



Lehigh County Authority

FINAL 5-YEAR CAPITAL PLAN

SUBURBAN DIVISION

2026-2030

OCTOBER 2025

**LEHIGH COUNTY AUTHORITY
5-YEAR CAPITAL PLAN
2026-2030**

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2026-2030 Capital Plan

Glossary of Acronyms & Terms

The following is a listing of acronyms and terms used in the Capital Plan Summary and Project Detail Sheets.

LCA Water and/or Wastewater Divisions/Systems

LCA Water and/or Wastewater Divisions/Systems		Water	Wastewater
<i>AD</i>	Allentown Division	X	X
<i>AWD</i>	Arcadia West Division	X	X
<i>BHD</i>	Beverly Hills Division	X	
<i>CLD</i>	Central Lehigh Division	X	
<i>CFD</i>	Clear View Farms Division	X	
<i>ECD</i>	Emmaus Consecutive Division	X	
<i>HHD</i>	Heidelberg Heights Division	X	X
<i>LLRI-1</i>	Little Lehigh Relief Interceptor, Phase 1		X
<i>LLRI-2</i>	Little Lehigh Relief Interceptor, Phase 2		X
<i>LTD</i>	Lynn Township Division		X
<i>MCD</i>	Mill Creek Division	X	
<i>MND</i>	Madison Park Division	X	
<i>NWD</i>	North Whitehall Division	X	
<i>PLD</i>	Pine Lakes Division	X	
<i>SSD</i>	Sands Spring Division		X
<i>UMD</i>	Upper Milford Division	X	X
<i>UMCD</i>	Upper Central Milford Division (Buss Acres)	X	
<i>WLI</i>	Western Lehigh Interceptor		X
<i>WTD</i>	Washington Township Division	X	X
<i>WWD</i>	Wynnewood Division		X

Project Type

Project Type	Description
<i>AO</i>	Administrative Order
<i>UW</i>	Uncompleted Work ⁽¹⁾
<i>S-7-MCI</i>	Schedule-7 (<i>Lease Required</i>) Major Capital Improvement ⁽²⁾
<i>LCA-MCI</i>	LCA Developed Major Capital Improvement ⁽²⁾
<i>Regular</i>	A project that does not fit in any of the aforementioned special categories

(1) *Uncompleted Work: City Projects that were supposed to be complete by the time of settlement. The City and LCA have reached an agreement for LCA to execute them.*

(2) *Major Capital Improvement: In accordance with the Lease, all Major Capital Improvements must be approved by the City.*

Project Funding

Project Funding	Description
<i>LCA</i>	Funded by LCA
<i>100% Reimb</i>	All costs are 100% reimbursable by fees charged
<i>Fees & LCA</i>	Costs partly recovered through fees charged and partly funded by LCA
<i>Allentown</i>	Funded by the City of Allentown
<i>CCRC</i>	Capital Cost Recovery Charge ⁽¹⁾ ; Applies only to City approved MCI

(1) *Capital Cost Recovery Charge: An on-going user fee that is above the rate caps set forth in the Lease to allow the recovery of the cost of an MCI. Rate payers are charged based upon usage.*

Project Category

Projects have been categorized to identify the primary and secondary reasons for the need. In some cases there is no secondary reason that would be applicable.

Project Category	Description
<i>Regulatory</i>	Required to meet Regulatory requirements
<i>New Cust</i>	New Customers
<i>CA/OS</i>	Concession Lease/Operating Standards
<i>AM - Low</i>	Asset Management - Low Risk
<i>AM - Med</i>	Asset Management - Medium Risk
<i>AM - High</i>	Asset Management - High Risk
<i>AM - Varies</i>	Asset Management - Varies ⁽¹⁾
<i>Efficiency</i>	Efficiency
<i>Sys Imp</i>	System Improvement
<i>Rev Opprt</i>	Revenue Opportunity
<i>Planning</i>	Planning
<i>Change of Law</i>	Change of Law
<i>N/A</i>	Not Applicable

(1) *Applies to Asset Management Projects, where there are multiple standalone sub-projects of varied levels of "risk".*

Approval Stage

Approval Stage	Description
<i>A</i>	Annual Project, no approvals required
<i>S</i>	Study/Planning Phase
<i>D</i>	Design Phase
<i>C</i>	Construction/Implementation Phase
<i>E</i>	Entire Project
<i>V</i>	Various Phases
<i>P</i>	Pending Board approval

WATER

**LEHIGH COUNTY AUTHORITY
SUBURBAN DIVISION WATER
5-YEAR CAPITAL PLAN
2026–2030**

CAPITAL FINANCING JUSTIFICATION

Capital additions to the Water System are justified by using six revenue sources: user charges, assessments or distribution tapping fees, supply tapping fees, contributions-in-aid of construction, reimbursements from the wastewater funds, and grants. This would comprise the amount of cash available from operations for capital projects.

Beyond the operating cash available, remaining sources are project reserves from previous debt issuance and any new borrowing required.

The table below summarizes the capital project sourcing by year and each major financial sourcing category:

CAPITAL FINANCING SOURCES						
	2026	2027	2028	2029	2030	TOTAL
Project Costs	\$5,785,000	\$12,860,000	\$7,330,000	\$6,240,000	\$5,935,000	\$38,150,000
<i>Sources of Funding:</i>						
Current Cash Flows	\$4,529,076	\$4,472,784	\$3,830,000	\$4,240,000	\$4,335,000	\$21,406,860
Cash Reserves	\$1,255,924	\$1,387,216	-	-	-	\$2,643,140
New Borrowing	-	\$7,000,000	\$3,500,000	\$2,000,000	\$1,600,000	\$14,100,000
TOTAL FUNDING	\$5,785,000	\$12,860,000	\$7,330,000	\$6,240,000	\$5,935,000	\$38,150,000

Total spending on capital projects for the five-year period totals \$38,150,000. Current cash flows and cash reserves over the period will provide \$24,050,000 for capital projects. New borrowing for plan period projects will be in the amount of \$14,100,000 and is expected to occur in Year 2027 through 2030 to fund the projects for the plan period.

The \$14,100,000 borrowing is to fund water main replacement projects, North Whitehall improvement projects, water meter replacements, and Buss Acres water quality upgrade projects. While some grants may be available to support these projects, this plan conservatively assumes no grant funding awarded.

To support the additional debt service, an increase in rates of 3.0% in years 1-5 will be required. Modestly conservative growth of 1% annually is included to reflect expected new customer connections during the plan period.

CONDENSED CASH FLOW - SUBURBAN WATER

US DOLLARS	2026	2027	2028	2029	2030
User Charges	19,406,541	20,188,625	21,002,227	21,848,617	22,729,116
Other Operating Revenues	289,811	289,811	289,811	289,811	289,811
Non-Operating Revenues	1,287,635	1,287,635	1,287,635	1,287,635	1,287,635
Operating expenses	(12,753,884)	(13,084,072)	(13,423,378)	(13,772,068)	(14,130,419)
Debt Service - Current Debt	(3,346,027)	(3,576,427)	(3,600,227)	(3,599,970)	(3,600,345)
Debt Service - NEW Debt	-	(434,038)	(651,057)	(775,068)	(874,277)
Investing Activity	-	-	-	-	-
Capital Funding From New Debt	-	7,000,000	3,500,000	2,000,000	1,600,000
Capex	(6,140,000)	(13,058,750)	(7,666,250)	(6,506,250)	(6,063,750)
NET FUND FLOWS	(1,255,924)	(1,387,216)	738,761	772,707	1,237,771
Plan Volume Increase %	1.00%	1.00%	1.00%	1.00%	1.00%
User Charge Rate Increase %	3.00%	3.00%	3.00%	3.00%	3.00%
Total User Charge Revenue Increase %	4.03%	4.03%	4.03%	4.03%	4.03%
Unrestricted Cash Balance	8,463,462	7,076,246	7,815,007	8,587,714	9,825,485
Unrestricted Investments	2,846,053	2,846,053	2,846,053	2,846,053	2,846,053
Total Unrestricted Balances	11,309,515	9,922,299	10,661,060	11,433,767	12,671,538
Days Cash on Hand	242	197	213	228	254
DEBT SERVICE COVERAGE RATIO	2.46	2.16	2.15	2.21	2.27

**LEHIGH COUNTY AUTHORITY
SUBURBAN DIVISION
2026-2030 CAPITAL PROGRAM
WATER**

Project #	Name or Title of Proposal	Prj. Category	(1) Prj. Funding	Approval Stage (1)	This Capital Program						
					2025 Budget Approved	2026 Year 1	2027 Year 2	2028 Year 3	2029 Year 4	2030 Year 5	2026-2030 Total
SD-W-A	Annual Projects	AM - Varies	LCA	A	\$ 2,492,000	\$ 2,520,000	\$ 2,180,000	\$ 2,030,000	\$ 2,640,000	\$ 2,085,000	\$ 11,455,000
SD-W-10	Water Main Replacement Projects	AM - Varies	LCA	V	\$ -	\$ 100,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,750,000	\$ 10,350,000
SD-W-11	North Whitehall Division Water System Supply Study & Improvements	Sys Imp	LCA	S	\$ 120,000	\$ 700,000	\$ 2,400,000	\$ -	\$ -	\$ -	\$ 3,100,000
SD-W-12	Water Systems Master Planning and Water Quality Studies	Sys Imp	LCA	S	\$ 150,000	\$ 100,000	\$ 100,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 350,000
SD-W-13	Upper System Pump Station & Water Main Extension	New Cust	LCA	D	\$ 50,000	\$ 50,000	\$ 900,000	\$ 1,100,000	\$ -	\$ -	\$ 2,050,000
SD-W-14	Water Meter Replacement Program	AM-Rev Opprt	LCA	C	\$ 1,000,000	\$ 1,050,000	\$ 1,050,000	\$ 1,050,000	\$ 1,000,000	\$ 1,000,000	\$ 5,150,000
SD-W-15	Central Lehigh System Supply Improvements	Sys Imp	LCA	S	\$ 180,000	\$ 165,000	\$ -	\$ -	\$ -	\$ -	\$ 165,000
SD-W-16	Buss Acres Water Quality Upgrade	Sys Imp	LCA	S	\$ 270,000	\$ 250,000	\$ 2,550,000	\$ -	\$ -	\$ -	\$ 2,800,000
SD-W-17	Applewood Pump Station Upgrade	Sys Imp	LCA	D	\$ 100,000	\$ 400,000	\$ 530,000	\$ -	\$ -	\$ -	\$ 930,000
SD-W-18	Small Systems Generator Replacement	Sys Imp	LCA	D	\$ -	\$ 50,000	\$ 400,000	\$ 450,000	\$ -	\$ -	\$ 900,000
SD-W-19	Leak Detection Program	Efficiency	LCA	C	\$ -	\$ 250,000	\$ 100,000	\$ 100,000	\$ 50,000	\$ 50,000	\$ 550,000
SD-W-20	Lead Service Inventory Program	Regulatory	LCA	P	\$ -	\$ 50,000	\$ 100,000	\$ 50,000	\$ -	\$ -	\$ 200,000
SD-W-21	Small Systems Water Supply Improvements	Sys Imp	LCA	P	\$ -	\$ 100,000	\$ 50,000	\$ -	\$ -	\$ -	\$ 150,000
	GRAND TOTAL				\$ 4,362,000	\$ 5,785,000	\$ 12,860,000	\$ 7,330,000	\$ 6,240,000	\$ 5,935,000	\$ 38,150,000

(1) Reference Glossary of Acronyms & Terms found immediately after the Table of Contents. All projects are LCA funded

(2) If blank , cost is not applicable (annual project) or to be determined

**LEHIGH COUNTY AUTHORITY
SUBURBAN DIVISION-CAPITAL IMPROVEMENT PLAN
PROJECT DETAIL SHEET**

Project Name	SUBURBAN WATER ANNUAL PROJECTS				
Budget Area	Water	Department	Capital Works	Project No.	SD-W-A
Location	Suburban	Prj. Type	Both	Prj. Score	75
Prj Initiator	Volk	Prj Manager	Volk		

Detailed Project Description
This annual project consists of separate smaller procurement and improvement projects. The consolidated project includes the following: general water system improvements, other equipment, mobile equipment, new and replacement water meters, reservoir rehab/maintenance, facility asset management upgrades, SCADA system upgrades, distribution mains (development), distribution mains upsizing, water company acquisitions, and capital management.

Category	Definition	LCA Weight	Prj Score	Weighted Score
Environmental				
Regulatory Requirement	Project will address a local, state and/or federal regulatory requirement.	25%	50	13%
Social				
Health/Safety Improvement	Project provides a human health and/or safety enhancement that may or may not be a regulatory requirement.	25%	75	19%
Level of Service	Project will increase level or quality of service to the community, including addressing increased customer expectations for service, improved response time, reliability, quality, taste, etc.	15%	100	15%
Innovation and Automation Enhancements	Project will enhance achievement of LCA's goals for innovation and/or automation.	5%	75	4%
Community Impact	Project will benefit Community and/or external stakeholders.	10%	75	8%
Economic				
Economic Development	Project is required to meet projected future capacity needs to address economic growth in the service area or provides other economic development benefit to the region.	10%	75	8%
Risk Mitigation	Project addresses asset risk by mitigating likelihood of failure, consequence of failure, and/or resiliency.	10%	100	10%

Additional Information

System Location UNC – OTHER WATER OR SEWER **Will this project require Land Rights?**

Project inception Date 1/2/2016 **Anticipated Project Completion Date** 12/31/2030

**LEHIGH COUNTY AUTHORITY
SUBURBAN DIVISION-CAPITAL IMPROVEMENT PLAN
PROJECT DETAIL SHEET**

Project Name	SUBURBAN WATER MAIN REPLACEMENT PROJECT			
Budget Area	Water	Department	Capital Works	Project No. SD-W-10
Location	Suburban	Prj. Type	Linear	Prj. Score 69
Prj Initiator	Peters	Prj Manager	Peters	

Detailed Project Description
This project entails replacement of aging and/or deficient cast iron (CI) and plastic water mains in LCA Central Lehigh and satellite water systems. Scope of work is prioritized based on break history, water loss, geology (sinkholes), pipe condition, pipe age, and probability and consequence of failure. The Capital Plan reflects the replacement of approximately one mile of water main per project cycle, beginning in 2027, in accordance with prioritization protocols.

Category	Definition	LCA Weight	Prj Score	Weighted Score
Environmental				
Regulatory Requirement	Project will address a local, state and/or federal regulatory requirement.	25%	50	13%
Social				
Health/Safety Improvement	Project provides a human health and/or safety enhancement that may or may not be a regulatory requirement.	25%	75	19%
Level of Service	Project will increase level or quality of service to the community, including addressing increased customer expectations for service, improved response time, reliability, quality, taste, etc.	15%	100	15%
Innovation and Automation Enhancements	Project will enhance achievement of LCA's goals for innovation and/or automation.	5%	0	0%
Community Impact	Project will benefit Community and/or external stakeholders.	10%	75	8%
Economic				
Economic Development	Project is required to meet projected future capacity needs to address economic growth in the service area or provides other economic development benefit to the region.	10%	50	5%
Risk Mitigation	Project addresses asset risk by mitigating likelihood of failure, consequence of failure, and/or resiliency.	10%	100	10%

Additional Information

System Location CLD – SD WATER CENTRAL **Will this project require Land Rights?**

Project inception Date 1/2/2013 **Anticipated Project Completion Date** 1/2/2034

Project No.	SD-W-10	Project Name	SUBURBAN WATER MAIN REPLACEMENT PROJECT
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Primary Prj Category Asset Management Plan **Secondary Prj Category** System Improvement

Project Drivers and Needs

- | | |
|---|--|
| <input type="checkbox"/> New Facility | <input checked="" type="checkbox"/> End of Useful Life |
| <input type="checkbox"/> Existing Facility - Upgrade | <input type="checkbox"/> Obsolescence |
| <input checked="" type="checkbox"/> Scheduled Replacement | <input type="checkbox"/> Inadequate Capacity |
| <input checked="" type="checkbox"/> System Improvements | <input type="checkbox"/> Regulatory |

Notes

Replacing aging cast iron and plastic water mains will reduce the frequency of breaks in the system thereby saving the Authority repair costs, customer outages and reducing the potential for damage which can occur to private property.

Capital Funds Requested for Project

LCA Staff	\$250,000	Project Estimated Level	Construction
Land Acquisition	\$0	Project Funding	LCA
Construction/Equipment	\$9,000,000	Grant Eligibility	TBD
Professional Services	\$900,000	Future Spending	\$0
Contingencies	\$200,000		
Total	\$10,350,000		

Current Budget 2025	\$0	
First Year Budget 2026	\$100,000	None
Second Year Budget 2027	\$2,500,000	None
Third Year Budget 2028	\$2,500,000	None
Fourth Year Budget 2029	\$2,500,000	None
Fifth Year Budget 2030	\$2,750,000	None
Total 2026-2030	\$10,350,000	

**LEHIGH COUNTY AUTHORITY
SUBURBAN DIVISION-CAPITAL IMPROVEMENT PLAN
PROJECT DETAIL SHEET**

Project Name	NORTH WHITEHALL DIVISION WATER SYSTEM SUPPLY STUDY & IMPROVEMENTS				
Budget Area	Water	Department	Capital Works	Project No.	SD-W-11
Location	Suburban	Prj. Type	Both	Prj. Score	73
Prj Initiator	Kunkel	Prj Manager	Kunkel		

Detailed Project Description
A source water assessment study for the North Whitehall Division (NWD) was completed in June 2024. The study identified vulnerabilities in emergency supply due to the system's single source of supply from Northampton Borough Municipal Authority (NBMA). This project is for the design and construction of a second interconnection with the NBMA water system, enhancing reliability and flow capacity, including fire flows.

Category	Definition	LCA Weight	Prj Score	Weighted Score
Environmental				
Regulatory Requirement	Project will address a local, state and/or federal regulatory requirement.	25%	75	19%
Social				
Health/Safety Improvement	Project provides a human health and/or safety enhancement that may or may not be a regulatory requirement.	25%	75	19%
Level of Service	Project will increase level or quality of service to the community, including addressing increased customer expectations for service, improved response time, reliability, quality, taste, etc.	15%	100	15%
Innovation and Automation Enhancements	Project will enhance achievement of LCA's goals for innovation and/or automation.	5%	0	0%
Community Impact	Project will benefit Community and/or external stakeholders.	10%	50	5%
Economic				
Economic Development	Project is required to meet projected future capacity needs to address economic growth in the service area or provides other economic development benefit to the region.	10%	50	5%
Risk Mitigation	Project addresses asset risk by mitigating likelihood of failure, consequence of failure, and/or resiliency.	10%	100	10%

Additional Information

System Location	NWC – NORTH WHITEHALL WATER	Will this project require Land Rights?	<input checked="" type="checkbox"/>
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Project inception Date 2/1/2022	Anticipated Project Completion Date 12/31/2027
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Project No.	SD-W-11	Project Name	NORTH WHITEHALL DIVISION WATER SYSTEM SUPPLY STUDY & IMPROVEMENTS
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Primary Prj Category System Improvement **Secondary Prj Category** Planning

Project Drivers and Needs

- | | |
|---|--|
| <input checked="" type="checkbox"/> New Facility | <input type="checkbox"/> End of Useful Life |
| <input type="checkbox"/> Existing Facility - Upgrade | <input type="checkbox"/> Obsolescence |
| <input type="checkbox"/> Scheduled Replacement | <input type="checkbox"/> Inadequate Capacity |
| <input checked="" type="checkbox"/> System Improvements | <input type="checkbox"/> Regulatory |

Notes

Having a single source of supply leaves the system vulnerable should an emergency occur at that supply source or single connection point.

Capital Funds Requested for Project
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LCA Staff	\$50,000	Project Estimated Level	Planning
Land Acquisition	\$100,000	Project Funding	LCA
Construction/Equipment	\$2,600,000	Grant Eligibility	TBD
Professional Services	\$250,000	Future Spending	\$0
Contingencies	\$100,000		
Total	\$3,100,000		

Current Budget 2025	\$120,000	
First Year Budget 2026	\$1,250,000	None
Second Year Budget 2027	\$1,850,000	Construction
Third Year Budget 2028	\$0	None
Fourth Year Budget 2029	\$0	None
Fifth Year Budget 2030	\$0	None
Total 2026-2030	\$3,100,000	

**LEHIGH COUNTY AUTHORITY
SUBURBAN DIVISION-CAPITAL IMPROVEMENT PLAN
PROJECT DETAIL SHEET**

Project Name	SUBURBAN WATER SYSTEMS MASTER PLANNING AND WATER QUALITY STUDIES				
Budget Area	Water	Department	Capital Works	Project No.	SD-W-12
Location	Suburban	Prj. Type	Both	Prj. Score	80
Prj Initiator	DePoe	Prj Manager	DePoe		

Detailed Project Description
<p>This project originally involved the preparation of a water supply study for two major Suburban Water Systems (Central Lehigh and North Whitehall Division). The study reviewed supply capacity requirements to meet current and future demands, and evaluate existing water sources, storage, and interconnections to ensure long-term supply needs can be met. From this study, additional engineering work will follow to develop and design water supply projects that enhance the region's water system resiliency and redundancy. This water supply study will serve as the backbone for future development of a Master Plan for the entire LCA Suburban Water System. Additional studies (continuation of pipeline assessment and comprehensive storage assessment) will occur in 2026 and beyond. In addition, this project includes development of a Master Plan for LCA's numerous small water systems ("satellite systems") that will include water quality studies to comply with evolving state and federal water quality standards. Scope will also include water quality studies and conceptual design for treatment at specific water sources found to exceed EPA maximum contaminant limits for PFAS.</p>

Category	Definition	LCA Weight	Prj Score	Weighted Score
Environmental				
Regulatory Requirement	Project will address a local, state and/or federal regulatory requirement.	25%	75	19%
Social				
Health/Safety Improvement	Project provides a human health and/or safety enhancement that may or may not be a regulatory requirement.	25%	75	19%
Level of Service	Project will increase level or quality of service to the community, including addressing increased customer expectations for service, improved response time, reliability, quality, taste, etc.	15%	100	15%
Innovation and Automation Enhancements	Project will enhance achievement of LCA's goals for innovation and/or automation.	5%	50	3%
Community Impact	Project will benefit Community and/or external stakeholders.	10%	90	9%
Economic				
Economic Development	Project is required to meet projected future capacity needs to address economic growth in the service area or provides other economic development benefit to the region.	10%	80	8%
Risk Mitigation	Project addresses asset risk by mitigating likelihood of failure, consequence of failure, and/or resiliency.	10%	75	8%

Additional Information

System Location Will this project require Land Rights?

Project inception Date 7/1/2022

Anticipated Project Completion Date 12/31/2030

**LEHIGH COUNTY AUTHORITY
SUBURBAN DIVISION-CAPITAL IMPROVEMENT PLAN
PROJECT DETAIL SHEET**

Project Name	SUBURBAN UPPER SYSTEM PUMP STATION & WATER MAIN EXTENSION				
Budget Area	Water	Department	Capital Works	Project No.	SD-W-13
Location	Suburban	Prj. Type	Vertical	Prj. Score	61
Prj Initiator	Kunkel	Prj Manager	Kunkel		

Detailed Project Description
The project consists of improvements to LCA's Western Lehigh water distribution system ("CLD Upper System") that is located north of I-78 and west of the village of Fogelsville. A study done in 2020 recommended an interconnection with the CLD Lower system to provide adequate water supply and pressure to future industrial customers. This consists of a new pump station on the north side of I-78 to convey water from the Lower System to the Upper system. Design has progressed to approximately 70% "DEP Permit Level". The final design and construction of improvements will be contingent upon the timing of execution of a Developer Water Service Agreement (DWSA) with a potential large user and/or approved development(s) in the Upper System. It is assumed that a portion of the project costs will be shared by a TBD developer(s).

Category	Definition	LCA Weight	Prj Score	Weighted Score
Environmental				
Regulatory Requirement	Project will address a local, state and/or federal regulatory requirement.	25%	25	6%
Social				
Health/Safety Improvement	Project provides a human health and/or safety enhancement that may or may not be a regulatory requirement.	25%	50	13%
Level of Service	Project will increase level or quality of service to the community, including addressing increased customer expectations for service, improved response time, reliability, quality, taste, etc.	15%	100	15%
Innovation and Automation Enhancements	Project will enhance achievement of LCA's goals for innovation and/or automation.	5%	50	3%
Community Impact	Project will benefit Community and/or external stakeholders.	10%	100	10%
Economic				
Economic Development	Project is required to meet projected future capacity needs to address economic growth in the service area or provides other economic development benefit to the region.	10%	100	10%
Risk Mitigation	Project addresses asset risk by mitigating likelihood of failure, consequence of failure, and/or resiliency.	10%	50	5%

Additional Information

System Location	CLD – SD WATER CENTRAL	Will this project require Land Rights?	<input checked="" type="checkbox"/>
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Project inception Date 1/1/2020	Anticipated Project Completion Date 12/31/2028
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Project No.	SD-W-13	Project Name	SUBURBAN UPPER SYSTEM PUMP STATION & WATER MAIN EXTENSION
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Primary Prj Category New Customer **Secondary Prj Category** System Improvement

Project Drivers and Needs

- | | |
|---|---|
| <input checked="" type="checkbox"/> New Facility | <input type="checkbox"/> End of Useful Life |
| <input type="checkbox"/> Existing Facility - Upgrade | <input type="checkbox"/> Obsolescence |
| <input type="checkbox"/> Scheduled Replacement | <input checked="" type="checkbox"/> Inadequate Capacity |
| <input checked="" type="checkbox"/> System Improvements | <input type="checkbox"/> Regulatory |

Notes

The project will meet the supply needs of a potential large water user(s) in the CLD Upper system.
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Capital Funds Requested for Project
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LCA Staff	\$30,000	Project Estimated Level	Design
Land Acquisition	\$20,000	Project Funding	LCA
Construction/Equipment	\$1,700,000	Grant Eligibility	Yes
Professional Services	\$175,000	Future Spending	\$0
Contingencies	\$125,000		
Total	\$2,050,000		

Current Budget 2025	\$50,000	
First Year Budget 2026	\$50,000	Design
Second Year Budget 2027	\$900,000	Construction
Third Year Budget 2028	\$1,100,000	Construction
Fourth Year Budget 2029	\$0	None
Fifth Year Budget 2030	\$0	None
Total 2026-2030	\$2,050,000	

**LEHIGH COUNTY AUTHORITY
SUBURBAN DIVISION-CAPITAL IMPROVEMENT PLAN
PROJECT DETAIL SHEET**

Project Name	SUBURBAN WATER METER REPLACEMENT PROGRAM				
Budget Area	Water	Department	Capital Works	Project No.	SD-W-14
Location	Suburban	Prj. Type	Linear	Prj. Score	35
Prj Initiator	Kunkel	Prj Manager	Kunkel		

Detailed Project Description
The program consists of annual projects to replace aging and/or inoperable water meters. The program consists of annual meter replacements, which is prioritized internally with a higher priority assigned to meters that are non-functioning and/or have reached the end of their useful lives. All new meters will have radio-read (RR) capability.

Category	Definition	LCA Weight	Prj Score	Weighted Score
Environmental				
Regulatory Requirement	Project will address a local, state and/or federal regulatory requirement.	25%	0	0%
Social				
Health/Safety Improvement	Project provides a human health and/or safety enhancement that may or may not be a regulatory requirement.	25%	25	6%
Level of Service	Project will increase level or quality of service to the community, including addressing increased customer expectations for service, improved response time, reliability, quality, taste, etc.	15%	100	15%
Innovation and Automation Enhancements	Project will enhance achievement of LCA's goals for innovation and/or automation.	5%	75	4%
Community Impact	Project will benefit Community and/or external stakeholders.	10%	50	5%
Economic				
Economic Development	Project is required to meet projected future capacity needs to address economic growth in the service area or provides other economic development benefit to the region.	10%	20	2%
Risk Mitigation	Project addresses asset risk by mitigating likelihood of failure, consequence of failure, and/or resiliency.	10%	25	3%

Additional Information

System Location UNC – OTHER WATER OR SEWER **Will this project require Land Rights?**

Project inception Date 1/1/2022 **Anticipated Project Completion Date** 12/31/2030

Project No.	SD-W-14	Project Name	SUBURBAN WATER METER REPLACEMENT PROGRAM
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Primary Prj Category Revenue Opportunity **Secondary Prj Category** Efficiency

Project Drivers and Needs

- | | |
|---|--|
| <input type="checkbox"/> New Facility | <input checked="" type="checkbox"/> End of Useful Life |
| <input checked="" type="checkbox"/> Existing Facility - Upgrade | <input type="checkbox"/> Obsolescence |
| <input checked="" type="checkbox"/> Scheduled Replacement | <input type="checkbox"/> Inadequate Capacity |
| <input checked="" type="checkbox"/> System Improvements | <input type="checkbox"/> Regulatory |

Notes

The probability of inaccuracies in meter readings increases with age and usage of the meters. The improved accuracy of the new meters creates the potential to increase water system revenues.

Capital Funds Requested for Project

LCA Staff	\$75,000	Project Estimated Level	Planning
Land Acquisition	\$0	Project Funding	LCA
Construction/Equipment	\$4,950,000	Grant Eligibility	No
Professional Services	\$0	Future Spending	\$0
Contingencies	\$125,000		
Total	\$5,150,000		

Current Budget 2025	\$1,000,000	
First Year Budget 2026	\$1,050,000	Construction
Second Year Budget 2027	\$1,050,000	Construction
Third Year Budget 2028	\$1,050,000	Construction
Fourth Year Budget 2029	\$1,000,000	Construction
Fifth Year Budget 2030	\$1,000,000	Construction
Total 2026-2030	\$5,150,000	

**LEHIGH COUNTY AUTHORITY
SUBURBAN DIVISION-CAPITAL IMPROVEMENT PLAN
PROJECT DETAIL SHEET**

Project Name	CENTRAL LEHIGH SYSTEM SUPPLY IMPROVEMENTS				
Budget Area	Water	Department	Capital Works	Project No.	SD-W-15
Location	Suburban	Prj. Type	Both	Prj. Score	90
Prj Initiator	Kunkel	Prj Manager	Kunkel		

Detailed Project Description
A source water assessment study for the Central Lehigh Division was completed in June 2024. The study identified vulnerabilities in emergency supply should the largest water source (Schantz Spring) be taken out of service. Re-establishing the Bortz interconnect with South Whitehall Township will result in an increase of 2.16 mgd during emergency situations. Costs for the upgrade will be shared with South Whitehall Township.

Category	Definition	LCA Weight	Prj Score	Weighted Score
Environmental				
Regulatory Requirement	Project will address a local, state and/or federal regulatory requirement.	25%	100	25%
Social				
Health/Safety Improvement	Project provides a human health and/or safety enhancement that may or may not be a regulatory requirement.	25%	80	20%
Level of Service	Project will increase level or quality of service to the community, including addressing increased customer expectations for service, improved response time, reliability, quality, taste, etc.	15%	100	15%
Innovation and Automation Enhancements	Project will enhance achievement of LCA's goals for innovation and/or automation.	5%	50	3%
Community Impact	Project will benefit Community and/or external stakeholders.	10%	100	10%
Economic				
Economic Development	Project is required to meet projected future capacity needs to address economic growth in the service area or provides other economic development benefit to the region.	10%	75	8%
Risk Mitigation	Project addresses asset risk by mitigating likelihood of failure, consequence of failure, and/or resiliency.	10%	100	10%

Additional Information

System Location CLD – SD WATER CENTRAL **Will this project require Land Rights?**

Project inception Date 1/2/2022 **Anticipated Project Completion Date**

Project No.	SD-W-15	Project Name	CENTRAL LEHIGH SYSTEM SUPPLY IMPROVEMENTS
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Primary Prj Category System Improvement **Secondary Prj Category** Regulatory

Project Drivers and Needs

- | | |
|---|---|
| <input type="checkbox"/> New Facility | <input type="checkbox"/> End of Useful Life |
| <input checked="" type="checkbox"/> Existing Facility - Upgrade | <input type="checkbox"/> Obsolescence |
| <input type="checkbox"/> Scheduled Replacement | <input checked="" type="checkbox"/> Inadequate Capacity |
| <input checked="" type="checkbox"/> System Improvements | <input checked="" type="checkbox"/> Regulatory |

Notes

This project addresses the need to have adequate source capacity with the largest source out of service during an emergency.
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Capital Funds Requested for Project
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LCA Staff	\$10,000	Project Estimated Level	Planning
Land Acquisition	\$0	Project Funding	LCA
Construction/Equipment	\$125,000	Grant Eligibility	TBD
Professional Services	\$15,000	Future Spending	\$0
Contingencies	\$15,000		
Total	\$165,000		

Current Budget 2025	\$180,000	
First Year Budget 2026	\$165,000	None
Second Year Budget 2027	\$0	None
Third Year Budget 2028	\$0	None
Fourth Year Budget 2029	\$0	None
Fifth Year Budget 2030	\$0	None
Total 2026-2030	\$165,000	

**LEHIGH COUNTY AUTHORITY
SUBURBAN DIVISION-CAPITAL IMPROVEMENT PLAN
PROJECT DETAIL SHEET**

Project Name	BUSS ACRES WATER SYSTEM INTERCONNECTION				
Budget Area	Water	Department	Capital Works	Project No.	SD-W-16
Location	Suburban	Prj. Type	Both	Prj. Score	83
Prj Initiator	Moore	Prj Manager	Kunkel		

Detailed Project Description
In January 2023, Pennsylvania's PFAS maximum contaminant levels (MCLs) were established by DEP. Water quality analysis of the two wells serving the Buss Acres Water System show levels in exceedance of these MCLs. A study was performed in 2024 to identify PFAS treatment options for the wells that included an option to connect Buss Acres to the Central Lehigh Division (CLD) system. This project will implement the CLD interconnection option, thereby eliminating the need to treat and remove PFAS on-site. Engineering design began in 2025, and construction will commence in 2026.

Category	Definition	LCA Weight	Prj Score	Weighted Score
Environmental				
Regulatory Requirement	Project will address a local, state and/or federal regulatory requirement.	25%	100	25%
Social				
Health/Safety Improvement	Project provides a human health and/or safety enhancement that may or may not be a regulatory requirement.	25%	100	25%
Level of Service	Project will increase level or quality of service to the community, including addressing increased customer expectations for service, improved response time, reliability, quality, taste, etc.	15%	100	15%
Innovation and Automation Enhancements	Project will enhance achievement of LCA's goals for innovation and/or automation.	5%	50	3%
Community Impact	Project will benefit Community and/or external stakeholders.	10%	75	8%
Economic				
Economic Development	Project is required to meet projected future capacity needs to address economic growth in the service area or provides other economic development benefit to the region.	10%	0	0%
Risk Mitigation	Project addresses asset risk by mitigating likelihood of failure, consequence of failure, and/or resiliency.	10%	75	8%

Additional Information

System Location	UCC – BUSS ACRES WATER	Will this project require Land Rights?	<input checked="" type="checkbox"/>
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Project inception Date	2/1/2024	Anticipated Project Completion Date	12/31/2027
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Project No.	SD-W-16	Project Name	BUSS ACRES WATER SYSTEM INTERCONNECTION
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Primary Prj Category Regulatory **Secondary Prj Category** System Improvement

Project Drivers and Needs

- | | |
|---|--|
| <input checked="" type="checkbox"/> New Facility | <input type="checkbox"/> End of Useful Life |
| <input checked="" type="checkbox"/> Existing Facility - Upgrade | <input type="checkbox"/> Obsolescence |
| <input type="checkbox"/> Scheduled Replacement | <input type="checkbox"/> Inadequate Capacity |
| <input checked="" type="checkbox"/> System Improvements | <input checked="" type="checkbox"/> Regulatory |

Notes

Treatment of the wells will not be required with selection of the CLD interconnection alternative.
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Capital Funds Requested for Project
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LCA Staff	\$30,000	Project Estimated Level	Planning
Land Acquisition	\$10,000	Project Funding	LCA
Construction/Equipment	\$2,500,000	Grant Eligibility	Yes
Professional Services	\$160,000	Future Spending	\$0
Contingencies	\$100,000		
Total	\$2,800,000		

Current Budget 2025	\$270,000	
First Year Budget 2026	\$250,000	None
Second Year Budget 2027	\$2,550,000	Construction
Third Year Budget 2028	\$0	None
Fourth Year Budget 2029	\$0	None
Fifth Year Budget 2030	\$0	None
Total 2026-2030	\$2,800,000	

**LEHIGH COUNTY AUTHORITY
SUBURBAN DIVISION-CAPITAL IMPROVEMENT PLAN
PROJECT DETAIL SHEET**

Project Name	APPLEWOOD PUMP STATION UPGRADE				
Budget Area	Water	Department	Capital Works	Project No.	SD-W-17
Location	Suburban	Prj. Type	Vertical	Prj. Score	73
Prj Initiator	Lynn	Prj Manager	Kunkel		

Detailed Project Description
This project involves a mechanical upgrade to the Applewood Pump Station, including replacing the existing jockey pump (to optimize pumping efficiency) and control valves (end of their service life). The project also includes sodium hypochlorite system improvements at several well station sites within the Central Lehigh Division.

Category	Definition	LCA Weight	Prj Score	Weighted Score
Environmental				
Regulatory Requirement	Project will address a local, state and/or federal regulatory requirement.	25%	50	13%
Social				
Health/Safety Improvement	Project provides a human health and/or safety enhancement that may or may not be a regulatory requirement.	25%	75	19%
Level of Service	Project will increase level or quality of service to the community, including addressing increased customer expectations for service, improved response time, reliability, quality, taste, etc.	15%	100	15%
Innovation and Automation Enhancements	Project will enhance achievement of LCA's goals for innovation and/or automation.	5%	25	1%
Community Impact	Project will benefit Community and/or external stakeholders.	10%	75	8%
Economic				
Economic Development	Project is required to meet projected future capacity needs to address economic growth in the service area or provides other economic development benefit to the region.	10%	75	8%
Risk Mitigation	Project addresses asset risk by mitigating likelihood of failure, consequence of failure, and/or resiliency.	10%	100	10%

Additional Information

System Location CLD – SD WATER CENTRAL **Will this project require Land Rights?**

Project inception Date 7/1/2024 **Anticipated Project Completion Date** 12/31/2027

Project No.	SD-W-17	Project Name	APPLEWOOD PUMP STATION UPGRADE
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Primary Prj Category System Improvement **Secondary Prj Category** Asset Management Plan

Project Drivers and Needs

- | | |
|---|---|
| <input type="checkbox"/> New Facility | <input checked="" type="checkbox"/> End of Useful Life |
| <input checked="" type="checkbox"/> Existing Facility - Upgrade | <input type="checkbox"/> Obsolescence |
| <input type="checkbox"/> Scheduled Replacement | <input checked="" type="checkbox"/> Inadequate Capacity |
| <input checked="" type="checkbox"/> System Improvements | <input type="checkbox"/> Regulatory |

Notes

Project drivers include asset management, system improvements and fire flow capacity. Well sites for hypochlorite system improvements are WL-6, WL-9 and
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Capital Funds Requested for Project
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LCA Staff	\$20,000	Project Estimated Level	Planning
Land Acquisition	\$0	Project Funding	LCA
Construction/Equipment	\$770,000	Grant Eligibility	No
Professional Services	\$90,000	Future Spending	\$0
Contingencies	\$50,000		
Total	\$930,000		

Current Budget 2025	\$100,000	
First Year Budget 2026	\$400,000	None
Second Year Budget 2027	\$530,000	Construction
Third Year Budget 2028	\$0	None
Fourth Year Budget 2029	\$0	None
Fifth Year Budget 2030	\$0	None
Total 2026-2030	\$930,000	

**LEHIGH COUNTY AUTHORITY
SUBURBAN DIVISION-CAPITAL IMPROVEMENT PLAN
PROJECT DETAIL SHEET**

Project Name	SD WATER SMALL SYSTEMS GENERATOR REPLACEMENT				
Budget Area	Water	Department	Capital Works	Project No.	SD-W-18
Location	Suburban	Prj. Type	Vertical	Prj. Score	50
Prj Initiator	Volk	Prj Manager	Siekmann		

Detailed Project Description
This is a multi-year project is focused on LCA owned small systems that presently do not have backup power or have an existing generator that is at the end of its service life.

Category	Definition	LCA Weight	Prj Score	Weighted Score
Environmental				
Regulatory Requirement	Project will address a local, state and/or federal regulatory requirement.	25%	50	13%
Social				
Health/Safety Improvement	Project provides a human health and/or safety enhancement that may or may not be a regulatory requirement.	25%	25	6%
Level of Service	Project will increase level or quality of service to the community, including addressing increased customer expectations for service, improved response time, reliability, quality, taste, etc.	15%	100	15%
Innovation and Automation Enhancements	Project will enhance achievement of LCA's goals for innovation and/or automation.	5%	50	3%
Community Impact	Project will benefit Community and/or external stakeholders.	10%	50	5%
Economic				
Economic Development	Project is required to meet projected future capacity needs to address economic growth in the service area or provides other economic development benefit to the region.	10%	10	1%
Risk Mitigation	Project addresses asset risk by mitigating likelihood of failure, consequence of failure, and/or resiliency.	10%	75	8%

Additional Information

System Location UNC – OTHER WATER OR SEWER **Will this project require Land Rights?**

Project inception Date 6/13/2025 **Anticipated Project Completion Date** 12/31/2030

Project No.	SD-W-18	Project Name	SD WATER SMALL SYSTEMS GENERATOR REPLACEMENT
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Primary Prj Category System Improvement **Secondary Prj Category** Asset Management Plan

Project Drivers and Needs

- | | |
|---|--|
| <input type="checkbox"/> New Facility | <input checked="" type="checkbox"/> End of Useful Life |
| <input checked="" type="checkbox"/> Existing Facility - Upgrade | <input checked="" type="checkbox"/> Obsolescence |
| <input checked="" type="checkbox"/> Scheduled Replacement | <input type="checkbox"/> Inadequate Capacity |
| <input type="checkbox"/> System Improvements | <input type="checkbox"/> Regulatory |

Notes

Locations include Schantz Booster Station, Schnecksville North Station, Well 5, and Well 6.

Capital Funds Requested for Project

LCA Staff	\$10,000	Project Estimated Level	Planning
Land Acquisition	\$0	Project Funding	LCA
Construction/Equipment	\$800,000	Grant Eligibility	
Professional Services	\$50,000	Future Spending	\$0
Contingencies	\$40,000		
Total	\$900,000		

Current Budget 2025	\$0	
First Year Budget 2026	\$50,000	Planning, Design
Second Year Budget 2027	\$400,000	Construction
Third Year Budget 2028	\$450,000	Construction
Fourth Year Budget 2029	\$0	None
Fifth Year Budget 2030	\$0	None
Total 2026-2030	\$900,000	

**LEHIGH COUNTY AUTHORITY
SUBURBAN DIVISION-CAPITAL IMPROVEMENT PLAN
PROJECT DETAIL SHEET**

Project Name	SUBURBAN LEAK DETECTION PROGRAM				
Budget Area	Water	Department	Capital Works	Project No.	SD-W-19
Location	Suburban	Prj. Type	Linear	Prj. Score	58
Prj Initiator	Volk	Prj Manager	Moughan		

Detailed Project Description
This project will improve leak detection monitoring capability in LCA water systems, and the data will be used to target and prioritize system repairs and main replacements. Project scope involves leak loggers and pressure sensors to be installed in strategic locations throughout LCA Suburban water systems.

Category	Definition	LCA Weight	Prj Score	Weighted Score
Environmental				
Regulatory Requirement	Project will address a local, state and/or federal regulatory requirement.	25%	50	13%
Social				
Health/Safety Improvement	Project provides a human health and/or safety enhancement that may or may not be a regulatory requirement.	25%	50	13%
Level of Service	Project will increase level or quality of service to the community, including addressing increased customer expectations for service, improved response time, reliability, quality, taste, etc.	15%	100	15%
Innovation and Automation Enhancements	Project will enhance achievement of LCA's goals for innovation and/or automation.	5%	90	5%
Community Impact	Project will benefit Community and/or external stakeholders.	10%	50	5%
Economic				
Economic Development	Project is required to meet projected future capacity needs to address economic growth in the service area or provides other economic development benefit to the region.	10%	10	1%
Risk Mitigation	Project addresses asset risk by mitigating likelihood of failure, consequence of failure, and/or resiliency.	10%	75	8%

Additional Information

System Location All Systems **Will this project require Land Rights?**

Project inception Date 6/20/2025 **Anticipated Project Completion Date** 12/31/2030

Project No.	SD-W-19	Project Name	SUBURBAN LEAK DETECTION PROGRAM
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Primary Prj Category Efficiency **Secondary Prj Category** System Improvement

Project Drivers and Needs

- | | |
|---|--|
| <input type="checkbox"/> New Facility | <input type="checkbox"/> End of Useful Life |
| <input checked="" type="checkbox"/> Existing Facility - Upgrade | <input type="checkbox"/> Obsolescence |
| <input type="checkbox"/> Scheduled Replacement | <input type="checkbox"/> Inadequate Capacity |
| <input checked="" type="checkbox"/> System Improvements | <input type="checkbox"/> Regulatory |

Notes

Work will be coordinated and equipment installed by LCA Field Services.

Capital Funds Requested for Project

LCA Staff	\$25,000	Project Estimated Level	Planning
Land Acquisition	\$0	Project Funding	LCA
Construction/Equipment	\$500,000	Grant Eligibility	
Professional Services	\$0	Future Spending	\$0
Contingencies	\$25,000		
Total	\$550,000		

Current Budget 2025	\$0	
First Year Budget 2026	\$250,000	Construction
Second Year Budget 2027	\$100,000	Construction
Third Year Budget 2028	\$100,000	Construction
Fourth Year Budget 2029	\$50,000	None
Fifth Year Budget 2030	\$50,000	None
Total 2026-2030	\$550,000	

**LEHIGH COUNTY AUTHORITY
SUBURBAN DIVISION-CAPITAL IMPROVEMENT PLAN
PROJECT DETAIL SHEET**

Project Name	SUBURBAN LEAD SERVICE INVENTORY PROGRAM				
Budget Area	Water	Department	Capital Works	Project No.	SD-W-20
Location	Suburban	Prj. Type	Linear	Prj. Score	76
Prj Initiator	Volk	Prj Manager	Siekmann		

Detailed Project Description
Project involves investigation of water service materials in LCA Suburban water system to identify and inventory lead pipe on the public and private sides.

Category	Definition	LCA Weight	Prj Score	Weighted Score
Environmental				
Regulatory Requirement	Project will address a local, state and/or federal regulatory requirement.	25%	100	25%
Social				
Health/Safety Improvement	Project provides a human health and/or safety enhancement that may or may not be a regulatory requirement.	25%	100	25%
Level of Service	Project will increase level or quality of service to the community, including addressing increased customer expectations for service, improved response time, reliability, quality, taste, etc.	15%	50	8%
Innovation and Automation Enhancements	Project will enhance achievement of LCA's goals for innovation and/or automation.	5%	20	1%
Community Impact	Project will benefit Community and/or external stakeholders.	10%	75	8%
Economic				
Economic Development	Project is required to meet projected future capacity needs to address economic growth in the service area or provides other economic development benefit to the region.	10%	20	2%
Risk Mitigation	Project addresses asset risk by mitigating likelihood of failure, consequence of failure, and/or resiliency.	10%	75	8%

Additional Information

System Location UNC – OTHER WATER OR SEWER **Will this project require Land Rights?**

Project inception Date 6/13/2025 **Anticipated Project Completion Date** 12/31/2030

Project No.	SD-W-20	Project Name	SUBURBAN LEAD SERVICE INVENTORY PROGRAM
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Primary Prj Category Regulatory **Secondary Prj Category** System Improvement

Project Drivers and Needs

- | | |
|---|--|
| <input type="checkbox"/> New Facility | <input type="checkbox"/> End of Useful Life |
| <input type="checkbox"/> Existing Facility - Upgrade | <input type="checkbox"/> Obsolescence |
| <input type="checkbox"/> Scheduled Replacement | <input type="checkbox"/> Inadequate Capacity |
| <input checked="" type="checkbox"/> System Improvements | <input checked="" type="checkbox"/> Regulatory |

Notes

Work will be performed internally by LCA Field Services with partial utilization of potholing subcontractor.

Capital Funds Requested for Project

LCA Staff	\$50,000	Project Estimated Level	Planning
Land Acquisition	\$0	Project Funding	LCA
Construction/Equipment	\$0	Grant Eligibility	
Professional Services	\$125,000	Future Spending	\$0
Contingencies	\$25,000		
Total	\$200,000		

Current Budget 2025	\$0	
First Year Budget 2026	\$50,000	Planning
Second Year Budget 2027	\$100,000	Planning
Third Year Budget 2028	\$50,000	Planning
Fourth Year Budget 2029	\$0	None
Fifth Year Budget 2030	\$0	None
Total 2026-2030	\$200,000	

**LEHIGH COUNTY AUTHORITY
SUBURBAN DIVISION-CAPITAL IMPROVEMENT PLAN
PROJECT DETAIL SHEET**

Project Name	SMALL SYSTEMS WATER SUPPLY IMPROVEMENTS				
Budget Area	Water	Department	Capital Works	Project No.	SD-W-21
Location	Suburban	Prj. Type	Vertical	Prj. Score	50
Prj Initiator	Volk	Prj Manager	Kunkel		

Detailed Project Description
This project is for the study phase of small Suburban Division water systems supply and distribution systems with a focus on resiliency and redundancy, in particular, single point of failure components, and addressing supply limitations. ovements.

Category	Definition	LCA Weight	Prj Score	Weighted Score
Environmental				
Regulatory Requirement	Project will address a local, state and/or federal regulatory requirement.	25%	50	13%
Social				
Health/Safety Improvement	Project provides a human health and/or safety enhancement that may or may not be a regulatory requirement.	25%	25	6%
Level of Service	Project will increase level or quality of service to the community, including addressing increased customer expectations for service, improved response time, reliability, quality, taste, etc.	15%	90	14%
Innovation and Automation Enhancements	Project will enhance achievement of LCA's goals for innovation and/or automation.	5%	10	1%
Community Impact	Project will benefit Community and/or external stakeholders.	10%	90	9%
Economic				
Economic Development	Project is required to meet projected future capacity needs to address economic growth in the service area or provides other economic development benefit to the region.	10%	10	1%
Risk Mitigation	Project addresses asset risk by mitigating likelihood of failure, consequence of failure, and/or resiliency.	10%	75	8%

Additional Information

System Location Will this project require Land Rights?

Project inception Date 8/27/2025 Anticipated Project Completion Date 12/31/2026

Project No.	SD-W-21	Project Name	SMALL SYSTEMS WATER SUPPLY IMPROVEMENTS
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Primary Prj Category System Improvement **Secondary Prj Category** Planning

Project Drivers and Needs

- | | |
|---|--|
| <input type="checkbox"/> New Facility | <input type="checkbox"/> End of Useful Life |
| <input checked="" type="checkbox"/> Existing Facility - Upgrade | <input type="checkbox"/> Obsolescence |
| <input type="checkbox"/> Scheduled Replacement | <input type="checkbox"/> Inadequate Capacity |
| <input checked="" type="checkbox"/> System Improvements | <input type="checkbox"/> Regulatory |

Notes

Primary drivers are resiliency, system improvements, and asset management plan.

Capital Funds Requested for Project
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LCA Staff	\$10,000	Project Estimated Level	Planning
Land Acquisition	\$0	Project Funding	LCA
Construction/Equipment	\$0	Grant Eligibility	
Professional Services	\$140,000	Future Spending	\$0
Contingencies	\$0		
Total	\$150,000		

Current Budget 2025	\$0	
First Year Budget 2026	\$100,000	Preliminary, Design
Second Year Budget 2027	\$50,000	Planning
Third Year Budget 2028	\$0	None
Fourth Year Budget 2029	\$0	None
Fifth Year Budget 2030	\$0	None
Total 2026-2030	\$150,000	

WASTEWATER

**LEHIGH COUNTY AUTHORITY
SUBURBAN DIVISION
WASTEWATER
5-YEAR CAPITAL PLAN
2026–2030**

CAPITAL FINANCING JUSTIFICATION

Capital additions to the Wastewater System are justified by calculating the operating cash available based upon projections of revenues over the five-year period. Beyond the operating cash available, remaining sources are project reserves from previous debt issuance and any new borrowing required.

The table below summarizes the capital project sourcing by year and each major financial sourcing category:

CAPITAL FINANCING SOURCES						
	2026	2027	2028	2029	2030	TOTAL
Project Costs	\$6,342,500	\$6,927,500	\$6,947,000	\$6,207,500	\$11,327,500	\$37,752,000
<i>Sources of Funding:</i>						
Current Cash Flows	\$2,730,500	\$1,534,387	\$2,303,167	\$1,207,500	\$1,327,500	\$9,103,054
Cash Reserves	\$1,112,000	\$393,113	\$4,643,833	-	-	\$6,148,946
New Borrowing	\$2,500,000	\$5,000,000	-	\$5,000,000	\$10,000,000	\$22,500,000
TOTAL FUNDING	\$6,342,500	\$6,927,500	\$6,947,000	\$6,207,500	\$11,327,500	\$37,752,000

Total spending on capital projects for the five-year period totals \$37,752,000. Current cash flows and cash reserves over the period will provide \$15,252,000 for capital projects. New borrowing will provide \$22,500,000 of project funding. This approach is recommended to allow for continued growth of reserves, which will be needed in the future as additional projects are incorporated into the plan as a result of the regional Act 537 Plan that is currently under development. The regional Act 537 Plan will provide details for sewage facility plans and significant capital improvements in the Suburban Division to address sanitary sewer overflows and overall capacity challenges of the system. The Act 537 Plan is expected to be submitted to state regulators in 2025 for review and approval and will include a separate detailed financial analysis outlining intermunicipal cost-sharing approaches for these projects as well as financing strategies and an analysis of rate impacts. This financial analysis and full plan overview will be presented later in 2025. However, due to the project timing, including some projects commencing in 2025, LCA has incorporated these projects into this Capital Plan to offer a preliminary view of borrowing and rate impacts. This information will be further refined in the Act 537 Plan and subsequent Capital Plans.

Revenue requirements will also be impacted by inflation for both the Western Lehigh Interceptor (WLI) group along with other users of the system. Signatory Revenue increases by year to support the Capital Plan are as shown below, but do not include and analysis of pass-through costs from the Allentown Division projects at this time:

	2026	2027	2028	2029	2030
Projected WLI Rate Increase	4.8%	-11.4%	4.6%	2.6%	8.0%

CONDENSED CASH FLOW - SUBURBAN WASTEWATER

Dollars	2026	2027	2028	2029	2030
User Charges	20,411,997	19,204,464	18,590,672	18,945,058	19,886,065
Other Operating Revenues	410,203	414,924	419,611	424,253	429,039
Non-Operating Revenues	1,733,496	1,733,496	1,733,496	1,733,496	1,733,496
Operating expenses	(16,472,197)	(16,977,781)	(15,462,397)	(15,873,420)	(16,295,575)
Debt Service - Current Debt	(2,176,924)	(2,176,924)	(2,176,924)	(2,176,924)	(2,176,924)
Debt Service - NEW Debt	(155,014)	(465,041)	(465,041)	(775,068)	(1,395,123)
Investments Converting to Cash	-	-	-	-	-
Proceeds From NEW Debt	2,500,000	5,000,000	-	5,000,000	10,000,000
Capex	(6,697,500)	(7,126,250)	(7,283,250)	(6,473,750)	(11,456,250)
NET FUND FLOWS	(445,939)	(393,113)	(4,643,833)	803,645	724,728
User Charge Revenue Increase %	2.6%	-5.9%	-3.2%	1.9%	5.0%
Unrestricted Cash Balance	10,554,343	10,161,230	5,517,397	6,321,042	7,045,771
Unrestricted Investments	7,278,350	7,278,350	7,278,350	7,278,350	7,278,350
Total Unrestricted Balances	17,832,693	17,439,580	12,795,747	13,599,392	14,324,121
Unrestricted Cash - Days on Hand	234	218	130	145	158
DEBT SERVICE COVERAGE RATIO	2.61	1.66	2.00	1.77	1.61

Sourcing of Projects and Debt Service related to various systems is as follows:

BY SYSTEM	TOTAL	CURRENT CASH FLOWS	RESERVES	NEW DEBT
Annual Projects	\$3,217,000	\$3,217,000	-	-
Western Lehigh Interceptor	\$2,330,000	\$2,330,000	-	-
LCA Wastewater Pretreatment Plant	\$29,300,000	\$651,054	\$6,148,946	\$22,500,000
Common Rate Collector Systems	\$1,475,000	\$1,475,000	-	-
Arcadia West	\$180,000	\$180,000	-	-
Lynn Township	\$1,250,000	\$1,250,000	-	-
Little Lehigh Relief Interceptor System	-	-	-	-
	\$37,752,000	\$9,103,054	\$6,148,946	\$22,500,000

**LEHIGH COUNTY AUTHORITY
SUBURBAN DIVISION
2026-2030 CAPITAL PROGRAM
WASTEWATER**

Project #	Name or Title of Proposal	Prj. Category	(1) Prj. Funding	Approval Stage (1)	This Capital Program							
					2025 Budget Approved	2026 Year 1	2027 Year 2	2028 Year 3	2029 Year 4	2030 Year 5	2026-2030 Total	
	Operating/Capital Reserve Funds											
	Annual											
SD-S-A	Annual Projects	AM - Varies	LCA	A	\$ 835,000	\$ 962,500	\$ 442,500	\$ 657,000	\$ 492,500	\$ 662,500	\$ 3,217,000	
	Subtotal				\$ 835,000	\$ 962,500	\$ 442,500	\$ 657,000	\$ 492,500	\$ 662,500	\$ 3,217,000	
	Pretreatment Plant											
SD-S-10	Pretreatment Plant Improvements	AM - Varies	LCA	A	\$ 600,000	\$ 600,000	\$ 500,000	\$ 500,000	\$ 400,000	\$ 400,000	\$ 2,400,000	
SD-S-11	Pretreatment Plant Critical Upgrades	AM - Varies	LCA	A	\$ 4,000,000	\$ 2,000,000	\$ -	\$ -	\$ -	\$ -	\$ 2,000,000	
SD-S-12	Pretreatment Long Term Upgrade/Replacement	AM - Varies	LCA	A	\$ 1,000,000	\$ 400,000	\$ 4,500,000	\$ 5,000,000	\$ 5,000,000	\$ 10,000,000	\$ 24,900,000	
	Subtotal				\$ 5,600,000	\$ 3,000,000	\$ 5,000,000	\$ 5,500,000	\$ 5,400,000	\$ 10,400,000	\$ 29,300,000	
	Western Lehigh Interceptor											
SD-S-20	Central Lehigh County WW Capacity Planning & Expansion	New Cust	LCA	S	\$ 400,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 500,000	
SD-S-21	Spring Creek Pump Station Upgrades	AM-High	LCA	C	\$ 1,000,000	\$ 580,000	\$ -	\$ -	\$ -	\$ -	\$ 580,000	
SD-S-22	Signatory I & I Investigation & Remediation Program	Regulatory	LCA	V	\$ 500,000	\$ 750,000	\$ 200,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 1,250,000	
	Subtotal				\$ 1,900,000	\$ 1,430,000	\$ 300,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 2,330,000	
	Satellite Systems											
SD-S-30	Wynnewood I & I Investigation & Remediation Program	AM - Varies	LCA	C	\$ 150,000	\$ 25,000	\$ 150,000	\$ 25,000	\$ 10,000	\$ 10,000	\$ 220,000	
SD-S-31	Wynnewood Wastewater Treatment Plant Expansion	New Cust	LCA	D	\$ 50,000	\$ 100,000	\$ 125,000	\$ -	\$ -	\$ -	\$ 225,000	
SD-S-32	Arcadia West WWTP Mechanical Screen	Efficiency	LCA	D	\$ 220,000	\$ 170,000	\$ 10,000	\$ -	\$ -	\$ -	\$ 180,000	
SD-S-33	North Whitehall Township Act 537 Sewage Facilities Planning	Regulatory	LCA	S	\$ 70,000	\$ 50,000	\$ 20,000	\$ -	\$ -	\$ -	\$ 70,000	
SD-S-34	Heidelberg Heights I & I Investigation & Remediation Program	AM - Varies	LCA	D	\$ 300,000	\$ 400,000	\$ 50,000	\$ 20,000	\$ 10,000	\$ 10,000	\$ 490,000	
SD-S-35	Sand Spring WWTP improvements	Regulatory	LCA	C	\$ 100,000	\$ 30,000	\$ 30,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 120,000	
SD-S-36	Lynn Township WWTP Improvements	AM - High	LCA	C	\$ 900,000	\$ 100,000	\$ 400,000	\$ 400,000	\$ 50,000	\$ -	\$ 950,000	
SD-S-37	Lynn Township I & I Investigation & Remediation Program	Regulatory	LCA	P	\$ 25,000	\$ 25,000	\$ 100,000	\$ 125,000	\$ 25,000	\$ 25,000	\$ 300,000	
SD-S-38	Small Systems Generator Replacement	Regulatory	LCA	P	\$ -	\$ 50,000	\$ 300,000	\$ -	\$ -	\$ -	\$ 350,000	
	Subtotal				\$ 1,815,000	\$ 950,000	\$ 1,185,000	\$ 590,000	\$ 115,000	\$ 65,000	\$ 2,905,000	
	GRAND TOTAL WASTEWATER PROJECTS				\$ 10,150,000	\$ 6,342,500	\$ 6,927,500	\$ 6,947,000	\$ 6,207,500	\$ 11,327,500	\$ 37,752,000	

(1) Reference Glossary of Acronyms & Terms found immediately after the Table of Contents. All projects are LCA funded.

(2) If blank, cost is not applicable (annual project) or to be determined

**LEHIGH COUNTY AUTHORITY
SUBURBAN DIVISION-CAPITAL IMPROVEMENT PLAN
PROJECT DETAIL SHEET**

Project Name	SUBURBAN WASTEWATER ANNUAL PROJECTS				
Budget Area	Wastewater	Department	Capital Works	Project No.	SD-S-A
Location	Suburban	Prj. Type	Both	Prj. Score	69
Prj Initiator	Volk	Prj Manager	Volk		

Detailed Project Description
This annual project consists of separate smaller procurement and improvement projects. The consolidated project includes the following: general sewer system improvements for suburban satellite systems, other equipment, mobile equipment, facility asset management upgrades, SCADA and security system upgrades, collection system service connections and extensions (development), sewer company acquisitions, and capital management.

Category	Definition	LCA Weight	Prj Score	Weighted Score
Environmental				
Regulatory Requirement	Project will address a local, state and/or federal regulatory requirement.	25%	50	13%
Social				
Health/Safety Improvement	Project provides a human health and/or safety enhancement that may or may not be a regulatory requirement.	25%	50	13%
Level of Service	Project will increase level or quality of service to the community, including addressing increased customer expectations for service, improved response time, reliability, quality, taste, etc.	15%	100	15%
Innovation and Automation Enhancements	Project will enhance achievement of LCA's goals for innovation and/or automation.	5%	75	4%
Community Impact	Project will benefit Community and/or external stakeholders.	10%	75	8%
Economic				
Economic Development	Project is required to meet projected future capacity needs to address economic growth in the service area or provides other economic development benefit to the region.	10%	100	10%
Risk Mitigation	Project addresses asset risk by mitigating likelihood of failure, consequence of failure, and/or resiliency.	10%	75	8%

Additional Information

System Location UNC – OTHER WATER OR SEWER **Will this project require Land Rights?**

Project inception Date 1/2/2016 **Anticipated Project Completion Date** 12/31/2030

Project No.	SD-S-A	Project Name	SUBURBAN WASTEWATER ANNUAL PROJECTS
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Primary Prj Category System Improvement **Secondary Prj Category** Asset Management Plan

Project Drivers and Needs

- | | |
|---|--|
| <input type="checkbox"/> New Facility | <input checked="" type="checkbox"/> End of Useful Life |
| <input checked="" type="checkbox"/> Existing Facility - Upgrade | <input checked="" type="checkbox"/> Obsolescence |
| <input checked="" type="checkbox"/> Scheduled Replacement | <input type="checkbox"/> Inadequate Capacity |
| <input checked="" type="checkbox"/> System Improvements | <input type="checkbox"/> Regulatory |

Notes

Annual projects provide for needed equipment and technology support to maintain systems operation and address high risk system components to maintain satisfactory level of service of various wastewater facilities in LCA's Suburban
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Capital Funds Requested for Project
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LCA Staff	\$200,000	Project Estimated Level	Planning
Land Acquisition	\$0	Project Funding	LCA
Construction/Equipment	\$2,600,000	Grant Eligibility	No
Professional Services	\$200,000	Future Spending	\$0
Contingencies	\$217,000		
Total	\$3,217,000		

Current Budget 2025	\$835,000	
First Year Budget 2026	\$962,500	Construction
Second Year Budget 2027	\$442,500	Construction
Third Year Budget 2028	\$657,000	Construction
Fourth Year Budget 2029	\$492,500	Construction
Fifth Year Budget 2030	\$662,500	Construction
Total 2026-2030	\$3,217,000	

**LEHIGH COUNTY AUTHORITY
SUBURBAN DIVISION-CAPITAL IMPROVEMENT PLAN
PROJECT DETAIL SHEET**

Project Name	PRETREATMENT PLANT ANNUAL IMPROVEMENTS				
Budget Area	Wastewater	Department	Capital Works		Project No. SD-S-10
Location	Suburban	Prj. Type	Vertical	Prj. Score	81
Prj Initiator	Volk	Prj Manager	Volk		

Detailed Project Description
<p>This project is comprised of asset management driven upgrades to address process equipment reliability and prolong the life of the 35-year-old facility. Prioritization of separate capital improvement projects utilizes asset management protocols in order to maintain level of service and compliance with City of Allentown mandated discharge requirements. Electrical system components were repaired/upgraded in 2025 as a result of a comprehensive electrical testing program conducted in 2024. Annual paving projects, SCADA/security upgrades, building repairs, and major equipment replacements are also part of this program.</p>

Category	Definition	LCA Weight	Prj Score	Weighted Score
Environmental				
Regulatory Requirement	Project will address a local, state and/or federal regulatory requirement.	25%	75	19%
Social				
Health/Safety Improvement	Project provides a human health and/or safety enhancement that may or may not be a regulatory requirement.	25%	75	19%
Level of Service	Project will increase level or quality of service to the community, including addressing increased customer expectations for service, improved response time, reliability, quality, taste, etc.	15%	100	15%
Innovation and Automation Enhancements	Project will enhance achievement of LCA's goals for innovation and/or automation.	5%	75	4%
Community Impact	Project will benefit Community and/or external stakeholders.	10%	75	8%
Economic				
Economic Development	Project is required to meet projected future capacity needs to address economic growth in the service area or provides other economic development benefit to the region.	10%	75	8%
Risk Mitigation	Project addresses asset risk by mitigating likelihood of failure, consequence of failure, and/or resiliency.	10%	100	10%

Additional Information

System Location TPC – PRETREATMENT PLANT **Will this project require Land Rights?**

Project inception Date 1/2/2010 **Anticipated Project Completion Date** 12/31/2030

Project No.	SD-S-10	Project Name	PRETREATMENT PLANT ANNUAL IMPROVEMENTS
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Primary Prj Category Asset Management Plan **Secondary Prj Category** System Improvement

Project Drivers and Needs

- | | |
|---|--|
| <input type="checkbox"/> New Facility | <input checked="" type="checkbox"/> End of Useful Life |
| <input checked="" type="checkbox"/> Existing Facility - Upgrade | <input checked="" type="checkbox"/> Obsolescence |
| <input checked="" type="checkbox"/> Scheduled Replacement | <input type="checkbox"/> Inadequate Capacity |
| <input type="checkbox"/> System Improvements | <input type="checkbox"/> Regulatory |

Notes

This facility is critical to support local economic growth in the Western Lehigh sewer service area, and annual improvements are required to maintain level of service for the pretreatment plant, which has been in continuous operation since 1990.

Capital Funds Requested for Project
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LCA Staff	\$100,000	Project Estimated Level	Design
Land Acquisition	\$0	Project Funding	LCA
Construction/Equipment	\$2,000,000	Grant Eligibility	TBD
Professional Services	\$100,000	Future Spending	\$0
Contingencies	\$200,000		
Total	\$2,400,000		

Current Budget 2025	\$600,000	
First Year Budget 2026	\$600,000	Construction
Second Year Budget 2027	\$500,000	Construction
Third Year Budget 2028	\$500,000	Construction
Fourth Year Budget 2029	\$400,000	Construction
Fifth Year Budget 2030	\$400,000	Construction
Total 2026-2030	\$2,400,000	

**LEHIGH COUNTY AUTHORITY
SUBURBAN DIVISION-CAPITAL IMPROVEMENT PLAN
PROJECT DETAIL SHEET**

Project Name	PRETREATMENT PLANT CRITICAL UPGRADES				
Budget Area	Wastewater	Department	Capital Works	Project No.	SD-S-11
Location	Suburban	Prj. Type	Vertical	Prj. Score	68
Prj Initiator	Capuzzi	Prj Manager	Volk		

Detailed Project Description
<p>The critical upgrade project was designed in 2024 and will be constructed in 2025 and 2026. The purpose of the project is to mitigate risk due to critical processes identified as having a high probability and consequence of failure. The process areas are - aeration (mixer repairs), replacement of return activated sludge (RAS) line, final settling (final clarifiers mechanical equipment replacement), cryogenic plant upgrade (mechanical and instrumentation), and solids processing (solids buildings HVAC upgrade). The objective of the critical plant upgrade project is to address high risk areas and maintain an acceptable level of service for the near term until a long term major facility upgrade or replacement the facility is completed. The scope of work for 2026 will primarily be focused on completion of the second tank final clarifier mechanical upgrade and replacement of the above grade steel RAS line.</p>

Category	Definition	LCA Weight	Prj Score	Weighted Score
Environmental				
Regulatory Requirement	Project will address a local, state and/or federal regulatory requirement.	25%	50	13%
Social				
Health/Safety Improvement	Project provides a human health and/or safety enhancement that may or may not be a regulatory requirement.	25%	50	13%
Level of Service	Project will increase level or quality of service to the community, including addressing increased customer expectations for service, improved response time, reliability, quality, taste, etc.	15%	100	15%
Innovation and Automation Enhancements	Project will enhance achievement of LCA's goals for innovation and/or automation.	5%	50	3%
Community Impact	Project will benefit Community and/or external stakeholders.	10%	75	8%
Economic				
Economic Development	Project is required to meet projected future capacity needs to address economic growth in the service area or provides other economic development benefit to the region.	10%	75	8%
Risk Mitigation	Project addresses asset risk by mitigating likelihood of failure, consequence of failure, and/or resiliency.	10%	100	10%

Additional Information

System Location TPC – PRETREATMENT PLANT Will this project require Land Rights?

Project inception Date 1/2/2024 Anticipated Project Completion Date 12/31/2026

Project No.	SD-S-11	Project Name	PRETREATMENT PLANT CRITICAL UPGRADES
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Primary Prj Category Asset Management Plan **Secondary Prj Category** System Improvement

Project Drivers and Needs

- | | |
|---|--|
| <input type="checkbox"/> New Facility | <input checked="" type="checkbox"/> End of Useful Life |
| <input checked="" type="checkbox"/> Existing Facility - Upgrade | <input type="checkbox"/> Obsolescence |
| <input type="checkbox"/> Scheduled Replacement | <input type="checkbox"/> Inadequate Capacity |
| <input checked="" type="checkbox"/> System Improvements | <input type="checkbox"/> Regulatory |

Notes

Asset management and system improvement are the primary drivers.

Capital Funds Requested for Project

LCA Staff	\$50,000	Project Estimated Level	Design
Land Acquisition	\$0	Project Funding	LCA
Construction/Equipment	\$1,600,000	Grant Eligibility	TBD
Professional Services	\$100,000	Future Spending	\$0
Contingencies	\$250,000		
Total	\$2,000,000		

Current Budget 2025	\$4,000,000	
First Year Budget 2026	\$2,000,000	Construction
Second Year Budget 2027	\$0	None
Third Year Budget 2028	\$0	None
Fourth Year Budget 2029	\$0	None
Fifth Year Budget 2030	\$0	None
Total 2026-2030	\$2,000,000	

**LEHIGH COUNTY AUTHORITY
SUBURBAN DIVISION-CAPITAL IMPROVEMENT PLAN
PROJECT DETAIL SHEET**

Project Name	PRETREATMENT PLANT LONG TERM UPGRADE/REPLACEMENT				
Budget Area	Wastewater	Department	Capital Works	Project No.	SD-S-12
Location	Suburban	Prj. Type	Vertical	Prj. Score	69
Prj Initiator	Capuzzi	Prj Manager	Volk		

Detailed Project Description
<p>Long term major modifications or replacement of the pretreatment plant is to be evaluated, planned, and constructed under this project. This project assumes only three major industries will be connected to the renewed pretreatment plant - Keurig/Doctor Pepper, Sunopta and Coke. Ocean Spray and Boston Beer will treat their wastewater on-site with their own facilities and bypass the PTP with conveyance of their wastewater via existing sewer interceptors to Kline's Island Wastewater Treatment Plant. A portion or all of the domestic wastewater from Upper Macungie Township will also bypass the pretreatment plant via existing sewer interceptors. The upgraded or new plant will continue to treat hauled-in waste; however, overall loadings will be greatly reduced. The replacement or upgraded treatment plant alternatives assume the abandonment/removal of the existing cryogenic (pure oxygen) plant. Upgraded processes include: new hauled waste receiving station, new solids dewatering and conveyance equipment, new solids load-out equipment, aeration basin conversion from pure oxygen to ambient air, and electrical system critical equipment replacement (two substations replacement). The project includes planning, design, equipment procurement, construction and construction management. Planning efforts commenced in 2025 and design work will start in 2026. Future improvements beyond this capital plan include upgrades to the influent pump station, primary sedimentation, RAS/WAS pump station, and 5- 10 year priority electrical equipment. The work is anticipated to be completed within 10 years.</p>

Category	Definition	LCA Weight	Prj Score	Weighted Score
Environmental				
Regulatory Requirement	Project will address a local, state and/or federal regulatory requirement.	25%	50	13%
Social				
Health/Safety Improvement	Project provides a human health and/or safety enhancement that may or may not be a regulatory requirement.	25%	50	13%
Level of Service	Project will increase level or quality of service to the community, including addressing increased customer expectations for service, improved response time, reliability, quality, taste, etc.	15%	100	15%
Innovation and Automation Enhancements	Project will enhance achievement of LCA's goals for innovation and/or automation.	5%	75	4%
Community Impact	Project will benefit Community and/or external stakeholders.	10%	100	10%
Economic				
Economic Development	Project is required to meet projected future capacity needs to address economic growth in the service area or provides other economic development benefit to the region.	10%	75	8%
Risk Mitigation	Project addresses asset risk by mitigating likelihood of failure, consequence of failure, and/or resiliency.	10%	75	8%

Additional Information

System Location TPC – PRETREATMENT PLANT **Will this project require Land Rights?**

Project inception Date 6/1/2024 **Anticipated Project Completion Date** 12/31/2036

Project No.	SD-S-12	Project Name	PRETREATMENT PLANT LONG TERM UPGRADE/REPLACEMENT
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Primary Prj Category Efficiency **Secondary Prj Category** Planning

Project Drivers and Needs

- | | |
|---|--|
| <input checked="" type="checkbox"/> New Facility | <input checked="" type="checkbox"/> End of Useful Life |
| <input checked="" type="checkbox"/> Existing Facility - Upgrade | <input checked="" type="checkbox"/> Obsolescence |
| <input type="checkbox"/> Scheduled Replacement | <input type="checkbox"/> Inadequate Capacity |
| <input type="checkbox"/> System Improvements | <input type="checkbox"/> Regulatory |

Notes

The existing pretreatment plant was built in the late 1980s, and the majority of its major equipment has reached the end of its service life. The plant requires a major long term upgrade/replacement in order to maintain level of service.

Capital Funds Requested for Project			
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LCA Staff	\$200,000	Project Estimated Level	Planning
Land Acquisition	\$0	Project Funding	LCA
Construction/Equipment	\$23,000,000	Grant Eligibility	TBD
Professional Services	\$1,000,000	Future Spending	\$20,000,000
Contingencies	\$700,000		
Total	\$24,900,000		

Current Budget 2025	\$1,000,000	
First Year Budget 2026	\$400,000	Design
Second Year Budget 2027	\$4,500,000	Construction
Third Year Budget 2028	\$5,000,000	Construction
Fourth Year Budget 2029	\$5,000,000	Construction
Fifth Year Budget 2030	\$10,000,000	Construction
Total 2026-2030	\$24,900,000	

**LEHIGH COUNTY AUTHORITY
SUBURBAN DIVISION-CAPITAL IMPROVEMENT PLAN
PROJECT DETAIL SHEET**

Project Name	CENTRAL LEHIGH COUNTY WW CAPACITY PLANNING & EXPANSION				
Budget Area	Wastewater	Department	Capital Works	Project No.	SD-S-20
Location	Suburban	Prj. Type	Both	Prj. Score	87
Prj Initiator	DePoe	Prj Manager	DePoe		

Detailed Project Description
<p>This project has evolved over the past 18 years, starting with the EPA Administrative Orders (AOs) being issued in 2007 and 2009 related to wet weather capacity issues. In 2010, DEP enacted a Connection Management Plan on the Western Lehigh Interceptor (WLI) - known as the "SCARP" (Sewer Capacity Assurance and Rehabilitation Program). LCA initiated its own version of Act 537 during 2013-2016, which was ultimately not submitted to DEP. With a commitment to a flow characterization study and a Regional Flow Management Strategy (RFMS), the EPA lifted both AOs in 2019. The region experienced an abnormal rainfall pattern that lasted from August 2018 through July 2019. This caused a Chapter 94 violation at the Kline's Island WWTP, which forced DEP to place the entire system under Act 537 Planning. This Plan is to be submitted to DEP in October 2025. A modest amount of annual funds (for miscellaneous consultant related items) are needed to address any Act 537, Connection Management Plan, and/or sewer capacity issues as they arise.</p>

Category	Definition	LCA Weight	Prj Score	Weighted Score
Environmental				
Regulatory Requirement	Project will address a local, state and/or federal regulatory requirement.	25%	100	25%
Social				
Health/Safety Improvement	Project provides a human health and/or safety enhancement that may or may not be a regulatory requirement.	25%	90	23%
Level of Service	Project will increase level or quality of service to the community, including addressing increased customer expectations for service, improved response time, reliability, quality, taste, etc.	15%	75	11%
Innovation and Automation Enhancements	Project will enhance achievement of LCA's goals for innovation and/or automation.	5%	10	1%
Community Impact	Project will benefit Community and/or external stakeholders.	10%	100	10%
Economic				
Economic Development	Project is required to meet projected future capacity needs to address economic growth in the service area or provides other economic development benefit to the region.	10%	100	10%
Risk Mitigation	Project addresses asset risk by mitigating likelihood of failure, consequence of failure, and/or resiliency.	10%	75	8%

Additional Information

System Location WLC – WESTERN LEHIGH SEWER **Will this project require Land Rights?**

Project inception Date 1/1/2007 **Anticipated Project Completion Date** 12/31/2035

Project No.	SD-S-20	Project Name	CENTRAL LEHIGH COUNTY WW CAPACITY PLANNING & EXPANSION
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Primary Prj Category Regulatory **Secondary Prj Category** Planning

Project Drivers and Needs

- | | |
|---|---|
| <input type="checkbox"/> New Facility | <input checked="" type="checkbox"/> End of Useful Life |
| <input type="checkbox"/> Existing Facility - Upgrade | <input type="checkbox"/> Obsolescence |
| <input type="checkbox"/> Scheduled Replacement | <input checked="" type="checkbox"/> Inadequate Capacity |
| <input checked="" type="checkbox"/> System Improvements | <input checked="" type="checkbox"/> Regulatory |

Notes

Primary project drivers are regulatory, system capacity and economic development.

Capital Funds Requested for Project
--

LCA Staff	\$50,000	Project Estimated Level	Preliminary
Land Acquisition	\$0	Project Funding	LCA
Construction/Equipment	\$100,000	Grant Eligibility	No
Professional Services	\$300,000	Future Spending	\$0
Contingencies	\$50,000		
Total	\$500,000		

Current Budget 2025	\$400,000	
First Year Budget 2026	\$100,000	Plan, Construction
Second Year Budget 2027	\$100,000	Planning
Third Year Budget 2028	\$100,000	Planning
Fourth Year Budget 2029	\$100,000	Planning
Fifth Year Budget 2030	\$100,000	Planning
Total 2026-2030	\$500,000	

**LEHIGH COUNTY AUTHORITY
SUBURBAN DIVISION-CAPITAL IMPROVEMENT PLAN
PROJECT DETAIL SHEET**

Project Name	SPRING CREEK PUMP STATION UPGRADES				
Budget Area	Wastewater	Department	Capital Works	Project No.	SD-S-21
Location	Suburban	Prj. Type	Vertical	Prj. Score	68
Prj Initiator	Kunkel	Prj Manager	Kunkel		

Detailed Project Description
The Spring Creek Pump Station and Force Main is a critical component of the Western Lehigh Interceptor system. The 2026 upgrade project consists of an in-kind replacement of the three 230 HP submersible pumps which have reached the end of their useful life.

Category	Definition	LCA Weight	Prj Score	Weighted Score
Environmental				
Regulatory Requirement	Project will address a local, state and/or federal regulatory requirement.	25%	50	13%
Social				
Health/Safety Improvement	Project provides a human health and/or safety enhancement that may or may not be a regulatory requirement.	25%	75	19%
Level of Service	Project will increase level or quality of service to the community, including addressing increased customer expectations for service, improved response time, reliability, quality, taste, etc.	15%	100	15%
Innovation and Automation Enhancements	Project will enhance achievement of LCA's goals for innovation and/or automation.	5%	80	4%
Community Impact	Project will benefit Community and/or external stakeholders.	10%	50	5%
Economic				
Economic Development	Project is required to meet projected future capacity needs to address economic growth in the service area or provides other economic development benefit to the region.	10%	25	3%
Risk Mitigation	Project addresses asset risk by mitigating likelihood of failure, consequence of failure, and/or resiliency.	10%	100	10%

Additional Information

System Location WLC – WESTERN LEHIGH SEWER **Will this project require Land Rights?**

Project inception Date 1/7/2025 **Anticipated Project Completion Date**

Project No.	SD-S-21	Project Name	SPRING CREEK PUMP STATION UPGRADES
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Primary Prj Category System Improvement **Secondary Prj Category** Asset Management Plan

Project Drivers and Needs

- | | |
|---|--|
| <input type="checkbox"/> New Facility | <input checked="" type="checkbox"/> End of Useful Life |
| <input checked="" type="checkbox"/> Existing Facility - Upgrade | <input checked="" type="checkbox"/> Obsolescence |
| <input checked="" type="checkbox"/> Scheduled Replacement | <input type="checkbox"/> Inadequate Capacity |
| <input checked="" type="checkbox"/> System Improvements | <input type="checkbox"/> Regulatory |

Notes

The primary drivers are asset management, efficiency and maintain level of service.

Capital Funds Requested for Project
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LCA Staff	\$10,000	Project Estimated Level	Preliminary
Land Acquisition	\$0	Project Funding	LCA
Construction/Equipment	\$540,000	Grant Eligibility	No
Professional Services	\$0	Future Spending	\$0
Contingencies	\$30,000		
Total	\$580,000		

Current Budget 2025	\$1,000,000	
First Year Budget 2026	\$580,000	Construction
Second Year Budget 2027	\$0	None
Third Year Budget 2028	\$0	None
Fourth Year Budget 2029	\$0	None
Fifth Year Budget 2030	\$0	None
Total 2026-2030	\$580,000	

**LEHIGH COUNTY AUTHORITY
SUBURBAN DIVISION-CAPITAL IMPROVEMENT PLAN
PROJECT DETAIL SHEET**

Project Name	SIGNATORY I & I INVESTIGATION & REMEDIATION PROGRAM				
Budget Area	Wastewater	Department	Capital Works	Project No.	SD-S-22
Location	Suburban	Prj. Type	Linear	Prj. Score	81
Prj Initiator	DePoe	Prj Manager	DePoe		

Detailed Project Description
LCA provides the leadership, technical expertise and administration for coordinating these projects located within the Signatory sewer systems. The project included two major components: (1) Investigatory/planning work such as flow monitoring, the SCARP development, SSES, Level of Service Determination, Alternatives Analysis, etc., that are necessary to develop the best course of action to reduce I&I within the system(s). Much of this work has been completed. Part (2) - Design, permitting and the construction for rehabilitation of infrastructure that will be necessary to comply with recent PA DEP Act 537 directives. Annual engineering assistance for the Western Lehigh Sewer group is also included within this project. Efforts in 2026 include the planning for a new LCA Meter Station 4, continued temporary flow metering as needed, miscellaneous manhole rehab as needed, and finalizing plans for the existing WLI rehab from Spring Creek Pump Station to Park Pump Station. In addition, preliminary work on the proposed parallel Western Lehigh Interceptor is anticipated to start. And this project also includes additional work from the ongoing lateral tap grouting Phase 2 project (UMT and UMiT only).

Category	Definition	LCA Weight	Prj Score	Weighted Score
Environmental				
Regulatory Requirement	Project will address a local, state and/or federal regulatory requirement.	25%	100	25%
Social				
Health/Safety Improvement	Project provides a human health and/or safety enhancement that may or may not be a regulatory requirement.	25%	75	19%
Level of Service	Project will increase level or quality of service to the community, including addressing increased customer expectations for service, improved response time, reliability, quality, taste, etc.	15%	75	11%
Innovation and Automation Enhancements	Project will enhance achievement of LCA's goals for innovation and/or automation.	5%	50	3%
Community Impact	Project will benefit Community and/or external stakeholders.	10%	90	9%
Economic				
Economic Development	Project is required to meet projected future capacity needs to address economic growth in the service area or provides other economic development benefit to the region.	10%	90	9%
Risk Mitigation	Project addresses asset risk by mitigating likelihood of failure, consequence of failure, and/or resiliency.	10%	50	5%

Additional Information

System Location	WLC – WESTERN LEHIGH SEWER	Will this project require Land Rights?	<input type="checkbox"/>
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Project inception Date 7/1/2009

Anticipated Project Completion Date 12/31/2035

Project No.	SD-S-22	Project Name	SIGNATORY I & I INVESTIGATION & REMEDIATION PROGRAM
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Primary Prj Category Regulatory **Secondary Prj Category** Planning

Project Drivers and Needs

- | | |
|---|---|
| <input checked="" type="checkbox"/> New Facility | <input type="checkbox"/> End of Useful Life |
| <input checked="" type="checkbox"/> Existing Facility - Upgrade | <input type="checkbox"/> Obsolescence |
| <input type="checkbox"/> Scheduled Replacement | <input checked="" type="checkbox"/> Inadequate Capacity |
| <input checked="" type="checkbox"/> System Improvements | <input checked="" type="checkbox"/> Regulatory |

Notes

Primary project drivers are regulatory and system capacity.

Capital Funds Requested for Project
--

LCA Staff	\$50,000	Project Estimated Level	Planning
Land Acquisition	\$0	Project Funding	LCA
Construction/Equipment	\$400,000	Grant Eligibility	TBD
Professional Services	\$700,000	Future Spending	\$0
Contingencies	\$100,000		
Total	\$1,250,000		

Current Budget 2025	\$500,000	
First Year Budget 2026	\$750,000	None
Second Year Budget 2027	\$200,000	Planning, Design
Third Year Budget 2028	\$100,000	Planning, Design
Fourth Year Budget 2029	\$100,000	Planning, Design
Fifth Year Budget 2030	\$100,000	Planning, Design
Total 2026-2030	\$1,250,000	

**LEHIGH COUNTY AUTHORITY
SUBURBAN DIVISION-CAPITAL IMPROVEMENT PLAN
PROJECT DETAIL SHEET**

Project Name	WYNNEWOOD I & I INVESTIGATION & REMEDIATION PROGRAM				
Budget Area	Wastewater	Department	Capital Works	Project No.	SD-S-30
Location	Suburban	Prj. Type	Linear	Prj. Score	59
Prj Initiator	Volk	Prj Manager	Volk		

Detailed Project Description
The objective of this project is to mitigate wet weather inflow and infiltration (I/I) into the collection system. Pipe deficiencies identified in LCA's CCTV investigation data are to be repaired under this project, which includes in-line repairs (grouting, lining) and dig-up repairs. An internal main lining project was completed in 2024, to be followed by annual rehabilitation/lining projects to seal leaks due to sewer main pipe deficiencies.

Category	Definition	LCA Weight	Prj Score	Weighted Score
Environmental				
Regulatory Requirement	Project will address a local, state and/or federal regulatory requirement.	25%	90	23%
Social				
Health/Safety Improvement	Project provides a human health and/or safety enhancement that may or may not be a regulatory requirement.	25%	50	13%
Level of Service	Project will increase level or quality of service to the community, including addressing increased customer expectations for service, improved response time, reliability, quality, taste, etc.	15%	100	15%
Innovation and Automation Enhancements	Project will enhance achievement of LCA's goals for innovation and/or automation.	5%	0	0%
Community Impact	Project will benefit Community and/or external stakeholders.	10%	20	2%
Economic				
Economic Development	Project is required to meet projected future capacity needs to address economic growth in the service area or provides other economic development benefit to the region.	10%	20	2%
Risk Mitigation	Project addresses asset risk by mitigating likelihood of failure, consequence of failure, and/or resiliency.	10%	50	5%

Additional Information

System Location WWC – WYNNEWOOD SEWER **Will this project require Land Rights?**

Project inception Date 1/2/2020 **Anticipated Project Completion Date** 12/31/2029

Project No.	SD-S-30	Project Name	WYNNEWOOD I & I INVESTIGATION & REMEDIATION PROGRAM
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Primary Prj Category Regulatory **Secondary Prj Category** Asset Management Plan

Project Drivers and Needs

- | | |
|---|--|
| <input type="checkbox"/> New Facility | <input type="checkbox"/> End of Useful Life |
| <input type="checkbox"/> Existing Facility - Upgrade | <input type="checkbox"/> Obsolescence |
| <input type="checkbox"/> Scheduled Replacement | <input type="checkbox"/> Inadequate Capacity |
| <input checked="" type="checkbox"/> System Improvements | <input checked="" type="checkbox"/> Regulatory |

Notes

The primary driver is regulatory, to avoid hydraulic overloads at the WWTP and maintain DEP discharge permit compliance.
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Capital Funds Requested for Project
--

LCA Staff	\$25,000	Project Estimated Level	Design
Land Acquisition	\$0	Project Funding	LCA
Construction/Equipment	\$150,000	Grant Eligibility	TBD
Professional Services	\$20,000	Future Spending	\$0
Contingencies	\$25,000		
Total	\$220,000		

Current Budget 2025	\$150,000	
First Year Budget 2026	\$25,000	Design
Second Year Budget 2027	\$150,000	Construction
Third Year Budget 2028	\$25,000	Planning
Fourth Year Budget 2029	\$10,000	Construction
Fifth Year Budget 2030	\$10,000	Construction
Total 2026-2030	\$220,000	

**LEHIGH COUNTY AUTHORITY
SUBURBAN DIVISION-CAPITAL IMPROVEMENT PLAN
PROJECT DETAIL SHEET**

Project Name	WYNNEWOOD WASTEWATER TREATMENT PLANT EXPANSION				
Budget Area	Wastewater	Department	Capital Works	Project No.	SD-S-31
Location	Suburban	Prj. Type	Vertical	Prj. Score	44
Prj Initiator	DePoe	Prj Manager	Volk		

Detailed Project Description
<p>The Wynnewood Wastewater Treatment Plant (WWTP), located in North Whitehall Township, was acquired by LCA in 2003 and completely replaced in 2020 with a new 60,000 gallon per day SBR plant. In 2023, representatives of a proposed development in the vicinity of the WWTP (Rising Sun Rd) requested connecting to the plant. LCA then commissioned a feasibility study be performed by an engineering firm to determine the reserve capacity at the WWTP, quantify the WWTP capacity expansion that would be needed, and evaluate facility upgrade alternatives to accommodate the development. The study determined that the existing facility has limited reserve capacity and must be expanded to accommodate the build-out of the proposed development. This project includes design, permitting, and construction of the capacity expansion of the existing WWTP, along with dedicated conveyance facilities to include a proposed pump station and force main. All costs (including design and construction) associated with this project are to be reimbursed by the developer. Construction is anticipated to be completed by the end of 2027.</p>

Category	Definition	LCA Weight	Prj Score	Weighted Score
Environmental				
Regulatory Requirement	Project will address a local, state and/or federal regulatory requirement.	25%	20	5%
Social				
Health/Safety Improvement	Project provides a human health and/or safety enhancement that may or may not be a regulatory requirement.	25%	0	0%
Level of Service	Project will increase level or quality of service to the community, including addressing increased customer expectations for service, improved response time, reliability, quality, taste, etc.	15%	100	15%
Innovation and Automation Enhancements	Project will enhance achievement of LCA's goals for innovation and/or automation.	5%	0	0%
Community Impact	Project will benefit Community and/or external stakeholders.	10%	100	10%
Economic				
Economic Development	Project is required to meet projected future capacity needs to address economic growth in the service area or provides other economic development benefit to the region.	10%	90	9%
Risk Mitigation	Project addresses asset risk by mitigating likelihood of failure, consequence of failure, and/or resiliency.	10%	50	5%

Additional Information

System Location	WWC – WYNNEWOOD SEWER	Will this project require Land Rights?	<input type="checkbox"/>
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Project inception Date 1/2/2023

Anticipated Project Completion Date 12/31/2027

Project No.	SD-S-31	Project Name	WYNNEWOOD WASTEWATER TREATMENT PLANT EXPANSION
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Primary Prj Category New Customer **Secondary Prj Category** Revenue Opportunity

Project Drivers and Needs

- | | |
|---|---|
| <input type="checkbox"/> New Facility | <input type="checkbox"/> End of Useful Life |
| <input checked="" type="checkbox"/> Existing Facility - Upgrade | <input type="checkbox"/> Obsolescence |
| <input type="checkbox"/> Scheduled Replacement | <input checked="" type="checkbox"/> Inadequate Capacity |
| <input type="checkbox"/> System Improvements | <input type="checkbox"/> Regulatory |

Notes

This project is driven by community growth and is being implemented exclusively for the proposed development (Rising Sun Rd) and will be funded 100% by the developer.

Capital Funds Requested for Project
--

LCA Staff	\$25,000	Project Estimated Level	Planning
Land Acquisition	\$0	Project Funding	LCA
Construction/Equipment	\$0	Grant Eligibility	Yes
Professional Services	\$150,000	Future Spending	\$0
Contingencies	\$50,000		
Total	\$225,000		

Current Budget 2025	\$50,000	
First Year Budget 2026	\$100,000	Design
Second Year Budget 2027	\$125,000	Construction
Third Year Budget 2028	\$0	None
Fourth Year Budget 2029	\$0	None
Fifth Year Budget 2030	\$0	None
Total 2026-2030	\$225,000	

**LEHIGH COUNTY AUTHORITY
SUBURBAN DIVISION-CAPITAL IMPROVEMENT PLAN
PROJECT DETAIL SHEET**

Project Name	ARCADIA WEST WWTP MECHANICAL SCREEN				
Budget Area	Wastewater	Department	Capital Works	Project No.	SD-S-32
Location	Suburban	Prj. Type	Vertical	Prj. Score	65
Prj Initiator	Volk	Prj Manager	Siekmann		

Detailed Project Description
This project consists of the installation of two automatic mechanical screening units at the head end of each SBR tank at the Arcadia West Wastewater Treatment Plant. Also included is the construction of above-grade platforms and enclosures to support the screening systems and protect against the weather, along with associated piping electrical, and controls for the new screening systems. The screen project should finish in early 2026. Future improvements projects at the WWTP to be determined.

Category	Definition	LCA Weight	Prj Score	Weighted Score
Environmental				
Regulatory Requirement	Project will address a local, state and/or federal regulatory requirement.	25%	50	13%
Social				
Health/Safety Improvement	Project provides a human health and/or safety enhancement that may or may not be a regulatory requirement.	25%	75	19%
Level of Service	Project will increase level or quality of service to the community, including addressing increased customer expectations for service, improved response time, reliability, quality, taste, etc.	15%	100	15%
Innovation and Automation Enhancements	Project will enhance achievement of LCA's goals for innovation and/or automation.	5%	75	4%
Community Impact	Project will benefit Community and/or external stakeholders.	10%	20	2%
Economic				
Economic Development	Project is required to meet projected future capacity needs to address economic growth in the service area or provides other economic development benefit to the region.	10%	50	5%
Risk Mitigation	Project addresses asset risk by mitigating likelihood of failure, consequence of failure, and/or resiliency.	10%	75	8%

Additional Information

System Location AWC – ARCADIA WEST **Will this project require Land Rights?**

Project inception Date 3/27/2024 **Anticipated Project Completion Date** 4/1/2026

Project No.	SD-S-32	Project Name	ARCADIA WEST WWTP MECHANICAL SCREEN
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Primary Prj Category System Improvement **Secondary Prj Category** Efficiency

Project Drivers and Needs

- | | |
|---|--|
| <input type="checkbox"/> New Facility | <input type="checkbox"/> End of Useful Life |
| <input checked="" type="checkbox"/> Existing Facility - Upgrade | <input type="checkbox"/> Obsolescence |
| <input type="checkbox"/> Scheduled Replacement | <input type="checkbox"/> Inadequate Capacity |
| <input checked="" type="checkbox"/> System Improvements | <input type="checkbox"/> Regulatory |

Notes

Project drivers include system improvements, safety, and efficiency.

Capital Funds Requested for Project

LCA Staff	\$5,000	Project Estimated Level	Construction
Land Acquisition	\$0	Project Funding	LCA
Construction/Equipment	\$150,000	Grant Eligibility	No
Professional Services	\$15,000	Future Spending	\$0
Contingencies	\$10,000		
Total	\$180,000		

Current Budget 2025	\$220,000	
First Year Budget 2026	\$170,000	Construction
Second Year Budget 2027	\$10,000	Planning
Third Year Budget 2028	\$0	None
Fourth Year Budget 2029	\$0	None
Fifth Year Budget 2030	\$0	None
Total 2026-2030	\$180,000	

**LEHIGH COUNTY AUTHORITY
SUBURBAN DIVISION-CAPITAL IMPROVEMENT PLAN
PROJECT DETAIL SHEET**

Project Name	NORTH WHITEHALL TOWNSHIP ACT 537 PLAN				
Budget Area	Wastewater	Department	Capital Works	Project No.	SD-S-33
Location	Suburban	Prj. Type	Both	Prj. Score	79
Prj Initiator	DePoe	Prj Manager	DePoe		

Detailed Project Description
This project involves the development of an Act 537 Sewage Facilities Plan for North Whitehall Township and is a coordinated effort between the township and LCA. The project will incorporate regional sewer facilities planning concepts to evaluate the feasibility of consolidation of small wastewater treatment plants that currently serve separate small sewer districts/developments.

Category	Definition	LCA Weight	Prj Score	Weighted Score
Environmental				
Regulatory Requirement	Project will address a local, state and/or federal regulatory requirement.	25%	100	25%
Social				
Health/Safety Improvement	Project provides a human health and/or safety enhancement that may or may not be a regulatory requirement.	25%	80	20%
Level of Service	Project will increase level or quality of service to the community, including addressing increased customer expectations for service, improved response time, reliability, quality, taste, etc.	15%	60	9%
Innovation and Automation Enhancements	Project will enhance achievement of LCA's goals for innovation and/or automation.	5%	50	3%
Community Impact	Project will benefit Community and/or external stakeholders.	10%	80	8%
Economic				
Economic Development	Project is required to meet projected future capacity needs to address economic growth in the service area or provides other economic development benefit to the region.	10%	90	9%
Risk Mitigation	Project addresses asset risk by mitigating likelihood of failure, consequence of failure, and/or resiliency.	10%	50	5%

Additional Information

System Location	UNC – OTHER WATER OR SEWER	Will this project require Land Rights?	<input checked="" type="checkbox"/>
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Project inception Date 7/1/2023	Anticipated Project Completion Date 3/31/2027
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Project No.	SD-S-33	Project Name	NORTH WHITEHALL TOWNSHIP ACT 537 PLAN
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Primary Prj Category Regulatory **Secondary Prj Category** Planning

Project Drivers and Needs

- | | |
|---|---|
| <input checked="" type="checkbox"/> New Facility | <input type="checkbox"/> End of Useful Life |
| <input checked="" type="checkbox"/> Existing Facility - Upgrade | <input type="checkbox"/> Obsolescence |
| <input type="checkbox"/> Scheduled Replacement | <input checked="" type="checkbox"/> Inadequate Capacity |
| <input checked="" type="checkbox"/> System Improvements | <input checked="" type="checkbox"/> Regulatory |

Notes

North Whitehall Township has numerous small wastewater treatment plants serving individual developments and institutions. The Act 537 Plan will evaluate growth impacts to existing sewerred areas and potential regionalization concepts.
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Capital Funds Requested for Project
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LCA Staff	\$10,000	Project Estimated Level	Planning
Land Acquisition	\$0	Project Funding	LCA
Construction/Equipment	\$0	Grant Eligibility	No
Professional Services	\$50,000	Future Spending	\$0
Contingencies	\$10,000		
Total	\$70,000		

Current Budget 2025	\$70,000	
First Year Budget 2026	\$50,000	Planning
Second Year Budget 2027	\$20,000	Planning
Third Year Budget 2028	\$0	None
Fourth Year Budget 2029	\$0	None
Fifth Year Budget 2030	\$0	None
Total 2026-2030	\$70,000	

**LEHIGH COUNTY AUTHORITY
SUBURBAN DIVISION-CAPITAL IMPROVEMENT PLAN
PROJECT DETAIL SHEET**

Project Name	HEIDELBERG HEIGHTS I & I INVESTIGATION & REMEDIATION PROGRAM				
Budget Area	Wastewater	Department	Capital Works	Project No.	SD-S-34
Location	Suburban	Prj. Type	Linear	Prj. Score	65
Prj Initiator	Volk	Prj Manager	Peters		

Detailed Project Description
<p>This project is driven by a DEP Consent Order and Agreement (CO&A) for the Heidelberg Heights sanitary sewer system as a result of hydraulic overloads at the Heidelberg Heights WWTP. The CO&A was executed by DEP and LCA in 2020, memorializing corrective actions required and an implementation schedule for LCA to eliminate wet weather overloads at the WWTP by reducing inflow and infiltration into the collection system. Commencing in 2017, public sewer main and laterals were to be replaced along with manholes to be sealed as part of an annual project (program complete). Persistent system leakage has been traced the private side of the sewer system, which is the focus of this program moving forward. In 2026 a private lateral rehabilitation project will be completed.</p>

Category	Definition	LCA Weight	Prj Score	Weighted Score
Environmental				
Regulatory Requirement	Project will address a local, state and/or federal regulatory requirement.	25%	100	25%
Social				
Health/Safety Improvement	Project provides a human health and/or safety enhancement that may or may not be a regulatory requirement.	25%	50	13%
Level of Service	Project will increase level or quality of service to the community, including addressing increased customer expectations for service, improved response time, reliability, quality, taste, etc.	15%	100	15%
Innovation and Automation Enhancements	Project will enhance achievement of LCA's goals for innovation and/or automation.	5%	0	0%
Community Impact	Project will benefit Community and/or external stakeholders.	10%	50	5%
Economic				
Economic Development	Project is required to meet projected future capacity needs to address economic growth in the service area or provides other economic development benefit to the region.	10%	0	0%
Risk Mitigation	Project addresses asset risk by mitigating likelihood of failure, consequence of failure, and/or resiliency.	10%	75	8%

Additional Information

System Location HHC – HEIDELBERG HTS **Will this project require Land Rights?**

Project inception Date 1/2/2017 **Anticipated Project Completion Date** 12/31/2030

Project No.	SD-S-34	Project Name	HEIDELBERG HEIGHTS I & I INVESTIGATION & REMEDIATION PROGRAM
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Primary Prj Category Regulatory **Secondary Prj Category** System Improvement

Project Drivers and Needs

- | | |
|---|---|
| <input type="checkbox"/> New Facility | <input type="checkbox"/> End of Useful Life |
| <input type="checkbox"/> Existing Facility - Upgrade | <input type="checkbox"/> Obsolescence |
| <input type="checkbox"/> Scheduled Replacement | <input checked="" type="checkbox"/> Inadequate Capacity |
| <input checked="" type="checkbox"/> System Improvements | <input checked="" type="checkbox"/> Regulatory |

Notes

Private sewer system work includes investigatory (CCTV and residential plumbing inspections), enforcement (disconnect prohibited connections), and private lateral lining. The 2026 project is to consist of private lateral lining.

Capital Funds Requested for Project			
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LCA Staff	\$10,000	Project Estimated Level	Design
Land Acquisition	\$0	Project Funding	LCA
Construction/Equipment	\$400,000	Grant Eligibility	Yes
Professional Services	\$70,000	Future Spending	\$0
Contingencies	\$10,000		
Total	\$490,000		

Current Budget 2025	\$300,000	
First Year Budget 2026	\$400,000	Construction
Second Year Budget 2027	\$50,000	Planning
Third Year Budget 2028	\$20,000	Planning
Fourth Year Budget 2029	\$10,000	Planning
Fifth Year Budget 2030	\$10,000	Planning
Total 2026-2030	\$490,000	

**LEHIGH COUNTY AUTHORITY
SUBURBAN DIVISION-CAPITAL IMPROVEMENT PLAN
PROJECT DETAIL SHEET**

Project Name	SAND SPRING WWTP IMPROVEMENTS				
Budget Area	Wastewater	Department	Capital Works	Project No.	SD-S-35
Location	Suburban	Prj. Type	Vertical	Prj. Score	73
Prj Initiator	Capuzzi	Prj Manager	Volk		

Detailed Project Description

The Sand Spring WWTP was acquired by LCA in 2005 and replaced in 2021. The new plant, which was put online around the same time as the connection of a new warehouse development to the system, has experienced DEP compliance issues related to nitrification performance. LCA retained AECOM in 2023 to plan, design, and secure permitting for a process intensification and optimization upgrade to improve plant performance and restore DEP permit compliance. Construction of the Project was completed in 2024 followed by a process demonstration period and final report. The report identified near term and long-term upgrade recommendations. This Plan includes annual near-term performance enhancements.

Category	Definition	LCA Weight	Prj Score	Weighted Score
Environmental				
Regulatory Requirement	Project will address a local, state and/or federal regulatory requirement.	25%	100	25%
Social				
Health/Safety Improvement	Project provides a human health and/or safety enhancement that may or may not be a regulatory requirement.	25%	75	19%
Level of Service	Project will increase level or quality of service to the community, including addressing increased customer expectations for service, improved response time, reliability, quality, taste, etc.	15%	100	15%
Innovation and Automation Enhancements	Project will enhance achievement of LCA's goals for innovation and/or automation.	5%	25	1%
Community Impact	Project will benefit Community and/or external stakeholders.	10%	75	8%
Economic				
Economic Development	Project is required to meet projected future capacity needs to address economic growth in the service area or provides other economic development benefit to the region.	10%	0	0%
Risk Mitigation	Project addresses asset risk by mitigating likelihood of failure, consequence of failure, and/or resiliency.	10%	50	5%

Additional Information

System Location SSC – SAND SPRING **Will this project require Land Rights?**

Project inception Date 6/1/2022 **Anticipated Project Completion Date** 12/31/2030

Project No.	SD-S-35	Project Name	SAND SPRING WWTP IMPROVEMENTS
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Primary Prj Category Regulatory **Secondary Prj Category** System Improvement

Project Drivers and Needs

- | | |
|---|--|
| <input type="checkbox"/> New Facility | <input type="checkbox"/> End of Useful Life |
| <input checked="" type="checkbox"/> Existing Facility - Upgrade | <input type="checkbox"/> Obsolescence |
| <input type="checkbox"/> Scheduled Replacement | <input type="checkbox"/> Inadequate Capacity |
| <input checked="" type="checkbox"/> System Improvements | <input checked="" type="checkbox"/> Regulatory |

Notes

This project implemented the short-term recommendations of a Process Performance Evaluation performed by an engineer consultant in 2023.

Capital Funds Requested for Project

LCA Staff	\$10,000	Project Estimated Level	Construction
Land Acquisition	\$0	Project Funding	LCA
Construction/Equipment	\$50,000	Grant Eligibility	No
Professional Services	\$50,000	Future Spending	\$0
Contingencies	\$10,000		
Total	\$120,000		

Current Budget 2025	\$100,000	
First Year Budget 2026	\$30,000	Plan, Construction
Second Year Budget 2027	\$30,000	Plan, Construction
Third Year Budget 2028	\$20,000	Planning
Fourth Year Budget 2029	\$20,000	Planning
Fifth Year Budget 2030	\$20,000	Planning
Total 2026-2030	\$120,000	

**LEHIGH COUNTY AUTHORITY
SUBURBAN DIVISION-CAPITAL IMPROVEMENT PLAN
PROJECT DETAIL SHEET**

Project Name	LYNN TOWNSHIP WWTP IMPROVEMENTS				
Budget Area	Wastewater	Department	Capital Works	Project No.	SD-S-36
Location	Suburban	Prj. Type	Vertical	Prj. Score	66
Prj Initiator	Volk	Prj Manager	Volk		

Detailed Project Description
This project consists of facility upgrades at the Lynn Township wastewater treatment plant. The WWTP, which is approximately 50 years old, was acquired by LCA in 2012. A second final clarifier was constructed in 2025 to provide redundancy and improve plant performance. Future projects include aeration tank rehabilitation, chlorine contact tank relocation, operations performance optimization, and asset management driven upgrades.

Category	Definition	LCA Weight	Prj Score	Weighted Score
Environmental				
Regulatory Requirement	Project will address a local, state and/or federal regulatory requirement.	25%	75	19%
Social				
Health/Safety Improvement	Project provides a human health and/or safety enhancement that may or may not be a regulatory requirement.	25%	50	13%
Level of Service	Project will increase level or quality of service to the community, including addressing increased customer expectations for service, improved response time, reliability, quality, taste, etc.	15%	100	15%
Innovation and Automation Enhancements	Project will enhance achievement of LCA's goals for innovation and/or automation.	5%	50	3%
Community Impact	Project will benefit Community and/or external stakeholders.	10%	50	5%
Economic				
Economic Development	Project is required to meet projected future capacity needs to address economic growth in the service area or provides other economic development benefit to the region.	10%	25	3%
Risk Mitigation	Project addresses asset risk by mitigating likelihood of failure, consequence of failure, and/or resiliency.	10%	100	10%

Additional Information

System Location LTC – LYNN TWP SEWER **Will this project require Land Rights?**

Project inception Date 6/1/2022 **Anticipated Project Completion Date** 12/31/2030

Project No.	SD-S-36	Project Name	LYNN TOWNSHIP WWTP IMPROVEMENTS
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Primary Prj Category System Improvement **Secondary Prj Category** Efficiency

Project Drivers and Needs

- | | |
|---|--|
| <input type="checkbox"/> New Facility | <input checked="" type="checkbox"/> End of Useful Life |
| <input checked="" type="checkbox"/> Existing Facility - Upgrade | <input type="checkbox"/> Obsolescence |
| <input type="checkbox"/> Scheduled Replacement | <input type="checkbox"/> Inadequate Capacity |
| <input checked="" type="checkbox"/> System Improvements | <input checked="" type="checkbox"/> Regulatory |

Notes

The primary project drivers are asset management, redundancy, and regulatory compliance.

Capital Funds Requested for Project

LCA Staff	\$50,000	Project Estimated Level	Planning
Land Acquisition	\$0	Project Funding	LCA
Construction/Equipment	\$700,000	Grant Eligibility	No
Professional Services	\$150,000	Future Spending	\$0
Contingencies	\$50,000		
Total	\$950,000		

Current Budget 2025	\$900,000	
First Year Budget 2026	\$100,000	Design
Second Year Budget 2027	\$400,000	Construction
Third Year Budget 2028	\$400,000	Construction
Fourth Year Budget 2029	\$50,000	Construction
Fifth Year Budget 2030	\$0	None
Total 2026-2030	\$950,000	

**LEHIGH COUNTY AUTHORITY
SUBURBAN DIVISION-CAPITAL IMPROVEMENT PLAN
PROJECT DETAIL SHEET**

Project Name	LYNN TOWNSHIP I & I INVESTIGATION & REMEDIATION PROGRAM				
Budget Area	Wastewater	Department	Capital Works	Project No.	SD-S-37
Location	Suburban	Prj. Type	Linear	Prj. Score	79
Prj Initiator	Volk	Prj Manager	Volk		

Detailed Project Description
This project is the result of a DEP mandated Corrective Action Plan (CAP) to reduce inflow and infiltration (I/I) into the Lynn Township sanitary sewage system to prevent system overflows/bypasses at the wastewater treatment plant and eliminate treatment plant discharge permit violations. The project includes updated CCTV inspection of the sewer collection system, spot repairs at leak locations, cured in place lining work, and private side system investigation and enforcement/removal of prohibited connections.

Category	Definition	LCA Weight	Prj Score	Weighted Score
Environmental				
Regulatory Requirement	Project will address a local, state and/or federal regulatory requirement.	25%	100	25%
Social				
Health/Safety Improvement	Project provides a human health and/or safety enhancement that may or may not be a regulatory requirement.	25%	75	19%
Level of Service	Project will increase level or quality of service to the community, including addressing increased customer expectations for service, improved response time, reliability, quality, taste, etc.	15%	100	15%
Innovation and Automation Enhancements	Project will enhance achievement of LCA's goals for innovation and/or automation.	5%	0	0%
Community Impact	Project will benefit Community and/or external stakeholders.	10%	75	8%
Economic				
Economic Development	Project is required to meet projected future capacity needs to address economic growth in the service area or provides other economic development benefit to the region.	10%	50	5%
Risk Mitigation	Project addresses asset risk by mitigating likelihood of failure, consequence of failure, and/or resiliency.	10%	75	8%

Additional Information

System Location LTC – LYNN TWP SEWER **Will this project require Land Rights?**

Project inception Date 1/2/2018 **Anticipated Project Completion Date** 12/31/2030

Project No.	SD-S-37	Project Name	LYNN TOWNSHIP I & I INVESTIGATION & REMEDIATION PROGRAM
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Primary Prj Category Regulatory **Secondary Prj Category** System Improvement

Project Drivers and Needs

- | | |
|---|--|
| <input type="checkbox"/> New Facility | <input type="checkbox"/> End of Useful Life |
| <input type="checkbox"/> Existing Facility - Upgrade | <input type="checkbox"/> Obsolescence |
| <input type="checkbox"/> Scheduled Replacement | <input type="checkbox"/> Inadequate Capacity |
| <input checked="" type="checkbox"/> System Improvements | <input checked="" type="checkbox"/> Regulatory |

Notes

Capital rehabilitation projects from the DEP CAP have been on-going since 2019, with the goal of eliminating I/I and restoring sewer allocation capacity of the wastewater treatment plant.

Capital Funds Requested for Project

LCA Staff	\$25,000	Project Estimated Level	Planning
Land Acquisition	\$0	Project Funding	LCA
Construction/Equipment	\$175,000	Grant Eligibility	TBD
Professional Services	\$75,000	Future Spending	\$0
Contingencies	\$25,000		
Total	\$300,000		

Current Budget 2025	\$25,000	
First Year Budget 2026	\$25,000	Planning
Second Year Budget 2027	\$100,000	Construction
Third Year Budget 2028	\$125,000	Construction
Fourth Year Budget 2029	\$25,000	Planning
Fifth Year Budget 2030	\$25,000	Planning
Total 2026-2030	\$300,000	

**LEHIGH COUNTY AUTHORITY
SUBURBAN DIVISION-CAPITAL IMPROVEMENT PLAN
PROJECT DETAIL SHEET**

Project Name	SD WASTEWATER SMALL SYSTEMS GENERATOR REPLACEMENT				
Budget Area	Wastewater	Department	Capital Works	Project No.	SD-S-38
Location	Suburban	Prj. Type	Vertical	Prj. Score	65
Prj Initiator	Volk	Prj Manager	Siekmann		

Detailed Project Description
This is a multi-year project is focused on LCA owned small systems that presently do not have backup power or have an existing generator that is at the end of its service life.

Category	Definition	LCA Weight	Prj Score	Weighted Score
Environmental				
Regulatory Requirement	Project will address a local, state and/or federal regulatory requirement.	25%	90	23%
Social				
Health/Safety Improvement	Project provides a human health and/or safety enhancement that may or may not be a regulatory requirement.	25%	50	13%
Level of Service	Project will increase level or quality of service to the community, including addressing increased customer expectations for service, improved response time, reliability, quality, taste, etc.	15%	100	15%
Innovation and Automation Enhancements	Project will enhance achievement of LCA's goals for innovation and/or automation.	5%	20	1%
Community Impact	Project will benefit Community and/or external stakeholders.	10%	20	2%
Economic				
Economic Development	Project is required to meet projected future capacity needs to address economic growth in the service area or provides other economic development benefit to the region.	10%	20	2%
Risk Mitigation	Project addresses asset risk by mitigating likelihood of failure, consequence of failure, and/or resiliency.	10%	100	10%

Additional Information

System Location UNC – OTHER WATER OR SEWER **Will this project require Land Rights?**

Project inception Date 6/13/2025 **Anticipated Project Completion Date** 12/31/2028

Project No.	SD-S-38	Project Name	SD WASTEWATER SMALL SYSTEMS GENERATOR REPLACEMENT
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Primary Prj Category Asset Management Plan **Secondary Prj Category** System Improvement

Project Drivers and Needs

- | | |
|---|--|
| <input type="checkbox"/> New Facility | <input checked="" type="checkbox"/> End of Useful Life |
| <input checked="" type="checkbox"/> Existing Facility - Upgrade | <input checked="" type="checkbox"/> Obsolescence |
| <input checked="" type="checkbox"/> Scheduled Replacement | <input type="checkbox"/> Inadequate Capacity |
| <input checked="" type="checkbox"/> System Improvements | <input type="checkbox"/> Regulatory |

Notes

System locations include Arcadia pump station and Heidelberg Heights WWTP.
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Capital Funds Requested for Project
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LCA Staff	\$5,000	Project Estimated Level	Preliminary
Land Acquisition	\$0	Project Funding	LCA
Construction/Equipment	\$275,000	Grant Eligibility	
Professional Services	\$40,000	Future Spending	\$0
Contingencies	\$30,000		
Total	\$350,000		

Current Budget 2025	\$0	
First Year Budget 2026	\$50,000	Design
Second Year Budget 2027	\$300,000	Construction
Third Year Budget 2028	\$0	None
Fourth Year Budget 2029	\$0	None
Fifth Year Budget 2030	\$0	None
Total 2026-2030	\$350,000	