



LEHIGH COUNTY AUTHORITY

December 15, 2014

BOARD MEETING AGENDA

1. Call to Order
2. Review of Agenda
 - *Public Participation Sign-In Request*
3. Executive Sessions
4. Approval of Minutes
 - *November 10, 2014 Regular Meeting Minutes*
5. Public Comments
6. Action / Discussion Items

FINANCE AND ADMINISTRATION

- *2015 Budget*
- *Water/Wastewater Rate Updates*
- *LCA Laboratory Water and Wastewater Analysis Services Contract*

WATER

- *None*

WASTEWATER

- *Wynnewood Terrace Pump Station and Force Main Replacement*
- *537 Plan Study*

7. System Operations Overview
8. Staff Comments
9. Solicitor's Comments
10. Other Comments
11. Adjournment

JANUARY MEETINGS

Workshop Meeting
Board Meeting

January 12 – 12:00 p.m.
January 26 – 12:00 p.m.

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. 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.

WORKSHOP MEETING MINUTES

November 10, 2014

The Workshop Meeting of the Lehigh County Authority was called to order at 12:22 p.m., on Monday, November 10, 2014, Chairman Asa Hughes presiding. Other Members present at the commencement of the meeting were: Brian Nagle, Tom Muller, Richard Bohner, Norma Cusick, and Scott Bieber. Authority Staff present were Aurel Arndt, Liesel Adam, Bradford Landon, Ed Bielarski, Frank Leist, Dan Standish, Pat Mandes, John Parsons, and Lisa Miller.

PUBLIC COMMENTS

Barbara Haver-Mentzer was present to discuss and ask for relief of an ongoing bill dispute regarding her property at 40 S. Howard St., Allentown. The disputed amount reflects the excess water charges generated as a result of a water leak. The water leak was discovered when the bill for the period of 11/21/13 to 3/3/14 was opened in April 2014. When Ms. Haver-Mentzer and her plumber, Mr. Bradley, arrived at the property, they observed that the leak was due to a large nut on the meter connection and the set bolt to hold it in place were both loose. Once the bolt was tightened, the leak was stopped. An LCA technician was called and visited the property. The LCA technician reported that the meter was in an exterior coal bin with no insulation to protect the meter from freezing. It was also reported that there were no drains or other connections to the sewer system in the vicinity, so the water did not leak into the sewer system. Ms. Haver-Mentzer stated that a new water meter was installed by a City subcontractor on July 23, 2013. The customer experienced no leakage or other issues with the meter for at least six months after the installation. LCA has provided credits for the sewer flow charges for leaked water that did not enter the sewer system, including waivers of late payment charges. Pictures of the leak and the meter were shown to the Board. Ms. Adam explained the process of reading meters and how the high-usage bills are reviewed by LCA staff.

Some discussion followed regarding the Lease Agreement protocol for this type of situation. Mr. Arndt said that there is clear language in the Concession Agreement that all events and circumstances prior to August 8, 2013 are the City's responsibility and those after that date are LCA's responsibility. Also, it was considered an uncompleted work issue for which the City retained responsibility.

Ms. Haver-Mentzer said that they have been in contact with Mr. Lightner, Risk Manager for the City, and he is looking into it but advised them to seek an appeal thru the LCA Board. Mr. Hughes expressed his opinion that the Board can control the accruing penalties but Ms. Haver-Mentzer should continue to work with the City on resolution to the investigation on the leaking meter installation.

The Chairman called for an Executive Session at 1:05 PM. to discuss potential litigation, at which time the Mentzers and Mr. Bradley left the meeting. The Executive Session ended at 1:22 PM.

ACTION AND DISCUSSION ITEMS

Drug & Alcohol Policy

Ms. Adam presented the Drug & Alcohol Policy to the Board for review and approval. There was some discussion regarding the wording under the Policy.

On motion made by Mr. Muller, seconded by Mr. Nagle, the Board unanimously approved the Drug & Alcohol Policy with minor language amendments as presented during discussion (7-0).

2014 Audit and Zelenkofske Axelrod extension

Mr. Bielarski referred to the extension letter from the Authority's auditor, Zelenkofske Axelrod, LLC. He recommends approving the extension because of the smooth nature that Zelenkofske Axelrod has brought to the transition of the audit when including the Allentown Concession and their familiarity with the current financial state of the Authority. He does, however, recommend putting a full bid out next year for audit services.

On a motion made by Mr. Bohner, seconded by Ms. Cusick, the Board unanimously approved the extension for Zelenkofske Axelrod LLC (7-0).

Budget Assumptions

Mr. Bielarski presented the 2015 Budget Assumptions that included projections thru 2017. He briefly explained estimates for the following categories: Staffing, Employee Benefits, Overall Operational Costs, and Internal Services. Some discussion followed.

Mr. Hughes announced that LCA received Certificates of Recognition from the Commonwealth of Pennsylvania House of Representatives, State Senate, and the Lehigh Valley Planning Commission for receiving the 2014 Lehigh Valley Planning Commission Award as a Multi-Municipal Cooperation Honoree for the Allentown Concession project.

Mr. Hughes turned the meeting over to Vice Chairman Muller and left the meeting at 1:55 PM.

City Signatory Flow Meter Evaluation

Ms. Mandes presented the Professional Services Authorization for Consulting Services by Arcadis in the amount of \$33,000.00, for the Board's consideration and approval. Some discussion followed.

On motion made by Mr. Bohner, seconded by Ms. Cusick, the Board unanimously approved the Professional Service Authorization in the amount of \$33,000.00 (6-0).

Allentown Division – Manhole Collars with Water Tight Frame and Covers

Mr. Leist gave an overview of the project to the Board. The project is to address part of the work necessary for the U.S. Environmental Protection Agency (EPA) Administrative Order and will be funded by the City. Three bids were received and Joao & Bradley was the low bidder at \$99,050. There are no issues with this bidder. Mr. Leist said he recommends the Board approve the Capital Project Authorization Amendment No. 1 – Construction Phase for \$146,254, the Professional Services Authorization Amendment No. 1 – Construction Phase for \$18,056 and the Contract Award for \$99,050.

On a motion made by Mr. Lyons, seconded by Mr. Bohner, the Board unanimously approved the Capital Project Authorization, the Professional Services Authorization and the Award of the Contract (6-0).

The Vice Chairman called another Executive Session at 2:07 PM to discuss potential litigation.

The Executive Session ended at 2:23 PM at which time the Staff left the meeting and the Executive Session continued to discuss personnel matters. The Executive Session ended at 2:38 PM.

SYSTEM OPERATIONS OVERVIEW

None.

STAFF COMMENTS

None.

SOLICITOR'S COMMENTS

None.

OTHER COMMENTS

None.

ADJOURNMENT

There being no further business, the Chairman adjourned the meeting at 2:38 p.m.

Richard H. Bohner, Secretary



LEHIGH COUNTY AUTHORITY

2015 BUDGET

Proposed: December 10, 2014



LEHIGH COUNTY AUTHORITY

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December 10, 2014

Chairman and Board Members
Lehigh County Authority
1053 Spruce Street
Allentown, PA 18106

Dear Board Members:

Two years removed from the City of Allentown Concession Lease commencement LCA has settled into its role as the area's leading regional water/wastewater operation, serving Allentown and its metropolitan suburbs. While "Integration" was last year's focus, this year's concept will be "Synergies", as we will build on organization strengths, economies of scale and enhanced productivity.

As part of the Synergies effort we will be committed to empowering our workforce to identify operational "best practices", implementing an organization-wide CMMS system and a new SCADA network. We will seek to achieve synergies with our adherence to fiscal responsibility and a prudent, business-like approach to challenges.

Operating Budget

The operating budget reflects the Authority's activities as it relates to anticipated revenues and proposed day-to-day operational and maintenance costs. The following summarizes the proposed operating budget for 2015:

	City	Suburban	Total
Operating and Other Revenue	\$ 31,467,434	\$ 25,178,730	\$ 56,646,164
Operating Expenses (net of depr'n)	<u>16,531,995</u>	<u>19,167,616</u>	<u>35,699,611</u>
Revenues Available for Debt Service	14,935,439	6,011,114	20,946,553
Debt Service	11,697,722	4,056,517	15,754,239
Debt Service Coverage	1.28	1.48	

Revenues:

The composition of Lehigh County Authority's Revenue (\$56.7 million) for 2015 is as follows:

- **Water Revenues** (\$25.3 million) – This amount is comprised of City Division Revenues (\$16.7 million) and the Suburban Division Revenues (\$8.6 million). The City Division Water Revenues are conservatively based on a residential customer growth of 1% and a wholesale water sale growth of 6.2%, due to an additional 1 mgd being withdrawn under the City Water Supply Contract.

The Suburban Division Water Revenues are based on an industrial commercial growth rate of 6.8% and residential growth of 1% (overall 3.8%). No water rate increase is anticipated for the City or Suburban Division.

- **Wastewater Revenues** (\$30.9 million) - The City Division Wastewater Revenues (\$14.3 million) is primarily derived from residential and commercial customers (\$8.1 million), which reflects growth of 1% over 2014. Other City Division Wastewater Revenues come from municipal charges (\$5.4 million), which is an overall 10% reduction as compared to 2014 estimated municipal charges and a 25% reduction from the 2014 budgeted revenue. These revenues are down due to the overall reduction in the overall annual operating costs at the Kline Island Wastewater Treatment Plant (KITP), which form the basis of billing other municipalities under the 1981 Municipal Service Agreement.

The Suburban Division Wastewater Revenues (\$16.6 million) are primarily generated from the Western Lehigh Interceptor (\$ 6.5 million) and the Pretreatment Facility (\$7.8 million).

- **Interest Income** (\$.5 million) – With returns on overnight investments and certificates of deposit at historic lows, LCA invested a major portion of idle funds in Treasury Bills and Notes over 6 months to 5 years with yields of .165 to 1.620%. Additional funds needed for current obligations are invested at yields of .010 to .070%.

Due to Lehigh County Authority's operational efficiencies in managing the KITP the average residential customer in the Western Lehigh Interceptor (WLI) and the Little Lehigh Relief Interceptor (LLRI) service areas will experience a 13% reduction from the 2014 rates. The current rates will fully support efforts to maintain and improve service, as well as continue ongoing SCARP (Sewer Capacity Assurance and Rehabilitation Program) effort to reduce leakage and other non-wastewater discharges in the area tributary to the WLI.

Although the common rate collection systems (Heidelberg Heights, Sand Spring, Upper Milford, Weisenberg and Wynnewood Terrace) reflect expenses over revenues LCA does not propose an increase to the rates at this time.

Expenses:

Lehigh County Authority's Expense Budget (\$35.9 million) for 2015 has been developed to provide safe drinking water at the most affordable cost and to manage the sewer network in the most efficient and safe manner. 80% of these costs fall within the following 6 categories:

- **Payroll and Benefits** (\$11.2 million) – Payroll and employee benefits continues to be Lehigh County Authority's largest single operating cost. The operating payroll costs of the City Division (\$7.4 million) are split between the Water Operations (\$3.3 million), the Wastewater Operations (\$3.6 million) and the Laboratory (\$.5 million).

The operating payroll costs of the Suburban Division (\$1.5 million) are spread between Water Operations (\$1.0 million) and the Wastewater Operations (\$.5 million).

The payroll costs of Internal Services (management, administration and support staff) represent \$2.3 million.

Capable, dedicated and motivated employees continue to be the key to meeting customer needs and system demands in an effective and efficient way. In addition to accomplishing day-to-day tasks, the 2015 Budget continues work to prepare for the retirement of senior employees. Continuing education and training, and maintaining a supportive work environment and developing transition plans and tools are important components of this Budget.

The 2015 Budget proposes hiring five employees, an engineer/technician at the Pretreatment Facility, a Capital Works Project Coordinator, two (2) City Division Maintenance workers and an Administrative Support Person.

LCA anticipates increases for its Suburban collective bargaining unit based on the fulfillment of criteria under the CareerPath program and accordingly proposes a 2.5% pool. The City collective bargaining unit will receive a 1.5% increase effective January 1, 2015, in accordance with its CBA, as well as any acquired step increases.

In accordance with general market conditions, the Budget proposes a merit pay pool of 3.0% for non-collective bargaining unit employees. In addition, we have included funds for a management bonus program.

It should be noted that the health insurance premiums covering the non-collective bargaining unit employees and the Suburban Division's collective bargaining unit employees decreased marginally (.6%). For these same employees, LCA increased the employee's share of the overall cost for pre-2008 employees from 7 to 9% and for post-2008 employees from 14 to 15%.

- **Suburban Division Treatment and Transportation costs** (\$6.4 million) – The Suburban Division and its Signatories incur the costs of conveying wastewater to the KITP.
- **Pretreatment contract with OMI** (\$5.3 million) – The Operations, Maintenance and Management Services Agreement for the Industrial Pre-Treatment Plant includes a base fee, an electric charge, variable charges and a repair and replacement reimbursement. These costs also include the solids removal at the Pretreatment Facility. The Authority extended this contract for another 5 years in 2013.
- **Utilities** (\$2.5 million) – Comprised primarily of electric power costs, the Authority entered into a contract with an electric supplier to lock-in fixed rates over the next three (3) years. As a result, utilities are projected to fall by \$100,000 in 2015 and remain constant through 2017.
- **Maintenance Services** (\$2.1 million) – Repair and maintenance on the major functional components of the Authority's water and wastewater system, including water mains, hydrants, meters, wells and tanks, pumps and general maintenance of the buildings and structures.
- **Purification Supplies** (\$.8 million) – Primarily the chemicals used at the City Division's Water Filtration Plant (\$.3 million) and the KITP (\$.4 million).

Debt Service:

Lehigh County Authority has separate bond indentures related to the City Division debt and the Suburban Division debt.

- On the City Division, as is required under Lehigh County Authority's Bond Indenture for the Concession Debt, revenues after the payment of operating expenses are available for the payment of debt service. This debt funded the payment of the upfront Concession payment to the City of Allentown and the five (5) year anticipated Capital Expenditures and the multiple reserves to secure bondholder's interests. Standard and Poors Rating Services currently carries an A rating on these bonds. Debt Service of \$11.7 million is budgeted for 2015. The Budget project Debt Service coverage of 1.28 which compare favorably to 1.2 time requirement in the Bond documents.
- Within the Suburban Division's Water System, as is required under the Lehigh County Authority's Bond Indentures for Water System Debt, revenues after the payment of operating expenses are available for the payment of debt service. This debt has funded the Suburban Division's Water System Capital Plan. Fitch currently carries an AA rating on these bonds. Debt Service of \$2.8 million is budgeted for 2015. The Budget project Debt Service Coverage of which compare favorably to 1.41 versus 1.1 time requirement in the Bond documents.
- Within the Suburban Division's Wastewater System, as is required under the Lehigh County Authority's Bond Indentures for Wastewater System Debt, revenues after the payment of operating expenses are available for payment of debt service. This debt has funded the Suburban Division's Wastewater Capital Plan. These bonds are not rated with any rating agency. Debt Service of \$1.3 million is budgeted for 2015.

Capital Budget

The 2014 Capital Budget is based largely on the 2015-2024 Capital Plan and involves all the stakeholders within the various operational and support functions of the organization. We believe all of the proposed projects are necessary to meet contractual obligations and the needs of future development, ensure regulatory compliance, maintain reliable, high quality service, and achieve some operational economies.

Water and wastewater capital projects will be funded by a variety of sources: capital recovery fees (CRFs); reserves from prior years derived from both CRFs and operating revenues; customer contributions and borrowed funds. Although the Authority does not anticipate any grants, we will actively pursue them if they become available. The Budget reflects CRFs adopted in 2013 and 2014. As we have done historically, we will review water and wastewater CRFs (tapping fees, connection charges, meter fees, among others) during 2015 to determine the need for fee changes.

No additional borrowing for water and wastewater projects in 2015 is anticipated except funding for the Wynnewood system improvements. As we do routinely, we will monitor bond market conditions for opportunities to refinance current debt.

The following components are part of the \$ 27.5 million 2015 capital budget:

- **City-Funded Projects** (\$5.6 million) – The Authority will work on a series of "Uncompleted Work" City Projects that were intended to be complete by the time of settlement on the Concession. The projects include SCADA upgrades (\$1.2 million), an


interim blending pumping system (\$1.3 million), valve replacements (\$1.1 million) and a variety projects, less than \$ 1 million in cost per project.

- **Required Capital Improvements Projects in the City Division** (\$7.3 million) – Under the Concession, the Lehigh County Authority agreed to fund and execute several projects to improve the water and wastewater system. In 2015, the Authority will spend \$4.3 million on the Water Main Replacement Project, \$2.4 million on the Replacement of the Motor Control Center and the remainder on the Belt Filter Press Rebuild and Replacement (\$.5 million) and some smaller projects.
- **Remaining City Division Projects** (\$5.3 million) – The largest of the remaining City Division projects is the Facility Roof Replacements (\$1.3 million). \$4 million of CapEx is left for mobile equipment, general improvements and engineering on hydraulic models and other projects (with no individual project more than \$ 1 million).
- **Suburban Division Projects** (\$8.6 million) – The Authority proposes to spend \$ 5.4 million on the wastewater system, with the largest of that CapEx going to the Western Lehigh Interceptor (\$1.5 million). \$3.2 million will be dedicated to the Suburban Water System, with \$1.0 million budgeted for Water Main Replacements.
- **Internal Services Projects** (\$.7 million) – The Authority proposes to spend the majority of this CapEX on SCADA Programming & Information Technology Master Plan Implementation (\$.4 million).

We believe the proposed 2015 Budget allows us to continue our approach of maintaining the high quality of LCA services, meeting the needs of our customer base, preparing for the challenges before us and continuing our leadership in water and wastewater service in the Lehigh Valley. We thank our customers and the communities we serve for their cooperation and guidance in our ongoing quest to provide high quality, reliable, and affordable water and wastewater service.

I also want to acknowledge our employees for their dedication and hard work; without them none of these goals would be attainable. Finally, the support and guidance provided by the LCA Board of Directors which has been invaluable in assuring high quality service to our customers, is greatly appreciated.

Sincerely,



Edward J. Bielarski, Jr.
Chief Financial Officer



Aurel M. Arndt
Chief Executive Officer

LEHIGH COUNTY AUTHORITY
SUBURBAN DIVISION

**2015 BUDGET
SUBURBAN DIVISION
SUMMARY OF REVENUES AND RESERVE FUNDS**

	2013 Actual	2014 Budget	2014 Estimate	2015 Budget
OPERATING FUNDING				
<u>OPERATING REVENUES:</u>				
Water System	\$ 7,853,780	\$ 8,382,467	\$ 8,295,028	\$ 8,582,206
Wastewater System	15,527,527	17,150,783	16,498,965	16,569,199
Total	23,381,307	25,533,250	24,793,993	25,151,405
<u>OPERATING EXPENSES (NET OF DEPRECIATION):</u>				
Water System	3,704,129	3,999,054	3,600,702	4,641,759
Wastewater System	13,780,224	14,529,865	14,161,424	14,525,857
Other Expenses				
Total	17,484,353	18,528,919	17,762,126	19,167,616
SURPLUS (DEFICIT) - OPERATING RESERVE	5,896,954	7,004,331	7,031,867	5,983,789
<u>DEBT SERVICE & RESERVES:</u>				
Interest Expense	1,576,597	1,550,329	1,516,738	1,505,622
Interest Income	(32,513)	(34,250)	(23,612)	(27,325)
Debt Retirement	2,290,759	2,371,970	2,396,286	2,543,395
Financing Fees	7,500	7,500	7,500	7,500
Total	3,842,343	3,895,549	3,896,912	4,029,192
SURPLUS (DEFICIT) AFTER USE OF RESERVES	\$ 2,054,611	\$ 3,108,782	\$ 3,134,955	\$ 1,954,597
Debt Service Coverage	1.53	1.79	1.80	1.48
CAPITAL FUNDING				
<u>NON-OPERATING REVENUES:</u>				
Water System	\$ 429,920	\$ 479,337	\$ 429,920	\$ 507,167
Wastewater System	2,603,373	1,058,040	796,202	994,000
Total	3,033,293	1,537,377	1,226,122	1,501,167
<u>CAPITAL CONTRIBUTIONS:</u>				
Water System	55,220	-	-	-
Wastewater System	1,176,094	959,300	-	-
Total	1,231,314	959,300	-	-
<u>BORROWED FUNDS & RESERVES:</u>				
Water System	3,271,113	3,997,163	3,070,080	2,678,333
Wastewater System	(200,000)	4,257,660	1,372,983	4,401,750
Total	3,071,113	8,254,823	4,443,063	7,080,083
<u>CAPITAL EXPENDITURES</u>				
Water System	3,741,534	4,476,500	3,500,000	3,185,500
Wastewater System	3,579,467	6,275,000	2,169,185	5,395,750
Total	7,321,001	10,751,500	5,669,185	8,581,250
SURPLUS (DEFICIT) - CAPITAL RESERVE FUND	\$ 14,719	\$ -	\$ -	\$ -

SUBURBAN DIVISION

WATER

**2015
BUDGET**

**WATER FUND-SUBURBAN
OPERATING BUDGET**

The Authority currently owns and operates water systems in three areas of Lehigh County - the Western Lehigh (WLSA), the Northern Lehigh (NLSA) and the Southern Lehigh (SLSA) Service Areas. In addition, the Authority owns and operates one system in Northampton County. Within each service area, separate systems are further designated as divisions. Since the Authority is funding all expenses in the majority of the divisions through a common rate, for presentation purposes this budget does not break out expenses and revenues by service area or division. However, the accounting system tracks individual division activity. Divisions currently not part of the common rate structure are; Upper Milford Central (WLSA), Welshtown Road (WTD) and Madison Park (Lynn Township).

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

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

The location, customers, source of supply and average day demand for all divisions is provided in the table attached as Exhibit A immediately following this overview.

Major Budget activities continue to place an emphasis on providing customers with outstanding service. Maintenance programs intended to prolong the usefulness of existing facilities, including preventive and predictive maintenance, leakage monitoring and repairs, exercising of system valves and fire hydrants, and station improvements and repairs, are continued from previous years.

2015 BUDGET
SUBURBAN DIVISION
SUMMARY OF REVENUES AND RESERVE FUNDS
WATER FUND - ALL SERVICE AREAS

	2013 Actual	2014 Budget	2014 Estimate	2015 Budget
OPERATING REVENUES:				
Large Industrial	\$ 872,859	\$ 960,091	\$ 1,055,213	\$ 1,061,577
Other Industrial/Commercial	2,372,947	2,711,637	2,647,928	2,857,617
Residential	3,218,823	3,353,941	3,329,255	3,433,763
Penalties	51,267	56,260	54,572	60,000
Private Fire Service	617,483	596,805	677,366	619,844
Public Fire Service	346,552	368,440	348,612	344,405
Rental Income	80,930	51,446	105,955	120,000
Interest Subsidy - 2010 A Bonds	-	207,462	-	-
Interest Income - Revenue Fund	17,573	20,000	16,115	17,500
Interest Income - Debt Service	5,085	7,500	1,553	2,500
Miscellaneous Income	292,919	76,385	76,127	85,000
Total	\$ 7,876,438	\$ 8,409,967	\$ 8,312,696	\$ 8,602,206
OPERATING EXPENSES AND DEBT SERVICE LESS COVERAGE AND DEPRECIATION	6,586,094	6,799,442	6,397,339	7,475,342
TRANSFER TO RENEWAL & REPLACEMENT RESERVE FUND	274,185	298,773	298,773	298,773
SURPLUS (DEFICIT) - OPERATING RESERVE	\$ 1,016,159	\$ 1,311,752	\$ 1,616,585	\$ 828,091
OPERATING COVERAGE (A)	1.45	1.58	1.69	1.41
CAPITAL FUNDING				
NONOPERATING REVENUES:				
Meter Sales & Installations	\$ 96,453	\$ 75,000	\$ 96,453	\$ 75,000
Supply/Special Tapping Fees	192,085	223,570	192,085	251,400
Distribution Tapping Fees	27,760	20,000	27,760	20,000
Inspection & Review Fees	62,641	65,000	62,641	65,000
Reimbursement from Wastewater Funds	26,980	71,767	26,980	71,767
Other Income	24,000	24,000	24,000	24,000
Total Nonoperating Revenues	429,920	479,337	429,920	507,167
CAPITAL CONTRIBUTIONS:				
Grants	-	-	-	-
Reimbursement from Other Entities	55,220	-	-	-
Total Capital Contributions	55,220	-	-	-
BORROWED FUNDS & RESERVES	3,271,113	3,997,163	3,070,080	2,678,333
TOTAL CAPITAL FUNDING	3,756,253	4,476,500	3,500,000	3,185,500
CAPITAL EXPENDITURES	\$ 3,741,534	\$ 4,476,500	\$ 3,500,000	\$ 3,185,500
SURPLUS TO CAPITAL RESERVE FUND	\$ 14,719	\$ -	\$ -	\$ -

(A) Equates to Operating Revenues less Operating Expenses, without Debt Service, divided by Interest expense and principal reduction. The trust indenture requires a minimum 1.1 factor.

**2015 BUDGET
SUPPORTING DETAIL
WATER FUND-SUBURBAN**

OPERATING AND NONOPERATING REVENUES

Large Industrial	For budget purposes, no growth in revenue is assumed.
Other Industrial/ Commercial/ Institutional	Ocean Spray is the primary reason for a budgeted 8% increase in this revenue category.
Residential	For budget purposes no growth in residential customers was assumed.
Private Fire Service	This classification includes private fire protection for those industrial/commercial customers who have either a sprinkler system or private fire hydrants.
Public Fire Service	For budget purposes no growth in public fire hydrant revenue was assumed.
Rental Income	Includes the annual reimbursement from the various funds for a portion of the Authority Operations Center costs and expansion.
Interest Subsidy	Represents reimbursement from federal government of 35% of interest expense due on the 2010 Build America bonds.
Reimbursement from Wastewater Funds	Represents wastewater fund share of post-retiree benefits.
Interest Income - Revenue Fund	Investment return on water operating reserves.
Interest Income - Debt Service Fund	Investment return on the Debt Service Reserve and Debt Service Fund monies. Interest income earned is used to offset interest expense.
Other Income	Includes miscellaneous revenues received for such items as damage claims, site visits for collections, reimbursement of lab costs, line location, miscellaneous water sales and violations and fines, etc.

**2015 BUDGET
SUPPORTING DETAIL
WATER FUND-SUBURBAN**

CAPITAL REVENUES

Meter Sales & Installation	Charges to new customers for initial meter and backflow prevention device costs and installation.
Supply Tapping Fees	Charges to new customers are based on connection size. These revenues offset costs related to construction of storage and supply facilities.
Distribution Tapping Fees	Charges to new customers are based on connection size. These revenues offset costs related to construction of transmission and distribution facilities. These charges are generally not applicable to customers connecting within a developer-installed distribution system.
Inspection and Review Fees	Reimbursement from developers for LCA inspection and plan review costs.
Reimbursement from Wastewater Funds	Includes recovery of costs related to the GIS project, SCADA system upgrades, Knowledge Management project and the Information Technology Master Plan Update. Such costs are being recovered over five years.
Other Income	Miscellaneous revenues for such items as new customer initiation fees, specification sales, hydrant defender sales etc.
Grant/Special Loan	Represents grants for various water projects.
Reimbursement from Other Entities	Represents reimbursement of costs from the State for the Slatedale Bridge Widening – Main Relocation project.
Borrowed Funds and Cash Cash Reserves	Bond funds will be used to pay for system improvements, while Cash Reserves will pay for those projects or equipment purchases that have a useful life less than the length of the bond issue maturity.

2015 BUDGET
SUBURBAN DIVISION
OPERATING AND NONOPERATING EXPENSES
WATER FUND - ALL SERVICE AREAS

	2013 Actual	2014 Budget	2014 Estimate	2015 Budget
OPERATING EXPENSES:				
PERSONNEL:				
Permanent	\$ 681,651	\$ 771,597	\$ 684,905	\$ 701,012
Overtime	62,284	38,679	71,742	82,004
Employee Benefits	203,326	257,559	194,982	212,865
Total	947,261	1,067,835	951,630	995,881
PURCHASE OF SERVICES:				
Internal Services - Overhead & Support	687,254	474,709	671,224	706,805
Utilities	400,614	430,450	426,482	475,650
Engineering	22,423	89,500	9,122	62,500
Analyses (External)	27,848	76,840	71,376	32,600
Contract Operating Svcs	34,665	34,600	33,700	32,650
Compliance Expense	-	-	-	4,750
Maintenance Services	154,372	329,200	180,272	539,000
Extraordinary Expenditures	98,401	56,000	20,021	60,000
Industrial Meter Testing & Repair	5,300	8,000	-	8,000
Miscellaneous Services	32,583	40,060	27,632	38,700
Water Purchases	978,597	1,003,980	984,580	1,261,000
Total	2,442,058	2,543,339	2,424,409	3,221,655
MATERIALS AND SUPPLIES:				
Pump Supplies	31,249	51,100	38,930	56,600
Purification Supplies	60,024	82,180	71,650	84,000
Distribution & Transmission Supplies	44,699	49,500	32,375	59,700
Misc. Materials & Supplies	60,194	55,750	20,905	61,200
Fuel & Mileage	50,656	64,900	40,327	67,200
Total	246,821	303,430	204,187	328,700
EQUIPMENT:	67,989	84,450	20,476	131,500
DEPRECIATION & AMORTIZATION	2,494,362	2,900,000	2,900,004	2,950,000
TOTAL OPERATING EXPENSES	6,198,491	6,899,054	6,500,706	7,627,736
NONOPERATING EXPENSES:				
DEBT SERVICE:				
Interest Expense	1,408,407	1,296,791	1,301,431	1,267,212
Financing Fees	7,500	7,500	9,013	7,500
Debt Retirement	1,466,059	1,496,097	1,486,193	1,522,894
Coverage *	431,170	418,933	418,144	418,516
TOTAL NONOPERATING EXPENSES	3,313,136	3,219,321	3,214,781	3,216,122
TOTAL EXPENSES	\$ 9,511,626	\$ 10,118,375	\$ 9,715,486	\$ 10,843,858

* Coverage is calculated at 15% of interest expense and debt retirement.

**2015 BUDGET
SUPPORTING DETAIL
WATER FUND-SUBURBAN**

OPERATING AND NONOPERATING EXPENSES

PERSONNEL

Permanent/Overtime	Represent salaries and off-time allocated for staff oversight of all divisions.
Employee Benefits	Comprised of medical coverage, defined benefit pension, long-term and short term disability, social security and Medicare contributions, flexible spending and unemployment insurance.

PURCHASE OF SERVICES

Internal Services - Overhead & Support	Overhead costs (\$706,805), which are not chargeable to certain funds, divisions or departments are allocated based on salaries within a fund as a percentage to total salaries. For small systems with less than 250 customers, the allocation percentage is further reduced to 20% of the salary ratio.
Utilities	Power costs reflect increased water production in the Central Lehigh System to meet the projected growth and increased commercial and industrial usage. Included in this budget is; power (\$428,400), gas service (\$11,000), share of cellular communication service (\$32,950) and phone service for alarm dialers (\$3,300).
Engineering	This budget includes engineering consulting services that may be required (\$62,500).
Contract Operating Services	A DEP licensed contract operator will provide one of the two system checks per week at fourteen well stations outside of the CLD. LCA personnel will perform the second weekly check.
Analyses (External)	"External" indicates that these analyses are performed by a contracted certified laboratory. 2015 analyses required by DEP will total \$32,600 for all of the systems.
Maintenance Services	This budget includes; wells, well stations & pumping (\$63,300), distribution/transmission mains & hydrants (\$92,300), reservoir/storage (\$205,200), mobile equipment (\$30,000), SCADA / TELOG maintenance services & software support (\$30,700), lab equipment maintenance (\$800), site maintenance (\$62,800), emergency generator service and repairs (\$23,200) and miscellaneous repairs and services (\$30,700).
Extraordinary Service & Equip. Expenditures	This budget line maintains the same level of insurance against an extraordinary leak repair and restoration in all systems (\$60,000). It includes items such as well and booster pump replacements, piping re-configurations and other services utilized in systems other than the CLD.
Industrial Meter Testing	This budget includes annual testing of large industrial and commercial meters.
Miscellaneous Services	This budget includes lab software support (\$2,100), PA One-Call System fees (\$13,000), PA One-Call software support (\$1,200), miscellaneous communication services (\$1,500), bank fees (\$1,500), water hauling for leak repair (\$2,000), certification/permit fees (\$3,100), dispatch answering service (\$3,100), meter reading software (\$2,500), shipping (\$1,500) and other miscellaneous expenses (\$7,200).

**2015 BUDGET
SUPPORTING DETAIL
WATER FUND-SUBURBAN**

OPERATING AND NONOPERATING EXPENSES

Water Purchases

This budget includes the purchase of approximately 203,000 gallons of water per day from the Northampton Borough Municipal Authority for customers in the North Whitehall Division, the purchase of approximately 68,000 gallons of water per day from the Borough of Slatington for customers in the Washington Township Division, the purchase of approximately 64,000 gallons of water per day from the Borough of Emmaus for the LCA Out-of-Borough customers in Lower Macungie, Salisbury and Upper Milford Townships and the purchase of 5,000,000 gallons per day of water from the City Division for customers in the Central Lehigh Division.

Rental Charge

Allocation of expenses related to the Authority Operations Center.

MATERIALS & SUPPLIES

Pump Supplies

This budget includes pump supplies (\$31,600), well supplies (\$23,700), and reservoir supplies (\$1,300).

Purification Supplies

This budget includes sodium hypochlorite (\$27,700), sodium hydroxide (\$9,400), reagent set (\$1,000), sodium thiosulfate (\$300), D-chlor tablets (\$1,500), Aquamag (\$2,500) replacement parts, injectors and repair parts (\$14,000), analyzer supplies (\$18,600) and miscellaneous parts and supplies (\$9,000).

**Distribution and
Transmission Supplies**

This budget includes hydrant supplies (\$21,300), main and service repair supplies (\$31,900), replacement meters, MXUs and batteries (\$6,500).

**Miscellaneous Materials
& Supplies**

This budget includes SCADA / TELOG supplies (\$29,700), mobile equipment parts and supplies (\$2,500), billing and customer service forms (\$8,700), clothing (\$2,000), plumbing supplies (\$4,000), lab supplies (\$5,600) and miscellaneous supplies (\$8,700).

Fuel

This item includes the allocation of a share of the total LCA fuel expense for the service vehicles, diesel fuel and generator fuel. The allocation is based on budgeted uniformed personnel time. An increase over recent years is budgeted due to the consistent increase volatility in prices for this commodity.

EQUIPMENT

This budget includes sampling stations (\$17,600), correlator (\$12,000) replacement fire hydrants (\$7,700), line/leak locator (\$6,000), chemical pumps (\$7,800), sump pumps (\$1,200), replacement heaters (\$2,500), Prominent CI2 analyzers (\$5,400), replacement well pumps (\$9,000), replacement booster pumps (\$7,500), turbidity meter upgrade (\$7,900), dehumidifiers (\$5,000), logger/leak detection (\$3,300), well depth probe (\$1,700), filtration bags for E&S control (\$5,000), chlorine storage tanks (\$2,600), miscellaneous tools & other minor equipment (\$19,500) and miscellaneous lab equipment (\$9,800).

Note: Major vehicle equipment and minor equipment costing over \$5,000 are included in the Capital Budget.

**DEPRECIATION AND
AMORTIZATION**

Depreciation expense is calculated by the straight-line method using standard depreciation periods. Amortization of planning and financing costs is included.

**2015 BUDGET
SUPPORTING DETAIL
WATER FUND-SUBURBAN**

OPERATING AND NONOPERATING EXPENSES

DEBT SERVICE

Interest Expense

Includes a 2.75% interest rate for the Washington Township System Improvements which were refinanced in 2011, a 2% interest rate on a State Penn Works loan for the Future Additional Water Supply projects, a 3.55% interest rate on the 2008 Water Bond issue, a 3.76% net rate on the 2010 Series A Build America bonds, a 2.55% rate on the 2010 Series AA bonds and a 1% interest rate on a Pennvest note to finance a meter replacement project.

Debt Retirement

Includes scheduled retirement on the loans listed above under interest expense.

Financing Fees

Includes trustee fees for the 2008, 2010 and 2011 bond issues.

**2015
BUDGET**

**WATER FUND
SERVICE AREA DESCRIPTION**

Service Area/Division	Municipalities Served	Customers (1)		Supply Source	2014 Avg Day Demand (gpd)
		No.	Type		
Western Lehigh Service Area					
Central Lehigh Division (2)	Upper Macungie Twp. Lower Macungie Twp. Weisenberg Twp. Lowhill Twp. Upper Milford Twp. Salisbury Twp. South Whitehall Twp.	18,150	Residential, Commercial, Institutional & Industrial	21 Wells	8,708,000
Arcadia West Division	Weisenberg Twp.	14	Commercial	2 Wells	18,000
Emmaus Out-of-Borough Division	Upper Milford Salisbury Twp. Lower Macungie Twp.	420	Residential, Commercial & Institutional	Borough of Emmaus	64,000
Upper Milford Central Division	Upper Milford Twp.	101	Residential	2 Wells	17,000
Subtotal		18,685			8,807,000
Northern Lehigh Service Area					
North Whitehall Division	North Whitehall Twp.	1,145	Residential, Commercial & Institutional	9 Wells & Northampton Borough Municipal Authority	252,000
Washington Township Division (3)	Washington Twp.	406	Residential, Commercial & Institutional	Slatington Municipal Water Authority	71,000
Millcreek Division	Washington Twp. Heidelberg Twp.	35	Residential	2 Wells	6,000
Lynn Township Division (LTD) (4)	Lynn Twp.	176	Residential	3 Wells	13,000
Heidelberg Heights Division	Heidelberg Twp.	190	Residential	5 Wells	28,000
Subtotal		1,952			370,000
Southern Lehigh Service Area					
Beverly Hill Division	Lower Milford Twp.	45	Residential	1 Well	6,000
Northampton County Service Area					
Clearview Farms Division	Moore Twp.	67	Residential	2 Wells	10,000
TOTAL					
		20,749			9,193,000

(1) Residential, Commercial and Industrial estimates as of 11/18/14.

(2) Includes Mink Estates and Farview Farms Division

(3) Includes Welshtown Road Customers

(4) Includes Pine Lakes at Lynn and Madison Park Division

**2015
BUDGET
WATER FUND-SUBURBAN
CAPITAL BUDGET**

The Suburban Divisions Water Capital Budget includes projects, which provide or lead to long-term improvements and reliability to the system. The following table provides information regarding significant activities:

Project	2015 Budget	2015 Project Stage
Water Main Replacement Projects	1,070,000	Design/Construction
CLD Auxiliary Pump Station & Main Extension	160,000	Design
Non-residential Water Meter Replacements	350,000	Design /Construction
General Water System Improvements	300,000	Design/Construction

**2015 BUDGET
SUBURBAN DIVISION
CAPITAL EXPENDITURES
TOTAL WATER FUND**

Project	Priority	Estimated Project Cost	Estimated Costs Through 2014	2015 Budget	Beyond 2015
Water Company Acquisitions	Medium	Annual		\$ 60,000	
Capital Management	High	Annual		70,000	
Capital Works Supplies, Software & Other Work	High	Annual		20,000	
Distribution Mains, Service Connections & System Planning	High	Annual		175,000	
Distribution Mains Upsizing *	High	Annual		150,000	
Distribution System Improvements (3rd Party)	High	Annual		10,000	
New & Replacement Water Meter Installations (non-project)	High	Annual		140,000	
Mobile Equipment	High	Annual		85,500	
Other Equipment	High	Annual		40,000	
Water Main Replacement Projects	High	10,700,000	-	1,070,000	9,630,000
Hydro-Pneumatic Pump Station Upgrades	High	702,000	3,000	300,000	399,000
Water Optimization Study	Medium	50,000	-	50,000	-
Non-residential Water Meter Replacements	Medium	501,500	-	350,000	151,500
General Water System Improvements	Medium	1,748,500	-	300,000	1,448,500
Crestwood- New Alternate Water Supply	High	211,000	6,000	205,000	-
CLD Auxilliary Pump Station & Main Extension	High	985,400	10,000	160,000	815,400
Total Suburban Divisions Water Capital Expenditures:					
			\$ 19,000	\$ 3,185,500	\$ 12,444,400

Note: Projects in bold type will not proceed beyond the planning phase, or beyond current authorized phase without specific authorization from the LCA Board subsequent to the adoption of this budget.

* Individual upsizing contributions less than \$75,000 will not require additional authorization beyond adoption of this budget.

**2015 BUDGET
SUPPORTING DETAIL
WATER FUND-SUBURBAN**

CAPITAL EXPENDITURES

Water Company Acquisitions	Staff and consultant involvement in actively pursuing system acquisitions. (2015 Cap Ex \$60,000).
Capital Management	Costs of providing general management and administrative services for the water capital programs (2015 Cap Ex \$70,000).
Capital Works Supplies, Software & Other Work	Includes miscellaneous supplies, on-going software support, and the Suburban Divisions share of updating Water and Wastewater General Design & Construction Specifications. (2015 Cap Ex \$20,000).
Distribution Mains, Service Connections & System Planning	Capital Works services required for distribution system extensions and connections including the reimbursable costs of plan review and construction inspection. Also includes the cost of providing general system engineering and planning (2015 Cap Ex \$175,000).
Distribution Mains Upsizing	Economically provides proper pipe capacities and extensions to meet future service needs by increasing pipe sizes in proposed developer-installed systems to provide sizes indicated in the Water System Plan or funds the off-site portion of a water main extension in accordance with a Township Water Service Agreement to serve a development (2015 Cap Ex \$150,000).
Distribution System - Improvements	Costs of additional valves or piping to improve the operation of the existing system. Where it is economical, improvements are made under a third party's contract (2015 Cap Ex \$10,000).
New & Replacement Meter Installations (<i>non-project</i>)	Material and labor costs for meters, radio read receivers and if applicable backflow prevention devices installed for new customers and defective or customer damaged meters. The costs of installations for the new customers and damaged meters are reimbursed through collection of meter installation fees (2015 Cap Ex \$140,000).
Mobile Equipment	Purchase of 1-SUV, 1-Small Van and 1-Full size Pickup Truck (2015 Cap Ex \$85,500).
Other Equipment	Equipment \$5,000 or over that is necessary to maintain service integrity. Items include leak detectors, line locators, electric and electronic equipment, lab equipment, hi-tech wireless leak detection sensing equipment, pumping equipment, generator, etc. (2015 Cap Ex \$40,000).
Water Main Replacement Projects	An on-going project to replace spun cast iron mains in acquired water systems that have or may experience high failure rates. (2015 Cap Ex \$1,070,000).

**2015 BUDGET
SUPPORTING DETAIL
WATER FUND-SUBURBAN
CAPITAL EXPENDITURES**

**Hydro-Pneumatic Pump
Station Upgrades**

This multi-year project includes the equipment necessary to convert the hydro-pneumatic operated equipment at the two facilities in the Upper Milford Central Division and the one facility in the Pine Lakes of Lynn Division to a variable frequency drive-controlled double pumping system. The project also allocates funds for some electrical upgrades and storage tank replacements if necessary. The 2015 budget addresses the upgrade at Pine Lakes of Lynn (2015 Cap Ex \$300,000).

Water Optimization Study

This project will evaluate ways optimize the use of the combined water capacities of both the Central Lehigh and Allentown Divisions for cost effective utilization in both divisions. (2015 Cap Ex \$50,000).

**Non-residential Water Meter
Replacement**

This project includes replacing ~ 260 water meters \geq 2-inches; and 25 larger meters ranging from 3 to 10-inches that have reached the end of their useful life with new radio read capable meters. It also includes upgrading ~110 newer meters to RR capability meters. The project is expected to be bid in the second-quarter of 2015 (2015 Cap Ex \$350,000).

**General Water System
Improvements**

This multi-year project includes various general system improvements. Which include installation of motor control valve at Reservoir #3; a main extension to connect the water mains on Schantz Spring Rd. to the main on Minesite Rd., VFD's on certain wells and chlorine injection stations as needed. Also included, are full abandonment of eight unused wells in various water systems if required to do so by PADEP. (2015 Cap Ex \$300,000).

**Crestwood- New Alternate
Water Supply**

This project consists of the design and construction of approximately 600 lf. of 6-inch diameter water main, connecting to the primary NWD system and applicable piping and control modifications within the pump station. This connection will provide an alternate supply of water to the Crestwood Pumping station and allow the existing two wells currently serving the station to be taken off line and abandoned if applicable (2015 Cap Ex \$205,000).

**CLD Auxiliary Pump Station
& Main Extension**

This multi-year project consists of the design and construction of 2 MGD water pressure booster pump station with fire flow capabilities of 2,500 GPM and approximately 1,600 linear-feet of 12-inch diameter interconnecting main extending from the intersection of Cetronia and Werley Roads. The project will provide the capability to pump water from the CLD Lower to Upper System, thereby enhancing reliability in the Upper System and allow flexibility for utilizing water purchased from the City of Allentown (2015 Cap Ex \$160,000).

SUBURBAN DIVISION

WASTEWATER

2015 BUDGET WASTEWATER FUND

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

WESTERN LEHIGH INTERCEPTOR SYSTEM

This Budget addresses transportation and City treatment services provided to various municipalities and assumes an average daily flow of 8.00 million gallons per day (mgd), from the communities served, the Boroughs of Alburtis and Macungie, and the Townships of Lower Macungie, Upper Macungie, Upper Milford, Weisenberg, Lowhill and the LCA Pre-Treatment Plant (the "Municipalities"). The estimated flow has decreased slightly from a budgeted flow of 7.9 million gallons per day (mgd) in 2014 to 8.0 mgd in 2015. The Municipalities are billed based upon wastewater strength, flow and reserved capacity. The budget (including the LLRI) maintains current rates for the typical residential customer. In addition, the Borough of Emmaus discharges a portion of its flow through the WLI and is billed in accordance with a service agreement.

Personnel time is included for the operation and maintenance of the gravity interceptors and the Spring Creek Road Pump Station (SCRPS) and force main. The budget anticipates that the SCRPS will operate monthly in an exercise mode to minimize the potential for odors as well as in response to wet weather events according to the new Wet Weather Operating Protocol (WWOP).

As part of a comprehensive Infiltration and Inflow (I/I) program, the flow monitoring of Signatory collector system connections to the interceptor that started in late December 2007 was completed in September of 2009. The results of the flow monitoring in conjunction with other investigations will be utilized in 2014 to complete certain tasks set-forth in the Sewer Capacity Assurance and Rehabilitation Program (SCARP) including the Preliminary Objectives Evaluation and Alternatives Modeling.

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

Major 2015 programs and efforts in the WLI are as follows:

- **WLI Physical Condition Assessment (PCA):** Engineering costs to continue the PCA program started in 2004 will continue in 2014 with manhole inspection and the inspection of the Spring Creek Force Main.
- **Signatory Infiltration and Inflow (I/I) program:** The SCARP was adopted by the Signatories in December 2009 as an amendment to their Act 537-plans. Numerous tasks identified in the SCARP including the completion of the Level of Service Assessment, a Preliminary Objectives Evaluation, Alternatives Analysis and Capital Improvements Plan will take place in 2014.
- **Wastewater Capacity Development- WLI** Study of treatment capacity alternatives including the possibility of upgrading the LCA WTP to full treatment or expanding the Kline's Island Wastewater Treatment Plant. The 2014 efforts will be focused on completion of the Act 537 Plan development.

LITTLE LEHIGH RELIEF INTERCEPTOR (LLRI) SYSTEM

Phase 1

This system phase, including the Park Pump Station (PPS) and Force Main, serves the Municipalities and the Townships of Salisbury and South Whitehall. The PPS, which has been in service since 1983, provides 20 mgd of relief pumping capacity to bypass a critical portion of the City interceptor system. In late 2008, the Authority and the City of Allentown developed a protocol for the operation of the station prior to major wet weather events to maximize capacity in the interceptor for use during the event. In addition, the Wet Weather Operating Logic Project completed 2012 with the assistance of Malcolm Pirnie, provides for a more effective use of other LCA facilities and the reduction of overflows during wet weather events.

Major 2015 capital expenditures and projects at the PPS are as follows:

- A continuation of the capacity study that will identify the maximum capacities of the wet well, piping and other similar infrastructure, the results of which will provide a basis for the design of future capacity upgrades. Installation of a double wall above the ground fuel tank with an automatic leak detection system, the replacement of an aged hydraulic sluice gate and upgrading the Park Pump Station telemetry to allow for full SCADA control from remote locations. If determined feasible by the physical capacity study results, replacement of the aged and inefficient flow-matcher variable speed control system with modern state of the art VFD motor control.
- Inspection of the Park Pump Station Forcemain.

Phase 2

This system phase includes the gravity relief line from Keck's Bridge to the PPS and serves the Municipalities. The 2015 Budget anticipates the continuation of increased maintenance costs for cleaning of the inverted siphons on this system. It is now anticipated that this will be an annual expense based upon the blockage experienced in the last 3 years.

COMMON RATE COLLECTOR SYSTEMS

UPPER MILFORD SYSTEM

As the wastewater service agency for Upper Milford Township (UMiT), Lehigh County Authority (LCA) provides all wastewater-related services for the 758 residential and 46 commercial customers in the township as of October 31, 2013. Except for significant matters requiring inter-municipal negotiations or consultations, LCA provides general representation for UMiT on wastewater issues.

WEISENBERG SYSTEM

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

HEIDELBERG HEIGHTS SYSTEM

This system, serving approximately 145 customers in Heidelberg Township was purchased by LCA in September 1998. The system includes approximately 6,500 linear feet of collector sewers and a .060 mgd Sequencing Batch Rector (SBR) Activated Sludge Wastewater Treatment Plant, which was placed in operation in 2000. The budget includes maintenance activities related to the collection system, emphasizing identification and removal of extraneous flow into the system. The Authority will continue to operate the system with a combination of its own personnel and a contract operator.

WYNNEWOOD TERRACE SYSTEM

The budget includes the operation and maintenance of the Wynnewood Terrace wastewater system in North Whitehall Township. The Authority took over ownership and operational responsibilities in July of 2003. The system includes a 60,000 gpd extended air activated sludge package treatment plant, three pump stations and collection system currently serving 217 residential and 2 commercial customers. The budget includes maintenance activities related to the collection system, emphasizing identification and removal of extraneous flow into the system. The Authority will continue to operate the system with a combination of its own personnel and a contract operator.

SAND SPRING SYSTEM

The budget includes the operation and maintenance of the Sand Spring wastewater system in North Whitehall Township, which was acquired at the end of 2004. The system includes a 35,000 gpd extended air activated sludge package treatment plant and collection system currently serving 248 residential apartment units and 9 commercial customers. The Authority will continue to operate the system with a combination of its own personnel and a contract operator.

ARCADIA SYSTEM

The Authority completed construction of a new 40,000 gpd wastewater treatment plant at the Arcadia West Industrial Park (AWIP). The new plant serves the AWIP and other properties in the New Smithville area of Weisenberg Township. Currently there are 9 commercial customers and 1 institutional customer in this system.

LYNN TOWNSHIP SYSTEM

The budget includes the operation and maintenance of the Lynn Township wastewater system in Lynn Township. The system includes an 80,000 gpd cast in place extended air plant and collection system currently serving approximately 345 residential customers, 80 apartment units, 20 commercial customers and the Northwestern Lehigh School District Complex. The Authority has plans to upgrade and expand the facility to a 160,000 gpd and be operational by 2018. The Authority currently operates the system with a combination of its own personnel and a contract operator.

WASHINGTON TOWNSHIP SYSTEM

LCA provides Operating Services for this system that serves approximately 632 residential and commercial customers in the Slatedale and Emerald areas of Washington Township. Approximately 130,000 gallons per day of wastewater is conveyed to and treated at the Slatington Wastewater Treatment Plant. Ownership of the system remains with Washington Township.

LCA PRE-TREATMENT PLANT (PTP)

LCA took over the operation in May 2006 and ownership in October 2009 of this 5.75 mgd facility built by the County of Lehigh in 1990. Currently the facility provides pre-treatment of high strength, predominantly food and beverage industry wastewater and commercial and domestic wastewater from Lowhill, Weisenberg and Upper Macungie Townships in areas up-stream of the wastewater treatment plant. The WTP also treats hauled waste, which is a significant revenue source for this plant. 2015 revenues are anticipated to decrease by 6%, primarily due to lower industrial charges. The plant is operated through a professional services contract with OMI, Inc. This service was publicly bid and a new 5 year contract was signed in May 2009. The new contract provides significant savings in the operational costs, which will be reinvested in plant capital that is reaching the end of its useful life. A five year contract extension was granted to OMI through 2018.

Boston Beer Company (BBC) started brewing operations at the former Pabst Brewery in April 2008. The brewery waste has become a very significant source of both waste and income for the WTP. As projected in 2009 BBC became the plant's largest customer and continues to increase production annually. Growth is expected to be 10% in 2015, as compared to 2014's budget.

Since 2008 significant capital investment was made in the WTP to rehabilitate aging, inefficient and inoperable equipment in anticipation of the significant increase in high strength brewery wastewater flow and strength, which in turn places added demands on plant equipment. Energy conservation measures were investigated in 2012 to reduce electrical demands and improve equipment and operational efficiencies. Several projects were started in 2013 to reduce energy costs. LCA completed the projects in 2014. The projects included the addition of a truck receiving station and the completion of the digester mixer replacements, which increased biogas production and reduce electrical needs. The construction of a combined power and heat system will be designed in 2015 if the gas production realized by the two projects results in adequate.

Planning level evaluation of upgrading the plant to full treatment capable of direct stream discharge and of future LCA wastewater treatment capacity needs have been completed. The upgrade of the WTP to full treatment is one of the viable options for future capacity development. More detailed planning will continue in 2015.

**2015 BUDGET
SUBURBAN DIVISION
EXPENSE & REVENUE SUMMARY
WASTEWATER FUND**

	2013 Actual	2014 Budget	2014 Estimate	2015 Budget
REVENUES:				
Operating and Nonoperating:				
Western Lehigh Interceptor System	\$ 6,868,071	\$ 6,631,417	\$ 6,167,212	\$ 6,471,379
Little Lehigh Relief Interceptor System Phase 1	170,628	426,564	292,232	456,256
Little Lehigh Relief Interceptor System Phase 2	7,684	53,344	2,932	42,013
Common Rate Collector System (A)	708,035	727,830	723,247	744,491
Arcadia West	158,746	167,645	182,522	174,497
Wastewater Treatment Plant	6,814,288	8,271,519	8,278,326	7,796,737
Washington Township System	488,688	512,739	495,010	511,244
Lynn Township System (B)	321,242	366,475	363,428	393,347
Capital	3,579,467	6,275,000	2,169,185	5,395,750
Total Revenues	\$ 19,116,849	\$ 23,432,533	\$ 18,674,094	\$ 21,985,714

EXPENSES:

Operating and Nonoperating:				
Western Lehigh Interceptor System	\$ 6,868,071	\$ 6,631,417	\$ 6,167,212	\$ 6,471,379
Little Lehigh Relief Interceptor System Phase 1	170,628	426,564	292,232	456,256
Little Lehigh Relief Interceptor System Phase 2	7,684	53,344	2,932	42,013
Common Rate Collector System (A)	612,249	836,454	633,567	763,922
Arcadia West System	141,465	124,253	229,151	298,581
Lynn Township System (B)	-	287,524	257,943	312,410
Wastewater Treatment Plant	6,343,131	6,937,094	7,344,976	7,074,934
Washington Township System	488,688	512,739	487,053	511,244
Capital	3,579,467	6,275,000	2,169,185	5,395,750
Total Expenses	\$ 18,211,383	\$ 22,084,389	\$ 17,584,250	\$ 21,326,489

(A) This budget includes the Heidelberg Heights, Wynnewood Terrace, Sand Spring, Weisenberg Township and Upper Milford Collector Systems.

(B) Acquired on March 1, 2012.

Note: Expenses are net of depreciation.

**2015 BUDGET
SUBURBAN DIVISION
SOURCES OF OPERATING REVENUES - WASTEWATER FUND**

	2013 Actual	2014 Budget	2014 Estimate	2015 Budget
WLI REVENUES:				
User Charges	\$ 6,778,734	\$ 6,548,917	\$ 6,110,413	\$ 6,393,879
Interest Income - Revenue Fund	3,941	2,500	1,652	2,500
Other Income	85,396	80,000	55,146	75,000
Total	6,868,071	6,631,417	6,167,212	6,471,379
LLRI - PHASE 1 REVENUES:				
User Charges	168,457	423,864	291,157	454,756
Operating Reserves	-	1,200	-	-
Interest Income - Revenue Fund	504	500	425	750
Other Income	1,667	1,000	650	750
Total	170,628	426,564	292,232	456,256
LLRI - PHASE 2 REVENUES:				
User Charges	6,011	51,544	1,507	40,013
Operating Reserves	-	-	-	-
Interest Income - Revenue Fund	1,673	1,800	1,425	2,000
Total	7,684	53,344	2,932	42,013
COMMON RATE COLLECTOR SYSTEM REVENUES: (A)				
User Charges	666,015	698,695	703,531	718,991
Interest Income	534	550	615	500
Other Income	41,486	28,585	19,101	25,000
Total	708,035	727,830	723,247	744,491
ARCADIA WEST REVENUES:				
User Charges	158,579	159,700	182,322	174,247
Use of Supplemental Revenues	-	7,770	-	-
Interest Income	167	175	200	250
Total	158,746	167,645	182,522	174,497
WASHINGTON TWP REVENUES:				
User Charges	412,882	440,300	422,958	429,821
Interest Income	-	50	39	75
Other Income	768	1,000	2,119	2,000
Use of Supplemental Revenues	75,038	71,389	69,894	79,348
Total	488,688	512,739	495,010	511,244
LYNN TOWNSHIP COLLECTOR SYSTEM: (B)				
User Charges	319,204	364,600	362,062	392,097
Interest Income	170	225	227	250
Other Income	1,868	1,650	1,140	1,000
Total	321,242	366,475	363,428	393,347
WASTEWATER TREATMENT PLANT				
Hauler Fees	2,253,458	2,440,000	2,214,520	2,260,000
Industrial Charges	2,796,193	3,292,488	4,244,983	3,579,500
Penalties	33,934	25,000	220,236	110,000
Excess Removal Credits	1,721,332	2,439,188	1,589,057	1,772,394
Interest Income	2,098	1,000	1,361	1,000
Other Income	7,273	73,843	8,170	73,843
Total	6,814,288	8,271,519	8,278,326	7,796,737
Total Operating Revenues	\$ 15,537,382	\$ 17,157,533	\$ 16,504,909	\$ 16,589,964

(A) Includes the following systems: Upper Milford, Weisenberg Township, Heidelberg Heights, Wynnewood Terrace, and Sand Spring.

(B) This system was acquired 2/29/12.

**2015 BUDGET
SUPPORTING DETAIL
WASTEWATER OPERATING, NONOPERATING AND CAPITAL REVENUES**

WESTERN LEHIGH INTERCEPTOR SYSTEM

User Charges	Charges to municipalities to recover Allentown Wastewater Treatment and Transportation, LCA Interceptor O&M and Debt Service.
Interest Income	Investment earnings on operating reserves.
Other Income	Includes reimbursement from non-signatories for sewer line flushing and televising services, and signatory payments for additional lab testing requests.

LITTLE LEHIGH RELIEF INTERCEPTOR SYSTEM - PHASE 1

User Charges	Charges to municipalities to recover O&M and debt service costs for this system.
Operating Reserves	Use of reserves to cover costs of fuel spill remediation and tank replacement.
Interest Income – Revenue Fund	Investment earnings on operating reserves.
Other Income	Miscellaneous reimbursements.

LITTLE LEHIGH RELIEF INTERCEPTOR SYSTEM - PHASE 2

User Charges	Charges to municipalities to recover O&M and debt service costs for this system.
Interest Income - Revenue Fund	Investment earnings on reserves.

COMMON RATE COLLECTOR SYSTEMS

User Charges	Charges to customers to the Upper Milford, Weisenberg Township, Heidelberg Heights, Wynnewood Terrace and Sand Spring collector systems to cover operating and debt service costs. In 2010 the Authority implemented a common rate structure for these collector systems.
Interest Income	Interest earnings on reserves.
Other Income	Includes lien administration and new customer initiation fees and other income.

ARCADIA WEST SYSTEM

User Charges	Charges to commercial users to recover systems operating costs.
Use of Supplemental Revenues	Reserves used to supplement revenues to meet budgeted expenses.
Interest Income	Investment earnings on reserves.

**2015 BUDGET
SUPPORTING DETAIL
WASTEWATER OPERATING, NONOPERATING AND CAPITAL REVENUES**

WASHINGTON TOWNSHIP SYSTEM

User Charges	Charges to customers to recover system operating costs and debt service.
Interest Income	Investment earnings on reserves.
Other Income	Includes lien administration and new customer initiation fees and other income.
Use of Supplemental Revenues	Reserves used to supplement revenues to meet budgeted expenses.

**WASTEWATER TREATMENT
PLANT (WTP)**

Hauler Fees	Includes strength and volume charges to wastewater haulers and annual permit fees.
Industrial/Commercial Charges	Includes charges to Boston Beer and Hilton Homewood Suites for their discharges to the plant.
Excess Removal Credits	Includes reimbursement for plant removals of BOD and TSS in excess of 250 parts per million (ppm) and 275 ppm, respectively. The WTP is reimbursed at City of Allentown rates.
Interest Income	Investment earnings on reserves.
Other Income	Includes charges to Upper Macungie for lab testing, surcharges to new connections (Ocean Spray and Coke expansion) and other income.

LYNN TOWNSHIP SYSTEM

User Charges	Charges to customers to recover system operating costs and debt service.
Interest Income	Investment earnings on reserves.
Other Income	Includes lien administration and new customer initiation fees and other income.

**2015 BUDGET
SUPPORTING DETAIL
WASTEWATER OPERATING, NONOPERATING AND CAPITAL REVENUES**

WASTEWATER CAPITAL

Collector System Tapping Fees	Represents charges to new customers connecting to the various collector systems.
Inspection & Review Fees	Reimbursement of costs for connection inspections and plan reviews.
Treatment Capacity Fees	Charge to new customers for purchasing treatment capacity and ongoing financed charges to existing commercial customers for purchases of additional wastewater allocation in excess of 50,000 gallons per day.
Western Lehigh Interceptor Fees	Charge to new customers for recovery of costs relating to the Western Lehigh Relief Facilities.
Little Lehigh Relief Interceptor Fees	Charge to new customers for recovery of costs related to the Little Lehigh Relief facilities.
Reimbursement from Other Funds	Reimbursement from other funds to cover general planning costs.
Contribution in Aid to Construction	Represents developer contribution towards Western Weisenberg Wastewater Treatment Plant project.
Borrowed Funds and Cash Reserves	Represents funds needed to cover capital costs in excess of capital revenues.

2015 BUDGET
SUBURBAN DIVISION
OPERATING AND NONOPERATING EXPENSES
ALLOCATION UNIT: WASTEWATER - ALL FUNDS

	2013 Actual	2014 Budget	2014 Estimate	2015 Budget
OPERATING EXPENSES:				
PERSONNEL:				
Permanent	\$ 267,281	\$ 365,845	\$ 322,105	\$ 374,826
Overtime	23,057	7,314	30,189	29,428
Employee Benefits	98,988	148,047	92,801	131,585
Total	389,325	521,207	445,095	535,839
PURCHASE OF SERVICES:				
Internal Services - Overhead & Support	215,826	185,347	250,411	302,857
Utilities	173,774	242,765	248,729	251,800
Engineering	55,224	427,700	81,686	123,000
Exceptional Strength Analyses	9,588	40,320	41,969	40,400
General Analyses	64,741	55,600	43,403	50,600
Maintenance Services	198,045	332,235	152,176	424,850
Fuel Spill Remediation	2,600	2,600	2,000	2,800
Contract Operator	4,909,414	5,060,038	5,705,472	5,420,398
Compliance Expense	-	-	-	-
Treatment & Transportation	5,189,928	5,438,567	5,042,756	5,239,979
LCA WTP Treatment /Removals	2,000,415	1,598,651	1,589,057	1,403,340
Misc. Purchase of Services	144,417	79,160	75,836	136,350
Rental Charges	56,043	51,387	75,660	78,806
System Planning/Capital Management	38,319	-	-	-
I/I Rehabilitation Program	1,660	20,000	-	20,000
Total	13,059,995	13,534,370	13,309,155	13,495,180
MATERIALS AND SUPPLIES:				
Fuel	21,444	37,245	21,216	50,850
Misc. Materials & Supplies	86,825	116,765	94,555	127,630
Equipment	35,507	101,950	78,871	95,250
Amortized Equipment	39,300	70,500	70,500	70,500
Total	183,075	326,460	265,142	344,230
AMORTIZED PLANNING	147,828	147,828	147,828	147,828
RESERVE FUND ALLOCATION	-	-	-	-
DEPRECIATION & AMORTIZATION	3,994,824	4,048,736	4,038,421	4,105,676
TOTAL OPERATING EXPENSES	17,775,048	18,578,601	18,205,640	18,628,754
NONOPERATING EXPENSES:				
Interest Expense	168,190	253,538	215,307	229,305
Principal Reduction	824,700	875,873	910,093	1,029,606
Coverage	114,798	127,038	122,221	125,650
TOTAL NONOPERATING EXPENSES	1,107,688	1,256,449	1,247,621	1,384,561
TOTAL EXPENSES	\$ 18,882,736	\$ 19,835,050	\$ 19,453,261	\$ 20,013,315

2015 BUDGET

OPERATING AND NONOPERATING EXPENSES

ALLOCATION UNIT: WASTEWATER - WESTERN LEHIGH INTERCEPTOR SYSTEM

	2013 Actual	2014 Budget	2014 Estimate	2015 Budget
OPERATING EXPENSES:				
PERSONNEL:				
Permanent	\$ 125,919	\$ 144,185	\$ 133,726	\$ 140,505
Overtime	8,182	-	11,140	13,507
Employee Benefits	46,453	53,528	36,790	50,131
Total	180,553	197,713	181,655	204,143
PURCHASE OF SERVICES:				
Internal Services - Overhead & Support	130,438	97,431	144,469	157,829
Utilities	20,935	25,000	29,160	29,600
Engineering	41,263	300,000	75,570	75,000
Compliance Expense	-	-	-	-
Exceptional Strength Analyses	9,588	40,320	41,969	40,400
General Analyses	31,370	9,995	12,899	2,900
Maintenance Services	40,531	93,830	32,606	145,700
Treatment & Transportation	3,478,472	3,328,295	3,109,018	3,420,375
LCA WTP Treatment /Removals	2,000,415	1,598,651	1,589,057	1,403,340
Misc. Purchase of Services	63,086	4,665	10,376	36,200
Rental Charges	35,088	27,044	42,233	41,069
System Planning/Capital Management	-	-	-	-
I/I Rehabilitation Program	1,660.24	20,000	-	20,000
Total	5,852,846	5,545,230	5,087,357	5,372,413
MATERIALS AND SUPPLIES:				
Fuel	10,600	11,000	9,565	11,000
Misc. Materials & Supplies	25,132	34,650	25,796	33,600
Equipment	16,788	29,500	49,487	36,900
Amortized Equipment	39,300	70,500	70,500	70,500
Total	91,820	145,650	155,348	152,000
AMORTIZED PLANNING	147,828	147,828	147,828	147,828
RESERVE FUND ALLOCATION	-	-	-	-
DEPRECIATION & AMORTIZATION	529,182	543,897	543,897	543,897
TOTAL OPERATING EXPENSES	6,802,229	6,580,319	6,116,085	6,420,281
NONOPERATING EXPENSES:				
Interest Expense	74,223	67,253	67,682	60,055
Principal Reduction	421,630	428,576	428,171	435,774
Coverage	99,171	99,166	99,171	99,166
TOTAL NONOPERATING EXPENSES	595,024	594,995	595,024	594,995
TOTAL EXPENSES	\$ 7,397,253	\$ 7,175,314	\$ 6,711,109	\$ 7,015,276

OPERATING AND NONOPERATING EXPENSES
ALLOCATION UNIT: WASTEWATER - LITTLE LEHIGH RELIEF
INTERCEPTOR SYSTEM, PHASE 1

	2013 Actual	2014 Budget	2014 Estimate	2015 Budget
OPERATING EXPENSES:				
PERSONNEL:				
Permanent	\$ 22,189	\$ 27,199	\$ 24,917	\$ 34,190
Overtime	1,818	2,030	3,838	4,121
Employee Benefits	8,418	10,851	7,368	12,470
Total	32,425	40,081	36,122	50,781
PURCHASE OF SERVICES:				
Internal Services - Overhead & Support	23,369	19,751	27,235	39,260
Engineering Services	-	80,000	-	-
Compliance Expense	-	-	-	-
Fuel Spill Remediation	2,600	2,600	2,000	2,800
Utilities	73,729	122,200	130,483	123,400
Maintenance Services	19,901	52,100	8,545	109,300
Miscellaneous Services	360	450	286	5,800
Rental Charges	6,288	5,482	7,350	10,216
Total	126,247	282,584	175,899	290,776
MATERIALS AND SUPPLIES:				
Fuel	2,780	9,600	1,637	21,700
Misc. Materials & Supplies	2,219	6,350	3,530	6,500
Equipment	6,957	19,950	7,043	18,500
Total	11,956	35,900	12,210	46,700
RESERVE FUND ALLOCATION	-	-	-	-
DEPRECIATION & AMORTIZATION	87,295	88,591	88,591	88,591
TOTAL OPERATING EXPENSES	257,923	447,155	312,823	476,847
NONOPERATING EXPENSES:				
Interest Expense	-	68,000	68,000	68,000
Principal Reduction	-	-	-	-
Coverage *	-	-	-	-
TOTAL NONOPERATING EXPENSES	-	68,000	68,000	68,000
TOTAL EXPENSES	\$ 257,923	\$ 515,155	\$ 380,823	\$ 544,847

2015 BUDGET
OPERATING AND NONOPERATING EXPENSES
ALLOCATION UNIT: WASTEWATER - LITTLE LEHIGH RELIEF
INTERCEPTOR SYSTEM, PHASE 2

	2013 Actual	2014 Budget	2014 Estimate	2015 Budget
OPERATING EXPENSES:				
PERSONNEL:				
Permanent	\$ 2,616	\$ 8,471	\$ 1,265	\$ 2,833
Overtime	-	-	-	-
Employee Benefits	1,195	3,145	383	922
Total	3,810	11,616	1,648	3,755
PURCHASE OF SERVICES:				
Internal Services - Overhead & Support	2,546	5,724	731	2,903
Utilities	91	75	-	100
Compliance Expense	-	-	-	-
Maintenance Services	-	23,000	224	23,000
Miscellaneous Services	287	40	40	150
General System Planning	-	-	-	-
Rental Charges	685	1,589	43	755
Total	3,609	30,428	1,038	26,908
MATERIALS AND SUPPLIES:				
Fuel	265	300	246	350
Misc. Materials & Supplies	-	1,000	-	1,000
Equipment	-	10,000	-	10,000
Total	265	11,300	246	11,350
DEPRECIATION & AMORTIZATION	54,246	54,246	53,434	53,434
TOTAL EXPENSES	\$ 61,930	\$ 107,590	\$ 56,366	\$ 95,447

2015 BUDGET
OPERATING AND NONOPERATING EXPENSES
ALLOCATION UNIT: WASTEWATER - COMMON RATE COLLECTOR SYSTEM

	2013 Actual	2014 Budget	2014 Estimate	2015 Budget
PERSONNEL:				
Permanent	\$ 75,445	\$ 110,053	\$ 69,924	\$ 89,288
Overtime	11,391	4,269	11,665	7,754
Employee Benefits	27,412	42,442	23,075	31,587
Total	114,248	156,764	104,664	128,629
PURCHASE OF SERVICES:				
Internal Services - Overhead & Support	24,348	20,642	19,525	22,340
Utilities	38,132	47,690	37,980	45,700
Treatment & Transportation	204,563	234,770	236,000	218,500
Contract Operating Svcs	32,491	34,200	34,700	35,500
Compliance Expense	-	-	-	-
External Lab Analysis	5,607	7,140	5,260	15,200
Maintenance Services	36,395	82,000	39,700	55,050
Miscellaneous Services	17,645	3,610	1,805	2,900
General System Planning	3,368	-	-	-
Rental Charges	5,540	5,670	5,795	5,813
Total	368,088	435,722	380,765	401,003
MATERIALS AND SUPPLIES:				
Fuel	5,184	11,600	7,320	10,900
Misc. Materials & Supplies	27,375	24,845	18,540	27,730
Equipment	6,011	21,000	6,620	11,250
Total	38,569	57,445	32,480	49,880
DEPRECIATION & AMORTIZATION	141,924	115,265	115,265	115,265
TOTAL OPERATING EXPENSES	662,829	765,196	633,174	694,776
NONOPERATING EXPENSES:				
DEBT SERVICE:				
Interest Expense	36,333	68,157	41,450	66,250
Principal Reduction	39,383	98,868	58,670	100,775
Coverage (A)	15,627	19,498	15,537	17,385
TOTAL NONOPERATING EXPENSES	91,343	186,523	115,657	184,410
TOTAL EXPENSES	\$ 754,173	\$ 951,719	\$ 748,832	\$ 879,187

Note: This budget includes the Heidelberg Heights, Wynnewood Terrace, Sand Spring, Weisenberg Township and Upper Milford Collector Systems.

(A) Coverage equals 3% of Operating Expenses less depreciation & amortization.

**2015 BUDGET
OPERATING EXPENSES
ALLOCATION UNIT: WASTEWATER - ARCADIA WEST**

	2013 Actual	2014 Budget	2014 Estimate	2015 Budget
OPERATING EXPENSES:				
PERSONNEL:				
Permanent	\$ 9,795	\$ 18,362	\$ 42,370	\$ 38,358
Overtime	392	508	3,221	3,492
Employee Benefits	3,106	7,005	12,097	13,622
Total	13,293	25,875	57,688	55,472
PURCHASE OF SERVICES:				
Internal Services - Overhead & Support	2,282	2,550	11,422	8,577
Utilities	6,086	15,975	18,061	20,300
Contract Operating Svcs	-	-	-	-
Compliance Expense	-	-	-	-
External Lab Analysis	24,152	29,820	21,751	21,900
Maintenance Services	58,457	8,200	19,488	19,200
Miscellaneous Services	162	850	325	700
General System Planning	34,348	-	-	-
Rental Charges	532	708	2,833	2,232
Total	126,020	58,103	73,880	72,909
MATERIALS AND SUPPLIES:				
Misc. Materials & Supplies	956	10,700	9,151	11,300
Fuel & Mileage	492	2,575	457	2,600
Equipment	703	2,000	105	1,800
Total	2,152	15,275	9,713	15,700
DEPRECIATION & AMORTIZATION				
	31,852	67,245	67,245	125,000
TOTAL OPERATING EXPENSES	173,317	166,498	208,526	269,081
DEBT SERVICE:				
Interest Expense	-	25,000	18,124	16,500
Principal Reduction	-	-	69,746	138,000
Coverage	-	-	-	-
TOTAL NONOPERATING EXPENSES	-	25,000	87,870	154,500
TOTAL EXPENSES	\$ 173,317	\$ 191,498	\$ 296,396	\$ 423,581

2015 BUDGET
OPERATING EXPENSES
ALLOCATION UNIT: WASTEWATER - LYNN TOWNSHIP SYSTEM

	2013 Actual	2014 Budget	2014 Estimate	2015 Budget
OPERATING EXPENSES:				
PERSONNEL:				
Permanent	\$ 10,375	\$ 16,473	\$ 20,470	\$ 22,096
Overtime	165	-	-	186
Employee Benefits	4,621	6,115	5,266	7,253
Total	15,161	22,588	25,735	29,535
PURCHASE OF SERVICES:				
Internal Services - Overhead & Support	10,858	11,131	20,102	22,834
Utilities	27,823	31,700	25,699	32,500
Contract Operating Svcs	72,277	72,000	72,666	72,000
Compliance Expense	-	-	-	-
External Lab Analysis	3,343	3,645	3,493	5,600
Maintenance Services	34,537	80,905	47,884	78,900
Miscellaneous Services	4,682	1,215	328	1,100
General System Planning	-	-	-	-
Rental Charges	2,757	3,090	8,874	5,942
Total	156,277	203,686	179,046	218,876
MATERIALS AND SUPPLIES:				
Misc. Materials & Supplies	28,756	33,555	28,523	36,200
Fuel & Mileage	1,606	1,620	1,510	3,700
Equipment	4,929	17,700	15,616	15,000
Total	35,291	52,875	45,648	54,900
DEPRECIATION & AMORTIZATION	93,845	92,812	92,809	92,809
TOTAL OPERATING EXPENSES	300,574	371,961	343,239	396,119
NONOPERATING EXPENSES:				
DEBT SERVICE:				
Interest Expense	-	-	-	-
Principal Reduction	-	-	-	-
Coverage (A)	-	8,374	7,513	9,099
TOTAL NONOPERATING EXPENSES	-	8,374	7,513	9,099
TOTAL EXPENSES	\$ 300,574	\$ 380,336	\$ 350,752	\$ 405,219

Note: LCA acquired system on 3/1/12.

(A) Equates to 3% of operating expenses less Depreciation and Amortization.

2015 BUDGET
OPERATING AND NONOPERATING EXPENSES
ALLOCATION UNIT: WASTEWATER - WASHINGTON TWP COLLECTOR SYSTEM

	2013 Actual	2014 Budget	2014 Estimate	2015 Budget
OPERATING EXPENSES:				
PERSONNEL:				
Permanent	\$ 8,401	\$ 9,860	\$ 4,877	\$ 10,670
Overtime	1,109	508	325	369
Employee Benefits	2,947	3,849	1,325	3,593
Total	12,458	14,216	6,527	14,632
PURCHASE OF SERVICES:				
Internal Services - Overhead & Support	9,851	7,005	5,215	11,312
Utilities	7,069	200	7,345	300
Treatment & Transportation	62,180	83,946	83,520	85,000
Maintenance Services	6,863	14,200	3,713	15,700
Engineering & Contract Operating Svcs	9,960	11,700	-	-
Compliance Expense	-	-	-	-
Miscellaneous Services	4,929	1,455	3,594	2,100
General System Planning	603	-	-	-
Rental Charges	1,868	1,944	1,516	2,944
Total	103,324	120,451	104,903	117,356
MATERIALS AND SUPPLIES:				
Fuel	517	550	481	600
Misc. Materials & Supplies	308	2,165	1,585	3,300
Equipment	118	1,800	-	1,800
Total	944	4,515	2,066	5,700
DEPRECIATION & AMORTIZATION	-	-	-	-
TOTAL OPERATING EXPENSES	116,725	139,182	113,496	137,687
NONOPERATING EXPENSES:				
DEBT SERVICE:				
Interest Expense	23,534	25,128	20,051	18,500
Principal Reduction	348,429	348,429	353,506	355,057
TOTAL NONOPERATING EXPENSES	371,963	373,557	373,557	373,557
TOTAL EXPENSES	\$ 488,688	\$ 512,739	\$ 487,053	\$ 511,244

2015 BUDGET
OPERATING EXPENSES
ALLOCATION UNIT: WASTEWATER TREATMENT PLANT

	2013 Actual	2014 Budget	2014 Estimate	2015 Budget
OPERATING EXPENSES:				
PERSONNEL:				
Permanent	\$ 12,541	\$ 31,242	\$ 24,558	\$ 36,887
Overtime	-	-	-	-
Employee Benefits	4,836	21,112	6,498	12,007
Total	17,377	52,354	31,056	48,894
PURCHASE OF SERVICES:				
Internal Services - Overhead & Support	12,134	21,112	21,712	37,802
Engineering	13,962	47,700	6,116	48,000
Contract Operating Svcs:		-		
Base	2,445,972	2,478,000	2,478,288	2,515,906
Electrical	791,820	741,000	744,933	759,117
Variable	1,000,000	923,138	1,252,396	1,237,875
Repairs	556,894	800,000	1,122,489	800,000
Compliance Expense	-	-	-	-
Treatment & Transportation	1,444,714	1,791,556	1,614,218	1,516,104
Permit/Regulatory	-	10,000	-	10,000
Lab Analysis	270	5,000	-	5,000
Maintenance Services	1,360	1,000	240	1,000
Miscellaneous Services	53,266	56,875	59,082	77,400
Rental Charges	3,285	5,860	7,016	9,836
Total	6,323,676	6,881,240	7,306,490	7,018,040
Misc. Materials & Supplies	2,078	3,500	7,429	8,000
Equipment	-	-	-	-
Total	2,078	3,500	7,429	8,000
DEPRECIATION & AMORTIZATION	3,056,480	3,086,680	3,077,180	3,086,680
TOTAL OPERATING EXPENSES	\$ 9,399,611	\$ 10,023,774	\$ 10,422,155	\$ 10,161,614

**2015 BUDGET
SUPPORTING DETAIL
WESTERN LEHIGH INTERCEPTOR SYSTEM
WASTEWATER OPERATING AND NONOPERATING EXPENSES**

PERSONNEL

Permanent/Overtime	Represent salaries and off-time of employees' direct time associated with LCA's Suburban Wastewater System.
Employee Benefits	Comprised of medical coverage, defined benefit pension, long-term and short term disability, social security and Medicare contributions, flexible spending and unemployment insurance.

PURCHASE OF SERVICES

Internal Services - Overhead & Support	Overhead costs, which are not chargeable to specific funds, are allocated based on salaries within a fund as a percentage to total salaries.
Utilities	The bulk of the utility costs (\$22,000) are related to the operation of the Spring Creek Road Pump Station (SCRPS), which is driven by wet weather. Also included in this line item is this budget's share of cellular phone services (\$3,500), electric service for the meter stations (\$1,500), back-up phone dialer alarm service (\$300), DSL SCADA data line service (\$1,500), and natural gas for the emergency power generator (\$800).
Engineering	Consultant expenses include on-call services for operational issues (\$25,000), and a continuation of the Physical Condition Assessment that began in 2004 (\$50,000).
Flow Monitoring Network	Not Applicable in this Budget.
Exceptional Strength Analyses (External)	This budget includes analyses of those WLI customers who potentially discharge high-strength waste. All analyses are being provided through contract services with an outside lab. Testing is in conformance with the LCA "2014 REPORT ON WASTEWATER USER CHARGES." For certain repeat testing, the expenses are charged to a municipality (see "Other Income" under Wastewater Revenues).
General Analyses (External)	General Analyses are those conducted for compliance with billing agreements with certain municipal entities. All analyses are being provided through contract services with an outside lab.
Maintenance Services	This budget includes: Repairs to meter stations (\$10,000), OMI costs (\$15,000), Pipe cleaning services (\$10,000), vehicle maintenance (\$5,700), sewer truck repairs (\$10,000), flow monitoring equipment repairs (\$1,500), TV equipment repairs (\$7,500), SCADA maintenance services and upgrades (\$41,000), lawn/trimming services (\$6,000), SCRPS generator maintenance (\$3,000), SCRPS pump service contract (\$4,200), SCRPS other equipment maintenance (\$2,500), SCRPS pump rebuilding (\$15,000), lab maintenance services (\$600), crane services for SCRPS (\$500), GIS software maintenance (\$3,200), electric study at SCPS (\$3,000), analyzer repairs (\$800), and miscellaneous repairs and maintenance (\$6,200).

**2015 BUDGET
SUPPORTING DETAIL
WESTERN LEHIGH INTERCEPTOR SYSTEM
WASTEWATER OPERATING AND NONOPERATING EXPENSES**

Treatment & Transportation	For details, see the "LCA 2014 REPORT ON WASTEWATER USER CHARGES."
LCA WTP Treatment/ Removal	Credits are given to the Authority's Wastewater Treatment Plant for removing BOD and TSS pounds in excess of treatment requirements. Credits are given at City unit rates.
Miscellaneous Services	This budget includes: GIS/IM Expense (\$32,200), lab software support (\$1,400), legal fees (\$800) and other miscellaneous services (\$1,800).
Rental Charges	Allocation of expenses related to the Authority Operations Center renovations and expansion which are being allocated over 30 years.
I/I Rehabilitation Program	This program includes contracted services and other expenses to repair leaks in the interceptor system.

MATERIALS & SUPPLIES

Fuel	This item is the allocation of a share of total fuel expense for the service vehicles. The allocation is based on budgeted uniformed personnel time. Increases in fuel costs are projected due to the volatility of this commodity.
Miscellaneous Materials & Supplies	This budget includes analyzers (\$5,000), SCADA supplies (\$6,000), samplers (\$1,200), mobile equipment (\$2,700), Sewer TV equipment (\$3,000), sewer sealant supplies (\$2,000), pump station supplies (\$1,200), manhole supplies (\$4,000) lab supplies (\$700), jet truck supplies (\$1,000) and miscellaneous supplies (\$6,800)

EQUIPMENT

Any single item costing more than \$5,000 is included in the Capital Budget. This budget includes: air analyzer replacements (\$8,000), samplers (\$6,500), sewer plugs (\$2,300), manhole covers (\$1,000), lab equipment (\$500), SCRPS equipment (\$1,700), TV camera equipment (\$7,500), SCADA equipment (\$3,000) and miscellaneous tools and safety equipment (\$6,400).

AMORTIZED EQUIPMENT

Represents the amortization of major equipment purchases over 5-10 year periods.

AMORTIZED PLANNING

Costs for the Hydraulic Model and Inflow and Infiltration Flow Monitoring and Investigation work are being recovered through rates over 10 and 20 years, respectively.

DEPRECIATION AND AMORTIZATION

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

DEBT SERVICE

Includes interest and principal on the Spring Creek Force Main and Pump Station and the Flow Equalization Basin projects currently financed through Pennvest loans.

2015 BUDGET
SUPPORTING DETAIL
LITTLE LEHIGH RELIEF INTERCEPTOR SYSTEM - PHASE 1
WASTEWATER OPERATING AND NONOPERATING EXPENSES

PERSONNEL

Permanent/Overtime	The established operational and preventative maintenance programs will continue.
Employee Benefits	Comprised of medical coverage, defined benefit pension, long-term and short term disability, social security and Medicare contributions, flexible spending and unemployment insurance.

PURCHASE OF SERVICES

Internal Services - Overhead & Support	Overhead costs, which are not chargeable to specific funds, are allocated based on salaries within a fund as a percentage to total salaries.
Utilities	The power expense (\$121,000) reflects an estimate of the run time at the Park Pump Station and is ultimately weather dependent. The remaining cost is DSL data line service (\$1,900) and a share of the cellular phone service (\$500).
Engineering	This budget is for miscellaneous consulting and engineering services for inspection of the force main.
Fuel Spill Remediation	Fuel tank rental (\$2,800).
Maintenance Services	This budget includes: force main inspection (\$50,000), pump maintenance (\$28,500), annual maintenance contracts for the pump station (\$1,500), control system repairs (\$2,500), instrument maintenance contract (\$1,500), generator maintenance (\$3,000), meter maintenance (\$1,800), SCADA maintenance and upgrades (\$1,500), Flo-Matcher maintenance (\$3,000), equipment maintenance (\$2,000), site maintenance (\$4,400), and miscellaneous maintenance (\$9,600).
Miscellaneous Services	This budget includes a GIS/IM expense (\$5,500) and miscellaneous expenses (\$300).
Rental Charges	Allocation of expenses related to the Authority Operations Center renovations and expansion which are being allocated over 30 years.

MATERIALS & SUPPLIES

Fuel	This item is the allocation of a portion of the total LCA gasoline and diesel fuel expense based on budgeted operations personnel time.
Miscellaneous Materials & Supplies	This budget includes: oils and greases (\$300), SCADA supplies (\$700), analyzers (\$1,500), air releases (\$500) and miscellaneous supplies (\$3,500).

EQUIPMENT

This budget includes: heat exchangers (\$6,000), Flo-matcher (\$4,400), Sluice gate motor and pump (\$4,000) exhaust fan motor (\$600), sensors (\$400), pump packing rings (\$100) and misc control equipment (\$3,000).

DEPRECIATION AND AMORTIZATION

Depreciation expense is calculated by the straight-line method using standard depreciation periods.

DEBT SERVICE

Includes interest expense on Park Pump Station Improvements.

**2015 BUDGET
SUPPORTING DETAIL
LITTLE LEHIGH RELIEF INTERCEPTOR SYSTEM - PHASE 2
WASTEWATER OPERATING AND NONOPERATING EXPENSES**

PERSONNEL

Permanent/Overtime	The established operational and preventative maintenance programs will continue.
Employee Benefits	Comprised of medical coverage, defined benefit pension, long-term and short term disability, social security and Medicare contributions, flexible spending and unemployment insurance.

PURCHASE OF SERVICES

Internal Services - Overhead & Support	Overhead costs, which are not chargeable to a specific fund are allocated based on salaries within a fund as a percentage to total salaries.
Maintenance & Miscellaneous Services	This budget includes siphon chamber cleaning (\$20,000), other maintenance services (\$3,000) and cellular phone costs (\$100).
Rental Charges	Allocation of expenses related to the Authority Operations Center renovations and expansion which are being allocated over 30 years.

MATERIALS & SUPPLIES

Fuel	Allocation of a portion of the total LCA fuel expense for the service vehicles based on budget uniformed personnel time.
Miscellaneous Materials & Supplies	Miscellaneous manhole supplies (\$1,000).

EQUIPMENT

Miscellaneous equipment as may be required. Odor control for vent pipes (\$10,000)

**DEPRECIATION AND
AMORTIZATION**

Depreciation expense is calculated by the straight-line method using standard depreciation periods.

**2015 BUDGET
SUPPORTING DETAIL
COMMON RATE COLLECTOR SYSTEM
WASTEWATER OPERATING AND NONOPERATING EXPENSES**

PERSONNEL

Permanent/Overtime	Established programs for preventive maintenance of the meter station and collection system, emphasizing I/I control, will continue.
Employee Benefits	Comprised of medical coverage, defined benefit pension, long-term and short term disability, social security and Medicare contributions, flexible spending and unemployment insurance.

PURCHASE OF SERVICES

Internal Services - Overhead	Overhead costs, which are not chargeable to specific funds, are allocated based on salaries within a fund as a percentage to total salaries.
Utilities	This item includes power costs (\$42,000), share of cellular phone service (\$1,700), and phone service for dialers (\$2,000).
Treatment & Transportation	Represents charges to the Upper Milford and Weisenberg Township Collector Systems for flow and strength based on sample strength or normal strength levels for non-sampled customers. This category includes costs associated with the Western Lehigh Interceptor, the Little Lehigh Interceptors and Emmaus transportation charges.
Maintenance Services	This budget includes treatment plant maintenance (\$17,000), collection system maintenance (\$10,000), line cleaning (\$5,000), sludge hauling (\$16,000), Monk's Security (\$2,500) generator maintenance (\$1,300), and miscellaneous maintenance and repairs (\$3,250).
Miscellaneous Services	This budget includes permit fees (\$2,250) and miscellaneous services and/or lien fees (\$650).
General System Planning	General System planning expenses which are not attributable to any specific capital project.
Rental Charges	Allocation of expenses related to the Authority Operations Center renovations and expansion which are being allocated over 30 years.

MATERIALS & SUPPLIES

Miscellaneous Materials & Supplies	This budget includes chlorine (\$1,950), soda ash (\$4,400), sodium thiosulfate (\$1,100), clara flocc (\$1,600), pH buffer (\$100), odor control materials (\$650), pumping supplies (\$2,600), collection system supplies (\$3,550), treatment plant supplies (\$7,400), miscellaneous lab supplies (\$800), and miscellaneous supplies (\$3,580).
Fuel	This item is the allocation of a share of total fuel expense for the service vehicles and is based on budgeted uniformed personnel time.

EQUIPMENT

This budget includes, blower and motors (\$5,850) and miscellaneous equipment (\$5,400).

**2015 BUDGET
SUPPORTING DETAIL
COMMON RATE COLLECTOR SYSTEM
WASTEWATER OPERATING AND NONOPERATING EXPENSES**

**DEPRECIATION AND
AMORTIZATION**

Depreciation expense is calculated by the straight-line method using standard depreciation periods. Amortized planning costs are included.

DEBT SERVICE

Includes interest (2.25%) and principal payments on 2011 Sewer Revenue Note for the Heidelberg Heights Wastewater Treatment plant built in the late 1990's and interest (2.43%) and principal on borrowings for the Wynnewood Terrace and the Sand Spring System acquisitions. In addition, interest (2.25%) is included for the 2011 borrowing for the Vera Cruz project in Upper Milford Township. Coverage at 3% of annual operating expenses is included.

**2015 BUDGET
SUPPORTING DETAIL
ARCADIA WEST
WASTEWATER OPERATING EXPENSES**

PERSONNEL

Permanent/Overtime

This budget includes the collection system & pumping stations located in the Arcadia West Industrial Park (AWIP) in Weisenberg Township (*note: AWIP WTP is decommissioned and the wastewater is currently being hauled to the LCA WTP*). Established programs for preventive maintenance and the original collection system, emphasizing I/I control, will continue.

Benefits

Comprised of medical coverage, defined benefit pension, long-term and short term disability, social security and medicare contributions, flexible spending and unemployment insurance.

PURCHASE OF SERVICES

**Internal Services-
Overhead & Support**

Overhead costs, which are not chargeable to specific funds, are allocated based on salaries within a fund as a percentage to total salaries. For this system the allocation percentage is further reduced to 20% of the salary ratio, since there are less than 250 customers.

Utilities

This line includes power costs to operate the Arcadia pump stations (\$18,800), phone service for dialers (\$1,200) and this budget's share of cellular phone service (\$300).

External Lab Analyses

External lab costs are budgeted to monitor the wastewater strength from the Arcadia customers individually and the combined influent wastewater strength for the proposed new WTP.

**Contract Operating
Services**

Not applicable in this budget because the Arcadia WTP has been decommissioned.

Maintenance Services

Maintenance services are primarily utilized to operate and maintain the system and include the hauling of wastewater from the decommissioned Arcadia West wastewater treatment plant to the LCA WTP (\$12,000), SCADA updates (\$30,000) site maintenance (\$2,700), generator service (\$1,500), collection system repairs (\$1,000) and miscellaneous maintenance (\$2,000).

Miscellaneous Services

This budget includes a certification fee (\$400) and miscellaneous services (\$300).

Rental Charges

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

MATERIALS & SUPPLIES

**Miscellaneous Supplies &
Materials**

This budget includes treatment plant chemicals (\$8,500) collection system supplies (\$400), treatment plant supplies (\$1,200), pumping supplies (\$300) and other supplies (\$900).

Fuel

This item is the allocation of a share of total fuel expense for the service vehicles and is based on budgeted uniformed personnel time.

**2015 BUDGET
SUPPORTING DETAIL
ARCADIA WEST
WASTEWATER OPERATING EXPENSES CONTINUED**

Equipment

This budget includes lab equipment (\$800), collection system equipment (\$500) and other miscellaneous equipment (\$500).

DEBT SERVICE

Represents interest expense payable on the new Pennvest loan for the Western Weisenberg Wastewater Treatment Plant project.

**DEPRECIATION &
AMORTIZATION**

Depreciation expense is calculated by the straight line method using standard depreciation periods.

**2015 BUDGET
SUPPORTING DETAIL
LYNN TOWNSHIP
WASTEWATER OPERATING EXPENSES**

PERSONNEL

Permanent/Overtime	This budget includes the collection system & pumping stations located in the Lynn Township. Established programs for preventive maintenance and the original collection system, emphasizing I/I control, will continue.
Benefits	Comprised of medical coverage, defined benefit pension, long-term and short term disability, social security and medicare contributions, flexible spending and unemployment insurance.

PURCHASE OF SERVICES

Internal Services- Overhead & Support	Overhead costs, which are not chargeable to specific funds, are allocated based on salaries within a fund as a percentage to total salaries.
Utilities	This line includes power costs to operate the Lynn Township WTP (\$29,500), phone service for dialers (\$900), and this budget's share of cellular phone service (\$2,100).
External Lab Analyses	External lab costs are budgeted to monitor the wastewater strength from the customers.
Contract Operating Services	This system will be contract operated with oversight by and maintenance assistance from LCA.
Maintenance Services	Maintenance services are primarily utilized to operate and maintain the system include sludge hauling (\$25,000), I/I expense (\$20,000), treatment plant maintenance (\$5,000), site maintenance (\$1,200), collection system repairs (\$12,500), pump services (\$2,500), generator maintenance (\$1,000) and other maintenance services (\$11,700).
Miscellaneous Services	<p>This budget includes a permit fee (\$600) and miscellaneous services (\$500).</p> <p>Includes expenses which are not attributable to any specific capital project.</p>
General System Planning Rental Charges	Allocation of expenses related to the Authority Operations Center renovations and expansion which are being allocated over 30 years.

MATERIALS & SUPPLIES

Miscellaneous Supplies & Materials	This budget includes treatment plant chemicals (\$29,900), treatment plant supplies (\$1,400), pumping supplies (\$1,500), collection system supplies (\$1,300) and other miscellaneous supplies (\$2,100).
Fuel	This item is the allocation of a share of total fuel expense for the service vehicles and is based on budgeted uniformed personnel time.
Equipment	This budget includes Telog equipment (\$4,000), replacement pumps (\$5,800), replacement blower (\$2,200), variable speed drives (\$500), lab equipment (\$1,000) and other miscellaneous equipment (\$1,500).

**DEPRECIATION &
AMORTIZATION**

Depreciation expense is calculated by the straight line method using standard depreciation periods.

**2015 BUDGET
SUPPORTING DETAIL
WASTEWATER TREATMENT PLANT
WASTEWATER OPERATING AND NONOPERATING EXPENSE**

PERSONNEL

Permanent	Represents salaries and off-time allocated for staff oversight of treatment plant operations.
Employee Benefits	Comprised of medical coverage, defined benefit pension, long-term and short term disability, social security and Medicare contributions, flexible spending and unemployment insurance.

PURCHASE OF SERVICES

Internal Services - Overhead & Support	Overhead costs, which are not chargeable to specific funds, are allocated based on salaries within a fund as a percentage to total salaries.
Engineering Services	The budget includes consulting fees for plant optimization assistance and an Operations Audit on the Contract Operating Services.
Operational Services	Cost of Operations Management Inc. (OMI) services to operate the plant and includes a portion of plant repairs.
Treatment & Transportation	Represents costs associated with the Western Lehigh and Little Lehigh Interceptor systems for disposal of wastewater hauler and treatment plant discharges.
Permit/Regulatory	The budget includes permit fees as a result of increased PADEP fees.
Lab Analyses	Represents lab testing for special samples and water quality parameters and duplicate analysis for compliance evaluation.
Maintenance Services	The budget includes lawn services.
Miscellaneous Service	The budget includes property and pollution liability insurances (\$49,900), permit regulatory expense (\$10,000), printing expenses (\$2,500) and miscellaneous expenses (\$15,000).
Rental Charges	Allocation of expenses related to the Authority Operations Center renovations and expansion which are being allocated over 30 years.

MATERIALS AND SUPPLIES

Misc. Materials and Supplies	Includes miscellaneous chemicals and other supplies needed for plant operation.
Equipment	Includes miscellaneous items.

**DEPRECIATION &
AMORTIZATION**

Depreciation expense is calculated by the straight line method using standard depreciation periods.

**2015 BUDGET
SUPPORTING DETAIL
WASHINGTON TOWNSHIP
WASTEWATER OPERATING EXPENSES**

PERSONNEL

Permanent/Overtime	Assumes a full year of operation. Personnel hours include equipment maintenance, collection system maintenance, alarm responses and customer service.
Benefits	Comprised of medical coverage, defined benefit pension, long-term and short term disability, social security and Medicare contributions, flexible spending and unemployment insurance.

PURCHASE OF SERVICES

Internal Services- Overhead & Support	Overhead costs, which are not chargeable to specific funds, are allocated based on salaries within a fund as a percentage to total salaries
Utilities	This line includes a share of cellular phone service (\$300).
Engineering Services	For any miscellaneous engineering services as needed.
Treatment and Transportation	Represents the cost billed by Slatington for treatment of the Washington Township wastewater.
Contract Operating Services	A contract operator will be used to provide daily checks of the pumping stations and meter stations.
Maintenance Services	Maintenance services include: pump and meter station repairs (\$1,200), emergency hauling (\$1,000), collection system maintenance (\$5,000), pump maintenance (\$5,000), generator maintenance (\$1,500), and miscellaneous maintenance (\$2,000).
Miscellaneous Services	This budget includes lien filings (\$1,000), State Board Annual Fee (\$100) and miscellaneous services (\$1,000).
Rental Charges	Allocation of expenses related to the Authority Operations Center renovations and expansion which are being allocated over 30 years.

MATERIALS & SUPPLIES

Miscellaneous Supplies & Materials	This budget includes collection system supplies (\$1,000), electrical supplies (\$150), customer service supplies (\$150), misc pumping supplies (\$1,500) and miscellaneous supplies (\$500).
Fuel	This item is the allocation of a share of total fuel expense for the service vehicles and is based on budgeted uniformed personnel time.
Equipment	This budget includes replacement pumps (\$1,500) and other miscellaneous equipment (\$300).
Debt Service	Represents scheduled interest and principal payments on Pennvest loan assumed by LCA through the system acquisition.

**2015 BUDGET
SUBURBAN DIVISIONS**

SUBURBAN DIVISIONS WASTEWATER CAPITAL

The major activities included in the 2015 Budget are continuation of the on-going work associated with WLI Signatory I/I Investigation & Remediation program and the selection of Central Lehigh Valley future wastewater capacity alternative. Other projects include the Wynnewood Main Pump Station and Force Main replacement; and Wynnewood I & I Remediation. In addition, components of the Lynn Township Wastewater Treatment Plant Upgrades & Expansion is also projected to be under construction in 2015.

Project	2015 Budget	2015 Project Stage
WLI Signatory I/I Investigation & Remediation	\$700,000.	Various
Central Lehigh Valley Wastewater Capacity Planning & Expansion	\$150,000	Act 537 Planning
Wynnewood Sewer System I & I Remediation	175,000	Construction
Wynnewood Sewer System Improvements	850,000	Construction
Lynn Township WTP Upgrades and Expansion	780,000	Construction Phase-1

2015 BUDGET

CAPITAL EXPENDITURES SUBURBAN DIVISION WASTEWATER

Project	Priority	Estimated Project Cost	Estimated Costs Through 2014	2015 Budget	Beyond 2015
General:					
General Sewer System Acquisition & Planning	High	Annual	\$ -	\$ 60,000	\$ -
Subtotal			-	60,000	-
LCA Wastewater Treatment Plant					
General Improvements	High	10,050,000	650,000	900,000	8,500,000
Biogas Energy Related Improvements	High	5,390,000	1,860,000	200,000	3,330,000
Subtotal			2,510,000	1,100,000	11,830,000
Western Lehigh Interceptor System:					
Capital Management	High	Annual		10,000	
Sewer Mains, Connections & System Planning	High	Annual		5,000	
Mobile Equipment	High	Annual		64,750	
Other Equipment	High	Annual	-	50,000	
Central Lehigh Valley Wastewater Capacity Planning & Expansion	High	80,506,000	820,000	150,000	79,536,000
Signatory I/I Investigation & Remediation Program	Mandated	45,000,000	3,500,000	700,000	40,800,000
Interceptor Access/ Easement Acquisitions	Medium	791,000	1,000	250,000	540,000
Spring Creek Pump Station Upgrades	Medium	283,000	2,500	280,500	-
Subtotal			4,323,500	1,510,250	120,876,000
Little Lehigh Relief Interceptor System:					
Sewer Mains, Connections & System Planning	High	Annual	-	1,000	
Park Pump Station Improvements	High	2,327,000	180,000	600,000	1,547,000
Subtotal			180,000	601,000	1,547,000
Upper Milford Township:					
Sewer Mains, Connections & System Planning	High	Annual	-	5,000	
Subtotal			-	5,000	-
Northern Lehigh Service Area:					
Sewer Mains, Connections & System Planning	High	Annual	-	2,000	
Common Rate Collector System Upgrades and Improvements	High	175,000	-	175,000	-
Wynnewood Sewer System Improvements	High	1,308,000	120,000	850,000	338,000
North Whitehall Township Act 537 Plan Update	Medium	35,000	2,000	10,000	23,000
Jordan Creek Wastewater System (1)	Medium	7,055,000	320,000	25,000	6,710,000
Wynnewood I/I Investigation and Remediation Program	Medium	695,000	40,000	175,000	480,000
Sand Spring Wastewater System Improvements	Medium	1,500,000	-	25,000	1,475,000
Heidelberg Heights I/I Investigation and Remediation Program	Medium	555,000	-	50,000	505,000
Subtotal			482,000	1,312,000	9,531,000
Weisenberg Township:					
Sewer Mains, Connections & System Planning	High	Annual		5,000	
Subtotal			-	5,000	-
Lynn Township					
Sewer Mains, Connections & System Planning	High	Annual		2,500	
Wastewater Treatment Plant Improvements & Expansion	High	3,785,000	100,000	\$ 800,000	2,885,000
			100,000	802,500	2,885,000
Total Wastewater Capital Expenditures			\$ 7,595,500	\$ 5,395,750	\$ 146,669,000

(1) Includes LCA WTP @ Kidspace and Offsite Conveyance Facilities

Note: Projects in bold type will not proceed beyond the planning phase, or beyond current authorized phase without specific authorization from the LCA Board subsequent to the adoption of this budget.

**2015 BUDGET
SUPPORTING DETAIL
SUBURBAN DIVISIONS
WASTEWATER CAPITAL EXPENDITURES**

General Sewer Acquisitions & Planning	Staff and consultant involvement in actively pursuing system acquisitions (2015 Cap Ex. \$60,000).
Wastewater Treatment Plant- General Improvements	This is an on-going multi-year program to address the continued reliability of the WTP (2015 Cap Ex \$900,000).
Biogas Energy Related Improvements	This multi-year project implements the biogas related recommendations of the 2011 energy/bio-gas study. The project includes the construction of a Truck Waste Receiving Station completed in 2013 and Primary Digester Mixer replacements completed 2014, which are necessary to increase biogas production, and an on-site cogeneration and heat recovery system (CHP) that will utilize the biogas produced to generate approximately 75% of the WTPs electrical power needs. CHP design, if applicable is expected to start in mid-2015 (2015 Cap Ex \$200,000).
Capital Management - WLI	Management activities and general engineering planning as required (\$10,000).
Sewer Mains, Connections & System Planning	Capital Works services required for system extensions and connections in all systems including the reimbursable costs of plan review and construction inspection. Also includes the cost of ggeneral sewer system planning, all systems (2015 Cap Ex \$20,000).
Mobile Equipment	1 easement tractor and 1 truck (2015 Cap Ex \$64,750)
Other Equipment	Equipment that is necessary to maintain service integrity. Items include line plugs, sampling equipment, electric and electronic equipment, I/I equipment, etc. (2015 Cap Ex \$50,000).
Central Lehigh Valley Wastewater Capacity Planning & Expansion	The City of Allentown does not currently have enough available wastewater treatment capacity to meet LCA's future needs. Updating the 537 Plan is a primary focus this budget year to identify the best alternative for future wastewater capacity. Primary alternatives include increasing capacity at the City of Allentown Wastewater Treatment Plant (WTP); or upgrading the LCA WTP to full treatment (2015 Cap Ex. \$150,000).
Signatory I/I Investigation & Remediation Program	This multiyear on-going I & I reduction project is composed of flow monitoring in LCA and Signatory collection systems tributary to the WLI, approval of the SCARP, SSES investigatory work. Preliminary Objectives Evaluation, Level of Service Modeling and many other tasks ultimately culminating with the work necessary to facilitate the removal of I & I in segments of systems identified with unacceptable levels of I & I 2015 Cap Ex (\$700,000).
Interceptor Access & Easements Acquisition	This multi-year project includes existing LCA easement clearing and grubbing and/or easement acquisitions for equipment access to LCA Western Lehigh Interceptor. (2015 Cap Ex \$250,000).

**2015 BUDGET
SUPPORTING DETAIL
SUBURBAN DIVISIONS
WASTEWATER CAPITAL EXPENDITURES**

**Spring Creek Pump Station
Upgrades**

This project includes the design and construction of two new motor operators with SCADA control for the 30" weir slide gates. Currently these side gates are manually operated (2015 Cap Ex \$280,500).

**Park Pump Station
Improvement**

This multi-year on-going project addresses the infrastructure repairs, improvements and upgrades necessary for the 27-year-old facility. Included is full SCADA control of the facility, installation of a new double walled underground fuel oil tank; and existing hydraulic sluice gate, upgrade to VFD motor controls and associated equipment and other items identified and prioritized in a condition assessment report completed by our consultant, Malcolm Pirnie Inc., (2015Cap Ex \$600,000).

**Wynnewood Sewer System
Improvements**

This on-going multi-year project includes the design, permitting and construction of improvements in the existing collection system and at the wastewater treatment plant, acquired in July, 2003. Construction to replace the aged primary pumping and station force main is expected to start in in early 2015. Additional system improvements, if justified, will be executed in as needed. (2015 Cap Ex (\$850,000).

**North Whitehall Township
Act 537 Plan Update - NL**

North Whitehall Township will be reevaluating their 2009 ACT 537 Plan which identified a proposed regional wastewater treatment plant located on a five-acre tract on the Kids Peace Campus. The Township will be assuming the lead role on this effort but has requested that LCA provide support and expertise as required (2015 Cap Ex \$10,000).

**Jordan Creek Wastewater
System - NL**

This multi-year on-going project includes the acquisition of a site at the Kids Peace campus for a regional wastewater treatment plant, the design and construction of a 200,000-gpd wastewater treatment plant and pump station and other facilities necessary to provide wastewater service to Kids Peace, Wal-Mart and other properties in the Jordan Creek watershed. The project is currently on hold pending the outcome of the North Whitehall Act 537 Plan Update (2015 Cap Ex \$25,000).

**Wynnewood Sewer System
I/I Investigation and
Remediation Program**

This multi-year project includes, flow metering, inspecting all properties for floor drains, sump pumps or any other illegal connections to the sanitary sewer system, inspecting manholes, televising sewer mains & laterals. In addition, a yearly allowance is included to repair identified I & I problems, which is subject to change dependent upon what is found (2015 Cap Ex \$175,000).

**2015 BUDGET
SUPPORTING DETAIL
SUBURBAN DIVISIONS
WASTEWATER CAPITAL EXPENDITURES**

**Sand Spring Wastewater
System Improvements**

This multi-year project includes, includes a condition evaluation of the Sand Spring WWTP and development of a remediation plan and facilitation of the related repairs. In the long-term, assumed in years 6-10 when the proposed regional Jordan Creek WWTP is constructed the Sand spring WWTP will be abandoned (if justified by new development growth) and a pump station and ~6,200 I. F. of force main will be constructed to convey the wastewater to the new regional WWTP. (2015 Cap Ex \$25,000).

**Heidelberg Heights I/I
Investigation and
Remediation Program**

This multi-year project includes flow monitoring, SSES work in areas identified and some funding for remediation measures. (2015 Cap Ex \$50,000).

**Lynn Township- Wastewater
Treatment Plant Upgrades
& Expansion**

This multi-year project is envisioned to be executed in two phases. Phase-1 includes disinfection facility and influent chamber upgrades and is expected to be complete in late 2014. Phase-2, if warranted is the expansion the WTP capacity from 80,000 GPD to 160,000 GPD. The WTP Upgrades & Expansion was designed and permitted by Gannett Fleming for the Lynn Township Sewer Authority prior to the LCA acquisition of the system. Phase-2, the WTP expansion addressed in the Townships Act 537 Plan was driven by system infiltration inflow (I/I) issues and projected growth, however we are reevaluating certain assumptions regarding the sizing of the components of WTP as a significant amount of I/I has been removed from the collection system since the initial design. Timing of the WTP expansion will be dependent upon I/I remediation efforts and growth (2015 Cap Ex \$800,000).

LEHIGH COUNTY AUTHORITY

CITY DIVISION

**2015 BUDGET
CITY DIVISION
SUMMARY OF REVENUES AND RESERVE FUNDS**

	2013 Actual	2014 Budget	2014 Estimate	2015 Budget
OPERATING FUNDING				
<u>OPERATING REVENUES:</u>				
Water System	\$ 6,748,381	\$ 16,411,329	\$ 16,380,020	\$ 16,696,347
Wastewater System	6,244,922	16,400,394	14,667,870	14,308,588
Total	12,993,303	32,811,723	31,047,891	31,004,934
<u>OPERATING EXPENSES (NET OF DEPRECIATION):</u>				
Water System	2,260,974	8,550,634	7,458,961	7,570,895
Wastewater System	2,028,199	9,337,414	8,237,887	8,961,100
Other Expenses	-	-	-	-
Total	4,289,172	17,888,048	15,696,848	16,531,995
SURPLUS (DEFICIT) - OPERATING RESERVE	8,704,131	14,923,675	15,351,042	14,472,940
<u>DEBT SERVICE & RESERVES:</u>				
Interest Expense	4,131,778	13,047,722	13,047,722	13,047,722
Interest Income	-	(20,000)	(8,071)	(462,500)
Bond Discount Amortization	-	316,622	316,622	316,622
Capitalized Interest	-	(1,350,000)	(1,350,000)	(1,350,000)
Total	4,131,778	11,994,344	12,006,273	11,551,844
SURPLUS (DEFICIT) AFTER USE OF RESERVES	\$ 4,572,353	\$ 2,929,331	\$ 3,344,769	\$ 2,921,096
Debt Service Coverage	2.11	1.28	1.31	1.28
CAPITAL FUNDING				
<u>NON-OPERATING REVENUES:</u>				
Water System	\$ 21,269	\$ -	\$ -	\$ -
Wastewater System	-	-	-	-
Total	21,269	-	-	-
<u>CAPITAL CONTRIBUTIONS:</u>				
Water System	571,000	1,620,000	-	1,903,500
Wastewater System	405,000	3,769,000	-	3,730,000
Total	976,000	5,389,000	-	5,633,500
<u>BORROWED FUNDS & RESERVES:</u>				
Water System	367,500	3,359,000	4,053,807	7,264,500
Wastewater System	446,000	5,278,000	3,451,893	5,329,995
Total	813,500	8,637,000	7,505,700	12,594,495
CAPITAL EXPENDITURES	1,789,500	14,026,000	7,505,700	18,227,995
SURPLUS (DEFICIT) - CAPITAL RESERVE FUND	\$ 21,269	\$ -	\$ -	\$ -

CITY DIVISION

WATER

2015 BUDGET

WATER FUND-CITY OPERATING BUDGET

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

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

Each division is affected by Federal and Pennsylvania Safe Drinking Water Regulations. Depending on the source, differing analyses are required for water quality monitoring. State and Local regulations also have an impact on water quality, performance monitoring and reporting.

The consumer base is located throughout the City of Allentown. Water is also provided to surrounding areas through the use of system interconnects. Sources of supply include two groundwater springs – Schantz and Crystal. In addition, two surface water sources include the Little Lehigh Creek and the Lehigh River. Average daily demand for 11 months of 2014 was 18.1 mgd.

Customer growth in the Allentown Division is expected to be minimal, although we expect increased consumption mainly through the interconnection with the Suburban Division. The Suburban Division is expected to increase from an average of 4 mgd to 7 mgd by 2017.

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

- Cost effective use of all 4 water sources
- Optimization of the Treatment Process through the Partnership for Safe Water
- Preventative/Predictive maintenance programs, utilizing the CMMS
- Aggressive Leak Detection Program
- Use/Upgrade of the SCADA System to allow for more cost effective operations
- Long term service contract for Reservoir/Tank maintenance program
- Enhanced CMMS to maintain cost
- Fleet management to control/maintain vehicle expenses
- Upgrade/replace aging/ineffective equipment that is beyond it's useful life

ALLENTOWN DIVISION SUMMARY OF WATER EXPENSES

OPERATING EXPENSES:	PROPOSED FUNDING
PERSONNEL:	\$3,343,681
PURCHASE OF SERVICES:	3,319,514
MATERIALS AND SUPPLIES:	907,700
TOTAL OPERATING EXPENSES	\$7,570,895

**2015 BUDGET
CITY DIVISION
SUMMARY OF REVENUES AND RESERVE FUNDS
WATER SYSTEM**

	2013 Actual	2014 Budget	2014 Estimate	2015 Budget
OPERATING FUNDING				
<u>OPERATING REVENUES:</u>				
Residential/Industrial/Commercial	\$ 5,521,113	\$ 13,301,657	\$ 13,166,278	\$ 13,297,940
Penalties	96,094	236,391	295,004	300,000
Fire Service	32,458	79,848	56,178	60,000
Reserves		-	-	-
Other Water Sales	1,098,716	2,793,433	2,862,560	3,038,406
Total	\$ 6,748,381	\$ 16,411,329	\$ 16,380,020	\$ 16,696,347
OPERATING EXPENSES	2,260,974	8,550,634	7,458,961	7,570,895
SURPLUS (DEFICIT) - OPERATING RESERVE	\$ 4,487,407	\$ 7,860,695	\$ 8,921,059	\$ 9,125,452
CAPITAL FUNDING				
<u>NONOPERATING REVENUES:</u>				
Supply/Special Tapping Fees	\$ 21,269	\$ -	\$ -	\$ -
Meter Sales & Installations	-	-	-	-
Distribution Tapping Fees	-	-	-	-
Inspection & Review Fees	-	-	-	-
Reimbursement from Wastewater Funds	-	-	-	-
Other Income	-	-	-	-
Total Nonoperating Revenues	21,269	-	-	-
<u>CAPITAL CONTRIBUTIONS:</u>				
Grants	-	-	-	-
Reimbursement from Other Entities	571,000	1,620,000	-	1,903,500
Total Capital Contributions	571,000	1,620,000	-	1,903,500
BORROWED FUNDS & RESERVES	367,500	3,359,000	4,053,807	7,264,500
TOTAL CAPITAL FUNDING	959,769	4,979,000	4,053,807	9,168,000
CAPITAL EXPENDITURES	938,500	4,979,000	4,053,807	9,168,000
SURPLUS TO CAPITAL RESERVE FUND	\$ 21,269	\$ -	\$ -	\$ -

**2015 BUDGET
SUPPORTING DETAIL
WATER FUND-CITY**

OPERATING AND NONOPERATING REVENUES

Residential/Industrial	LCA projects customer growth of 1% over estimated 2014 revenues (\$13,297,940).
Penalties	Assume penalties to stay in line with 2014 performance (\$300,000).
Public Fire Service	Assume fire hydrants to stay in line with 2014 performance (\$60,000).
Interest Income	Assume investment of approximately \$40 million of reserves and other cash in Treasury Bills and Treasury Notes at 6 month to 5 year maturities (\$462,500). This is reflected on the City Division Summary of Revenues and Reserves Funds page.
Other Water Sales	Includes miscellaneous revenues received for LCA water supply contract, as well as Salisbury and South Whitehall Township (\$3,038,406).

CAPITAL REVENUES

Supply Tapping Fees	No new charges are assumed.
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**2015 BUDGET
CITY DIVISION
OPERATING EXPENSES
WATER SYSTEM TOTAL**

	2013 Actual	2014 Budget	2014 Estimate	2015 Budget
OPERATING EXPENSES:				
PERSONNEL:				
Permanent	\$ 751,961	\$ 2,218,241	\$ 2,240,648	\$ 2,113,644
Overtime	131,799	300,542	385,529	326,414
Employee Benefits	258,977	1,261,102	836,350	903,622
Total	1,142,736	3,779,885	3,462,527	3,343,681
PURCHASE OF SERVICES:				
Internal Services - Overhead & Support (including Lab)	251,305	1,589,129	1,466,045	1,700,389
Utilities	309,795	1,077,570	829,160	688,325
Engineering	-	25,000	14,000	10,500
Contract Operating Svcs	101,724	53,400	47,500	61,900
Residuals	6,381	-	30,000	30,000
Analyses (External)	-	-	-	-
Maintenance Services	52,763	490,100	455,750	690,800
Extraordinary Expenditures	41,667	125,000	70,000	20,000
Industrial Meter Testing & Repair	-	-	1,000	10,500
Miscellaneous Services	18,382	118,100	99,700	107,100
Total	782,017	3,478,299	3,013,155	3,319,514
MATERIALS AND SUPPLIES:				
Pump Supplies	-	38,500	37,500	31,000
Purification Supplies	143,950	514,500	340,500	311,000
Distribution & Transmission Supplies	98,728	433,800	355,000	326,500
Misc. Materials & Supplies	61,976	88,400	128,000	121,700
Fuel & Mileage	19,311	122,500	75,000	78,000
Total	323,965	1,197,700	936,000	868,200
Equipment	12,256	94,750	47,280	39,500
TOTAL OPERATING EXPENSES	\$ 2,260,974	\$ 8,550,634	\$ 7,458,961	\$ 7,570,895

**2015 BUDGET
CITY DIVISION
OPERATING EXPENSES
WATER FILTRATION PLANT**

	2013	2014	2014	2015
	Actual	Budget	Estimate	Budget
OPERATING EXPENSES:				
PERSONNEL:				
Permanent	\$ 371,902	\$ 1,054,339	\$ 1,047,251	\$ 998,508
Overtime	76,561	150,271	206,861	186,838
Employee Benefits	131,470	612,370	400,748	438,967
Total	579,932	1,816,980	1,654,860	1,624,312
PURCHASE OF SERVICES:				
Internal Services - Overhead & Support (including Lab)	113,230	918,455	827,181	970,265
Utilities	303,965	1,041,200	803,700	655,600
Engineering	-	25,000	14,000	10,500
Contract Operating Svcs	75,566	-	-	-
Residuals	6,381	-	30,000	30,000
Analyses (External)	-	-	-	-
Maintenance Services	34,567	165,800	160,050	460,800
Extraordinary Expenditures	-	-	-	-
Industrial Meter Testing & Repair	-	-	1,000	500
Miscellaneous Services	2,971	108,500	64,700	64,600
Total	536,681	2,258,955	1,900,631	2,192,265
MATERIALS AND SUPPLIES:				
Pump Supplies	-	38,500	37,500	31,000
Purification Supplies	143,950	514,500	340,500	311,000
Misc. Materials & Supplies	32,358	74,000	73,600	82,200
Fuel & Mileage	3,350	18,000	10,000	11,000
Total	179,658	645,000	461,600	435,200
Equipment	20,909	47,470	-	18,300
TOTAL OPERATING EXPENSES	\$ 1,317,181	\$ 4,768,405	\$ 4,017,091	\$ 4,270,077

**2015 BUDGET
SUPPORTING DETAIL
WATER FUND-CITY**

**OPERATING AND NONOPERATING EXPENSES
WATER FILTRATION PLANT DIVISION**

PERSONNEL

Permanent/Overtime	Represent salaries and off-time of employees' direct time at Water Filtration Plant.
Employee Benefits	Comprised of medical coverage, defined benefit pension, long-term and short term disability, social security and Medicare contributions, flexible spending and unemployment insurance.

PURCHASE OF SERVICES

Internal Services - Overhead & Lab	Overhead costs (\$970,265), which are not directly allocable to certain funds, divisions or departments are allocated based on salaries within a fund, division or department as a percentage to total salaries. City Laboratory costs are allocated (\$280,585) based on the percentage of use (33%).
Utilities	Power costs of (\$597,000), gas service (\$50,000), phone service (\$7,100) and garbage service (\$1,500).
Engineering	This budget includes consulting services that may be required throughout the year (\$10,500), such as minor permitting for the facility and engineering work.
Residuals	Disposal of treatment residuals to the Wastewater treatment facility (\$30,000).
Maintenance Services	This budget includes contracted maintenance service expenses for maintenance and repair of plant equipment (\$47,000), vehicles (\$20,000), as well as SCADA service (\$23,600), site and building maintenance (\$245,700), and steel tank maintenance and other misc. services (\$124,500).
Indust. Mtr Test & Repair	Interconnect meter testing, calibration, and service (\$500).
Miscellaneous Services	This budget line item includes expenses for DEP storage tank registration fees (\$1,000), USGS service fee (\$36,000), employee uniforms (\$6,000), DRBC fees (\$5,000) and other fees & services (\$16,600).

MATERIALS & SUPPLIES

Purification Supplies	This budget includes chemicals used throughout the treatment process including sodium hypochlorite, sodium hydroxide, alum, pac, fluoride and other chemicals utilized in the treatment process and laboratory (\$311,000).
Miscellaneous Materials & Supplies	This budget includes an estimate for miscellaneous materials and supplies, safety equipment and building supplies (\$82,200).
Pump Supplies	This line item includes expenses to purchase oil, lubricants, pipe, fittings and parts for pump & valve maintenance repairs throughout the treatment process and reservoir/tank locations. (\$31,000)
Fuel	This item includes the allocation of a share of the total fuel expense for the service vehicles (\$11,000).
Equipment	Funding to replace/update process metering and various equipment used at the treatment plant, reservoirs and booster pump stations (\$18,300).

**2015 BUDGET
CITY DIVISION
OPERATING EXPENSES
WATER DISTRIBUTION SYSTEM**

	2013 Actual	2014 Budget	2014 Estimate	2015 Budget
OPERATING EXPENSES:				
PERSONNEL:				
Permanent	\$ 380,059	\$ 1,163,902	\$ 1,193,398	\$ 1,115,137
Overtime	55,238	150,271	178,668	139,577
Employee Benefits	127,507	648,732	435,601	464,655
Total	562,804	1,962,905	1,807,667	1,719,369
PURCHASE OF SERVICES:				
Internal Services - Overhead & Support (including Lab)	138,075	670,674	638,863	730,125
Utilities	5,830	36,370	25,460	32,725
Engineering	-	-	-	-
Contract Operating Svcs	26,158	53,400	47,500	61,900
Analyses (External)	-	-	-	-
Maintenance Services	18,195	324,300	295,700	230,000
Extraordinary Expenditures	41,667	125,000	70,000	20,000
Industrial Meter Testing & Repair	-	-	-	10,000
Miscellaneous Services	15,410	9,600	35,000	42,500
Total	245,336	1,219,344	1,112,523	1,127,250
MATERIALS AND SUPPLIES:				
Pump Supplies	-	-	-	-
Purification Supplies	-	-	-	-
Distribution & Transmission Supplies	98,728	433,800	355,000	326,500
Misc. Materials & Supplies	29,618	14,400	54,400	39,500
Fuel & Mileage	15,961	104,500	65,000	67,000
Total	144,307	552,700	474,400	433,000
Equipment	(8,654)	47,280	47,280	21,200
TOTAL OPERATING EXPENSES	\$ 943,793	\$ 3,782,229	\$ 3,441,870	\$ 3,300,818

**2015 BUDGET
SUPPORTING DETAIL
WATER FUND-CITY**

OPERATING AND NONOPERATING EXPENSES

WATER DISTRIBUTION SYSTEM DIVISION

PERSONNEL

Permanent/Overtime	Represent salaries and off-time of employees' direct time in Water Distribution.
Employee Benefits	Comprised of medical coverage, defined benefit pension, long-term and short term disability, social security and Medicare contributions, flexible spending and unemployment insurance.

PURCHASE OF SERVICES

Internal Services - Overhead	Overhead costs (\$730,125), which are not directly allocable to certain funds, divisions or departments, are allocated based on salaries within a fund, division or department as a percentage to total salaries.
Utilities	Power costs of (\$13,500), gas service (\$15,000), phone service (\$2,825) and garbage service (\$1,400).
Contract Operating Services	Funding for large repairs, valves associated within the dist. system, sinkhole restoration, and required water system services. (\$61,900).
Maintenance Services	This budget includes expenses required for site and building maintenance (\$5,000), equipment rental (\$10,000), paving restorations (\$105,000), permitting (\$20,000), equipment repairs and maintenance (\$10,000) and mobile equipment maintenance (\$30,000), janitorial services (\$9,500), leak detection and hydrant services (\$12,500), and miscellaneous expenses (\$28,000).
Extraordinary Service & Equip. Expenditures	This budget line maintains the same level of insurance against an extraordinary leak repair and restoration (\$20,000).
Miscellaneous Services	This budget includes uniforms (\$4,500); other uniforms not covered by Unifirst (\$3,900) customer notification (\$500) radio repairs and communications center fees (\$9,900) Pennsylvania One Call system (\$18,000) Boiler maintenance (\$1,200) Industrial Meter testing (\$10,000), and other services (\$4,500).

MATERIALS & SUPPLIES

Fuel	This item includes the allocation of a share of the total fuel expense for the service vehicles (\$67,000).
Miscellaneous Materials & Supplies	Funding to purchase supplies to repair and maintain the distribution system, buildings and equipment. Major items include repair clamps, fittings and pipes (\$95,000), "No-Lead" brass and copper (\$80,000), hydrants (\$63,000), crushed stone and blacktop (\$60,000), valve and curb boxes (\$14,000), meter fitting and supplies (\$25,000), Service, billing, and customer service forms (\$8,500) and other miscellaneous supplies (\$20,500).
Equipment	Funding to replace/update equipment used to maintain the distribution system. Major items include handheld radio replacements (\$12,000), leak survey equipment (\$2,500), metal detector (\$2,500) and other equipment and supplies (\$4,200).

**2015
BUDGET**

**WATER FUND-CITY
CAPITAL BUDGET**

Water projects in the 2015 Budget focus on regulatory compliance, future needs, assuring the reliability& improving the water transmission/distribution network, and Water Filtration Plant; and addressing the Lease operating standards. Key projects include the rehabilitation of the 28th Street elevated tank and the construction of a chlorine booster station on the Schantz Spring main. Funding is also provided to comply with the Lease requirement to replace 2-miles of aged and/or failing spun cast and pit cast water mains annually. To assist in future planning needs, an "all pipe" City water system hydraulic model is included. Finally, studies will be conducted to; pilot test the change in coagulants at the Water Filtration Plant (WFP) to identify any issues prior to the changeover; and to evaluate both operational and capital improvements options to minimize water age in the reservoirs

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

- Uncompleted Work Projects (UW): Are projects that were the City's responsibility to fund and complete prior to the closing of the Concession Lease, however the majority of the projects were not started and none have been completed. The City has requested that LCA execute these projects. Funding will be provided by the City.

Project	2015 Budget	2015 Project Stage
28 th Street Elevated Steel Tank Rehabilitation	\$ 427,000	Construction
Schantz Spring Chlorine Booster Station	246,500	Design/ Construction
Water Main Replacement Program	4,270,000	Design/ Construction
WFP SCADA Upgrades	300,000	Design/ Construction
Pre-Lease Valve Replacements	1,110,000	Design/ Construction
Water System Hydraulic Model	381,500	Model Development

**2015 BUDGET
CAPITAL EXPENDITURES
ALLENTOWN DIVISION
WATER**

Project	Priority	Estimated Project Cost	Estimated Costs Through 2014	2015 Budget	Beyond 2015
<u>LCA Funded Projects</u>					
Capital Management		Annual		65,000	
Capital Works Supplies, Software & Other Work		Annual		15,000	
Distribution Mains, Service Connections & System Planning		Annual		110,000	
Distribution Mains - Upsizing *		Annual		30,000	
Distribution System Improvements (3rd Party)		Annual		10,000	
New & Replacement Meter Installations (non-project)		Annual		145,000	
Mobile Equipment		Annual		223,000	
Other Equipment		Annual		250,000	
WFP General Improvements		Annual		350,000	
Water Main Replacement Program ⁽²⁾		45,270,000	3,010,000	4,270,000	37,990,000
WFP SCADA Upgrades		460,000	-	300,000	160,000
Various Water System Related Studies		1,250,000	50,000	250,000	950,000
Transmission Main Evaluation, Replacements & Rehabilitation		9,100,000	-	150,000	8,950,000
General Water System Replacements/Improvements		5,700,000	-	500,000	5,200,000
Fix Base Meter Reading System		1,705,000	-	5,000	1,700,000
Emergency Power - Water & Wastewater Facilities		750,000	-	150,000	600,000
Schantz Spring Main Replacement & Leak Rehabilitation ⁽²⁾		1,405,000	-	50,000	1,355,000
Water System Hydraulic Model		391,500	10,000	381,500	-
Backflow Control Prevention Program Planning		50,000	-	10,000	40,000
Sub-total Allentown Division Water Capital Funded by LCA			3,070,000	7,264,500	56,945,000
<u>City Funded Projects</u>					
28th Street Elevated Steel Tank Rehabilitation ⁽³⁾	High	430,000	3,000	427,000	-
Schantz Spring Chlorine Booster Station ⁽³⁾	High	250,000	3,500	246,500	-
AMR Meter Project ^{(3), (4)}	High	245,000	20,000	120,000	105,000
Pre-Lease Valve Replacements ⁽³⁾	High	1,110,000	-	1,110,000	-
Sub-total Allentown Division Water Capital Funded by the City			26,500	1,903,500	105,000
Total Allentown Division Water Capital Expenditures:			\$ 3,096,500	\$ 9,168,000	\$ 57,050,000

Note: Projects in bold type will not proceed beyond the planning phase, or beyond current authorized phase without specific authorization from the LCA Board subsequent to the adoption of this budget.

* Individual upsizing contributions less than \$75,000 will not require additional authorization beyond adoption of this budget.

(2) Required Capital Improvement Projects as shown on Schedule 7 of the Agreement and will be funded by LCA.

(3) "Uncompleted Work" City Projects that were supposed to be complete by the time of settlement or executed by City personnel after settlement.

The City will fund these projects but has requested that LCA execute them.

(4) Costs reflected from 2014 forward. Previous City costs in excess of \$8 Million not shown

**2015 BUDGET
SUPPORTING DETAIL
WATER FUND-CITY**

OPERATING AND NONOPERATING REVENUES

CAPITAL EXPENDITURES

Capital Management	Costs of providing general management and administrative services for the water capital programs (2015 Cap Ex \$65,000).
Capital Works Supplies, Software & Other Work	Miscellaneous supplies and the Allentown Divisions share of updating Water and Wastewater General Design & Construction Specifications. (2015 Cap Ex \$15,000).
Distribution Mains, Service Connections & System Planning	Capital Works services required for distribution system extensions and connections including the reimbursable costs of plan review and construction inspection. Also includes the cost of providing general system engineering and planning (2015 Cap Ex \$110,000).
Distribution Mains Upsizing	Economically provides proper pipe capacities and extensions to meet future service needs by increasing pipe sizes in proposed developer-installed systems to provide sizes as desired by LCA or if applicable may fund the a portion of a off-site water main extension to serve a development (2015 Cap Ex \$30,000).
Distribution System - Improvements (3rd Party)	Costs of additional valves or piping to improve the operation of the existing system. Where it is economical, improvements are made under a third party's contract (2015 Cap Ex \$10,000).
New & Replacement Meter Installations (non-project)	Material and labor costs for meters, radio read receivers and if applicable backflow prevention devices installed for new customers and defective or customer damaged meters. The costs of installations for the new customers and damaged meters are reimbursed through collection of meter installation fees (2015 Cap Ex \$145,000).
Mobile Equipment	Purchase of 1-SUV, 1-Small Van and 1-Full size Pickup Truck (2015 Cap Ex \$223,000).
Other Equipment	Contains individual equipment over \$5,000. Replacement and new equipment is required from time to time to maintain and improve service integrity and reliability. Items include electric and electronic equipment, pumping equipment, leak detection equipment and other equipment as needed (2015 Cap Ex \$250,000)
WFP General Improvements	Funding to cover the on-going replacement of equipment that is nearing the end of its useful life and to address unforeseen equipment failures. Equipment will be constantly evaluated and repaired or replaced as needed. (2015 Cap Ex \$350,000)
Water Main Replacement Program	Over 50% of the Allentown Divisions water system is pit cast iron or spun cast iron mains. Some of the pit cast mains date back to the turn of the century, however the spun cast mains have a higher failure. Although the entire system will be evaluated, LCA will work closely with the City Streets department to coordinate main replacements in advance of the annual City Street paving schedule. (\$4,270,000)

**2015 BUDGET
SUPPORTING DETAIL
WATER FUND-CITY**

WFP SCADA Upgrades

Upgrade of the current Dynac plant wide SCADA system hardware and software to the latest version of Dynac ES. This will standardize the SCADA systems at both WWTP and WFP. (2015 Cap Ex \$300,000)

**Various Water System
Related Studies**

1) Water Filtration Plant (WFP) –Complete a study to assure that the change in the type of coagulants will not impact the quality of the finished water; (2) Schantz Spring- Identify the impact of and improvements necessary at the WFP when DEP designates Schantz Spring "as under the influence of ground water"; (3) Reservoirs- Identify physical improvements and/or operating changes to minimize water age in the reservoirs; (4) Conduct preliminary design of a new Little Lehigh Creek intake that will meet current regulatory criteria. (5) Evaluate upgrading the dual media filters @ the WFP to higher rate mixed media filters. (2015 Cap Ex \$250,000)

**Transmission Main
Evaluation, Replacements
& Rehabilitation**

This project involves leak detection of many older and large sized water transmission mains that are located within the city. Based on the findings, appropriate repairs or replacements of those mains will be made. The costs of the replacements and repairs are included in this project. The 2015 Budget will focus on non-invasive leak detection of approximately 32,000 feet of cast iron and steel transmission mains. If warranted future budgets will address rehabilitation or replacement of approximately 1000 feet of transmission main annually. (2015 Cap Ex \$150,000)

**General Water System
Replacements/
Improvements**

Provides funding on as as-needed basis for distribution system valve replacements; the replacement of some lead services and to provide looping for problematic dead end water mains; and for other issues as they are identified. (2015 Cap Ex \$500,000)

**Fixed Base Meter Reading
System**

A fixed base system provides instantaneous readings of any water meter via a radio signal directly to the customer care center via a series transmitters and repeaters installed throughout the water system service area this a multi-year project where the 2015 work will be investigatory .. (2015 Cap Ex \$5,000)

**Emergency Power Water &
Wastewater Facilities**

There have been several instances over the past few years when the water plant and/or the high level distribution systems were without power. The four (4) high level distribution systems all have manual transfer switches but a mobile generator needs to be purchased. The wastewater plant needs a portable generator and manual transfer switch for the chlorination building. 2015 will include buying both portable generators and installing a manual transfer switch at the chlorination building. Subsequent Budget Years will include installations of manual transfer switches for both the Crystal Spring and Schantz Spring Pumps in the Water Plant and the installation of the generators. 40% of the costs for 2015 will come out of Water Capital and the other 60% will come out of Wastewater Capital. Subsequent years will be 100% Water Capital (2015 Cap Ex \$150,000)

**Schantz Spring Main
Replacement & Leak
Rehabilitation**

This multi-year Project, includes the replacement of approximately 2,000 lf, 1903 vintage, 30-inch diameter main in Martin Luther King, Jr. Boulevard from Schribers Bridge to the Water Filtration plant. The project also includes addressing other leaks that were identified during the Smart Ball leak detection work. (2015 Cap Ex \$50,000)

**2015 BUDGET
SUPPORTING DETAIL
WATER FUND-CITY**

**Water System Hydraulic
Model**

There is no model of the City water system, as such there is no dynamic way to evaluate the capabilities of the water system, identify areas where pipe sizes or network configuration impacts fire flow capability. A model will be required evaluate sections of aged mains that have not structurally failed to determine if replacement is warranted. (2015 Cap Ex \$381,500)

**Backflow Control
Prevention
Program Planning**

The Pennsylvania Department of Environmental Resources requires all water suppliers to implement a Backflow Control Prevention Program. The Allentown Division does not have a program; and since records are incomplete or non-existent it is assumed that a majority of the 2,000 non-residential customers do not have a backflow device. This multi-year project will identify, survey, inspect and implement a mandatory backflow protection program, where the customers will be responsible to install at their cost an acceptable backflow prevention device. 2015 efforts will focus on high level planning. (2015 Cap Ex \$10,000)

**28th Street Elevated Steel
Tank Rehabilitation**

The project will repair structural deficiencies, make improvements and recoat (paint both interior and exterior surfaces. (2015 Cap Ex \$427,000)
Uncompleted Work- City Funded

**Schantz Spring Chlorine
Booster Station**

The City's initial concept was the construction of Chlorine Booster Station, located on City park property north of Honochick Drive, between Ott Street and the park pavilions along a section of the Schantz Spring water transmission main. However LCA is developing an alternate plan that will eliminate the need for a remote building.
(2015 Cap Ex \$246,500) ***Uncompleted Work- City Funded***

AMR Meter Project

This multi-year project completes the remaining work of the City's AMR project and includes the purchase and implementation of Water Analytics software package to a repository to store data gathered from the meters in the division for use in identifying customer metering issues; and the installation of 747 meters were not completed because the sites were either vacant or not accessible. (2015 Cap Ex \$120,000) ***Uncompleted Work- City Funded***

**Pre-Lease Valve
Replacements**

The Project includes the replacement of 52 valves that were identified as inoperable prior to the Lease settlement. (2015 Cap Ex \$1,110,000)
Uncompleted Work- City Funded

CITY DIVISION WASTEWATER

**2015
SUMMARY
WASTEWATER FUND-CITY**

OPERATING BUDGET

LCA's operation and maintenance responsibilities include the operation of the Kline's Island Wastewater Treatment Plant and the portion of the collection system that resides in the geographic boundaries of the City of Allentown.

The 2014 budget was developed to provide, accordance with applicable regulatory requirements and utilizing recognized operational, maintenance and industrial pretreatment procedures to effectively convey and process the wastewater generated in the service area of treatment facility. Compliance with the Standards of Practice agreed upon as part of the lease will be an essential focus for the wastewater staff of the city division, as well as compliance with the 2007 and 2009 administrative orders. In addition, the plant's staff will be working closely with the LCA Capital Works group in completion of the numerous plant improvement projects that are planned for the coming year.

OPERATING EXPENSES:	PROPOSED FUNDING
PERSONNEL:	\$3,611,534
PURCHASE OF SERVICES	\$4,301,914
MATERIALS AND SUPPLIES	\$1,047,652
TOTAL OPERATING EXPENSES	\$8,961,100

**2015 BUDGET
CITY DIVISION
SUMMARY OF REVENUES AND RESERVE FUNDS
WASTEWATER SYSTEM**

	2013 Actual	2014 Budget	2014 Estimate	2015 Budget
OPERATING FUNDING				
<u>OPERATING REVENUES:</u>				
User Charges - Municipal	\$ 2,667,428	\$ 7,210,215	\$ 6,036,235	\$ 5,412,370
User Charges - Residential and Commercial	3,173,900	7,903,855	8,065,562	8,146,218
Other Income	403,594	1,286,324	566,072	750,000
Total	6,244,922	16,400,394	14,667,870	14,308,588
OPERATING EXPENSES	2,028,199	9,337,414	8,237,887	8,961,100
SURPLUS (DEFICIT) - OPERATING RESERVE	\$ 4,216,723	\$ 7,062,980	\$ 6,429,983	\$ 5,347,488
CAPITAL FUNDING				
<u>NON-OPERATING REVENUES:</u>				
Total	\$ -	\$ -	\$ -	\$ -
<u>CAPITAL CONTRIBUTIONS:</u>				
Grants				
Reimbursement from other entities	405,000	3,769,000	-	3,730,000
Total	405,000	3,769,000	-	3,730,000
<u>BORROWED FUNDS & RESERVES:</u>	446,000	5,278,000	3,451,893	5,329,995
TOTAL CAPITAL FUNDING	851,000	9,047,000	3,451,893	9,059,995
CAPITAL EXPENDITURES	\$ 851,000	\$ 9,047,000	\$ 3,451,893	\$ 9,059,995
SURPLUS (DEFICIT) - CAPITAL RESERVE FUND	\$ -	\$ -	\$ -	\$ -

**2015 BUDGET
CITY DIVISION
OPERATING EXPENSES
WASTEWATER SYSTEM TOTAL**

	2013 Actual	2014 Budget	2014 Estimate	2015 Budget
OPERATING EXPENSES:				
PERSONNEL:				
Permanent	\$ 728,926	\$ 2,267,682	\$ 2,160,554	\$ 2,288,450
Overtime	143,378	259,028	352,673	347,075
Employee Benefits	257,981	1,284,467	795,144	976,008
Total	1,130,285	3,811,177	3,308,371	3,611,534
PURCHASE OF SERVICES:				
Internal Services - Overhead & Support (including Lab)	63,543	1,907,305	1,795,985	2,103,138
Utilities	289,283	1,065,395	1,053,692	1,005,427
Engineering	-	60,000	32,833	45,000
Contract Operating Services	48,123	201,915	169,117	200,400
General Analyses	-	20,000	15,000	20,000
Maintenance Services	93,149	569,008	427,375	502,966
Miscellaneous Services	119,800	414,590	372,234	424,983
System Planning/Capital Management	-	-	-	-
I/I Rehabilitation Program	-	-	-	-
Total	613,899	4,238,213	3,866,237	4,301,914
MATERIALS AND SUPPLIES:				
Fuel	42,852	117,600	88,789	95,800
Purification Chemicals	126,711	450,574	581,416	367,100
Miscellaneous Supplies	93,783	674,450	366,937	520,102
Equipment	20,668	45,400	26,137	64,650
Amortized Equipment	-	-	-	-
Total	284,015	1,288,024	1,063,278	1,047,652
AMORTIZED PLANNING	-	-	-	-
RESERVE FUND ALLOCATION	-	-	-	-
DEPRECIATION & AMORTIZATION	-	-	-	-
TOTAL OPERATING EXPENSES	\$ 2,028,199	\$ 9,337,414	\$ 8,237,887	\$ 8,961,100

**2015 BUDGET
CITY DIVISION
OPERATING EXPENSES
KLINE ISLAND WASTEWATER TREATMENT PLANT**

	2013 Actual	2014 Budget	2014 Estimate	2015 Budget
OPERATING EXPENSES:				
PERSONNEL:				
Permanent	\$ 578,634	\$ 1,753,192	\$ 1,706,069	\$ 1,698,371
Overtime	118,315	203,564	267,494	230,926
Employee Benefits	206,946	994,728	624,102	714,472
Total	903,895	2,951,484	2,597,665	2,643,769
PURCHASE OF SERVICES:				
Internal Services - Overhead & Support (including Lab)	17,730	1,607,766	1,436,394	1,692,180
Utilities	285,901	1,030,525	1,037,292	969,802
Engineering	-	60,000	32,833	45,000
Contract Operating Svcs	40,879	27,965	4,316	1,900
General Analyses	-	20,000	15,000	20,000
Maintenance Services	45,037	203,908	194,800	266,616
Miscellaneous Services	111,577	406,790	360,474	381,783
System Planning/Capital Management	-	-	-	-
Total	501,124	3,356,954	3,081,109	3,377,281
MATERIALS AND SUPPLIES:				
Fuel	29,945	76,800	51,316	55,000
Purification Chemicals	126,711	450,574	581,416	367,100
Miscellaneous Supplies	62,896	333,000	227,960	286,482
Equipment	11,267	45,400	25,976	49,000
Amortized Equipment	-	-	-	-
Total	230,819	905,774	886,668	757,582
AMORTIZED PLANNING				
RESERVE FUND ALLOCATION				
DEPRECIATION & AMORTIZATION				
TOTAL OPERATING EXPENSES	\$ 1,635,838	\$ 7,214,212	\$ 6,565,442	\$ 6,778,632

**2015 BUDGET
SUPPORTING DETAIL
WASTEWATER FUND-CITY**

OPERATING AND NONOPERATING EXPENSES

WASTEWATER TREATMENT PLANT DIVISION

PERSONNEL

Permanent/Overtime	Represent salaries and off-time of employees' direct time at the Kline's Island Wastewater Treatment Plant and the Industrial Pretreatment Program. The budget provides for one additional Treatment Plant Operator to better manage overtime incurred as a result on staffing the divisions treatment plant on a 24/7 basis.
Employee Benefits	Comprised of medical coverage, defined benefit pension, long-term and short term disability, social security and Medicare contributions, flexible spending and unemployment insurance.

PURCHASE OF SERVICES

Internal Services - Overhead & Lab costs	Overhead costs (\$1,122,669) which are not chargeable to certain funds are allocated based on salaries within a fund as a percentage to total salaries. City Laboratory costs are allocated (\$569,511) based on the percentage of use (67%).
Utilities	This account includes the power costs of (\$900,802) to operate the Kline's Island WWTP, natural gas service (\$60,000), telephone (\$6,600) and garbage hauling (\$2,400).
Engineering	This budget line item is for miscellaneous consultant assistance with the: EPA Administrative Order reporting, operator shift schedule development, and plant operations consultation (\$45,000).
Contract Operating Services	Contract services (\$1,900) including Accu-Weather storm warnings and meteorological data are provided for in this item.
Analysis (External)	This account provides for external laboratory analysis of samples to support the biosolids disposal program, landfill disposal requirements, and Industrial Pretreatment Program (\$20,000).
Maintenance Services	This budget includes: annual maintenance contracts for: office cleaning (\$48,243); site and building maintenance (\$43,446), equipment rental (\$5,000); pump maintenance services (\$45,000); other maintenance services (\$3,250); SCADA expenses (\$6,100); mobile equipment maintenance (\$60,000); treatment plant maintenance (\$54,577); and CCTV services (\$1,000).
Miscellaneous Services	Miscellaneous expenses include employee costs such as uniforms and safety shoes; PADEP fees for licenses, permits and registrations (\$31,333); residuals disposal (\$346,000); and flow monitoring (\$4,450).

MATERIALS & SUPPLIES

Fuel	This item includes the allocation of a share of the total fuel expense for the service vehicles (\$55,000).
Purification Supplies	The treatment plant chemical budget includes: LOX (\$33,200); sodium hypochlorite (\$100,000); chlorine (\$55,000); polymer (\$119,040); larvicide (\$27,000); potassium permanganate (\$17,000); and other chemicals (\$15,860).

**2015 BUDGET
SUPPORTING DETAIL
WASTEWATER FUND-CITY**

**Miscellaneous Materials
and Supplies**

This budget item provides for the supplies required to maintain the wastewater treatment plant: mechanical (\$150,000); electrical (\$20,000); plumbing (\$27,000); belt filter press supplies (\$30,000); instrumentation supplies (\$15,000); and lubricants (\$9,000). In addition, the pumping supplies category includes: small pump parts (\$20,000); pipe (\$5,000); and valves/fittings (\$5,000). Other miscellaneous materials are mobile equipment supplies (\$5,482).

Equipment

This budget includes equipment expenses associated with the biosolids dewatering operation and preventive maintenance of the odor control units (\$49,000).

**2015 BUDGET
CITY DIVISION
OPERATING EXPENSES
WASTEWATER COLLECTION SYSTEM**

	2013 Actual	2014 Budget	2014 Estimate	2015 Budget
OPERATING EXPENSES:				
PERSONNEL:				
Permanent	\$ 150,292	\$ 514,490	\$ 454,486	\$ 590,079
Overtime	25,063	55,464	85,178	116,149
Employee Benefits	51,035	289,739	171,042	261,536
Total	226,390	859,693	710,706	967,765
PURCHASE OF SERVICES:				
Internal Services - Overhead & Support (including Lab)	45,813	299,539	359,591	410,958
Utilities	3,382	34,870	16,400	35,625
Engineering	-	-	-	-
Contract Operating Services	7,243	173,950	164,801	198,500
General Analyses	-	-	-	-
Maintenance Services	48,113	365,100	232,576	236,350
Miscellaneous Services	8,223	7,800	11,760	43,200
System Planning/Capital Management	-	-	-	-
I/I Rehabilitation Program	-	-	-	-
Total	112,775	881,259	785,128	924,633
MATERIALS AND SUPPLIES:				
Fuel	12,907	40,800	37,473	40,800
Misc. Materials & Supplies	30,887	341,450	138,977	233,620
Equipment	9,402	-	161	15,650
Amortized Equipment	-	-	-	-
Total	53,196	382,250	176,611	290,070
AMORTIZED PLANNING				
RESERVE FUND ALLOCATION				
DEPRECIATION & AMORTIZATION				
TOTAL OPERATING EXPENSES	\$ 392,361	\$ 2,123,202	\$ 1,672,445	\$ 2,182,468

**2015 BUDGET
SUPPORTING DETAIL
WASTEWATER FUND-CITY**

**OPERATING AND NONOPERATING EXPENSES
WASTEWATER COLLECTION SYSTEM DIVISION**

PERSONNEL

Permanent/Overtime	Represent salaries and off-time allocated for staff oversight.
Employee Benefits	Comprised of medical coverage, defined benefit pension, long-term and short term disability, social security and Medicare contributions, flexible spending and unemployment insurance.

PURCHASE OF SERVICES

Internal Services – Overhead	Overhead costs, which are not chargeable to certain funds, are allocated based on salaries within a fund as a percentage to total salaries (\$410,958).
Utilities	Budget is for garbage hauling (\$5,000); Electric costs of (\$12,000); telephone (\$3,625); and natural gas service (\$15,000).
Contract Operating Services	Budget includes such services as CCTV truck software maintenance (\$1,600); root control program (\$85,000); railroad easement fee (\$8,500); Farland Development (\$3,000); trenchless spot repairs (\$50,000); street cut restorations (\$50,000); and pest control (\$400).
Maintenance Services	This budget includes: annual maintenance contracts for: office cleaning (\$6,000); site and building maintenance (\$7,500); equipment maintenance and rental (\$61,000); other maintenance services (\$6,600); mobile equipment maintenance (\$50,250); extraordinary sewer repairs (\$65,000); and CCTV services (\$40,000).
Miscellaneous Services	This budget includes traffic control, uniform service, clothing, communication centers, PA 1 system, radio repairs, and miscellaneous services (\$43,200).

MATERIALS & SUPPLIES

Fuel	This item includes the allocation of a share of the total fuel expense for the service vehicles (\$40,800).
Mobile Equipment Supplies	Budget is for small vehicle repairs (\$5,200)
Misc. Supplies	Budget provides for work order forms and supplies, misc. supplies for mini camera and line tracer (\$17,400) and additional AO supplies (\$40,000).
Collection System Supplies	This budget includes degreaser (\$10,000); inspection die & deodorizer (\$500); concrete additive (\$1,200); PVC pipe & fittings (\$3,000); manhole frames and covers (\$30,370); risers and inserts (\$55,000); ferncos & couplings (\$10,000); concrete SDR pipe (\$5,500); hose lines (\$5,000) paving material (\$15,000); lubricating oils & grease (\$2,500); root cutter (\$8,950) crushed stone (\$15,000); and maintenance & construction materials (\$9,000)
Equipment	Budget includes two (2) radio units (\$8,000), Light Stick (\$5,000) and a Trash Pump (\$2,650).

**2015
SUMMARY
WASTEWATER FUND-CITY**

CAPITAL BUDGET

Wastewater projects in 2015 focus on regulatory compliance, critical needs at the Wastewater Treatment Plant (WWTP) and addressing the Lease operating standards. Key projects include, the replacement of five motor control centers, replacement of two digester covers all at the WWTP; WWTP SCADA Upgrade, and for the replacement and/or rehabilitation of defective sewer mains. In addition funding is provided to replace the aged and failing roofing systems on many Allentown Division facilities.

The projects identified in the Budget fall into to two primary categories, those funded by LCA and those funded by the City, with the latter further categorized as Administrative Order (AO) projects and Uncompleted Work (UW).

- **Administrative Order Projects (AO):** Are projects necessary to bring the City's wastewater system into compliance with the US Environmental Protection Agency (USEPA) Administrative Order to eliminate Sanitary Sewer Overflows / By-passes at Outfall 003 of the wastewater treatment plant. Pursuant to the Concession Lease Agreement (Lease) the City is responsible for making all decisions related to this work; and for funding said work. LCA is responsible for the execution of the work.
- **Uncompleted Work Projects (UW):** Are projects that were the City's responsibility to fund and complete prior to the closing of the Concession Lease, however the majority of the projects were not started and none have been completed. The City has requested that LCA execute these projects. Funding will be provided by the City.

Project	2015 Budget	2015 Project Stage
WWTP SCADA Upgrades	\$1,200,000	Construction
WWTP- Replacement of Motor Control Centers	\$2,422,000	Construction
Facility Roof Replacements	\$1,325,000	Construction
WWTP- Digester Cover Replacements	\$75,000	Design

**2015 BUDGET
CAPITAL EXPENDITURES
CITY DIVISION
WASTEWATER**

Project	Priority	Estimated Project Cost	Estimated Costs Through 2014	2015 Budget	Beyond 2015
<u>LCA Funded Projects</u>					
Capital Management	High	Annual		60,000	
Collection System - Development, Service Connections & System Plannin	High	Annual		40,000	
Mobile Equipment	High	Annual		464,500	
Other Equipment	High	Annual		50,000	
WWTP General Improvements	High	Annual		440,000	
WWTP- Replacement of Motor Control Centers ⁽²⁾	High	2,662,000	240,000	2,422,000	-
WWTP- Belt Filter Press Rebuilds & Replacement ⁽²⁾	High	1,643,495	1,190,000	453,495	-
WWTP- Digester Cover Replacements ⁽²⁾	High	2,305,000	5,000	75,000	2,225,000
Facility Roof Replacements (Water & Wastewater Facilities)	High	1,686,000	36,000	1,325,000	325,000
Sub-total Allentown Division Wastewater Capital Funded by LCA			\$ 1,471,000	\$ 5,329,995	\$ 2,550,000
<u>City Funded Projects</u>					
WWTP-SCADA Upgrades ⁽³⁾	High	1,210,000	10,000	1,200,000	-
WWTP Interim Blending Pumping System ⁽⁴⁾	Medium	1,250,000	-	1,250,000	-
WRA Phase II RDII Corrective Action Plan Tasks 1-6 ⁽⁴⁾	Mandated	378,000	1,000	377,000	-
Sanitary Sewer Manhole Lining ⁽⁴⁾	Mandated	290,000	1,000	289,000	-
Sanitary Sewer Manhole Collars & Water Tight Covers ⁽⁴⁾	Mandated	340,000	1,000	339,000	-
Sanitary Sewer Main Replacements and/or Rehabilitation ⁽⁴⁾	High	2,750,000	-	275,000	2,475,000
Sub-total Allentown Division Wastewater Capital Funded by the City			\$ 13,000	\$ 3,730,000	\$ 2,475,000
Total Wastewater Capital Expenditures:			\$ 1,484,000	\$ 9,059,995	\$ 5,025,000

Note: Projects in bold type will not proceed beyond the planning phase, or beyond current authorized phase without specific authorization from the LCA Board subsequent to the adoption of this budget.

(2) Required Capital Improvement Projects as shown on Schedule 7 of the Agreement and will be funded by LCA.

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

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

**2015 BUDGET
SUPPORTING DETAIL
WASTEWATER FUND-CITY**

CAPITAL EXPENDITURES

Capital Management	Costs of providing general management and administrative services for the waste water capital programs (2015 Cap Ex \$60,000).
Collection System- Development, Service Connections & System Planning	Plan review and construction inspection of extensions and connections to the sanitary sewer system. Also includes the cost of providing general system engineering and planning (2015 Cap Ex \$40,000).
Mobile Equipment	Purchase one Vac-Truck and one ATV Gator (2015 Cap Ex \$464,500).
Other Equipment	Generally utilized for purchase of individual equipment greater than \$5,000. Replacement equipment is required from time to time to maintain service integrity. Items include valves, sampling equipment, electric and electronic equipment, Infiltration & Inflow (I/I) equipment and other equipment as needed. (2015 Cap Ex \$50,000)
WWTP General Improvements	Funding to cover the on-going replacement of equipment that is nearing the end of its useful life and to address unforeseen equipment failures. Equipment will be constantly evaluated and repaired or replaced as needed. (2015 Cap Ex \$440,000)
Sanitary Sewer Main Replacements and/or Rehabilitation	Replacement and/or rehabilitation of sanitary sewer mains that have been found to be defective. The replacement and/or rehabilitation of "Building Sewers" or Laterals as defined in City Ordinance "Title Five- Sewers" that are connected to said sewer mains is not included because these laterals are owned and maintained by the owners of the improved properties. (2015 Cap Ex \$275,000) <i>Note: Some repairs may be considered by LCA as City Funded Administrative Order work.</i>
WWTP-Replacement of Motor Control Centers	This Project will replace five aged motor control centers that provide power on a 24/7 basis to various parts of the WWTP. (2015 Cap Ex \$2,422,000)
WWTP-Belt Filter Press Rebuilds & Replacement	The completion of the project started in 2014 that will replace one Belt Filter Press (BFP) and rebuild in place two BFPs. (2015 Cap Ex \$453,495)
WWTP-Digester Cover Replacements	Design with bid-ready plans is anticipated in 2015; with Phase 1 of the Project the replacement of the primary digester cover taking place in 2016; and Phase-2 the replacement of the secondary digester cover in 2017. (2015 Cap Ex. \$75,000)
Facility Roof Replacements	Many roof systems at the WFP, WWTP, distribution/collection building and water system remote stations are in various stages of disrepair. In 2014 LCA retained a consultant to perform condition assessments on 43 different roof systems, some of them the original slate roofs from as far back as 1916. The roof assessment report identified the need for immediate roof replacements and/or repairs for a significant number of buildings. 75% of the proposed work being related to wastewater infrastructure and the remaining 25% being related to water. (2015 Cap Ex. \$1,325,000)

**2015 BUDGET
SUPPORTING DETAIL
WASTEWATER FUND-CITY**

WWTP-SCADA Upgrades

Installation of a plant wide SCADA system that would enable operators to monitor and remotely control equipment at the WWTP (2015 Cap Ex \$1,200,000). **Uncompleted Work, City Funded**

**WWTP Interim Blending
Pumping System**

This project provides for the installation of 4 diesel power pumps and associated pipeline to increase the hydraulic capacity of Kline's Island WWTP (KIWWTP) during significant wet-weather events which result from the remnants of hurricane and tropical storms. Once installed blending of wastewater that has received primary treatment with fully treated plant effluent will be made possible reducing environmental concerns related to the current practice of discharging raw sewage to the Little Lehigh Creek during these extreme wet-weather events. Note: This Project is contingent upon PADEP approval of blending. (2015 Cap Ex. \$1,250,000). **Administrative Order Project, City Funded**

**WRA Phase II RDII
Corrective Action Plan,
Tasks 1-6 & C-1,2 &3**

The work will include Task-1 finalization of the alternatives as identified in the Phase 1 Corrective Action Plan; Task-2: Determination of Flow Equalization Volume; Task-3 Evaluation of Effluent Blending; and 3 other tasks one of which will be developing the Phase II Corrective Action Plan. This work is a component of the work that will be necessary to comply with the EPA Administrative Order. (2015 Cap Ex. \$377,000) **Administrative Order Project, City Funded**

**Sanitary Sewer Manhole
Linings**

This annual project will install lining in approximately 50- aged brick manholes to eliminate infiltration and provide structural reinforcement. The City has directed LCA to bring the project to a bid ready stage, but not to bid unless authorized to do so by the City. This work is a component of the work that will be necessary to comply with the EPA Administrative Order. (2015 Cap Ex. \$289,000). **Administrative Order Project, City Funded**

**Sanitary Sewer Manhole
Chimneys & Water Tight
Covers**

This four year project involves securing new watertight frames and covers to approximately 400 aged brick riparian manholes. The preferred method is to install a 5' diameter/4' deep concrete collar to secure the new watertight frames and covers to the manhole, however because of access issues alternative methodologies will need to be developed and utilized. This work will eliminate the potential for inflow into and Sanitary Sewer Overflows from these manholes. (2015 Cap Ex. \$339,000). **Administrative Order Project, City Funded**

**2015 BUDGET
SUPPORTING DETAIL
WASTEWATER FUND-CITY**

OPERATING AND NONOPERATING REVENUES

User Charges-Municipal

The City is party to Municipal Sewer Service Agreements under which the Sewer Utility System provides sewer services to seven municipalities or municipal authorities: the Borough of Emmaus, Hanover Township, Salisbury Township, South Whitehall Township, the Coplay-Whitehall Authority, the Existing LCA System and Lower Macungie Township. Pursuant to these agreements, LCA will act as the agent of the City and will perform all of the contractual obligations of the City under each Municipal Agreement Charges, including the billing and collection of the revenues (\$5,412,370).

User Charges-Residential

LCA projects a baseline of 33,096 residential and commercial customers being billed at a rate of 85% of water usage, under service charges based on concession rate schedule (\$8,146,218).

Other Income

Includes penalties and interest (\$175,000), leachate treatment, septic disposal fees, industrial waste charges and other miscellaneous income totaling \$ 750,000.

**2015 BUDGET
SUPPORTING DETAIL
WASTEWATER FUND-CITY**

CAPITAL REVENUES

Special Sewer Charges

No new charges are assumed.

Connection Fees

No new charges are assumed.

CITY DIVISION SUPPORT SERVICES

**2015 BUDGET
CITY DIVISION
OPERATING EXPENSES
ALLOCATION UNIT: LABORATORY**

	2013 Actual	2014 Budget	2014 Estimate	2015 Budget
OPERATING EXPENSES:				
PERSONNEL:				
Permanent (A)	\$ 149,360	\$ 364,466	\$ 318,512	\$ 327,864
Overtime	2,284	3,852	3,095	-
Benefits	104,625	181,136	97,350	121,417
Total	256,270	549,454	418,957	449,281
PURCHASE OF SERVICES:				
Internal Services - Overhead & Support	38,332	187,263	166,939	190,786
Engineering	-	3,000	-	26,000
Contract Operating Services	-	-	11,500	29,000
Laboratory Maintenance Services	1,670	33,350	33,350	48,950
Analyses (External)	11,903	26,700	19,700	33,000
Compliance Expense	-	-	-	-
Miscellaneous	14,003	3,700	5,500	11,000
Total	65,908	254,013	236,989	338,736
MATERIALS & SUPPLIES:				
Lab Supplies	-	27,000	5,000	45,000
Miscellaneous Supplies	11,843	15,300	2,000	5,000
Total	11,843	42,300	7,000	50,000
EQUIPMENT:				
Total	11,843	19,000	14,745	12,000
DEPRECIATION:				
TOTAL EXPENSES	\$ 345,863	\$ 864,767	\$ 677,690	\$ 850,016

OPERATING AND NONOPERATING EXPENSES

CITY - LABORATORY

PERSONNEL

Permanent/Overtime	Represent salaries and off-time of employees' direct time at the Laboratory.
Employee Benefits	Comprised of medical coverage, defined benefit pension, long-term and short term disability, social security and Medicare contributions, flexible spending and unemployment insurance.

PURCHASE OF SERVICES

Internal Services - Overhead & Support	Overhead costs, which are not directly allocable to certain funds, divisions or departments are allocated based on salaries within a fund, division or department as a percentage to total salaries.
Lab Maintenance Services	This budget includes service and maintenance for laboratory equipment (\$48,950).
External Analysis	This budget includes analysis for effluent and waste hauler metals, and various water analyses (\$33,000).
Miscellaneous Services	This budget includes application fees for regulatory permits (\$11,000).

MATERIALS & SUPPLIES

Misc Supplies	This budget includes lab supplies, chemicals, and controls (\$50,000).
Equipment	This budget includes the replacement of a muffle furnace and dishwasher (\$12,000).

INTERNAL SERVICE FUNDS

**2015 BUDGET
SUPPORTING DETAIL
INTERNAL SERVICE-CONSOLIDATED**

The City Internal Service Budget includes overhead, support and general administrative services, which are included in the City Operating and Capital Budgets. These costs are recovered through reimbursements from the City Divisions' operating and capital budget, based upon services provided. The budget incorporates six functions: Accounting, Risk Management, Personnel, Legal, Customer Care and General Administration.

The development of a separate City Internal Service Budget was based on the realization that the City Division was similar to the Suburban Division, in that it maintained a level of exclusive support functions for the productive activities of water and wastewater services. As a result, LCA isolated specific elements of costs, which were allocated to each area of operation, based on the pro-rata share of its salaries.

Today, in addition to the City Internal Service Budget and the Suburban Internal Service Budget, LCA has established a Consolidated Internal Service Budget to capture those costs which benefit both the City and Suburban Division, but whose capture is uneconomical or unreasonable. These Consolidated Internal Service costs are allocated to each Division on its pro rata share or revenue.

2015 BUDGET
OPERATING EXPENSES
ALLOCATION UNIT: CONSOLIDATED INTERNAL SERVICE

	2013 Actual	2014 Budget	2014 Estimate	2015 Budget
PERSONNEL:				
Permanent (A)		\$ 443,915	\$ 592,229	\$ 556,096
Overtime		-	4,080	-
Benefits		117,444	150,593	146,567
Total	-	561,359	746,903	702,663
PURCHASE OF SERVICES:				
Postage		16,184	22,664	23,344
Telephone		-	24,413	77,800
Computer Services		126,556	128,879	156,230
IT Consultant Services		-	-	-
Advertising		5,000	4,150	5,000
Building & Equipment Maintenance		42,550	53,577	62,120
Utilities		84,100	53,344	46,900
Audit Fees		37,455	52,855	55,000
Dues & Subscriptions		25,000	33,191	36,305
Travel & Mileage		5,000	6,199	7,000
Education & Training		76,680	57,895	42,015
Worker's Compensation Insurance		22,175	19,713	22,816
P&L Insurance		-	1,161	1,500
Legal/Litigation Fees		50,000	102,039	95,500
Miscellaneous		121,075	85,181	260,250
Risk Management		-	-	61,700
Compliance Expense		-	-	17,750
Public Relations		98,625	43,347	84,525
Special Studies		25,000	27,648	35,000
Total	-	735,400	716,256	1,090,755
MATERIALS & SUPPLIES:				
Office Supplies		8,761	17,163	17,678
Maintenance Materials and Supplies		-	-	-
Total	-	8,761	17,163	17,678
EQUIPMENT/SITE IMPROVEMENT:				
Gen'l Office Furniture and Equipment		-	41,270	25,000
Computer Equipment & Software		22,700	-	33,200
Operation Center Improvement		-	-	-
Total	-	22,700	41,270	58,200
DEPRECIATION:				
TOTAL EXPENSES	\$ -	\$ 1,328,220	\$ 1,521,591	\$ 1,869,295

(A) Salaries include bonus payout.

**2015 BUDGET
REVENUE SUMMARY
CONSOLIDATED INTERNAL SERVICE FUND**

	2013 Actual	2014 Budget	2014 Estimate	2015 Budget
Service Fee Allocation (1)		\$ 1,328,220	\$ 1,521,591	\$ 1,869,295
Interest and Other Income (2)				
TOTAL REVENUES (3)	\$ -	\$ 1,328,220	\$ 1,521,591	\$ 1,869,295

(1) Internal Service charges to other budgets.

(2) 2013 includes a \$3,000 Safety grant from the Delaware Valley Worker's Compensation Trust.

(3) Excludes recovery of depreciation since actual equipment & furniture payouts are recovered in full in the year of the expenditure or through use of reserves.

**2015 BUDGET
SUPPORTING DETAIL
INTERNAL SERVICE-CONSOLIDATED**

Expenses

PERSONNEL

Permanent/Overtime

Represents salaries and off-time of employees' indirect time in support of LCA's City and Suburban Divisions.

Employee Benefits

Comprised of medical coverage, defined benefit pension, long-term and short term disability, social security and Medicare contributions, flexible spending and unemployment insurance.

PURCHASE OF SERVICES

Postage

Represents cost for general mailings, not identified as either City or Suburban (\$23,344).

Computer Services

Represents costs benefiting both City and Suburban systems, such as MUNIS Service License (\$66,000), MUNIS Dashboard, Human Resources and Maplink (\$10,000), GIS ESRI Software Maintenance (\$15,500), GIS Consulting Services (\$10,000), EZ Micro (\$32,850) and other services (\$21,880).

**Building & Equipment
Maintenance**

Represents Operations Center costs, such as office cleaning (\$18,000), security services (\$7,500), site maintenance (\$16,500) and other maintenance (\$20,120).

Utilities

Budget includes Operations Center Costs, such as electric (\$36,000), propane (\$4,000), cable (\$2,500) and other utilities (\$4,400).

Audit Fees

Represents an extension of Zelenkofske Axelrod's contract for the audit of LCA.

Dues and Subscriptions

Organization membership fees and contributions and periodical subscriptions.

Travel and Mileage

Includes reimbursement to employees at prevailing IRS rate for personal vehicle use for business purposes.

Education and Training

Represents primarily the leadership team's expenses of seminars, conferences and training.

Workers Compensation

Required Coverage for workforce.

Legal/Litigation

Represents costs associated with labor relations, part-time Solicitor and other global legal issues (\$95,500),

Miscellaneous

Comprised of human resource projects (\$100,000), banking costs (\$73,000), risk management activities (\$61,700), compliance expenses (\$17,750) outsourced billing (\$35,000), lien processing (\$15,000), company picnic and other employee activities (\$11,000), other miscellaneous (\$26,250).

Public Relations

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

Special Study

Budget includes a compensation study.

**2015 BUDGET
SUPPORTING DETAIL
INTERNAL SERVICE-CONSOLIDATED**

MATERIALS & SUPPLIES

Office Supplies

Purchase of copier and computer supplies and general office supplies.

Office Furniture

Represents costs of furniture for new employees.

Computer Equipment

Includes purchase of (20) Verizon Tablets (\$10,000), (6) desktop computers (\$7,500), Domain Controller and Exchange Server Upgrade (\$7,000) and other hardware purchases (\$8,700).

**2015 BUDGET
SUPPORTING DETAIL
INTERNAL SERVICE-CITY**

The City Internal Service Budget includes overhead, support and general administrative services, which are included in the City Operating and Capital Budgets. These costs are recovered through reimbursements from the City Divisions' operating and capital budget, based upon services provided. The budget incorporates six functions: Accounting, Risk Management, Personnel, Legal, Customer Care and General Administration.

The development of a separate City Internal Service Budget was based on the realization that the City Division was similar to the Suburban Division, in that it maintained a level of exclusive support functions for the productive activities of water and wastewater services. As a result, LCA isolated specific elements of costs, which were allocated to each area of operation, based on the pro-rata share of its salaries.

Today, in addition to the City Internal Service Budget and the Suburban Internal Service Budget, LCA has established a Consolidated Internal Service Budget to capture those costs which benefit both the City and Suburban Division, but whose capture is uneconomical or unreasonable. These Consolidated Internal Service costs are allocated to each Division on its pro rata share or revenue.

2015 BUDGET
OPERATING EXPENSES
ALLOCATION UNIT: CITY INTERNAL SERVICE

	2013 Actual	2014 Budget	2014 Estimate	2015 Budget
PERSONNEL:				
Permanent (A)	\$ 489,828	\$ 573,990	\$ 533,839	\$ 693,292
Overtime	15,165	16,879	17,001	10,390
Benefits	75,299	300,371	176,551	260,593
Total	580,292	891,240	727,391	964,276
CONSOLIDATED INTERNAL SERVICES	-	917,121	1,217,273	1,391,379
PURCHASE OF SERVICES:				
Postage	22,500	101,823	89,333	92,013
Computer Services	11,724	34,050	11,092	36,700
IT Consultant Services	-	-	-	-
Advertising	-	-	-	-
Building & Equipment Maintenance	367	25,000	-	-
Utilities	10,376	10,000	21,041	-
Dues and Subscriptions	-	-	5,559	-
Travel & Mileage	432	-	1,904	-
Education & Training	4,265	45,890	36,101	44,046
Worker's Compensation Insurance	-	153,163	140,250	162,326
Property & Liability Insurance	124,115	316,887	310,315	287,344
Legal/Litigation Fees	-	-	1,498	2,500
Miscellaneous	20,439	103,200	142,709	-
Risk Management	-	-	-	74,100
Compliance Expense	-	-	-	5,500
Public Relations	-	-	-	-
Special Studies	-	-	-	-
Uncollectible Receivables	-	125,000	99	-
Total	194,216	915,013	759,902	704,529
MATERIALS & SUPPLIES:				
Office Supplies	2,019	20,652	12,495	12,870
Maintenance Materials and Supplies	240	-	480	-
Total	2,259	20,652	12,975	12,870
EQUIPMENT/SITE IMPROVEMENT:				
Gen'l Office Furniture and Equipment	-	-	33,738	-
Computer Equipment & Software	507	74,904	-	71,243
Total	507	74,904	33,738	71,243
DEPRECIATION:				
TOTAL EXPENSES	\$ 777,275	\$ 2,818,930	\$ 2,751,278	\$ 3,144,297

(A) Salaries include bonus payout.

**2015 BUDGET
REVENUE SUMMARY
CITY INTERNAL SERVICE FUND**

	2013 Budget	2014 Annualized	2014 Estimate	2015 Budget
Service Fee Allocation (1)	\$ 777,275	\$ 2,818,930	\$ 2,751,278	\$ 3,144,297
Interest and Other Income (2)				
TOTAL REVENUES (3)	\$ 777,275	\$ 2,818,930	\$ 2,751,278	\$ 3,144,297

(1) Internal Service charges to other budgets.

(2) 2013 includes a \$3,000 Safety grant from the Delaware Valley Worker's Compensation Trust.

(3) Excludes recovery of depreciation since actual equipment & furniture payouts are recovered in full in the year of the expenditure or through use of reserves.

**2015 BUDGET
SUPPORTING DETAIL
INTERNAL SERVICE-CITY**

Expenses

PERSONNEL

Permanent/Overtime

Represents salaries and off-time of employees' direct time in the City System supporting either the Water Filtration Plant, Water Distribution System, Wastewater Treatment Plant, Wastewater Collection System or Lab.

Employee Benefits

Comprised of medical coverage, defined benefit pension, long-term and short term disability, social security and Medicare contributions, flexible spending and unemployment insurance.

PURCHASE OF SERVICES

**Internal Services -
Overhead (Consolidated)**

Overhead costs (\$1,391,379), which are not directly allocable to certain funds are indirectly allocated based on salaries within a fund, division or department as a percentage of total salaries.

Postage

Represents cost to mail City customer water and wastewater billings (\$92,013).

Computer Services

Represents costs such as PennTeledata Fiber (\$23,600) and Advanced Copier Service and Supplies (\$3,050) and other services (\$10,050).

Education and Training

Budget includes specifically identified training for City Division employees, whether through participation in seminars or classes (\$44,046).

Workers Compensation

Required Coverage for City Division workforce (\$162,326).

**Property & Liability
Insurance**

Required Coverage required under the Concession Agreement for the City Division assets (\$287,344).

Legal/Litigation Fees

Budgeted fees for legal assistance in Concession compliance (\$2,500).

Miscellaneous

Represents Risk Management (\$75,100) and Compliance Expenses (\$5,500) for City Division. Comprised of fleet management, professional services, safety shoe reimbursement, other safety equipment and other expenses.

MATERIALS & SUPPLIES

Office Supplies

Purchase of computer supplies and general office supplies (\$12,870).

Computer Equipment

Includes replacement of ten desktop computers (\$15,000), twenty Verizon Tablets (\$10,000), two Laptop computers with Docking Stations (\$10,000) and some printers and other hardware (\$36,243).

**2015 BUDGET
CAPITAL EXPENDITURES
CITY DIVISION
ADMINISTRATIVE**

Project	Priority	Estimated Project Cost	Estimated Costs Through 2014	2015 Budget	Beyond 2015
<u>LCA Funded Projects</u>					
Geographic Information System Upgrades & Application Dev. ⁽¹⁾		Annual		64,000	
Computer System Hardware & Software Upgrades ⁽¹⁾		Annual		53,000	
Information Technology Master Plan Implementation ⁽¹⁾		1,804,190	213,120	166,500	1,424,570
Total Allentown Division Administrative Capital Expenditures:			\$ 213,120	\$ 283,500	\$1,424,570

(1) This Project benefits both the Allentown and Suburban Divisions. Project cost shown is 2/3 to the total project cost which reflects

Note: Projects in bold type will not proceed beyond the planning phase, or beyond current authorized phase without specific authorization from the LCA Board subsequent to the adoption of this budget.

**2015 BUDGET
SUPPORTING DETAIL
INTERNAL SERVICE-CITY**

CAPITAL EXPENDITURES

**GIS Data Conversion &
Application Development)**

Includes project costs associated with application development. Also includes data acquisition purchases as needed (2015 Cap Ex \$64,000. *see note below*)

**Computer System Hardware
& Software Upgrades**

This annual project includes the upgrade of the Microsoft Office software, purchase of Human Resources software; and server replacements for units older than 6 years. (2015 Cap Ex \$53,000 *see note below*).

**Information Technology
Master Plan Update &
Implementation**

This multi-year on-going project will implement some of the recommendations made in the Master Plan update). (2015 Cap Ex \$166,500 *see note below*).

Note: This Project benefits both the Allentown and Suburban Divisions. The 2015 Cap. Ex. cost shown is 2/3 of the total 2015 Cap Ex. For the Project which reflects an allocation based upon system revenue where the Suburban Divisions share is 1/3 and the City Division 2/3 of the total project cost

**2015 BUDGET
SUPPORTING DETAIL
INTERNAL SERVICE-SUBURBAN**

The Suburban Internal Service Budget includes overhead, support and general administrative services, which are included in the Suburban Operating and Capital Budgets. These costs are recovered through reimbursements from each operating and capital budget, based upon services provided. The budget incorporates six functions: Accounting, Risk Management, Personnel, Legal, Customer Care and General Administration.

The 2015 budget includes several significant activities and changes as follows:

- Operation Center expenses are now included in the Consolidated Internal Service Budget, for indirect allocation to both the City and Suburban Internal Services Budget. These expenses include utilities such as electric, telephone and garbage collection.
- Other expenses, which in the past were classified as Suburban Internal Services, such as audit fees, legal fees, education and training and public relations will be largely classified as Consolidated Internal Services with an indirect allocation to both Divisions.

The Suburban Internal Service Fund is reimbursed monthly from other Suburban Budget centers. Actual costs are allocated to each budget based upon salaries within each fund. For systems with less than 250 customers, the allocation percentage is further reduced to 20% of the salary ratio to limit cost exposure. At year-end a final reconciliation is prepared with the reimbursement amounts for each fund determined by first allocating Internal Service costs that exclusively benefit an individual budget center and then allocating remaining costs to each budget based upon the salary percentage method described above.

The Authority performs certain work, which is reimbursed by others (municipalities, developers, etc.). Such charges are billed on a direct payroll cost with a cost multiplier applied for benefits and internal service costs. This factor only includes benefits and internal service costs which are not directly allocated to a specific fund. The cost multiplier for 2015 is 2.25 times direct salary and is based on budget figures.

2015 BUDGET
OPERATING EXPENSES
ALLOCATION UNIT: SUBURBAN INTERNAL SERVICE

	2013 Actual	2014 Budget	2014 Estimate	2015 Budget
PERSONNEL:				
Permanent (A)	\$ 709,413	\$ 464,422	\$ 475,015	\$ 475,392
Overtime	7,578	4,324	3,273	320
Benefits	173,119	141,051	177,450	129,324
Total	890,110	609,797	655,738	605,037
CONSOLIDATED INTERNAL SERVICES	-	411,098	304,318	477,916
PURCHASE OF SERVICES:				
Postage	59,223	67,882	40,204	41,410
Computer Services	87,200	1,000	1,165	3,000
IT Consultant Services	-	-	-	-
Advertising	2,682	-	-	-
Building & Equipment Maintenance	54,180	-	19,376	-
Utilities	69,571	-	-	-
Travel & Mileage	8,041	-	871	1,000
Education & Training	19,513	20,270	14,649	42,829
Worker's Compensation Insurance	8,938	38,055	33,591	38,878
Property & Liability Insurance	129,103	142,001	158,659	175,128
Legal/Litigation Fees	93,256	-	31,517	10,000
Miscellaneous	142,280	39,520	33,772	1,500
Risk Management				20,000
Compliance Expense				3,000
Public Relations	27,260	-	-	-
Special Studies	34,872	-	-	-
Total	736,119	308,728	333,804	336,745
MATERIALS & SUPPLIES:				
Office Supplies	19,473	10,435	1,804	1,858
Maintenance Materials and Supplies	11,017	-	7,007	7,500
Total	30,490	10,435	8,811	9,358
EQUIPMENT/SITE IMPROVEMENT:				
Gen'l Office Furniture and Equipment	3,315	-	20,387	-
Computer Equipment & Software	19,594	24,100	7,281	26,100
Total	22,909	24,100	27,668	26,100
DEPRECIATION:	16,983	7,000	6,996	7,000
TOTAL EXPENSES	\$ 1,696,611	\$ 1,371,158	\$ 1,337,335	\$ 1,462,156

(A) Salaries include bonus payout.

**2015 BUDGET
REVENUE SUMMARY
SUBURBAN INTERNAL SERVICE FUND**

	2013 Actual	2014 Budget	2014 Estimate	2015 Budget
Service Fee Allocation (1)	\$ 1,680,150	\$ 1,788,055	\$ 1,330,339	\$ 1,455,156
Interest and Other Income (2)	2,258	3,100		
TOTAL REVENUES (3)	\$ 1,682,408	\$ 1,791,155	\$ 1,330,339	\$ 1,455,156

(1) Internal Service charges to other budgets.

(2) 2013 includes a \$3,000 Safety grant from the Delaware Valley Worker's Compensation Trust.

(3) Excludes recovery of depreciation since actual equipment & furniture payouts are recovered in full in the year of the expenditure or through use of reserves.

**2015 BUDGET
SUPPORTING DETAIL
INTERNAL SERVICE-SUBURBAN**

Expenses

PERSONNEL

Represents salaries and off-time of employees' direct time in the Suburban System supporting the water and/or wastewater operations, including lab analysis or pretreatment operations (\$483,277).

PURCHASE OF SERVICES

**Internal Services -
Overhead (Consolidated)**

Overhead costs (\$477,916), which are not directly allocable to certain funds are indirectly allocated based on salaries within a fund, division or department as a percentage of total salaries.

Postage

Represents cost to mail Suburban customer billings (\$41,410).

Computer Services

Nominal services for \$3,000.

Education and Training

Budget includes specifically identified training for Suburban Division employees, whether through participation in seminars or classes (\$42,829).

Workers Compensation

Workplace injury coverage for those continuing Suburban workers (\$38,878).

**Property & Liability
Insurance**

Premiums for all Suburban properties, with the exception of the Wastewater Treatment Plant in Upper Macungie (\$175,128).

Legal/Litigation

Represents general litigation expenses within Suburban Division (\$10,000).

Miscellaneous

Represents Risk Management (\$20,000) and Compliance Expenses (\$3,000) for the Suburban Division. Comprised of fleet management, professional services, safety shoe reimbursement, other safety equipment and other miscellaneous expenses (\$1,500).

MATERIALS & SUPPLIES

Office Supplies

Purchase of computer supplies and general office supplies (\$1,858).

Maintenance Supplies

Represents general maintenance supplies for Suburban offices (\$7,500).

Computer Equipment

Budget includes fifty (50) upgrades to Microsoft Office 2013 (\$8,800) and a variety of other software upgrades (\$17,300).

DEPRECIATION

Straight-line method of Depreciation is used for office equipment and other furnishings.

**CAPITAL EXPENDITURES
SUBURBAN DIVISION
ADMINISTRATIVE**

Project	Priority	Estimated Project Cost	Estimated Costs Through 2014	2015 Budget	Beyond 2015
Knowledge Management / Sharing Program	High	596,250	458,000	138,250	-
SCADA Programming, Hardware Upgrades, Software & Training	High	Annual		148,000	
Geographic Information System Upgrades & Application Dev. ⁽¹⁾	High	Annual		31,670	
Computer System Hardware & Software Upgrades ⁽¹⁾	High	Annual		26,260	
Information Technology Master Plan Implementation ⁽¹⁾	High	903,180	106,690	83,350	713,140
Total Suburban Divisions Administrative Capital Expenditures:			\$ 564,690	\$ 427,530	\$ 713,140

(1) This Project benefits both the Allentown and Suburban Divisions. Project cost shown is 1/3 of the total project cost which reflects an allocation based upon system revenue where the Suburban Divisions share is 1/3 and the City Division 2/3 of the total project cost.

Note: Projects in bold type will not proceed beyond the planning phase, or beyond current authorized phase without specific authorization from the LCA Board subsequent to the adoption of this budget.

**2015 BUDGET
SUPPORTING DETAIL
INTERNAL SERVICE-SUBURBAN**

CAPITAL EXPENDITURES

**Knowledge Management /
Sharing Program**

This is the final year of a multi-year project that addressed certain items identified in the Knowledge Management assessment recommendations completed in 2011. Among other things the Project focused on operations department issues, compliance tracking, addressing transitions for planned retirements and included the development and implementation of a skill-based pay system in the Suburban Operations (2015 Cap Ex \$138,250).

**SCADA Programming,
Hardware Upgrades,
Software & Training**

This on-going project includes hardware, software and programming to enhance system control and to provide training for LCA (2015 Cap Ex \$148,000).

**GIS Data Conversion &
Application Development)**

Includes project costs associated with application development. Also includes data acquisition purchases as needed (2015 Cap Ex \$64,000. *see note below*)

**Computer System Hardware
& Software Upgrades**

This annual project includes the upgrade of the Microsoft Office software, purchase of Human Resources software; and server replacements for units older than 6 years. (2015 Cap Ex \$53,000 *see note below*).

**Information Technology
Master Plan Update &
Implementation**

This multi-year on-going project will implement some of the recommendations made in the Master Plan update). (2015 Cap Ex \$166,500 *see note below*)

Note: This Project benefits both the Allentown and Suburban Divisions. 2015 Cap Ex. Amount shown is 1/3 of the total 2015 Cap Ex. for the Project which reflects an allocation based upon system revenue where the Suburban Divisions share is 1/3 and the City Division 2/3 of the total project cost

LEHIGH COUNTY AUTHORITY
SCHEDULE OF WATER RATES AND CHARGES (cont'd)

II. Meter Test Fee

(adopted 6/16/98; effective 6/16/98)

Meter Size	Fee
5/8", 3/4", 1"	\$15.00
Larger than 1"	Actual Cost

**New Fee: \$50
or Actual Cost
if >\$50**

III. Meter Inspection Fee

(adopted 5/11/99; effective 5/11/99)

\$40.00**New Fee: \$50****IV. Service Order / Site Visit Fees**

(adopted 12/07/11; effective 01/01/12)

Business Hours – 7:00 a.m. and 4:45 p.m.,
Monday through Friday (except holidays)

\$40.00**New Fee: \$50**

After Hours

\$120.00**New Fee: \$150**

Service Termination & Restoration Charge

NEW**New Fee: \$100****V. Site Revisitation Charge**

(adopted 12/16/02; effective 3/1/03)

\$80.00**New Fee: \$100****VI. Lien Administration Fee**

(adopted 12/13/04; effective 01/1/05)

\$56.50 + Current Lehigh County Clerk of Court's Filing Fee**VII. Hydrant Security Device Fee****Central Lehigh Division**

(adopted 06/27/05; effective 07/1/05)

\$115.00**VIII. Fire Flow Test Charge**

(adopted 12/07/11; effective 01/01/12)

\$180.00**IX. Use of Easement Preparation Fee**

(adopted 12/07/11; effective 01/01/12)

\$90.00**X. Backflow Prevention Non-compliance Charge**

(adopted 12/07/11; effective 01/01/12)

\$50.00

LEHIGH COUNTY AUTHORITY
SCHEDULE OF WATER RATES AND CHARGES (cont'd)

Customer Facilities Fee (adopted 3/12/12; effective 3/12/12)

This fee includes the supply and installation of a water meter and a backflow protection device for residential facilities (meter component). The fee can also include, at the customer's option and based on actual cost, installation of a service line from the property line to the customer's facility by the Authority.

All service lines must have an approved backflow protection device installed. The Authority will furnish a DC (dual check) device for residential facilities.

Meter Size	Meter Fee - With DC Backflow	Meter Fee - With No Backflow
5/8"	\$ 362	\$ 322
5/8" Pit	\$ 388	\$ 348
3/4"	\$ 395	\$ 355
3/4" Pit	\$ 408	\$ 368
1"		\$ 397
1" Pit		\$ 410
1 1/2" Displacement		\$ 690
1 1/2" Turbine		\$ 942
1 1/2" Compound		\$ 1,274
2" Displacement		\$ 878
2" Turbine		\$ 1,076
2" Compound		\$ 1,435

Meter Size	NEW Meter Fee - With DC Backflow	NEW Meter Fee - With No Backflow
5/8"	\$ 357	\$ 320
5/8" Pit	\$ 383	\$ 346
3/4"	\$ 363	\$ 326
3/4" Pit	\$ 389	\$ 352
1"		\$ 386
1" Pit		\$ 412
1 1/2" Displacement *		\$ 651
1 1/2" Turbine *		\$ 913
1 1/2" Compound *		\$ 1,261
2" Displacement *		\$ 844
2" Turbine *		\$ 1,042
2" Compound *		\$ 1,401

* LCA will install all meters 1" or smaller. Larger meters may be purchased from LCA at the prices listed above, which includes a \$50 inspection fee. If LCA installation of a larger meter is requested, the customer will pay actual costs, on a time and materials basis.

Notes: (cont'd)

Backflow protection devices for commercial/industrial facilities shall be approved by the Authority, and supplied, installed and tested by the applicant. Meters larger than 2" shall be

LEHIGH COUNTY AUTHORITY
SCHEDULE OF WATER RATES AND CHARGES (cont'd)

CITY OF ALLENTOWN

Adopted & Effective 7/22/2013

NOTE: Unless expressed specifically in this Schedule of Rates and Charges, customers of the City of Allentown water system are subject to any and all additional charges, fees, penalties and policies stated in Lehigh County Authority's Rules & Regulations for Water Service and its Schedule of Water Rates and Charges duly adopted for its non-City systems.

A. Metered Water Use

Fixed Charges		
Meter Size	Monthly Fixed Charge**	Quarterly Fixed Charge*
5/8" *	\$ 17.21	\$ 25.21
3/4" *	\$ 19.09	\$ 30.91
1" *	\$ 22.95	\$ 42.29
1 1/2"	\$ 32.45	\$ 71.12
2"	\$ 43.83	\$ 105.63
3"	\$ 74.10	\$ 197.76
4"	\$ 108.33	\$ 301.30
6"	\$ 203.11	\$ 589.09
8"	\$ 316.98	\$ 934.19

*Typical residential meter sizes (5/8", 3/4" and 1") are billed Quarterly.

** Larger meters sized 1 1/2" and larger are billed Monthly.

Volume	Rate per 1,000 Gallons
All Volume	\$ 3.10125

B. Capital Cost Recovery Charge

To be determined.

C. Private Fire Protection

Each Hydrant	\$310 per year (may be billed monthly or quarterly)
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D. Service Termination & Restoration Charge

\$100.00

DELETE

E. Tapping Fees

Part 1 \$810.00 per Equivalent Dwelling Unit

Part 2 To be determined based on Capital Recovery Fee calculation

LEHIGH COUNTY AUTHORITY
SCHEDULE OF WATER RATES AND CHARGES (cont'd)

F. Customer Facilities Fees (adopted & effective 9/23/13)

Fees includes the supply and installation of a water meter and associated components.

Meter Size	With LCA Installation*	Without LCA Installation*
5/8"	\$270.59	
3/4"	\$293.45	
1"	\$323.17	
1 1/2"	\$532.24	
2"	\$662.95	
3" Compound		\$1,220.19
3" Turbine		\$1,187.43
4" Compound		\$1,487.20
4" Turbine		\$1,504.63
6" Compound		\$2,615.00
6" Turbine		\$2,650.80
8" Compound		\$7,057.25
8" Turbine		\$6,567.95
* LCA will install all meters 2" or smaller. Larger meters may be purchased from LCA at the prices listed above, which includes a \$40 inspection fee. If LCA installation of a larger meter is requested, the customer will pay actual costs, on a time and materials basis.		

Meter Size	NEW Meter Fee - With LCA Installation*	NEW Meter Fee - Without LCA Installation*
5/8"	\$258	
3/4"	\$280	
1"	\$308	
1 1/2"	\$463	
2"	\$562	
3" Compound		\$1,318
3" Turbine		\$1,317
4" Compound		\$1,594
4" Turbine		\$1,594
6" Compound		\$2,764
6" Turbine		\$2,764
8" Compound		\$7,404
8" Turbine		\$7,404

Other Components	Price	NEW FEES
5/8" Meter Horn	\$36.50	\$49.00
3/4" Meter Horn	\$56.00	\$59.00
Curb Box	\$62.24	\$53.33

LEHIGH COUNTY AUTHORITY
SCHEDULE OF WATER RATES AND CHARGES (cont'd)

G. Connection Fee (adopted & effective 9/23/13)

Actual cost of connecting to the Authority water line, completed by Authority personnel. Additional fees may apply for service line inspection, plan review, construction permits and/or capital recovery charges. Please contact the Authority's Capital Works department for more information.

Tap Size	Charge
1"	\$237.02
1 1/2"	\$394.82
2"	\$509.98
4" x 4"	\$1,696.33
6" x 4"	\$1,666.33
6" x 6"	\$1,827.33
8" x 4"	\$1,681.33
8" x 6"	\$1,837.33
8" x 8"	\$2,294.33
12" x 4"	\$1,816.33
12" x 6"	\$2,002.33
12" x 8"	\$2,379.33
12" x 12"	\$3,759.33

Tap Size	NEW Charge
3/4"	\$248
1"	\$270
1 1/2"	\$429
2"	\$564
4" x 4"	\$1,622
6" x 4"	\$1,655
6" x 6"	\$1,832
8" x 4"	\$1,651
8" x 6"	\$1,832
8" x 8"	\$2,322
12" x 4"	\$1,776
12" x 6"	\$1,964
12" x 8"	\$2,459
12" x 12"	\$3,897

**LEHIGH COUNTY AUTHORITY
SCHEDULE OF WASTEWATER RATES AND CHARGES**

II. Metering Fees

A. Meter Purchase/Installation Fee

(adopted 3/12/12; effective 3/12/12)

Meter Size	Purchase Only *	Purchase & Installation *
5/8"	\$ 108	\$ 213
5/8" Pit	128	233
3/4"	141	246
3/4" Pit	148	253
1"	183	288
1" Pit	190	295
1-1/2"	476	581
1-1/2" Pit	728	833
2" Displacement	1,060	1,165
2" Displacement Pit	664	769
2" Turbine	862	967
2" Compound	1,221	1,326

* Prices include ECR meter with touchpad and installation wire. LCA reserves the right to include additional equipment, such as a radio unit for more efficient metering operations. Pricing to be adjusted at the time of application to include any additional requirements or labor costs.

Meter Size	Purchase & Inspection *
5/8"	\$ 277
5/8" Pit	303
3/4"	283
3/4" Pit	309
1"	343
1" Pit	369
1-1/2"	651
1-1/2" Pit	913
2" Displacement	1,261
2" Displacement Pit	844
2" Turbine	1,042
2" Compound	1,401

*** Prices include ECR meter with touchpad, radio read unit and installation wire, plus \$50 inspection fee. Plumber shall install all components and call for meter inspection by LCA personnel.**

**LEHIGH COUNTY AUTHORITY
SCHEDULE OF WASTEWATER RATES AND CHARGES**

G. Exceptional Strength Charges

(adopted 12/10/12; effective 01/01/13)

(Commercial & Industrial)	<u>\$/pound</u>	<u>NEW FEE</u>
BOD	0.33	0.22
TSS	0.30	0.20
TKN	0.53	0.29

**LEHIGH COUNTY AUTHORITY
SCHEDULE OF WASTEWATER RATES AND CHARGES**

WESTERN LEHIGH INTERCEPTOR SYSTEM

I. Schedule of Wastewater Rates

(adopted 7/22/13; effective 8/1/13)

LCA Signatories	Rate (\$)	NEW RATE
Flow (per 1,000 gallons)	1.03	1.26
BOD (per pound)	0.33	0.22
TSS (per pound)	0.30	0.20
TKN (per pound)	0.53	0.29
Allocation (per 1,000 gallons per day)	0.25	0.21
Emmaus		
Flow (per 1,000 gallons)	0.38	0.74

II. Tapping Fee

(adopted 7/14/14; effective 7/1/14)

<u>System</u>	Tapping Fee \$/gal/day	Tapping Fee \$/EDU
Treatment Allocation	5.51	1,229.00
Western Lehigh Interceptor	2.65	591.00

LITTLE LEHIGH RELIEF INTERCEPTOR SYSTEM

I. Schedule of Wastewater Rates

(adopted 12/10/12; effective 01/01/13)

LCA Signatories	Rate (\$)	NEW RATE
Phase 1 Flow (per 1,000 gallons)	0.17	0.12
Other Users – Lower Macungie Phase 2 & Brookside Road, Salisbury, and So. Whitehall Townships		
Phase 1 Flow (per 1,000 gallons)	0.12	0.09
LCA Signatories – Phase 2 Flow (per 1,000 gallons)	0.03	0.03

II. Tapping Fee

(adopted 7/14/14; effective 7/1/14)

<u>System</u>	Tapping Fee \$/gal/day	Tapping Fee \$/EDU
Little Lehigh Relief Interceptor	0.94	210.00