# Public Utilities Plan

The Public Utilities Plan addresses maintaining the present sanitary sewer and water systems, extending sewer and water lines on the perimeter of the community and protecting the natural environment in the process.

## Summary of Public Utilities Issues

These are the major public sewer and water systems issues identified through the Assessment of Conditions and Issues.

1. **Sanitary Sewer and Water Main Extensions**: What should the City of Eau Claire do to ensure coordination between the cost-effective extension of sanitary sewer or water mains and future development in the City's Extra-Territorial Plat Approval Area?

   *The City has entered into agreements with the five adjacent Towns regarding future trunk utility extensions, land use patterns and road improvements as they apply to properties that successfully petition for annexation to the City. The challenge now will be for groups of land owners and the City to agree on the timing, extent and equitable cost-sharing of the improvements.*

2. **Urban Sewer Service Area:** Should the City seek adjustments to its existing Urban Sewer Service Area boundary before 2030?

   *The City believes that there is sufficient land in the Sewer Service Area to accommodate growth through the 2030 planning period.*

3. **Regional Planning:** What should the City of Eau Claire do to encourage more effective coordination in the metropolitan area in providing the sanitary sewer and water infrastructure necessary for supporting future residential and business growth essential to the continued economic vitality of the area?

   *The City believes that the Intergovernmental Agreements mentioned above and described in the Land Use and Growth Management Assessment should provide sufficient coordination for effective perimeter and infill growth through the 2030 planning period.*

4. **Surface Water:** What should the City of Eau Claire do to ensure effective management of surface water drainage and safeguarding of the water quality in City watersheds?

   *The City has adopted a plan that guides and an ordinance that regulates the management of surface water and its related threats in a manner consistent with State law.*

5. **River Flooding:** Should the City acquire additional houses from the floodplain in the North Riverfronts Neighborhood and other floodplain areas?

   *Those houses were acquired and the area is now called North Riverfront Park. Other flood-prone properties remain developed along First Avenue.*

6. **Riverbank Stabilization:** Should there be greater emphasis placed on natural means of riverbank stabilization as opposed to rip-rap or concrete?

   *The Waterways Plan (2012) recommended and described natural means of riverbank stabilization.*

7. **Water Quality:** What actions should the City take to maintain or improve the quality of water entering the Chippewa and Eau Claire Rivers?

   *The City has strengthened its regulation of surface water and erosion control since the 2005 Comprehensive Plan.*

## Goal and Objectives for Public Utilities

Based on the Assessment of Conditions and Issues, the following objectives were established for the Public Utilities Plan chapter of this *Comprehensive Plan*.

### Goal

**Maintain the existing public utility system and extend lines to newly-annexed properties while minimizing harm to the natural environment.**

#### Objective 1 – Existing Water and Sewer System Infrastructure

Maintain and improve the condition of the existing sanitary sewer and water infrastructure.

#### Objective 2 – New Water and Sewer System Infrastructure

Implement the features of the Intergovernmental Agreements and the Sewer Service Area Plans as they pertain to the extension of City utilities to newly annexed properties.

#### Objective 3 – Public Utility System Expansion

Extend City sewer and water mains to serve newly-annexed properties according to engineering studies.

#### Objective 4 -- Surface Water Management

Implement the *Eau Claire Comprehensive Stormwater Management Plan*, the subsequent sub-area studies and the State water quality permit under NR 216.

#### Objective 5 – The Natural Environment

Maintain the existing public utility system and construct new public utility infrastructure in a manner that minimizes harm to the natural environment.

This plan includes recommendations for improvements to the water wells and filtration complex.

## Public Utilities Objectives and Policies

### Objective 1 – Existing Public Water and Sewer System Infrastructure

**Maintain and improve the condition of the existing sanitary sewer and water infrastructure.**

**Policies**

#### 1. Assess the Condition of the Existing System

Continue to regularly inventory the condition of existing sewer services, trunks, structures, pumps and water mains.

#### 2. Wastewater Treatment Plant Improvements

Complete the remaining improvements recommended by the 2007 *Wastewater Treatment Plant Facilities Plan Amendment.* These include replacing the rotating biological contactor system with a nitrifying activated sludge system by 2020. If the City decides to not adopt total nitrogen effluent standards, it may elect to build a non-nitrifying activated sludge system.

#### 3. Major Sanitary Sewer Improvements

Study the feasibility of and budget for replacing the Chippewa River Interceptor Sewer. That pipe, built in 1939, serves a large portion of central Eau Claire and runs from the North Barstow District, under the Eau Claire River, through the South Barstow District, under the Chippewa River near Lake Street and then along the northern bank of the river to the treatment plant located near I-94. Pipe conditions have deteriorated to the point that repairs are becoming uneconomic and the risk of failure is approaching an unacceptable level.

#### 4. Water Supply and Treatment

Consider including in future capital improvement programs and City budgets the recommendations of the 2014 *Water Supply and Treatment Evaluation*, which addressed improvements at the water well field and treatment system. Those recommendations included:

- Rehabilitate the filters
- Abandon Well #4 and site two new wells north of existing Well #19
- Install a new generator at the treatment plant
- Study and improve the pH control system
- Modify the settling basins
- Fully automate the treatment plant
- Construct a 1 million gallon clear well and modify the filer backwash process
- Replace Well #11 after installing the new wells north of Well #19.

### 5. Water Distribution System

Consider including in future five-year capital improvement programs and annual City budgets the recommendations of the 2014 *Water System Evaluation*, which addressed improvements to the network of water mains. Those recommendations included:

- Construct a second (redundant) 30-inch main across the Chippewa River from the treatment plant.
- Improve fire flow volume and pressure in localized areas through looping or pipe replacement as described in the study
- Reduce overly-high water pressures in certain areas of low elevation as described in the study
- Consider adding storage in the Southwest pressure zone.

A preliminary opinion of probable cost was included in the report for each of the recommendations.

The City will also follow the recommendations of the report regarding:

- Water facilities maintenance
- Storage facilities maintenance
- Booster station maintenance.

### 6. Coordinate Utility and Street Work

Continue to coordinate the street reconstruction program with the replacement and repair of under-street sewer or water lines.

When rebuilding a street, replace any water lines that meet these criteria:

- Any pipe older than 75 years
- Any water main built between 1940 and 1960 that is made of cast iron
- Any locations where there has been a cluster of water main breaks.

### 7. Minimize Infiltration and Inflow to the Sanitary Sewer System

Maximize the efficiency of the existing sanitary sewer system by continuing to implement improvements that reduce infiltration and inflow.

### 8. Update Sewer and Water Infrastructure Studies

Update the two-part 2014 *Water Source and Distribution Study* every five years.

Update the 2007 *Wastewater Treatment Plan Facilities Plan Amendment* in approximately 2025.

## Objective 2 – Perimeter Growth Management for Public Utilities

**Implement the features of the Intergovernmental Agreements and the Sewer Service Area Plans as they pertain to the extension of City utilities to newly annexed properties.**

These policies coordinate with several from the Land Use Plan chapter.

### Policies

#### 1. Perimeter Growth Management Plan

Follow the perimeter growth management techniques outlined in the Land Use and Growth Management Plan chapter, including:

**Growth Management Areas**

Use the Urban Area, the Urban Sewer Service Area and the Extra-Territorial Plat Approval Area to organize land use regulations and utility extensions.

**Intergovernmental Agreements**

Follow the provisions of the Intergovernmental Agreements negotiated with each of the five adjacent Towns. Those provisions relate to development density, public water and sewer service, private water and sewer service, and cooperative boundary agreements for land within the Sewer Service Area (SSA) and land between the SSA and the limits of the Extra-Territorial Plat Approval Area. [1]

**Sewer Service Area Plans**

Apply the Sewer Service Area Plans with regard to newly-annexed properties.

**USSA Boundary**

Study the need to amend the boundary of the Urban Sewer Service Area whenever the *Chippewa Falls / Eau Claire Urban Sewer Service Plan* is updated by the West Central Wisconsin Regional Planning Commission.

**Annexation Petitions**

Approve annexation petitions that are consistent with Policy 2, below, and Objective 11, Policy 2, of the Land Use and Growth Management Plan chapter of this comprehensive plan.

#### 2. Sequence of Public Utility Improvements

Give most favorable consideration to annexation petitions that allow public sewer and water lines to be extended in a cost-effective sequence. Utility extensions that are not optimally efficient will be considered but the added cost will likely be passed on to the petitioner.

Trunk sewer and water lines will be extended from the City's systems to serve land that is transferred from Town jurisdiction to City jurisdiction. Geographic features will dictate the routes for these main pipes to a large degree, particularly in the case of the sanitary sewer lines, which usually rely on gravity flow.

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[1] Please refer to page 2-14 of the Land Use Plan chapter for a definition of these growth management areas.

### 3. Eligibility for Municipal Sewer or Water Service

Continue the policy of providing municipal sewer or water service only to (a) properties within the City of Eau Claire, (b) properties subject to an intergovernmental cooperative boundary agreement or (c) land that is the subject of another form of intergovernmental cooperation agreement.

### 4. Feasibility Studies and Cost-Sharing

In Eau Claire, the portion of the public sewer and water system that is located under the Local and Collector Roads in a new neighborhood is normally financed and installed by the land developer then given to the City at no cost. Occasionally, some of the extensions needed to get the pipes to the edge of the subdivision are also financed privately.

However, the cost of extending the trunk lines to the vicinity of the neighborhood -- lines that are intended to serve other neighborhoods as well -- are often financed and built by the City with the costs spread to landowners within the City for the broad benefit. For landowners outside the City, the assessment is deferred until annexation. The land developer may be required to pay some portion of the cost of building or improving roads that lead to his land.

Either before or after an annexation, one or more landowners may petition the City to study the cost of extending City trunk sewer, water and, perhaps roads, known as a feasibility study. Such studies estimate the project costs and propose how they will be shared among the benefiting landowners and, perhaps, the City. If the project is approved and built, the City would then distribute and assign the assessments to the benefiting lots within the City and defer the assessment for benefiting lots outside the City until annexation. The affected Town would be notified of the annexation request.

The Special Assessment Policy of the City of Eau Claire (June 22, 2004) describes the methods that may be used to distribute equitably the cost of various types of public improvements projects, the number of years that property owners will be given to repay their costs, and what percentage of certain costs may be borne by the City.

### 5. Possible Additional Agreements with the Towns

Intergovernmental agreements with one or more of the adjacent Towns may be negotiated to help extend or improve public roads or utilities in response to private land development and annexation applications. Such agreements are allowed by state law under these Wisconsin Statutes:

- Section 66.0301, Intergovernmental Cooperation
- Section 66.0305, Political Subdivision Revenue Sharing and
- Section 66.0307, Boundary Change Pursuant to an Approved Cooperative Plan.

## Objective 3 – Public Utility System Expansion

**Extend City sewer and water mains to serve newly-annexed properties according to engineering studies.**

Conceptual routes for extending City sanitary sewer and water lines have been prepared. Additional studies will be needed to determine optimum routes, and feasibility.

The City prepared a major engineering study of its water distribution system in 2014 that addressed improvements needed to serve current and future customers. That report, *Water System Evaluation*, assumed City expansion through annexation and projected population growth within the current City limits and future annexation areas; it assumed full development of the Sewer Service Area of each of the five Towns adjacent to the City; and it took into account the five *Sewer Service Area Plans* prepared by the City in 2013.

A comparable engineering study has not yet been prepared for the City's sanitary sewer system. However, the general routing of future sewer trunk lines has been forecast based on topography, land use, connection points and anticipated development sequencing. Those routes were originally shown in the *Sewer Service Area Plans* prepared in 2013.

### Policies

**1. Engineering Studies**

Refine through more detailed engineering studies the conceptual plans for the extension of trunk water lines into the Towns. Preliminary alignments are illustrated by Figure 4-2 through 4-8.

**2. Water System Evaluation, 2014**

Anticipate extending the City's water system to newly-annexed areas consistent with the assumptions of the 2014 *Water System Evaluation*. Figure 4-1 illustrates the conceptual alignment of the trunk lines, the service areas, pressure zones, booster pumps and reservoirs that are likely to be needed in each of the fiver Sewer Service Areas.

This section of the chapter outlines preliminary plans for extending water and sanitary sewer lines into future service areas,

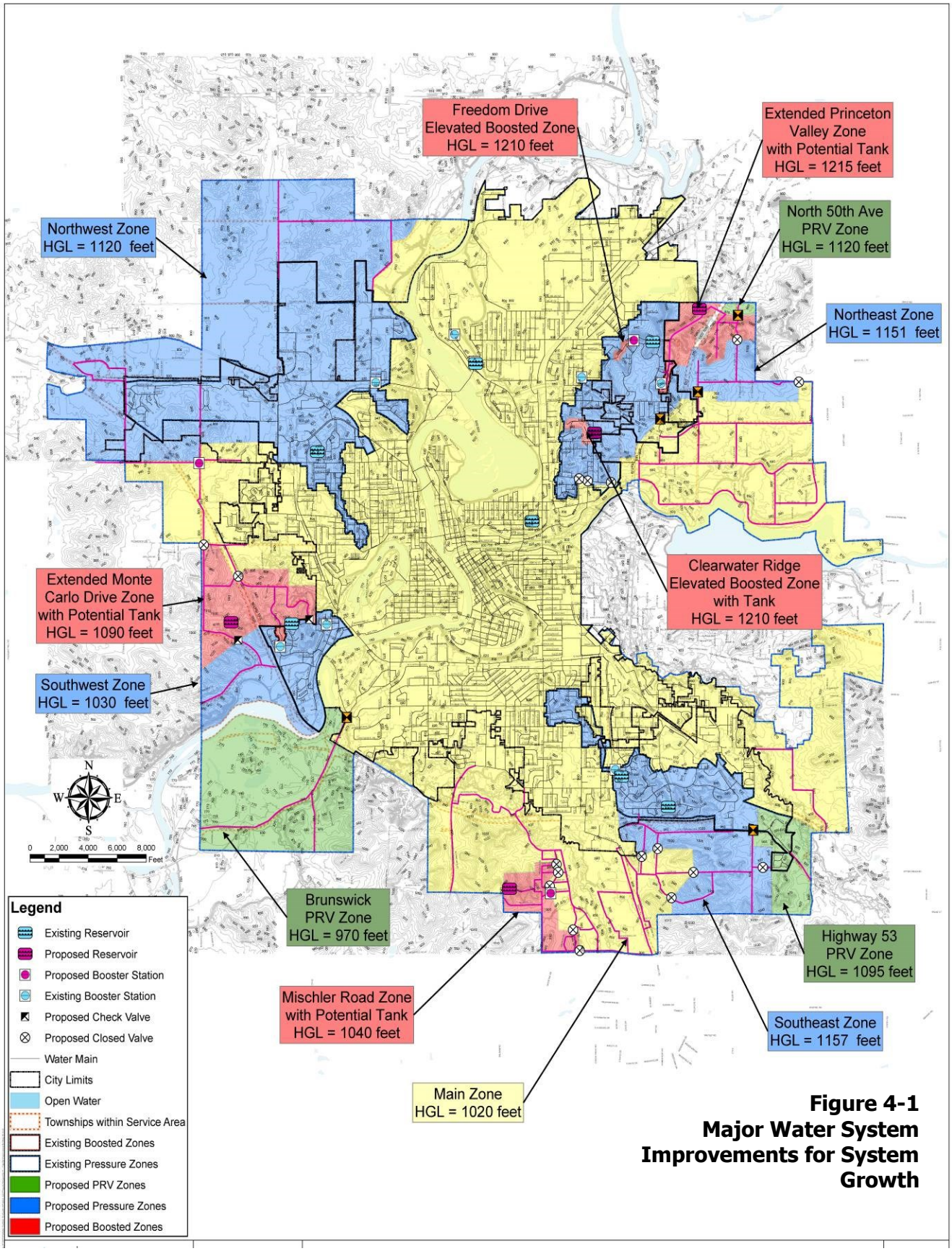


**Figure 4-1**
**Major Water System Improvements for System Growth**

Source: *Water Evaluation Study* (2014), Figure F-1.

## 3. Utility Service Plan for Properties Annexed from the Town of Brunswick

Figure 4-2 illustrates the preliminary general alignment for the extension of the sanitary sewer trunk line and the water trunk line from the City to properties annexed from the Town of Brunswick.

### Sanitary Sewer Trunk Lines

Preliminary engineering indicates that the sanitary sewer system may be extended from the trunk line located near Short Street and the Chippewa River then southwest to a lift (pump) station in the valley of Taylor Creek then southeast up the creek valley. Alternatively, the lift station and trunk line could use the Lowes Creek valley. To select the alignment, a future feasibility study will consider costs, land development benefits and landowner participation interest.

### Water Trunk Lines

The trunk water system offers more alignment options because it does not rely on gravity flow, although it ought to be looped to ensure even pressure and continually fresh water. Contrary to Figure 4-2, the City report, *Water System Evaluation* (2014), assumed that a water main would be extended along Highway 37 to serve areas annexed from the Town.

Extending City sewer and water lines into the study area may not prove to be economical in the foreseeable future because of two factors: (a) most of the land on the river side of Highway 37 is judged to be floodplain or wetland and, thus, costly or legally impossible to develop and (b) some of the land along County Highway B has been divided into large lots for semi-rural housing and, thus, difficult to consolidate and re-subdivide.

Note that the water system pressure zones and trunk water main alignments shown in Figure 4-2 differ slightly from those shown in Figure 4-1, with those of Figure 4-1 being more accurate. Based on *Water System Evaluation* (page 216), mains would be constructed along County Road B and Highway 37.

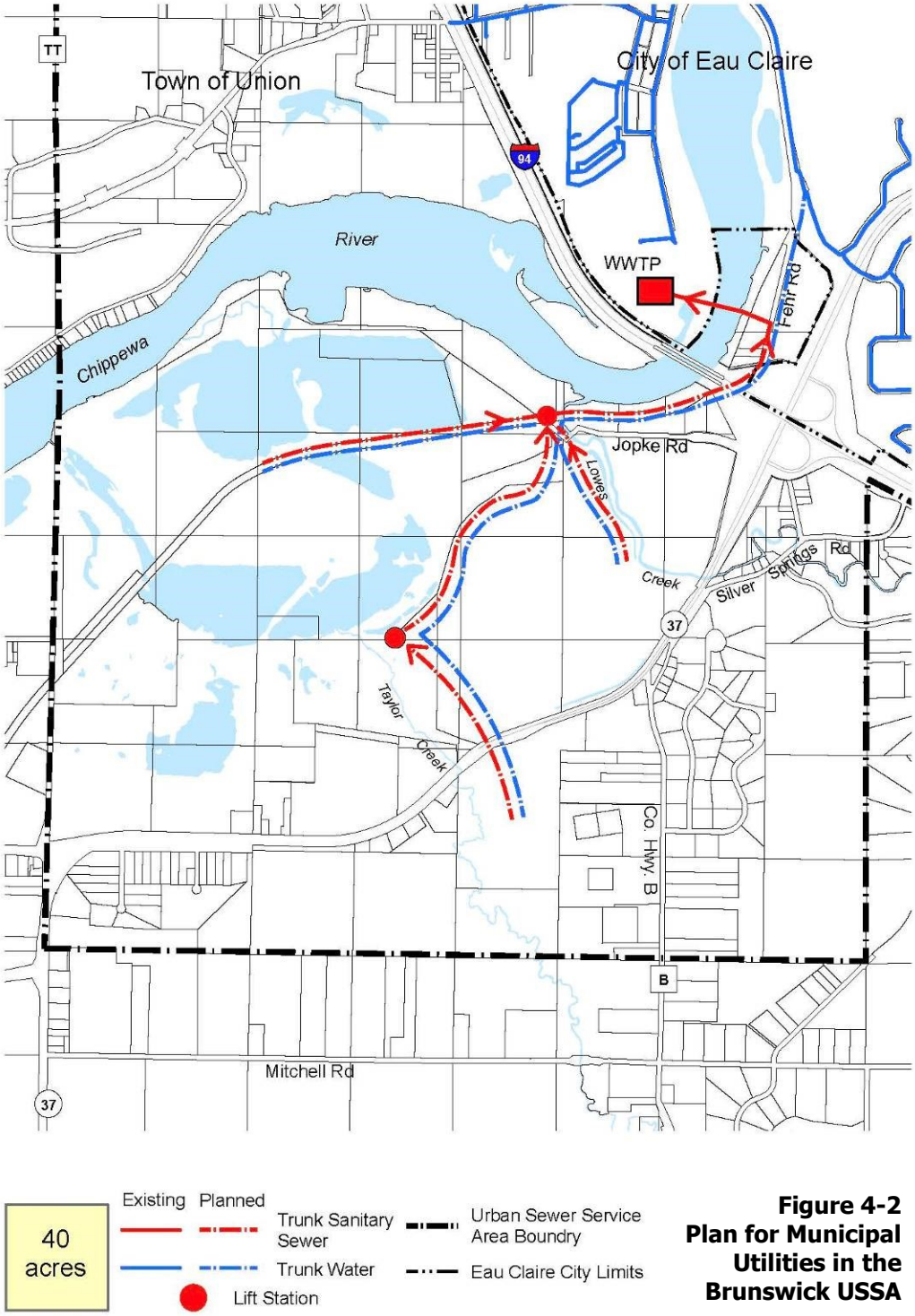


**Figure 4-2**
**Plan for Municipal Utilities in the Brunswick USSA**

Source: *Sewer Service Area Plan for the Town of Brunswick* (2013)

## 3. Utility Service Plan for Properties Annexed from the Town of Union

Figure 4-3 illustrates the preliminary general alignment for the extension of the sanitary sewer trunk line and the water trunk line from the City to properties annexed from the Town of Union.

### Sanitary Sewer Trunk Lines

Preliminary engineering indicates that the sanitary sewer system may be extended into the Town from the existing trunk lines in the City at eight locations. To select alignments, future feasibility studies will consider costs, land development benefits and landowner participation interest.

### Water Trunk Lines

The trunk water system offers more alignment options because it does not rely on gravity flow, although it ought to be looped to ensure even pressure and continually fresh water.

Based on *Water System Evaluation* (page 224) water mains of at least 12-inch diameter are recommended to be constructed along the major roadways in the Town in coordination with successful annexation petitions. Properties would be served by four pressure zones: the Southwest zone, the Monte Carlo Drive zone, the Main zone and the Northwest zone.

The northern areas are recommended to be served by the Northwest pressure zone. A new booster station would pump water from the Main zone to the Northwest zone from West Folsom Street to the existing dead end along North Town Hall Road. Connections and check valves would be required among the zones.

The existing Monte Carlo Drive booster could provide adequate pumping capacity to the zone to meet the potential maximum day demands. If development in the extended Monte Carlo Drive pressure zone exceeded 50 units, storage would be required there.

Note that the water system pressure zones and trunk water main alignments shown in Figure 4-3 differ slightly from those shown in Figure 4-1, with those of Figure 4-1 being more accurate.

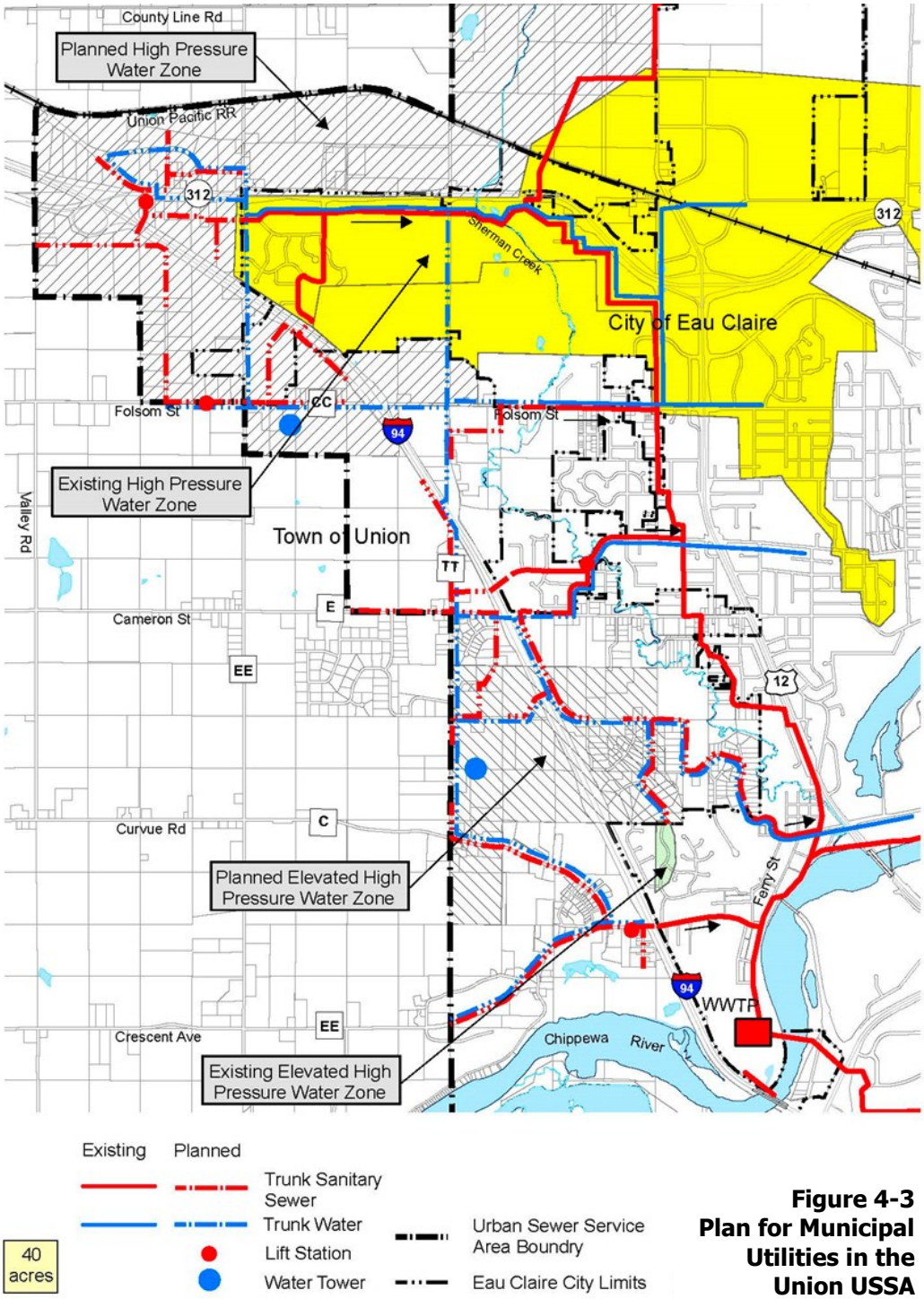


**Figure 4-3**
**Plan for Municipal Utilities in the Union USSA**

Source: *Sewer Service Area Plan for the Town of Union* (2013)

## 4. Utility Service Plan for Properties Annexed from the Town of Wheaton

Figure 4-4 illustrates the preliminary general alignment for the extension of the sanitary sewer trunk line and the water trunk line from the City to properties annexed from the Town of Wheaton.

### Sanitary Sewer Trunk Lines

Preliminary engineering indicates that the sanitary sewer system may be extended north from trunk lines located near the City limits along both County Highways T and F (Jeffers Road).

### Water System Trunk Lines

Based on *Water System Evaluation* (page 224) water mains of at least 12-inch diameter would be constructed along the major roadways in the Town. The Town will be served by the Northwest pressure zone. With the anticipated land development, the transmission mains would have acceptable pressures. Until a storage tank is constructed, the available flow in the entire zone is that of the booster station.

Note that the water system pressure zones and trunk water main alignments shown in Figure 4-4 differ slightly from those shown in Figure 4-1, with those of Figure 4-1 being more accurate.

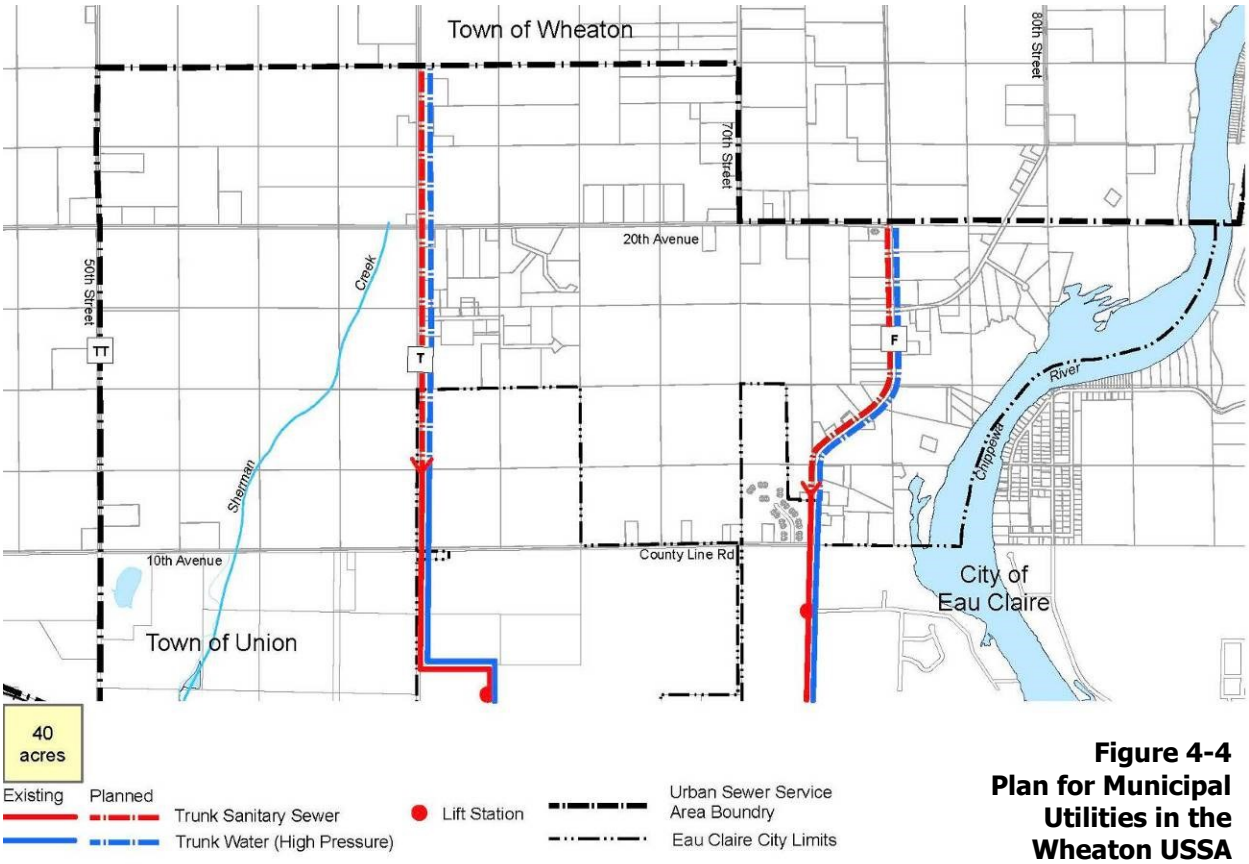


**Figure 4-4**
**Plan for Municipal Utilities in the Wheaton USSA**

Source: *Sewer Service Area Plan for the Town of Wheaton* (2013)

## 5. Utility Service Plan for Properties Annexed from the Town of Seymour

Figures 4-5 and 4-6 illustrate the preliminary general alignment for the extension of the sanitary sewer trunk line and the water trunk line from the City to properties annexed from the Town of Seymour.

### Sanitary Sewer Trunk Lines

Preliminary engineering indicates that the sanitary sewer system may be extended from two existing lift stations:

- **Between Black Avenue and US 53 south of Olson Drive.** Lines may be extended along Olson Drive and Burnell Drive to serve the primary growth areas of the Town.
- **Along the Eau Claire River.** A lift station may be built along the northern side of the river near the bend in North Shore Drive to serve the potential long-term needs of the large-lot housing in the vicinity of North Shore Drive and Tower Drive. This line would be an important safeguard in case of a public health hazard resulting from widespread and numerous failures of on-site wastewater systems. This station would pump wastewater up to an existing lift station located downriver near the Union Pacific railroad bridge.

To select an alignment, future feasibility studies will consider costs, land development benefits and landowner participation interest.

### Water System Trunk Lines

Figure 4-6 illustrates the general alignment for the extension of the water trunk line from the City into the Town of Seymour. The trunk water system offers more alignment options because it does not rely on gravity flow, although it ought to be looped to ensure even pressure and continually fresh water.

Based on *Water System Evaluation* (page 221), water mains of at least 12-inch diameter would be constructed along the major roadways in the Town. The majority of the Town would be served by the Main pressure zone and a smaller portion to the north by the Princeton Valley zone. The major portion of the Town would be served by the 10-inch water main from County Road Q along with the 8-inch water main from Gala Street. Two pressure reducing station were recommended to provide additional water capacity from the Northeast zone in the case of a fire flow event.

The existing Princeton Valley booster can provide adequate pumping capacity to the zone to meet the potential maximum day demands. However, the reliable supply capacity of the Princeton Valley booster station is less than 500 gallons per minute (gpm) and is recommended to be increased to at least 500 gpm. If future development in the extended Princeton Valley pressure zone exceeded 50 units, storage would be required there.

Note that the water system pressure zones and trunk water main alignments shown in Figure 4-6 differ slightly from those shown in Figure 4-1, with those of Figure 4-1 being more accurate.

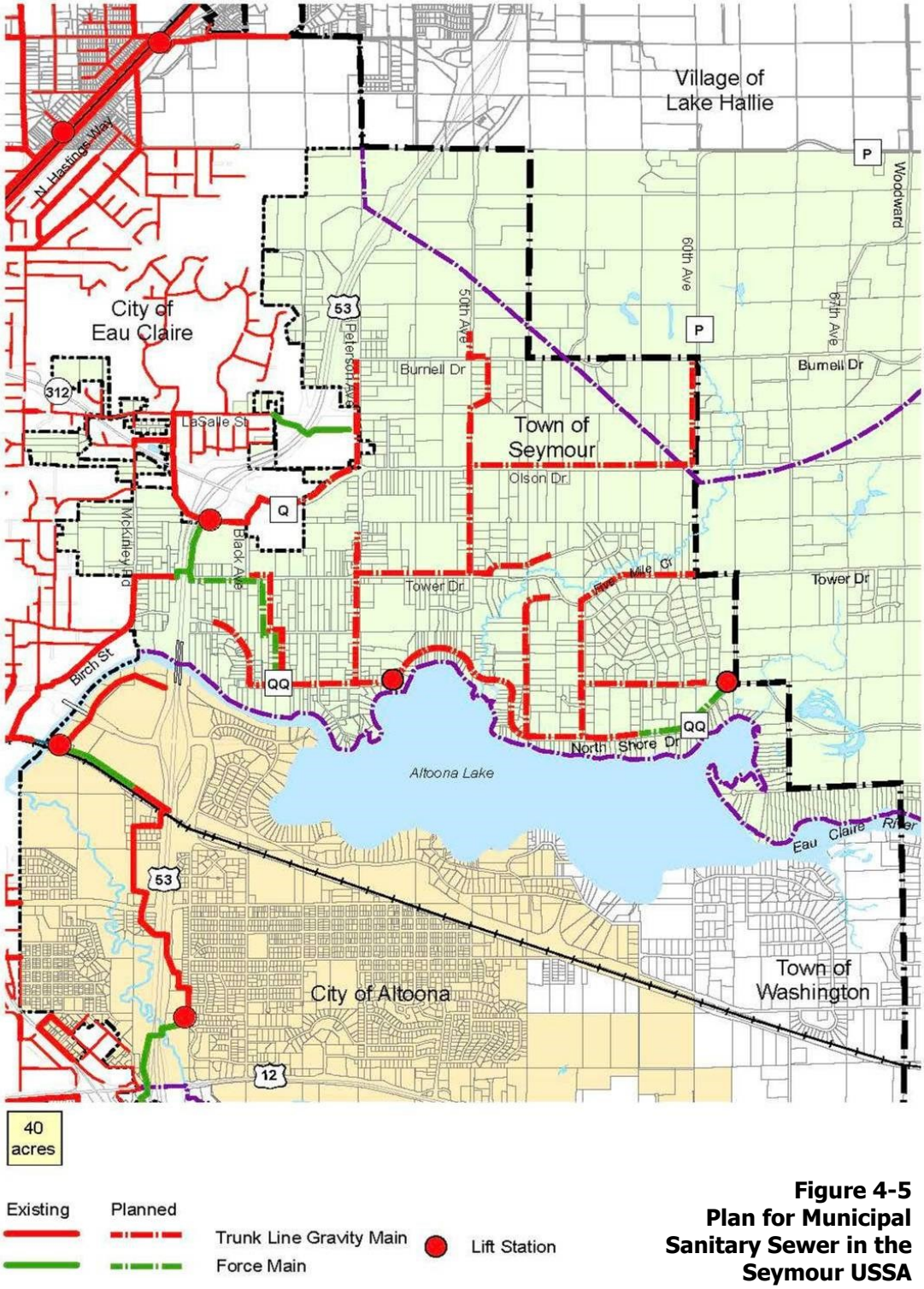


**Figure 4-5**
**Plan for Municipal Sanitary Sewer in the Seymour USSA**

Source: *Sewer Service Area Plan for the Town of Seymour* (2013)

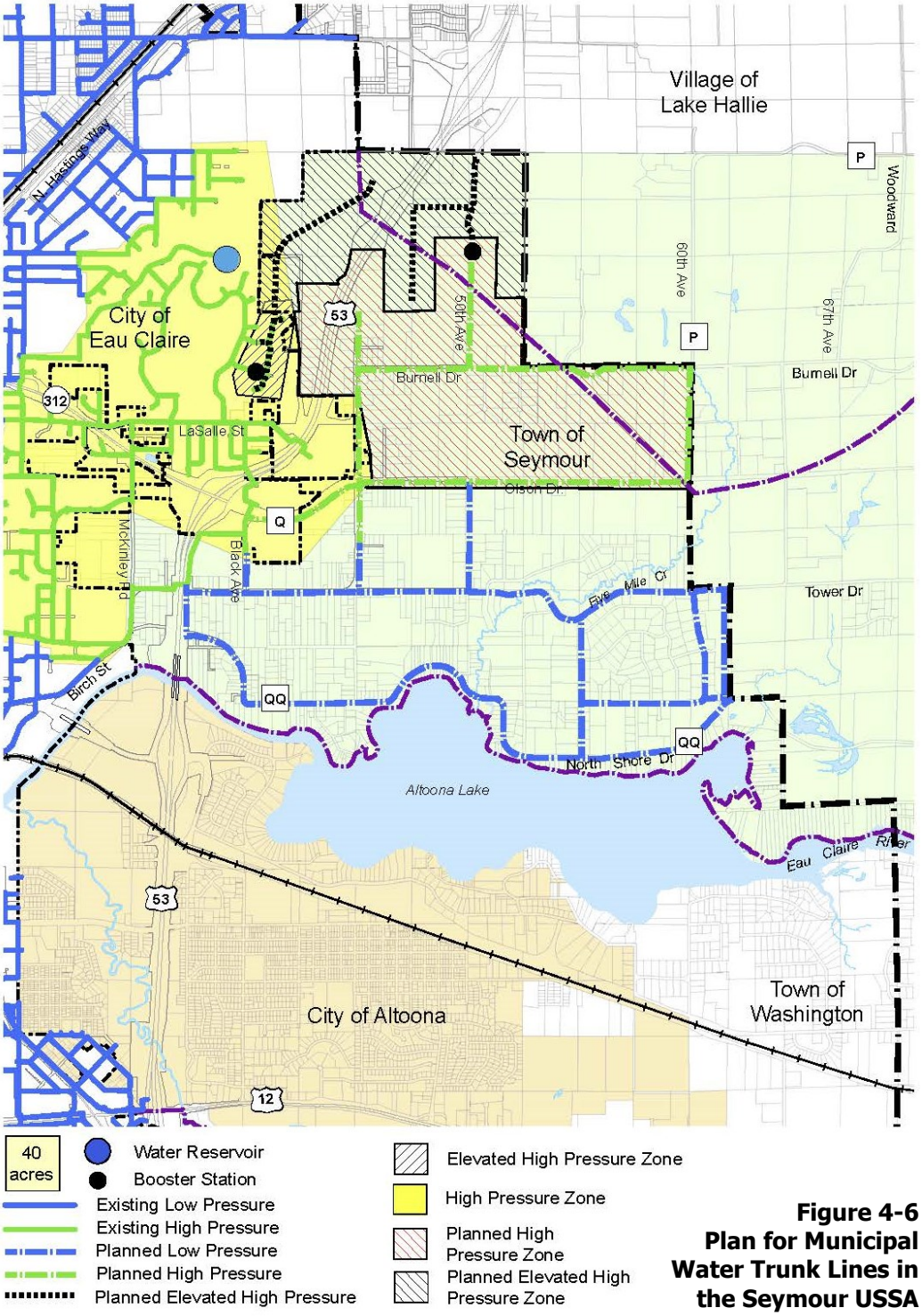


**Figure 4-6**
**Plan for Municipal Water Trunk Lines in the Seymour USSA**

Source: *Sewer Service Area Plan for the Town of Seymour* (2013)

## 6. Utility Service Plan for Properties Annexed from the Town of Washington

Figures 4-7 and 4-8 illustrate the preliminary general alignment for the extension of the sanitary sewer trunk line and the water trunk line from the City to properties annexed from the Town of Washington.

### Sanitary Sewer Trunk Lines

Preliminary engineering indicates that the sanitary sewer system may be extended south from trunk lines located near the City limits to Lowes Creek Road East and West, Lorch Avenue and the vicinity of Highway 53 and Hall Road. Sewer service east of Otter Creek may be provided from a Town lift station located along Prill Road near Otter Creek.

New sanitary sewer connections to properties in the former Washington Sanitary District that were receiving only water from the District will have to be annexed.

### Water System Trunk Lines

The trunk water system offers more alignment options because it does not rely on gravity flow, although it ought to be looped to ensure even pressure and continually fresh water. Nevertheless, the water lines often parallel with the sewer lines to support land development and reduce costs.

Figure 4-8 illustrates the general alignment for the extension of the water trunk utility lines from the City into the Town. The water service in the higher elevations of Washington will have to be designed for higher pressure similar to the water system in the vicinity of Golf Road.

Based on *Water System Evaluation* (page 227), water mains of at least 12-inch diameter were assumed to be constructed along the major roads to serve full development. The Town would eventually be served by three pressure zones: the Southeast zone, the proposed Mischler Road zone and the Main zone.

There is sufficient capacity in the water well and storage systems to serve growth forecast in the Sewer Service Area during this 20 year planning period. However, *Water System Evaluation* determined that a booster station would be needed between West Lowes Creek Road and Highway 93 in the vicinity of Mischler Road if development there exceeded 50 housing units. Until a storage tank is constructed in that vicinity, the available flow in that zone would be derived from on the booster station.

A pressure reducing station may be needed near Graff Road and Old Town Hall Road to alleviate the high pressures experienced around Prairie Circle.

The water system pressure zones and trunk water main alignments shown in Figure 4-8 differ slightly from those shown in Figure 4-1, with those of Figure 4-1 being more accurate.

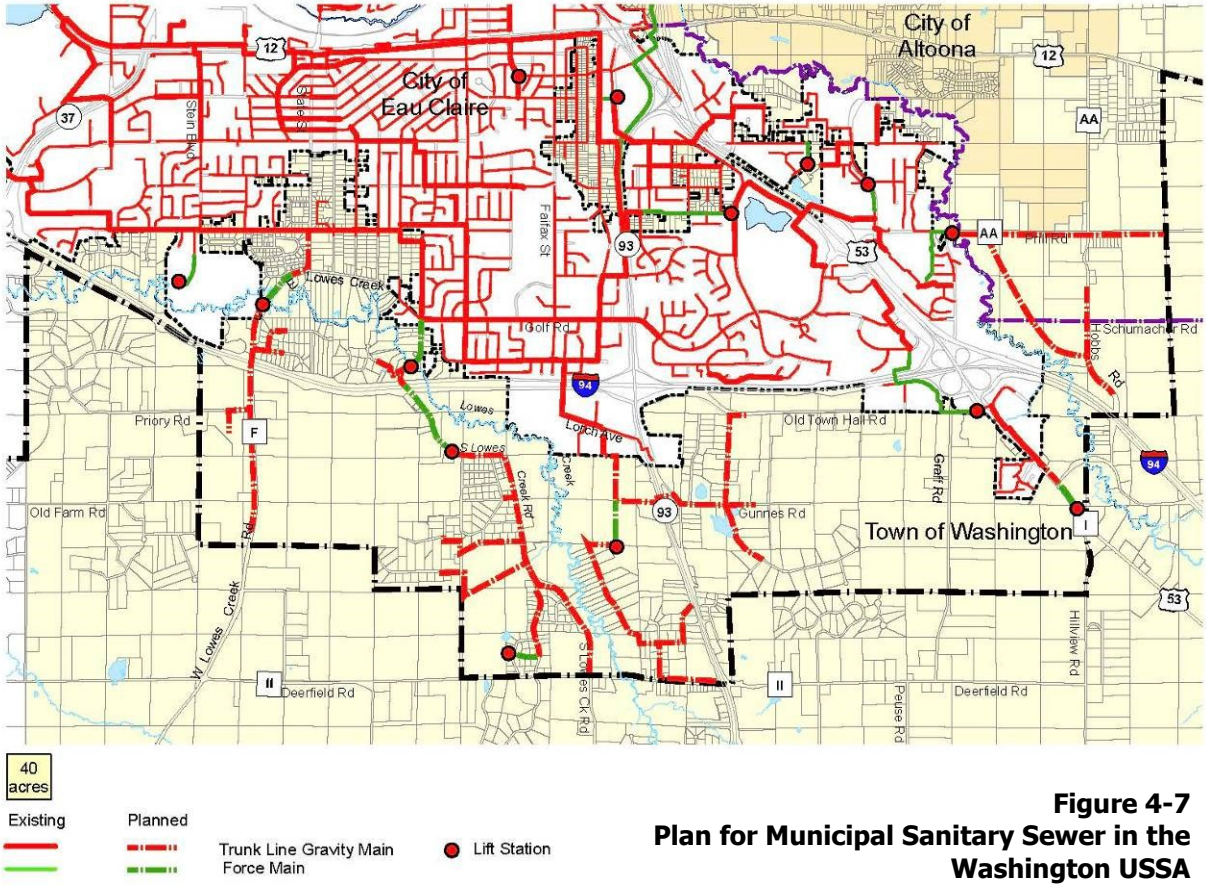


**Figure 4-7**
**Plan for Municipal Sanitary Sewer in the Washington USSA**

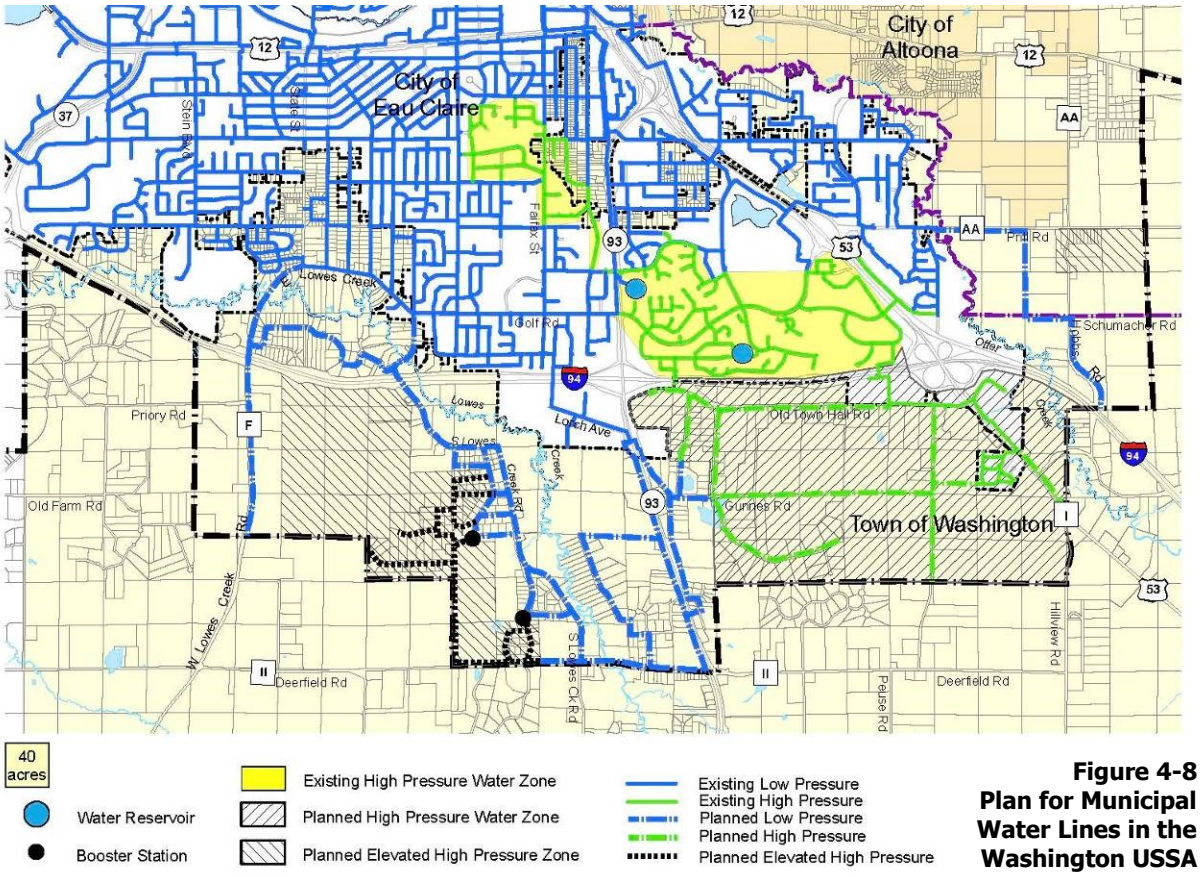


**Figure 4-8**
**Plan for Municipal Water Lines in the Washington USSA**

## Objective 4 – Surface and Ground Water Protection

**Apply the provisions of the State MS4 Permit throughout the watersheds under the jurisdiction of the City.**

The Natural Resources Plan chapter should also be consulted regarding the protection of soil, slopes, woods and waters.

### Policies

#### 1. Stormwater Permit Implementation

The City will continue to apply and enforce the provisions of its Surface Water Management Plan and its WPDES **Municipal Separate Storm Sewer System (MS-4)** permit from the Wisconsin Department of Natural Resources under NR 216 of the Wisconsin Administrative Code throughout the watersheds that drain to the rivers, creeks and lakes.

The provisions of the MS4 permit are described in the Natural Resources Plan chapter of this comprehensive plan and include:

- Legal authority to control stormwater runoff from new development
- Monitoring program
- Stormwater management
- Catch basins
- Leaf collection
- Street sweeping
- Structural control maintenance
- Roadway maintenance
- Nutrient management on City properties
- Construction site runoff
- Flood control devices
- Illicit connections and discharges
- Industrial and high risk runoff
- An information and education program
- Toxic spills
- Reduction of the discharge of Total Suspended Solids to surface waters
- Assessment of controls
- An annual report

#### 2. Private On-Site Wastewater Treatment

Continue to require new development in the City of Eau Claire to connect to the public sewage system. Require annexed development served by an on-site system to connect to the City's sewage system according to a schedule negotiated between the City and the owner at the time of annexation. Septic tanks and other private, on-site wastewater treatment facilities located outside a City are regulated by the County.

## Objective 5 – The Natural Environment

**Maintain the existing public utility system and construct new utility infrastructure in a manner that minimizes harm to the natural environment.**

Sewer and water services allow and promote intensive urban growth in undisturbed locations. Eau Claire is committed to regulating growth so that it respects sensitive natural features.

### Policies

### 1. Minimize Disturbance to Environmentally Sensitive Area (ESAs)

Minimize the extension of water and sewer infrastructure into designated Environmentally Sensitive Areas through the continued application of its zoning ordinance, especially Chapter 18.11, **Floodplain Zoning District**, Chapter 18.12, **Shoreland-Wetlands Overlay Zoning District**, and Chapter 18.45.050, **Site Plans**, and Chapter 17.12.290 of the Subdivision code, **Environmentally Sensitive Areas.**

Chapter 17.12.290 states:

> No development or land disturbance activity shall be allowed within any environmentally sensitive area …unless the owner demonstrates the proposed development or land disturbance activity is expressly allowed under any of the following:
>
> 1. Chapter 18.11, Floodplain Overlay District, for floodplain areas.
> 2. Chapter 18.12, Shoreland-Wetlands Overlay District, for wetland areas.
> 3. The provisions of the *Chippewa Falls - Eau Claire Urban Sewer Service Area Plan,* adopted by reference herein, for all areas of 20 percent or greater slope.

#### Environmentally Sensitive Areas

According to the Wisconsin Department of Natural Resources, an Environmentally Sensitive Area (ESA) is defined as "portions of the landscape including valuable natural resource features that should be protected from intensive development". ESAs include all lakes, rivers, streams, wetlands, floodways, and certain other significant and unique natural resource features plus a setback or buffer from these features. Furthermore, areas of steep slopes (12 percent or greater) when located wholly or partially within these natural resource features shall also be included as an ESA. Required setbacks from Environmentally Sensitive Areas are:

**Table 4-1**
**Setback Requirements for Environmentally Sensitive Areas**

| ESA Feature | Setback or Buffer |
|---|---|
| Navigable waters | 100 feet from the ordinary high water mark |
| Non-navigable waters | 25 feet from the top of bank |
| Channels of concentrated flow | 10 feet from the edge of feature |
| Floodways | No setback or buffer |
| Wetlands | 50 feet from the leeward edge of wetlands 2 acres or larger |

In general, roads, storm sewers, sanitary sewers and water mains should be allowed to cross ESAs if the care is taken to minimize disturbance. Also, private utilities, stormwater management facilities and recreational facilities should be allowed to be constructed within an ESA.

## Plan Action Steps

The City will take the following steps to implement the Public Utilities Plan.

**Table 4-2**
**Public Utilities Plan Actions**

| Action | Timing |
|---|---|
| Complete the remaining **improvements** recommended by the 2007 *Wastewater Treatment Plant Facilities Plan Amendment.* | 2015 – 2030 |
| Study the feasibility of and budget for replacing the **Chippewa River Interceptor** Sewer. | ~~2015 – 2016~~Moved back within the CIP Replacement plan for 2021-2023<br>~~Moved back within the CIP Replacement plan for 2021-2023~~ |
| **Budget** for the recommendations of the *Water System Evaluation.* | 2015 - 2025 |
| Replace aging or break-prone **water lines** as streets are rebuilt. | Continuous |
| Continue to make improvements that reduce water **infiltration** and inflow to the sanitary sewer system. | Continuous |
| **Update** the two-part 2014 *Water Source and Distribution Study* every five years. Update the 2007 *Wastewater Treatment Plan Facilities Plan Amendment* in approximately 2025. | 2020 – 2025 |
| Follow the utilities provisions of the **Intergovernmental Agreements** negotiated with each of the five adjacent Towns. | Continuous |
| Study the need to amend the **boundary** of the Urban Sewer Service Area whenever the *Chippewa Falls / Eau Claire Urban Sewer Service Plan* is updated by the Regional Planning Commission. | Continuous |
| Continue the policy of providing **municipal sewer** or water service only to (a) properties in the City, (b) properties subject to an cooperative boundary agreement or (c) land that is the subject of another form of intergovernmental cooperation agreement. | Continuous |
| Use intergovernmental agreements or cooperative boundary plans to facilitate construction of public **utilities** in the Sewer Service Area. | Continuous |
| Continue to provide municipal **utilities** only to properties in the City or subject to a cooperative boundary plan. | Continuous |
| Prepare a comprehensive sanitary **sewer system plan** comparable to the 2014 water system plan. | M~~2015 – 2020~~<br>oved back to be |

| | |
|---|---|
| | within the 2025 FPA ~~Moved back to be within the 2025 FPA~~ |
| Continue to apply and enforce the provisions of its **Surface Water** Management Plan and its WPDES Municipal Separate Storm Sewer System (MS-4) permit. | Continuous |