Northern Lehigh County Wastewater Planning - Background

Municipalities in Northern Lehigh County have been collaborating on issues related to land-use planning and wastewater treatment needs for about the past 10 years, since the early 2000s. First, seven municipalities came together to develop a joint comprehensive land-use plan in order to take advantage of the state’s grant incentives for joint planning projects. The municipalities involved in the joint land-use plan were Heidelberg, Lowhill, North Whitehall, Lynn, Weisenberg and Washington townships, and the Borough of Slatington.

Then, in 2003, South Whitehall Township joined four members of the initial group to undertake a joint wastewater planning study, and the five municipalities (Heidelberg, Lowhill, North Whitehall, South Whitehall and Washington townships) asked Lehigh County Authority (LCA) to manage the project due to LCA’s expertise in the area of utility management and wastewater planning. LCA and the municipalities contracted with Spotts, Stevens & McCoy (SSM) to conduct the engineering study, which focused on portions of the Mill Creek, Coplay Creek and Jordan Creek drainage basins. Within these basins, there are several small wastewater treatment plants that are either privately or publicly run utilities serving small residential developments, but no centralized sewer system is serving this area. In addition to the environmental risk associated with these small treatment plants, the condition of private septic systems and drinking water wells was unknown at the time. See Figure 1 for a map of the study area.

The study sought to answer questions about current facilities and their long-term viability to serve the community’s needs, as well as to look ahead at the future needs of the community. The recently completed joint comprehensive land-use plan provided much of the background needed, and additional residential surveys and water quality tests were conducted during the study.

In 2004, SSM presented results of the study, which determined the primary need for central sewer service was along the Routes 873 and 309 corridors in North Whitehall Township. SSM developed several alternatives to meet the need for this area, and included preliminary financial analysis of the alternatives.
Over the next several years, all five townships reviewed the study results and the alternatives. Some alternatives were added to the list and others were dropped from the list. By 2009, all municipalities had come to agreement on the alternatives and an Act 537 plan was developed and adopted by the four municipalities that were impacted by the plan – Heidelberg, Lowhill, Washington and North Whitehall townships. Because the plan called for facilities located in North Whitehall Township and only serving properties located there, most of the public discussion was conducted at that township’s public meetings, and at LCA’s Board of Directors meetings. However, all municipalities adopted their Act 537 plans through a public process, which was completed by January 2010. The plan was then submitted to the state Department of Environmental Protection (DEP) for its review and approval.

Approval of the work completed to this point by LCA and the townships has been conducted in public meetings. Residents of the area were included in the study as septic systems and water quality of private wells were being studied. Now that the planning process has been completed, after nearly 10 years of work, LCA and the townships are focused on implementing the plan.

The option that was selected for implementation is to construct a new wastewater treatment plant on property currently owned by KidsPeace, but which would be conveyed to LCA for the project. An existing treatment plant on the KidsPeace property, directly adjacent to the new plant, is too small and would require significant upgrades. Therefore, upon completion of the new plant, the current KidsPeace plant would be taken out of service.

The project is intended to be constructed in a phased approach over many years. In the first phase, the plant would be constructed to provide 200,000 gallons of wastewater treatment capacity per day to the area, to serve KidsPeace and neighboring areas such as the proposed Wal-Mart development, Lehigh-Carbon Community College, and residential properties west of Route 309. The plan does not call for mandatory sewer connections of existing homes and businesses in North Whitehall Township, so residents with existing septic systems that are functioning properly may continue to use them. However, properties that wish to connect to the new sewer facilities would have the option to do so.

In a future phase, which is currently unscheduled and would only be constructed when needed, the plant could be expanded to provide up to 550,000 gallons of wastewater treatment capacity per day to additional areas of North Whitehall Township, east of Route 309 and along Route 873. Some of the areas that are currently served by small community treatment plants would be connected to the centralized system at the time when significant capital investment is needed to upgrade or repair their facilities. See Figures 2 & 3 for maps of the project area, including the phased approach and the KidsPeace site.

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As the project kicks off, the approval process is lengthy and offers many opportunities for public input on the issues that are up for approval. One of the key issues is related to environmental protection, and ensuring that the Jordan Creek basin is not harmed by the discharge of treated water into the creek. DEP and the Delaware River Basin Commission will review the facility plans that will be developed to ensure that all treatment requirements for this watershed are met. A properly designed wastewater treatment plant will discharge high quality water to the receiving stream, which may in some cases improve the stream flows and water quality. These project details will be established in the design phase of the project to ensure the basin is properly protected, prior to the start of construction.

LCA is a non-profit, municipal authority charged with providing high-quality utility services in the Lehigh Valley where it is needed. The communities in Northern Lehigh County have an identified need for proper waste treatment along the Route 309 corridor in North Whitehall Township in order to protect the environment and the public from potential failures of existing systems that are in place in this area, and to provide capacity for the growth that community leaders have planned.

* A fact sheet is attached for additional background about LCA, and more detailed information about LCA is available on our website at [www.lehighcountyauthority.org](http://www.lehighcountyauthority.org).  

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Every drop matters. Every customer counts.

Figure 1 – Northern Lehigh County Wastewater Plan – Study Area
Figure 2 – Planned & Future Service Area of Northern Lehigh County Wastewater System
Figure 3 – Site Map for Northern Lehigh Wastewater Treatment Plant
Overview

Lehigh County Authority (LCA) is a public water and wastewater utility committed to providing unparalleled service to residents and businesses in all our service areas. Our 39 employees strive to meet this commitment through an unwavering focus on our customers' needs and offering a high level of professionalism, quality and flexibility. We provide water service to more than 19,000 residential and commercial properties throughout Lehigh and Northampton counties. We also provide municipal-level and customer-level sewer service in many areas of western and northern Lehigh County.

LCA was founded in 1966 by the County of Lehigh and is governed by a seven-member Board of Directors appointed by the County. LCA is a nonprofit, public agency. Our activities and services are funded solely through revenues from our water and wastewater customers, and our rate-making practices are governed by the Pennsylvania Municipal Authorities Act.

About LCA Water Systems

- LCA operates 13 water systems that provide service in 13 municipalities in two counties.
- The Central Lehigh Division, LCA's largest system, serves more than 17,000 residential and commercial properties, primarily in Upper and Lower Macungie townships.
- A residential customer using 20,000 gallons per quarter will pay a quarterly water bill of $53.10.
- In most areas, LCA's water is drawn from wells and is not fluoridated.
- 2011 Total Water Budget: $19,146,000 (expenses are net of depreciation)

About LCA Wastewater Systems

- LCA’s Western Lehigh Interceptor system provides wastewater transportation service for 10 municipalities. Through this system, all wastewater is transported to the City of Allentown’s wastewater treatment plant.
- LCA provides direct wastewater service to roughly 1,700 individual customers in Upper Milford, Weisenberg, North Whitehall, Washington and Heidelberg townships.
- LCA operates small wastewater treatment plants in Heidelberg, Weisenberg and North Whitehall townships, where collection systems are too distant from the Western Lehigh Interceptor system to be interconnected.
- LCA’s industrial wastewater pretreatment plant serves commercial properties in the Fogelsville area.
- Wastewater rates are developed on a system-by-system, cost-of-service basis.
- 2011 Total Wastewater Budget: $27,496,000 (expenses are net of depreciation)

Issues of Importance to LCA

As a water and wastewater utility, LCA takes its responsibilities to its customers very seriously. Providing safe, reliable drinking water and wastewater services at a reasonable price to thousands of residents and businesses requires LCA to stay on top of a variety of environmental and regulatory issues. Some specific topics of interest to LCA include:

- Environmental laws and regulations
- Public education and youth outreach on environmental issues
- Water supply issues including droughts, water quality and long-term sustainability of supplies
- Municipal financing and long-term infrastructure needs
- Regionalization and/or privatization of utility services and the impacts on Lehigh Valley residents
- Achieving service economies and efficiency through joint ventures with other systems and municipalities