Over the past three years, Lehigh County Authority (LCA) has been working to develop new water supplies to meet the growing demand for safe drinking water in our service area. Residential and commercial development in western Lehigh County has been growing at a rapid pace over the past decade, requiring an increase in essential public services such as drinking water and wastewater treatment.

LCA has kept all customers’ best interest in mind when pursuing plans to develop new water supplies, which means we must consider the reliability, safety and cost of new water supplies, as well as the environmental impact of our actions. As a result, plans have been developed to construct a major water system interconnection with the City of Allentown’s water system. This fact sheet is provided to outline some of the benefits this interconnection will bring to our customers and the region, as well as to explain the impact on all customers.

Important Customer Note: This Interconnection Series applies to customers in LCA’s Central Lehigh Division, which serves Upper and Lower Macungie townships as well as small portions of Weisenberg, Lowhill, Upper Milford and Salisbury townships. Please look at your bill details on the front of this newsletter to see if you are in the Central Lehigh Division.

But first, what exactly is an interconnection, and how will it work for LCA and Allentown?

The water system that serves your property is made up of a network of underground pipes that carry water from our wells into the developments we serve throughout western Lehigh County. LCA’s Central Lehigh Division currently withdraws up to 8 million gallons of water per day from 18 groundwater wells. As new customers continue to connect to the water system, more water is needed to supply those customers. LCA has two basic sources for a new water supply to meet this need. First, we could drill new wells and continue to rely on groundwater as our sole source of water. Alternatively, we can interconnect our pipe network with our neighboring water utility, the City of Allentown, and buy water directly from the City.

In 2009, LCA and Allentown reached an agreement that will allow us to tap into the City’s water system and draw water directly from the City’s sources. In 2010, the first phase of this interconnection was completed, and LCA is now drawing an additional 2 million gallons of water per day from Schantz Spring, which is another groundwater source that is very similar to the well water LCA already supplies to our customers.

The second phase of the Allentown-LCA interconnection is scheduled to be constructed by the end of 2012. This project will connect LCA’s major pipe network with Allentown’s so we can draw up to 7 million gallons of water directly from the city’s pipe network. The city’s water supply comes from various sources including Schantz and Crystal springs, the Little Lehigh Creek and the Lehigh River. This water is treated at the city’s water treatment plant, and LCA will draw this water from Allentown’s system, through the interconnection, and blend it with our existing groundwater sources as it flows through our pipes to our customers.

QUESTIONS FOR LCA?

As the interconnection is constructed, customers will receive more information directly from us. Information will also be posted online at www.lehighcountyauthority.org. If you have any questions, please call 610-398-1444 or email service@lehighcountyauthority.org.
Diversity of supply = Public health protection
LCA currently relies solely on groundwater as your source of drinking water. The City of Allentown uses a combination of spring water from Schantz and Crystal springs, plus surface water from the Little Lehigh Creek and the Lehigh River. Adding new, non-groundwater sources of water to our system will allow LCA to respond to water quality changes on a proactive basis to increase the level of public health protection. For example, if one of our well supplies becomes contaminated, we will be able stop using that supply and increase our withdrawal from the Allentown supply while the problem is being corrected.

Use of past investments = Long-term cost control for all
Allentown’s water treatment and filtration plant (on Martin Luther King Boulevard in the City) was designed to treat up to 36 million gallons of water per day. Because of the changing demographics and loss of manufacturing facilities in the city, Allentown no longer needs this much water. By purchasing the “extra” water from Allentown, both the City and LCA can take advantage of the prior investment in this treatment facility. In the long run, using existing facilities will be more cost effective for both systems than developing new facilities.

Blending sources = Best management of natural resources
Water doesn’t flow naturally along municipal boundaries, and groundwater is highly connected to our local streams and other water ways. LCA’s current system draws groundwater from wells upstream of Allentown. After you use the water, it is generally put back into a sewer system that flows down through to the other side of Allentown, effectively leaving Lehigh County as soon as it is drawn out of our wells. By using a blend of sources, including water from the Little Lehigh Creek and the Lehigh River, some water downstream will actually be returned to the watershed as you use it at your home or business. This is an improvement in the way we manage our natural resources, and a more regional approach to water supply management.

Flexible operations = Efficiency and water rate stability
After the interconnection is completed in 2012, LCA will have a variety of options available to operate our water system most efficiently. While we will be required to purchase a minimum amount of water every day from Allentown in accordance with our agreement, we will have flexibility in our system to utilize the most cost-effective supplies, such as running well pumps during off-peak periods to reduce energy costs, or minimizing the use of low-yield wells to reduce other operational costs. This flexibility will help to control costs and stabilize rates over time.

Long-term water supply = Support for economic growth
Over the 45 years LCA has been operating your water system, the landscape in western Lehigh County has changed dramatically. Housing development boomed in the 1990s and 2000s, and new industrial markets have opened up, creating new jobs for the new residential base. Where the future of growth and development is going is not up to LCA to decide—those decisions rest with your municipal leaders and elected officials. However, as a responsible public utility, LCA’s mission is to provide water and sewer services where it is needed. This interconnection will provide a sustainable and reliable source of water for existing and new customers for many years to come.

WHY INTERCONNECT?

A few things that all customers should keep in mind regarding the new water supply from Allentown:

1. Safety standards will continue to be met. The water LCA will be purchasing from Allentown will already be treated and tested to ensure that it meets all standards for health and safety. These are federal and state standards that all public water suppliers must meet. If our water does not meet these standards, customers would be notified through our automated phone-dialing system as required by state law.

2. What about fluoride? Allentown’s water contains fluoride! The city adds fluoride to its drinking water to a level of approximately 0.7 milligrams per liter, which is the safe level recommended for healthy teeth in children. LCA’s water has never contained fluoride, and we will not be adding fluoride to our well water. Therefore, our water will contain some fluoride as a result of the blending of LCA and Allentown water supplies, and this will vary depending on where you live (see item 3 below about blending of supplies). Customers should ask a dentist or pediatrician about health impacts of this change and about any fluoride supplements provided to children.

3. Expect variations due to blending of supplies. Water from Allentown will be drawn into LCA’s system and blended with our existing water supply. The water will be blended naturally as it flows together within our underground pipe network. Therefore, customers who live closer to Allentown will most likely receive more water from Allentown’s supply, and customers who live farther away, such as in Fogelsville or Breinigsville, will most likely receive more water from LCA’s well supplies. The particular blend of water received will vary depending on how much water we draw from Allentown, how much we draw from our wells, how much our customers are using at any given moment, and other operational changes we make to achieve proper system pressure and efficiency. Because the blend will vary, customers will also receive varying amounts of fluoride (ranging from no fluoride up to the maximum of 0.7 milligrams per liter), and customers may also notice fluctuations in the way our water tastes.

4. Changes in water’s taste, smell, hardness? Because Allentown’s water supply comes from sources customers are not used to, including the Little Lehigh Creek, Crystal Spring and the Lehigh River, you may notice some changes in the taste of the water and hardness levels. These will not affect the safety of our drinking water, but some people are more sensitive than others to these changes. In addition, because of the blended supply between LCA and Allentown, you may notice some variation in these qualities of our water over time (see item 3 above about blending of supplies).

5. Tell us what you are experiencing! This is a major change in LCA’s water supply, and we are very interested in hearing about customers’ experience with this change. By hearing customers’ concerns, questions and experiences, we can develop operational programs to improve our service quality!