



Rapid Growth or Population Decline: Consider Consolidation

By Liz Harvell, Jeff Hughes, and Erin Riggs

Many North Carolina communities are experiencing rapid growth while other communities have seen almost as rapid population declines. The rate of growth (or decline) impacts people, industries, jobs, places, environments, and governments, both in rural and urban areas. Urban areas, such as the Research Triangle and Charlotte, are among the fastest growing areas in the country, drawing attention from large businesses around the world. On the other hand, some smaller, more rural areas in North Carolina are seeing significant decreases in population as residents move to larger areas in search of jobs after manufacturing-based industries have left the region. In addition, some North Carolina town and city populations are also declining as a consequence of environmental challenges, such as flooding or drought events, as well as aging populations in rural areas passing away.

Population change, whether it is in the form of rapid growth or decline, can cause significant financial strains on water and wastewater systems. At a time where dwindling communities are losing revenue and booming areas are struggling to keep up with demand, one particular strategy could help address both puzzles – consolidation.

Wide agreement exists throughout the water sector that regionalization – a concept that includes increased cooperation, collaboration, and, in some cases, consolidation – has the potential for improving the quality of water and wastewater services while providing positive economic and financial outcomes for communities. However, there are varying

levels of consolidation. For example, some involve acquisition by one system of another, while others represent a merger of two or more systems into a new entity; some involve consolidation of physical assets, while others are limited to consolidation of services such as meter reading. Examples of potential positive financial impacts of consolidation include but are not limited to:

- Reduced duplication in water and wastewater asset investment.
- Pooling, or “smoothing out,” costs over a larger customer base.
- Reduction in rate discrepancies among nearby communities.
- Reduction in operation and maintenance costs due to consolidation.
- Access to lower cost capital.

CONSOLIDATION AND A BOOMING POPULATION

An example of how consolidation can help communities adapt in a rapidly growing region is found in one of the major metropolitan centers of North Carolina. The City of Raleigh’s water and wastewater utility transformed from a single, city-focused utilities department to a regional, full service provider through a series of system mergers and interlocal agreements executed in the early 2000s.

Raleigh and the surrounding areas of Wake County have experienced some of the highest growth rates in the country. In 2000, the city had 276,000 residents; by 2010, that number had increased to 383,000, a 38.8% increase in just 10 years. Many of the region’s water and wastewater systems faced capital needs linked to a changing and increasingly strict environmental regulatory climate.

Within a relatively small region, multiple water and wastewater providers were all working independently to provide safe and environmentally sound services to their populations, sometimes competing for regional resources in ways that delayed mutual solutions and imposed unnecessary costs on customers.

An adjacent municipality, Garner, was considering building a major facility for hundreds of millions of dollars. The Department of Health and Environmental Resources (now the Department of Environmental Quality) was charged with reviewing and approving water system permits and urged communities in the region to consider consolidating. The Department went so far as to enter into proposing an informal arrangement with Raleigh and Garner suggesting that if they consolidated systems, they could benefit from a more streamlined regulatory approval process.

Around this time, leaders in Wake County were instrumental in catalyzing a major regional water and wastewater planning effort. While not a direct water service provider, the county government was involved in a range of land use planning and economic development efforts and recognized the importance of optimizing water and wastewater service in their region. A task force of stakeholders from throughout the county, including many leaders from towns that provided their own water and wastewater service, participated in the planning effort. The resulting water and wastewater plan, finalized in 1998, envisioned and analyzed a range of regionalization scenarios. The most



far reaching and ambitious called for a single, consolidated utility system by 2015. At the time, leaders saw increased regionalization as a means of providing economic benefits to the region while reducing fragmentation and customer cost variations. **Table 1** below is an excerpt from the plan, listing the major independent systems in the county and the rates they charged their customers in 1998:

At the time, the political and financial environment was conducive to moving forward with regionalization. Before the consolidation, some of the smaller consolidation communities, like Rolesville, found themselves needing further capacity but lacked the financing to secure it.

Several years after the development of the plan, the Town of Garner was the first to execute an agreement with Raleigh to transfer their assets and customers. Over the next six years, five other towns entered into similar agreements with Raleigh, transforming how utility services were provided in that region.

An important part of the Raleigh example is the institutional government model implemented. A large municipal utility incorporated the assets and customers of six surrounding medium-sized municipal utilities through a planned asset transfer and permanent capacity allocation. Currently, city managers of all affected utilities sit on a Utility Advisory Committee with Raleigh management and consult with Raleigh on key issues even though assets are now official owned by Raleigh.

Twenty years after developing the roadmap for increased regionalization, the area now has a much different water and wastewater provision landscape. While not reducing the number of utilities down to one, the region has made major advancements in reducing service fragmentation. While the overall financial impacts of Raleigh's consolidation were positive in terms of rate equalization and operational efficiency, the consolidation did not magically mean that no future rate increases would be needed in the area. Also, the impacts were not immediate for most communities and required careful

planning and patience. The influence of Wake County and the State in supporting the communities, serving as a neutral advocate, was likely instrumental in creating the momentum to complete this ambitious initiative.

CONSOLIDATION AND A DECLINING POPULATION

Consolidation can also be an option for helping communities that have experienced declines in population or water service demands due to the loss of manufacturing facilities.

Earlier this year, the Environmental Finance Center at the University of North Carolina at Chapel Hill was asked to take the lead on a wastewater regionalization study for a small town of 700 people in Western North Carolina. The Town (which will remain anonymous as the study is still in progress) had been awarded a regionalization grant from the North Carolina Department of Environmental Quality's Division of Water Infrastructure to study alternatives to their existing wastewater business model.

TABLE 1: Wake County Water/Sewer Rate Comparison
 Monthly Cost Based on 6,000 Gallons Per Month Usage

| Local Government | Monthly Water Charges | | Monthly Sewer Charges | | Combined Monthly Charges | | Ratio of Outside-to Inside-City Rates | |
|------------------|-----------------------|--------------|-----------------------|--------------|--------------------------|--------------|---------------------------------------|-------|
| | Inside City | Outside City | Inside City | Outside City | Inside City | Outside City | Water | Sewer |
| Apex | \$22.55 | \$45.10 | \$27.15 | \$27.15 | \$49.70 | \$72.75 | 2 | 1 |
| Cary | 19.38 | 58.14 | 16.62 | 49.86 | 36 | 108 | 3 | 3 |
| Fuquay-Varina | 19.4 | 38.8 | 28.7 | 57.4 | 48.1 | 96.2 | 2 | 2 |
| Garner | 19.34 | 38.68 | 22 | 29.6 | 41.34 | 68.28 | 2 | 1.3 |
| Holly Springs | 21.25 | 31.5 | 22.25 | 32.5 | 43.5 | 64 | 1.5 | 1.5 |
| Knightdale | 18.8 | 39.04 | 13.6 | 13.6 | 32.4 | 52.64 | 2.1 | 1 |
| Morrisville | 22.45 | 61.21 | 36.36 | 36.36 | 58.81 | 97.57 | 2.7 | 1 |
| Raleigh | 9.91 | 19.82 | 8.51 | 11.64 | 18.42 | 31.46 | 2 | 1.4 |
| Rolesville | 25.86 | 51.72 | 37.5 | 75 | 63.36 | 126.72 | 2 | 2 |
| Wake Forest | 23.14 | 46.28 | 27.78 | 55.56 | 50.92 | 101.84 | 2 | 2 |
| Wendell | 18.3 | 29.52 | 32.4 | 50.7 | 50.7 | 80.22 | 1.6 | 1.6 |
| Zebulon | 26 | 52 | 27.27 | 54.54 | 53.27 | 106.54 | 2 | 2 |

Source: Triangle J Council of Governments, April 1998



The Town faces issues common to many wastewater systems: an aging plant that needs significant renovations; environmental concerns regarding discharge location; and decreased sales due to the changes in manufacturing. With no anticipated growth and only several hundred residential connections to spread costs over, the Town is looking for ways of serving customers without excessive rate increases.

A short distance away, the neighboring city of over 10,000 people has a different situation. This City has plenty of capacity in their wastewater treatment plant, a good record of environmental compliance, and a strong residential and industrial customer base. The City's in-city rates are lower than the Town's rates and they have shown interest in providing service to the Town.

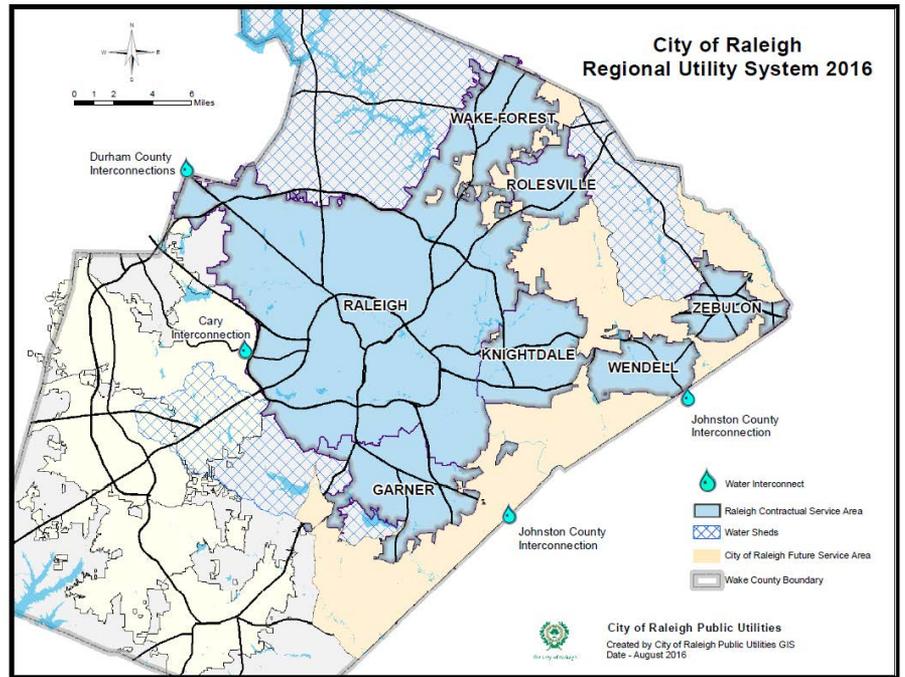
After developing a work plan, the process started with informal conversations with each of the potential consolidation stakeholders. Stakeholders include the Town, the City, local county planning and economic development officials, representatives of the State Treasurer's office and Department of the Environmental Quality. Following these conversations and research into case studies of similar situations, a list of potential options was produced.

Some of the general options analyzed included:

- Leave the Town as is and invest in the existing infrastructure. No consolidation is pursued.
- Have the Town extend its collection system to the City's facilities and purchase bulk service from the City.
- Have the City extend its collection system to the Town's facilities and sell bulk services to the City.
- Full consolidation.

There are advantages and challenges to each of these options, but after preliminary analysis it does appear that some form of regionalization could mitigate some of the financial challenges facing this community. Similar analyses and investigations are underway in many parts

FIGURE 1: City of Raleigh Regional Utility System



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of the state that show promise as well. But as with the case in previously mentioned Wake County mergers, consolidation, particularly implemented to address legacy challenges, is not a silver bullet. Whether systems are turning to consolidation to help address growth or population decline, the consolidation should be viewed as something moving water management in the right direction and mitigating future finance challenges. Maintaining the “right direction” whether in a fast-growing area or declining population area will continue to require perseverance, dedication, and most likely increased water rates.

SOME HELPFUL TIPS – A PREVIEW

Consolidation is becoming an increasingly analyzed option for systems and communities looking to partner with others in search of financial sustainability. But consolidation is not a one-size-fits-all

solution and does not come without complicated decisions, intricate arrangements, and lasting consequences. In each scenario, the feasibility of options must be assessed to determine technical, financial, and social implications.

The Environmental Finance Center is currently constructing a resource to help systems that may be considering pursuing financial viability via the consolidation route. *Consolidation of Water and Wastewater Systems: A Tips Guide*, slated to be published in early winter 2019, will help stakeholders develop financing strategy, institutional and governance models, and enabling documentation as they move through the consolidation process. This tips guide will serve as a resource that can be used at the local utility level to support planning and evaluation related to regionalization or consolidation.

The tips guide will help answer questions including but not limited to:

- Developing a process for evaluating options
- Arranging facilitation and planning assistance
- Evaluating ownership and selection of an institutional model
- Identifying options for valuing and making reimbursements for transferred assets
- Establishing a plan to address existing financial reserves
- Establishing a plan to address existing debt
- Crafting a robust and transparent rate adjustment process

While consolidation can be considered as a potential solution for water utilities facing various population changes, the tips guide will be designed for consolidation as a process, not specific to either demographic situation.

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