,191 for both general and electrical contracts. It was decided then to reject all bids and rebid the project in 2017, due to high bid prices and lack of bidders. The project was advertised for bid in late April and bids were received via PennBid on June 1, 2017, the results of which are as follows:

General Construction					
Bidder	Bid Amount				
DESCCO Design Construction, Inc.	\$366,879.00				
PSI Pumping Solutions, Inc.	\$378,800.00				
Zimmerman Environmental	\$39,6242.00				
Bellview Pump, LLC	\$418,000.00				
JEV Construction LLC	\$474,500.00				
Eastern Environmental Contractors, Inc.	\$516,600.00				
Blooming Glen Contractors WW	\$557,962.00				
Electrical Construction					
Bidder	Bid Amount				
PSI Pumping Solutions, Inc.	\$81,300.00				
Eastern Environmental Contractors, Inc.	\$94,240.00				
Blooming Glen Contractors WW	\$125,840.00				
Shannon A. Smith, Inc.	\$128,650.00				

DESCCO has extensive experience with new and rehabilitation construction work at water and wastewater facilities, and LCA staff have worked with them on prior non-LCA projects with satisfactory performance. PSI Pumping Solutions also has extensive water and wastewater facility construction experience, including electrical work, and we are also familiar with this firm from prior non-LCA projects. Both firms' 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.

PROFESSIONAL SERVICES

Construction engineering is to be performed by JMT, Inc. and part-time inspection services are to be performed by Cowan Associates, Inc.

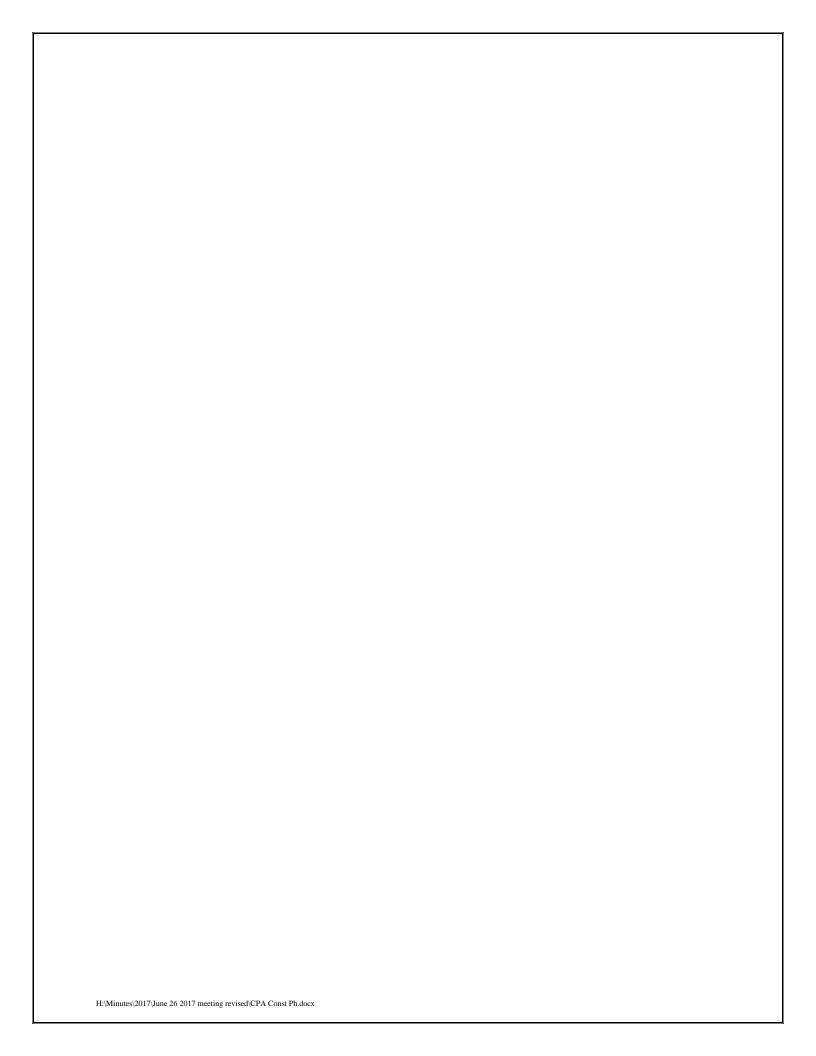
PROJECT SCHEDULE

Based on contract award following the June 26, 2017 Board meeting, it is anticipated that the project will be completed by early 2018.

FUTURE AUTHORIZATIONS

None

CAPITAL PROJECT AUTHORIZATION					
PROJECT NO.:	SD-W-15-4	BUDGET FUND:	Suburban Div\Water\C	Capital	
PROJECT TITLE:	Suburban Division Pine Lakes Pumping Stati Construction Phase -	on Improvements –	PROJECT TYPE:		
			Construction Engineering Stud	dv	
THIS AUTHORIZATION:	\$540,994		_ Equipment Purcl		
TO DATE (W/ ABOVE)	\$720,486		Amendment		
DESCRIPTION AND BENE	FITS:				
existing hydro-pneu pumping system. To underground water and data acquisition	is for the construction of important in the station serving the development in the project will also include the storage tank and other miscellar system will be installed to all akes us through construction provided in the state of the sta	lopment to a variable free addition of a new 10,000 laneous improvements. A llow full remote control	quency drive controlled d) gallon steel non-pressure A SCADA (supervisory c	ouble- e class control	
	Previous Auth	orizations			
Planning Phase			\$8,610		
Design Phase			\$122,574		
SCADA			\$48,308		
	REQUESTED THIS A	IITHODIZATION			
	Construction				
Staff	0 011512 000120		\$30,000		
Professional Serv	ices				
Construction E	ngineering - JMT, Inc.		\$9,050		
Construction In	nspection – Cowan Associate	s, Inc.	\$8,765		
			\$2.66.9 7 0		
Contract 1-Gener			\$366,879 \$81,300		
Contract 2-Electr	ical Construction		\$5,000		
Miscellaneous			\$40,000		
Contingency Total This Author	 rization		\$540,994		
Total This Author	ization		12 27 2		
	Future Author	orization			
None					
Total Estimated Pr	roject		\$720,486		
REVIEW AND APPROVAL	S:				
Project Manage	r Date	Chief Exe	ecutive Officer	Date	
Chief Capital Works	Officer Date	Ch	airman	Date	
H:\Minutes\2017\June 26 2017 meet					





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

	PROFESSIONAL SERVI	ICES AUTHORIZAT	TION
Professional:	COWAN ASSOCIATES, INC. 120 Penn Am Drive PO Box 949	Date:	June 26, 2017
	Quakertown, PA 18951	Requested By: Approvals Department Head: Chief Executive Officer:	Amy Kunkel
This Authoriza	ision- Pine Lakes Pumping Sta tion- Construction Phase, \$8,765 es, Inc. will provide construction in	-	the aforementioned pro
Cowan Associat			
4	Professiona		
1.	Attend Pre-Construction Meeting		
2.	8 8		
3.	<u>.</u>	nante and wards commission	
5.			
	Compile and Teview as sum draw	yings, nom contactors	
C ost Estimate (1	not to be exceeded without further an	uthorization): \$8,765	
·	not to be exceeded without further at Completion Deadline: As required		ne requirements.
·	Completion Deadline: As required (For Author)		ne requirements.



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 Amendment No. 1

Professional:	JMT, INC. 7535 Windsor Drive	Date:	June 26, 2017
	Suite 204B Allentown, PA 18195	Requested By:	Amy Kunkel
	i memown, 111 10195	Approvals	7 mily Rumer
		Department Head:	
		Chief Executive	
		Officer:	
Suburban D	ivision- Pine Lakes Pumping Sta	tion Improvements	
Previous Auth	orizations- Design Phase; \$50,854		
	<u>cation</u> - Construction Phase, \$9,050		
JMT, Inc. will	provide construction engineering rela	ated services for the aforeme	ntioned project
Г	Professiona	al Services	
	1. Attend Pre-Construction Meeting		ites
	2. Attend Progress Meetings	una i repure, arsure ace iviline	
-	3. Respond to design related RFIs		
	4. Log, review and process shop dra	wing submittals	
	5. Attend Substantial Completion M	<u> </u>	
	•		
Cost Estimate	(not to be exceeded without further a	uthorization): \$59,904	
		, . ,	
Time Table ar	d Completion Deadline: As required	d to meet construction timeling	ne requirements.
	(Fan Authan	ity Use Only)	
Authorization		ny Ose Omy)	
. Iddioi izadioii	compicuon.		
Approval:	Actual Co	ost: D	ate:

MEMORANDUM

Date: June 26, 2017

To: Lehigh County Authority Board

From: Charles Volk, LCA Chief Capital Works Officer

Subject: Suburban Division – Water and Wastewater Facilities Asset Management

Upgrades – Construction Phase

MOTIONS / APPROVALS REQUESTED:

No.	Item	Amount
1	Capital Project Authorization – Construction Phase	\$961,796
2	Construction Contract - General:	
	JEV Construction, LLC (*)	\$623,340
3	Construction Contract – Electrical	\$240,856
	Blooming Glen Contractors (*)	
4	Professional Services – Construction Phase Engineering	\$37,600
	DHuy Engineering (*)	

^(*) Included in Capital Project Authorization

BACKGROUND

Many of LCA's Suburban Division water and sewer facilities include components that are approaching the end of their design service life, and a comprehensive facilities evaluation was performed in 2016 to provide updated condition assessments with recommendations for upgrades. Utilizing asset management protocols for mitigating criticality and preserving level of service, an upgrade project was designed that includes nine (9) water facilities and two (2) wastewater facilities with the highest overall facility risk rating. The construction project includes structural, HVAC, and electrical upgrades to prolong service life, satisfy current codes, and mitigate risk.

PROJECT OVERVIEW

The asset management upgrade work, consisting of structural, HVAC, and electrical rehabilitation, is to be performed at the following facilities:

Water Facilities:

• WL-6

- NL15-16
- Beverly Hills
- WL-13
- Clearview Farms
- WL10
- WL11
- WL16
- WL19

Wastewater Facilities:

- Lynn Township Wastewater Treatment Plant
- Western Lehigh Interceptor 8 Siphon Chambers

FUNDING

The Project will be funded by the LCA Suburban Division

BUDGET AMENDMENT

Not required

PROJECT STATUS

Board approval is requested for the Construction Phase.

BIDDING SUMMARY – CONSTRUCTION PHASE

This project consists of two contracts. The project was advertised for bid in late April and bids were received via PennBid on May 30, 2017, the results of which are as follows:

General Construction					
Bidder	Bid Amount				
JEV Construction LLC	\$623,340.00				
Blooming Glen Contractors (Clinton NJ)	\$635,535.00				
Electrical Construction	n				
Bidder	Bid Amount				
Blooming Glen Contractors (Clinton NJ)	\$240,856.00				
No others					

JEV has extensive experience with new and rehabilitation construction work at water and wastewater facilities, and has performed satisfactory work on prior LCA projects. Blooming Glen also has extensive water and wastewater facility construction experience, including electrical work, and is currently completing the KIWWTP digester cover replacement for LCA, in addition to numerous prior projects. Both firms' 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.

PROFESSIONAL SERVICES

Construction engineering and part-time inspection services is to be performed by D'Huy Engineering.

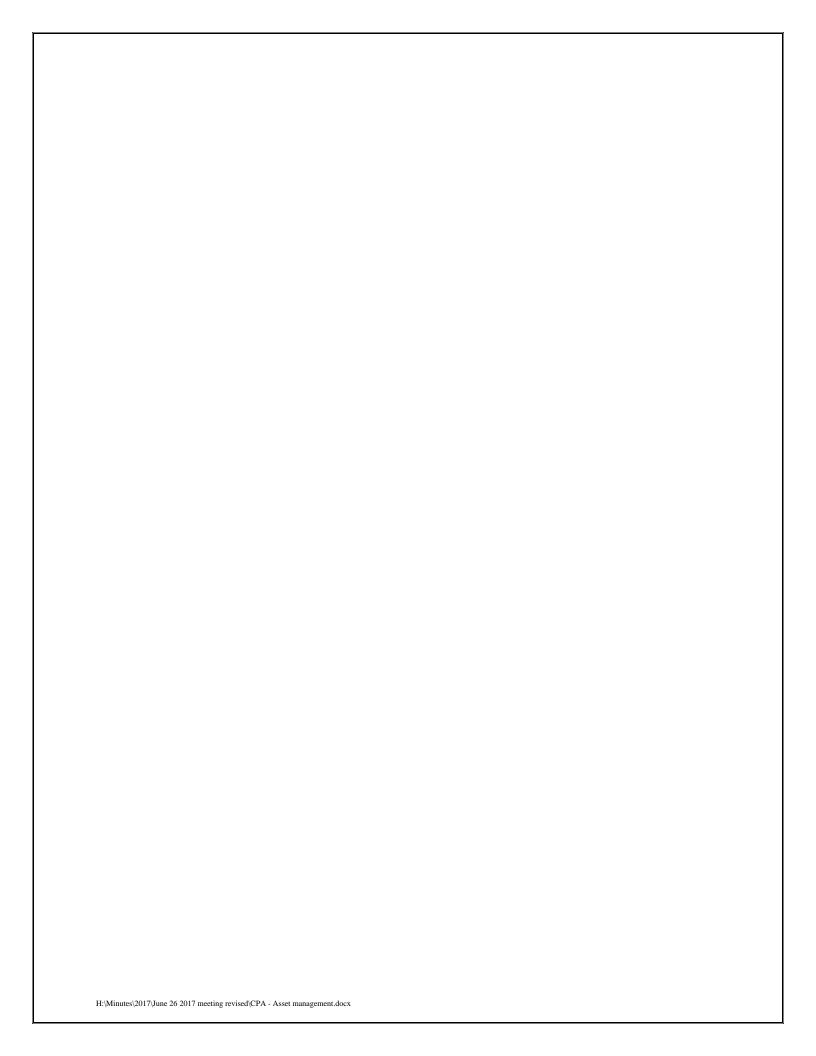
PROJECT SCHEDULE

Based on contract award following the June 26, 2017 Board meeting, it is anticipated that the project will be completed by the end of the year.

FUTURE AUTHORIZATIONS

None

ROJECT NO.:	SD-S-11 & SD-W	⁷ -11	BUDGET FUN	D: Suburl	oan Capital
ROJECT TITLE:	Suburban Division Asset Managemen		d Wastewater Facil s		ест Түре:
					Construction
HIS AUTHORIZATION:	\$961,796				Engineering Study Equipment Purchase
DATE (W/ ABOVE)	\$1,081,796			— H '	Equipment I dichase
ESCRIPTION AND BENE	EFITS:				
Assessment performassigned risk ratin recommendations scope of which inconstruction projes atisfy current cool	e result of a Suburba rmed in 2016, which ags for each station from that study pro- cludes nine (9) wat ect includes structural des, and mitigate ris	ch evaluate based on ovided the ter facilitie ral, HVAC	ed numerous water probability and control basis of design for a second two (2) was	er and sewer to consequence of for this constructions stewater facil	Facilities and f failure. The uction project, the ities. The
horization Status:	 Previous	s Authoriza	tions		7
Study Phase		11000000		\$120,000	7
				φ120,000	'
	Requested T	This Autho	orization	ψ120,000	
Construction Ph		This Autho	orization	Ψ120,000	
			orization	\$623,340	
Contract No. 1 (ase	tion			
Contract No. 1 C Contract No. 2 F Staff	ase GC: JEV Construct EC: Blooming Glen	tion Contract	ors	\$623,340	
Contract No. 1 C Contract No. 2 E Staff Professional Ser	GC: JEV Construct EC: Blooming Glen vices – Construction	tion Contract	ors	\$623,340 \$240,856 \$20,000	
Contract No. 1 C Contract No. 2 F Staff Professional Ser D'Huy Engineer	GC: JEV Construct EC: Blooming Glen vices – Construction	tion Contract	ors	\$623,340 \$240,856 \$20,000 \$37,600	
Contract No. 1 C Contract No. 2 E Staff Professional Ser	GC: JEV Construct EC: Blooming Glen vices – Construction	tion Contract	ors	\$623,340 \$240,856 \$20,000	
Contract No. 1 C Contract No. 2 E Staff Professional Ser D'Huy Engineer	nase GC: JEV Construct EC: Blooming Glen evices – Construction	tion Contract	ors	\$623,340 \$240,856 \$20,000 \$37,600	
Contract No. 1 C Contract No. 2 E Staff Professional Ser D'Huy Engineer Contingency Total This Author	nase GC: JEV Construct EC: Blooming Glen Evices – Construction Fing Orization	tion Contract	ors ering:	\$623,340 \$240,856 \$20,000 \$37,600 \$40,000	
Contract No. 1 C Contract No. 2 E Staff Professional Ser D'Huy Engineer Contingency	nase GC: JEV Construct EC: Blooming Glen Evices – Construction Fing Orization	tion n Contracto n Enginee	ors ering:	\$623,340 \$240,856 \$20,000 \$37,600 \$40,000	
Contract No. 1 C Contract No. 2 E Staff Professional Ser D'Huy Engineer Contingency Total This Author	Tase GC: JEV Construct EC: Blooming Glen Evices – Construction Fing Future A	tion n Contracto n Enginee	ors ering:	\$623,340 \$240,856 \$20,000 \$37,600 \$40,000	
Contract No. 1 C Contract No. 2 F Staff Professional Ser D'Huy Engineer Contingency Total This Authority None	Tase GC: JEV Construct EC: Blooming Glen Evices – Construction Fing Future A	tion n Contracto n Enginee	ors ering:	\$623,340 \$240,856 \$20,000 \$37,600 \$40,000	
Contract No. 1 C Contract No. 2 F Staff Professional Ser D'Huy Engineer Contingency Total This Author	Tase GC: JEV Construct EC: Blooming Glen Evices – Construction Fing Future A	tion n Contracto n Enginee	ors ering:	\$623,340 \$240,856 \$20,000 \$37,600 \$40,000	
Contract No. 1 C Contract No. 2 F Staff Professional Ser D'Huy Engineer Contingency Total This Authority None	roject	tion n Contracto n Enginee	ors ering:	\$623,340 \$240,856 \$20,000 \$37,600 \$40,000	





D'HUY ENGINEERING, INC.

One East Broad St., Suite 310

Description of Services (Work Scope, Steps, Check Points, etc.):

Bethlehem, PA 18018

Professional:

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

Department Head: Chief Executive

Date: June 26, 2017

Requested By: Charles Volk

Officer:

PROFESSIONAL SERVICES AUTHORIZATION

Approvals

Suburban Division – Facility Condition Assessments, Water and Sewer Facilities				
D'Huy Engineering, Inc. will perform construction phase engineering, inspection, and management services for the construction of the Suburban Division Water and Wastewater Facilities Asset Management Upgrade Project, in accordance with their proposal dated June 7, 2017. The scope of services includes the following:				
Professional Services				
Conduct pre-construction conference				
2. Conduct progress meetings.				
3. Perform project administration services, including payment				
application review, change order, coordination, etc.				
4. Respond to contractor requests for information (RFIs)				
5. Perform shop drawing review, approval, and distribution.				
6. Conduct a minimum of three, 3-hour inspections per facility, and				
additional visits up to 24 hours total.				
7. Perform twelve 2-hour inspection visits to the siphon chambers.				
8. Perform one substantial completion inspection per facility per contract.				
9. Complete one combined final completion inspection per facility for both contracts.				
10. Construction management				
ost Estimate (not to be exceeded without further authorization): \$37,600 me Table and Completion Deadline: Assumes work will be substantially complete by the end of ctober 2017.				
(For Authority Use Only)				
pproval: Actual Cost: Date:				

PROFESSIONAL SERVICES AUTHORIZATION INDEMNIFICATION

Allentown Division WWTP: Digester Cover System Replacements

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

I am or represent the Professional indicated above, an ☐ Accept the terms of the professional services authorized above.	
Agree to indemnify and hold harmless LCA, the Cirepresentatives, attorneys, and assigns from any and a the Consultant in connection with this contract and/or not limited to payment of all fees for its/their attorney LCA or any of its employees, agents, officials, representation emanating from the Consultant's performance that any portion of a judgment nor associated litigation explored to be the result of the negligence of the Analysis and the consultant of the negligence of the Analysis and the Consultant of the negligence of the Negligence of the Consult	all liability, arising out of all activities conducted by the Consultant's performance hereof, including but as and all incidental litigation expenses in the event entatives, attorneys, and assigns are sued upon a hereof. Professional shall not, however, be liable for penses, including attorney's fees, ultimately
Name (signature):	Name (printed)
	Title:



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

MEMORANDUM

Date: June 16, 2017

To: Lehigh County Authority Board

From: Jason Peters, Capital Projects Coordinator

Subject: Allentown Division- Pre-Lease Valve Replacement Project

Construction Phase

MOTIONS / APPROVALS REQUESTED:

No.	Item	Amount
1	Capital Project Authorization:	\$1,033,556
	Construction Phase	
2	Contract Award:	
	General Construction – Wexcon, Inc. (*)	\$881,030
3	Professional Services Authorization:	
	Construction Engineering, Management and Inspection Services Amendment No. 1 – Barry Isett & Associates, Inc. (*)	\$17,526

^(*) Included in Capital Project Authorization

PROJECT OVERVIEW:

This project consists of the replacement of a minimum of 50 inoperable valves in multiple locations throughout the City of Allentown (COA) that existed prior to the lease settlement. The replacement of these valves will allow for greater operation flexibility in the water system, particularly when planned or unplanned outages occur, increasing the reliability of water service for our customers.

This project has been identified in the Lease Concession as <u>Uncompleted Work</u> and is required to be completed by Lehigh County Authority (LCA).

FUNDING:

The project is identified as Uncompleted Work and will be funded by the COA.

PROJECT STATUS:

In February 2015 the Board approved the Design Phase of the Project. Working closely with all necessary LCA staff, COA and other outside agencies, LCA obtained all approvals and permits required for Construction Phase of this project.

THIS APPROVAL - CONSTRUCTION PHASE:

Includes the replacement of a minimum of 50 inoperable valves in multiple locations throughout the City of Allentown. Inoperable valves limit operations personnel from properly isolating system areas during maintenance and line repairs.

BIDDING SUMMARY - CONSTRUCTION CONTRACTS:

The project was advertised for bid on April 21, 2017. A pre-bid meeting was held on April 28, 2017, and bids were opened on May 30, 2017. Bid results are as follows:

General Construction				
Bidder Amount				
Wexcon, Inc.	\$881,030			
Anrich, Inc.	\$970,098			
Jaoa & Bradley Construction Co., Inc.	\$1,132,625			

Reference checks for Wexcon, Inc. (Mohrsville PA) have identified no negative issues and the firm has completed numerous projects of similar size and nature. The firm appears qualified to perform the work and all bidding requirements have been met. Therefore, we recommend awarding the General Construction contract to Wexcon, Inc., subject to the receipt of the necessary Performance Bonds, Insurance and other required documentation.

PROFESSIONAL SERVICES:

Barry Isett & Associates, Inc., our design consultant, will provide Construction Engineering, Management and Inspection related services for the construction phase of the project. The work will generally include:

- Coordinate the issuance and receipt of all construction documents.
- Conduct a pre-construction meeting and prepare and distribute meeting minutes.
- Review all contractor submittals in accordance to the contract documents.
- Provide interpretations and clarification of the contract document to all requests for information.
- Provide full-time construction inspection.
- Prepare daily written and photo documentation.
- Review, prepare and recommend change orders as necessary.
- Conduct construction progress meeting as frequent as every 2 weeks and prepare and distribute meeting minutes.
- Provide progress reports to LCA and the City on a monthly basis based on the progress meetings minutes.
- Prepare record drawings.
- Prepare punch list and closeout documents.
- Coordinate and attend post-construction site visit and walk over.

• Collect GPS data of as-built construction information.

A Professional Services Authorization is attached for Board approval.

SCHEDULE:

Assuming approval of the Construction Phase at the June 26, 2017 Board meeting, all pre-lease valves replacements are anticipated to be operational by October 1, 2017 (i.e. the substantial completion date).

FUTURE AUTHORIZATIONS:

No future authorizations are anticipated at this time.

	CT No.:	AD-W-17-3		BUDGET FUND:	Allentown Div\W	ater\Capita
ROJE	CT TITLE:		vision – Pre-Le		PROJECT TYPE:	
		Replacement 1	Project- Consti	ruction Phase	_ 🗸	
					Construction Engineering	
HIS A	UTHORIZATION:	\$ 1,033,556			Equipment 1	
	te (W/Above)	\$1,117,102			Amendmen	
SCR	CIPTION AND BENE	FITS:				
ugho es w ges	out the City of Alle	entown (COA) that the operation flexibited reliability of wa	existed prior to tallity in the water sater service for ou	he lease settlement system particularly	s in multiple locations . The replacement of when planned or unp	these
	Design Phase		Previous Auth	norizations		\$83,546
	Design Fliase					ψου,υ40
		REQU		UTHORIZATIO	N	
	G, ee		Construction	on Phase		ΦΩΩ ΩΩΩ
	Staff Professional So	wies				\$80,000
	Professional Se	rvices Administration,	Inspection & Cl	oseout		\$17,526
		ruction Contract	пърссион & С	oscoui		881,030
	Miscellaneous					\$5,000
	Contingency					\$50,000
	Total This Autl	norization			\$1,	033,556
			Future Auth	orization		
	None		Tuture Autr	OHZation		
	TVOIC					
	Total Estimated	! Project			\$1,1	117,102
REVIE	W AND APPROVAL	S:				
REVIE	W AND APPROVAL Project Manage		Date	Chief Exec	cutive Officer	Da



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

PROFESSIONAL SERVICES AUTHORIZATION Amendment No.1

Professional:	BARRY ISETT & ASSOCIATES	Date:	June 16, 2017
	85 S. Route 100	Requested By:	Jason Peters
		Approvals:	
		Department Head:	
		Chief Executive	
		Officer:	
Allentown Divis	ion – Pre-Lease Valve Replacements		
Previous Auth	orization – Design Phase: \$23,546		
Barry Isett & A	Associates will perform the follow	ing Construction rela	ated services
	Requested By: Approvals: Department Head: Chief Executive Officer: town Division – Pre-Lease Valve Replacements tous Authorization – Design Phase: \$23,546 Authorization – Construction Phase: \$17,526 I sett & Associates will perform the following Construction related services at Allentown Division – Pre-Lease Valve Replacement Project Professional Services 1. Construction Engineering Services 2. Construction Management Services 3. Construction Inspection Services This project is identified as Uncompleted Work and will be funded by the City of Allentown. Estimate (total not to be exceeded without further authorization): \$41,072 Table and Completion Deadline: As required to meet various critical deadlines as set forth in the osal. (For Authority Use Only)		
1			
Note: This project	is identified as Uncompleted Work and will	be funded by the City of A	llentown.
Cost Estimate (total not to be exceeded without furth	er authorization): \$41,	072
Time Table and proposal.	l Completion Deadline: As required to	meet various critical dea	dlines as set forth in the
Authorization Co		Jse Only)	
Approval:	Actual Cost:	D:	ate:

MEMORANDUM

Date: June 26, 2017

To: LCA Board of Directors

From: Phil DePoe, LCA Capital Works Program Manager

Subject: Allentown Division

Manhole Chimneys (i.e. Methodologies of Affixing Frame and Covers to Brick

Sanitary Sewer Manholes) – (Cycle 4) Construction Phase

MOTIONS / APPROVALS REQUESTED:

No.	Item	Amount
1	Capital Project Authorization – Construction Phase	\$58,000
2	Contract Awards – Construction: Joao & Bradley (*)	\$49,460

^(*) Included in the Capital Project Authorization.

PROJECT OVERVIEW:

This project will install a frame and cover anchoring system for 10 aged brick manholes identified by previous City staff. The selected anchoring systems are intended to eliminate sewage overflows during high flow events. In addition, all manholes for this project will receive new bolt-down frames if not installed.

FINANCIAL:

The project is identified as Administrative Order Work and will be funded by the City.

PROJECT STATUS:

In accordance with the Lease Agreement, the City is responsible for determining what Administrative Order (AO) work is to take place, and LCA is responsible to execute said work. The design phase of this project was previously authorized by LCA.

The project was advertised for bid on June 2, 2017. A pre-bid meeting was held on June 8, 2017. Bids were received on June 15, 2017.

THIS APPROVAL - CONSTRUCTION PHASE:

Award is contingent upon receipt of the signed Agreement, Performance and Payment Bond, and required insurance paperwork.

BIDDING SUMMARY - CONSTRUCTION CONTRACT:

This project requires a General Construction Contract. The bidding results, which reflect the Base Bid, are as follows:

Contractor	Cost
Joao & Bradley Construction	\$49,460.00
Co.	
Quick Precision Solutions, LLC	\$59,990.00

Joao & Bradley Construction Co. successfully executed this project in 2014, 2015, and 2016. Therefore, we recommend awarding the General Construction to Joao & Bradley subject to receipt of the necessary Performance Bonds, Insurance and other required documentation.

PROFESSIONAL SERVICES:

None required. The City is providing construction inspection services.

PROJECT SCHEDULE:

Assuming approval of the Construction Phase at the June 26, 2017 Board Meeting, Notice to Proceed will be issued early July 2017 with an estimated completion date of late August 2017.

FUTURE AUTHORIZATIONS:

None anticipated.

	PROJECT No.:		BUDGET FU	UND: Alle	entown Div\Wastewater\Capit			
PROJECT TITLE:		Allentown Division Manhole Chimneys Phase	(Cycle 4) - Construct	PROJECT TYPE: - Construction				
Tura Armironia	TION.	¢50 000			Construction Engineering Study			
THIS AUTHORIZA TO DATE (W/ABO		\$58,000 \$65,000		—— H	Engineering Study Equipment Purchase			
IO DATE (W/ABO	ve).	φυ3,000		—— H	Amendment No. 1			
DESCRIPTION ANI	D BENER	ITS:			7 mendment 110. 1			
CA and City staff. ow events. In add he design phase of	The sellition, all	ame and cover anchoring lected anchoring system manholes for this project was previously aut	ns are intended to eliminate will receive new bolk. The project is	nate sewage ov tt-down frames identified as A	verflows during high s if not installed. Administrative Order			
	·	the City. The project i	•	plete by late A	August 2017.			
		nemo for additional info	ormation.					
Authorization Stat	tus:							
		Pı	revious Authorizations					
	Desig	n Phase			\$7,000			
		REQUEST	ED THIS AUTHORIZ	ZATION				
		truction Phase						
	Sta				\$ 5,000			
		ofessional Services			0			
	Ge	neral Construction Co			49,460			
		Additional Authoriza	ation (1)		3,540			
	Co	ntingencies			0			
	Total	This Authorization			\$ 58,000			
	_	project will be funded by the City - ation for additional manholes if ne		· · · · · · · · · · · · · · · · · · ·	will provide			
			Future Authorization					
	None	Anticipated			\$0			
	Total	Estimated Project			\$65,000			
		3:						
REVIEW AND APP	PROVALS							
			Date C	Chief Executive (Officer Date			
	PROVALS Manager		Date C	Chief Executive (Officer Date			

FINANCE & ADMINISTRATION

ACTION ITEMS

DISCUSSION ITEMS

1. LCA Strategic Goals & Key Performance Indicators – July meeting date TBD

Authority staff will present a 2nd Quarter update on strategic goals, and share preliminary concepts of performance indicators (measures) being established to track and communicate organizational performance in the key attributes selected for improvement.

2. <u>Geographic Information System (GIS) Field Application</u> – July meeting date TBD

Authority staff will present a demonstration of a new application (app) for mobile devices that has been developed in-house to support field crews locating Authority assets.

INFORMATION ITEMS

1. 2018-2021 Capital Plan

Staff is beginning to prepare project details for the annual revision / update of the Authority's 5-year Capital Plan. Preliminary details will be presented to the Board in July or August, with public comment period and adoption planned for September and October 2017.

3. Recently Purchased Investments – Certificates of Deposit (CDs)

CERTIFICATES OF DEPOSIT							
			Gross	Date of	Date	Net Rate	
Fund	Bank	Location	Amount	Purchase	Due	%	
LLRI CR	Medallion Bank	Salt Lake City, Ut	250,000.00	5/1/17	5/1/19	1.5	
Cons Wtr (2)	American Express Bank, FSB	Salt Lake City, Ut	248,000.00	5/3/17	5/3/19	1.55	
WW Capac	Marlin Business Bank	Salt Lake City, Ut	248,000.00	5/10/17	5/10/19	1.5	
LLRI CR	Synchrony Bank	Draper Ut	248,000.00	5/26/17	5/28/19	1.65	

Cons Wtr (2) Consolidated Water (2)

LLRI CR
Cons LL2 (314)
WW Capac

Little Lehigh Relief Interceptor Capital Reserves
Consolidated Little Lehigh Relief Interceptor 2
Wastewater Capacity

2010 Wtr Cons A 2010 Water Construction, Series A Bond

Wtr R&R Renewal and Replacement

WATER

ACTION ITEMS

1. <u>Suburban Division – Pine Lakes Pumping Station Improvements</u> – June 26, 2017

This project was originally bid in July 2016 and bids were subsequently rejected due to the lack of competiveness and significant exceedance of the engineer's estimate. The purpose of this project is to upgrade the original hydropneumatic well station (built in mid-1970s) to continue the level of service, replace aged and problematic equipment, reduce the probability and consequence of risk, and prolong the useful life of the station. The station is to be upgraded to a double pumping variable speed system with full SCADA telemetry. The project bids were opened on June 1 and staff requests authorization and award at the June 26, 2017 Board meeting.

2. Suburban Division – Asset Management Facility Upgrades – June 26, 2017

Project includes the construction of improvements that were identified and prioritized in the Building Condition and Assessment Study prepared by D'Huy Engineering in accordance with LCA's asset management goal. The project scope includes structural, HVAC, and electrical/code improvements to be performed on facilities that were assigned a high risk score (high consequence and probability of failure). Nine (9) water facilities and two (2) wastewater facilities are part of the project scope. The project bids were opened on May 30, and staff requests authorization and award at the June 26, 2017 Board meeting.

3. <u>Allentown Division – Pre-Lease Valve Replacements</u> – June 26, 2017

The project scope includes the replacement of approximately 50 inoperable valves in multiple locations throughout the City that existed prior to the lease settlement. The project is classified as uncompleted work and will be funded by the City of Allentown. The project bids were opened on May 30 and staff requests authorization and award at the June 26, 2017 Board meeting.

DISCUSSION ITEMS

1. <u>Stormwater Injection Wells</u> – June 26, 2017

Authority staff will share information gathered from meetings/discussions with representatives from the Lehigh County Conservation District and the Pa. Department of Environmental Protection about the permitting process for stormwater injection wells and ways for the Authority to participate in the process to ensure its concerns about source water protection are addressed.

INFORMATION ITEMS

1. Allentown Division – Water Main Replacement Program- Cycle 3

The project is the replacement of 4.39 miles of aged and/or failing Cast Iron water main in multiple locations throughout the City. The Construction phase was approved at the 4/11/16 Board meeting. The contractor, Joao & Bradley, Inc, completed construction according to schedule. As of May 31, 2017, LCA officially submitted all project closeout documentation for the required CCRC report to the City of Allentown. This Project is identified as Schedule-7 Work and is funded by LCA Allentown Division.

2. <u>Allentown Division - Water Filtration Plant / Water Distribution: Flood Pump Replacement</u>
Upgrades to the existing stormwater pump/control for the WFP and D&C parking lot are needed due to equipment age. The existing flood pump (centrifugal) will be replaced with a new submersible flood pump. Miscellaneous electrical upgrades will also occur. In addition, a new raw water magmeter and two new chemical feed tanks will be installed at the Water Filtration

Plant. Board Approval was granted at the January 23rd Board Meeting. Construction began in April of 2017 and completion is expected by August of 2017. This capital project is funded by the LCA Allentown Division. **(No Change)**

3. <u>Allentown Division – Water System Master Plan</u>

This project involves the creation of a Master Plan for the Allentown Water Plant, water storage tanks, water storage reservoirs, pressure booster stations, raw water springs, and surface water intakes. The Master Plan will involve several key sections including, but not limited to: full-scale condition assessments, treatment process optimization, and development of short term/long term capital plans. The Master Plan is a requirement included within the City of Allentown lease, and it also needs to be updated every 5 years throughout the life of the lease. The project kick-off meeting with Arcadis was held on May 4, 2016. Multiple workshops have also been held since then. Condition Assessments and process control audits/optimizations are to the point of final drafts and short-term and long-term capital plans are being developed. The project continues to move forward and is scheduled to be completed in June/July 2017 and it will be funded by the LCA Allentown Division.

4. Allentown Division – Schantz Spring Main Replacement

The project is the replacement of approximately 2,000 linear feet of 1903 vintage 30-inch diameter water main in Martin Luther King, Jr. Boulevard from the Water Filtration Plant heading towards Schribers Bridge. This project also includes addressing other leaks that were identified during the "SmartBall" technology leak detection work completed by the City of Allentown (COA). Design is currently being finalized following review of 90% design plans by the City. This Project is identified as Schedule-7 Work and will be funded by LCA Allentown Division. (**No Change**)

5. Allentown Division - Hamilton Street Cedar Creek Bridge Water Main Relocation Project

As part of the Pennsylvania Rapid Bridge Replacement Program, the replacement of the Cedar Creek Bridge on Hamilton Street has required the relocation of approximately 500 linear feet of water main. The Design phase was approved at the December 2016 Board meeting. As of June 2, 2017 LCA's engineer, Gannett Fleming, submitted the design of the relocation plans to the state and is awaiting their response/approval. It is anticipated that this work will be reimbursed 100% by the state and that all construction related activities will be incorporated within the state's work.

6. Suburban Division – CLD Auxiliary Pump Station Project

The project will feature the installation of a new booster pumping station and water main extension to pump water from the Lower System to the Upper System. The project will also involve installation of a SCADA system. The Public Water Supply (PWS) permit application package and 70% design drawings were received from the consultant and reviewed and returned by LCA with comments. (**No Change**)

7. <u>Suburban Division – Crestwood Alternate Water Supply</u>

The project consists of abandonment of existing wells and storage tank currently serving higher elevation customers and a connection of the pumping station to the main North Whitehall Division System. The project will also involve installation of a SCADA system. The project was be advertised for bid on June 6 and bids will be received on July 7, 2017.

8. Suburban Division – Route 309 Crossing at Sand Spring Road

A 12" water line will cross Route 309 through a previously installed 24" casing. Completion of this line will bring public water to the property line of Lehigh Carbon Community College. The design phase is completed. Penndot Highway Occupancy Permits have been obtained. An

easement agreement was secured with LCCC. The project is anticipated to be constructed as part of the upcoming Suburban Division main replacement project (No Change).

9. Suburban Division - Water Main Replacement Program Cycles 1 & 2

The project consists of the replacement of 2.85 miles of aged and/or failing cast iron water main. The Construction phase was approved at the 4/11/16 Board meeting. As of May 6, 2017 the contractor, Anrich Inc., completed all punch list items and deficiencies. LCA is in the process of closing out the project by mid-summer 2017.

10. Suburban Division - Water Main Replacement Program Cycle 3

The project consists of the replacement of a minimum of 1 mile of aged and/or failing cast iron water main. The design phase of this project was approved in early 2015. As of June 2, 2017 LCA's engineer, Gannett Fleming, submitted 90% design plans for LCA review and comment. The project is anticipated to be bid in Summer 2017.

11. Suburban Division – Upper Milford-CLD Interconnection Project (Kohler Tract)

The project will feature the installation of a new booster pumping station and water main extension to pump water from the Central Lehigh Division (CLD) to the 125-lot Kohler Tract subdivision in Upper Milford Township. Design has commenced and we are in the process of easement value determination and preparing offers to the three property owners where easements are needed. Design will be completed by the end of 2017.

12. Suburban Division – Well Abandonments

The project consists of the abandonment of six wells that are no longer used due to water quality issues:WL4, WL7, NL7, NL8, NL9, and NL10. ARRO Consulting Engineers has been contacted to prepare a proposal for professional services.

13. Developments

Water system construction is occurring in the following developments:

Highgate, Phase 3 (Dunbar Tract) SF4/5, 17 residential lots (sfd), UMT

Spring View (Bortz Tract), 14 commercial units, UMT

Trexler Business Center, 1 Commercial Lot with 6 commercial buildings, LMT

Trexler Fields. Phase 1B/8/9. 100 residential lots (sfa). UMT

Water system plans are being reviewed for the following developments:

67 Werley Road, 112 apartments & clubhouse, UMT

Ciocca Audi, 1 additional commercial building at existing business, LMT

Diocesan Pastoral Center, 2 commercial lots, 3 additional lots and residual lot for existing cemetery, LMT

Farr Tract, 17 residential lots (sfd), LMT

Grant Street Townes, 18 residential lots (sfa), WashT

Green Acres Mobile Home Court, master meter 590 existing units (sfd), UMT

Hickory Park Estates, 3 residential lots (sfd), UMT

Hillview Farms, 31 residential lots (sfd), LMT/SWT

Indian Creek Industrial Park, 6 commercial lots, UMilT, water and sewer

Kohler Tract, 125 residential lots (sfa), UMilT, water and sewer

Lehigh Hills, Lot 2 Pad Sites, 2 commercial lots, UMT

Lehigh Hills, Lot 5, Phase 1, 273 apartments & clubhouse, UMT

Mary Ann's Plaza, 1 lot with 12 commercial units, NWT

Morgan Hills, 40 residential lots (sfd), WeisT, water and sewer

North Whitehall Commercial Center (Walmart), 5 commercial lots, NWT, water & sewer

Schoeneck Road - Lot 1, 1 lot warehouse, LMT, water

Shepherd's Corner, 1 commercial lot, LMT

Monthly Project Update: Report to the LCA Board of Directors

June 26, 2017

Weilers Road Twins, 82 residential lots (sfa), UMT Woodmere Estates, 60 residential units (sfd), UMT

WASTEWATER

ACTION ITEMS

1. <u>Allentown Division – Manhole Collars with Water Tight Frame and Covers: Cycle 4</u> – June 26, 2017

This project will permanently secure the frame and cover of 10 aged brick manholes identified by current LCA and City staff. This work will eliminate inflow from entering these manholes and eliminate the potential for sanitary sewer overflows (SSOs) from these manholes. Board approval of this project is requested at the June 26, 2017 Meeting. Construction is expected to begin in July of 2017. The project is identified as Administrative Order work and will be funded by the City. This will be the final cycle of the project.

DISCUSSION ITEMS

INFORMATION ITEMS

1. Allentown Division – Wastewater Treatment Plant: Miscellaneous Improvements

On 12/20/2016, the drive on Final Settling Tank #5 at Kline's Island WWTP experienced a complete failure. The drive is the original unit that was installed during construction of the clarifier in 1968. Procurement of a replacement drive has a long lead time of 14-17 weeks (update: the drive has been installed and the clarifier is now fully operational), which would place installation of the drive on a schedule well into the spring months when peak flows are often experienced and all tanks and drives must be fully operational. An emergency declaration allows staff to reduce this installation time by several weeks. A request for a retroactive emergency declaration was requested and approved at the January 9, 2017 Board meeting. The remaining mechanisms of Clarifier #5 and #6 have also reached the end of its useful life and will be replaced in late 2017. The design is currently underway and construction approval is expected this summer. This capital project will be funded by the LCA Allentown Division.

2. Allentown Division – Wastewater Treatment Plant: Digester Cover Replacements

This project involves the cover replacement of both the Primary Digester No. 1 and the Secondary Digester (the cover for Primary Digester No. 2 was previously replaced in 2010). A Major Capital Improvement (MCI) Conceptual Design has been approved by the City. Board approval of the construction phase was received at the 2/8/16 Board Meeting. The new Secondary Digester cover was installed in late October 2016 and construction was completed in late February of 2017. The new Primary No. 1 Digester is expected to be installed and operational by October 2017. This Project is identified in the Lease as a Schedule 7 (required) project and will be funded by the LCA Allentown Division. (No Change)

3. <u>Allentown Division – Kline's Island WWTP Phase 1 AO Improvements: Conceptual Design Development</u>

This portion of the Phase 1 Administrative Order project will develop conceptual designs for the blending and flow equalization alternatives at the wastewater treatment plant. This conceptual design concept has been approved by the City. The City has directed LCA to proceed with these alternatives pending a final determination in late May of 2017. Board approval has been approved for the development of this conceptual design (later to be included in the RFP for full design services). Board approval for the full engineering design phase of the project will be requested in Q4 of 2017. The project is identified as Administrative Order Work and will be funded by the City. Construction is expected to begin in early 2019 and is expected to be complete in late 2020.

4. Allentown Division – Wastewater Treatment Plant: WWTP Security Upgrades

This project involves the installation of security related equipment upgrades at the Kline's Island Wastewater Treatment Plant (WWTP). Enhanced security will further reduce the risk of breaches that may impair the operation of the facility. Board Approval of the CoStars Agreement with Tyco (to purchase the security cameras, doors, etc. upfront) was granted at the January 23rd Board Meeting. Approval of the electrical contractor to install the security equipment will was granted at the May 22, 2017 Board Meeting. Construction of the project is expected to begin in July of 2017. This Project is identified as an Uncompleted Work (UW) in the Lease Agreement and will be funded by the City of Allentown.

5. Allentown Division – Wastewater Treatment Plant: Electrical Substation Replacements

This project involves the replacement of the existing 12.4 kV Switchgear and existing Substation No. 1 and No. 2. The equipment was installed in 1977 and has reached the end of its useful life. The City has reviewed this and has approved this project as a Major Capital Project. Approval of the design engineer was granted at the May 8, 2017 Board Meeting. Approval of the construction contract will be requested at the December 11, 2017 Board Meeting. Construction of the project is expected to begin in January of 2018. This Major Capital Project will be funded by the LCA Allentown Division

6. Suburban Division - Spring Creek Pump Station

This project involves the following upgrades to the existing pumping station: Install a comminutor to reduce buildup of debris on the bar screens, replace the manually operated weir gates with new motorized weir gates, and upgrades to the SCADA system. Design of the project is 75% complete, with bid phase expected to begin in August 2017.

7. Suburban Division – Test & Seal Project, Western Lehigh Interceptor Service Area

Project consists of sanitary sewer cleaning, inspections via CCTV, cured-in-place point repairs, pressure testing and chemical grout sealing of joints, and post construction inspection for sanitary sewer lines located in western and central Lehigh County previously identified as areas subject to leakage. This project is part of the SCARP program. Construction began in August 2016 and is expected to finish by Summer 2017. (**No Change**)

8. Suburban Division – Lynn Township WWTP Improvements, Phases 1 & 2

This project will upgrade the wastewater treatment plant (WWTP) headworks to install a mechanical fine screen, in order to protect the influent pumps and mitigate rag buildup. The project is being funded by the Lynn Township Suburban Division. The Notice to Proceed was issued on 4/24/17. Due to the long lead time for delivery of the mechanical screen, work under the general construction contract is not anticipated to start until August. Some electrical work may be undertaken in the meantime. (**No change**)

9. Suburban Division - SCARP

Monthly meetings with the LCA Suburban Division Signatories began in January to negotiate a Memo of Cooperation for completion of the SCARP Capital Improvements Plan. Cash flow plans prepared by the Program Consultant have been presented to the Signatories so they can begin analyzing their borrowing needs and schedule. A communications plan has been developed to help the Signatories with discussions with their Boards and the public. The LCA AO Program Consultant will be making a presentation at both LMT and Macungie Borough at their request. Meetings are also taking place monthly with the City Signatories in preparation for signing a Memo of Understanding.

Negotiations have begun with the City Solicitor's on a Memo of Understanding for the AO Project and means for paying for the City infrastructure.

A meeting between the City, LCA, EPA, and DEP has been scheduled in Philadelphia in mid-June. Attorneys for all parties will be present. The City capital improvements plan and the LCA capital improvements plan will be presented in anticipation for the December 31 submission to EPA.

10. <u>Suburban Division – Park Pump Station Upgrade</u>

The Park Pump Station is to be upgraded to address station capacity and age/condition issues, and prolong the service life of this critical facility. The existing pumps are to be replaced with dry pit submersible units, existing motors are to be replaced with high efficiency units, and the old rheostat type motor drives are to be replaced with variable speed drives. The MCC is also to be replaced along with miscellaneous mechanical improvements. The project is currently in design phase with design completion and start of bid phase planned for Fall 2017. (**No change**)

LEHIGH COUNTY AUTHORITY

FINANCIAL REPORT – MAY 2017

FINANCIAL REPORT MAY 2017

1. SUMMARY

A. Month

				MAY 2017			
MONTH	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var
Income Statement							
Suburban Water	93,775	5,528	(68,171)	85,268	88,247	161,946	8,507
Suburban Wastewater	121,035	136,316	62,136	(9,166)	(15,281)	58,899	130,202
City Division	(625,913)	(689,370)	(1,271,591)	(391,996)	63,457	645,678	(233,917)
Cash Flow Statement (Indirect)							
Suburban Water	(42,987)	(401,011)	(587,404)	101,266	358,024	544,417	(144,253)
Suburban Wastewater	374,116	233,538	(230,810)	194,347	140,578	604,926	179,768
City Division	900,967	770,594	84,237	867,693	130,373	816,730	33,274

Net income

Suburban Water and Suburban Wastewater reported positive net income for the month. City Division was negative.

Compared to forecast, Suburban Water was better, Suburban Wastewater was lower, and City Division was better.

Compared to budget, all three funds were better.

Cash Flows

Suburban Wastewater and City Division reported positive cash flows for the month.

Compared to forecast, all three funds had better cash flows.

Compared to budget, all three funds were better.

B. YTD

				MAY 2017			
YTD	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var
Income Statement							
Suburban Water	(42,794)	(167,431)	(232,392)	206,747	124,637	189,598	(249,541)
Suburban Wastewater	539,564	388,532	(205,413)	283,715	151,033	744,977	255,849
City Division	(1,825,676)	(1,907,852)	(5,214,675)	(3,463,471)	82,176	3,388,999	1,637,794
Cash Flow Statement (Indirect)							
Suburban Water	(734,680)	(1,120,126)	(2,828,557)	323,936	385,446	2,093,877	(1,058,616)
Suburban Wastewater	1,728,072	874,640	(1,670,143)	1,251,866	853,431	3,398,215	476,205
City Division	5,423,727	5,319,967	2,320,465	2,968,179	103,760	3,103,262	2,455,548
Debt Service Coverage Ratio							
Suburban Water	1.43	1.32	1.10	1.67	0.10	0.32	(0.25)
Suburban Wastewater	8.97	8.41	2.32	7.62	0.56	6.65	1.35
City Division	1.39	1.37	1.13	1.30	0.02	0.26	0.09

Net income

YTD net income for Suburban Wastewater was positive but negative for both Suburban Water and City Division

Compared to forecast, however, all three funds had better net income.

Compared to budget, all three funds are better.

Cash Flows

YTD cash flows for both Suburban Wastewater and City Division were positive.

All three funds reported a cash flow that was higher than forecast.

All three funds have better than budget cash flow.

Debt Service Coverage Ratio

YTD debt service coverage ratios are better than forecast and budget across all three funds and the ratios for all three funds are better than the 1.20 internal target.

2. SUBURBAN WATER

A. Month

MONTH - SUBURBAN WATER				MAY 2017			
Income Statement	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var
Operating Revenues	674,048	667,789	695,883	648,062	6,259	(21,835)	25,986
Operating (Expenses)	(632,664)	(662,566)	(734,533)	(584,879)	29,902	101,869	(47,786)
Operating Income	41,384	5,223	(38,650)	63,183	36,161	80,034	(21,799)
Non-Operating Revenues (Expenses)	136,180	120,483	66,167	105,931	15,697	70,013	30,249
Income Before Interest	177,564	125,706	27,517	169,114	51,858	150,047	8,450
Interest Income	7,097	6,795	16,667	4,473	302	(9,570)	2,624
Interest Expense	(90,886)	(126,973)	(112,355)	(88,319)	36,087	21,469	(2,566)
Capital Contributions					-		<u> </u>
NET INCOME	93,775	5,528	(68,171)	85,268	88,247	161,946	8,507

Net income was positive and was favorable to forecast by \$88k. We had favorable variances to forecast across all major categories.

MONTH - SUBURBAN WATER		MAY 2017								
Cash Flow Statement (Indirect)	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var			
Net Income	93,775	5,528	(68,171)	85,268	88,247	161,946	8,507			
Add: Depreciation & Amortization	245,832	245,832	245,833	245,832	-	(1)	-			
Add: Non-Cash Interest Expense		1	-	-	(1)	-	-			
Add: Capex Charged to Expense	1,825	187	8,333	91	1,638	(6,508)	1,734			
Principal Payments	(138,969)	(128,565)	(152,816)	(136,592)	(10,404)	13,847	(2,376)			
Investments Converting To Cash		-	-	-	- 1	-	-			
New Borrowing		-	-	-	-	-	-			
Capital Expenditures	(245,450)	(523,994)	(620,583)	(93,333)	278,544	375,133	(152,117)			
NET FUND CASH FLOWS	(42,987)	(401,011)	(587,404)	101,266	358,024	544,417	(144,253)			

Cash flows were negative but better than forecast by \$358k with a favorable effect from higher net income and lower capital spending.

B. YTD

YTD - SUBURBAN WATER				MAY 2017			
Income Statement	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var
Operating Revenues	3,472,268	3,459,946	3,587,878	3,455,702	12,322	(115,610)	16,566
Operating (Expenses)	(3,176,663)	(3,230,830)	(3,672,665)	(3,070,330)	54,167	496,002	(106,333)
Operating Income	295,606	229,116	(84,787)	385,372	66,489	380,393	(89,766)
Non-Operating Revenues (Expenses)	138,294	114,417	330,835	223,780	23,876	(192,541)	(85,486)
Income Before Interest Expense	433,899	343,534	246,048	609,152	90,366	187,851	(175,253)
Interest Income	32,157	33,974	83,335	39,605	(1,817)	(51,178)	(7,448)
Interest Expense	(508,851)	(544,939)	(561,775)	(442,010)	36,088	52,924	(66,840)
Capital Contributions							
NET INCOME	(42,794)	(167,431)	(232,392)	206,747	124,637	189,598	(249,541)

YTD net income was negative but is \$125k better than forecast. This is due favorable variances across all categories except for interest income where were are down slightly.

Compared to budget, net income is favorable by \$190k due mainly, to lower operating expenses.

YTD - SUBURBAN WATER		MAY 2017								
Cash Flow Statement (Indirect)	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var			
Net Income	(42,794)	(167,431)	(232,392)	206,747	124,637	189,598	(249,541)			
Add: Depreciation & Amortization	1,229,160	1,229,160	1,229,165	1,229,160	-	(5)	-			
Add: Non-Cash Interest Expense	-	2	-	(0)	(2)	-	0			
Add: Capex Charged to Expense	2,825	934	41,665	2,395	1,891	(38,840)	430			
Principal Payments	(663,580)	(642,824)	(764,080)	(682,411)	(20,756)	100,500	18,830			
Investments Converting To Cash	-	-	-	-	-	-	-			
New Borrowing	-	-	-	-	-	-	-			
Capital Expenditures	(1,260,291)	(1,539,968)	(3,102,915)	(431,956)	279,676	1,842,624	(828, 336)			
NET FUND CASH FLOWS	(734,680)	(1,120,126)	(2,828,557)	323,936	385,446	2,093,877	(1,058,616)			

YTD cash flow is negative but is \$385k favorable to forecast on higher net income driven and lower capital spending.

Compared to budget, cash flow is favorable by \$2.1m on higher net income along with lower capital spending.

3. SUBURBAN WASTEWATER

A. Month

MONTH - SUBURBAN WASTEWATER			•	MAY 2017			
Income Statement	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var
Operating Revenues	1,425,174	1,420,980	1,603,552	1,556,271	4,194	(178,378)	(131,097)
Operating (Expenses)	(1,374,020)	(1,379,370)	(1,546,447)	(1,606,720)	5,350	172,427	232,700
Operating Income	51,154	41,610	57,105	(50,449)	9,544	(5,951)	101,603
Non-Operating Revenues (Expenses)	100,571	108,204	66,083	58,108	(7,633)	34,488	42,463
Income Before Interest Expense	151,725	149,814	123,188	7,659	1,911	28,537	144,066
Interest Income	(12,004)	4,602	9,917	785	(16,606)	(21,921)	(12,789)
Interest Expense	(18,685)	(18,100)	(70,969)	(17,610)	(585)	52,284	(1,075)
Capital Contributions							
NET INCOME	121,035	136,316	62,136	(9,166)	(15,281)	58,899	130,202

Net income was positive lower than forecast by \$15k on lower non-operating revenues and lower interest income. Interest income is being unfavorably impacted by lower invested balances.

MONTH - SUBURBAN WASTEWATER			•	MAY 2017			
Cash Flow Statement (Indirect)	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var
Net Income	121,035	136,316	62,136	(9,166)	(15,281)	58,899	130,202
Add: Depreciation & Amortization	364,694	364,694	327,083	334,133	-	37,611	30,561
Add: Non-Cash Interest Expense	3,448	2,928	-	2,865	520	3,448	583
Add: Capex Charged to Expense	-	-	25,000	119	-	(25,000)	(119)
Principal Payments	(39,449)	(39,602)	(93,946)	(41,812)	153	54,497	2,363
Investments Converting To Cash	-	-	-	-	-	-	-
New Borrowing	-	-	-	-	-	-	-
Capital Expenditures	(75,612)	(230,798)	(551,083)	(91,791)	155,186	475,471	16,179
NET FUND CASH FLOWS	374,116	233,538	(230,810)	194,347	140,578	604,926	179,768

Cash flows were positive and better than forecast due to lower capital spending.

B. YTD

YTD - SUBURBAN WASTEWATER				MAY 2017			
Income Statement	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var
Operating Revenues	7,115,814	7,144,898	7,501,667	7,459,370	(29,085)	(385,853)	(343,556)
Operating (Expenses)	(7,014,124)	(7,016,847)	(7,732,235)	(7,676,200)	2,723	718,111	662,076
Operating Income	101,689	128,051	(230,568)	(216,830)	(26,362)	332,257	318,519
Non-Operating Revenues (Expenses)	525,888	327,970	330,415	581,204	197,917	195,473	(55,316)
Income Before Interest Expense	627,577	456,021	99,847	364,374	171,556	527,730	263,203
Interest Income	2,267	23,009	49,585	3,904	(20,742)	(47,318)	(1,637)
Interest Expense	(90,280)	(90,499)	(354,845)	(84,563)	218	264,565	(5,717)
Capital Contributions							
NET INCOME	539,564	388,532	(205,413)	283,715	151,033	744,977	255,849

YTD net income is positive and is better than forecast by \$151k due to higher tapping fees that are more than offsetting some of the smaller unfavorable variances.

Compared to budget, net income is up by \$755k lower operating expenses, higher tapping fees, and lower interest expense to offset an unfavorable operating revenue variance.

YTD - SUBURBAN WASTEWATER				MAY 2017			
Cash Flow Statement (Indirect)	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var
Net Income	539,564	388,532	(205,413)	283,715	151,032	744,977	255,849
Add: Depreciation & Amortization	1,823,470	1,823,470	1,635,415	1,670,665	-	188,055	152,805
Add: Non-Cash Interest Expense	14,361	14,639	-	14,634	(278)	14,361	(273)
Add: Capex Charged to Expense	133	-	125,000	940	133	(124,867)	(807)
Principal Payments	(197,634)	(198,010)	(469,730)	(197,663)	376	272,096	29
Investments Converting To Cash	-	-	-	-	-	-	-
New Borrowing	-	-	-	-	-	-	-
Capital Expenditures	(451,822)	(1,153,991)	(2,755,415)	(520,424)	702,169	2,303,593	68,602
NET FUND CASH FLOWS	1,728,072	874,640	(1,670,143)	1,251,866	853,431	3,398,215	476,205

YTD cash flow is positive and \$853k better than forecast due to higher net income and lower capital spending.

Compared to budget, cash flow is up by \$3.4m from higher net income and lower capital spending as well.

4. CITY DIVISION

A. Month

MONTH - CITY DIVISION	MAY 2017								
Income Statement	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var		
Operating Revenues	2,538,192	2,530,388	2,230,624	2,390,293	7,804	307,568	147,898		
Operating (Expenses)	(1,916,128)	(1,942,188)	(1,871,840)	(1,565,502)	26,060	(44,288)	(350,626)		
Operating Income	622,063	588,200	358,784	824,791	33,863	263,279	(202,728)		
Non-Operating Revenues (Expenses)	(127,399)	(150,583)	(283,834)	(80,446)	23,184	156,435	(46,953)		
Income Before Interest Expense	494,665	437,617	74,950	744,345	57,048	419,715	(249,681)		
Interest Income	142,363	135,954	25,167	179,117	6,409	117,196	(36,754)		
Interest Expense	(1,262,941)	(1,262,941)	(1,371,708)	(1,315,458)	-	108,767	52,517		
Capital Contributions		<u> </u>	<u> </u>						
NET INCOME	(625,913)	(689,370)	(1,271,591)	(391,996)	63,457	645,678	(233,917)		

Net income was negative but \$63k better than forecast with favorable variances across all categories.

MONTH - CITY DIVISION				MAY 2017			
Cash Flow Statement (Indirect)	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var
Net Income	(625,913)	(689,370)	(1,271,591)	(391,996)	63,457	645,678	(233,917)
Add: Depreciation & Amortization	450,000	450,000	466,667	450,000	-	(16,667)	-
Add: Non-Cash Interest Expense	1,262,941	1,262,941	1,371,708	1,315,458	-	(108,767)	(52,517)
Add: Capex Charged to Expense	135,756	166,488	658,667	161,112	(30,732)	(522,911)	(25,356)
Principal Payments	-	-	-	-	-	-	-
Cash Outlays on Lease & Lease Reserve	-	-	(252,000)	-	-	252,000	-
Investments Converting To Cash	-	-	-	-	-	-	-
New Borrowing	-	-	-	-	-	-	-
Capital Expenditures	(321,816)	(419,465)	(889,214)	(666,881)	97,649	567,398	345,065
NET FUND CASH FLOWS	900,967	770,594	84,237	867,693	130,373	816,730	33,274

Cash flow was positive and was \$131k better than forecast due to higher net income and lower capital spending.

B. YTD

YTD - CITY DIVISION				MAY 2017			
Income Statement	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var
Operating Revenues	13,333,795	13,314,937	12,296,400	12,523,263	18,858	1,037,395	810,532
Operating (Expenses)	(8,798,649)	(8,894,941)	(9,359,200)	(8,250,176)	96,291	560,551	(548,473)
Operating Income	4,535,146	4,419,996	2,937,200	4,273,087	115,149	1,597,946	262,058
Non-Operating Revenues (Expenses)	(231,342)	(192,914)	(1,419,170)	(1,339,485)	(38,428)	1,187,828	1,108,142
Income Before Interest Expense	4,303,803	4,227,082	1,518,030	2,933,602	76,721	2,785,773	1,370,201
Interest Income	185,225	179,770	125,835	180,217	5,455	59,390	5,008
Interest Expense	(6,314,705)	(6,314,705)	(6,858,540)	(6,577,290)	-	543,835	262,585
Capital Contributions							
NET INCOME	(1,825,676)	(1,907,852)	(5,214,675)	(3,463,471)	82,176	3,388,999	1,637,794

YTD net income is negative but \$82k better than forecast with higher operating revenues and lower operating expenses partially offset by lower capital recovery and project reimbursement fees.

Compared to budget, income is \$3.4m favorable with favorable variances across all categories.

YTD - CITY DIVISION				MAY 2017			
Cash Flow Statement (Indirect)	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var
Net Income	(1,825,676)	(1,907,852)	(5,214,675)	(3,463,471)	82,176	3,388,999	1,637,794
Add: Depreciation & Amortization	2,250,000	2,250,000	2,333,335	2,250,000	-	(83,335)	-
Add: Non-Cash Interest Expense	6,314,705	6,314,705	6,858,540	6,577,290	-	(543,835)	(262,585)
Add: Capex Charged to Expense	442,358	432,439	3,293,335	1,208,588	9,919	(2,850,977)	(766,230)
Principal Payments	-	-	-	-	-	-	-
Cash Outlays on Lease & Lease Reserve	(252,000)	(252,000)	(504,000)	(250,000)	-	252,000	(2,000)
Investments Converting To Cash	-	-	-	-	-	-	-
New Borrowing	-	-	-	-	-	-	-
Capital Expenditures	(1,505,660)	(1,517,325)	(4,446,070)	(3,354,228)	11,665	2,940,410	1,848,568
NET FUND CASU EL OMO	F 400 707	5.040.007	0.000.405	0.000.470	400 700	0.400.000	0 455 540
NET FUND CASH FLOWS	5,423,727	5,319,967	2,320,465	2,968,179	103,760	3,103,262	2,455,548

YTD cash flow is positive and \$104k better than forecast on higher net income and lower capital spending.

Compared to budget, cash flow is up \$3.1m from higher net income and lower capital spending partially offset by higher interest expense and higher expensed capex.

5. FULL YEAR FORECAST

Through May, we are running favorable to forecast on net income and cash flow. That will help make up some of the interest income issue we reported for the Q2 forecast and provide some push to get us closer to budget than the forecast was.

We will report on June and then start another forecast cycle.

The Q2 Forecast for the full year is as follows:

			Variance to
	Forecast	Budget	Budget
INCOME STATEMENT			
Suburban Water	(240,735)	(34,673)	(206,061)
Suburban Wastewater	(235,352)	(237,977)	2,625
City Division	(10,277,442)	(10,217,568)	(59,874)
TOTAL LCA	(10,753,529)	(10,490,218)	(263,311)
CASH FLOW STATEMENT			
Suburban Water	8,746,797	(81,469)	8,828,266
Suburban Wastewater	37,287,310	7,121,675	30,165,635
City Division	3,359,258	3,424,640	(65,382)
TOTAL LCA	49,393,365	10,464,846	38,928,519
DEBT SERVICE COVERAGE RATIO			
Suburban Water	1.20	1.27	(0.07)
Suburban Wastewater	2.52	2.45	0.07
City Division	1.25	1.25	(0.00)

Net income

Suburban Water is down to budget due to lower interest income as invested balances are lower. Suburban Wastewater is up slightly to budget.

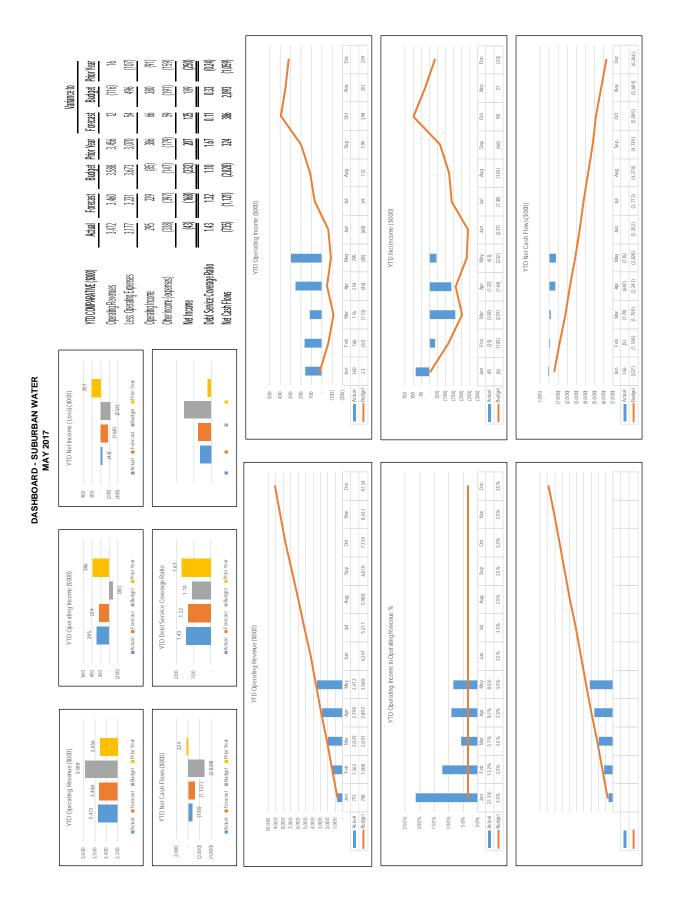
City Division is down due to lower interest income on lower invested balances

Cash Flows

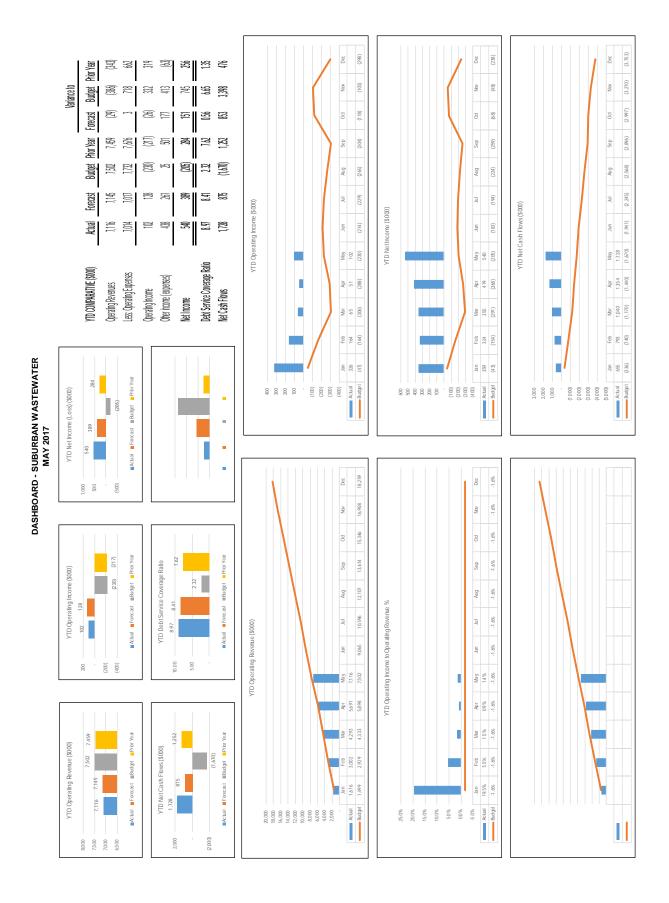
Suburban Water is up due to higher borrowing – we are borrowing \$15m to cover projects for three years instead of the budgeted \$5.9m for one year. Adjusting for borrowing, cash flow would be down on lower interest income.

Suburban Wastewater is also up due to higher borrowing as the forecast has borrowing for \$25m of AO work along with an additional \$16m of other wastewater projects covering a three year period. Adjusting for borrowing, cash flow would be up slightly on higher net income.

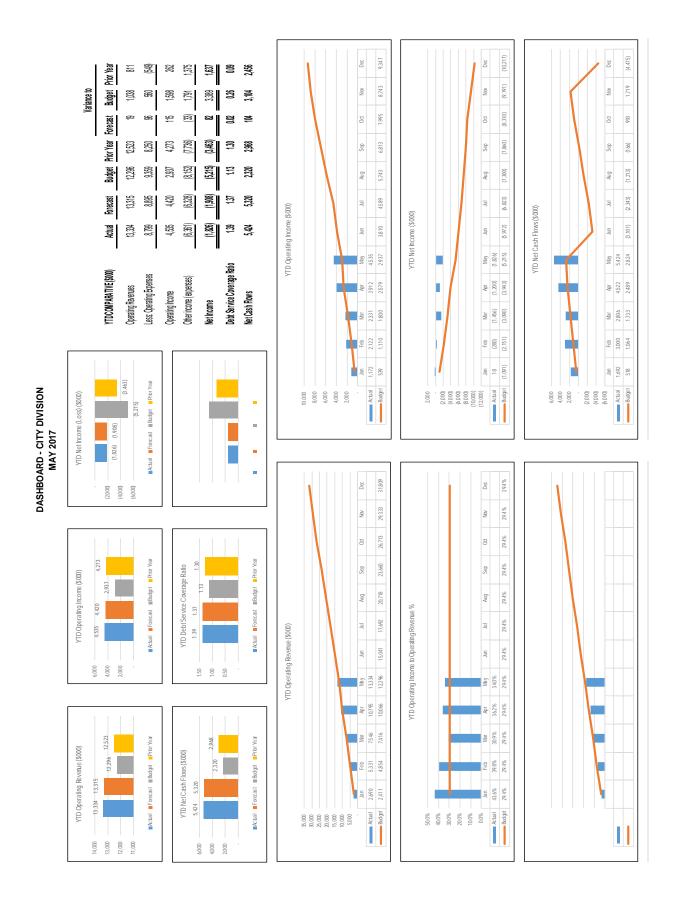
City Division is down on the lower interest income.



MONITE SIBLIDDAN WATED				MAX 2007				OTE WATER				MAN V 2044			
MONIH - SUBURBAN WAIEK Income Statement	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var	Income Statement	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var
Operating Revenues Operating (Expenses)	674,048 (632,664)	(662,566)	695,883 (734,533)	648,062 (584,879)	6,259	(21,835)	25,986 (47,78 <u>6</u>)	Operating (Expenses)	3,472,268 (3,176,663)	3,459,946 (3,230,830)	3,587,878 (3,672,665)	3,455,702 (3,070,330)	12,322 54,167	(115,610)	16,566
Operating Income	41,384	5,223	(38,650)	63,183	36,161	80,034	(21,799)	Operating Income	295,606	229,116	(84,787)	385,372	66,489	380,393	(89,766)
Non-Operating Revenues (Expenses)	136,180	120,483	66,167	105,931	15,697	70,013	30,249	Non-Operating Revenues (Expenses)	138,294	114,417	330,835	223,780	23,876	(192,541)	(85,486)
Income Before Interest	177,564	125,706	27,517	169,114	51,858	150,047	8,450	Income Before Interest Expense	433,899	343,534	246,048	609,152	90,366	187,851	(175,253)
Interest Income Interest Expense Capital Contributions	7,097	6,795	16,667 (112,355)	4,473 (88,319)	36,087	(9,570)	2,624 (2,566)	Interest Income Interest Expense Capital Contributions	32,157 (508,851)	33,974 (544,939)	83,335 (561,775)	39,605 (442,010)	(1,817)	(51,178) 52,924	(7,448)
NET INCOME	93,775	5,528	(68,171)	85,268	88,247	161,946	8,507	NET INCOME	(42,794)	(167,431)	(232,392)	206,747	124,637	189,598	(249,541)
MONTH - SUBURBAN WATER				MAY 2017				YTD - SUBURBAN WATER				MAY 2017			
Cash Flow Statement (Indirect)	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var	Cash Flow Statement (Indirect)	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PYVar
Net Income Add: Depreciation & Amortization	245,832	5,528	245,833	85,268 245,832	88,247	(1)	700'8	Net income Add: Depreciation & Amortization	1,229,160	1,229,160	1,229,165	1,229,160	124,637	189,598	(249,541)
Add: Non-Cash Interest Expense	, 100	- 15	' 00	. 5	(1)	' 60		Add: Non-Cash Interest Expense	'	2	. 100	(0)	(2)	- 000	0
Add: Capex Charged to Expense Principal Payments	(138,969)	187	(152,816)	(136,592)	(10,404)	(6,508)	1,734	Add: Capex Charged to Expense Principal Payments	(663,580)	(642,824)	(764,080)	2,395 (682,411)	1,891	100,500	430 18,830
Investments Converting To Cash New Borrowing								Investments Converting To Cash New Borrowing							
Capital Expenditures	(245,450)	(523,994)	(620,583)	(93,333)	278,544	375,133	(152,117)	Capital Expenditures	(1,260,291)	(1,539,968)	(3,102,915)	(431,956)	279,676	1,842,624	(828,336)
NET FUND CASH FLOWS	(42,987)	(401,011)	(587,404)	101,266	358,024	544,417	(144,253)	NET FUND CASH FLOWS	(734,680)	(1,120,126)	(2,828,557)	323,936	385,446	2,093,877	(1,058,616)
MONTH - SUBURBAN WATER				MAY 2017				YTD - SUBURBAN WATER				MAY 2017			
Cash Flow Statement (Direct)	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var	Cash Flow Statement (Direct)	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PYVar
Operating Revenues	674,048	667,789	695,883	648,062	6,259	(21,835)	25,986	Operating Revenues	3,472,268	3,459,946	3,587,878	3,455,702	12,322	(115,610)	16,566
Operating Expenses (Ex Depreciation) Interest Income	7,097	6,795	16,667	4,473	302	(9,570)	2,624	Operating Expenses (Ex Depreciation) Interest Income	32,157	33,974	83,335	39,605	(1,817)	(51,178)	(7,448)
Cash Available For Debt Service	294,313	257,850	223,850	313,488	36,463	70,463	(19,175)	Cash Available For Debt Service	1,556,923	1,492,251	1,227,713	1,654,137	64,672	329,210	(97,214)
Interest Payments Principal Payments	(90,886)	(126,972)	(112,355)	(88,319)	36,086	21,469	(2,566)	Interest Payments Principal Payments	(508,851)	(544,937)	(561,775)	(442,010)	36,086	52,924	(66,840)
Net Cash Available After Debt Service	64,458	2,313	(41,321)	88,576	62,145	105,779	(24,118)	Net Cash Available After Debt Service	384,492	304,490	(98,142)	529,716	80,002	482,634	(145,224)
Non-Operating Revenues (Expenses)	136,180	120.483	66.167	105,931	15.697	70.013	30.249	Non-Operating Revenues (Expenses)	138.294	114,417	330,835	223.780	23.876	(192.541)	(85,486)
Add: Capex Charged to Expense Less: Project Reimbursement	1,825 (25,397)	(37,000)	8,333	91	1,638	(6,508)	1,734 (25,397)	Add: Capex Charged to Expense Less: Project Reimbursement	2,825 (25,397)		41,665	2,395	1,891	(38,840)	430 (25,397)
Non-Cash Working Capital Changes						1	1	Non-Cash Working Capital Changes				1			
Net Cash Available For Capital	177,066	85,983	5,346	194,598	91,083	171,720	(17,532)	Net Cash Available For Capital	500,214	382,841	135,193	755,891	117,373	365,021	(255,677
Project Reimbursement Capital Contributions	25,397	37,000	27,833		(11,603)	(2,436)	25,397	Project Reimbursement Capital Contributions	25,397	37,000	139,165		(11,603)	(113,768)	25,397
Investments Converting To Cash New Borrowing								Investments Converting To Cash New Borrowing							
Capital Expenditures	(245,450)	(523,994)	(620,583)	(93,333)	278,544	375,133	(152,117)	Capital Expenditures	(1,260,291)	(1,539,968)	(3,102,915)	(431,956)	279,676	1,842,624	(828,336
NET FUND CASH FLOWS	(42,987)	(401,011)	(587,404)	101,266	358,024	544,417	(144,253)	NET FUND CASH FLOWS	(734,680)	(1,120,126)	(2,828,557)	323,936	385,446	2,093,877	(1,058,616)
DEBT SERVICE COVERAGE RATIO Total Cash Available For Debt Service	406,921	341,520	270,517	419,510				DEBT SERVICE COVERAGE RATIO Total Cash Available For Debt Service	1,672,645	1,570,602	1,461,048	1,880,312			
Dept Service	223,000	700,007	7007	/ 15 77 /				DEOL SELVCE	77/7			77 77			



SUBURBAN WASTEWATER MONTHLY FINANCIAL STATEMENTS															
MONTH - SUBURBAN WASTEWATER				MAY 2017				YTD - SUBURBAN WASTEWATER				MAY 2017			
Income Statement	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var	Income Statement	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var
Operating (Expenses)	1,425,174	1,420,980 (1,379,370)	1,603,552 (1,546,447)	1,556,271 (1,606,720)	4,194	(178,378)	(131,097)	Operating Revenues Operating (Expenses)	7,115,814 (7,014,124)	7,144,898 (7,016,847)	7,501,667 (7,732,235)	7,459,370 (7,676,200)	(29,085)	(385,853)	(343,556) 662,076
Operating Income	51,154	41,610	57,105	(50,449)	9,544	(5,951)	101,603	Operating Income	101,689	128,051	(230,568)	(216,830)	(26,362)	332,257	318,519
Non-Operating Revenues (Expenses)	100,571	108,204	66,083	58,108	(7,633)	34,488	42,463	Non-Operating Revenues (Expenses)	525,888	327,970	330,415	581,204	197,917	195,473	(55,316)
Income Before Interest Expense	151,725	149,814	123,188	7,659	1,911	28,537	144,066	Income Before Interest Expense	627,577	456,021	99,847	364,374	171,556	527,730	263,203
Interest Income Interest Expense Capital Contributions	(12,004)	4,602	9,917	785 (17,610)	(16,606)	(21,921)	(12,789)	Interest Income Interest Expense Capital Contributions	2,267 (90,280)	23,009 (90,499)	49,585 (354,845)	3,904 (84,563)	(20,742)	(47,318)	(1,637)
NET INCOME	121,035	136,316	62,136	(9,166)	(15,281)	58,899	130,202	NET INCOME	539,564	388,532	(205,413)	283,715	151,033	744,977	255,849
MONTH - SUBURBAN WASTEWATER				MAY 2017				YTD - SUBURBAN WASTEWATER				MAY 2017			
Cash Flow Statement (Indirect)	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var	Cash Flow Statement (Indirect)	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PY Var
Net Income	121,035	136,316	62,136	(9,166)	(15,281)	58,899	130,202	Net Income	539,564	388,532	(205,413)	283,715	151,032	744,977	255,849
Add: Non-Cash Interest Expense	3.448	2.928	- 25,000	2.865	520	3.448	583	Add: Non-Cash Interest Expense	14.361	14.639	- 1,000,1	14,634	(278)	14.361	(273)
Add: Capex Charged to Expense			25,000	119		(25,000)	(119)	Add: Capex Charged to Expense	133	- 6	125,000	940	133	(124,867)	(807)
Principal Payments Investments Converting To Cash	(39,449)	(39,602)	(33,340)	(41,812)	3 '	784,497	2,303	Principal Payments Investments Converting To Cash	(197,034)	(198,010)	(469,730)	(197,003)	3/6	272,030	8 '
New Borrowing	•							New Borrowing							•
Capital Expenditures	(75,612)	(230,798)	(551,083)	(91,791)	155,186	475,471	16,179	Capital Expenditures	(451,822)	(1,153,991)	(2,755,415)	(520,424)	702,169	2,303,593	68,602
NET FUND CASH FLOWS	374,116	233,538	(230,810)	194,347	140,578	604,926	179,768	NET FUND CASH FLOWS	1,728,072	874,640	(1,670,143)	1,251,866	853,431	3,398,215	476,205
MONTH - SUBURBAN WASTEWATER				MAY 2017				YTD - SUBURBAN WASTEWATER				MAY 2017			
Cash Flow Statement (Direct)	Actual	Forecast	Budget		FC Var	Bud Var	PY Var	Cash Flow Statement (Direct)	Actual	Forecast	Budget	Prior Year	FC Var	Bud Var	PYVar
Operating Revenues Operating Expenses (Ex Depreciation) Interest Income	1,425,174 (1,009,326) (12,004)	1,420,980 (1,014,676) 4,602	1,603,552 (1,219,364) 9,917	1,556,271 (1,272,587) 785	4,194 5,350 (16,606)	(178,378) 210,038 (21,921)	(131,097) 263,261 (12,789)	Operating Revenues Operating Expenses (Ex Depreciation) Interest Income	7,115,814 (5,190,654) 2,267	7,144,898 (5,193,377) 23,009	7,501,667 (6,096,820) 49,585	7,459,370 (6,005,535) 3,904	(29,085) 2,723 (20,742)	(385,853) 906,166 (47,318)	(343,556) 814,881 (1,637)
Cash Available For Debt Service	403.844	410.906	394.105	284.469	(7.062)	9.739	119,375	Cash Available For Debt Service	1.927.427	1.974.531	1,454,432	1.457.739	(47.104)	472.995	469.688
Interest Payments Principal Payments	(39,449)	(15,172)	(70,969)	(14,746)	153	55,731	(492)	Interest Payments Principal Payments	(75,919)	(75,859)	(354,845)	(197,663)	376	278,926	(5,990)
Net Cash Available For Debt Service	349,157	356,132	229,190	227,911	(6,975)	119,967	121,246	Net Cash Available For Debt Service	1,653,873	1,700,661	629,857	1,190,146	(46,788)	1,024,016	463,727
Non-Operating Revenues (Expenses) Add: Capex Charged to Expense Less: Project Reimbursement Non-Cash Working Capital Changes	100,571	108,204	66,083	58,108	(7,633)	34,488 (25,000)	42,463	Non-Operating Revenues (Expenses) Add: Capex Charged to Expense Less: Project Reimbursement Non-Cash Working Capital Changes	525,888	327,970	330,415	581,204	197,917	195,473 (124,867)	(807)
Net Cash Available For Capital	449,728	464,336	320,273	286,139	(14,608)	129,455	163,589	Net Cash Available For Capital	2,179,893	2,028,632	1,085,272	1,772,291	151,262	1,094,621	407,603
Project Reimbursement	·	•	•		•	•	•	Project Reimbursement	'	•					
Capital Contributions Investments Converting To Cash New Borrowing								Capital Contributions Investments Converting To Cash New Borrowing							
Capital Expenditures	(75,612)	(230,798)	(551,083)	(91,791)	155,186	475,471	16,179	Capital Expenditures	(451,822)	(1,153,991)	(2,755,415)	(520,424)	702,169	2,303,593	68,602
NET FUND CASH FLOWS	374,116	233,538	(230,810)	194,347	140,578	604,926	179,768	NET FUND CASH FLOWS	1,728,072	874,640	(1,670,143)	1,251,866	853,431	3,398,215	476,205
DEBT SERVICE COVERAGE RATIO Total Cash Available For Debt Service Debt Service	504,415	519,110	485,188	342,696				DEBT SERVICE COVERAGE RATIO Total Cash Available For Debt Service Debt Service	2,453,447	2,302,501	1,909,847	2,039,883			
DSCR	9.22	9.48	2.94	90.9				DSCR	8.97	8.41	2.32	7.62			



Month Latry Daysion Actual Actual Research Forecast Budget Budget Prior Year FC Vor Operating Revenues 2.538, 182 2.530, 388 2.530, 388 2.530, 288 7.290, 624 7.894 Operating Revenues (1.916, 129) (1.92, 189) <th> Columbia Columbia</th> <th>PY Var 147,896 (202,728) (46,963) (46,963) (249,681) (249,681) (249,681) (245,617) (233,917) (25,36) (25,36) (25,36) (25,36) (25,36) (25,36) (25,36)</th> <th>TYD - CITY DIVISION TYD - CITY DIVISION TYD - CITY DIVISION Operating Revenues Operating Revenues Operating Revenues Operating Revenues Non-Operating Revenues Non-Operating Revenues Expense Capital Contributions NET INCOME YTD - CITY DIVISION Cash Flow Statement (Indirect) Net Income The Contributions Net Income Cash Flow Statement (Indirect) Net Income The Contributions Net Income Cash Revenue Cash Country Division Net Revenue Cash Country on Lease & Lease Reserve Investments Converting To Cash New Borrowing Capital Expenditures NET FUND CASH FLOWS</th> <th>Actual 13.333,786 (6.786,649) 4,533,786 (231,342) 4,333,803 (3.314,705) (1,825,676) (2.260,000 6,314,705 (2250,000 6,314,705 (</th> <th></th> <th>Budget P 12,296,400 11 (9,359,200) ((2,337,200 4 (1,419,170) ((</th> <th>MAY 2017 Prior Year 12,523,263 (8,250,176)</th> <th>FC Var 18,858 1,0</th> <th></th> <th>PY Var</th>	Columbia Columbia	PY Var 147,896 (202,728) (46,963) (46,963) (249,681) (249,681) (249,681) (245,617) (233,917) (25,36) (25,36) (25,36) (25,36) (25,36) (25,36) (25,36)	TYD - CITY DIVISION TYD - CITY DIVISION TYD - CITY DIVISION Operating Revenues Operating Revenues Operating Revenues Operating Revenues Non-Operating Revenues Non-Operating Revenues Expense Capital Contributions NET INCOME YTD - CITY DIVISION Cash Flow Statement (Indirect) Net Income The Contributions Net Income Cash Flow Statement (Indirect) Net Income The Contributions Net Income Cash Revenue Cash Country Division Net Revenue Cash Country on Lease & Lease Reserve Investments Converting To Cash New Borrowing Capital Expenditures NET FUND CASH FLOWS	Actual 13.333,786 (6.786,649) 4,533,786 (231,342) 4,333,803 (3.314,705) (1,825,676) (2.260,000 6,314,705 (2250,000 6,314,705 (Budget P 12,296,400 11 (9,359,200) ((2,337,200 4 (1,419,170) ((MAY 2017 Prior Year 12,523,263 (8,250,176)	FC Var 18,858 1,0		PY Var
Actual Forecast Budget Prior Veal		(202,728) (202,728) (46,963) (46,963) (246,681) (26,961) (23,917) (23,917) (23,917) (23,917) (23,917) (23,917) (23,917) (23,917) (23,917) (23,917) (23,917) (23,917)	Income statement Operating (Expenses) Operating (Expenses) Operating (Expenses) Income Before Interest Expenses Income Before Interest Expense Interest Expense Interest Expense Interest Expense April Contributions NET INCOME NET INCOME Add: Dependent of Amontzation Add: Operation & Amontzation Add: Operation & Amontzation Add: Operation of Amontzation And Operation of Amontzation Amontzation Amontzation Amontzation Amontzation Add: Operation Amontzation Amontzation Add: Operation Amontzation Amontzation Add: Operation Amontzation Add: Operation Amontzation Amontzation Add: Operation Amontzation Add: Operation Amontzation Amontzation Add: Operation Amontzation Amontzation Add: Operation Amontzation Amontzation Add: Operation Amontzation Amontzation Amontzation Add: Operation Amontzation Amontzation Amontzation Amontzation Add: Operation Amontzation Amon	Actual A		4 1 4 1 1 1 4	12,523,263 (8,250,176)	4 1	-	PY Va
(1,262,913)		(350,628) (202,728) (46,963) (249,681) (36,754) 52,517 (233,917) (25,357) (26,356) (26,357) (26,356) (26,357) (26,356) (26,356) (26,356) (346,065	Operating Ricentuses Operating Ricentuses Operating Revenues (Expenses) Income Before Interest Expense Interest Income Capital Contributions NET INCOME State Income Add: Dependation & Amortization Add: Caper Origad to Expense Add: Caper Origad to Expense Principal Payments Cash Interest Expense Add: Caper Origad to Expense Principal Payments Cash Interest Expense Principal Payments Cash Outlays on Lease & Lease Reserve Investments Converting To Cash New Borrowing Capital Expenditures NET FUND CASH FLOWS	(5.785,4789 (6.786,649) (6.21,342) (6.314,705) (1.825,676) (1.825,676) (2.250,000) (2.250,000) (2.250,000) (2.250,000) (2.250,000) (2.250,000) (2.250,000) (2.250,000) (2.250,000) (2.250,000) (2.250,000) (2.250,000) (2.250,000) (2.250,000) (2.250,000) (2.250,000) (2.250,000) (2.250,000) (2.250,000)			(8,250,176)			
(625,913) (689,200 358,784 824,791 (127,399) (150,583) (283,834) (80,446) (142,363 15,984 15,117 (142,363 15,984 15,117 (142,363 15,984 15,384 14,384 15,384		(2.22,728) (46,963) (2.49,681) (3.6,77 (3.5,57 (2.33,917) (2.33,917) (2.33,917) (2.33,917) (2.35,917) (2.35,917) (2.35,917) (2.35,917) (2.35,917) (2.35,917) (2.35,917)	Operating Income Non-Operating Resenues (Expenses) Income Before Interest Expense Interome Acti Dependent Annortzation Acti Chord-Cash Interest Expense Principal Payments Cash Outlays on Lease & Lease Resene Principal Payments Cash Outlays on Lease & Lease Resene Interpense Covering To Cash New Borrowing Capital Expenditures NET FUND CASH FLOWS YTD -CITY DIVISION	4,525,146 (231,342) 4,303,803 185,225 (6,314,705) (1,825,676) 2,250,000 6,314,705 4,23,000 (222,000) (222,000) (222,000) (222,000) (222,000) (232,000) (232,000) (232,000)				I	1,037,395	810,532 (548,473)
(625,913) (689,370) (1,271,591) (690,446) (1,262,941) (1,262,941) (1,271,591) (1,315,458) (1,262,941) (1,271,591) (1,315,458) (1,271,591) (1,315,458) (1,271,991) (1,271,991) (1,315,458) (1,271,991) (1,271,991) (1,315,458) (1,271,991) (1,315,498) (1,271,991) (1,315,498) (1,271,991) (1,315,498) (1,271,991) (1,311,192)		(246,681) (246,681) (26,744) 52,517 (233,917) (25,386) (25,386) (25,386) (25,386) (25,386) (25,386) (25,386) (25,386) (25,386) (25,386) (25,386) (25,386)	Non-Operating Revenues (Expenses) Income Before Interest Expense Interest Income Interest Expense Capital Contributions NET INCOME YTD - CITY DIVISION Gash Flow Statement (Indirect) Net Income Add: Deposition & Amonitation Add: Deposition & Amonitation Add: Deposition of Expense Principal Payments Cash Outlays on Lease & Lesse Reserve Investments Conesting To Cash New Borrowing Capital Expenditures NET FUND CASH FLOWS	(231,342) 4,303,803 165,225 (6,314,705) (1,825,676) 2,26,000 6,314,706 442,306 (222,000) (222,000) (222,000) (323,707 (1,505,660)			4,273,087	115,149 1,	1,597,946	262,058
142,363 156,964 25,167 179,175 170,1708 142,365 156,964 25,167 179,175 170,1708		(249,681) (36,754) (23,517) (233,917) (233,917) (26,356) (26,356) (26,356) (346,065	Irronne Before Interest Expense Irrenest income Capital Contributions NET INCOME Sab Flow Statement (Indirect) Net Income Add: Dependation & Annoritzation Add: Caper Origad to Expense Principal Payments Cash Indirect Expense Add: Caper Origad to Expense Principal Payments Cash Outlays on Lease & Lease Reserve Incestnerist Concerting To Cash New Borrowing Capital Expenditures NET FUND CASH FLOWS	4,303,803 165,225 (6,314,705) (1,825,676) 4,250,000 2,250,000 6,314,705 442,385 (7,525,680) (7,525,680) (7,525,680)			(1,339,485)	(38,428) 1,	1,187,828 1	1,108,142
142,363 155,964 25,167 179,117 (425,913) (689,370) (1,271,591) (1315,489) (425,913) (689,370) (1,271,591) (391,396) (625,913) (689,370) (1,271,591) (391,396) (625,913) (689,370) (1,271,591) (391,986) (625,913) (689,370) (1,271,591) (391,986) (625,913) (689,370) (1,271,591) (391,986) (1,27,991 196,485) (1,271,591) (166,688) (321,816) (166,488 686,667 161,112 Adual Forecasi Budget Pior Year (321,816) (1,62,189) (1,62,189) (1,65,682) (419,485) (1,62,189) (1,45,963 (419,485) (1,62,189) (1,45,964 (1,27,399) (1,62,189) (1,45,964 (1,27,399) (196,583) (227,760 (1,27,399) (196,583) (227,760 (1,22,784 1,188,860 (345,701 1,534,574 (1,22,784 1,188,860 (345,701 1,534,574 (1,22,784 1,188,860 (345,701 1,534,574 (1,22,784 1,188,860 (345,701 1,534,574 (1,22,784 1,188,860 (345,701 1,534,574 (1,22,784 1,188,860 (345,701 1,534,574 (1,22,784 1,188,860 (345,701 1,534,574 (1,22,784 1,188,860 (345,701 1,534,574 (1,22,784 1,188,860 (345,701 1,534,574 (1,22,784 1,188,860 (345,701 1,534,574 (1,22,784 1,188,860 (345,701 1,534,574 (1,22,784 1,188,860 (345,701 1,534,574 (1,22,784 1,188,860 (345,701 1,534,574 (1,22,784 1,188,860 (345,701 1,534,574 (1,22,784 1,188,860 (345,701 1,534,574 (1,22,784 1,188,860 (345,701 1,534,574 (1,22,784 1,188,860 (345,701 1,534,574 (1,22,784 1,188,860 (345,701 1,534,574 (1,22,2784 1,188,860 (345,701 1,534,574 (1,22,2784 1,188,860 (345,701 1,534,574 (1,22,2784 1,188,860 (345,701 1,534,574 (1,22,2784 1,188,860 (345,701 1,534,574 1,188,860 (345,701 1,534,574 1,188,860 (345,701 1,534,574 1,188,860 (345,701 1,534,574 1,188,860 (345,701 1,534,574 1,188,860 (345,701 1,24,574 1,188,860 (345,701 1,188,860 (345,701 1,188,860		(36,754) 52,577 (233,917) PY Var (23,517) (25,557) (25,356) (25,356) (25,356) (25,356) (25,356) (33,274	Indexest income Indexest Expense Capital Contributions NET INCOME YTD -CITY DIVISION Cash Flow Statement (Indirect) Net Income Add: Dependation & Amortization Add: Caperboard interest Expense Add: Caperboard Payments Cash Outlands on Lease & Lease Reserve Innestreins Converting To Cash Incestreins Converting To Cash New Bornowing Capital Expenditures NET FUND CASH FLOWS	(6.314,705) (7.14.825,676) (1.1825,676) (1.225,670) (2.250,000) (3.14,705,670) (222,00) (222,		1,518,030	2,933,602	76,721 2,	2,785,773 1	1,370,201
Content Cont		(233,917) PY Ver (233,917) (25,366)	NET INCOME YTD - CITY DIVISION Cash Flow Statement (Indirect) Net Income Add: Depociation & Amonization Add: Depociation & Amonization Add: Capec Original to Expense Principal Payments Cash Outlays on Lasse & Lesse Reserve Investments Converting To Cash New Borrowing Capital Expenditures NET FUND CASH FLOWS	(1,825,676) (1,825,676) (1,825,676) (2,26,000) (314,706) (42,388 (252,000) (252,000) (35,423,727		125,835 (6,858,540) (6	180,217 (6,577,290)	5,455	543,835	5,008
Actual Forecast Budget Prior Year		PY Var (233,917) (25,517) (25,366) - 345,065	YTD -CITY DIVISION Cash Flow Statement (Indirect) Net Income Add: Dependation & Amortization Add: Non-Cash Interest Expense Add: Non-Cash Interest Expense Add: Open Charged to Expense Principal Payments Cash Outland on Lease & Lease Reserve Interpretation on Lease & Lease Reserve Interpretation on Lease & Lease Reserve Interpretation on Lease & Lease Reserve New Bornowing Capital Expenditures NET FUND CASH FLOWS	Actual (1,826,676) 2,226,000 6,314,705 442,386 (252,000) (1,505,660) 5,423,727		(5,214,675)	(3,463,471)	82,176 3,	3,388,999	1,637,794
Actual Forecast Budget Prior Year		PY Var (233.917) (25,366) (25,366) - 345,065	Cash Flow Statement (Indirect) Net Income Net Income Add: Dependation & Amoritzation Add: Chepercalation & Amoritzation Add: Chepercalation & Expense Add: Capex Charged to Expense Principal Payments Cash Outlays on Lease & Lease Reserve Innestrents Converting To Cash Investments Converting To Cash New Bornowing Capital Expenditures NET FUND CASH FLOWS	Actual (1,825,676) 2,2250,000 6,314,705 442,388 (25,000)		2	MAY 2017			
(625,91) (625,91) (625,98)		(233,917) (26,356) (26,356) (26,356) (27,356) (27,356) (33,274	Net Income Net Income Net Income Net Income Add: Dependation & Amortization Add: Open Class Interest Expense Add: Caper Oringed to Expense Principal Payments Principal Payments Constituting To Cash Infestionatist Converting To Cash New Borrowing Capital Expenditures NET FUND CASH FLOWS YTD -CITY DIVISION	(1,825,676) 2,260,000 6,314,705 442,358 42,368 (1,505,660) 5,423,727			Prior Year		- 1	PY Var
1,262,941 1,282,941 1,371,708 1,315,458 1,31		(52,517) (25,356) (25,346) (25,346) (25,346) (25,345,065)	Add. Nor-Cash Interest Expense Add. Caper Oringed to Expense Principal Payments Principal Payments Cash Outlays on Lease & Lease Resene Investments Converting To Cash New Borrowing Capital Expenditures NET FUND CASH FLOWS	6,314,705 442,358 (252,000) (1,505,660) 5,423,727			(3,463,471)	82,176 3,	3,388,999 1	1,637,794
.ee 1.32,756 1.66,488 6.68,667 161,112 .ee 1.321,816 (419,465) (889,214) (686,881) .ee 2.533,182 2.550,382		(25, 356)	Addic Caper Orlanged to Expense Principal Payments Cash Outlays on Lease & Lease Reserve Investments Converting To Cash New Bornowing Capital Expenditures NET FUND CASH FLOWS YTD - CITY DIVISION	(252,000) (252,000) (1,505,660) (1,505,727	Н	Ш	6,577,290		(543,835)	(262,585)
1,222,784 1,189, 686, 677, 70, 689 1,419, 689 1,4		33,274	Cash Outlays on Lease & Lease Resene Investments Converting To Cash New Bornowing Capital Expenditures NET FUND CASH FLOWS YTD - CITY DIVISION	(1,505,660)	432,439	3,293,335	1,208,588	9,919 (2,4	(2,850,977)	(766,230)
1,222,784 1,199,890,214 1,594,893 1,159,893		345,066	measments Convering to Casin New Bornowing Capital Expenditures NET FUND CASH FLOWS	(1,505,660)	(252,000)	(504,000)	(250,000)		252,000	(2,000)
(321,816) (419,465) (889,214) (666,881)		33,274	Capital Expenditures NET FUND CASH FLOWS YTD - CITY DIVISION	(1,505,660)						
MAY 2017 MAY 2017 MAY 2017 MAY 2017		33,274	NET FUND CASH FLOWS YTD - CITY DIVISION	5,423,727	(1,517,325) (4	(4,446,070)	(3,354,228)	11,665 2,9	2,940,410 1	1,848,568
Addual Forecast Budget Prior Year			YTD - CITY DIVISION		5,319,967	2,320,465	2,968,179	103,760 3,	3,103,262 2	2,455,548
Adual Forecast Budget Prior Year 2,533,192 2,550,382 2,250,382 2,250,283						7W	MAY 2017			
2.539122 2.530,388 2.220,624 2.930,289 (1,466,128) (1,466,128) (1,466,128) (1,466,128) (1,466,128) (1,466,128) (1,466,128) (1,465,130) (1,115,502] (1,115,502] (1,115,502] (1,115,117] (1,115,117] (1,115,117] (1,117,118] (1,117,118] (1,117,118] (1,117,118] (1,117,118] (1,117,118] (1,117,118] (1,117,118] (1,117,118] (1,117,118] (1,117,118] (1,117,118] (1,117,118] (1,117,118] (1,117,118] (1,117,118] (1,117,118] (1,118] (1,118] (1,		PY Var	Cash Flow Statement (Direct)	Actual	Forecast	Budget P	Prior Year	FC Var	Bud Var	PY Var
(1,465,128) (1,462,164) (1,465,170) (1,115,602) (1,465,128) (1,465,164) (1,115,602) (1,115,602) (1,115,104) (1,115,104) (1,1174,154) (1		147,898	Operating Revenues	13,333,795	1	4	12,523,263		1,037,395	810,532
Service 1,214,427 1,174,154 860,618 1,453,908 Debt Service 1,214,427 1,174,154 860,618 1,453,908 Expenses 1,214,427 1,174,154 860,618 1,453,908 Expenses 1,214,427 1,174,154 860,618 1,453,908 Expense 1,214,427 1,174,154 860,618 1,453,908 Indicator 1,223,999 (150,563) (283,834) (90,46) Indicator 1,222,784 1,188,860 645,701 1,534,574 Capital 1,222,784 1,188,860 645,701 1,534,574		(350,626)	Operating Expenses (Ex Depreciation) Interest Income	(6,548,649)	- 1	(7,025,865) (((6,000,176)	291	477,216 59,390	5,008
Debt Service 1,214,427 1,174,154 850,618 1,453,908 (127,399) (150,583) (283,834) (80,446) (17112 (179,194) (179,775)	40,273 363,809	(239,482)	Cash Available For Debt Service	6,970,371	6,849,767	5,396,370	6,703,304	120,604 1,4	1,574,001	267,067
Debt Service 1,214,427 1,174,154 860,618 1,453,908 (Expenses) (127,399) (150,583) (283,894) (80,446) (150,486) (150,486) (160,488) (160,			Interest Payments	•	•	•	•	•		
Debt Service 1,214,427 1,174,154 860,618 1,453,908 (Expenses) (127,399) (150,583) (283,834) (80,446) (282,709) (150,583) (282,709) (287,750) (17,112 (17,112) (17,112			Pincipal Payments		1	1	1	'	Ï	
S (Expenses) (127,399) (150,583) (283,834) (80,446) Expense 138,766 166,7780 161,112 R Lease Resene 1,522,780 - - Ital Changes - - - Capital 1,222,784 1,189,880 645,701 1,534,574 - - - - - -	40,273 363,809	(239,482)	Net Cash Available For Debt Service	6,970,371	6,849,767	5,396,370	6,703,304	120,604 1,4	1,574,001	267,067
Expense 135,750 100,488 005,007 101,112 8 Lass Reserve - (1,189) (287,750) - (262,000) -		(46,953)	Non-Operating Revenues (Expenses)	(231,342)			(1,339,485)			,108,14
A Lasse Reserve . (252,000)	1,199 327,750	(25,356)	Add: Capex Charged to Expense Less: Project Reimbursement	(123,598)	(165,996)	3,293,335	1,208,588	42,398 1,4	1,515,152	(123,598)
Capital 1,222,784 1,188,880 645,701 1,534,574 1,199 327,750	- 252,000		Cash Outlays on Lease & Lease Reserve Non-Cash Working Capital Changes	(252,000)	- 1	(504,000)	(250,000)			(2,00
. 1,199 327,750	33,924 577,083	(311,790)	Net Cash Available For Capital	6,805,789	6,671,296	5,127,785	6,322,407	134,493 1,0	1,678,004	483,382
	(1,199) (327,750)		Project Reimbursement	123,598	165,996	1,638,750		(42,398) (1,	(1,515,152)	123,598
Investments Converting to Cash			Capital Collinguitors Investments Converting To Cash							
			New Borrowing			•				
Capital Expenditures (321,816) (419,465) (889,214) (666,881) 97,649	97,649 567,398	345,065	Capital Expenditures	(1,505,660)	(1,517,325) (4	(4,446,070)	(3,354,228)	11,665 2,9	2,940,410	1,848,568
NET FUND CASH FLOWS 900,967 770,594 84,237 867,693 130,373	130,373 816,730	33,274	NET FUND CASH FLOWS	5,423,727	5,319,967	2,320,465	2,968,179	103,760 3,	3,103,262 2	2,455,548
DEBT SERVICE COVERAGE RATIO			DEBT SERVICE COVERAGE RATIO							
Net Cash Available For Debt Service 1,222,784 1,188,880 897,701 1,534,574 504,000 504,			Net Cash Available For Debt Service	7,057,789	6,923,296	5,631,785	6,572,407			
1,726,784 1,692,860 1,401,701			Total Available	7,561,789	1	1	7,072,407			
1,087,310 1,087,310			Debt Service	5,436,550		Ш	5,436,550			

Lehigh County Authority

System Operations Review - May 2017

Presented: June 26, 2017

	<u>System</u>	<u>Description</u>	<u>May-17</u>	<u>2017-to-Date</u>	2016 Totals	<u>Permit</u>
			Daily Avg (MGD)	Daily Avg (MGD)	Daily Avg (MGD)	Daily Max (MGD)
Water Production	Allentown	Total	21.27	21.23	20.41	39.0
		Schantz Spring	6.76	6.44	5.91	9.0
			3.92	3.90	3.86	4.0
		Little Lehigh Creek	10.51	10.81	10.46	30.0
		Lehigh River	0.07	0.07	0.18	28.0
	Central Lehigh	Total	9.94	9.05	9.27	19.04 MGD Avg
		Feed from Allentown	7.02	7.03	5.99	7.0 MGD Avg 10.5 MGD Max
		Well Production (CLD)	2.92	2.02	3.28	8.54 MGD Avg
		Sum of all (12) other Suburban Water Systems	0.17	0.17	0.19	1.71 Sum of all wells
Wastewater Treatment		Kline's Island	31.48	30.83	29.67	40.0
		Pretreatment Plant	4.42	4.27	4.33	5.75 (design capacity)
		Sum of all (5) other Suburban WW Systems	0.16	0.17	0.17	0.36
			<u>May-17</u>	2017-to-Date	2016 Totals	
Precipitation Totals (inches	:)		4.21	17.18	36.82	
Compliance Reports Submitted to Allentown	l		18	140	0.50	
			10	140	269	
Notices of Violation (NOVs)		(Allentown + Suburban)	0	0	3	
	Os)/Bypasses	(Allentown + Suburban) (Allentown + Suburban)				
Notices of Violation (NOVs)	Os)/Bypasses		0	0	3	
Notices of Violation (NOVs) Sanitary Sewer Overflows (SS	Os)/Bypasses	(Allentown + Suburban)	0	0	3	
Notices of Violation (NOVs) Sanitary Sewer Overflows (SS		(Allentown + Suburban) Allentown	2	0 10 9	3 16 19	
Notices of Violation (NOVs) Sanitary Sewer Overflows (SS Main Breaks Repaired	ries	(Allentown + Suburban) Allentown Suburban	0 2 2	0 10 9	3 16 19	
Notices of Violation (NOVs) Sanitary Sewer Overflows (SS Main Breaks Repaired Customer Service Phone Inqui	ries	(Allentown + Suburban) Allentown Suburban (Allentown + Suburban)	0 2 2 0 2,224	0 10 9 3 11,466	3 16 19 11 28,099	
Notices of Violation (NOVs) Sanitary Sewer Overflows (SS Main Breaks Repaired Customer Service Phone Inqui Water Shutoffs for Non-Payme	ries	(Allentown + Suburban) Allentown Suburban (Allentown + Suburban) (Allentown + Suburban)	0 2 2 0 2,224	0 10 9 3 11,466 738	3 16 19 11 28,099 1,685	

Significant Repairs:

KIWWTP Primary Digester #1 cover replacement is going well and construction is scheduled to be complete by the end of by Q3 2017.

Description of NOVs and/or SSOs:

There was (1) SSO in the city and (1) bypass in suburban during May. The city SSO resulted from a blockage on an 8" sanitary line. The bypass in suburban happened at Sand Springs WWTP and resulted from a 3/4" air line gate valve on the sludge wasting line not being fully closed. Neither event was due to a heavy rain event.

Other Highlights:

As of 6/16/2017, all counties in PA are in a "Normal" drought status. LCA is currently researching costs for establishing additional monitoring sites as we move towards a full-scale watershed monitoring program.