Lehigh Valley Planning Commission

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ENVIRONMENT COMMITTEE MEETING
Tuesday, September 22, 2026, 10:30 AM
AGENDA

THE MEETING CAN BE ACCESSED AT http://www.tinyurl.com/LVPC2026 OR VIA PHONE 610-477-5793 Conf ID: 947 550 319#

Roll Call

Courtesy of the Floor

Committee Business:

1. *ACTION ITEM:* Lehigh County Authority Preliminary Capital Plan – Allentown Division 2027-2031 (CR)
2. *ACTION ITEM:* Lehigh County Authority Preliminary Capital Plan – Suburban Division 2027-2031 (CR)

Next Environment Committee Meeting
Tuesday, October 27, 2026, at 10:30 AM

Lehigh Valley Planning Commission

Project Review Summary Sheet

Environment Committee **Date: September 2026**

Project	Municipality	Statement of Purpose	LVPC Comment
Lehigh County Authority - Preliminary Capital Plan (2027-2031)	**ALLENTOWN DIVISION**	**Water** • ***WFP Wet Lab Renovations:*** Expansion of the existing wet lab area into the former HVAC room, which will occur once Phase 2 HVAC system upgrades are complete. The existing operator's wet lab at the Water Filtration Plant (WFP) is crowded with limited space for instrumentation. • ***City Leak Detection and Water Loss Program:*** The purchase and installation of leak loggers and pressure sensors in strategic locations throughout the City water system to improve leak detection monitoring capability. The data obtained through this effort will be used to target and prioritize system repairs and main replacements. A water loss study is to be performed in 2027 to identify and target areas of water loss. • ***City East Side Transmission Main Rehabilitation:*** Existing East Side Transmission Main conveys water from the WFP approximately 3 miles to the City's East Side Reservoir. The existing 36-inch and 30-inch cast iron lines were constructed about 70 years ago and exhibited areas of leakage in 2022 from a leak detection study and identified areas of severe external pipe corrosion and pitting at repair sites in 2026 during leak repair projects. This project includes a planning phase as well as design and construction of a pipeline rehabilitation project, consisting of pipe replacement, internal lining or a combination of both alternatives. • ***WFP Plate Settler Sludge Removal System Upgrade:*** Evaluation of the existing sludge removal operation is needed to determine if a system can be installed to facilitate sludge removal. Project is in the planning phase; scope of upgrades is to be determined. **Wastewater** • ***City Manhole Inspection and Sealing Program:*** The City's sanitary sewer system contains approx. 7,200 public manholes, which must be investigated and addressed to remove sources of wet weather inflow. A manhole inspection and rehab program is outlined in LCA's Act 537 Plan. In 2026, approximately 3,800 manholes have been inspected, and a pilot rehab project of 250 manholes was completed and informed future rehab projects. Trout Creek and East Side sewer basins have been targeted for this work in the near term due to high peaking factors. In 2026, approx. 450 manholes in Trout Creek basin will be rehabilitated. Rehab work in 2027 and 2028 will focus on Trout Creek Basin manholes, with East Side basin manholes to be addressed in 2028 and 2029. Temporary flow metering is planned in 2026 and 2027 to determine rehab effectiveness.	Evaluating/providing system improvements to provide safe, reliable and efficient service supports *FutureLV*: The Regional Plan actions to 'improve the utility and mobility infrastructure of the region' and 'integrate efficiency measures and emerging technologies' (of Policy 1.1) and 'protect the quality and quantity of surface water and groundwater' (of Policy 3.2).

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Lehigh County Authority - Preliminary Capital Plan (2027-2031)	**ALLENTOWN DIVISION**	**Wastewater Projects Continued:** • ***WWTP Primary Clarifier Rehabilitation:*** Upgrades to primary clarifiers; the overall scope of work to be determined. This capital plan includes the design of a project to install adequately sized access hatches in the existing domes due to the existing access hatches being small and difficult to navigate with ladders and equipment. • ***WWTP Stormwater Upgrades:*** Upgrades to the existing stormwater system at Kline's Island WWTP. Specifically, improvements to drainage lift station #2 are required as well as any improvements that may be necessary due to the NPDES permit upgrades. • ***City Interceptor Rehabilitation:*** LCA has started an inspection and condition assessment program for the sanitary interceptor sewers in Allentown. The interceptors inspected in 2024 were confined to the east side of the Lehigh River and included: Hanover Trunk Line, Eastside Interceptor, Albert Street Trunk Sewer, Hanover Avenue Trunk Line and the Siphon under the River. Two projects recommended to reduce the risk of failure: Eastside Interceptor (~2,000 linear feet of cured in place lining) and the Albert Street Trunk Line (~2,450 linear feet of cured in place lining).	Evaluating/providing system improvements to provide safe, reliable and efficient service supports *FutureLV* actions to 'improve the utility and mobility infrastructure of the region' and 'integrate efficiency measures and emerging technologies' (of Policy 1.1) and 'protect the quality and quantity of surface water and groundwater' (of Policy 3.2).

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Lehigh County Authority - Preliminary Capital Plan (2027-2031)	**SUBURBAN DIVISION**	**Water** • ***Central Lehigh System Supply Improvements:*** In 2024, a source water assessment study for the Central Lehigh Division identified vulnerabilities in emergency supply if the largest water source, Schantz Spring, be taken out of service. Re-establishing the Bortz interconnect with South Whitehall Township is one option to increase emergency supply. To address long-term projected demands due to industrial growth in the western Central Lehigh Division, there is an urgent need to develop new additional water sources and/or increase production from existing sources. Additional storage in the Upper System is also needed. • ***Small Systems Water Supply Improvements:*** This project includes planning and design work for small Suburban Division water systems supply and distribution systems with a focus on resiliency and redundancy, in particular, single point of failure components, single source systems and addressing supply limitations. • ***SD Green Hills Pump Station Upgrade:*** Replacement of two booster pumps and associated equipment at the Green Hills pump station to better serve current and future water demands in LCA's upper system due to existing pumps reaching the end of their useful life. • ***SD Automated Fill Station:*** Proposed automated filling station in the Central Lehigh Division in order to accurately account for water consumption and reduce theft of water by unauthorized operation of LCA fire hydrants. The station will consist of an unmanned remote bulk water dispensing facility, housed in a weather-proof enclosure with remote monitoring and control. **Wastewater** • ***Pretreatment Plant Long Term Planning:*** Long term major process modifications at the LCA pretreatment plant were evaluated in 2025 and 2026 in order to accommodate changes in flow and loading due to planned growth and projected wastewater flows and loads in Upper Macungie Township. Sewage conveyance options evaluated included bypassing all of a portion of the western Upper Macungie Township flow around the pretreatment plant, with conveyance of untreated or partially treated wastewater via existing sewer interceptor to Kline's Island WWTP. Long term pretreatment plant upgrade planning is required to accommodate changes inorganic loading due to industrial growth in Upper Macungie Township.	Evaluating/providing system improvements to provide safe, reliable and efficient service supports *FutureLV* actions to 'improve the utility and mobility infrastructure of the region' and 'integrate efficiency measures and emerging technologies' (of Policy 1.1) and 'protect the quality and quantity of surface water and groundwater' (of Policy 3.2).

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Lehigh County Authority - Preliminary Capital Plan (2027-2031)	**SUBURBAN DIVISION**	**Wastewater Projects Continued** • ***Pretreatment Plant Solids Process Improvements:*** Project involves replacement of sludge dewatering and conveyance equipment within the adjacent solids buildings. Replacement of two gravity belt thickeners which are used to thicken waste activated sludge prior to conveyance to the digesters is also proposed. The existing solids dewatering system at the PTP consists of equipment that is over 36 years old and is in need of replacement. Centrifuge utilization was effective in dewatering PTP sludge to a higher solids content when a centrifuge study was performed in 2025 and it would improve working conditions in the dewatering building. • ***Pretreatment Plant Phase 1 Electrical System Improvements:*** Replacement of two substations (Substation Nos. 2 and 4) due to a condition assessment of the electrical distribution system, substations and main switchgear performed in 2025 that considered the risk of failure for the various components and identified the need. Design phase commenced in 2026 for Phase 1. Equipment procurement to be bid in Q3 of 2026, and construction to occur in 2027 and 2028. • ***Pretreatment Plant Phase 2 Electrical System Improvements:*** Phase 2 electrical improvements will follow the Phase 1 Improvements at the PTP and consist of replacement of the 37-year-old main service entrance switchgear, Substation No. 3 and various motor control centers throughout the facility that are in poor condition. • ***Pretreatment Plant Aeration Basin Conversion:*** The current pure oxygen system of the cryogenic plant was designed to treat high strength industrial waste, and the existing process is very energy intensive. Retirement of the pure oxygen system and conversion of the aeration decks to utilize ambient air would represent significant energy savings, however, it is contingent upon the reduction of organic loading into the PTP. Project assumes future industrial loading conditions that will facilitate decommissioning the aging cryogenic system and converting aeration process to ambient air.	Evaluating/providing system improvements to provide safe, reliable and efficient service supports *FutureLV* actions to 'improve the utility and mobility infrastructure of the region' and 'integrate efficiency measures and emerging technologies' (of Policy 1.1) and 'protect the quality and quantity of surface water and groundwater' (of Policy 3.2).

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