

Chapter 8 Public Utilities



Introduction

This chapter only is referencing those parts of the City of Lincoln served by the City’s Water and Sewer Department. The parts of the community served by other systems will not be addressed under this plan.

The City of Lincoln through the Water and Sewer Department has made large capital investments to create a safe and reliable water supply, treatment, and distribution system; wastewater collection and treatment system, and stormwater management services. These utility services meet the goals of providing safe reliable drinking water and protecting public health and the environment. The combination of a highly dependable water supply and competitive rates support and attract economic development. The City should work with the Public Works Department to develop and implement a comprehensive stormwater management program.

For the most part the City’s systems are capable of handling current and projected water, and sewer needs; however in isolated areas the City must continue to expand, improve maintenance and upgrade its facilities. The goals, objectives, and strategies of this section are intended to enhance the City’s ability to provide its citizens with safe, reliable, and cost-effective public utilities.

The Lincoln water distribution system delivers more that 760 million gallons of water a year to Lincoln homes and businesses. The wastewater collection and treatment system treats over 281 million gallons of sewage wastewater.

The City of Lincoln is an active part of the Logan Martin Lake Protection Association assisting in protection and debris removal projects in the Coosa River Watershed.

The Public Utilities Committee feels that environmental protection is an important and vital element when dealing with water, wastewater, stormwater and sanitation (solid waste). To this end, they have recommended that the City of Lincoln explore the benefits of implementing “Green Building” or Leadership in Energy and Environmental Design (LEED) standards.

Water Treatment and Distribution

The City of Lincoln’s Public Works Department has been rapidly growing over the past decades from a system with a single 50,000 gallon water storage tank, to one with six (6) water storage

tanks boasting a capacity of approximately 4,300,000 gallons. The city provides over a million gallons of water a day to more than 3,000 customers throughout the city.

The water system implemented a new radio-read meter system in 2007. All meters in the system should be replaced by the 2nd quarter of 2015. The radio read meters provide a more accurate and cost effective means of obtaining the meter data.

The Lincoln water system was designed to provide maximum service to customers. The backbone of the system consists of twelve inch piping which forms a complete loop around a substantial portion of the City. Deep wells and interconnection to adjacent water systems provide safe and reliable water sources for the community.

The City of Lincoln's 2014 Annual Drinking Water Quality Report states that the City has a very reliable municipal water system and the quality of its water has long been a source of community pride. Both of Lincoln's water sources are excellent and produce quality water.

In Lincoln, as with most systems within the State, a majority of the operational costs are generally fixed and known; however, only a small portion of the corresponding revenue is fixed. Going forward the City should focus on shifting more of the revenue to a fixed monthly charge instead of the volumetric charge currently employed. This will help stabilize future revenues and adequately fund the water system infrastructure needs.

The primary concern for all water systems is aging infrastructure. A Service Development and Maintenance Plan needs to be created to assist the Public Works Department in evaluating, maintenance, expansions, operations and capital budgeting. Another concern that needs to be considered is providing adequate redundancy within the system. This will aid with new development and redevelopment within the older sections of the community (Historic Downtown). Water rates should be set to fully fund the cost to operate the water system.

Additionally, the City should continue to adequately invest in the water system. Not only is water an essential service, the availability and quality of City water is a significant economic development tool— a major benefit to attract new businesses and industries.

Fire protection and ISO ratings are major concerns with municipalities and citizens as they relate to water delivery systems. These concerns are no different in Lincoln, and have not been an issue in the past. The City has worked closely with all area Fire Departments to assess the system, and put into place developmental policies, and necessary improvements, to upgrade or maintain the current ISO ratings.

In addition to serving the City, the system supplies water to Honda for all domestic uses (restrooms, break rooms, etc.). Under an agreement water for manufacturing purposes is supplied by Anniston and Lincoln receives fees for this franchise.

The system also has the potential to serve other surrounding communities or systems; if this occurs, it could provide a significant source of revenue to the Water Fund. If such expansions are considered, water rates should be evaluated. In the meantime, the City should continue to pursue a planned course of operations, system improvements and system expansions. A regional approach to water services is the most economical way to deliver services.

Wastewater Collection and Treatment

The City of Lincoln owns and operates a state-of-the-art wastewater treatment facility. The City built its first wastewater treatment system in the 1980's, and with the arrival of Honda a new modern wastewater system that treats over a million gallons of wastewater daily was placed into operation.

The system utilizes ultraviolet light for disinfection which provides protection of the environment. As technology improves the facility will search for ways to reuse the byproducts such as, bio-solids, grease, used oil, and other resources to improve the process and decrease energy costs. The reuse of bio-solids is potentially the best and most cost saving option for handling system byproducts. Recycling of wastewater byproducts is in its infancy and not cost effective at this time, but the future looks very bright, and the City should keep abreast of emerging technologies.

The Lincoln wastewater treatment plant complies with all ADEM regulations and publishes an annual Municipal Water Pollution Prevention report (MWPP). The wastewater personnel also provide water testing for area cities.

As with other man-made items aging infrastructure of the sewer collection system is ongoing and as such adequate resources need to be devoted to maintenance and renewal. Particular attention needs to be paid to increasing resources for maintenance and capital projects in an effort to eliminate sanitary sewer overflows and make improvements in areas where capacity may be an issue. Inadequate sewer capacity could essentially halt development in the areas upstream. Programs such as the Fats, Oil, and Grease Program should be fully implemented and enforced to help avoid sewer blockages caused by grease.

Many areas of the City are not currently served by sewer. At risk is the long term sustainability of these neighborhoods as well as impacts to water quality. Policies need to be developed that address this issue in the most economical and equitable way possible.

In addition, the policies surrounding mandatory connections and grinder pumps need to be addressed and clarified. At what point does the City require residents to connect to the sanitary sewer as a means of protecting the environment as well as other citizens? These issues are as much financial as they are health related. Who bears the cost of the connection now or the

environmental mediation? Grinder pump policies, and issues regarding who owns and maintains them, have been a financial drain on Lincoln for several years. The City needs to address this issue promptly and establish a policy on the issue of grinder pumps and other privately installed sewer treatment systems. Consideration must be given to whether the City wants to take on the responsibility of maintenance and ownership of equipment on private property and the legal issues surrounding the question.

As with its water system, the City has used the availability of wastewater treatment as an economic development tool—a major benefit to attract new businesses and industries. Several industries have located in Lincoln because of the combination of available water and wastewater treatment.

Stormwater Management

Just as it is in Lincoln stormwater management has become an increasing concern to municipalities all over the state. Questions are being asked regarding who is responsible for the management of the stormwater run-off, who created the problem, and who owns the stormwater management systems (drainageways, ditches, inlets, and retention and detention ponds).

The City needs to examine this issue in detail and make a determination on ownership policies and regulations. These regulations should be incorporated into the subdivision regulations and/or developmental policies. As a result of any increase regulatory and stormwater infrastructure needs, the City may wish to implement a stormwater utility and associated fee in order to have a dedicated funding source to meet the stormwater program goals and requirements. The City may also want to take a comprehensive approach to managing its stormwater program and should select a consultant to assist with the development of a stormwater master plan.

Sanitation Services

The City of Lincoln's waste and garbage disposal service is provide by Advanced Waste Company on a subscription basis.

Goals

The Public Utilities Committee identified five primary goals for inclusion in the City's Comprehensive Plan. Along with these goals have been provided recommended action items for which the City will need to formulate policies and programs to carry out.

PU-1. Provide safe and abundant water for drinking and for fire protection for the community.

- a. Require that new growth be consistent with developmental standards within City ordinances, regulations and policies.
 - All new development or redevelopment must comply with minimum developmental requirements.
- b. Achieve the best practical fire protection rating to reduce insurance costs for local residents.
 - Ensure that all new improvements and maintenance are maintained at current policy requirements.
- c. Provide the highest practical drinking water quality.
 - Ensure all water testing and sampling are at required levels or above.
- d. Require nonfarm uses within the city limits to connect to city water supplies wherever they are available.
 - Work with all nonfarm uses to connect to the systems within the next three years.

PU-2. Provide efficient and environmentally responsible wastewater collection and treatment.

- a. Encourage the installation of separate storm and sanitary sewers to increase the capacity of each and reduce the discharge of waste into the waterways.
 - Ensure development regulations that require separate storm and sanitary sewers.
 - Work with private owners to correct combination systems as soon as possible, where feasible.
 - Require that all liquid wastes (industrial, commercial, and household) be properly treated.

- b. Minimize the amount of clear water (from down spouts, infiltration, etc.) which enters the sanitary sewer system to increase capacity and reduce treatment costs.
 - Inspect lines, smoke test when necessary to determine condition and repair as required.
 - Establish a policy on the issue of grinder pumps and other privately installed sewer treatment systems.

PU-3. Provide high-quality utility service at the lowest possible rates.

- a. Costs for utility improvements necessitated by new development should be borne in a fair and equitable manner by the developer, not by the community as a whole. New development should not diminish the level of service currently enjoyed by local residents.
 - Ensure that fee structures developers are required to pay for utility extensions to serve their subdivisions or developments cover indirect cost impacts to the capacity of the system, particularly the treatment plant.
- b. Use available outside funding sources, such as state and federal grants, to help pay for needed improvements and extensions.
 - Reduce the cost impacts of utility systems on individuals by using available outside funding sources to help pay for utility improvements.
- c. Maintain the systems in a manner which will minimize costs.
 - Ensure regular maintenance is performed on the sewer and water systems.

PU-4. Ensure that all utilities serving city residents are of the same high standards.

- a. Manage and/or direct community growth through utility policy.
 - The city should use its investments in utilities to direct growth to areas where such growth is desired and can be supported.
- b. Provide utility extensions, improvements, and upgrades only in a manner consistent with the city's growth management strategy.
 - Ensure utility extensions and improvements to areas where development is consistent with the city's plans for growth.

- c. Eliminate conflicts among competing utilities.
 - Coordinate with other utilities that have authority to provide service in and around Lincoln.
 1. Fire Service Insurance Ratings (water flows necessary for hydrants adequate for city fire-fighting equipment)
 2. Economic Development
 3. Large Scale Retail Development
- d. Ensure public control of utility policy.
 - Ensure the utility policy operates responsibly in relation to the City's growth policy.

PU-5. Promote “Green Codes” (LEED) integration in development standards.

- a. Incorporation “Green Codes” within the current development policies and city department policies
 - Adoption of International Green Building Codes
 - Educate City staff and developers on Green Code techniques
 - Encourage Green Code techniques utilized on City projects and incorporated within the bidding processes

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