

# Utilities

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## Introduction

In Allen County, the availability of utilities (particularly sanitary sewer) continues to be a key driver in determining locations for new development. Therefore, plans for future utilities expansion must be aligned with future land use and development objectives. This chapter looks at the existing sewer, drinking water, and stormwater management systems in Allen County and Fort Wayne, and provides recommendations for meeting the dual goals of improving regional water quality while extending services to new areas.

## Overview

This chapter outlines the recommendations for addressing the provision of utilities in Allen County and Fort Wayne, and is organized in the following sections:

- Policy Foundation of the Plan;
- Goal;
- Key Findings; and
- Objectives and Strategies.

## Policy Foundation of the Plan

The foundation of the Plan was shaped by an extensive community involvement and planning process (see Executive Summary). The Comprehensive Plan has three key layers of policies: goals, objectives and strategies. Goals are the broadest policy statements that state a desired outcome in general terms. Objectives indicate a more specific policy direction and help organize strategies. Strategies are detailed actions necessary to initiate or complete an objective – such as a program or project. There are multiple objectives for each goal and multiple strategies for each objective. The recommendations for each element of the Plan contain all three policy layers.

## Goal

The following goal for the Utilities element was developed by the Steering Committee based on citizen input:

*Safe and abundant drinking water and regionalization of interests for improving regional water quality—such as reduction of failed septic systems and improved performance from sanitary sewers and storm water facilities—that is expandable to meet demands and support community plans for growth.*

## Key Findings

A summary of key findings derived from the existing conditions analysis related to utilities in Allen County and Fort Wayne is outlined below. For a more detailed explanation of each finding, see the Utilities chapter of the Existing Conditions report.

## **Sanitary Sewers**

There are fourteen separate sanitary sewer systems in Allen County, which serve about 100,000 customers, including households and businesses. There are approximately 18,000 properties on individual septic systems, which have a tendency to fail, particularly in the hydric soil areas prevalent throughout the county. The three main sewer providers are the City of Fort Wayne (serving 80% of

the customer base), Aqua Indiana (12%), and the City of New Haven (5%). Many of the small, individual treatment systems were developed during the 1950s, when Allen County planning entities adopted a subdivision control ordinance that required sanitary sewer systems. Today's regional water quality concerns include failed or underperforming septic systems, combined sewer overflows (CSOs), and sanitary sewer overflows (SSOs). Solutions for managing these problems can be costly. Fort Wayne, Allen County, and other sewer system providers must find suitable ways to mitigate existing problems, while expanding sewers to support community developments.

### **Drinking Water**

In a pattern similar to sewer systems, the provision of drinking water is dominated by the City of Fort Wayne (serving 75% of the customer base), Aqua Indiana (18%), and the City of New Haven (5%), with nine small systems meeting the remaining needs. Properties not served by these systems rely on individual wells. All drinking water utilities have designated source water protection areas to preserve raw water supplies. For the City of Fort Wayne and the City of New Haven, this means protecting the St. Joseph River through a variety of watershed initiatives. For other systems, this means creating wellhead protection areas to protect groundwater wells.

### **Stormwater and Drainage Systems**

Unless it is properly managed, stormwater runoff and inadequate drainage can have negative impacts on property, environmental quality, and public health. Due to increased public demand for improvements in stormwater management, as well as closer environmental regulatory scrutiny, stormwater runoff has become a key concern for the region. Stormwater management is an inter-jurisdictional concern, since drainage patterns and aquifer recharge areas do not adhere to political boundaries. Allen County, Fort Wayne, and various stormwater management agencies must look for coordinated strategies related to funding, development standards, and regulations that promote effective stormwater management and drainage systems.

### **Objectives and Strategies**

Outlined below are objectives and strategies to support the provision of Utilities.

#### **OBJECTIVE UL1.**

#### **ENSURE COOPERATIVE DECISION-MAKING AND UNIFORM STANDARDS FOR PROTECTING WATER QUALITY THROUGHOUT THE REGION.**

Water resources are inter-jurisdictional in nature. Groundwater and surface water flow freely between jurisdictions, as do various contaminants and stormwater runoff. Therefore, solutions to protecting water quality should be inter-jurisdictional and cooperative in nature. The following strategies provide recommendations for addressing water quality issues in a cooperative manner.

#### **UL1.A Develop a collaborative water quality partnership among local governments, stakeholders, and utility providers.**

Allen County and Fort Wayne should work with the St. Joseph Watershed Initiative and all water utility providers to identify opportunities for collaboration that will capitalize on economies of scale while providing services of uniform quality. A regional or countywide water utility partnership could be created, which could explore the possibilities for coordinating utility services and developing cooperative funding mechanisms.

## **OBJECTIVE UL2.**

### **UTILIZE THE CONCEPTUAL DEVELOPMENT MAP AS PART OF THE COMMUNITY'S UTILITY DECISION MAKING PROCESS.**

The Land Use Chapter of this plan provides a Conceptual Development Map and accompanying land use principles that will have significant impact on development patterns in Allen County and Fort Wayne. In particular, the Conceptual Development Plan calls for future development to be more strategic, compact, and contiguous to existing development. Adherence to these development principles will enable utility services to be extended in a more efficient manner, with shorter lines accommodating a larger population. At the same time, strategic extension of utility services can also be used to manage and control growth. Water and sewer services should not be extended beyond the scope of the development patterns outlined in the Conceptual Development Map.

#### **UL2.A Recommend the adoption of the Conceptual Development Map by City of Fort Wayne Public Works, Aqua Indiana, LLC and approval by other local utility providers.**

The final Conceptual Development Map should be presented along with the Plan for adoption by City of Fort Wayne Board of Public Works, Aqua Indiana's governing body and the approval by the Boards of other local utility providers. In order for the Conceptual Development Map and Plan to be an effective tool for planning growth and development, all utility providers will need to utilize the Map and Plan as a guide for the expansion of utilities. Both the Map and Plan will also need to be formally reviewed and updated so that development trends can be incorporated when necessary. A process should be established and implemented for this review and update.

#### **UL2.B Coordinate community utility improvements and expansions within the Conceptual Development Map growth areas.**

One of the key findings of the Land Use chapter of the Existing Conditions report was that the availability of adequate infrastructure, particularly sanitary sewer systems, is a primary driver of new development. In light of this, it becomes very important to coordinate community infrastructure improvements and expansions. A formal process to allow for Plan Commission review and comment on proposed utility and transportation system improvements, Certificate of Territorial Authority (C.T.A.) service areas expansions and school district facility expansions, should be established and implemented to help plan and coordinate those improvements with existing and proposed land uses.

#### **UL2.C Significant utility, service area, Certificate of Territorial Authority (C.T.A.) and infrastructure expansions should not be endorsed outside the Conceptual Development Map growth areas.**

As noted above, the availability of adequate sanitary sewer infrastructure is a primary driver of new development. Because of this, it is also very important that other significant community infrastructure or facility improvements and expansions do not take place in areas where adequate sanitary sewer does not exist; conversely, significant sanitary sewer infrastructure expansions should not take place in areas which would require other significant community infrastructure or facility investments, unless a community decision has been made to make those investments in those areas. As part of the formal process to allow for Plan Commission review and comment on proposed utility and transportation system improvements, and school district facility expansions, it should be understood that there will be times that the County or City Plan Commission may recommend against certain proposed community infrastructure improvements or community facility expansions.

### **OBJECTIVE UL3.**

#### **THE DUAL GOALS, TO PROVIDE INFRASTRUCTURE TO NEW DEVELOPMENT AND MAINTAIN THE EXISTING SYSTEM IN ACCORDANCE WITH FEDERAL STANDARDS SHOULD BE PLANNED FOR IN A COORDINATED COUNTY-WIDE MANNER.**

It remains important to improve the regional water quality through the successful reduction or elimination of failed septic systems, combined sewer overflows (CSOs) and sanitary sewer overflows (SSOs). Equally important is the ability to provide sanitary sewer capacity for new land development.

### **OBJECTIVE UL4.**

#### **IMPROVE AND EXPAND SANITARY SEWER SYSTEMS WITHIN THE CONCEPTUAL DEVELOPMENT MAP AREAS.**

The following strategies provide recommendations for monitoring, improving, and expanding sanitary sewers in Allen County and Fort Wayne.

##### **UL4.A Encourage improvements to existing sewer systems to resolve sewer overflows.**

Combined sewer overflows (CSOs) and sanitary sewer overflows (SSOs) represent a major threat to water quality, environmental quality, and public health. Overflow and discharge data should be tracked on a regular basis to identify areas in need of priority intervention.

##### **UL4.B Maximize capacity of existing systems by promoting infill development.**

Infill and redevelopment within areas that are already served by a larger sewer utility provider (i.e. the City of Fort Wayne, Aqua Indiana, and the City of New Haven, the City of Woodburn and the Town of Monroeville) will help to maximize the capacity of existing systems and minimize the need for additional infrastructure investments.

##### **UL4.C Require future new residential development to occur concurrently with sanitary sewer expansion.**

A substantial number of failed septic systems already exist in the community; the high rate of failure is due in part to the area's hydric soils. Current growth trends are placing more residential subdivisions as well as metes and bounds residential development at the periphery of suburban and urban areas, where public sewer and water are not yet available. Septic failures at such densities can have much more dire consequences. All future development in Allen County and Fort Wayne within the Conceptual Development Map area should be required to coincide with sanitary sewer extensions.

##### **UL4.D Provide direction for alternative methods for the processing of sewage.**

Alternative means for the processing of sewage should be investigated such as the utilization of wetland clusters. Other non-traditional methods may provide cost effective ways to accommodate the processing of sewage where traditional means are unavailable or too costly.

#### **UL4.E Discourage development on conventional septic systems**

Soils in Allen County are generally poorly suited to accommodate conventional septic systems. This is of particular concern to the northern part of Allen County where a large concentration of septic systems could generate high E Coli levels.

#### **UL4.F Discourage on-site wastewater package treatment facilities.**

On-site wastewater package treatment facilities have been a concern in Allen County due to the lack of long term maintenance of these facilities. One objective of the planning process has been to address the existing on-site wastewater disposal problems in the County and prevent reoccurrence in the future. The proposed application of new, more restrictive standards for soil testing and design of leach fields by the Indiana Department of Environmental Management and the State Board of Health may mean fewer septic systems in the future. Where future individual on-site wastewater disposal systems can be utilized, an approach must be applied that ensures proper long term functioning.

### **OBJECTIVE UL5.**

#### **WORK WITH THE DEPARTMENT OF HEALTH AND OTHER AGENCIES TO PROTECT AND ENHANCE DRINKING WATER SYSTEMS.**

While the majority of drinking water for Fort Wayne is supplied by the St. Joseph River, most residents outside of Fort Wayne rely on groundwater resources to meet their drinking water needs. Strategies for protecting and enhancing drinking water in Allen County and Fort Wayne must address both groundwater and surface water supply systems. The protection of drinking water systems is also enhanced by discouraging development on conventional septic systems and discouraging on-site wastewater package treatment facilities, as noted in Objective 4.

#### **UL5.A Create a county-wide map of all wellhead protection areas. Encourage efforts to identify and map additional types of wells that could be significantly impacted by contaminated groundwater.**

Wellhead protection areas are defined through hydrogeologic analysis to determine how quickly groundwater (along with possible contaminants) could travel to a well. Currently, only “community” well water systems are required to develop Wellhead Protection Plans with defined wellhead protection areas. Allen County and Fort Wayne should undertake efforts to identify and map additional wellhead protection areas for other types of wells. Protective land use regulations should be developed within these areas to minimize contamination of groundwater.

#### **UL5.B Expand and enhance initiatives to protect the St. Joseph, Wabash and Maumee River watersheds.**

The St. Joseph River provides most of the drinking water for Fort Wayne. In the mid 1990s, after tap water samples were discovered to contain nine different herbicides, concerned citizens and stakeholders formed the St. Joseph River Watershed Initiative to promote better water quality. Fort Wayne and Allen County should collaborate with this organization and other watershed groups to identify and reduce pollution sources, expand green infrastructure that helps to filter contaminants, and encourage appropriate land use and development guidelines that will reduce river contamination.

**UL5.C Work with local groups to educate the public about practices to protect groundwater and river water in order to maintain drinking water quality.**

Throughout the county, many suburban and rural residents obtain their drinking water through wells and dispose of their waste through septic systems. Allen County and Fort Wayne should undertake measures to educate the public about ways to maintain clean and well-functioning water and septic systems. They should also collaborate with local environmental groups such as the St. Joseph River Watershed Initiative in order to develop messages that inform the public about what they can do to protect the county's rivers and streams.

**OBJECTIVE UL6.**

**ENHANCE STORMWATER MANAGEMENT AND DRAINAGE SYSTEMS.**

Stormwater and drainage patterns are determined by natural and topographic features, rather than jurisdictional boundaries. Therefore cross-jurisdictional, inter-agency cooperation is imperative to meet stormwater and drainage needs. The following strategies outline recommendations for pursuing cooperative strategies in regulating stormwater management and drainage systems.

**UL6.A Establish a regulatory partnership to coordinate stormwater management on a county-wide basis.**

The City of Fort Wayne operates a public stormwater utility that is based on user fees and regulates more than 600 miles of sewer lines, ditches, channels, and drains. This utility should collaborate with other stormwater authorities in Allen County to create a regulatory partnership that will monitor stormwater and drainage issues throughout the county to ensure that existing systems are meeting the public's needs and protecting the environment.

**UL6.B Ensure uniform standards for stormwater management and drainage systems.**

Stormwater management techniques are often referred to as "Best Management Practices" or BMPs. Allen County and Fort Wayne should continue to publish and distribute descriptive guidelines on the practices that they would like to promote throughout the region via the Allen County Stormwater Technical Standards Manual. All new proposals for development and infrastructure should be required to include plans for stormwater management using BMPs to mitigate adverse impacts to the environment.

**UL6.C Encourage the acquisition of former railroad right of ways for trail usage and utility easements.**

Acquisition of former railroad right-of-ways is a significant opportunity to provide for extension and connection to existing trail systems. Their potential use for utility extension projects may also mean savings in time and project costs verses utilizing local street right of ways and private easements.