# 11 Utilities




### What You Will Find in this Chapter

- Information about utility providers.
- Efforts to coordinate growth projections and future utility extension plans.
- Goals and policies that guide utilities planning.

# Our Utilities Vision

*Capital facilities and utilities are well-maintained, equitably distributed, efficiently managed, and sufficiently funded to support the daily needs of a thriving and growing city.*

# Introduction

The City does not directly provide utility services to its residents and businesses; rather, Burien is served by a number of utility districts providing water, sewer, and electrical services. Other services are provided by privately owned companies, such as telecommunication and solid waste providers.

Each utility district has and maintains a system plan containing information about its system inventory, system capacity, capital improvement program and a wealth of other information about the district and the services it provides. Most, if not all, districts are overseen by state or federal agencies to ensure they meet operational and quality standards.

**Utilities**

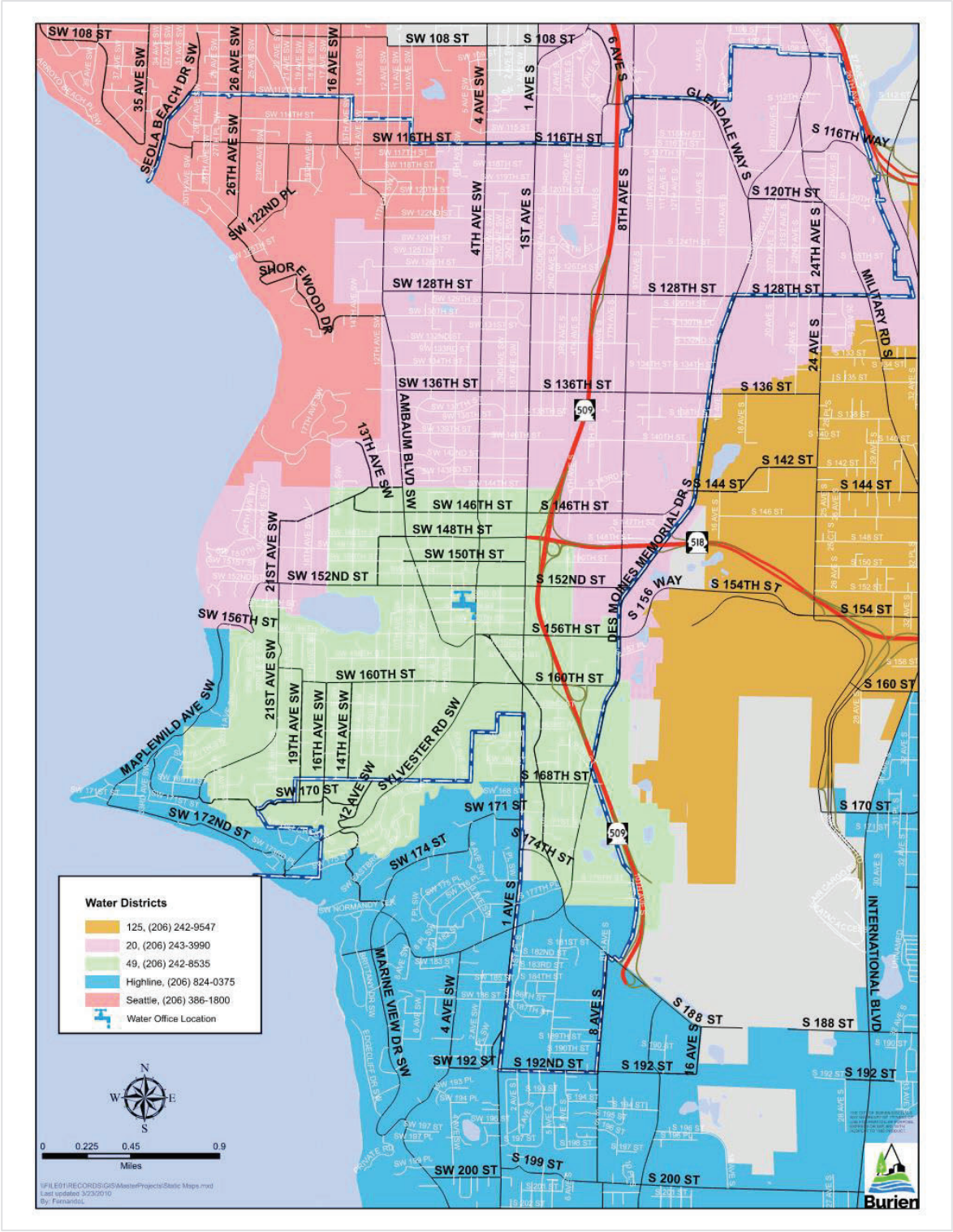
"Utilities" or "public utilities" means enterprises or facilities serving the public by means of an integrated system of collection, transmission, distribution, and processing facilities through more or less permanent physical connections between the plant of the serving entity and the premises of the customer. Included are systems for the delivery of natural gas, electricity, telecommunications services, and water, and for the disposal of sewage. (WAC 365-196-210)

The following is a list of the essential Utility providers for the city of Burien.

Domestic Water: Five separate water districts serve Burien: Highline Water District, King County Water Districts 20, 49, and 125, and Seattle Public Utilities. The boundaries of the five districts are depicted in **Exhibit 11-1**.

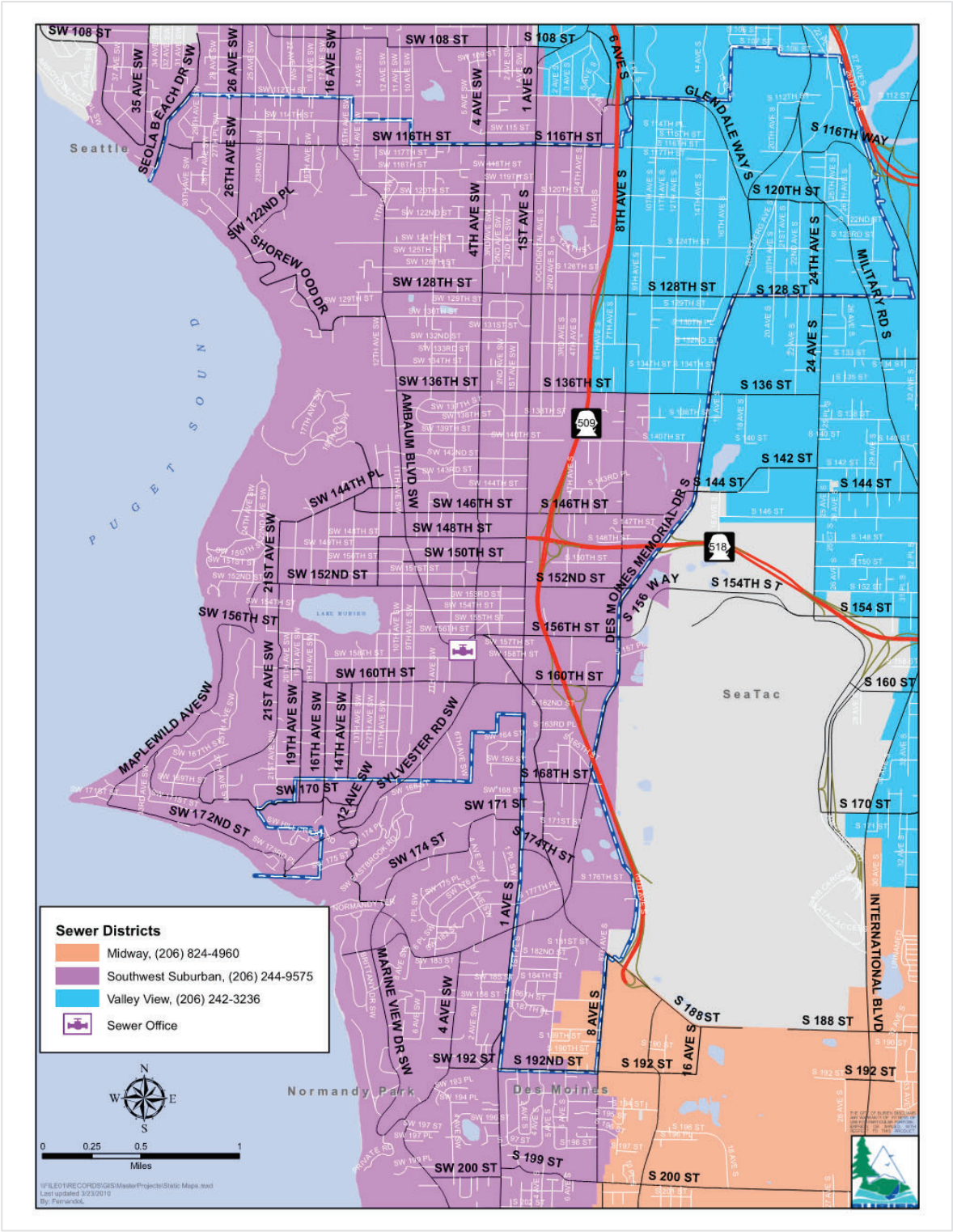
Sanitary Sewer: Three separate sewer districts serve Burien: Midway Sewer District, Southwest Suburban Sewer District, and Valley View Sewer District. The boundaries of the three districts are depicted in **Exhibit 11-2**.

## Exhibit 11-1. Water District Map




Source: City of Burien, 2023.

## Exhibit 11-2. Sewer District Map




Source: City of Burien, 2023.

Power and Natural Gas: Electrical power services are provided by Seattle City Light and Puget Sound Energy. Puget Sound Energy also provides natural gas services.

Solid Waste: Solid waste services are provided by Recology ® CleanScapes.

Telecommunications: CenturyLink QC provides basic telecommunication facilities. A 2019 King County Broadband Access Study shows most of Burien has access to broadband, and pockets of Burien have underserved members of the community that lack access.

# Conditions and Trends

## Today's Conditions

### Water

Burien is served by five water districts of various sizes and capacities. All of the water districts serve portions of other cities and areas of unincorporated of King County. Highline and the three King County Water Districts (20, 49, and 125) receive the majority, if not all, of their water through interties with Seattle Public Utilities. Seattle Public Utilities has two permanent sources (the Cedar and Tolt Rivers) and three seasonal sources (groundwater wells) for its water. A number of emergency interties are available for all five districts to be utilized when primary water sources do not meet peak demands. The Utilities Appendix contains more detailed information about the five water districts, including the number of system connections, capacity, and distribution system.

Funding sources for water district projects vary across the districts, but include revenue bonds, connection charges, loans, grants, developer financing, utility local improvement district financing, or a combination of sources. The Utilities Appendix contains more information about funding sources for each district.

### Sewer

Burien is served by three sewer districts. As with the water districts, all three of the sewer districts serve portions of other cities and areas of unincorporated King County. Two out of the three sewer systems (Midway and Southwest Suburban) treat their sewage at wastewater treatment plants owned by that sewer district, whereas Valley View Sewer District sends sewage to wastewater treatment plants owned by King County's Wastewater Treatment Division, Southwest Suburban Sewer District and Midway Sewer District for treatment and disposal. The Utilities Appendix contains specific information on system connections, infrastructure, and wastewater treatment plants.

Funding sources for sewer district projects vary across the districts, but include sewer service charges, contractual customers, utility local improvement districts, bonds, grants, loans, or a combination of sources. The Utilities Appendix contains more information about funding sources for each district.

# Tomorrow's Projections

As Burien continues to grow over the coming years, the City will need to ensure service providers offer high-quality, affordable, and reliable utility services to its residents and businesses through agreements with special districts and franchises. The water and sewer systems will need to replace infrastructure that is past its useful life and make improvements to increase system capacity. Specific projected deficiencies for water and sewer service are noted in the Challenges and Opportunities section below and additional information is provided in the Utilities Appendix.

The utilities systems will need to prepare for impacts from climate change, including sea level rise, temperature changes, and increased precipitation. In order to provide high-quality services equitably throughout the city, Burien must consider service equity in utility decision making and prioritize investments in underserved areas of the city.

# Challenges and Opportunities

## Water

Challenges facing Burien's water system include fire flow deficiencies and aging infrastructure. **Exhibit 11-3** depicts the type and location of deficiencies within each of the five water districts. Additionally, the Utilities Appendix contains specific information about each of these deficiencies, including the prioritization of improvements.

The most common deficiency is fire flow, with four out of the five water districts (Highline Water District, King County Water Districts 20 and 49, and Seattle Public Utilities) containing fire flow deficiencies within city limits. Fire flow deficiencies are caused when portions of the water system contain undersized water mains. Proposed improvements include replacing smaller pipes with larger pipes to improve the available fire flow to acceptable levels. More information on proposed improvements, including prioritization, can be found in the Utilities Appendix.

At this time, Seattle Public Utilities does not have any planned projects to address their deficiencies. There are no concerns or deficiencies noted in the King County Water District No. 125 portion of Burien at this time.

Future development in Burien will be limited in areas where undersized distribution lines, cast iron pipes, or lack of system looping remain until the fire flow deficiencies are addressed, as upgrades are required before permits can be issued.

**Exhibit 11-3. Water System Deficiencies in Burien**



## Sewer

Sewer system challenges in Burien include pipelines and lift stations at the end of their useful lives, capacity concerns, and residents currently without connection to the sewer system. The Southwest Suburban Sewer District has multiple areas that require pipelines to be replaced, as well as several lift stations in need of replacement. Additionally, the entire system is expected to have capacity concerns by 2031.

A portion of Burien residing within the Valley Sewer District is not currently connected to the sewer system and many new extensions will be required to connect this area to the system. Additionally, some areas of the system will require replacement of pipes that are reaching the end of their useful life. The Utilities Appendix contains more specific information about the deficiencies in Valley View.

There are no deficiency or capacity concerns for the portion of Burien within Midway Sewer District under current conditions.

## Lighting and Broadband

Complaint-based systems function by residents reporting infrastructure issues or outages to the City for repair or replacement. However, there may be barriers in residents reporting these issues to the City, such as language barriers or distrust of local governments. To ensure that all areas of Burien are equitably served by utility infrastructure, such as streetlights, Burien should track life expectancy of light bulbs (and other applicable infrastructure) and replace them at the end of their expected life span.

The COVID-19 pandemic changed the way many residents in Burien (and across the country) worked and went to school and highlighted disparities in access to necessary technology, such as broadband internet. In order to ensure Burien residents have access to as many employment and educational opportunities as possible, the City should track household access to broadband internet and usage.

# Our Utilities Plan

The City of Burien is not a provider of utilities but ensures adequate public facilities to allow development (Chapter 19.70 Adequacy of Public Facilities and Services). The City relies on the system plans of providers.

As noted in the Economic Development Element, the City can play a facilitator role to support applicants as they meet requirements of special districts. The City can also collaborate with districts and providers on equitable investments (e.g., lighting, broadband) in underserved areas.

Strategies to ensure adequate facilities and reliable service to meet the Vision of this plan include:

- Consider partnering with utility districts to develop tax increment financing (see RCW 39.114) to fund water and sewer improvements.
- Partner with the utility districts to assist in promoting and facilitating latecomers' agreements.
- Explore steps necessary to consolidate water and sewer districts.
- Partner with water districts to address fire water flow deficiencies and aging infrastructure by upsizing pipes.
- Pair water and sewer utility updates with street improvements.
- Support conversion from septic to sewer system, particularly in Boulevard Park.
- Support businesses during public infrastructure construction.
- Analyze current lighting in focus areas to inventory the types and locations of existing lighting (private or public) and lighting needs.

# Goals and Policies

**Goal 11.1** **Work in partnership with providers to ensure utility services are adequate and equitably available to support current and future development.**

**Policy 11.1-**1 Encourage utilities to prioritize investments in underserved communities and areas with deficient infrastructure.

**Policy 11.1-2** To facilitate the coordination of providing utility services, the City will discuss and exchange population forecasts, development plans and technical data with the service providers.

**Policy 11.1-3** Electrical power, sanitary sewer, domestic water, solid waste and disposal, stormwater drainage (as addressed in the Sustainability and Natural Environment Element) are herein designated essential utility services.

**Policy 11.1-4** Development shall be allowed only when and where all essential utility services are adequate in accord with their level of service guidelines, and only when and where such development can be adequately served by essential utilities without reducing levels of service below the level of service guidelines for existing development in the city. Alternative means of providing essential utility services shall be allowed only when consistent with the policies of this element.

**Policy 11.1-5** A development shall not be approved if it causes the level of service of an essential utility service to decline below the guidelines set forth in Pol. 11.1-7, unless improvements to accommodate the impacts are made concurrent with the development for the purposes of this policy. "Concurrent with the development" shall mean that improvements are in place at the time of the development or that a financial commitment is in place to complete the improvements.

**Policy 11.1-6** If adequate essential utility serices are currently unavailable and public funds are not committed to provide such facilities, developers must provide such facilities at their own expense in order to develop. The City shall promote and assist in facilitating latecomers' agreements.

**Policy 11.1-7** The following level of service guidelines should be used to evaluate whether there is sufficient capacity available to accommodate the demands of new development:

Electrical Power: Adequate electrical power connections must be available for any development within the City.

Water: (Fire Flow Requirements)

Pursuant to the Fire Code, single-family, multi-family, public facilities, commercial and industrial developments require different minimum available fire-flows based on the type of construction and amount of floor area. Available fire-flow serving the land use designations as set forth in the City of Burien long range land use map (Map LU-1) shall meet or exceed standards consistent with those designations. Water service providers shall plan and design system improvements to provide minimum fire flows consistent with a reasonable range of anticipated long-term land use designations.

Sprinkler systems may only be approved by the City as an alternative to meeting fire flow requirements when no other means of achieving the standard is practical, subject to the requirements of the International Fire Code (IFC) as locally adopted and amended. However, as described in the IFC, sprinklers may be required in addition to adequate fire flow under specific conditions.

All new short plats and formal subdivisions shall meet fire flow requirements. Sprinkling shall only be approved as an alternative fire protection method where domestic water service is not available, planned, or adequate.

Water Quality Level of Service:

The water system quality shall be in compliance with Washington Administrative Code requirements for water quality.

Sewer:

All new development must be served by or provision made for an adequate public sewage disposal system.

On-site sewage disposal systems may be allowed for new single-family homes where no other alternative is cost effective and technically feasible, if approved by the Seattle-King County Department of Public Health, in accordance with the Seattle-King County Board of Health rules and regulations. Existing residential on-site disposal systems will not be required by the City to connect to sewer unless their current systems fail.

Solid Waste Disposal Service:

Curbside collection for solid waste and recycling must be available for any single-family home, multifamily dwelling and business development. Solid waste and recycling services shall be available to any new development but are considered a voluntary service. Requiring service to be provided does not eliminate a resident's right to haul his or her own waste.

Stormwater Drainage:

As provided in the Stormwater Management Element policies.

**Policy 11.1-8** Natural gas and communication services (including cable TV and cellular telephone service) are herein designated as optional utility services. Optional utility services should be available to serve new development, but are not a requirement for development approval.

**Policy 11.1-9** The City shall encourage improvements in communication services to ensure all residents of Burien have access to reliable and affordable broadband internet.

**Policy 11.1-10** When franchising and working with the communication utilities, the City will encourage upgrades to the system improving capacity, speed, and reliability. This will improve the City's competitive advantage in business retention and recruitment while also supplying residents with improved service and access to information and communication technologies. Special attention shall be given to ensure upgrades are prioritized in underserved communities.

**Policy 11.1-11** Street lights commensurate with an area's level of density should be provided, based upon the following prioritized criteria:

a. Enhancement of pedestrian and vehicular safety, with an emphasis on underserved areas and areas with deficient infrastructure

b. Existing and projected traffic volumes

c. Location of school or transit stops

d. High-density land uses

e. Proximity to nearest intersection

f. Other relevant state, federal, local or utility design requirements

**Policy 11.1-12** New or expanded facilities should be compatible with surrounding land uses; such facilities should have a minimal impact on the natural or built environment.

**Policy 11.1-13** All facilities provided in accordance with these policies shall be constructed consistent with the design standards as specified in each provider's system plan.

**Policy 11.1-14** Land use and utility planning should be coordinated to allow for the siting and construction of necessary facilities.

**Policy 11.1-15** Coordinate facility planning so that utilities may locate in transportation corridors and dedicated right-of-way.

**Policy 11.1-16** Ensure utility plans use and support the land use plan. The City shall adopt procedures for the City review of and comment on the proposed plans, policies, and actions of public and private utility providers. When possible, the City shall provide residents opportunities to review and comment on proposed plans, policies, and actions of public and private utility providers.

**Policy 11.1-17** The City should actively work with water utility service providers to ensure that areas of low water flow are upgraded. Water service shall be provided at acceptable levels for the adequate provision of emergency fire response services.

**Policy 11.1-18** The City shall actively work with all utility service providers to plan for impacts of climate change (such as sea level rise, temperature changes, and increased precipitation) in accordance with the City's Climate Action Plan.

## Goal 11.2 Minimize impacts associated with the siting, development, and operation of utility services and facilities on adjacent properties and the natural environment. Ensure that impacts and benefits associated with utility services and facilities are equitably distributed throughout the city.

**Policy 11.2-1** The City shall ensure that utility facilities are designed, located, constructed, and buffered (through extensive screening and/or landscaping) to blend in with their surroundings and to reasonably minimize significant, individual, and cumulative adverse impacts on adjacent properties, and to protect environmentally sensitive areas. When sited within or adjacent to residential areas, special attention should be given to minimizing noise, light and glare impacts, and pollution.

**Policy 11.2-2** The City shall discourage siting of utility facilities in communities that face disproportionate shares of noise, light, and glare impacts and pollution.

**Policy 11.2-3** The City shall encourage or require implementation of resource conservation practices and best management practices according to the USDA Soil Conservation Service during the construction, operation, and maintenance of utility structures and improvements.

**Policy 11.2-4** The City shall work with surrounding municipalities, King County and the state during the siting and development of utility facilities of regional significance.

**Policy 11.2-5** The City shall encourage joint use of utility corridors and properties for recreational facilities.

**Policy 11.2-6** Consider climate change in the siting and development decisions of new utility facilities, including sea level rise, temperature changes, and increased precipitation.

## Goal 11.3 Ensure provision of the most cost-effective, high quality and efficient water and sewer services to residents of Burien.

**Policy 11.3-1** Ensure new industrial and commercial development is not allowed to have community or on-site sewage systems.

**Policy 11.3-2** Require sewer connections, where connection is available, for all new plats.

**Policy 11.3-3** Require conversion from on-site wastewater disposal systems as sewer lines become available and should require connections when possible.

**Policy 11.3-4** Support cooperative regional efforts in pursuing options for the development of additional water sources to meet future needs. The City should also support efforts to encourage the efficient use of water from existing sources.

**Policy 11.3-5** Maintain information on water and sewer service rates and hook-up system and development charges for public review. Where possible, this information should be in the commonly spoken languages in Burien.

## Goal 11.4 Maintain an adequate and effective solid waste and recycling program to serve the needs of Burien's residents and businesses, which maintains public health, environmental and land use quality.

**Policy 11.4-1** Encourage private and public sector involvement in recycling programs and in the use of recycled products, primarily through an enhanced public education campaign. Ensure opportunities for historically marginalized populations to participate in these programs.

**Policy 11.4-2** Strive to achieve an overall waste diversion rate consistent with the King County Solid Waste Management Plan and the Burien Climate Action Plan.

**Policy 11.4-3** The City should strive to achieve:

a) a 95% recycling participation in the single-family sector

b) a 75% recycling participation in the multifamily sector; and

c) a 60% recycling participation in the commercial sector.

**Policy 11.4-4** Build upon existing recycling programs, and initiate new programs, that will result in significant impact at a reasonable cost.

## Goal 11.5 Proactively improve infrastructure in Burien to enhance quality of life and meet economic development objectives.

**Policy 11.5-1** Consider partnering with utility districts to develop Tax Increment Financing (see RCW 39.114) to fund water and sewer improvements.

**Policy 11.5-2** Partner with the utility districts to assist in promoting and facilitating latecomers' agreements.

**Policy 11.5-3** Explore steps necessary to consolidate water and sewer districts.

# Implementation

In order to provide high-quality, reliable, and affordable utility service equitably to all residents and businesses in Burien, the City will utilize a consistent framework in reviewing and prioritizing utility investments to ensure that impacts and benefits are spread equitably throughout the city. Prioritizing investments in underserved areas and in areas with deficient infrastructure is a City priority and requires the City to designate these priority areas. Investments and level of service in these priority areas should be tracked to ensure that improved service are occurring. Additionally, to have a climate resilient utility system, the City will need to consider changes to climate for project prioritization and decision making, including for new utility facility siting and development, as well as modifications to the current system to be more resilient overall.

Below in **Exhibit 11-4** are outcomes and metrics by which this element would be evaluated in the 5-year progress report.

**Exhibit 11-4. Utilities Outcomes and Metrics**

| Outcomes | Metrics |
|---|---|
| ▶ Improved utilities provided by franchise and special district providers in priority investment areas for economic development or climate resilience.<br>▶ Increased investment in areas with deficient infrastructure or underserved populations. | ▶ Streetlight density. Perhaps by race or by high risk census tracts.<br>▶ Homes without access to broadband / low technology access |