

Lehigh County Authority:  
2021-2025  
Suburban Division and  
Administration Capital Plan

*Preliminary Plan:* Board Presentation – January 27, 2020

# Capital Plan Components

- ADMINISTRATION
- SUBURBAN DIVISION WATER AND WASTEWATER
- ALLENTOWN DIVISION WATER AND WASTEWATER  
– to be presented at February 10 Board Meeting

# 2021- 2025 Capital Plan Timeline

- Preliminary Suburban & Administrative Capital Plan Distribution (with financials) – 1/27/20
- SD Capital Plan board presentation – 1/27/20
- AD Capital Plan board presentation – 2/10/20
- AD and SD Capital Plan public comment posting – 2/10/20
- End of preliminary plan public comment period – 3/11/20
- Final Plan (AD & SD) Approval and Distribution – 3/23/20

# Administration – 2020 and 5-Year Plan Projects

CP#	Project	2020 \$	2021-2025 \$
<b>Operating/Capital Reserve Funds</b>			
SD-A-1	SCADA Programming, Hardware & Software Upgrades	\$ 150,000	\$ 750,000
CON-A-1 *	Computer System Hardware & Software Upgrades	140,000	250,000
CON-A-2 *	Geographic Information System Upgrades & Application Dev.	50,000	300,000
CON-A-3 *	Information Technology Master Plan Update	125,000	350,000
CON-A-4 *	Document Management	200,000	480,000
CON-A-5*	Disaster Recovery/Security Upgrades	25,000	75,000
CON-A-6*	CMMS Upgrades	25,000	175,000

*\*= Projects benefit both Suburban and Allentown*

# Suburban Division Water – 2020 and 5-Year Projects

## Operating/Capital Reserve Funds

CP#	PROJECT	2020 \$	2021-2025 \$
<b>Operating/Capital Reserve Funds</b>			
SD-W-A	ANNUAL PROJECTS <i>(breakdown of projects to follow)</i>	\$1,672,500	\$7,668,000
SD-W-12	WATER MAIN REPLACEMENT PROJECTS	0	12,000,000

# Suburban Division Water – 2020 and 5-Year Projects

## New Borrowing Funds

CP#	PROJECT	2020 \$	2021-2025 \$
<b>New Borrowing Funds</b>			
SD-W-4	BUSS ACRES PUMP STATION IMPROVEMENTS (UMCD)	2,300,000	0
SD-W-37	REDUNDANT WATER SUPPLY – SMALL SATELLITE DIVISIONS	300,000	570,000
SD-W-49	CLD AUXILIARY PUMPING STATION AND MAIN EXTENSION	200,000	0
SD-W-50	FIXED BASE METER READING SYSTEM	50,000	870,000
SD-W-51	NORTH WHITEHALL DIVISION WATER SYSTEM STUDY	50,000	10,000
SD-W-52	ARCADIA WATER TANK REPLACEMENT	100,000	1,050,000
SD-W-53	WATER METER READING EQUIPMENT UPGRADE	1,500,000	0
SD-W-54	CENTRAL LEHIGH TO UPPER MILFORD INTERCONNECTION (Kohler)	1,320,000	0
SD-W-55	CLD WELL IMPROVEMENTS STUDY	60,000	60,000
SD-W-56	CLD DISTRIBUTION SYSTEM IMPROVEMENTS STUDY	60,000	10,000
SD-W-57	WATER METER REPLACEMENT PROGRAM	0	2,462,000

# Suburban Division Annual Water Projects

- Distribution Mains – Development & Upsizing
- Distribution System Improvements (3<sup>rd</sup> party)
- General Water System Improvements
- Mobile Equipment
- New & Replacement Meter Installation
- Other Equipment
- Reservoir Rehabilitation & Maintenance
- Water Company Acquisitions
- Water Facility Asset Management Upgrades
- Capital Management
- Main Office Improvements
- Capital Works Miscellaneous Expenses (includes PennDOT permitting)

# Suburban Water – Financial Analysis

SOURCES	
Cash from operations and reserves	\$17,268,000
New Borrowing	<u>\$ 5,022,000</u>
Total Sources	<u>\$22,290,000</u>
USES	
Capital project spending	<u>\$22,290,000</u>

- Cash from operations includes \$3,717,367 of non-operating revenues
- Total funding from operations and reserves of \$17,268,000 covers annual projects worth \$7,668,000 and \$9,600,000 of Main Replacement projects
- Operations funding requires 6.50% annual increase in revenues for all years to cover the project costs along with the additional annual debt service of \$273,053 on the \$5.0M in new borrowing, and coverage of inflation on operating expenses.
- Revenue increases will be evaluated annually and will come from a mix of rate adjustments and growth in water sales from new customers.
- Borrowing of \$5,022,000 covers the remaining projects outside of annual and main replacements.



# Suburban Water – Financial Analysis

<b>US DOLLARS</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>
User Charges	11,044,237	11,762,112	12,526,649	13,340,881	14,208,038
Other Operating Revenues	211,834	211,834	211,834	211,834	211,834
Non-Operating Revenues	771,367	936,500	936,500	936,500	936,500
Operating expenses	(7,628,117)	(7,933,241)	(8,250,571)	(8,580,594)	(8,923,818)
Debt Service - Current Debt	(3,341,564)	(3,341,564)	(3,341,564)	(3,341,564)	(3,341,564)
Debt Service - NEW Debt	(273,053)	(273,053)	(273,053)	(273,053)	(273,053)
Investments Converting to Cash	3,211,321	-	-	-	-
Proceeds From NEW Debt	5,022,000	-	-	-	-
Capex - Admin Paygo	(250,000)	(225,000)	(212,500)	(187,500)	(137,500)
Capex - Paygo	(1,595,000)	(3,892,000)	(4,045,000)	(3,868,000)	(3,868,000)
Capex - NEW Borrowing	<u>(1,930,000)</u>	<u>(880,000)</u>	<u>(170,000)</u>	-	<u>(2,042,000)</u>
<b>NET FUND FLOWS</b>	<b><u>5,243,025</u></b>	<b><u>(3,634,412)</u></b>	<b><u>(2,617,705)</u></b>	<b><u>(1,761,496)</u></b>	<b><u>(3,229,563)</u></b>
User Charge Revenue Increase %	6.50%	6.50%	6.50%	6.50%	6.50%
Operating Cash Balance	3,761,811	3,912,283	4,068,775	4,231,526	4,400,787
Days on Hand	180	180	180	180	180
Project Reserve Balance	12,184,968	8,400,084	5,625,887	3,701,640	302,816
DEBT SERVICE COVERAGE RATIO	1.22	1.38	1.50	1.63	1.78
Total Capex	(3,775,000)	(4,997,000)	(4,427,500)	(4,055,500)	(6,047,500)

# Suburban Division Wastewater – 2020 and 5-Year Projects

CP#	Project	2020 \$	2021-2025 \$
<b>Operating/Capital Reserve Funds</b>			
Annual			
SD-S-A	ANNUAL PROJECTS <i>(breakdown of projects to follow)</i>	\$320,500	\$2,005,500
Pretreatment Plant			
SD-S-22	PRETREATMENT PLANT IMPROVEMENTS	700,000	3,500,000
Western Lehigh Interceptor			
SD-S-3	CENTRAL LEHIGH WW CAPACITY PLANNING & EXPANSION	620,000	2,050,000
SD-S-4	SPRING CREEK FORCE MAIN AIR RELEASE VALVE REPLACEMENTS	40,000	105,000
SD-S-9	SPRING CREEK PS FORCE MAIN CONDITION ASSESSMENT	0	300,000
Satellite Systems			
SD-S-6	WYNNEWOOD I/I INVESTIGATION & REMEDIATION	50,000	150,000
SD-S-7	WYNNEWOOD WWTP REPLACEMENT	700,000	0
SD-S-8	WESTERN WEISENBERG MECHANICAL SCREEN (Arcadia West)	0	325,000

# Suburban Division Wastewater – 2020 and 5-Year Projects (continued)

<b>CP#</b>	<b>Project</b>	<b>2020 \$</b>	<b>2021-2025 \$</b>
SD-S-10	WEISENBERG, LOWHILL, UPPER MILFORD TOWNSHIP SSES	0	225,000
SD-S-13	SAND SPRING WWTP REPLACEMENT	3,600,000	768,000
SD-S-17	HEIDELBERG HEIGHTS I&I INVESTIGATION & REMEDIATION	275,000	850,000
SD-S-18	HEIDELBERG HEIGHTS WWTP REHABILITATION	40,000	400,000
SD-S-25	LYNN TOWNSHIP WWTP UPGRADE & EXPANSION DESIGN	50,000	250,000
SD-S-26	LYNN TOWNSHIP I/I INVESTIGATION & REMEDIATION	300,000	200,000
Little Lehigh Relief Interceptor			
SD-S-12	PARK PUMP STATION FORCE MAIN REHABILITATION	100,000	1,200,000
SD-S-15	PARK PUMP STATION REHABILITATION	400,000	960,000
SD-S-16	REGIONAL PARK PUMP STATION	0	100,000

# Suburban Division Wastewater – 2019 and 5-Year Projects (continued)

CP#	Project	2020 \$	2021-2025 \$
<b>New Borrowing Funds</b>			
Western Lehigh Interceptor			
SD-S-24	SIGNATORY I/I INVESTIGATION & REMEDIATION	1,000,000	1,650,000
SD-S-28	WLI TREXLERTOWN AREA INTERCEPTOR	400,000	14,300,000

# Suburban Division Annual Wastewater Projects

- Mobile Equipment
- Other Equipment
- Wastewater Facilities Asset Management Upgrades
- Sewer Company Acquisitions
- WLI Capital Management
- WLI Collection System & Service Connections
- LLRI Collection System & Service Connections
- Upper Milford Township Collection System & Service Connections
- Northern Lehigh Collection System & Service Connections
- Weisenberg Township Collection System & Service Connections
- Lynn Township Collection System & Service Connections

# Suburban Wastewater – Financial Analysis

SOURCES	
Cash from operations and reserves	\$10,220,500
New borrowing*	<u>\$19,118,000</u>
Total sources	<u>\$29,338,500</u>
USES	
Capital project spending	<u>\$29,338,500</u>

*\* LCA's 2020 Budget included borrowing \$22,635,000 in year 2020 to cover a large portion of the 2021-2025 project needs. This plan requires an additional \$3,200,000 of borrowing in 2021 to cover the remaining projects not included in the planned 2020 borrowing.*

- Cash from operations includes \$4,627,344 of non-operating revenues
- Total funding from operations and reserves of \$10,220,500 covers annual projects worth \$2,005,500, LCA Wastewater Treatment Plant Project worth \$3,500,000, WLI projects worth \$2,455,000, and LLRI projects worth \$2,260,000
- Operations funding requires increases in revenues from both the Western Lehigh and Satellite systems groups to cover the operations funding of projects in addition to the additional debt service of \$1,404,683 annually on the new borrowing, and for inflation on operating expenses.
- A rate evaluation for LCA's Satellite systems group will be conducted in 2020 as rates have not been adjusted since 2013.

# Suburban Wastewater – Financial Analysis

<u>Dollars</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>
User Charges	16,452,449	16,818,049	17,213,748	17,642,745	18,108,610
Other Operating Revenues	-	-	-	-	-
Non-Operating Revenues	1,071,640	1,097,759	1,124,662	1,152,371	1,180,912
Operating expenses	(12,849,872)	(13,363,868)	(13,898,423)	(14,454,361)	(15,032,535)
Debt Service - Current Debt	(2,059,485)	(2,059,485)	(2,059,485)	(2,059,485)	(2,059,485)
Debt Service - NEW Debt	(173,988)	(173,988)	(173,988)	(173,988)	(173,988)
Investments Converting to Cash	-	-	-	-	-
Proceeds From NEW Debt	3,200,000	-	-	-	-
Capex - Admin Paygo	-	-	-	-	-
Capex - Paygo	(1,815,500)	(2,565,500)	(2,704,500)	(1,742,500)	(1,392,500)
Capex - NEW Borrowing	(2,188,000)	(2,110,000)	(5,790,000)	(8,415,000)	(615,000)
<b>NET FUND FLOWS</b>	<b><u>1,637,244</u></b>	<b><u>(2,357,033)</u></b>	<b><u>(6,287,986)</u></b>	<b><u>(8,050,218)</u></b>	<b><u>16,014</u></b>
User Charge Revenue Increase %	0.0%	2.2%	2.4%	2.5%	2.6%
Operating Cash Balance	6,336,923	6,590,400	6,854,017	7,128,178	7,413,305
Days on Hand	180	180	180	180	180
Project Reserve Balance	19,970,084	17,359,574	10,807,971	2,483,592	2,214,479
DEBT SERVICE COVERAGE RATIO	2.09	2.04	1.99	1.94	1.91
Total Capex	(4,003,500)	(4,675,500)	(8,494,500)	(10,157,500)	(2,007,500)

# Summary

- 2020 Capital Budget
- Total 5-Year Capital Budget 2021-2025

	<u>2020</u>		<u>2021-2025</u>
Administration	\$715,000		\$2,025,000
Suburban Water	5,940,000		24,700,000
Suburban Wastewater	8,670,500		29,338,500
<b>TOTAL</b>	<b>15,325,500</b>		<b>56,063,500</b>



# Discussion

Questions?