
CHAPTER 5 CITY UTILITIES

Like streets and transportation systems, utilities represent a major public investment and have a direct impact on the distribution and intensities of land use. When planned in accordance with Master Plan goals, utilities can provide an effective means to help guide development along preferred development paths.

Water and Well-Head Protection Programs

The City water supply is derived from four (4) production wells located immediately southwest of the City in Filer Township. Generally, a combination of two (2) or more wells are necessary to produce the average day of the peak month demand of approximately 2 MGD.

According to a recent water system study, the City has enough supply and storage capacity to meet projected demands and to sustain anticipated levels of future growth. The study however noted that fire suppression flows for certain parts of the City, including the M-55 Renaissance Park and the downtown commercial district, were inadequate due to a series of 4" mains that cannot deliver the necessary water volumes. According to the report, an estimated \$4 million worth of recommended improvements would help alleviate the system's current deficiencies. The study noted further that the City's water supply system was operated in a safe manner, assisted by the City's participation in a Wellhead Protection Program.

The adoption of Manistee's *Wellhead Protection Program* dates from April 2000. The program was initiated in part, by the discovery of elevated levels of chlorides in the vicinity of the City's wellfield. Other contaminants that could potentially pose a threat to the City's water supply include: salts, fertilizers, pesticides, nitrates and leeches from nearby brine wells and septic systems. The Wellhead Protection Plan outlines a series of precautionary measures and best management practices designed to lessen or prevent both the introduction of new contaminants, and the migration of known contaminants, into the City's underground aquifer. It is important that future zoning initiatives offer adequate protective measures for the City's system of wells, including proper isolation distances, controls on area land uses, and like factors. It is also important that the City consider measures to curb potential vandalism of the wellhead sites.

The Master Plan endorses the City of Manistee Wellhead Protection Program and efforts associated with the provision of safe and adequate potable water supplies for the City. Further, the plan recommends the implementation of zoning regulations to protect ground water supplies to meet the needs of current and future residents, businesses, and industrial users.

Sewer

A 1997 sewer overflow study recommended \$1.3 - \$1.5 million worth of improvements to the City's wastewater collection system. These improvements are designed to help prevent the periodic sewer discharges that have plagued Manistee Lake over the years. Proposed system improvements include an additional retention basin, additional transport sewers, and expanded capacity of the City's wastewater treatment plant. An alternative proposal presented in the study suggested the possible future separation of the City's sanitary and storm sewer components. This could be done on either a complete or partial basis depending on cost and land acquisition factors.

Storm Sewer

As indicated above, the City has examined and programmed improvements leading to the separation of sanitary and storm sewer components in order to improve the efficiency of the sanitary sewer system and to reduce or eliminate unnecessary discharges to the sanitary sewer system. The plan recommends that future developments fully consider and program on-site systems capable of supporting the proper containment and disposition of storm water.

Provision of Utilities to Neighboring Communities

The growth and development of the townships adjacent to the City are somewhat dependent on the provision of utility services. Historically, the adjoining units have examined the options of implementing their own utility services or the utilization of those of the City of Manistee. Generally, the cost of developing and maintaining independent facilities exceeds those of connecting to the systems provided by the City. Manistee has been willing to provide utility services predicated on service fees considered fair and reasonable given the historic investments of the City in developing and operating its utility systems.

The Master Plan recommends that the City of Manistee cooperate with the adjoining units of government in the provision of municipal water and sanitary sewer services. The provision of services should be based on a financial arrangement which adequately compensates the City for the services provided, recognizing the historic financial resources provided by the City in developing and upgrading the systems to modern standards.