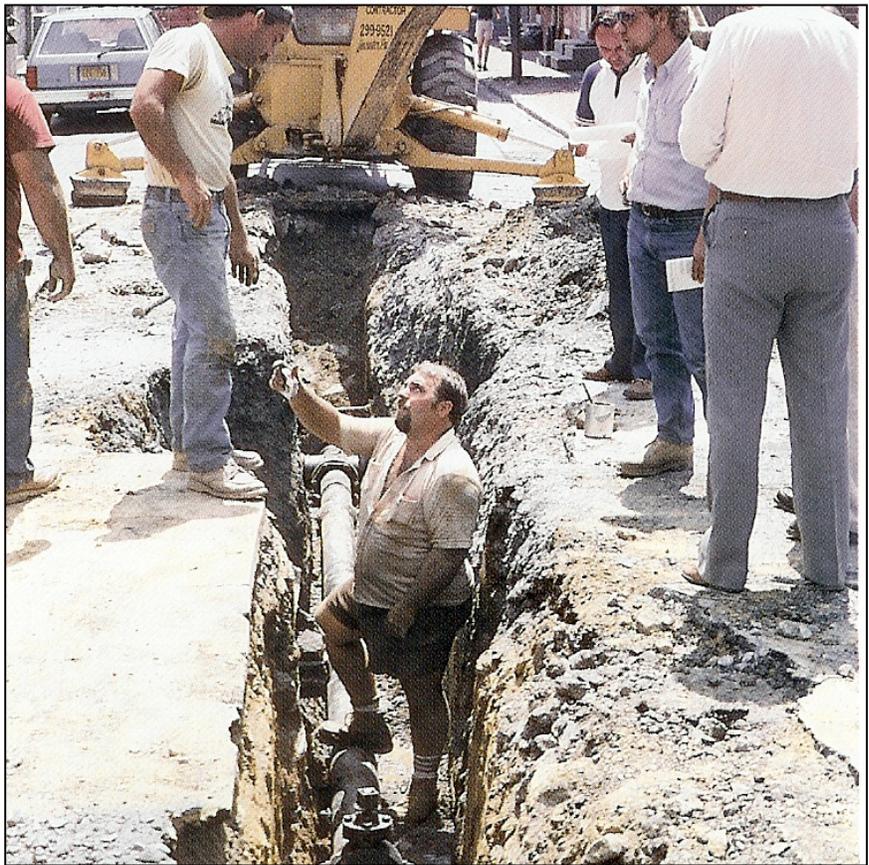


GROWING TOGETHER

A COMPREHENSIVE PLAN FOR CENTRAL LANCASTER COUNTY, PENNSYLVANIA

PLANNING THE FUTURE • PRESERVING THE PAST

13. Utilities: Water, Sewer, Solid Waste, and Stormwater Management



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Above

Utilities are being maintained in Central Lancaster County.

A. Goal

A cost-effective, sufficient, well maintained, and environmentally sound public utility system will provide water that meets acceptable standards and effective solid waste, sewage, and stormwater management to protect public health and manage growth in the region.

B. Overview

This chapter focuses on the future maintenance and upgrading of water and sewage systems, as well as solid waste disposal and stormwater management. It includes the goals, objectives, and strategies derived from public input as well as from revisions by municipal officials and Steering Committee members. It embodies the vision for future maintenance and improvements to utility systems in Central Lancaster County.

As the Central Lancaster County region grows, the area municipalities will need to maintain existing water supply and sewage disposal systems, while extending and adding lines for new development within the Designated Growth Area (DGA). In addition, solid waste disposal and stormwater management systems need to be maintained and improved to help ensure a sound infrastructure. Finally, the region will need to protect

the public health, welfare, and standard of living for its residents and businesses through the continuous maintenance of these systems.

C. Existing Conditions

The existing public sewer service areas and public water service areas are shown on Maps 13.1 and 13.2, found at the end of this chapter. Central Lancaster County is well served by public sewer and public water within the DGA, with a few exceptions that are shown on the two maps. There are several instances where both of these services extend beyond the boundaries of the DGA.

Much of the region's water supply originates from ground water sources, the Susquehanna River, and the Conestoga River. The Columbia Water Company and the City of Lancaster Water Bureau are the chief suppliers for the region's water supply. Two water plants serve the needs of the region.

Much of the region receives its public sewer service from one of three providers: the City of Lancaster, the Lancaster Sewer Authority (LASA), and the Suburban Lancaster Sewer Authority (SLSA). All areas not receiving public wastewater treatment rely on on-site sewage disposal. Most of Lancaster City is served by a combined sanitary and storm sewer system. Generally, ample conveyance and treatment capacity for water supply and sewage disposal exists within the Urban Growth Areas and Village Growth Areas.

The Lancaster County Solid Waste Management Authority assists all municipalities with the disposal of solid waste generated within the county in accordance with the County's Solid Waste Management Plan.

D. Objectives and Strategies

This section describes the objectives and strategies that will support the Utilities goal for Central Lancaster County. For further details regarding the timeframe and lead agencies responsible for each strategy, please see the Implementation Matrix in Chapter 15.

Goal: A cost-effective, sufficient, well maintained, and environmentally sound public utility system will provide water that meets acceptable standards and effective solid waste, sewage, and stormwater management to protect public health and manage growth in the region.

Objective U.1 - Carefully maintain existing sewer and water utilities within the DGA.

Provision of high quality utilities within the DGA can make redevelopment and infill more attractive development options, and help to preserve landscapes outside of the DGA. Such development will also contribute towards taking advantage of unused capacity in existing public lines, and improving the economic efficiency of sewer and water utilities.

Strategies

U.1.A Provide routine maintenance of existing sewer and water utilities within the urban growth areas.

Routine maintenance of existing sewer lines provides an on-going program to monitor potential problems such as infiltration, inflow, blockages, and corrosion. Water utility maintenance crews should regularly flush dead end water mains, inspect pressure valves, and maintain reservoirs, storage tanks, and fire hydrants.

U.1.B Encourage infill and redevelopment.

Infill and redevelopment within the DGA helps to minimize the need for additional infrastructure investments. Development within the DGA will help the region economize on utility infrastructure.

U.1.C Utilize infrastructure to control and slowly allow new development only at the same rate that infill and redevelopment is occurring.

Expansion of utilities outside Urban Growth Areas and Village Growth Areas should be strictly limited. Expansion of utilities to serve the Growth Opportunity Areas should be automatic.

U.1.D Provide incentives for infill provision of utilities including lower rates and more capacity/taps.

Municipalities should create utility-based incentives to induce more infill development. For example, they could establish a fee schedule that

significantly increases rates and tap-in fees for areas outside the Urban Growth Areas and Village Growth Areas.

Objective U.2 - Coordinate regional utility planning and extension of future development areas within the DGA.

Municipalities should coordinate with sewer and water providers to ensure that utility planning and extensions help to concentrate development within the DGA. Where appropriate, municipalities should seek reimbursement for design and construction costs related to utility extensions, particularly when these extensions are outside the DGA.

Strategies

U.2.A Coordinate cost effectiveness through a regional/countywide utility authority.

LIMC should work with all utility providers to identify opportunities for collaboration that will capitalize on economies of scale while providing services of uniform quality. A regional or countywide utility authority could be created and made responsible for monitoring utility services and developing consistent fee schedules, reimbursement policies, and cooperative funding mechanisms.

Objective U.3 - Require adequate stormwater management measures that prevent adverse impact to surrounding properties and watercourses.

The Pennsylvania Stormwater Management Act provides for the regulation of land use for the purpose of stormwater management, particularly in watershed areas such as the Mill Creek and Conestoga River watersheds. Municipalities should jointly develop stormwater management standards and performance codes that address the overall quality of water in the region, pursuant to Act 167 of state law under which the County implements watershed management programs.

Strategies

U.3.A Clarify or re-write current stormwater management requirements.

Stormwater management techniques are often referred to as “Best Management Practices” or BMPs. Municipalities should publish and distribute descriptive guidelines on the BMPs that they would like to promote throughout the region. All new proposals for development should be required to include plans for stormwater management using BMPs to mitigate adverse impacts to the environment.

Objective U.4 - Identify and promote energy-saving and more efficient utility technologies to promote environmental conservation and protection.

Municipalities should dedicate resources to creating and maintaining a sustainable, well functioning, and environmentally sound utility infrastructure. One way to promote such sustainability is through the introduction of more energy efficient technologies within utility systems. Full-cost pricing and public education regarding water management, energy use, and waste disposal are other strategies that can help to protect Central Lancaster County's environment and conserve its natural resources. The Pennsylvania Unified Construction Code requires energy saving technologies in new construction and renovation.

Strategies

U.4.A Provide economic incentives to promote the use of renewable energy technology such as gravity-flow sewer lines, groundwater recharge, and renewable energy.

In collaboration with utilities authorities, municipalities should create guidelines regarding the use of appropriate technologies in the region. Private and public utility companies and developers should be required to comply with these guidelines, particularly when utility lines are extended to accommodate new development.

U.4.B Promote environmental conservation and protection.

The public can play a very important role in conserving resources and protecting the environment. LIMC should work to educate the public about how they can use resources more efficiently. Through more energy efficient appliances, maintenance, and a variety of other techniques, homeowners and businesses can help conserve natural resources.

Objective U.5 - Provide facilities and services for proper disposal of refuse.

Solid waste facilities and services should meet the EPA's Municipal Solid Waste Landfill Criteria. These criteria offer guidance and regulations related to such topics as location, operation, and design of solid waste facilities. More information is available from the EPA at <http://www.epa.gov/epaoswer/non-hw/muncpl/criteria.htm>. Further details about the region's solid waste facilities can be found at the Lancaster County Solid Waste Management Authority website, at <http://www.lcswma.org/>.

Strategies

U.5.A Inventory existing solid waste disposal services and facilities.

LIMC municipalities should collaborate to create a map that shows the size and location of existing solid waste facilities throughout the region. Such an inventory should also include information about the remaining capacity of each facility in order to help municipalities plan for their future needs regarding solid waste disposal.

U.5.B Investigate potential areas for new facilities and services.

Municipalities should undertake an inventory of potential sites for new solid waste facilities. Potential sites must meet EPA requirements, and avoid locations near airports, within floodplains or wetlands, or along fault lines or other unstable landscapes. LIMC should consult geologic experts in determining the best sites for solid waste facilities and services.

U.5.C Build new facilities and/or provide services for proper disposal of refuse.

As the population grows and the need for refuse disposal expands, municipalities will need to build new facilities and/or provide alternative services for solid waste disposal. Expansion of recycling facilities should also be considered.

Objective U.6 - Increase the quantity of recyclable materials that are removed from the solid waste stream.

In order to address serious concerns in Pennsylvania in the late 1980s regarding waste management issues, including declining disposal capacity, increased waste generation, and increased disposal costs, the Commonwealth of Pennsylvania adopted the Municipal Waste Planning, Recycling and Waste Reduction Act of 1988 (Act 101). Since its adoption, municipalities across Pennsylvania, including the Central Lancaster County municipalities, have enacted mandatory recycling ordinances as required by the Act. Increased recycling efforts, not only by households, but also by commercial, institutional, and industrial establishments, as required by Act 101, are necessary to achieve the proven environmental and economic benefits of recycling.

Strategies**U.6.A Increase participation by all households in recycling newspaper, glass food and beverage containers, aluminum cans, and other materials as required by Act 101 and local municipal ordinances.**

LIMC municipalities should assess the participation by occupants of all residential units, both single-family and multifamily, in mandatory recycling programs. Where participation is lacking or inadequate, ongoing educational outreach should occur. With technical assistance from the Lancaster County Solid Waste Management Authority, a multi-faceted approach should be used, including inserts in utility bills, media campaigns, education through schools, or other outreach methods. Enforcement by municipalities should occur when necessary.

U.6.B Increase participation by commercial, institutional, and industrial establishments in recycling of high-grade office paper, aluminum, corrugated paper, and other materials as required by Act 101 and local municipal ordinances.

LIMC municipalities should also assess the participation of commercial, institutional, and industrial establishments in recycling materials identified in local ordinances. The Lancaster County Solid Waste Management Authority should assist LIMC municipalities in the planning and implementation of waste reduction/recycling training programs for nonresidential establishments. Enforcement by municipalities should occur when necessary.

Objective U.7 - Ensure that properties outside the DGA access safe water sources and appropriately manage their septic systems and stormwater.

In areas outside of the DGA, many residents obtain their water through wells, and dispose of their waste through septic systems. Municipalities should undertake measures to confirm the safety of groundwater resources, and educate the public about ways to maintain clean and well-functioning water and septic systems. Warwick Township publishes a brochure that informs the public about ways to monitor and protect well water, available at <http://www.warwicktownship.org/warwick/cwp/view.asp?a=7&q=531079>.

Strategies

U.7.A Routinely inspect water sources and septic systems of properties outside the DGA.

Municipalities should encourage property owners to regularly monitor their own well and septic systems. Authorities should also plan for routine inspections and strategic spot-checking to make sure that water and septic systems meet necessary safety standards, and that ground water resources are protected.

Objective U.8 - Discourage extension of public water and sewer service outside the DGA except in special needs areas, as defined by Act 537 plans.

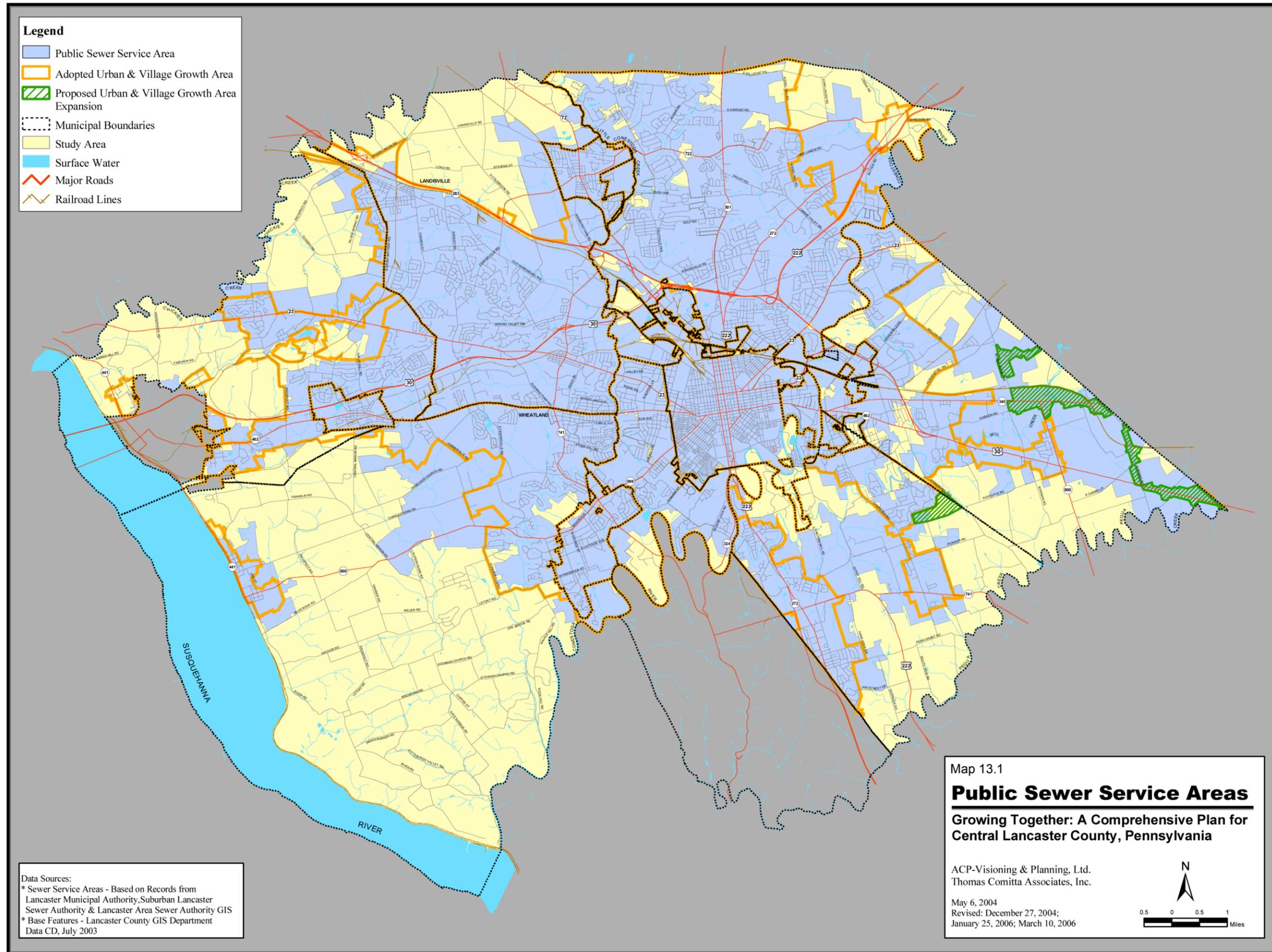
Municipalities must collectively restrict the extension of water and sewer lines beyond the DGA. They should also develop a common understanding about which special needs would qualify for service extension.

Strategies

U.8.A Refine zoning ordinances and Act 537 plans to prohibit infrastructure extensions beyond the DGA.

Zoning ordinances should be amended, and Act 537 Sewage Facilities Plans should be updated to strictly control infrastructure extensions within designated growth areas. Extensions outside the growth areas should not be considered until after 2030 or 2040, if at all.

Map 13.1



Map 13.2

