FINAL

DRAFT

KITSAP COUNTY

CAPITAL FACILITES PLAN

2024

Prepared for: Kitsap County Department of Community Development

Prepared by: LDC Inc, DCG/Watershed, and Transpo, in collaboration with Kitsap County, with contributions by Cities and Special Districts

[Page intentionally left blank.]

TABLE OF CONTENTS

LIST OF EXHIBITS

APPENDIX A – SANITARY SEWER SYSTEM MAPS

1 PLAN FOUNDATION

1.1 THE CAPITAL FACILITY PLAN

The purpose of this Capital Facility Plan (CFP) appendix is to meet the requirements of the Growth Management Act (GMA) to identify capital improvements and associated funding that support the County's land use plan and growth targets for the period 2024-2044. Investing in capital facilities will help support the community's quality of life in urban and rural areas by ensuring responsive public safety services, access to parks and recreation, coordination of schools with student growth, necessary water supply, and wastewater treatment, stormwater management, and other important services. Providing quality facilities can also attract economic investment to Urban Growth Areas (UGAs) where denser employment and housing opportunities are desired.

Infrastructure and Services Addressed in the Capital Facility Plan

The CFP contains an inventory of each facility and associated service, level of service standards, revenue projections, and capital costs, and descriptions of how facilities are to be funded. Of particular focus are facilities needed to support urban growth in UGAs. The components of the CFP are illustrated in Exhibit 1-1.

Requirements for the Capital Facilities Plan

GMA specifies that the capital facilities element should consist of a) an inventory of existing capital facilities owned by public entities; b) a forecast of the future needs for capital facilities; c) the proposed locations and capacities of expanded or new capital facilities; d) a six-year capital facilities plan that will finance capital facilities within projected funding capacities and clearly identifies sources of public money for such purposes; and e) a requirement to reassess the land use element if probable funding falls short of existing needs. (RCW 36.70a.070 (3))

Recent Growth Management Hearings Board cases have placed more importance on the preparation and implementation of CFPs. The key points include:

- Capital facilities plans should address the 20-year planning period and be consistent with growth allocations assumed in the Land Use Element.
- Capital facilities plans should also demonstrate an ability to serve the full UGA. Existing un-served areas in the UGA must be addressed as well as new UGA expansion areas.
- Financial plans should address at least a six-year period and funding sources should be specific and committed. The County should provide a sense of the funding sources for the 20-year period, though it can be less detailed than for the six-year period.

Exhibit 1-1. Capital Facilities Plan (CFP) Update Process

According to WAC 365-196-415, the inventory and analysis of capital facilities must include, at a minimum: water systems, sewer systems, stormwater systems, reclaimed water facilities, schools, parks and recreation facilities, police facilities, and fire facilities. This CFP addresses the capital facilities and services listed in Exhibit 1-2.

Exhibit 1-2. Capital Facilities and Services Addressed

Capital Facility and Service Topic	Providers to Unincorporated UGAs and Rural Areas
Administration: Public Buildings	Kitsap County
Public Safety: Law Enforcement	Kitsap County
Public Safety: Fire Protection	North Kitsap Fire District, Central Kitsap Fire District, City of Bremerton, South Kitsap Fire District. Poulsbo Fire Department / District 18, Bainbridge Island
Parks and Recreation	Kitsap County
Schools	North Kitsap School District, Central Kitsap School District, Bremerton School District, South Kitsap School District
Solid Waste	Kitsap County
Stormwater	Kitsap County
Transportation	Kitsap County
Wastewater: Sanitary Sewer, Reclaimed Water	Kitsap County, Cities, and Special Districts
Water	Cities and Special Districts

Source: LDC Inc, 2023

1.2 RELATIONSHIP TO THE COMPREHENSIVE PLAN AND FUTURE LAND USE PLAN

County Services and Planning Responsibilities

Capital facilities generally have a long useful life and include County and non-County operated infrastructure, buildings, and equipment. The County's definition of a capital asset is:

> *Capital Assets typically include land, machinery and buildings, and are further defined as assets whose benefits are realized over future fiscal periods. (Kitsap County Auditor)*

Capital facilities planning does not cover regular operation and maintenance, but it does include major repair, rehabilitation, or reconstruction of facilities.

The County is responsible for allocating growth and designating Urban Growth Areas (UGA). UGAs must include cities and land characterized by urban uses that are needed to support growth allocations. UGAs must be supported by public facilities and services. (RCW 36.70A.110)

The County is also responsible for the services it provides both countywide and in unincorporated areas, including governmental administration, criminal justice and law enforcement, transportation, stormwater, solid waste, and sanitary sewer.

Beyond considering its own services, the County is charged with ensuring that other municipalities serving UGAs and rural areas have adequate services and facilities, particularly those necessary to serve growth. These include cities and special districts providing water, sewer, fire protection, and schools. For some services the County collects impact fees, which are based on the needs identified in this Plan; these services include roads, parks, and schools. The County also addresses impacts of growth through SEPA mitigation fees, such as for fire districts.

Land Use and Growth Assumptions

Per WAC 365-196-415, the CFP "should forecast needs for capital facilities during the planning period, based on the levels of service or planning assumptions selected and consistent with the growth, densities, and distribution of growth anticipated in the land use element."

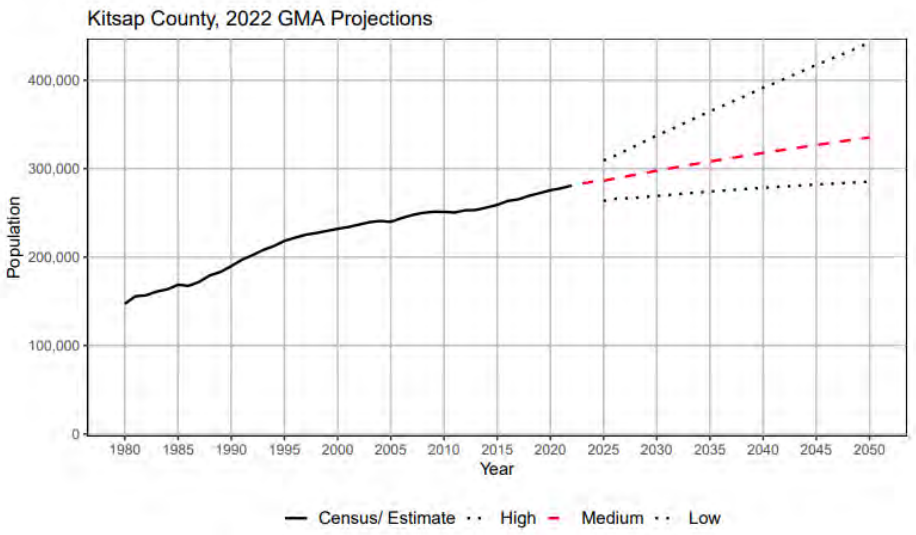
Kitsap County updated its Comprehensive Plan for the 2024-2044 period. The Update includes consideration of growth and land use alternatives. The County selected a Preferred Alternative growth plan after a series of public hearings and consideration of policy and environmental factors (see the Kitsap County 2024 Comprehensive Plan Update Environmental Impact Statement 2024).

Exhibit 1-3. County Population Growth

Topic	All Alternatives
Countywide Population: 2022*	280,900
Unincorporated Population: 2022	182,040
Countywide Population: 2044**	346,358
Unincorporated Population: 2044**	210,609

**Source: Office of Financial Management (OFM) 2022 GMA Projections*
***Source: 2020 Census Redistricting File, PSRC 2018 Regional Forecast, VISION 2050 regional growth strategy adopted per General Assembly action 10-30-2020*

Exhibit 1-4. Population Growth Estimates and Projections: Base Year, 2029, and 2044



Source: OFM Forecasting & Research Division, Dec 2022

For coordination purposes, alternative population forecasts were projected in a range and distributed to capital facility providers throughout the county. Capital facility providers were provided year 2022 and 2044 forecasts by transportation analysis zones that could be aggregated to generally approximate service area boundaries.

1.3 FOUNDATION DOCUMENTS

The documents used for preparation of the CFP are the capital facility and capital improvement plans prepared routinely by the Kitsap County, which are required for obtaining funding. The following documents are incorporated by reference:

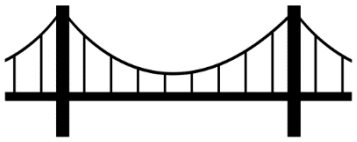
- Budget including Capital Improvement Plan, 2023

- Transportation Improvement Program, 2024-2029
- Stormwater Management Program, 2023
- Solid Waste Division Capital Facility Plan (CFP) 2022-2027
- Sewer Utility 6-Year Capital Facility Plan (CFP) 2023-2028
- Kitsap County Nonmotorized Facility Plan, 2013
- Kitsap County Parks, Recreation & Open Space Plan 2024

In addition, functional plans for non-County service providers are also reviewed and incorporated by reference, as appropriate.

2 COMPREHENSIVE CAPITAL FACILITY PLAN

2.1 STUDY AREA AND INVENTORY



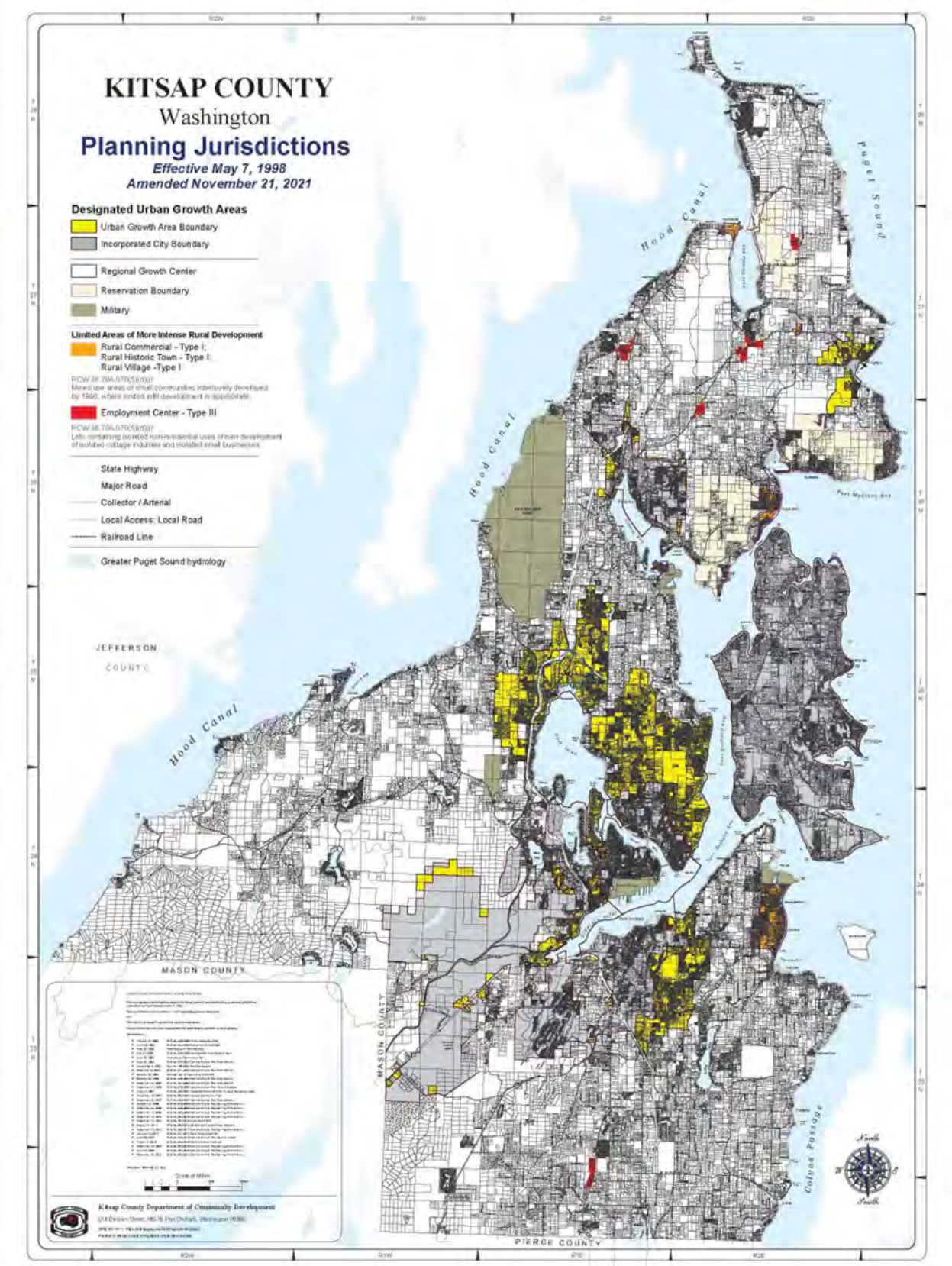
Kitsap County encompasses approximately 395 square miles of land. See Exhibit 2-1. This CFP addresses all unincorporated portions of Kitsap County – both unincorporated UGAs and rural areas total approximately 319 square miles. UGAs include cities, totaling about 78 square miles, and unincorporated UGAs, at about 31 square miles. Three cities (Poulsbo, Bremerton, and Port Orchard) are surrounded by UGAs. Current unincorporated UGAs are: Kingston, Silverdale, Poulsbo, Central Kitsap, Bremerton UGA (East, West and Gorst), and Port Orchard. In the future, UGAs may incorporate into new communities or annex to existing cities depending on property owner or voter approvals. Outside of urban areas, rural lands include rural residential, rural industrial, and rural commercial areas, as well as lands for forestry, mining, and agriculture.

The incorporated cities of Bremerton, Port Orchard, Poulsbo, and Bainbridge Island are responsible for maintaining their individual GMA comprehensive plans, which must be consistent with the County's Plan. The County's planning process, however, includes consultation and coordination with these jurisdictions. Where these cities provide services to unincorporated UGAs, their facility plans are addressed in this CFP.

Further, school, fire protection, water, wastewater, and other special districts serve areas in urban and rural areas.

Current inventories of land, machinery, and buildings in the study area are addressed by service provider in Chapter 4. As appropriate, maps are provided.

Exhibit 2-1. Plan Study Area



2.2 COMPLETED PROJECTS

Following the adoption of the 2016 CFP, Kitsap County has made investments in land, buildings, and infrastructure. Annually, the Kitsap County Auditor prepares a financial report including capital asset investments. 2021 and 2022 reports show significant investment in infrastructure. See Exhibit 2-2.

Exhibit 2-2. Capital Investments 2021-2022 (in Millions)

Investment Type	2021	2022
Land	$83.27	$86.24
Infrastructure	$578.68	$579.38
Building	$202.40	$199.80
Building Improvements	$208.21	$209.92
Machinery & Equipment	$77.87	$80.88
Construction in Progress	$56.64	$87.35
Total Investment	$1,207.07	$1,243.58
Total Net Investment	$570.29	$582.67

Source: Kitsap County Auditor, 2021; Kitsap County Auditor, 2022

Some capital projects highlighted in 2022 include:

- Bangor Keyport Force main replacement $8.96 million
- Timber rights purchased for conservation purposes $4.87 million
- Updated equipment rental fleet $4.18 million

The 2021 report highlighted the following accomplishments:

- Infrastructure Projects $11.14 million
- Sewer system updates $3.95 million
- Updated equipment rental fleet $2.37 million

2.3 PROJECTED FUNDING

The CFP uses sound fiscal policies to provide adequate public facilities consistent with the land use element. In Chapter 3, the CFP presents revenue projections and compares dedicated capital dollars to identified capital costs. Where there are gaps between dedicated capital funds and the capital program, the revenue analysis identifies the potential ability to fill gaps with other funding sources. For each service area the CFP identifies funding sources for each capital project. As part of the annual budget, the County adopts a more detailed six-year capital improvement program implementing the CFP.

Chapter 3 includes a revenue analysis of dedicated capital funds, potential gaps in funding, and means to expand or add funding.

2.4 PROPOSED PROJECTS AND RELATIONSHIP TO GROWTH

Chapter 4 of this plan provides proposed capital projects intended to maintain existing investments and add investments to support growth. Planned County projects address public safety, courtrooms, parks, trails, community centers, roads, regional stormwater facilities, and sewer collection and treatment facilities.

2.5 LEVELS OF SERVICE IMPACTS

Levels of service (LOS) are established in the CFP and represent quantifiable measures of capacity. They are minimum standards adopted by the County or special district providers to provide capital facilities and services to the community at a certain level of quality and within the financial capacity of the County or special district provider. Examples of LOS measures include: roadway volumes to capacities, acres of parks per 1,000 population, gallons of water per capita per day, and others.

The CFP outlines the LOS impacts of growth for the County both to 2029, and in a longer-term review to 2044. A detailed review of each County service, as well as LOS analysis for non-county-provided facilities, is contained in Chapter 4 Service Area and Infrastructure.

2.6 CAPITAL PROJECTS AND PRIORITIZATION

Based on adopted or alternative levels of service presented in Chapter 4, a series of capital projects is proposed for the six-year and 20-year periods. As described in Chapter 3, dedicated capital funds are limited and there is a gap between dedicated funds and capital costs for many of the County's service areas. Means to fill gaps with other funding sources are described. However, in consideration of limited resources, another means to aligning funds to projects is to prioritize projects around prioritization principles. It is recommended that Kitsap County convene representatives of Public Works, Sheriff, Administration, Community Development, Auditor and others to develop a coordinated set of principles and a process to evaluate and prioritize capital projects, particularly those that share related funding sources. The Capital Facilities Element of the Comprehensive Plan provides general guidance on prioritization of capital facilities improvements. Some additional interim prioritization principles are listed below for consideration in this Capital Facilities Plan.

Exhibit 2-3 Interim Capital Project Prioritization Criteria

Principle	Criteria
Vision	1. Does the project support the Kitsap County Comprehensive Plan Vision? 2. Does the project implement an approved functional plan?
Existing commitments	3. Are there agreements or other official commitments in place or is a substantial amount of work already complete?
Leverage existing system	4. Does the project help complete the existing system in the County or subarea? 5. Does the project improve the quality of existing facilities
Available maintenance resources	6. Are long-term sustainable maintenance resources available? 7. Does a project scope or timing help avoid major maintenance costs down the road?
Funding and partnerships	8. Does the project require specific timeframes of partner participation or is it eligible for specific grants? 9. Does the proposal represent a unique funding opportunity? 10. Is the project drawing from entrepreneurial opportunity with a long-term capital or program funding stream?
Best provider	11. Is the County the best provider of the facility or service?
Benefits outweigh cost	12. Is there a substantial benefit in relation to cost of the facility service?

Equity	13. Is there a fair distribution of investment and benefits among different communities? 14. Does the project provide added facilities or services to meet the needs of underserved populations?
Community support	15. Does the project have the support of the community? Will it benefit a significant number of persons in the community?

Source: Kitsap County, 2023

2.7 REASSESSMENT POLICY

Those facilities and services necessary to support growth should have LOS standards. The County must reassess the land use element and other elements of the comprehensive plan if the probable funding falls short of meeting the need for facilities that are determined by a county or city to be necessary for development.

Growth, LOS standards, and a funded capital improvement program are to be in balance. In the case where the LOS cannot be met by a particular service or facility, the jurisdiction could do one of the following: 1) add proposed facilities within funding resources, 2) reduce demand through demand management strategies, 3) lower LOS standards, 4) phase growth, or 5) change the land use plan. In the case of transportation, the County would have to deny development that would cause LOS to decline below the adopted standards unless transportation facilities can be implemented at the time of development or within six years: "concurrent with the development" means that improvements or strategies are in place at the time of development, or that a financial commitment is in place to complete the improvements or strategies within six years." (RCW 36.70A.070(6))

3 REVENUE ANALYSIS

3.1 INTRODUCTION

This chapter discusses Kitsap County's capital facilities revenues for County-provided facilities and services. The purpose of this financial analysis is to understand the fiscal constraints of the Kitsap County CFP. These revenue estimates were developed to assist in project planning but are not intended to be precise forecasts. Exact funding levels are difficult to predict given the uncertainties of funding sources; high sensitivity to local, state, and federal policy decisions; personal choices of residents; and other market forces.

Estimated future revenues have been projected for the 2024-2044 planning period in year of expenditure dollars (YOE$). The revenue analysis is grouped in the following categories:

- **Dedicated Capital Revenues.** These revenues are required by law to be used for specific types of capital expenditures.
- **General Capital Revenues.** These revenues are required by law to be used for capital, but the types of capital projects are not restricted.
- **Impacts of Annexations.** Annexation and incorporation of land into cities can have significant impacts on the County's revenues, by decreasing the tax base.
- **Potential Policy Options and Other Funding Sources.** This section covers other ways the County could fund its capital project costs, including policy choices and sources such as local improvement districts.

Some of the funds discussed in this analysis may be used for maintenance and operations of existing capital facilities or for construction of new capital facilities. However, if maintenance and operations costs of existing facilities increase faster than revenues, jurisdictions are confronted with difficult decisions of whether to fund these costs rather than build new facilities, or to maintain current facilities that may provide lower levels of service. Those decisions will be made by the Board of County Commissioners and the County's executive leadership. Every effort has been made in this analysis to include only those revenues that the County currently chooses to use for capital investments. No funds currently used for maintenance and operations have been included in the capital revenue analysis.

3.2 ASSUMPTIONS

The revenue projections included in this analysis are based on up-front assumptions. The most significant assumptions are:

Annexation. This analysis makes annexation assumptions that are based on discussions with County staff familiar with the County's and cities' future plans. The assumptions provide a conservative picture of future revenues and demand for service; however, it is noted that if the annexations occur there would be corresponding change in responsibilities for capital project implementation that would be reflected in future capital plans for the County.

- This analysis does not consider the possible incorporation of Silverdale before 2044.

- This analysis assumes the cities in Kitsap County will annex all commercial and residential areas in their assigned UGAs by 2044. These annexations are assumed to occur incrementally between 2024 and 2044.

Real Estate Growth. This analysis makes assumptions about the growth in assessed value of real estate, which affects both Real Estate Excise Tax (REET) revenues and the Conservation Futures Levy that supports park capital projects. There are two pieces to projecting future real estate:

- **Escalation Rate of Assessed Values.** This analysis estimates that real estate assessed values will increase between 3.5 percent - 5 percent annually, beginning in 2024. In comparison, home values increased by an average of 8.7 percent annually over the prior twenty years. This rate of increase reflects a level similar to, but slightly lower than average levels of growth for Washington State during the same timeframe.
- **Turnover Rate of Properties.** To be conservative, this analysis assumes a turnover rate of 5.0 percent for residential properties and 3.5 percent for commercial properties in 2024, which are considered typical levels of turnover for those property types and less than the most recent five-year period average at 8 percent annually.

Population Growth. The revenue analysis is based on estimated countywide population growth.

The assumptions being used for this revenue analysis may not align with the County's budget assumptions regarding the same sources of revenue. The assumptions differ because the purposes of the two analyses are different: the purpose of the County' budget is to estimate how much money the County will have available to spend in the coming fiscal year; the purpose of this CFP revenue analysis is to estimate how much money the County is likely to receive over the next six years and next twenty years. The County's budgeting process works to estimate how much money will be received in a given year, while this revenue analysis estimates long-term averages based on historical trends.

3.3 DEDICATED CAPITAL REVENUES

Transportation

The County is responsible for maintenance and operations of our current multi-modal transportation system and for improvements to the system to support future growth. The County works closely with the State, cities, neighboring counties, transit agencies, Ports,

and special districts within and adjacent to the Kitsap County to provide an integrated multi-modal transportation system.

Funding for transportation comes from a variety of taxes, fees, and grants; some of which are solely available for transportation purposes. The level of available funding is difficult to project beyond 3 to 4 years, let alone project for the 20-year time frame of the comprehensive plan. There are two primary expenditure categories: operations (maintenance, operations, and preservation of the existing system) and capital construction (building new improvements).

Operation of the multi-modal transportation system is the priority for the County with most of the available funding going to support those activities. In 2023 the Operations budget was $38,000,000 and is expected to increase annually due to inflation, changes to environmental regulations, and operational requirements. Over 20 years the estimated operations expenditure may range from $900,000,000 to $1,000,000,000.

The capital construction program is funded through available revenue after operations are funded and grant funding. Over the Transportation Improvement Program (TIP) six-year cycle for 2024-2029, the capital construction budget is $115,400,000.

Road Levy – Property Tax

The County assesses a portion of the property tax for transportation purposes. The County Board of Commissioners is limited to a maximum of 1 percent growth (exclusive of new construction) per year for the Road Levy. Any larger increase requires a public vote.

In 2023, the County Road Levy allocated to Public Works was $31,000,000. Over 20 years the anticipated total range is $680,000,000 to $775,000,000. Between 17 percent and 19 percent of the Road Levy is directed to transportation uses outside of road maintenance, operations, and improvements. The largest purposes are Sheriff traffic enforcement, $2,900,000 in 2023, over 20 years approximately $58,000,000; and County Stormwater Fees, $3,500,000 in 2023, over 20 years approximately $71,000,000.

Exhibit 3-1. Kitsap County Road Levy Estimated Future Revenues (2024-2044 in YOE$).

Road Levy – Property Tax Revenues	Total 2024-2044
Estimated Revenues*	$727,500,000
Amount Committed to Fees**	$129,000,000
Available Revenues	$598,500,000

Source: Kitsap County Transportation Planning, 2023; LDC, 2023
*Notes: *The estimated revenue is calculated as an average of the anticipated total range of revenues. **The amount committed to fees is the total amount of revenue that is used for Sheriff traffic enforcement and County stormwater fees.*

The County does not currently dedicate any County road property tax levy revenues toward capital projects. However, this revenue is sometimes used to fund construction on an as-needed basis through operating transfers to the County road construction fund.

State Motor Vehicle Fuel Tax

Counties and cities receive a portion of the State Motor Vehicle Fuel (MVF) tax based on a complex reimbursement formula relying largely on road miles within the jurisdiction. State MVF tax rates saw a series of voter-approved increases in past years. Most of those additional funds, however, were earmarked for specific transportation projects throughout the State, and local jurisdictions did not see a noticeable increase in average revenues.

Assumptions: Revenues in this category have been projected using estimated revenues per centerline miles of road in the unincorporated county. There are two counter forces affecting miles of road in the unincorporated county: road miles increase as the County builds new roads and expands current ones, and road miles decrease as land is annexed and incorporated.

To account for both of these forces, this analysis uses recent trends in centerline miles of roads as they relate to population in the unincorporated county. As UGAs or portions of UGAs are annexed, miles are subtracted from the unincorporated total in approximate proportion to the unincorporated acres being annexed.

MVF tax revenues per mile of road are assumed to decline over the study period. The ten-year historical average MVF tax revenue per lane mile is about $5,480. To be conservative, this analysis assumes an average annual loss of 1.8 percent in fuel tax revenues over the planning period, resulting in decreasing purchasing power over time.

Kitsap County has historically put all of its MVF tax revenues into its capital road fund, and this analysis assumes that trend will continue.

While the MVF revenue has been flat or declining, County Public Works anticipates around $5,750,000 annual revenue for the state program or its Vehicle Miles Traveled replacement. Over 20 years, the anticipated total is $80,000,000. Exhibit 3-2 shows historical motor vehicle fuel tax revenues and projected future revenues.

Exhibit 3-2. Kitsap County Motor Vehicle Fuel Tax Revenues Allocated for Capital (2024-2044 in YOE$).

Source: Kitsap County Transportation Planning, 2023; LDC, 2023

Exhibit 3-3 shows estimated total Motor Vehicle Fuel Tax revenues in two subtotal periods as well as for the entire 2024-2044 planning period.

Exhibit 3-3. Projected Kitsap County Motor Vehicle Fuel Tax Revenues Allocated to Capital (2024 – 2044 in YOE$)

Motor Vehicle Fuel Tax Revenues	Subtotal 2024-2029	Subtotal 2030-2044	Total 2024-2044
Estimated Revenues	$25,785,000	$53,550,000	$79,335,000

Source: Kitsap County Transportation Planning 2023; Kitsap County Department of Administrative Services, 2023; LDC, 2023

Transportation Impact Fees

Transportation impact fees are assessed on new development to fund improvements that add capacity to the transportation system, accommodating the travel demand created by new development. The Revised Code of Washington (RCW) Section 82.02.050 identifies the intent of impact fees as:

- To ensure that adequate facilities are available to serve new growth and development;
- To promote orderly growth and development by establishing standards by which counties, cities, and towns may require, by ordinance, that new growth and

development pay a proportionate share of the cost of new facilities needed to serve new growth and development; and
- To ensure that impact fees are imposed through established procedures and criteria so that specific developments do not pay arbitrary fees or duplicative fees for the same impact.

Transportation impact fees are a financing mechanism authorized by the Growth Management Act (GMA) of Washington State (see RCW 36.70A.070 and 82.02.050). State law imposes limitations on impact fees. These limitations are intended to assure property owners that the fees collected are reasonably related to their actual impacts and will not be used for unrelated purposes.

Impact fee revenue collected from developments can be spent only on transportation system improvements which are: (a) identified in the comprehensive plan, capital improvement program, or other policy documents (including this study) as needed for growth, and (b) reasonably related to the impacts of the new development from which fees are collected.

Specifically, condition (a) requires that impact fees are not used on improvements needed to remedy existing deficiencies. Those needs must be entirely funded from public sector resources. Condition (b) is satisfied if the local government defines a reasonable service area, identifies the public facilities within the service area that require improvement during the designated planning period, and prepares a fee schedule taking into account the type and size of the development as well as the type of public facility being funded.

Impact fee rates are set based on the entire transportation system. This is a key difference between impact fees and State Environmental Policy Act (SEPA) mitigation, whereby pro-rata shares of specific project improvements are collected. However, impact fees are not a replacement for SEPA mitigation.

Impact fee rates are easier to administer than traditional SEPA development mitigation, at the point of development review. However, more complex administrative procedures are necessary to track the funds collected from each development. This is necessary to assure that the funds are expended only on eligible transportation system improvements and to assure that impact fee revenues are used within ten years. Fees not expended within ten years must be refunded with interest to the current owner of the property.

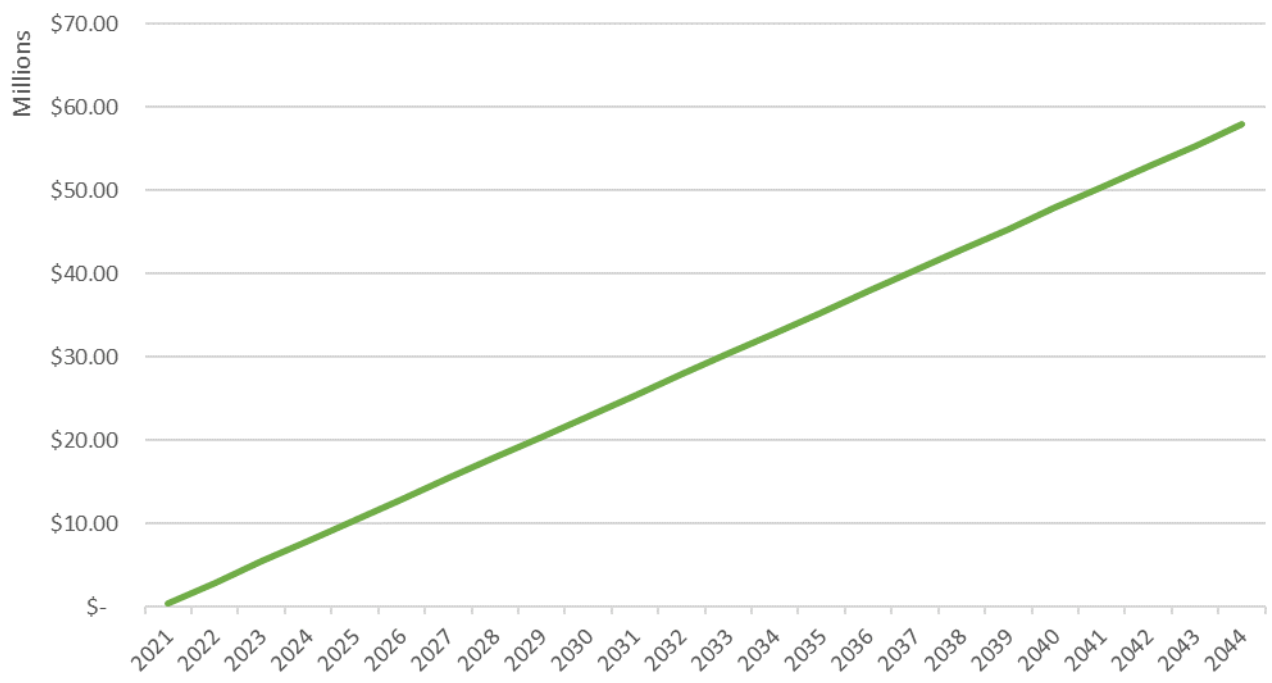
Kitsap County first adopted a transportation impact fee ordinance in 1992. The ordinance established an impact fee rate of approximately $51 per daily trip for each of three impact fee districts. The impact fee rate structure was updated in a 2003 study to create four impact fee districts, with a fifth district for state route projects in Kitsap County.

Kitsap County Ordinance 561-2018 established a new impact fee rate table based on the Institute of Transportation Engineers Trip Generation Manual. The current impact fee rate is uniform across all impact fee service areas and is adjusted for inflation.

As of March 2020, the transportation impact fee rate was approximately $700 per new PM peak hour trip, an equivalent of $694 per new single-family dwelling unit. This was the second-lowest impact fee rate in Western Washington for jurisdictions who impose transportation impact fees.

In 2021, the County Board of Commissioners passed Ordinance 600-2021, increasing the Transportation Impact Fee to $4,304 per PM peak hour trip. Revenue from impact fees is highly variable and subject to economic cycles. For planning purposes, the County Public Works estimates $2,500,000 in revenue from impact fees annually. Over 20 years, an estimated $50,000,000 in revenue is anticipated. Exhibit 3-4 shows projected future Impact Fee revenues rising linearly with expected growth over the next 20 years.

Exhibit 3-4. Kitsap County Transportation Impact Fees (2021 – 2044 in YOE$)



Source: Kitsap County Transportation Planning 2023; LDC, 2023

Exhibit 3-5 shows estimated total impact fee revenues in two subtotal periods as well as for the entire 2024-2044 planning period.

Exhibit 3-5. Projected Kitsap County Transportation Impact Fees (2024 – 2044 in YOE$)

Impact Fee Revenues	Subtotal 2024-2029	Subtotal 2030-2044	Total 2024-2044
Estimated Revenues	$15,000,000	$35,000,000	$52,500,000

Source: Kitsap County Transportation Planning 2023; LDC, 2023

Transportation Grants

A grant is funding provided by an outside source that does not need to be repaid. Grants come in all sizes, purposes, and conditions set by the granting source to achieve the goals and objectives of the grant organization. Grants typically target specific issues such as safety, congestion, walking and biking, economic development, and preservation to name a few.

Grant processes are competitive; the more closely the proposed project matches the criteria of the grant process the higher the potential a grant may be awarded. However, all grant processes are oversubscribed with typically significantly more applications than available funding, so even perfectly eligible projects will not receive a grant award. Grants can be competitive on a national, state, or regional level.

Utilizing a grant has direct and indirect costs in County in funds, staffing, resources, and lost opportunities to pursue higher priority projects; thus, grant opportunities are strategically pursued by the County when they are consistent with the policies, TIP process, and transportation plans of the County. Prior to applying for a grant, the County will have already invested significant resources, staff, and time into developing the plans and identifying the scope of the project.

Grant awards can provide full or partial funding for a project. Some grant awards "fully fund" a project; however, these grant awards are not common and are typically smaller scale projects. On average a "fully funded" award will cover approximately 95 percent of the full cost of a project. Most grant programs require the County to provide a "local match" based on a percentage of the grant award amount. Local matches are local funds provided by the County and come from the Road Fund revenue. Local matches generally range from 13.5 percent to 20 percent of the grant amount, with some requiring as much as 50 percent.

Most grant programs also set a maximum dollar amount for a grant award. The County typically must size projects or divide larger projects into multiple projects to apply for

grants. The County can, and typically does, apply for grants by phases (for preliminary engineering, right of way, and/or construction) within a project. A project can apply for and receive multiple grant awards (for preliminary engineering, right of way, and/or construction) or apply for a single phase, such as construction. If a grant award is for a specific phase (i.e., construction) then only the costs associated with actual construction of the project can be paid for with grant funds; all other associated costs are the responsibility of the County.

Grant organizations impose requirements on the County and projects that range from added administrative processes and purchasing restrictions to regulatory review processes. Typically, these requirements increase the total cost of a project by 10 percent to 25 percent. A grant agency will place restrictions on what is an "eligible cost" for a project. The County will either cut the "ineligible cost" or fund that portion of a project with local funds. Grants lock the County into rigid timelines, placing constraints on County staffing, and can result in the County returning the grant funding because it cannot make required deadlines.

Overall, the County anticipates that a "grant funded project" will receive 60 percent to 70 percent of the total project costs from grants, and that 30 percent to 40 percent of the project costs will come from other County Road Fund revenue sources.

Grants from the State or other organizations are typically for all phases of a project and account for approximately 35 percent to 45 percent of all awards. Grants from federal agencies are more typically awarded by phase.

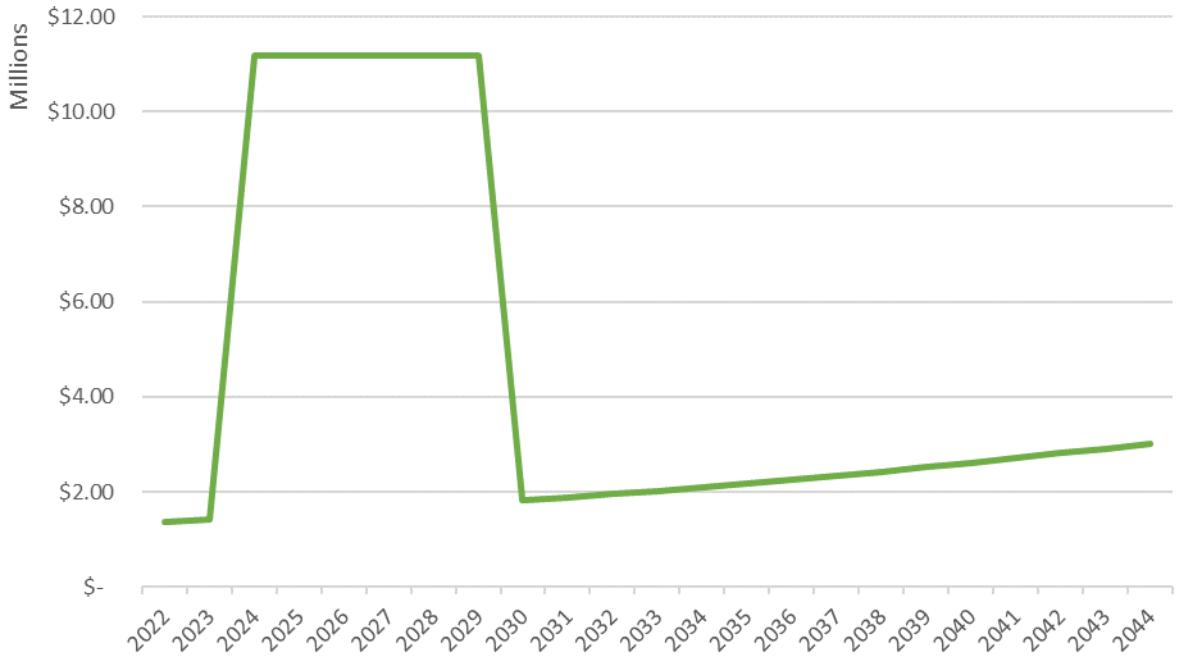
In the 2024-2029 TIP, the County is estimating $67M (or 58 percent of the 6-year TIP, $115,000,000 capital construction program) will be grant funded from 8 different grant organizations. The grants identified in the TIP include secured and high potential for awarded future grants. For planning purposes, it is assumed the construction program will be 55 percent to 65 percent funded by grants. The majority of these projects will not be constructed without full or partial grant funding.

Assumptions: Grant revenues are estimated on a per capita basis on the assumption that, over time, a jurisdiction will generally receive its "fair share" of available grant revenues. Since 1988, Kitsap County has averaged $4.55 per capita in state grant revenues per year. In the past decade, the County has received approximately $3.33 per capita in state grant revenues. Given the forces discussed previously, this analysis assumes $4.50 per capita in the future with 3 percent annual increases. Total revenues will therefore change on pace with changes in the county's unincorporated population. Because of the increased competition for grant dollars and decrease in available grant funds, grant revenues have

been estimated at lower levels than recent rates. Since 1988, Kitsap County has received an annual average of $7.34 per capita of federal grant funding, and over the last decade the County has received an annual average of $12.78 per capita. The average has been slightly higher in recent years, so this analysis estimates future average annual per capita federal grant dollars at $8.00 per capita, with a 3 percent annual increase. As with state grant dollars, changes in total revenues are expected to occur at the rate of change in the population.

Exhibit 3-6 shows historical Grant revenues and projected future revenues. After 2029, grant funding is expected to decrease to average levels described in the assumptions above.

Exhibit 3-6. Kitsap County Federal Transportation Grant Revenues Allocated for Capital Projects (2022 – 2044 in YOE$)



Source: Kitsap County Transportation Planning 2023; LDC, 2023

Exhibit 3-7 shows estimated total federal grant revenues in two subtotal periods as well as for the entire 2024 – 2044 planning period.

Exhibit 3-7. Projected Federal Transportation Grant Revenues for Capital Projects (2024 – 2044 in YOE$)

Transportation Grants	Subtotal 2024-2029	Subtotal 2030-2044	Total 2024-2044
Estimated Revenues	$67,000,000	$35,581,000	$102,581,000

Source: Kitsap County Transportation Planning 2023; LDC, 2023

Total Estimated Transportation Revenues

Exhibit 3-8 shows total projected dedicated transportation revenues for Kitsap County for the planning period and two interim subtotal periods. It is important to note that these totals include impact fee revenues, which have limitations described in the Transportation Impact Fees section above, including that they are limited to spending on projects that serve new development and must be spent within six years of collection.

Exhibit 3-8. Projected Total Transportation Revenues Allocation for Capital (2024 – 2044 in YOE$)

Total Transportation Revenues	Subtotal 2024-2029	Subtotal 2030-2044	Total 2024-2044
Estimated Revenues	$122,620,445	$124,131,000	$246,751,445

Source: Kitsap County Transportation Planning 2023; LDC, 2023

Parks

Parks Impact Fees

Similar to the transportation impact fees described above, a County can impose impact fees on new residential developments to help fund capital parks projects to serve new development. Impact fees can be used to pay the proportional share that each development benefits from public facilities but cannot be used to correct existing deficiencies. Parks impact fees may only be charged on developments in unincorporated areas of the county.

Impact fees can be used on development, site acquisition, or debt service for projects that serve a new development. Kitsap County currently imposes impact fees at the rates authorized in Kitsap County Code 4.110.210.

Assumptions. Since impact fees are related to new residential development, this analysis projects future revenues based on expected rates of new residential construction in the unincorporated area of the county. Historical revenues and construction levels were analyzed to understand the relationship between impact fees and new construction, and this relationship was used to project revenues going forward.

Over the last ten years (2014-2023) the County has received about $1.60 in parks impact fees for every $1,000 of new construction Assessed Value (AV) from unincorporated areas. To estimate these revenues going forward, this analysis holds a constant relationship of $1.60 per $1,000 new construction AV, with 3 percent annual increases. Total revenues will therefore change on pace with changes in the County's unincorporated population. As with transportation impact fees, this analysis does not assume any future rate adjustments, although rates are likely to be reviewed, and perhaps adjusted, by the County every few years based on future project needs.

Exhibit 3-9 shows historical park impact fee revenues and estimated future revenues.

Exhibit 3-9. Kitsap County Park Impact Fees (2014 – 2044 YOE$)

Source: Kitsap County Parks Admin, 2023; LDC, 2023

Exhibit 3-10 shows future estimated park impact fee revenues for two subtotal time periods as well as for the entire 2024-2044 planning timeframe.

Exhibit 3-10. Kitsap County Park Impact Fee Revenues (2024 – 2044 YOE$)

Parks Impact Fees	Subtotal 2024-2029	Subtotal 2030-2044	Total 2024-2044
Estimated Revenues	$ 4,637,539	$ 15,922,124	$ 20,559,663

Source: Kitsap County Parks Admin, 2023; LDC, 2023

Conservation Futures Tax

The Conservation Futures Tax is a property tax assessed on all taxable property in Kitsap County, in both incorporated and unincorporated areas. According to state laws (RCWs 84.34.210 and 84.34.220), revenues from this tax may be used for acquisition of open space land, farm and agricultural land, and timber land. This tax has become an important piece of Kitsap County's parks funding as it remains stable, while impact fee revenues have been consumed by debt service payments during the prior 10 years. However, much of this revenue has also been dedicated to paying off bonds that will be retired in 2024.

As mentioned above, property tax revenues were significantly impacted by the passage of Initiative 747 in 2001, which limits property tax collections increases to 1.0 percent of the previous year's revenues plus new construction. In inflation-adjusted terms, revenues from property tax are actually declining, since the 1.0 percent allowable increase does not keep pace with inflation (which has averaged about 3.0 percent in the recent past) or with population growth.

Assumptions. This analysis assumes assessed values will increase at 3.0 percent annually, which is in line with historical averages. The current levy rate for the conservation futures tax is $0.025532 per $1,000 of assessed value countywide (Kitsap County Statement of Assessments, 2024). As assessed values increase and levy revenues are limited to the 1 percent increase plus new construction, the levy rate will decline. Kitsap County is currently collecting the maximum revenue each year at its current rate, including the 1 percent growth. The only way the County could receive additional revenues beyond what is projected below is to pass a voter-approved levy increase.

Exhibit 3-11 shows historical conservation futures tax revenues and estimated future revenues.

Exhibit 3-11. Kitsap County Conservation Future Tax Revenues (2016 -2044 YOE$)

Source: Kitsap County Parks Admin, 2023; LDC, 2023

Exhibit 3-12 shows estimated future revenues for the conservation futures tax for two subtotal time periods as well as the entire 2024-2044 planning timeframe. The County is currently using these revenues to pay debt service for capital bonds. In total, about $7.3 million of projected conservation futures revenues is slated to go toward debt service payments through 2024. The remaining amount is available for future parks capital projects.

Exhibit 3-12. Projected Kitsap County Conservation Futures Tax Revenues (2024 – 2044 in YOE$)

Conservation Futures Tax	Subtotal 2024-2029	Subtotal 2030-2044	Total 2024-2044
Estimated Revenues	$7,840,680	$31,955,515	$39,796,195

Source: Kitsap County Parks Admin, 2023; LDC, 2023

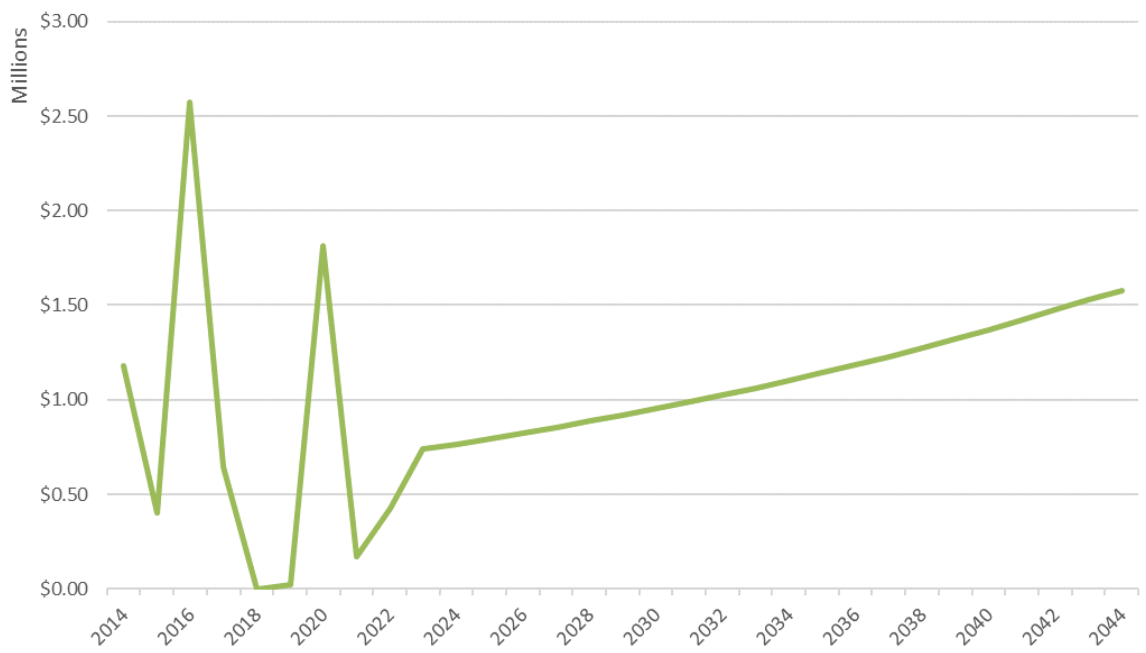
Grants and Donations

Additional revenues for parks capital projects and acquisitions generally comes from state grants, federal grants, and donations. State grants, which usually come from the Washington State Recreation and Conservation Office, make up the largest of these three sources.

Assumptions. Because competition for grants is on a state or national level, this analysis estimates these revenues on a per capita basis on the assumption that, over time, a jurisdiction will generally receive its "fair share" of available grant revenues. Between 2014 and 2023, the County received about $4.03 per capita in combined state and federal grant and donation revenues; this analysis estimates future average annual grants at $4.03 per capita, with 3 percent annual increases.

Exhibit 3-13 shows historical revenues and estimated future revenues. An average annual dollar amount is assumed in each year for this analysis. However, these dollars will vary greatly from year to year and will likely resemble the trend of peaks and valleys shown in historical data. While using an annual average does not fully represent the County's future cash flow of grant dollars, it approximates how many total dollars will be received over the study period.

Exhibit 3-13. Kitsap County Parks Grants and Donations Revenues (2014 – 2044 in YOE$)



Source: Kitsap County Parks Admin, 2023; LDC, 2023

Exhibit 3-14 summarizes the County's projected parks grant and donation revenues in two subtotal time periods as well as for the entire 2024-2044 planning horizon.

Exhibit 3-24. Projected Kitsap County Parks Grants and Donations Revenues (2024-2044 in YOE$)

Parks Grants and Donations	Subtotal 2024-2029	Subtotal 2030-2044	Total 2024-2044
Estimated Revenues	$5,042,898	$18,660,745	$23,703,643

Source: Kitsap County Parks Admin, 2023; LDC, 2023

Total Estimated Parks Revenues

Exhibit 3-15 shows total projected parks capital revenues for the planning period, including revenues from impact fees, conservation futures tax, grants, and donations. The County's future revenues are available for spending on parks capital projects over the planning period, resulting in an estimated $84 million.

Exhibit 3-35. Projected Total Kitsap County Revenues Dedicated to Parks Capital Projects (2024-2044 in YOE$)

Total Parks Revenues	Subtotal 2024-2029	Subtotal 2030-2044	Revenue Total 2024-2044
Estimated Revenues	$17,521,117	$66,538,384	$84,059,501

Source: Kitsap County Parks Admin, 2023; LDC, 2023

Sewer

Federal or State Grants

Kitsap County receives grants from the state to help fund sewer capital projects. These grants are project-specific and therefore do not occur on a regular basis. In the timeframe for which historical revenues were available for this analysis, 2016-2023, the County received capital sewer grants in four of the eight years. These grants varied in amount from $0.15 million to $10 million. The County received two grants for the Kingston Treatment Plant Water Reuse Feasibility Study. In 2017 the Bureau of Reclamation provided a $150K grant and in 2019, the Department of Ecology (DOE) provided a $258K grant for the study. The County received a $10M grant in 2021 from the Defense Community Infrastructure Pilot (DCIP) program for the Bangor/Keyport Forcemain Replacement project to replace 5-miles of highly corroded ductile iron pipe. DOE provided a $343K grant in 2022 to reduce nutrients discharged into Puget Sound from the Central Kitsap Treatment plant.

Assumptions. Based on discussions with Kitsap County, recent grant revenues have been higher than historical averages, and higher than the County expects to receive going forward. The County has indicated that the conservative estimate for project revenues over the next 20-years would be to account for no additional grant revenues.

Sewer Connection Fees

Sewer connection fees (also known as newcomer assessment fees) are charged when a property owner wants to connect a property to an existing county sewage system. The logic behind the newcomer's fee is that it represents the new connection's proportionate share of the existing asset value and for the capacity of future expansion of the major components of the existing sewage systems. The amount of the fee varies based on the type of property and/or the number of dwelling units.

Connection fees for of Kitsap County sewer service area new customers are deposited into a non-capital Sewer Improvement Fund and only transferred to the Sewer Capital Program as needed. In 2020 the connection fee calculation structure was changed from individual fees for each County sewer service area to a uniform fee for all the service areas. The fee is calculated annually based on current asset value, 10-years of interest on debt service, and capacity. Previously, the connection fee was adjusted annually by Seattle-Tacoma CPI-U for the previous year. The CPI-U is not a true cost for adjustment since it does not accurately account for construction costs.

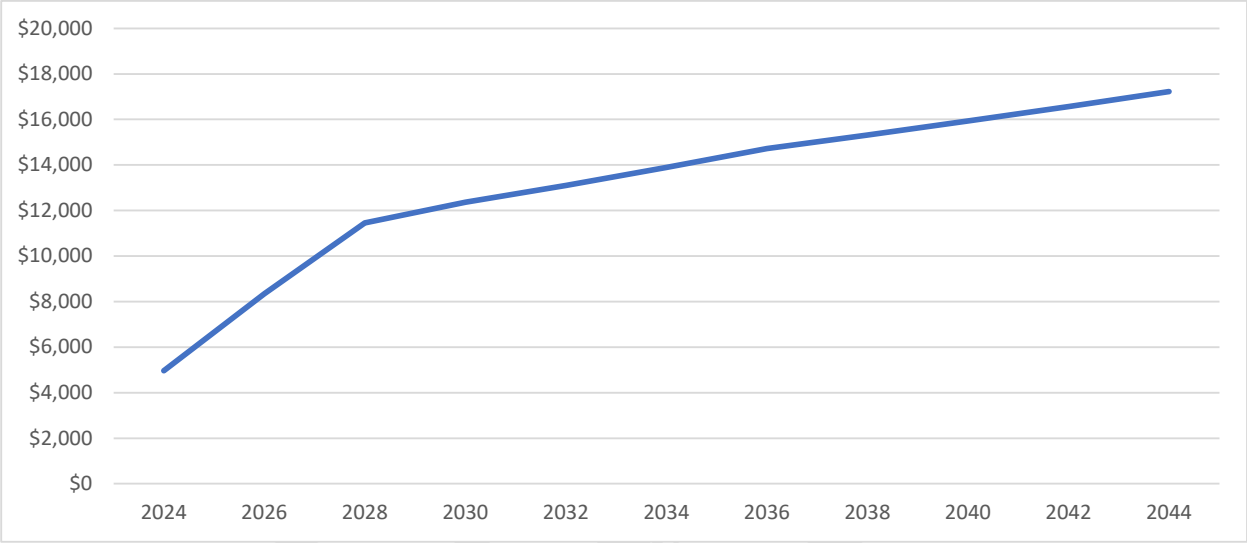
The City of Poulsbo and the USN Keyport Base pay for a portion of the County's sewer infrastructure improvements directly benefitting the City and the Base. The proportionate amount is calculated by percentage of flow in the collection and conveyance system and by share of capacity at the Central Kitsap Treatment Plant (CKTP) and is applied as revenue to the individual project.

Assumptions. Connection fees are generated by new sewer connections, which vary by the type of new development, as well as when an existing property changes use, and the connection fee is then calculated on the new use and then deducts the previous connection fee paid under the old use.

Future revenues generated from connections fees is dependent on the housing development growth within the County's sewer service areas as well as the projected cost of the capital program. Over the last eight years (2016-2023), connection fees have gone from an average fee of $5,873 in 2016 to $9,939 in 2023. A significant increase came in 2023 due to the jump in the cost of the capital improvement program. The amount of future connection fees will be dependent on the cost of the capital improvement program with much of the County infrastructure near or past it's useful life and the growth in the housing development.

Exhibit 3-16 shows estimated future revenues from connection fees allocated to the capital program. The analysis estimates annual revenues using an assumption of linear growth in households between 2024 and 2044. However, actual revenues in any given year may vary based on the type and amount of construction completed in that particular year and will likely exhibit peaks and valleys. Graph 1 shows the annual average over the entire planning period.

Exhibit 3-16. Kitsap County Sewer Connection Fees Allocated for Capital 2024-2044 (in thousands YOE$)



Source: Kitsap County, 2023

Exhibit 3-17 summarizes total future estimated sewer capital revenues from the City of Poulsbo and the USN Keyport Base for the planning period 2024-2044 broken out into the two subtotal periods for 2024-2029 and 2030-2044.

Exhibit 3-17. Projected Sewer Capital Revenues from the City of Poulsbo and USN Keyport Base for 2024-2044 (YOE$)

Sewer Fees	Subtotal 2024-2029	Subtotal 2030-2044	Total 2024-2044
Estimated Revenues	$27,987,106	$35,66,763	$63,647,869

Source: Kitsap County, 2023

Total Estimated Sewer Revenues

Utility funds operate as enterprises within the County structure, functioning much like private business entities. The Sewer Capital Fund relies primarily on rates to fund its capital program; the County periodically conducts comprehensive cost-of-service evaluation of its utilities to determine whether any adjustments to current rates are needed to ensure each customer pays their equitable share of sewer system costs. The results of this study are

reflected in the customer utility rates. Additionally, the Sewer Capital Fund typically receives transfers from the Sewer Operating and Maintenance Fund, as well as developer contributions.

Exhibit 3-18 shows total estimated revenues available for sewer capital projects over the planning period, with the major contributions come from, sewer connection fees, federal and state grants, capital revenue from the City of Poulsbo and USN Keyport, and sewer revenue bonds. Additionally, the County currently has a fund balance of $18.8M in its sewer capital fund. These dollars are also available to cover planned sewer projects during the 2024-2044 time period.

Exhibit 3-18. Total Projected Sewer Revenues Estimated for Capital 2024-2044 (YOE$)

Total Sewer	Subtotal 2024-2029	Subtotal 2030-2044	Revenue Total 2024-2044	Total with 2024 Fund Balances
Estimated Revenues	$164,672,000	$418,223,255	$582,895,255	$600,000,000

Storm Water Management

State and Federal Grants

The County receives state and federal grants to support specific Stormwater Management (Stormwater) capital projects. The County received grants to aid stormwater capital projects for capacity and non-capacity projects to be distributed through 2027 for a total of $6,156,000.

Assumptions. Over the last three years (2020-2022), annual per capita grant revenues for surface and stormwater management have been about $11.40 per capita. As a conservative assumption, expected revenues for Stormwater grants are estimated at $2.00 per capita annually, growing at an estimated future inflation rate of 3.0 percent, per historical trends. An average annual dollar amount is assumed in each year for this analysis. However, in reality these dollars will vary greatly from year to year and will likely resemble the trend of peaks and valleys shown in historical data. While using an annual average does not fully represent the County's future cash flow of grant dollars, it approximates how many total dollars will be received over the study period.

Exhibit 3-19 summarizes projected revenues for the planning period as well as two subtotal time periods.

Exhibit 3-194. Projected Surface and Stormwater Management Grant Revenues (2024 – 2044 in YOE$)

Stormwater Grants	Subtotal 2024-2029	Subtotal 2030-2044	Revenue Total 2024-2044
Estimated Revenues	$8,585,785	$8,988,263	$17,574,048

Source: Kitsap County, 2023

Surface and Stormwater Management Fees

The County charges Stormwater fees to those served by or receiving benefits from County drainage facilities or contributing to surface water runoff within the County. Rates are based on the current use of a property (such as residential, commercial, or roadway) as well as the size of the establishment in terms of square footage, number of dwelling units, or impervious surface area.

Stormwater fee revenues can be used for both operations and maintenance of Stormwater facilities as well as Stormwater capital projects. The amount of fee revenue that goes into the Stormwater capital funds is based on County policy.

Assumptions. As of 2016 the County allocated about $1.1 million per year of its Stormwater rate revenues into its Stormwater capital funds: $850,000 into the Stormwater Program Capital Fund and $230,000 into the Stormwater Asset Replacement Fund. This analysis assumes that this level of fee contribution to capital projects will continue and will increase at about 3.0 percent annually due to inflation and rate increases. Exhibit 3-20 shows estimated future revenues.

Exhibit 3-5. Kitsap County Surface and Stormwater Management Fee Revenues Allocated to Capital (2024 – 2044 in YOE$)

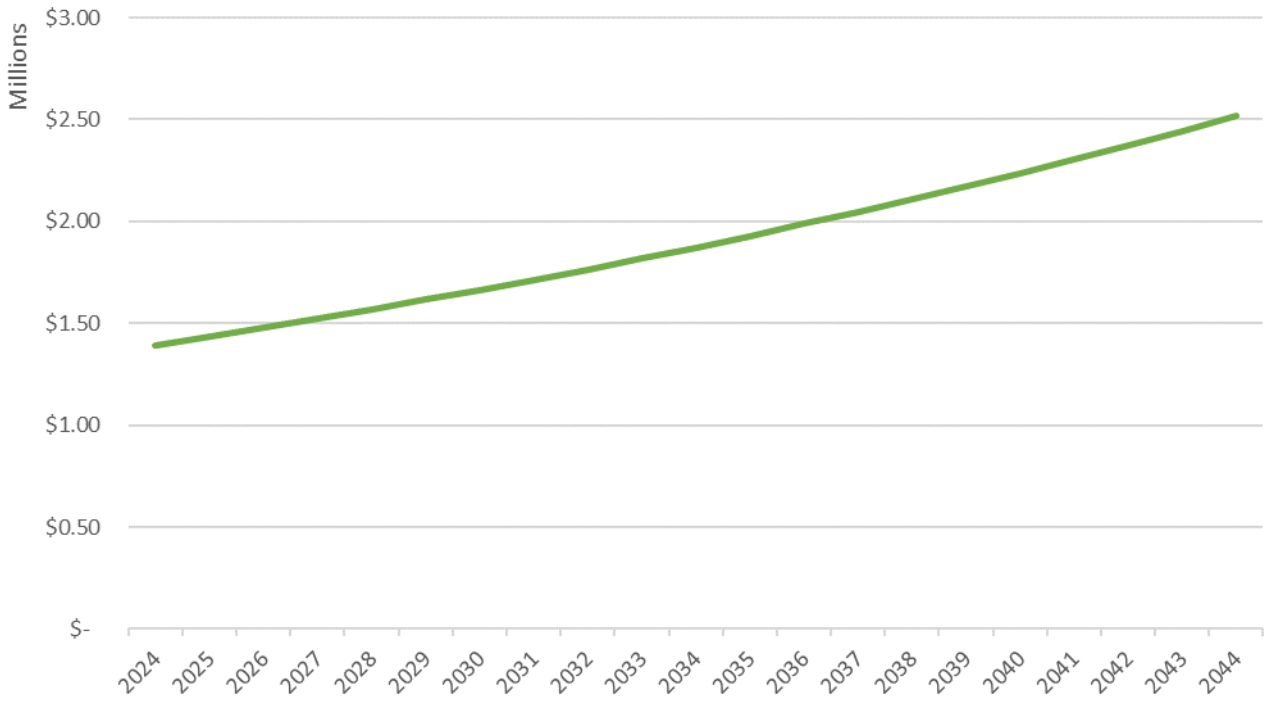


Exhibit 3-21 summarizes total estimated fee revenues allocated for capital for 2024 – 2044 as well as two interim summary time periods.

Exhibit 3-61. Projected Kitsap County Surface and Stormwater Management Fee Revenues Allocated to Capital (2024 – 2044 in YOE$)

Stormwater Fees	Subtotal 2024-2029	Subtotal 2030-2044	Revenue Total 2024-2044
Estimated Revenues	$9,013,387	$30,945,779	$39,959,166

Source: Kitsap County, 2023

Total Estimated Surface and Stormwater Management Revenues

Utility funds operate as enterprises within the County structure, functioning much like private business entities. The Surface and Stormwater Capital Fund relies primarily on rates to fund its capital program; the County periodically conducts comprehensive cost-of-service evaluation of its utilities to determine whether any adjustments to current rates are needed to ensure each customer pays their equitable share of surface and stormwater system costs. The results of this study are reflected in the customer utility rates.

Additionally, the Sewer Capital Fund typically receives transfers from the Sewer and Stormwater Operating and Maintenance Fund, as well as developer contributions.

Exhibit 3-22 shows total projected Stormwater capital revenues for the planning period, including state and federal grants and management fees. These funds are available for capital projects over the planning period, as reflected in Exhibit 3-24.

Exhibit 3-72. Projected Total Kitsap County Revenues Allocated to Stormwater Capital Projects (2024 – 2044 in YOE$)

Total Stormwater Management	Subtotal 2024-2029	Subtotal 2030-2044	Revenue Total 2024-2044
Estimated Revenues	$17,590,172	$39,934,042	$57,533,214

Source: Kitsap County, 2023

3.4 GENERAL CAPITAL REVENUES

Real Estate Excise Tax

Real Estate Excise Tax (REET) revenues are collected upon the sale of real property and must be expended on capital projects. Since REET is based on the total value of real estate transactions in a given year, the amount of REET revenues a county receives can vary substantially from year to year based on fluctuations in the real estate market. During years when the real estate market is active, revenues are high, and during slower real estate markets, revenues are lower.

Counties have the ability to impose up to two REET levies, REET I (the first 0.25 percent), and REET II (the second 0.25 percent), for a total tax of 0.5 percent of total assessed value. REET I and REET II revenues must be spent on capital projects that are listed in a county's current capital facilities plan. The definition of capital project, according to RCW 82.46.010 is:

> *those public works projects of a local government for planning, acquisition, construction, reconstruction, repair, replacement, rehabilitation, or improvement of streets; roads; highways; sidewalks; street and road lighting systems; traffic signals; bridges; domestic water systems; storm and sanitary sewer systems; parks; recreational facilities; law enforcement facilities; fire protection facilities; trails; libraries; administrative and judicial facilities…*

In addition to the above guidelines, REET II is further restricted, as it may not be spent on recreational facilities, law enforcement facilities, fire protection facilities, trails, libraries, or administrative or judicial facilities.

In Kitsap County, REET I and II are used as follows:

REET I - housing market activity and low interest rates in the last 5 years has allowed for a build of reserves in anticipation of bonding for a new courthouse addition. High interest rates after the pandemic and market cooling have constricted revenues. Modest growth projections of 2 percent over the long term show potential cash flow issues until the existing debt services pay off after 2030.

REET II - Public Works is seeking approval of a long term commitment toward the new debt service, bonded in 2022, which funded the building of the North Kitsap Service Center. Parks utilization of REET has been low in the last 5 years due to a backlog of projects and staffing issues. There is capacity for Parks projects in the amount of $1M - $2.25M annually.

Assumptions: Because REET dollars are directly related to the sale of real estate, this analysis assumes an annual turnover rate of 5.0 percent for residential properties and 3.5 percent for commercial properties.

Because REET revenues must be used for capital projects, this analysis assumes all REET revenues beyond those committed to existing bond payments are available for the capital projects discussed in this plan.

Exhibit 3-23 shows estimated total REET revenues in two subtotal time periods as well as for the entire 2024-2044 planning timeframe. The REET account currently has a total fund balance (REET I and REET II) of about $30 million, which is mostly dedicated for debt service during the planning period. Additionally, some REET revenues, especially in the six-year period, are dedicated to existing capital projects.

Exhibit 3-23. Projected Kitsap County Real Estate Excise Tax Revenues (2024-2044 in YOE$)

REET	Subtotal 2024-2029	Subtotal 2030-2043	Revenue Total 2024-2044
Estimated Revenues	$45,861,863	$130,348,179	$176,210,043
Amount Committed to Debt Service	$46,218,297	$92,404,398	$138,622,695
Available Revenues	($356,434)	$37,943,781	$37,587,348

Source: Kitsap County, 2023

3.5 TOTAL CAPITAL REVENUES

Exhibit 3-24 summarizes projected total capital revenues available over the planning period, including fund balances.

Exhibit 3-24. Projected Total Kitsap County Capital Revenues (2024-2044 in YOE$)

Total Capital Revenues	Subtotal 2024-2029	Subtotal 2030-2043	Revenue Total 2024-2044
Estimated Revenues	$368,265,597	$779,174,860	$1,147,449,458
Amount Committed to Debt Service	$46,218,297	$92,404,398	$138,622,695
Available Revenues	$322,047,300	$686,770,462	$1,008,826,763

Source: Kitsap County, 2023

3.6 POTENTIAL POLICY OPTIONS AND OTHER FUNDING SOURCES

This section describes policy and funding options available to the County outside of the dedicated revenues listed above. The options listed are not necessarily being considered by the County today but are included to show a range of options available to the County.

Adjusting Policies for Non-allocated Revenue Streams

The County has some revenue streams that it is not required to use on capital that are currently either (1) being used partially for capital and partially for operations or (2) not being used for capital at all. If the County experiences a shortfall in the revenues it has allocated for capital sources (which are described in the sections above) it could consider changing its policies to create additional or larger capital revenue streams. However, any increase in the portion of these revenues dedicated to capital would need to be balanced against the County's existing operations and maintenance needs. Revenue streams the County could consider allocating to capital include:

- **Solid Waste.** The County has modeled a fee structure that accounts for future transfers to Capital funds, and accounts for the timing of projects. Beginning in 2025, estimated transfers to the capital fund range from $2.5M to $3.5M, through 2028. In the event of shortfalls due to increased project costs or revenue reductions, the County would need to adjust fees and/or take on additional debt to account for these changes.

- **Stormwater Fees.** The County currently has a set practice of transferring a portion of Stormwater fee revenues into the Stormwater asset replacement fund each year

to maintain required fund balances. In addition, fee revenue transfers in varying amounts have historically been used to supplement peaks in the capital program not adequately covered by other funding sources. The County could increase its fee revenue transfers to provide additional capital revenues.

- **County Road Levy.** The County does not currently dedicate any County road property tax levy revenues toward capital projects. However, this revenue is sometimes used to fund construction on an as-needed basis through operating transfers to the County road construction fund. The County could institute a policy of allocating a certain percent of road levy revenues to capital projects to create a more stable capital transportation revenue source.

Local/Road Improvement Districts

If the County needs additional capital funds, it could consider creating a Local Improvement District (LID) or Road Improvement District (RID). Under these programs, the County has the statutory authority to create a new taxing district. Within these districts, the County may levy an additional property tax (excess levy) to cover debt service payments on the sale of bonds purchased to finance projects within the district. Revenues may only be applied to local, clearly-defined areas in which the land owners being assessed the additional tax receive a benefit from the funded projects. LIDs may be used for water, sewer, and stormwater projects. RIDs may only be used to fund road and street improvements.

Transportation Benefit District

Counties may form transportation benefit districts (TBDs) to acquire, construct, improve, provide, or fund transportation improvements within the defined district. TBDs have a number of revenue options to raise money to fund these improvements:

- Annual vehicle fee up to $50 (new legislative change as of July 2016). This fee does not require voter approval, although the County may place it on the ballot if it would like an advisory vote or as an actual requirement of imposition. This fee can either be assessed countywide (on both incorporated and unincorporated areas) or in a district that only includes the unincorporated areas of the county. To assess the fee within incorporated areas, there are legal requirements about the percent of cities and population that must approve the fee.

- Transportation impact fees on commercial and industrial buildings. Residential buildings are excluded. In addition, a county or city must provide a credit for a commercial or industrial transportation impact if the respective county or city has already imposed a transportation impact fee.

- Additional voter-approved revenue options. The County can, with voter approval, institute an annual vehicle license fee of up to $100 per vehicle or a sales tax up to 0.2 percent within the TBD. The TBD sales tax can be imposed in an area that is smaller than countywide and also sunsets after 10 years unless funds are used to retire debt on bonds used to fund improvements.

Tax Increment Financing Tool

Tax increment financing (TIF) allows cities, counties, and port districts to create special districts (tax increment areas) to finance public infrastructure and help incentivize economic development and redevelopment of blighted neighborhoods. Once created, the existing tax base within the tax increment area is frozen. Property taxes continue to be paid, but taxes derived from increases in assessed values (the tax increment) resulting from new development either go into a special fund created to retire bonds issued to fund public infrastructure or to fund infrastructure on a pay-as-you-go basis.

In Washington State, the Community Revitalization Financing (CRF) program is the only current TIF program available to counties. The State also offers two additional TIF programs that include state matching funds, but are currently closed to new applicants as they are pending additional state funding.

3.7 PROJECTED PROJECT FUNDING

Six-Year Projected Funding and Cost Comparison

The purpose of this section is to compare Kitsap County's dedicated capital facilities revenue sources with its planned project costs for the six-year planning horizon of 2024-2029 to understand the difference between near-term future dedicated capital revenues and planned future costs. In Kitsap County, future capital costs are generally larger than future dedicated capital revenues. This trend is seen in most counties and cities throughout Washington State, given the structural and legal limitations on capital funding sources.

Understanding the magnitude of this difference can help the County plan for ways to fill in the gap through other funding methods, such as operating transfers or bonds.

Estimated Project Cost

The capital project costs shown in Exhibit 3-25 are taken from each county service provider's individual capital facilities plan for the six-year planning period (2024-2029) and estimated costs for the six-year period (2024-2029). Costs were adjusted from current year dollars to Year of Expenditure dollars (YOE$) using an assumed annual inflation rate of 3.0 percent to align with the revenue projections presented above.

Exhibit 3-25. Estimated Capital Project Costs by Category (2024-2029 in YOE$)

Project Costs	Subtotal 2024-2029
Parks	$8,907,900
Sewer	$164,672,000
Solid Waste	$51,620,000
Stormwater	$17,474,500
Transportation	$115,379,000
Total	**$358,053,400**

Source: Kitsap County, 2023

Six-Year Capital Cost and Revenue Comparison by Facility Type

Exhibit 3-27 through Exhibit 3-34 show how planned project costs compare to dedicated capital revenue sources for the six-year planning period (2024-2029). The revenues and costs are both presented in year of expenditure dollars (YOE$).

These exhibits identify the difference between planned costs and projected dedicated revenues in the near-term, including existing fund balances in capital project funds. It is important to note that for all of the departments and service providers identified, their six-year capital plans have been balanced using non-dedicated revenue sources or bonds. These mechanisms are summarized after each exhibit.

Exhibit 3-29. Estimated Transportation Dedicated Capital Revenues and Costs (in YOE$)

Transportation	2024-2029	2030-2044
Dedicated Transportation Fund Revenues	$122,620,445	NA
2023 Transportation Fund Balance	NA	NA
TOTAL TRANSPORTATION FUNDS AVAILABLE	$122,620,445	NA
Capital Transportation Costs	$115,379,000	337,400,000
Estimated Dedicated Funding Surplus/(Deficit)	**$7,241,445**	**NA**

Source: Kitsap County TIP; LDC, 2023

Although there is a difference between future dedicated transportation capital revenues and estimated capital costs for the planning period, the six-year adopted TIP has been balanced through the use of multiple revenue sources, including local funds, impact fees, and state and federal funds.

Exhibit 3-30. Estimated Parks and Recreation Dedicated Capital Revenues and Costs (2024-2029 in YOE$)

Parks *(excluding amount committed to debt service)*	**2024-2029**
Dedicated Parks Fund Revenues	$17,521,117
2023 Parks Fund Balance	NA
TOTAL PARKS FUNDS AVAILABLE	$17,521,117
Capital Parks Costs	$8,907,900
Estimated Dedicated Parks Funding Surplus/(Deficit)	**$8,613,217**

Source: Kitsap County, 2023

Although there is a difference between future capital costs and dedicated capital revenues for the planning period, the adopted Parks CIP creates a balanced plan through the use of other funding mechanisms, including partnerships and bonds. Transfers from Conservation Futures Tax revenues also fund debt service for parks.

Exhibit 3-31. Estimated Stormwater Management Dedicated Capital Revenues and Costs (2024-2029 in YOE$)

Surface and Stormwater Management	**2024-2029**
Dedicated Stormwater Fund Revenues	$17,590,172
2023 Stormwater Fund Balance	NA
TOTAL STORMWATER FUNDS AVAILABLE	$17,590,172
Capital Stormwater Costs	$17,474,500
Estimated Dedicated Stormwater Funding Surplus/(Deficit)	**$115,672**

Source: Kitsap County, 2023

The six-year Stormwater CIP makes up for the difference between dedicated capital revenues and costs by using stormwater utility funds and targeted grant applications to augment its dedicated revenue sources. More detail on revenue sources for planned Stormwater projects and project-specific revenue sources can be found in Chapter 4.

Exhibit 3-32. Estimated Sewer Dedicated Capital Revenues and Costs (2024-2029 in YOE$)

Sewer	**2024-2029**
Dedicated Sewer Fund Revenues	$164,672,000
2023 Sewer Fund Balance	$18,800,000
TOTAL SEWER FUNDS AVAILABLE	$183,472,000

Capital Sewer Costs	$164,672,000
Estimated Dedicated Sewer Funding Surplus/(Deficit)	**$18,800,000**

Note: Year-by-year sewer costs for 2016 – 2026 were estimated from the 1-3 year and 4 – 6 year periods in the project list in Chapter 4. The year-by-year cost estimates were then escalated for inflation and rolled back up to the 6-year project period.
Source: Kitsap County, 2023

Although the difference between future dedicated capital revenues and costs is large, the County has developed a funding plan that balances its six-year sewer CIP through the planned use of revenue bonds. The sewer costs and revenues analyzed in Exhibit 3-32 include those costs and revenues under the Preferred Alternative.

Exhibit 3-33. Estimated Solid Waste Dedicated Capital Revenues and Costs (2024-2029 in YOE$)

Solid Waste	2024-2029
Dedicated Solid Waste Fund Revenues	$0
2022 Solid Waste Fund Balance	$22,884,000
UNASSIGNED SOLID WASTE FUNDS AVAILABLE	$22,884,000
SOLID WASTE FUNDS AVAILABLE TO LANDFILL CLOSURE	$13,138,000
Non-Landfill Closure Capital Solid Waste Costs	$49,770,000
Costs related to Landfill Closures	$1,850,000
Estimated Total Dedicated Solid Waste Funding Surplus/(Deficit)	$(11,748,000)
Estimated Non-Assigned Dedicated Solid Waste Funding Surplus/(Deficit)	$(9,934,000)

Note: There are no project costs specific to years 2022 through 2036 currently available. There is a $10 million surplus for 6-year landfill closure and no surplus for 6-year capacity project capital spending.
Source: Kitsap County, 2023.

The County has balanced its six-year solid waste CIP by planning to transfer tipping fee revenues to the solid waste capital fund and its Hansville and Olalla Landfill Post Closure Funds to fill in the difference between its future costs and dedicated revenue sources. Additionally, the County has taken on some debt via Limited Tax General Obligation (LTGO) Bonds to pay for some of the near-term projects.

Six-Year Capital Cost and Revenue Comparison – All County Facilities

Exhibit 3-34. Estimated General Capital Revenues and Costs (2024-2029 in YOE$)

General Capital Funds *(excluding amount committed to debt service)*	2024-2029
General Capital Revenue	$322,403,734
General Capital Fund Balance	$41,684,000
TOTAL GENERAL CAPITAL FUNDS AVAILABLE	$41,684,000
General Capital Costs	$0
Estimated Dedicated General Capital Funding Surplus/(Deficit)	$41,684,000
TOTAL DEDICATED CAPITAL FUNDS*	$364,087,734
TOTAL CAPITAL NEED	$358,053,400
TOTAL DEDICATED CAPITAL FUNDING SURPLUS/(DEFICIT)	$6,034,334

Note: Total dedicated capital funds include projected revenues for all services provided by the County.
Source: Kitsap County, 2023

As shown in Exhibit 3-34, there is an estimated surplus of $6 million in total dedicated capital funding projected over the next six-year planning period.

This variance represents the structural difference between incoming dedicated capital revenues and planned capital expenditures over the six-year planning period, and does not reflect the County's likely future cash flow or ability to pay. The County has tools beyond its dedicated revenue streams with which to fund capital projects, such as reprioritization of operating revenues and its unused debt capacity.

Over the next 20-years the County has $583M in sewer capital projects to complete due to much of the infrastructure being 40- to 50-years old and is past its useful life. Connection fees are adjusted annually based on the cost of the current 6-year CFP. The County annually applies for federal and state grants and low interest loans as a first source of additional funding to pay for capital projects. In addition, the County will go out for sewer revenue bonds to fill in funding gaps for projects, but it is dependent on bonding capacity and interest rates. Reviewing and updating the 6-year CFP annually, allows the County to reprioritize, delay, or add projects based on condition assessment/consequence of failure, capacity, regulation changes, and funding.

3.8 OTHER SERVICE PROVIDERS

For service providers other than Kitsap County, general funding information for each type of service has been presented in the sections below. For review of the specific funding

sources for each provider, the most current CFP available for that provider has been relied on. Information has been supplemented via personal communication with provider representatives, where possible.

4 SERVICE AREA AND INFRASTRUCTURE DETAIL

4.1 ADMINISTRATION: PUBLIC BUILDINGS

Overview

Kitsap County's public buildings, which include government administrative offices, courtrooms, juvenile justice, maintenance facilities, and community centers, serve the county, including incorporated and unincorporated populations.

Inventory of Current Facilities

Exhibit 4-1 shows the location and size of each public building. The 2023 inventory shows that the County has approximately 613,371 square feet of public building space.

Exhibit 4-1 County Public Buildings: Current Facilities Inventory

Facility	Size (Sq Ft)	Location
Admin Building	77,946	614 Division Street Port Orchard, WA 98366
Bullard Building	10,982	614 Division Street Port Orchard, WA 98366
Coroners	10,182	5010 NW Linden Rd Bremerton, WA 98312
Courthouse	85,411	614 Division Street Port Orchard, WA 98366
Facilities Maintenance	8,760	717 Taylor Street Port Orchard, WA 98366
Givens Community Center	49,796	1026 Sidney Ave, Port Orchard, WA 98366
Kitsap County Sheriff	16,993	614 Division Street Port Orchard, WA 98366

Jail Visitation	2,132	614 Division Street Port Orchard, WA 98366
PW Annex	44,872	8600 SW Imperial Way Bremerton, WA 98312
PW Building	29,715	507 Austin Ave Port Orchard, WA 98366
PW HHW	4,000	5551 SW Imperial Way Bremerton, WA 98312
Road Shed-Central	12,202	1972 Seabeck Hwy Seabeck, WA 98380
Road Shed-North	7,226	302 NE Bernt Road Poulsbo, WA 98370
Road Shed-South	8,640	2339 SE Cedar Rd Port Orchard, WA 98367
SAU	6,400	715 Sydney Ave Port Orchard, WA 98366
Sheriff's Office Kingston	1,800	26076 Illinois Avenue NE Kingston, WA 98346
Sheriff Office Silverdale	5,616	3951 Randall Way NW Silverdale, WA 98383
Juvy/Juvy Admin	95,558	1338 SW Old Clifton Rd Port Orchard, WA 98367
Family Support	8,028	730 Prospect Street Port Orchard, WA 98366
DEM Warehouses	18,390	8900 Imperial Way Bremerton, WA 98312
Pacific Building	20,040	4459 SE Mile Hill Dr Port Orchard, WA 98366
BKAT	5,280	7266 Tibardis Rd NW Bremerton, WA 98311
Vacant 612	1,524	612 Sidney Ave Port Orchard, WA 98366
Vacant 808	800	808 Sidney Ave Port Orchard, WA 98366
Vacant 810	1,728	810 Sidney Ave Port Orchard, WA 98366

Vacant 816	2,044	816 Sidney Ave Port Orchard, WA 98366
Vacant 803	2,226	803 Cline Ave Port Orchard, WA 98366
Vacant 807	2,980	807 Cline Ave Port Orchard, WA 98366
Jail/KRC	70,000	661 Taylor Street Port Orchard, WA 98366
Readiness Center	2,100	661 Taylor Street Port Orchard, WA 98366
Total Public Space	**613,371**	

Source: Kitsap County Facilities Maintenance, 2023; LDC 2023

Level of Service Analysis

The County Public Buildings listed above can be separated into distinct categories that each have their own LOS. The section below goes through each of these categories and their Level of Service.

County Administration Buildings

The County's LOS for County Administration buildings is 952 square feet per 1,000 countywide population. This level was adopted in the 2012 Capital Facilities Plan Update and was unchanged in the 2016 Capital Facility Plan Update. Currently, the County has a deficit in County administration space, as shown in Exhibit 4-2.

Exhibit 4-2 County Administration Buildings: LOS Requirements Analysis

Time Period	Kitsap Countywide Population	Square Feet Needed to Meet LOS Standard	Current Square Feet Available	Net Reserve or Deficit
Current LOS Standard = 952 square feet per 1,000 population				
2022	280,900	267,416	190,810	(76,606)
2044	346,358	314,087	190,810	(123,277)

Source: Kitsap County Facilities Maintenance, 2023

To address future LOS deficiencies, the County can lower its LOS standards to reflect space efficiencies, as shown in Exhibit 4-3.

Exhibit 4-3. Potential LOS Adjustments for County Administration Buildings

Time Period	Target LOS	Estimated Deficiency	LOS Needed to Address Deficiency (SF/1000 people)
2022	952 square feet per 1,000 population	(76,606)	679
2044	952 square feet per 1,000 population	(123,277)	551

Source: Kitsap County Facilities Maintenance, 2023

County Maintenance Facilities

The LOS for County Maintenance Facilities is 109 square feet per 1,000 population. Currently and within the 20-year planning period, the County will be able to meet the County Maintenance Facility LOS standard, as shown in Exhibit 4-4. To be efficient with public funds, the County has outsourced its custodial services to a private company.

Exhibit 4-4. LOS Requirements Analysis - County Maintenance Facilities

Time Period	Kitsap Countywide Population	Square Feet Needed to Meet LOS Standard	Current Square Fee Available	Net Reserve or Deficit
Current LOS Standard = 109 square feet per 1,000 population				
2022	280,900	30,618	70,543	39,925
2044	346,358	37,753	70,543	32,790

Source: Kitsap County Facilities Maintenance, 2023

County District Courtrooms

The LOS for County District Courtrooms is currently 0.012 courtrooms per 1,000 population. Per the space needs analysis prepared by Kitsap County, there will be 6 total District Courtrooms by 2030 and 7 total by 2045. Currently and within the 20-year planning period, the County will be able to meet the County District Courtroom LOS standard. See Exhibit 4-5.

Exhibit 4-5. LOS Requirements Analysis - County District Courtrooms

Time Period	Kitsap Countywide Population	Courtrooms Needed to Meet LOS Standard	Current Courtroom Available	Net Reserve or Deficit
Current LOS Standard = 0.012 courtrooms per 1,000 population				
2022	280,900	3	4	1
2044	346,358	4	4	0

Source: Kitsap County Facilities Maintenance, 2023

County Superior Courtrooms

The LOS for County Superior Courtrooms is currently 0.021 courtrooms per 1,000 population. Per the space needs analysis prepared by Kitsap County, there will be 12 total

Superior Courtrooms by 2030 and 13 total by 2045. Under current LOS standards, there is a deficit in the number of Superior Courtrooms. Currently and within the 20-year planning period, the County will be able to meet the County Superior Courtroom LOS standard.

Exhibit 4-6 LOS Requirements Analysis - County Superior Courtrooms

Time Period	Kitsap Countywide Population	Courtrooms Needed to Meet LOS Standard	Current Courtroom Available	Net Reserve or Deficit
Current LOS Standard = 0.021 courtrooms per 1,000 population				
2022	280,900	6	7	1
2044	346,358	7	7	0

Source: Kitsap County Facilities Maintenance, 2023

Juvenile Jail Facility

The Juvenile Jail facility is overseen by the Superior Court. The current LOS for juvenile facilities is 0.084 beds per 1,000 population. The County is currently meeting the LOS standard, and has a surplus of 13 beds, as shown in Exhibit 4-7.

Exhibit 4-7 LOS Requirements Analysis – Juvenile Jail Facility

Time Period	Kitsap Countywide Population	Beds Needed to Meet LOS Standard	Current Beds Available	Net Reserve or Deficit
Current LOS Standard = 0.084 beds per 1,000 population				
2022	280,900	24	35	11
2044	346,358	29	35	6

Source: Kitsap County Facilities Maintenance, 2023

County Community Centers

The LOS for County Community Centers is 200 square feet per 1,000 population. With the successful relocation of the Kingston Community Center (now the Village Green Community Center) the County will be able to meet the Community Center LOS standard. See Exhibit 4-8.

The old Kingston Community center relocated due to the realignment of state route 104. The center was sold, and proceeds were donated to The Village Green group who used the funds along with decades of fundraising to build the Village Green Community Center in Kingston. The building is approximately 23,000 square feet.

Exhibit 4-8 LOS Requirements Analysis - County Community Centers

Time Period	Kitsap Countywide Population	Square Feet Needed to Meet LOS Standard	Current Square Feet Available	Net Reserve or Deficit
Current LOS Standard = 200 square feet per 1,000 population				
2022	280,900	56,180	72,796	16,616
2044	346,358	69,271	72,796	3,525

Source: Kitsap County Facilities Maintenance, 2023

Capital Projects and Funding

Exhibit 4-9 Public Buildings Capital Facilities Projects, 2024-2044 (All numbers in 2023 $1000s)

Category/Project Description	Revenue Sources	Cost 2024-2026	Cost 2027-2029	Cost 2030-2044	Total Cost
Category l: Capacity Increasing Projects					
Courthouse Addition & Adaptive Re-Use	REET I, Bonds, Fund Balance	7,000	3,000	0	10,000
Category ll: Capital Replacement, Maintenance and Operations					
Campus-Wide HVAC Control System Upgrade	Undesignated Fund Balance	150	0	0	150
Courthouse Awning Replacement	Undesignated Fund Balance	20.43	0	0	20.43
Jail & Courthouse Roof Replacement	Jail and Juvenile Sales Tax	4,000	0	0	4,000
Jail Camera System Replacement	Jail and Juvenile Sales Tax	2,400	0	0	2,400
Jail Fire Suppression System Upgrade	Jail and Juvenile Sales Tax	300	0	0	300
Jail HVAC System Replacement	Grant	7,072	0	0	7,072
Juvenile Building Cleaning & Painting	Jail and Juvenile Sales Tax	425	0	0	425
Kitsap Recovery Center HVAC Fire Damper Repair	Undesignated Fund Balance	55	0	0	55
Silverdale Sheriff's Office Fencing & Gate Install	Undesignated Fund Balance	202.74	0	0	202.74
2015 LTGO Bond Debt Service	REET I	1,802	1,382.6	0	3,184.6
2020 LTGO Bond Debt Service	REET I	765.7	758.2	0	1,523.9
2022 LTGO Bond Debt Service	REET I	1,208.49	0	0	1,208.49

2022 LTGO Bond Debt Service	REET II	737.9	0	0	737.9

Source: Kitsap County Facilities Maintenance, Public Buildings Capital Facilities Plan 2024 - 2029, 2023

Exhibit 4-10 shows the public building capital facilities project costs, and Exhibit 4-11 shows the revenue sources for the planned capital facilities projects.

Exhibit 4-10 Public Buildings Capital Facilities Project Costs, 2024-2044 (All numbers in 2023 $1000s)

Category Summary	Cost Years 2024-2029	Cost Years 2030-2044	Total Cost
Category l (Capacity Projects Required to Meet LOS)	10,000	0	10,000
Category ll (Other Projects Needed for Maintenance and Operations)	21,280	0	21,280
Total	31,280	0	31,280

Source: Kitsap County Facilities Maintenance, Public Buildings Capital Facilities Plan 2024 - 2029 , 2023

Exhibit 4-11 Public Buildings Capital Facilities Revenue Sources, 2024-2044 (All numbers in 2023 $1000s)

Revenue Source	Revenue Year 2024-2029	Revenue Years 2030-2044	Total Revenue
Bond Financing	0	0	0
Grants	7,072	0	7,072
Jail & Juvenile Salex Tax	7,125	0	7,125
REET I	15,917	0	15,917
REET II	737.9	0	737.9
Undesignated Fund Balance	428.1	0	428.1
Total	31,280		31,280

Source: Kitsap County Facilities Maintenance, Public Buildings Capital Facilities Plan 2024 - 2029 , 2023

4.2 PUBLIC SAFETY: LAW ENFORCEMENT

Overview

The Kitsap County Sheriff Office serves the population of unincorporated Kitsap County. The Department is responsible for law enforcement, maintaining order, crime investigation and prevention, traffic control, marine enforcement, process, and service of civil papers for the courts, service of criminal warrants, and other emergency services.

The Sheriff's main office is located in Port Orchard, and is the home to the offices of the Sheriff, Undersheriff, records, detective, patrol chief, administration, corrections and the

evidence/ storage rooms. Satellite offices include the North Office in Kingston which has been closed and is anticipated to be relocated in the future. The Sheriff's Office used to staff a storefront in Silverdale Mall that is now closed. The Silverdale office remains open.

The County correctional facilities, which service the population of incorporated cities and the unincorporated county, consist of a jail and a juvenile facility. The jail is located on the courthouse campus in Port Orchard. The jail is attached to the second floor of the courthouse and is accessible from the sheriff's main office. The County correctional facilities used a work release facility in the past; however, that facility is no longer used by the Sheriff's Office. The Superior Court operates the Juvenile Jail Facility.

Inventory of Current Facilities

Exhibit 4-12 Inventory of Law Enforcement Facilities

Facility Name	Location	Size/Quantity (SF and beds)
Main Office	614 Division Street, Port Orchard	11,734
Central Office	3133 Randall Way, Silverdale, WA	5,620
Jail Administrative Offices	614 Division Street, Port Orchard	927
Office of Professional Standards/Training*	5102 Linden St. Bremerton	1,540
Kingston Office	26076 Illinois Avenue NE, Suite A, Kingston	1,200
Readiness Classroom*	1211 Carver St. Bremerton	1,275
Total Office Space		**22,296**
Readiness Center Garage*	5150 Linden St. Bremerton	3,245
Silverdale Storage Container*	3951 Randall Way, Silverdale, WA	250
Vehicle Impound lot, Carport and Storage Building	South Road Shed off Cedar Street	2,960
Jail/Equipment Storage Room	614 Division Street, Port Orchard	1,868
Property Evidence Room	614 Division Street, Port Orchard	4,095
Total Storage Space		**12,418**
Jail Corrections Facility	614 Division Street, Port Orchard	127,103

Total Jail Space		**127,103**

*Notes: * The County leases these spaces.*
Source: Kitsap County Sheriff's Office, 2023

The Sheriff's Office-operated Jail Facility does not use 58 of the 519 beds, because it does not have the budget to hire the staff to reopen this housing area. Level of Service Analysis

Sheriff's Office

The Level of Service (LOS) standard for the Sheriff's Office space is 129 square feet per 1,000 unincorporated population. The County currently has a 1,182 sqft deficit of office space. This deficit is expected to grow through 2044 as the unincorporated population increases. To address deficiencies, the County could choose to add facilities or adjust its LOS standards to reflect likely future service levels given estimated population growth and current facility plans.

Exhibit 4-13 Level of Service Analysis - Sheriff's Office

Time Period	Kitsap Unincorporated County Population	Square Feet Needed to Meet LOS Standard	Square Feet Available	Net Reserve or (Deficit)
Current LOS Standard = 129 square feet per 1,000 population				
2022	182,040	23,478	22,296	(1,182)
2044	210,609	27,169	22,296	(4,873)

Source: Kitsap County Sheriff's Office, 2023

To address deficiencies, the County could choose to add facilities or adjust its LOS standards to reflect likely future service levels given estimated population growth and current facility plans. Adjusting its LOS is not recommended due to existing overcrowded office conditions. See Exhibit 4-14

Exhibit 4-14. Potential LOS Adjustments for Sheriff's Office

Time Period	Target LOS	Estimated Deficiency	LOS Needed to Address Deficiency (SF/1000 people)
2022	129 square feet per 1,000 population	(1,182)	122
2044	129 square feet per 1,000 population	(4,873)	106

Source: Penelope Sapp, Chief of Corrections, Lt. Keith Hall, Kitsap County Sheriff's Office – Jail. 2023.

County Jail Facilities

The LOS standard for County Jail Facilities is 1.43 beds per 1,000 countywide population. Based on this standard there is a surplus of jail beds, but this surplus will not continue through 2044. It is anticipated that the jail will be at full capacity within the next three years depending on population trends and changes in criminal laws that may occur during that time frame.

Exhibit 4-15 Level of Service- County Jail Facilities

Time Period	Kitsap Countywide Population	Beds Needed to Meet LOS Standard	Beds Available	Net Reserve or (Deficit)
Current LOS Standard = 1.43 beds per 1,000 population				
2023	280,900	402	407	5
2044	346,358	495	407	(88)

Source: Kitsap County Sheriff's Office, 2023

Kitsap County is considering an alternative level of service for its jail facility based on incarceration rates. The Bureau of Justice Statistics for jails estimated a typical incarceration rate of 224 inmates per 100,000 population in 2019 (Zend & Minton, 2021). Kitsap County's incarceration rate was only 168 per 100,000 population in 2014, 170 in 2013, and 167 in 2012. Kitsap County incarcerates 28 percent fewer people than the average for other jurisdictions in the nation. In the subsequent years average daily population was, 2015: 385, 2016: 399, 2017: 407, 2018: 415, 2019: 370.

There is no current plan or timeline to increase available space, and assuming that incarceration rate will return to pre-pandemic levels, it is predicted that the county will see a significant shortage in available beds to meet the LOS in the near future.

Exhibit 4-16 Alternative LOS Based on Incarceration Rate

Time Period	Kitsap Countywide population	Beds Needed to Meet LOS Standards	Beds Available	Net Reserve or Deficit
Alternative LOS Standard = Kitsap County Incarceration Rate: 168 per 100,000 Population				
2023	280,900	402	472	(70)
2044	346,358	582	407	(175)

Source: Kitsap County Sheriff's Office, 2023

Potential LOS Adjustments could be considered if incarceration rate remains lower than expected or facilities are expanded.

4.3 PUBLIC SAFETY: FIRE PROTECTION

Overview

Kitsap County receives Fire, Rescue, and Emergency Medical Services from the six local fire departments and the federal fire department serving the Navy bases within the county. Through automatic-aid agreements, the departments provide seamless all-hazards emergency response to all areas of the county, regardless of jurisdiction. While Kitsap County is the authority having jurisdiction for the unincorporated areas of the county for fire code enforcement, the fire departments operate independently, receiving no regular funding or governance from Kitsap County.

Excluding the Bainbridge Island Fire Department, there are a total of 38 fire stations in the county. Some stations are staffed with volunteers, which is important for serving areas of the county that are more remote. Total stations are listed in Exhibit 4-17.

Exhibit 4-17 Staffed and Volunteer Stations Numbers

Fire District	Total Stations	Fully Staffed Station	Volunteer Station
North Kitsap Fire and Rescue (NFKR)	5	4	1
Poulsbo Fire Department	5	4	1
Bainbridge Island	3	3	0
Central Kitsap Fire and Rescue (CKFR)	9	7	2
Bremerton Fire Department	3	3	0
South Kitsap Fire and Rescue (SKFR)	11	7	4
Total	**36**	**28**	**8**
Total Excluding Bainbridge Island	**35**	**29**	**6**

Source: Kitsap County Fire Districts and City Departments, 2023

County Fire Protection Districts

Fire protection districts in Kitsap County have entered into agreements with the Washington State Department of Natural Resources (DNR) to jointly fight fires on state-owned land and private forestland. DNR has no responsibility or authority in incorporated areas of the county. Each municipality is responsible for all fires within its boundaries. For the unincorporated lands, DNR and some fire districts have split up fire protection and suppression responsibility through creation of a fire protection zone (FPZ) (see WAC 332-24-710 Forest protection zone—Kitsap County). DNR has protection responsibility for non-structural fires within an FPZ. The fire district protects all other unincorporated areas as well as structures within the FPZ. DNR policy is that it will not fight structure fires. Any structure within a fire district's boundaries is the responsibility of the district. DNR also

protects certain state land parcels regardless of location. DNR is a signatory on the countywide mutual aid agreement and will respond as mutual aid when requested.

Inventory of Current Facilities

Exhibit 4-18 summarizes the capital facilities available for each fire district and includes each district's fire rating, presence of EMS service, and service area population.

Exhibit 4-18 Current Facilities of Each Fire District

Fire Protection Provider	Number of Stations	WSRB 2020 Rating	Fire and EMS Units*	Estimated 2023 OFM Service Area Population
North Kitsap Fire and Rescue (NFKR)	5	4	25	20,730
Poulsbo Fire Department	5	4	27	27,064
Central Kitsap Fire and Rescue (CKFR)	9	4	79	75,589
Bremerton	3	3	17	45,000
South Kitsap Fire and Rescue (SKFR)	11	3	35	64,698

Source: Kitsap County Fire Districts 2023

** A unit is the combination of vehicle and equipment that responds to a fire or EMS situation, including engines, ladder trucks, water tenders, rescue units, aid cars and ambulances, and rehabilitation units, but not including staff or miscellaneous vehicles.*

Response Time Objectives

State statute (RCW 52.33) requires fire districts with a predominance of career staff (as opposed to volunteers) to adopt and annually report response time objectives. These objectives may change over time to respond to each district's resources and needs. Current response time objectives by fire department or district are shown in Exhibit 4-19.

Exhibit 4-19 Response Times by Fire Department and District

District / Department	Response Time Objective
North Kitsap Fire and Rescue (NFKR)	**Structure Fires** Turnout Time Goal: 2:45 Travel Time Goal: 7:50 **EMS (Basic Life Support)** Turnout Time Goal: 2:00 Travel Time Goal: 8:40 **EMS (Advanced Life Support)** Turnout Time Goal: 2:00 Travel Time Goal: 8:40
Poulsbo Fire Department	Turnout time for fire: 86 sec

	Turnout time for priority 1 and 2 events: 67 sec Turnout time for medical events: 64 sec Response time of units to suburban calls for service: 285 secs Rural response time goals: <600 secs
Bainbridge Island	**EMS** Turnout: 60 seconds Response: 5 minutes **Fire** Turnout: 90 seconds Response: 5:30 minutes
Central Kitsap Fire and Rescue (CKFR)	Turnout time goal: 90 seconds, met 90 percent of the time Suburban fire/EMS: 8 minutes Rural fire/EMS: 12 minutes Wilderness fire/EMS: 20 minutes
Bremerton Fire Department	Response Time Objective 6 Minutes
South Kitsap Fire and Rescue (SKFR)	Turnout time: Travel times for fire responses (urban, suburban, rural): 8:00 – 18:15 minutes Travel times for EMS services (urban, suburban, rural): 8:00 – 14:15 minutes

Source: Kitsap County Fire Districts, 2023

CFP Level of Service Standard

Consistent with GMA requirements to establish levels of service for improvements necessary for development, this CFP provides a minimum countywide measure of need for fire services. All fire districts in Kitsap County must achieve the following minimum Washington Surveying and Ratings Bureau (WSRB) Ratings:

- Fire districts with career staff serving urban areas must have a minimum WSRB rating of 4. Urban areas include city limits and UGAs.
- The portions of districts serving rural areas with non-career staff must have a minimum WSRB Rating of 5. Rural areas consist of lands outside of UGAs and city limits.

Fire Services and WSRB Ratings

The WSRB is a non-profit agency that evaluates fire protection capabilities of cities and fire protection districts. In turn, insurance companies use WSRB Protection Classes to help establish fair premiums for fire insurance. The evaluation process includes a review of the following that are relevant to capital facilities: distribution of fire stations and fire

companies, apparatus equipment, water supply, and water pressure. Other activities reviewed include personnel and training, response to alarms, dispatching, code enforcement, and public education.

Fire districts and departments respond to fires and EMS calls from their stations with their apparatus, but their response occurs within a broader system where other agencies have important roles.

- Kitsap County is responsible for planning for population and employment growth under GMA and provides housing opportunities through zoning. As described above, proposed LOS standards for fire services rely on WSRB ratings and are higher in more densely populated areas than in rural areas. The exhibits below show fire services and population density in Kitsap County in 2044 under the Preferred Alternative and today, respectively. The population growth will increase not only the number of calls but also tax revenue available to service providers.

- The Kitsap County Fire Marshal's Office works to enhance fire safety through quality fire inspections, plan review, fire investigation, and fire prevention education; County fire marshal services are applicable in all districts except within the City of Bremerton, which provides its own services.

- Water service providers are responsible for the water supply and fire flow pressure, in tandem with County building and fire codes.

Selection of the WSRB-based ratings for the Fire Service LOS reflects that fire protection is based on the collective efforts of the fire districts, Kitsap County, cities, and water providers. Ensuring adequate staff resources for planning and permitting (e.g. County fire marshal services) will be important to consider at the time of the County's annual budget. During the development review process, the County will require consistency with the fire code and water availability. The County will also interface with fire districts and cities, and discuss their fire protection capital investments at the time of CFP updates.

Central Kitsap Fire and Rescue

Central Kitsap Fire and Rescue (CKFR) is one of the largest fire service providers in Kitsap County. CKFR provides fire and emergency medical services response to approximately 75,000 citizens in a service area of approximately 115 square miles. Because of its location, CKFR has a significant amount of waterfront in its service area—40 miles of tidal waterfront with adjacent saltwater area and numerous small lakes and ponds.

Communities recognized within CKFR are Silverdale, Olympic View, Seabeck, Lake Symington, Lake Tahuya, Island Lake, Ridgetop, Crosby, Hintzville, Holly, Brownsville,

Gilberton, Meadowdale, North Perry, Illahee, Tracyton, Chico, Wildcat Lake, Kitsap Lake, and Erlands Point.

Inventory of Current Facilities

Exhibit 4-20 Inventory of Current Facilities – Central Kitsap Fire and Rescue

Inventory	Existing
Fire Units	
Fire Engines (1,000-1,500 Gallons-Per-Minute Pump Capacity And 750-1,000-Gallon Tank Capacity)	16
Brush Engine	2
Ladder Truck (105-Foot)	2
Water Tenders	6
3,000-Gallon Tank Capacity Tenders	5
1,250-Gallon Tank Capacity Tender	1
Rescue Units	1
Medical Units	8
Advanced Life Support	4
Basic Life Support	4
Emergency Scene Rehabilitation Unit	1
Rescue Boat (17-Foot)	1
Miscellaneous Vehicles (e.g., Staff, Utility, Delivery)	28
Staff	
Fire Chief	1
Deputy Chief	1
Assistant Chief	3
Battalion Chief	3
Captains	20
Lieutenants	0
FF/PM/EMT/AO	82
Company Officer of Operations	1
Medical Officer	1
Training Officers	2
Chief Administrative Officer	1
Chief Business Officer	1
IT Manager	1
HR Manager	1
Public Information Officer	1
Executive Assistant	1
Administrative Assistant	2
Accounting Supervisor	1
Accounting Specialist	2

Purchasing Agent	1
Logistics & Supply Technician	1
IT Technician	1
Facilities Lead Technician	1
Facilities Maintenance Assistant	2
Fleet Maintenance Supervisor	1
Lead Emergency Vehicle Technician	1
Emergency Vehicle Technician	1
Mechanic	1
Fleet Logistics Technician	1
Volunteers	20

Source: CKFR, 2024

Level of Service Analysis

Exhibit 4-21 Level of Service Analysis of Emergency Services

Response Time Objectives	*Time*
Turnout time goal	90 seconds, met 90 percent of the time
Suburban fire/EMS	8:00 minutes
Rural fire/EMS	12:00 minutes
Wilderness fire/EMS	20:00 minutes
Other	
WSRB Fire Rating	4

Source: CKFR, 2024

Capital Projects and Funding

Exhibit 4-22 shows CKFR's planned capital projects. Exhibit 4-23 shows the capital projects costs for 2024-2029 and 2030-2044, and Exhibit 4-24 shows the capital project revenues for the same time periods.

Exhibit 4-22. Central Kitsap Fire and Rescue Capital Projects (All numbers are in 2024 $1000s)

Category/Project Description	Revenue Source	Cost 2024-2029	Cost 2030-2044	Total Cost
Category I: Capacity Increasing Projects				
Station 45 – New	Cap Bond	9,115		9,115
Station 52 - New	Cap Bond	9,075		9,075

Station 53 - New	Cap Bond	6,037		6,037
Station 57 – New	Cap Bond	9,651		9,651
Station 51 – New	Cap Bond	15,966		15,966
Station 41 – Remodel	Cap Bond	7,752		7,752
Category II: Capital Replacement, Maintenance and Operations				
Station 42/56/64 – Seismic Upgrades	Cap Bond	2,300		2,300
Station 56 – Roofing & Access Control	Capital Reserve	300		300
Station 64 – Paving & Access Control	Capital Reserve	100		100
Administration Building Remodel (Phase II)	Capital Reserve	2,500		2,500
General Station Upgrades	Capital Reserve	3,074	4,855	7,929

Source: CKFR, 2023

Exhibit 4-23. Central Kitsap Fire and Rescue Capital Project Costs (All numbers are in 2024 $1000s)

Category Summary	Cost Years 2024-2029	Cost Years 2030-2044	Total Cost
Category I (Capacity Projects Required to Meet LOS)	57,596	0	57,596
Category II (Other Projects Needed for Maintenance and Operations)	8,274	4,855	13,129
Total	65,870	4,855	70,725

Source: CKFR, 2023

Exhibit 4-24 Central Kitsap Fire and Rescue Capital Project Revenues (All numbers are in 2024 $1000s)

Revenue Source	Revenue Years 2024-2029	Revenue Years 2030-2044	Total Revenue

Bond	0	0	00
Capital Facilities Bond*	59,896	0	59,896
General/Capital Reserve	5,974	4,855	10,829
Total	65,870	4,855	70,725

Source: CKFR, 2023 Notes: Including remaining bond proceeds from previously issued capital bond debt. No new capital facilities debt is planned to be issued beyond 2024.*

North Kitsap Fire and Rescue

Overview

NKFR, located in the northeast portion of the county, provides fire and emergency medical services (EMS) to an area of approximately 47 square miles and serves an estimated population of 20,651 in 2022 (OFM, 2022). The product of multiple mergers, NKFR serves the communities of Kingston, Hansville, Eglon, Indianola, Gamblewood, Jefferson Beach, Miller Bay, Suquamish, and approximately 80 percent of the Port Madison Indian Reservation. By contract, the district also provides fire and EMS services to the Port Gamble S'Klallam Indian Reservation at Little Boston whose territory does not fall within the district's legal boundaries. The contract for services adds an estimated 1,010 persons and five square miles to its service responsibilities.

Inventory of Current Facilities

Exhibit 4-25 Inventory of Current Facilities - North Kitsap Fire and Rescue

Inventory	Existing
Fire Units	
Fire engines	5
Reserve fire engines	1
Ambulances	4
Reserve ambulances	1
Water Tenders	3
Wildland Engine	1
Fire Boat	1
Miscellaneous vehicles, if any (e.g., staff, utility, delivery)	9
Staff	
Total Full-time Staff	59
Administration	4
Administrative Support	2
Community Services	1
Suppression/ EMS	47

Facilities Management	1
Fleet Services	3
Full-time Mechanics	3
Facilities Maintenance Manager	1
Total Volunteers	10
Tender Operations (Volunteers)	7
Chaplain Services (Volunteers)	2
Community Services (Volunteers)	1

Source: NKFR, 2023

Level of Service Analysis

Exhibit 4-26 Level of Service Analysis- North Kitsap Fire and Rescue

Response Time Objectives	Time (minutes)
Structure Fires Turnout Time Goal	2:45
Structure Fires Travel Time Goal	7:50
EMS (Basic Life Support) Turnout Time Goal	2:00
EMS (Basic Life Support) Travel Time Goal	8:40
EMS (Advanced Life Support) Turnout Time Goal	2:00
EMS (Advanced Life Support) Travel Time Goal	8:40
Other	
WSRB Fire Rating	4

Source: NKFR, 2023

Capital Projects and Funding

Exhibit 4-27 shows NKFR's planned capital projects. Exhibit 4-28 shows the capital projects costs for 2024-2029 and 2030-2044, and Exhibit 4-29 shows the capital project revenues for the same time periods.

Exhibit 4-27. North Kitsap Fire and Rescue Capital Projects (All numbers in 2024 $1000s)

Category/Project Description	Revenue Source	Cost 2024-2029	Cost 2030-2044	Total Cost
Category I: Capacity Increasing Projects				
None at this moment				
Category II: Capital Replacement, Maintenance and Operations				
Replace Fire Station 84.			7,268	7,268
Replace Generators at Stations 81, 85, and 89.		480		480
Purchase apparatus		1,585	2,000	3,585
Renovate – mechanic shop		150		150

Source: NKFR, 2023

Exhibit 4-28. North Kitsap Fire and Rescue Capital Project Costs (All numbers in 2024 $1000s)

Category Summary	Cost Years 2024-2029	Cost Years 2030-2044	Total Cost
Category I (Capacity Projects Required to Meet LOS)	0	0	0
Category II (Other Projects Needed for Maintenance and Operations)	2,215	9,268	11,483
Total	2,215	9,268	11,483

Source: NKFR, 2023

Exhibit 4-29. North Kitsap Fire and Rescue Capital Project Revenues (All numbers in 2024 $1000s)

Revenue Source	Revenue Years 2024-2029	Revenue Years 2030-2044	Total Revenue
Bond*	TBD	TBD	TBD
Capital Facilities Bond*	TBD	TBD	TBD
Total	TBD	TBD	TBD

*Notes: *Exact amounts not yet determined.*
Source: NKFR, 2023

South Kitsap Fire and Rescue

Overview

SKFR covers 118 square miles and serves a population of approximately 80,000 as of 2023. Within the service area there are 22 miles of tidal waterfront with adjacent saltwater area,

plus numerous small lakes and ponds. SKFR also covers a considerable amount of DNR land on a contractual basis.

SKFR serves the City of Port Orchard and the Port of Bremerton's Airport and Olympic View Industrial Park under a contractual agreement. Fourteen percent of the water for firefighting is provided by water districts and systems. Fire district tenders provide water for firefighting in the remaining 73 percent of the district.

SKFR responds to all types of fire, medical, and related emergency situations from 12 stations throughout the district. Six stations are staffed with career employees 24 hours per day while another six stations are not.

Inventory of Current Facilities

Exhibit 4-28 Inventory of Current Facilities – South Kitsap Fire and Rescue

Inventory	Existing
Fire Units	
Engines	13
Medic Units	4
Brush Trucks	2
Aid Units	5
Tenders	7
Ladder Truck	1
Air Support Unit	1
Command Vehicle	2
MCI Unit	0
Staff	
Commissioners	5
Fire Chief	1
Deputy Chief	2
Division Chiefs	3
Battalion Chiefs	3
Deputy Fire Marshal	0
Computer Technician	2
Vehicle Maintenance	3
Facilities Maintenance	4
Admin Support Staff	8
Lieutenants	14
Captains	7
Paramedics	21
Career Fire Fighters	48
Total Staff:	
Volunteer Lead Battalion Chief	1

Volunteer Battalion Chiefs	0
Volunteer Captains	3
Volunteer Lieutenants	5
Volunteer Firefighters	10
Volunteer First Responders	7
Chaplains	5
Volunteer Support Personnel	11
Total Volunteers:	42
Number of Stations	12

Source: SKFR, 2023

Level of Service Analysis

Exhibit 4-29 Level of Service Analysis – South Kitsap Fire and Rescue

Response Time Objectives	Time
Turnout time	Goal of 90 seconds or less 90 percent of the time.
Travel times for fire responses (depends on the urban, suburban, or rural nature of the call)	8:00 minutes – 18:15 minutes
Travel times for EMS services (depends on the urban, suburban, or rural nature of the call)	8:00 minutes – 14:15 minutes
Other	
WSRB Fire Rating	3

Source: SKFR, 2023

Capital Projects and Funding

Exhibit 4-30 shows SKFR's planned capital projects. Exhibit 4-31 shows the capital projects costs for 2024-2029 and 2030-2044 and Exhibit 4-32 shows the capital project revenues for the same time periods.

Exhibit 4-30. South Kitsap Fire and Rescue Capital Projects (All numbers are in 2024 $1000s)

Category/Project Description	Revenue Source	Cost 2024-2029	Cost 2030-2044	Total Cost
Category I: Capacity Increasing Projects				
Fire Equipment	General Fund	280		280
EMS Equipment	General Fund	300		300
Category II: Capital Replacement, Maintenance and Operations				
General Maintenance	General Fund	450	1,050	1,500
Staff Vehicle Replacement	General Fund	100		100

Command Vehicle Replacement	General Fund	50		50
Ambulance Replacement	General Fund	275		275
Fire Engine Replacement	General Fund	900		900

Source: SKFR, 2022 Strategic Plan

Exhibit 4-31. South Kitsap Fire and Rescue Capital Project Costs (All numbers are in 2024 $1000s)

Category Summary	Cost Years 2024-2029	Cost Years 2030-2044	Total Cost
Category I (Capacity Projects Required to Meet LOS)	580	0	580
Category II (Other Projects Needed for Maintenance and Operations)	1,775	1,050	2,825
Total	2,355	1,050	3,405

Source: SKFR, 2022 Strategic Plan

Exhibit 4-32. South Kitsap Fire and Rescue Capital Project Revenues (All numbers are in 2023 $1000s)

Revenue Source	Revenue Years 2024-2029	Revenue Years 2030-2044	Total Revenue
Bond	TBD	TBD	TBD
Capital Facilities Bond	TBD	TBD	TBD
General Fund	2,355	1,050	3,405
Total	2,355	1,050	3,405

Source: SKFR, 2022 Strategic Plan

Bremerton Fire Department

Overview

The City of Bremerton Fire Department (BFD) provides emergency and non-emergency fire, rescue, and medical services to approximately 45,000 residents of Bremerton. On average, the Bremerton Fire Department received 0.22 calls per capita annually between 2012 and 2022, including both fire and EMS calls. There have been an additional 2,223 emergency responses since 2015. These added calls have impacted, and will continue to impact, the Department's ability to respond quickly, and it is likely that investment will be needed to run the service at the desired response time of 6.0 minutes.

Inventory of Current Facilities

Exhibit 4-33 Inventory of Current Facilities – Bremerton Fire Department

Inventory	Existing
Fire Units	
Command	2
Engines	5
Medic Units	6
Ladder Truck	2
Type V Brush Engine	1
Rescue/Fire Boat	1
Staff	
Battalion Chief/ Training-Safety	1
Battalion Chiefs	3
Capital/ Fire Marshal	1
Captain/ Medical Officer	1
Lieutenant of Training	1
Fire Chief	1
Fire Prevention Specialist	2
Firefighters/ Mechanics	3
Firefighters/ SCBA Repair Persons	3
Firefighters	22
Lieutenants	9
Line Personnel	60
Senior Specialist	1
Paramedics	17
Staff Personnel	9
Station Captains	3
Assistant Chief	1
Total Staff:	
Number of Stations	12

Source: Bremerton Fire Department, 2023

Level of Service Analysis

Exhibit 4-34 Level of Service Analysis – Bremerton Fire Department

Response Time Objectives	Time
Response Time	6 minutes
Other	
WSRB Fire Rating	3

Source: Bremerton Fire Department, 2023

Capital Projects and Funding

Exhibit 4-35 shows BFD's planned capital projects. Exhibit 4-36 shows the capital projects costs for 2024-2029 and 2030-2044, and Exhibit 4-37 shows the capital project revenues for the same time periods.

Exhibit 4-35. Bremerton Fire Department Capital Projects (All numbers are in 2023 $1000s)

Category/Project Description	Revenue Source	Cost 2024-2029	Cost 2030-2044	Total Cost
Category I: Capacity Increasing Projects				
New Fire Station	NA		12,000	12,000
Category II: Capital Replacement, Maintenance and Operations				
One ladder truck replacement	NA	2,000		2,000
Two fire engines replacement	NA	2,600		2,600
One fire boat replacement	NA	1,000		1,000

Source: Bremerton Fire Department, 2023

Exhibit 4-36. Bremerton Fire Department Capital Project Costs (All numbers are in 2023 $1000s)

Category Summary	Cost Years 2024-2029	Cost Years 2030-2044	Total Cost
Category I (Capacity Projects Required to Meet LOS)		12,000	12,000
Category II (Other	5,600		5,600

Projects Needed for Maintenance and Operations)			
Total			17,600

Source: Bremerton Fire Department, 2023

Exhibit 4-37. Bremerton Fire Department Capital Project Revenues (All numbers are in 2023 $1000s)

Revenue Source	Revenue Years 2024-2029	Revenue Years 2030-2044	Total Revenue
Bond	Need voter approval		
Capital Facilities Bond		Need voter approval	
Total			17,600

Source: Bremerton Fire Department, 2023

Poulsbo Fire Department

Overview

The Poulsbo Fire Department is an all-hazard emergency response agency, providing fire, rescue, hazardous materials, and emergency medical services (EMS) at the Advanced Life Support (ALS) level. Beyond emergency response, the department provides comprehensive Community Risk Reduction through fire code enforcement, fire prevention, public education, and EMS prevention which includes a Community Assistance, Referral, and Education Service (CARES) program to the 27,064 residents of Kitsap County Fire Protection District #18. The Fire District protects the City of Poulsbo and the unincorporated area of North Kitsap from Keyport to Port Gamble.

The Fire District maintains four fire stations. Stations 71, 72, and 77 are staffed 24/7. Station 73 is staffed by volunteer emergency responders. The Fire District also maintains a boat house in the Port of Poulsbo, and a Training Tower at Station 77. The District is currently in the process of constructing a new fire station on Viking Ave, Station 76, which will be fully staffed in 2025.

Capital Projects

The Poulsbo Fire Department has formally adopted a Capital Facilities Plan, covering the 2024-2034 planning period. The Capital Facilities Plan provides a detailed analysis of the Capital Facilities, including buildings and emergency response apparatus, to support the increasing emergency response capabilities necessary to maintain service level with growth in the community. Poulsbo Fire Department's capital facilities plan is published at; https://poulsbofire.org/strategic-plan/

The Fire District is primarily funded by the two regular property taxes, the permanent Fire Levy capped at $1,50/$1,000 of assessed value and the temporary six-year EMS levy capped at $.50/$1,000 of assessed value. A majority of these funds are utilized for the ongoing operations of the department to maintain service levels. They do not provide adequate funding to both sustain operations and make the capital facilities investment necessary to increase service levels concurrent with community growth. The Capital Facilities Plan is therefore, reliant upon other forms of funding such as; reserve funds, excess levies, and impact fees. The funding requirements and sources are a component of the capital facilities plan.

Inventory of Current Facilities

Exhibit 4-38 Inventory of Current Facilities – Poulsbo Fire Department

Inventory	Existing
Facilities	
Fire Stations - Staffed	4*
Fire Stations - Volunteer	1
Training Tower	1
Boat House	1
Emergency Response Apparatus	
Engines	6
Tenders	2
Wildland	1
Ambulances (Medic Units and Aid Units)	6
Rescue Boat	2
Command / Staff Vehicles	9
ORV / Misc	1
Staff	
Fire Chief	1
Deputy Chiefs	1
Emergency Response - Battalion Chiefs	4
Emergency Response - Captains	5
Emergency Response - Lieutenants	9

Emergency Response - Firefighter/Paramedics	10
Emergency Response - Firefighter/EMTs	23
Emergency Response - Volunteer EMTs / Chaplain	9
Fire Prevention - Deputy Fire Marshal	1
Total Staff:	68
Number of Stations	12

Source: Poulsbo Fire Department, 2023

Level of Service Analysis

The Poulsbo Fire Department's strategic plan provides detailed information on the Department's adopted service level objectives. The Strategic Plan can be viewed at; https://poulsbofire.org/strategic-plan/#. Additionally, the department annually publishes an emergency response service level objectives report, which are available on the department's website at; https://poulsbofire.org/annual-report/. The Department's service level objectives are primarily based on the emergency response times for sufficient personnel to arrive on scene to prevent brain death in a cardiac arrest and flashover in a structure fire. Independent of these service levels, the Washington State Survey and Rating Bureau evaluated the Poulsbo Fire Department in 2022 and provided a fire protection rating of 4 within the City of Poulsbo and 5 in the unincorporated areas of the fire district, with one being the highest rating and 10 equating to no fire protection capabilities. A summary of the Department's service level objectives are provided in exhibit 4-39.

Exhibit 4-39 Level of Service Analysis – Poulsbo Fire Department

Response Time Objectives	Time
Turnout time for fire	72 sec
Turnout time for priority 1 and 2 events	60 sec
Response Time- First Arriving Unit (Urban Growth Area)	318 sec
Response Time- First Arriving Unit (Rural Area)	408 sec
Response Time- Effective EMS Response Force (Urban Growth Area)	386 sec
Response Time- Effective EMS Response Force (Rural Area)	595 sec
Response Time to Priority 1/2 Incidents-Advanced Life Support Unit (Urban Growth Area)	302 sec
Response Time to Priority 1/2 Incidents-Advanced Life Support Unit (Rural Area)	393 sec
Response Time-Full Alarm for Structure Fire Residential (Urban Growth Area)	875 sec
Response Time-Full Alarm for Structure Fire Residential (Urban Growth Area)	1,05 sec

Source: Poulsbo Fire Department, 2024

Capital Projects and Funding

Exhibit 4-40 shows Poulsbo Fire Department planned capital projects. Exhibit 4-41 shows the capital projects costs for 2024-2029 and 2030-2044, and Exhibit 4-42 shows the capital project revenues for the same time periods.

Exhibit 4-40. Poulsbo Fire Department Capital Projects (All numbers in 2024 $1000s)

Category/Project Description	Revenue Source	Cost 2024-2029	Cost 2030-2044	Total Cost
Category I: Capacity Increasing Projects				
Sation 76	Levy/ Bond/ Impact Fee	7,875		7,875
Fleet/Support Building	Bond/ Impact Fee	2,625		2,625
Station 77 Apparatus Bay	Bond/ Impact Fee	630		630
New Station Eastern UGA	Bond/ Impact Fee		7,875	7,875
Engine Aerial (75')	Levy/ Impact Fee	1,680		1,680
WUI Engine	Bond/ Impact Fee		297	297
Engine Aerial (100')	Bond/ Impact Fee		2,100	2,100
Category II: Capital Replacement, Maintenance and Operations				

Station 77 Roof/ Drill Tower	Bond	420		420
Station 71 50 Year Re-Model	Bond		8,400	8,400
Station 72 Re-construction	Bond		7,875	7,875
Engine Basic Replacement	Levy/ Bond	958		958
Tender Replacement	Levy/ Bond	945		945
Medic Unit Replacement	Levy/ Bond	288		288
Engine Rescue Replacement	Levy/ Bond		1,155	1,155
Medic Unit Replacement	Levy/ Bond	288		288
Medic Unit Replacement	Levy/ Bond	288		288
Engine Basic Replacement	Levy/ Bond		958	958
Medic Unit Replacement	Levy/ Bond		288	288
Medic Unit Replacement	Levy/ Bond		288	288
Engine Rescue Replacement	Levy/ Bond		1,155	1,155
Medic Unit Replacement	Levy/ Bond		288	288
Medic Unit Replacement	Levy/ Bond		288	288

Source: Poulsbo Fire Department, Capital Facilities and Capital Revenue plan, 2023

Exhibit 4-41. Poulsbo Fire Department Capital Projects Cost (All numbers in 2024 $1000s)

Category Summary	Cost Years 2024-2029	Cost Years 2030-2044	Total Cost
Category I (Capacity Projects Required to Meet LOS)	12,810	10,272	23,082
Category II (Other Projects Needed for	3,187	20,695	23,882

Maintenance and Operations)			
Total	15,997	30,967	46,964

Source: Poulsbo Fire Department, Capital Facilities and Capital Revenue plan, 2023

Exhibit 4-42. Poulsbo Fire Department Capital Projects Revenues (All numbers in 2024 $1000s)

Revenue Source	Revenue Years 2024-2029	Revenue Years 2030-2044	Total Revenue
Transfer from Operations & Reserves	2,400	2,100	4,500
Capital Facilities Bond*	9,000	18,000	27,000
Total	11,400	20,100	31,500

*Note: *Assumes approval of $9,000 Capital Bond on a six-year cycle*
Source: Poulsbo Fire Department, Capital Facilities and Capital Revenue plan, 2023

Bainbridge Island Fire Department

Overview

Bainbridge Island Fire Department is located on Bainbridge Island. It is the second largest city in Kitsap County with a population of just over 24,000 people spread across 28 square miles. The Bainbridge Island Fire Department (BIFD) is a combination department that was originally founded in 1942. BIFD is staffed by 44 paid, uniformed staff; 15 volunteers; and 8 administrative personnel. BIFD operates out of three fire stations. The headquarters fire station, Station 21, was expanded and completely rebuilt in 2018. The south station, Station 22, was completely rebuilt in 2019. The Department responds to over 3,000 calls for service each year. Approximately 70 percent of those calls are for emergency medical responses.

Inventory of Current Facilities

Exhibit 4-43 Inventory of Current Facilities – Bainbridge Island Fire Department

Inventory	Existing
Fire Units	
Engines (including Type 3)	5
Brush engine	1
Ladder truck	1
Tenders	3
Medical units	5
Utility	1
Rescue unit	1
Rescue boat	1
Miscellaneous staff vehicles	10
Staff	

Fire Chief	1
Deputy Chief	1
Battalion Chiefs	4
Lieutenants	10
Paramedics	9
FF/EMTs	16
Fire Marshal's Office	2
Administration (Finance, IT)	4
Community Risk Reduction	1
Fleet Manager	1
Volunteer FF/EMTs	15
Number of Stations	3

Source: Bainbridge Island Fire Department, 2023

Level of Service Analysis

Exhibit 4-44 Level of Service Analysis – Bainbridge Island Fire Department

Response Time Objectives	Time
Turnout time for fire	90 sec
Turnout time for EMS	60 sec
Response time for fire	5:30 mins
Response time for EMS	5 mins
Other	
WSRB Fire Rating	4

Source: Bainbridge Island Fire Department, 2023

Capital Projects and Funding

An updated Bainbridge Island Fire Department Capital Plan is in progress. Below are the 2023 capital costs and funding for the department. The 2024-2029 BIFD CIP is pending. Exhibit 4-45 shows Poulsbo Fire Department planned capital projects. Exhibit 4-46 shows the capital projects costs for 2024-2029 and 2030-2044, and Exhibit 4-47 shows the capital project revenues for the same time periods.

Exhibit 4-45. Bainbridge Island Fire Department Capital Projects (All numbers in 2024 $1000s)

Category/Project Description	Revenue Source	Cost 2024-2029	Cost 2030-2044	2023 Cost
Category I: Capacity Increasing Projects				
New Equipment	Capital Facilities Bond Levy			202
Category II: Capital Replacement, Maintenance and Operations				

Station 21 Improvements	Capital Facilities Bond Levy			80
Station 22 Improvements	Capital Facilities Bond Levy			7
Station 23 Improvements	Capital Facilities Bond Levy			40
Vehicle Replacements	Capital Facilities Bond Levy			290

Source: Bainbridge Island Fire Department, 2023 Budget

Exhibit 4-46. Bainbridge Island Fire Department Capital Projects Cost (All numbers in 2024 $1000s)

Category Summary	Cost Years 2024-2029	Cost Years 2030-2044	2023 Total Cost
Category I (Capacity Projects Required to Meet LOS)			202
Category II (Other Projects Needed for Maintenance and Operations)			417
Total			619

Source: Bainbridge Island Fire Department, 2023 Budget

Exhibit 4-47. Bainbridge Island Fire Department Capital Projects Revenues (All numbers in 2024 $1000s)

Revenue Source	Revenue Years 2024-2029	Revenue Years 2030-2044	2023 Total Revenue
Capital Facilities Bond Levy			619
Total			619

Source: Bainbridge Island Fire Department, 2023 Budget

4.4 PARKS AND RECREATION

Overview

A variety of public agencies and private organizations provide parks and recreation facilities within Kitsap County, including Washington State Parks, Washington Department of Natural Resources (DNR), National Park Service-designated Kitsap Peninsula Water Trail, schools, and cities.

Inventory of Current Facilities

Kitsap County owns approximately 10,138 acres of park land, and other agencies own approximately 19,829 acres of park land in the county. Kitsap County owns 8.5 miles of shoreline access and approximately 100 miles of trails in the county, while other agencies own 18 miles of shoreline access and 57 miles of trails in the county. Park space is generally used by all county residents. Out-of-county and out-of-state visitors and tourists also use a significant portion of these regional sites and facilities.

Exhibit 4-48. County-Owned Parks, Shoreline Access, and Trails

Type of Park	Kitsap County Capacity (Acres)	Other Agencies Capacity (Acres)	Total Capacity (Acres)
Natural Resource Areas	255	16,699	16,954
Heritage Parks	7,833	0	7,833
Regional Parks	1,326	2,324	3,650
Community Parks	343	806	1,149
Partnership Properties	381	-	381
Total Acres	**10,138**	**19,829**	**29,985**
Shoreline Access (Miles)	8.5	18	26.5
Trail Miles (Paved and Unpaved)	74	57	131

Source: Kitsap County Parks, Recreation & Open Space Plan, 2012; Kitsap County Parks Department, 2023.

Active and Passive Recreation Facilities

The County owns and manages a wide variety of active and passive recreation facilities, including baseball and softball fields, soccer fields, tennis courts, and other venues, as shown in Exhibit 4-49 and Exhibit 4-50.

Exhibit 4-49 County-Owned Active Recreation Facilities (Units)

Type of Active Recreation Facility	Facility Count
Baseball Fields (250'+)	8
Baseball Fields (200'+)	19
Indoor Gymnasium	1
Basketball	7
Volleyball	6
Soccer	18
Tennis Courts	9
Horseshoe Pits	32
BMX Track	1
Gold Course Holes	36
Skate Park	3

Source: Kitsap County Parks, Recreation & Open Space Plan, 2012; Kitsap County Parks Department, 2023.

Exhibit 4-50. County-Owned Passive Recreation Facilities (Units)

Type of Active Recreation Facility	Facility Count
Playgrounds	12
Garden features	1
Off-leash areas	3
Trails	
Trails (Paved)	1
Trails (Unpaved)	73
Total Trails (Miles)	74

Source: Kitsap County Parks, Recreation & Open Space Plan, 2012; Kitsap County Parks Department, 2023.

Level of Service Analysis

The LOS analysis for parks is based on the 2012 Kitsap County Parks, Recreation & Open Space (PROS) Plan that was adopted in March of 2012. For most of the parks and recreation facilities include, there are two forms of LOS: The "target" LOS is from PROS, and "base" LOS was the standard adopted in the 2012 based on the fundable plan. This information will be updated when the 2024 PROS Plan becomes available.

Natural Resource Areas

The adopted LOS for natural resource areas is 71.1 acres per 1,000 population, including both County and non-County facilities. Currently, the County is not meeting this standard as shown in Exhibit 4-51.

Exhibit 4-51. Target LOS Requirement Analysis – Natural Resource Areas

Time Period	Kitsap Countywide Population	Acres Needed to Meet LOS Standard	Acres Available	Net Reserve or (Deficit)
Natural Resources Area LOS Standard = 71.1 Acres per 1,000 population				
2022	280,900	19,972	16,954	(3,018)
2044	346,358	24,626	16,954	(7,672)

Source: Kitsap County Parks, Recreation & Open Space Plan, 2012; Kitsap County Parks Department, 2023.

Regional Parks

Currently and within the 20-year planning period, the County will not be able to meet the Regional Parks LOS standard as shown in Exhibit 4-52.

Exhibit 4-52. Target LOS analysis for regional parks

Time Period	Kitsap Countywide Population	Acres Needed to Meet LOS Standard	Acres Available	Net Reserve or (Deficit)
Regional Park Area LOS Standard = 16 Acres per 1,000 population				
2022	280,900	4,494	3,650	(844)
2044	346,358	5,542	3,650	(1,892)

Source: Kitsap County Parks, Recreation & Open Space Plan, 2012; Kitsap County Parks Department, 2023

Heritage Parks

Currently and within the 20-year planning period, the County will be able to meet the Heritage Parks LOS standard as shown in Exhibit 4-53. This analysis includes consideration of concepts within the Port Gamble Forest Heritage Park Framework completed in December 2022.

Exhibit 4-53. Target LOS analysis for heritage parks

Time Period	Kitsap Countywide Population	Acres Needed to Meet LOS Standard	Acres Available	Net Reserve or (Deficit)
Heritage Park Area LOS Standard = 19 Acres per 1,000 population				
2022	280,900	5,337	7,833	2,496
2044	346,358	6,581	7,833	1,252

Source: Kitsap County Parks, Recreation & Open Space Plan, 2012; Kitsap County Parks Department, 2023

Community Parks

Currently and within the 20-year planning period, the County will not be able to meet the Community Parks LOS standard as shown in Exhibit 4-54.

Exhibit 4-54. Target LOS analysis for community parks

Time Period	Kitsap Countywide Population	Acres Needed to Meet LOS Standard	Acres Available	Net Reserve or (Deficit)
Community Parks Area LOS Standard = 4.65 Acres per 1,000 population				
2022	280,900	1,306	1,149	(157)
2044	346,358	1,611	1,149	(462)

Source: Kitsap County Parks, Recreation & Open Space Plan, 2012; Kitsap County Parks Department, 2023

Shoreline Access

The LOS for Shoreline Access includes County and non-County miles. The County currently has a surplus of shoreline access, considering both County and non-County miles of shoreline access. Currently and within the 20-year planning period, the County will be able to meet the Shoreline Access LOS standard as shown in Exhibit 4-55.

Exhibit 4-55. LOS analysis for shoreline access

Time Period	Kitsap Countywide Population	Miles Needed to Meet LOS Standard	Miles Available	Net Reserve or (Deficit)
Shoreline Access LOS Standard = 0.061 miles per 1,000 population				
2022	280,900	17	26.5	9.5
2044	346,358	21	26.5	5.5

Source: Kitsap County Parks, Recreation & Open Space Plan, 2012; Kitsap County Parks Department, 2023

Trails

The LOS for Trails includes only County's inventory of trails. The County currently has a surplus of trails. Other agencies provide approximately 57 miles of trails in the county, which, if included in the adopted LOS standard, would increase the surplus. Currently and within the 20-year planning period, the County will be able to meet the Trails LOS standard as shown in Exhibit 4-56.

Exhibit 4-56. LOS analysis for trails

Time Period	Kitsap Countywide Population	Miles Needed to Meet LOS Standard	Miles Available	Net Reserve or (Deficit)
Shoreline Access LOS Standard = 0.2 miles per 1,000 population				
2022	280,900	56	157	101
2044	346,358	69	157	88

Source: Kitsap County Parks, Recreation & Open Space Plan, 2012; Kitsap County Parks Department, 2023

Capital Projects and Funding

Exhibit 4-57 shows Kitsap County Parks Department planned capital projects. Exhibit 4-58 shows the capital projects costs for 2024-2029 and 2030-2044, and Exhibit 4-59 shows the capital project revenues for the same time periods.

Exhibit 4-57. Parks Capital Projects (All numbers in 2024 $1000s)

Category/Project Description	Revenue Source	Cost 2024-2029	Cost 2030-2044	Total Cost
Category I: Capacity Increasing Projects				
Schold Farm/Clear Creek Master Plan	REET II, General Fund	200		200
Ilahee Forest Preserve Heritage Park Restroom Installation	REET II, General Fund	47.6		47.6

North Kitsap Heritage Park Restroom Installation and Parking Lot Improvements	REET II, General Fund	257.6		257.6
Newberry Hill Heritage Park Restroom Installation and Parking Lot Improvements	REET II, General Fund	275		275
Long Lake Park Playground Installation	REET II, General Fund	200		200
Banner Forest Heritage Park Restroom Installation and Parking Lot Improvements	REET II, General Fund	247.7		247.7
South Kitsap Regional Park Parking Lot Improvements, Shelter/Main Parking, and Artificial Turf	REET II, General Fund	1,370		1,370
Norwegian Point Park	REET II, General Fund	900		900
Coulter Creek Heritage Park Restroom Installation and Parking Lot Improvements	REET II, General Fund	240		240
Category II: Capital Replacement, Maintenance and Operations				
Fairgounds & Events Center Pavilion Fire Suppression and Renovation	REET II, General Fund	770		770
Guillemot Cove Nature Reserve Demolition of cabin and bulkhead	REET II, General Fund	50		50
Point No Point Park Beach Rehabilitation	REET II, General Fund	700		700
Silverdale Waterfront Park Bulkhead Repair	REET II, General Fund	2,500		2,500
Island Lake Park Playground Replacement	REET II, General Fund	175		175
Wildcat Lake Park Playground Replacement	REET II, General Fund	175		175
Salsbury Point Park Playground Replacement	REET II, General Fund	185		185
Horseshoe Point Park Playground Replacement	REET II, General Fund	215		215
Silverdale Waterfront Park Playground Replacement	REET II, General Fund	200		200
Howe Farm Barn Renovations	REET II, General Fund	200		200

Source: Kitsap County Parks Dept. Capital Improvement Plan 2023-2028

Exhibit 4-58. Parks Capital Projects Cost (All numbers in 2024 $1000s)

Category Summary	Cost Years 2024-2029	Cost Years 2030-2044	Total Cost
Category I (Capacity Projects Required to Meet LOS)	3,737.9	0	3,737.9
Category II (Other Projects Needed for Maintenance and Operations)	5,170	0	5,170
Total	8,907.9	0	8,907.9

Source: Kitsap County Parks Dept. Capital Improvement Plan 2023-2028

Exhibit 4-59. Parks Capital Projects Revenues (All numbers in 2024 $1000s)

Revenue Source	Revenue Years 2024-2029	Revenue Years 2030-2044	Total Revenue
General Fund	687.25		687.25
REET II	8,220.65		8,220.65
Total	8,907.9		8,907.9

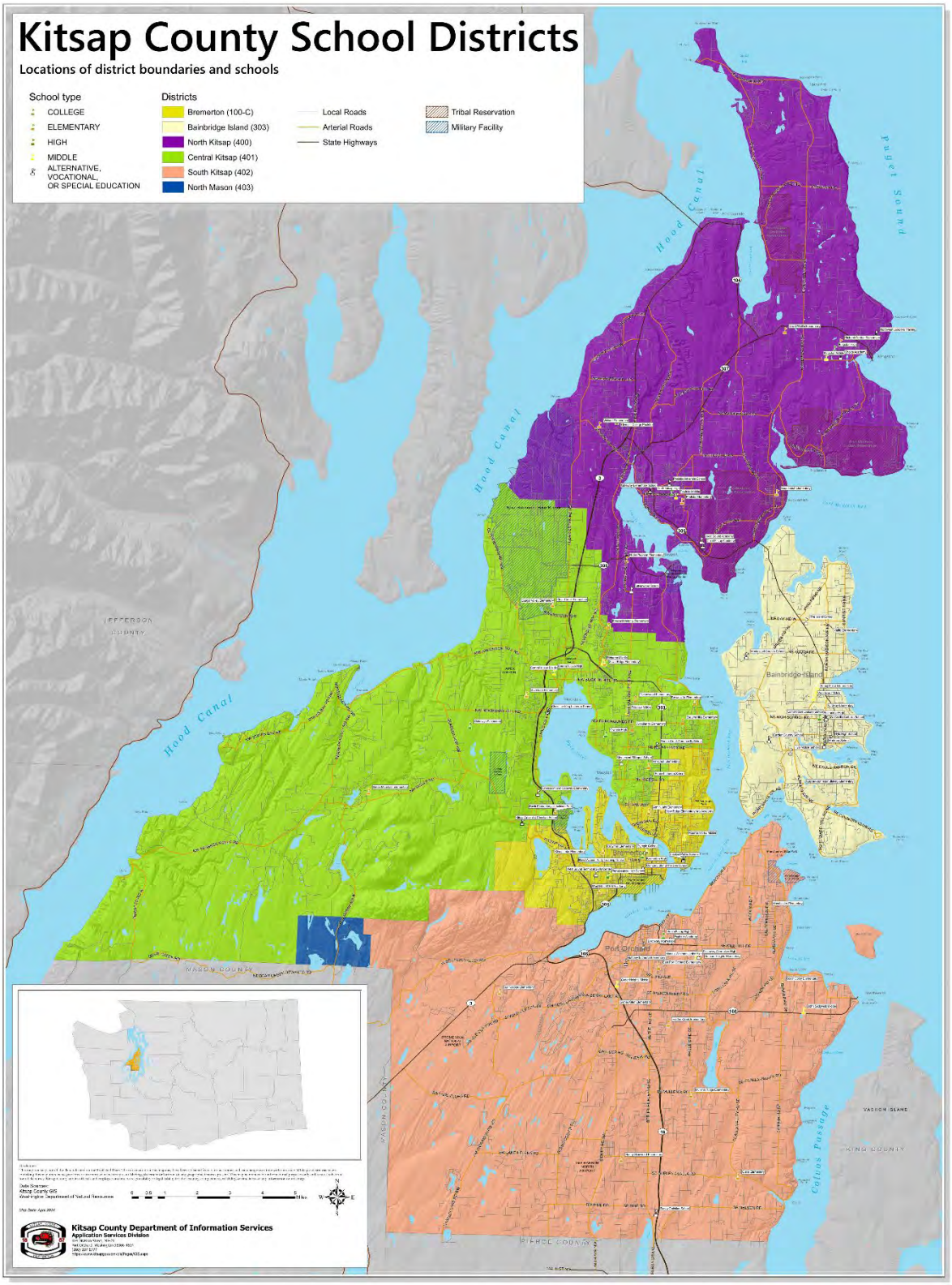
Source: Kitsap County Parks Dept. Capital Improvement Plan 2023-2028
Additional Parks information will be provided when the 2024 PROS Plan becomes available.

4.5 SCHOOLS

Purpose

The purpose of this section is to ensure that adequate educational facilities will be available to serve the increasing population of Kitsap County. This section evaluates the four school districts that serve unincorporated Kitsap County: North Kitsap, Central Kitsap, South Kitsap, and Bremerton. Two districts were excluded: Bainbridge Island Schools, because the entire district is located in the City of Bainbridge Island, and the North Mason School District, because it does not have schools or facilities in Kitsap County and serves only a very small area in the southwestern corner of the County. Exhibit 4-60 shows the school district boundaries.

Exhibit 4-60 School District Boundaries.



The inventories and analyses of capacity requirements are presented in two ways: with interim (i.e., portable) facilities and without interim facilities. The districts' capital improvement projects are based on the capacity without portables because portables have significant limitations, including heating, ventilation, noise, security, restrooms, storage cupboards, and intercom communications. For these reasons, portables are not considered permanent capacity by the state or by the districts. The capacity of portable rooms is presented to show the interim facilities the districts use (1) to meet short-term enrollment fluctuations, or (2) to serve as temporary facilities until permanent facilities are built. Capacity figures are generally based on teacher-to-student ratios (expressed as students per classroom) that the school district determines to be most appropriate to accomplish its educational program. These ratios are often contained in employment agreements between districts and their teachers. Inventories of the school districts' existing facilities in Kitsap County are presented in this section.

North Kitsap School District

Overview

North Kitsap School District (NKSD) is located at the north end of the Kitsap Peninsula and is almost completely surrounded by water. To the west, the district is bordered by Hood Canal and includes the Port Gamble Inlet. To the north and east, Puget Sound borders the district. Port Madison and Liberty Bay surround the district on its southernmost borders. NKSD schools are generally clustered around the City of Poulsbo and the unincorporated community of Kingston. The district currently uses the following grade level configurations: K–5 housed in elementary schools, 6-8 housed in middle schools, and 9-12 housed in senior high schools. Exhibit 4-61 lists North Kitsap Schools and their enrollment capacity.

Inventory of Current Facilities

Exhibit 4-61. Enrollment Capacity – North Kitsap Schools

Schools	Current Enrollment	Current Capacity
Elementary Schools (K-5)		
Gordon	402	340
Pearson	285	300
Poulsbo	421	360
Suquamish	323	350
Vinland	518	460
Wolfle	372	415
Other:	27	
Total Elementary Permanent Facilities		2225
Total Elementary Interim (Portable) Facilities		870
Total Elementary Permanent and Interim Facilities	2348	3095

Middle School		
Kingston	496	825
Poulsbo	693	625
Other:	13	
Total Middle School Permanent Facilities		1450
Total Middle School Interim (Portable Facilities)		200
Middle School Permanent and Portable	1202	1650
High School		
Kingston	574	775
North Kitsap	992	1225
Spectrum School 7	70	
Other:	63	
Total High School Permanent Facilities		2000
Total High School Interim (Portable Facilities)		150
High School Permanent and Portable Classrooms	1699	2150
Overall Total Permanent Facilities Capacity		5675
Overall Total Interim (Portable) Facilities		1220
Overall Total Permanent and Interim Facilities		6895

Source: North Kitsap School District, Doug Newell

Level of Service Analysis

NKSD is currently meeting its LOS standard through the use of permanent facilities. However, with an increase in households expected over the planning period, the District is not expected to meet its LOS in 2044, as shown in Exhibit 4-61.1.

In its CFP, NKSD has its own student generation rates based on the demographics in the district. The District uses the student generation rates to project future enrollment based on anticipated housing unit growth. Generation rates for NKSD are 0.273 students per single-family dwelling unit and 0.92 students per multi-family dwelling unit.

Exhibit 4-61.1 North Kitsap School District LOS analysis – student capacity

Time Period	SF House-holds	MF House-holds	Total Enrollment	Permanent Capacity	Net Reserve or Deficit	Total Capacity	Net Reserve or Deficit
2024	118,923	4,4,176	5,213	5,871	6689	6,892	1,679
2044	22,836	5,975	6,494	6,197	(297)	6,347	(147)

Capital Projects and Funding

Exhibit 4-62 shows North Kitsap School District planned capital projects, cost and revenue sources.

Exhibit 4-62. North Kitsap School District Capital Projects and Revenues, (All numbers are in 2024 $1000s)

Category/Project Description	Revenue Source	Cost 2024-2029	Cost 2030-2044	Total Cost
Category I: Capacity Increasing Projects	Bond	100,000	240,000	340,000
	SCAP	8,000	17,000	25,000
	Impact Fees			
Category II: Capital Replacement, Maintenance and Operations	Bond	150,000	40,000	190,000

Source: North Kitsap School District, 2023

Central Kitsap School District

Overview

Central Kitsap School District (CKSD) is located on the Kitsap Peninsula, surrounding Dyes Inlet and extending west to the Hood Canal. Currently, there are twelve elementary schools, three middle schools, one 7–12 secondary school, and two senior high schools in the district. The District also serves an alternative school program for K-12 grades at Barker Creek Community School.

Inventory of Current Facilities

Exhibit 4-63. Enrollment Capacity – Central Kitsap School District

Schools	Current Enrollment	Current Capacity
Elementary Schools (K-5)		
Brownsville	420	378
Clear Creek	424	403
Cottonwood	385	398
Cougar Valley	395	404
Emerald Heights	468	489

Esquire Hills	271	363
Green Mountain	360	374
Jackson Park	445	538
Pinecrest	390	405
Silverdale	418	501
Silver Ridge	419	471
Woodlands	385	398
Total Elementary Permanent Facilities	4,644	5,122
Total Elementary Interim (Portable) Facilities	136	136
Total Elementary Permanent and Interim Facilities	4,780	5,258
Middle School (6-8)		
Central Kitsap	628	745
Fairview	595	736
Ridgetop	752	1007
Total Middle School Permanent Facilities	1,975	2,488
Total Middle School Interim (Portable Facilities)	0	0
Middle School Permanent and Portable Classrooms	1,975	2,488
High School (9-12)		
Central Kitsap	1541	1,451
Olympic	1069	1,336
Klahowya (7-12)	571	1,276
Total High School Permanent Facilities	3,181	4,063
Total High School Interim (Portable Facilities)	0	120
High School Permanent and Portable Classrooms	3,181	4,183
Alternative School (K-12)		
Barker Creek Community School	297	300
Total Alternative Facilities	297	300
Overall Total Permanent Facilities Capacity	9,800	11,673
Overall Total Interim (Portable) Facilities	136	256
Overall Total Permanent and Interim Facilities	10,233	12,229

Source: Central Kitsap School District, 2023

Capacity data used July 15, 2021 CKSD Study and Survey adjusted for K-3 classrooms at 17 students/classroom; K-3 classroom capacity assumes 17 students/per classroom per SOW goal; Current K-3 classroom enrollment is based upon 19 students/per classroom due to staffing challenges; Enrollment reflects total student population by site (permanent and portable students not separated); Only counted general elementary classrooms with current occupancy, in capacity (daycare and preschool uses not included); Only counted MS and HS portables manufactured after 2000 in capacity.

Level of Service Analysis

CKSD is currently meeting the LOS standard through the use of portables, which gives it a total available capacity that is greater than current enrollment. It is not meeting its standard through permanent facilities alone. All MS and HS students are currently housed in permanent space. With the exception of two (2) elementary schools, all elementary students are currently housed in permanent space. Elementary portables have largely remained in place since 2016 CFP to serve in the capacity of pre-school and daycare needs or waiting to be surplused due to age. Current SOW initiatives suggest that pre- school may become state funded and more portables will be needed to accommodate.

If student enrollment returns to pre Covid-19 numbers, CKSD would barely meets its LOS standard through permanent facilities alone (current capacity at 11,673). There would be no room for additional increased student enrollment beyond pre-Covid capacity.

Exhibit 4-64 Level of Service Analysis – Central Kitsap School District

Time Period	Student per SF Household Ratio	Student per MF Household Ratio	SF House-holds	MF House-holds	Total Enrollment	Permanent Capacity	Net Reserve or Deficit	Total Capacity	Net Reserve or Deficit
2023	0.513	0.208	16,428	7,404	10,233	11,673	1,440	12,229	1,996
2044	0.513	0.208	25,878	11,154	15,595	11,921	(3,674)	12,034	(3,561)

Capital Projects and Funding

Exhibit 4-65 shows Central Kitsap School Districts planned capital projects. Exhibit 4-66 shows the capital projects costs for 2024-2029 and 2030-2044, and Exhibit 4-67 shows the capital project revenues for the same time periods.

Exhibit 4-65 Central Kitsap School District Capital Projects Costs(All numbers are in 2023 $1000s)

Category/Project Description	Revenue Source	Cost 2024-2029	Cost 2030-2044	Total Cost
Category I: Capacity Increasing Projects				

Brownsville Elementary Replacement	Bonds, OSPI Matching, Impact Fees	45,000		45,000
Early Childhood Learning Centers	Federal Heavy Impact Funds, OSPI Matching, Impact Fees	15,000		15,000
Category II: Capital Replacement, Maintenance and Operations				
Fairview Middle school Replacement	Federal Heavy Impact Funds, OSPI Matching	73,800		73,800
Elementary School Modernization (Clear Creek, Esquire Hills, and Woodlands)	Bonds, OSPI Matching	60,000		60,000
Critical and Required Repairs	Bonds	7,000	18,000	25,000
Athletic Field and Court Upgrades	Bonds	60,000	20,000	80,000
Silverdale Center Tenant Improvement	Sale of Property	3,300		3,300
Playground Upgrades	Bonds		7,000	7,000
Ridgetop Middle School Modernization	Bonds, OSPI Matching		55,000	55,000
Elementary School Modernization (Cougar Valley, Green Mountain, Silver Ridge)	Bonds, OSPI Matching		65,000	65,000

Source: Central Kitsap School District Admin, 2023.

Exhibit 4-66. Central Kitsap School District Capital Project Costs (All numbers are in 2023 $1000s)

Category/Project Description	Cost 2024-2029	Cost 2030-2044	Total Cost
Category I (Capacity Projects Required to Meet LOS)	60,000	240,000	300,000
Category II (Other Projects Needed for Maintenance and Operations)	149,000	165,000	314,000
Total	209,100	405,000	614,400

Source: Central Kitsap School District Admin, 2023.

Exhibit 4-67. Central Kitsap School District Capital Project Revenues (All numbers are in 2023 $1000s)

Revenue Source	Cost 2024-2029	Cost 2030-2044	Total Cost
Bonds	92,000	140,000	232,000
Federal Heavy Impacts Funds	66,400	0	66,400
OSPI Matching	42,900	25,000	67,900
Impact Fees	4,500	0	4,500
Sale of Property	3,300	0	3,300
Total	209,100	165,000	374,100

Source: Central Kitsap School District Admin, 2023.

Bremerton School District

Overview

The Bremerton School District (BSD) is located on the Kitsap Peninsula between Port Orchard Bay, Dyes Inlet, and Sinclair Inlet. The district is adjacent to the Puget Sound Naval Shipyard, and its enrollment is directly related to the military base. The school district serves the City of Bremerton and unincorporated areas adjacent to the city.

BSD comprises six elementary schools, one middle school, one traditional high school, and one alternative high school. The district also administers a vocational skills center that serves other school districts. The current grade configuration in the district is based on grades K–5, elementary; grades 6–8, middle school; and grades 9–12, high school. Exhibit 4-68 lists the schools of Bremerton School District and their enrollment capacity.

Inventory of Current Facilities

Exhibit 4-68. Enrollment Capacity – Bremerton School District

Schools	Current Capacity
Elementary Schools	
Armin Jahr	481
Crownhill	528
Kitsap Lake	528
Naval Avenue Early Learning Center	484
View Ridge	578
West Hills S.T.E.M. Academy	528

Total Elementary Permanent Facilities	3,127
Total Elementary Interim (Portable) Facilities	890
Total Elementary Permanent and Interim Facilities	4,017
Middle School	
Mountain View Middle School (6-8)	1,274
Total Middle School Permanent Facilities	1,274
Total Middle School Interim (Portable Facilities)	120
Middle School Permanent and Portable Classrooms	1,394
High School	
Bremerton High School	1,671
Renaissance High School	136
West Sound Technical Skills Center	515
Total High School Permanent Facilities	2,322
Total High School Interim (Portable Facilities)	120
High School Permanent and Portable Classrooms	2,442
Overall Total Permanent Facilities Capacity	6,673
Overall Total Interim (Portable) Facilities	1,130
Overall Total Permanent and Interim Facilities	7,803

Source: Bremerton School District, Garth Steedman
Note: The Bremerton School District has stated that their classrooms tend to be overcrowded at the listed capacity; therefore, they are often not used at capacity numbers. The West Sound Technical Skill Center may include students that are enrolled at Bremerton High School and Renaissance High School.

Level of Service Analysis

BSD is currently meeting its LOS standard through the use of permanent facilities. However, with an increase in households expected over the planning period, the District is not expected to meet its LOS, as shown in Exhibit 4-69. In 2021, BSD will see a surplus if temporary capacity is considered and a deficit with permanent capacity. With permanent or temporary capacity there would be a deficit by 2044, and the District does not have adequate portable facilities to serve total enrollment under the Preferred Alternative.

Exhibit 4-69. Level of Service Analysis – Bremerton School District

Time Period	Student per SF Household Ratio	Student per MF Household Ratio	SF Households	MF Households	Projected Enrollment	Permanent Capacity	Permanent Capacity Net Reserve or Deficit	Total w/ Port Capacity	Total Capacity Net Reserve or Deficit
2020 Base	0.21	0.14	13,694	7,761	3,962	5,393	1,431	6,744	2,782
2044	0.21	0.14	20,151	19,170	6,914	5,393	(1,523)	6,744	(172)

Capital Projects and Funding

Exhibit 4-70 shows Bremerton School District capital projects planned for 2024 through 2044. The project list includes both Phase I items, and Phase II items. Within Phase I, projects at Armin Jahr, View Ridge, Kitsap Lake, West Hills, and Naval Avenue Elementaries will add student capacity and will require state funding assistance and passage of bond(s) to complete. It is too early to determine if the Phase II projects will be done in a manner to add student capacity. The Bremerton School District's future plans include approximate cost but do not specify the years for planned projects other than a range of 10-15 years from the date of the 2024 study. This CFP contemplates the completion of Phase I projects by these projects will be completed by 2030, with the second phase occurring early in the 2030s. Exhibit 4-71 and Exhibit 4-72 show the Bremerton School District capital project costs and revenues, respectively.

Exhibit 4-70. Bremerton School District Capital Projects (All numbers are in 2024 $1000s)

Category / Project Description	Revenue Sources	Total Cost
Category I (Capacity Projects Required to Meet LOS)		
Phase I Projects:		
Armin Jahr Elementary Replacement	Bond, State Assistance	45,000
View Ridge Elementary Replacement	Bond, State Assistance	45,000
Consolidated Facilities Replacement	Bond	34,000
Kitsap Lake Elementary Gym Addition	Bond	5,000
West Hill STEM Gym Addition	Bond	5,000
Naval Avenue Gym Addition & Site Improvements	Bond	10,000
HVAC Improvements & Cooling	Bond	10,000
Renaissance High School Replacement	Bond	14,000
Phase II Projects:		
Bremerton High School Upgrades	Bond, State Assistance	75,000
Mountain View Middle School Upgrades	Bond, State Assistance	24,000

Kitsap Lake Elementary School Upgrades	Bond, State Assistance	9,000
Crownhill Elementary School Upgrades	Bond, State Assistance	10,000
West Hills STEM Upgrades	Bond, State Assistance	16,000

Source: Bremerton School District Long-Range Facilities Plan, 2023.

Exhibit 4-71 Bremerton School District Capital Project Cost (All numbers are in 2024 $1000s)

Category Summary	2024-2029	Total
Category I (Capacity Projects Required to Meet LOS)	110,000	110,000
Total	110,000	110,000

Source: Bremerton School District Long-Range Facilities Plan, 2023.

Exhibit 4-72. Bremerton School District Capital Project Revenues (All numbers are in 2024 $1000s)

Revenue Source	Revenue Years 2024-2029	Total Revenue
State Assistance	18,000	18,000
Bond(s)	150,000	150,000
Total	168,000	168,000

Source: Bremerton School District Long-Range Facilities Plan, 2023.

South Kitsap School District

Overview

South Kitsap School District (SKSD) is located in the southern portion of Kitsap County. Pierce County and Mason County border the District to the south and west. To the north and east, the District is bordered by the Sinclair Inlet, Rich Passage, Colvos Passage, and Puget Sound. The district includes 10 elementary schools, three junior high schools, and one alternative and one comprehensive high school. The majority of the schools are

located throughout the southern portion of unincorporated Kitsap County, while South Kitsap High School, Cedar Heights Middle School, and Sidney Glen Elementary School are located within the Port Orchard city limits. The grade configuration is based on grades K–5, elementary; grades 6-8, middle school; and grades 9–12, senior high school. Exhibit 4-73 lists the schools of the South Kitsap School District and their enrollment capacity.

Inventory of Current Facilities

Exhibit 4-73. Enrollment Capacity – South Kitsap School District

Schools	Current Enrollment
Elementary Schools	
Burley-Glenwood	528
East Port Orchard	467
Hidden Creek	526
Manchester	441
Mullenix Ridge	480
Olalla	408
Orchard Heights	729
Sidney Glen	467
South Colby	216
Sunnyslope	417
Total Elementary Permanent Facilities	4,679
Total Elementary Interim (Portable) Facilities	391
Total Elementary Permanent and Interim Facilities	4,233
Middle Schools	
Cedar Heights	605
John Sedgwick	702
Marcus Whitman	796
Total Middle School Permanent Facilities	2,240
Total Middle School Interim (Portable Facilities)	450
Middle School Permanent and Portable Classrooms	2016
High School	
South Kitsap	1,972
Discovery Alternative High School	174
Explorer	214
Total High School Permanent Facilities	2010
Total High School Interim (Portable Facilities)	540
High School Permanent and Portable Classrooms	2550
Overall Total Permanent Facilities Capacity	7418
Overall Total Interim (Portable) Facilities	1381

Overall Total Permanent and Interim Facilities	8799

Source: South Kitsap School District 2023
Note: Enrollment Capacity based on current enrollment. The Total capacity of a building is a little more intense figuring contract language around class size and special education programs.

Level of Service Analysis

SKSD is currently meeting the LOS standard through the use of portables to house approximately 75 classrooms, which gives it a total available capacity greater than current enrollment. The 75 portable classrooms in use throughout the District have the capacity to house over 1500 students. It is not meeting its standard through permanent facilities alone.

In its CFP, SKSD has its own student generation rates based on the demographics within the district. The district uses the student generation rates to project future enrollment based on anticipated housing unit growth. Generation rates for SKSD are 0.52 students per single-family dwelling unit and 0.32 students per multifamily dwelling unit (South Kitsap School District CFP, 2014-19).

Exhibit 4-74 shows the estimated level of service under the Preferred Alternative. If growth in households occurs as predicted with the land capacity analysis, SKSD would need to increase capacity to meet its LOS standard.

Exhibit 4-74. Level of Service Analysis – South Kitsap School District

Time Period	Student per SF Household Ratio	Student per MF Household Ratio	SF Households	MF Households	Total Enrollment	Permanent Capacity	Net Reserve or Deficit	Total Capacity	Total Capacity Net Reserve or Deficit
2023	0.52	0.36	19,515	6,816	8,761	9,065	304	10696	1,935
2044	0.52	0.36	29,568	7,477	18,067	9,065	(9,002)	10,696	(7,371)

Source: South Kitsap School District,2023

Capital Projects and Funding

Exhibit 4-75 shows Bremerton School District capital projects planned for 2024 through 2029.

Exhibit 4-75. SKSD Capital Projects and Funding (All numbers are in 2023 $1000s)

Category/Project Description	Revenue Source	Cost 2024-2029	Total Cost
Category I: Capacity Increasing Projects			
Category II: Capital Replacement, Maintenance and Operations			
Cedar Heights Middle School Replacement	Bond, State Assistance	96.3	96.3
South Colby Elementary School Replacement	Bonds, State Construction Assistance	55.1	55.1
Olalla Elementary School Replacement	Bonds, State Construction Assistance	55.1	55.1
Explorer Academy Replacement	Bond, State Construction Assistance	14.9	14.9
Discovery High School Replacement	Bond, State Construction Assistance	14.9	14.9
South Kitsap High School Renovation	Bond, SCAP Assistance	46.8	46.8

Source: South Kitsap School District, 2023

Exhibit 4-76. SKSD Capital Project Cost (All numbers are in 2023 $1000s)

Category Summary	2024-2029	Total
Category II: Capital Replacement, Maintenance and Operations	283.1	283.1
Total	283.1	283.1

Source: South Kitsap School District, 2023

Exhibit 4-77. SKSD Capital Project Revenues (All numbers are in 2023 $1000s)

Revenue Source	Revenue Years 2024-2029	Total Revenue
State Assistance*		

Bond(s)*		
SCAP Assistance*		
Total		283.1

*Note: *Exact amount of revenue from each source was not specified/TBD*
Source: South Kitsap School District, 2023

4.6 SOLID WASTE

Overview

Washington State law (RCW 70A.205 [formerly RCW 70.95]) requires counties to plan an integrated solid waste management system that emphasizes waste reduction and recycling. Chapter 70A.300 RCW (formerly Chapter 70.105 RCW) requires local governments to develop plans for managing moderate risk waste, which includes hazardous wastes produced by households, businesses, and other entities in small quantities. Kitsap County Public Works/Solid Waste Division is the lead planning agency for solid waste management in Kitsap County.

In 2018, Kitsap County adopted the current Solid and Hazardous Waste Management Plan (Kitsap County 2018). This Plan and personal communication with Kitsap County Public Works/Solid Waste Division staff are the sources for this analysis. As of summer 2023,the Solid Waste Division began updating the 2018 Plan for a 6-year detailed and 20-year general time period.

The Plan specifies the management actions that will be taken over a six-year (detailed) and 20-year (general) time period. The plan is developed with participation from the cities, tribes, and the Navy, as well as a solid waste advisory committee. Through this planning process, counties are encouraged to allow private industry to provide services to the fullest extent possible (RCW 70A.205.010 [formerly 70.95.020]). The Kitsap County solid waste system is a combination of private companies and public agencies. Components of an integrated solid waste management program are:

- System planning, administration, and enforcement
- Collection, transfer, and disposal of solid waste
- Collection and processing of recyclables
- Moderate risk waste transfer and collection programs

Inventory of Current Facilities

Exhibit 4-78 shows the current inventory of solid waste facilities in Kitsap County, which are owned and operated by a variety of entities.

Exhibit 4-78. Inventory of Current Facilities – Solid Waste

Name	Owner	Operator	Location
Solid Waste Disposal			
Olympic View Transfer Station (OVTS)	Kitsap County Public Works (KCPW)	Waste Management of Washington, Inc. (WMW) Note: KCPW operates OVTS Scalehouse	City of Bremerton
Olalla Recycling and Garbage Facility (RAGF)	KCPW	KCPW	South Kitsap
Hansville RAGF	KCPW	KCPW	North Kitsap
Silverdale RAGF	KCPW	KCPW	Central Kitsap
Bainbridge Island Transfer Station	Bainbridge Disposal	Bainbridge Disposal	City of Bainbridge Island
Moderate Risk Waste Disposal			
Household Hazardous Waste Collection Facility	KCPW	KCPW	City of Bremerton
Residential Recyclables Collection			
OVTS Recycling Area	KCPW	KCPW	City of Bremerton
Olalla RAGF	KCPW	KCPW	South Kitsap
Hansville RAGF	KCPW	KCPW	North Kitsap
Silverdale RAGF	KCPW	KCPW	Central Kitsap
Bainbridge Island Transfer Station	Bainbridge Disposal	Bainbridge Disposal	City of Bainbridge Island

Source: Keli McKay-Means, Projects & Operations Manager, Kitsap County Public Works Solid Waste Division, 2023.

Level of Service Capacity Analysis

With the closure of the Olympic View Sanitary Landfill, the County contracted with Waste Management of Washington, Inc. (WMW) to design, build, and operate the Olympic View Transfer Station (OVTS) in Bremerton. OVTS opened to the public in 2002 serving as the primary transfer station for managing all the County's municipal solid waste for transport by rail to Waste Management's Columbia Ridge Landfill near Arlington, Oregon. This design, build and operate contract spanned 20 years and expired in June 2022. A comprehensive

procurement process was undertaken in 2020 and 2021 to ensure continued level of service for OVTS operations. As a result of this process, the County awarded a contract to WMW for operations of OVTS through May 2042. The County has a contract with Waste Management for implementing designated capital improvement projects at OVTS. This second contract is tied to the primary operations contract.

The capital improvement contract at OVTS identified key projects as part of a comprehensive Facility Master Plan conducted in 2022 to identify and plan for service level and operational needs for the next 20-years. The Solid Waste Division continues to work with WMW to address needs through implementation of projects identified in the capital improvement contract.

OVTS is designed for a maximum daily processing of 1,000 tons of waste, which exceeds the maximum projected volume of 800-900 tons per day in 2036. The landfill has capacity for 50 to 100 years and has additional acreage that could be permitted to increase its capacity further.

To increase daily tonnage processing of waste and provide redundancy in the event of equipment failure, a second trash compactor will be installed by 2025. However, OVTS is still limited by capacity on the railway service lines. The Solid Waste Division is working with WMW, the rail companies, and the US Navy (who owns the portion of the rail line for OVTS) to expand service levels and capacity within the rail system.

Planning at Kitsap County and Waste Management occurs on an ongoing basis based on future projected needs. The County has adequate time to plan for 2044 levels of waste generation, and projected levels could be accommodated at OVTS and the current landfill site. Prior to the expiration of the existing operations contract, the County will issue a Request for Proposals for qualified contractors to continue to maintain solid waste levels of service.

Exhibit 4-79. Solid Waste Management Disposal and Recycling Rate

Time Period	Countywide Populations	SW Disposal Rate (lbs./ cap/ day)	SW Tons Disposed per Year	SW Recycling Rate (lbs./ cap/ day)	Recycled Tons per Year
2022	280,900	4.22	216,335	2.85	146,103

Source: Washington State Department of Ecology, 2018 Recycling and Disposal Numbers for Kitsap County, 2021. Nate Vikeras, Solid Waste Management, October 15, 2021. Personal communication with Keli McKay-Means, Projects and Operations Manager, Kitsap County Public Works Solid Waste Division, February 2023. Personal Communication with Jim Rogers, Kitsap County Department of Community Development, February 2023 (for year 2022 population data).

Capital Projects and Funding

Exhibit 4-80 shows Kitsap County Solid Waste planned capital projects. Exhibit 4-81 shows the capital projects costs for 2024-2029 and 2030-2044, and Exhibit 4-82 shows the capital project revenues for the same time periods.

Exhibit 4-80. Kitsap County Solid Waste Capital Projects (All numbers are in 2024 $1000s)

Category/Project Description	Revenue Source	Cost 2024-2029	Cost 2030-2044	Total Cost
Category I: Capacity Increasing Projects				
Olympic View Transfer Station - Second Pre-load Compactor	Tipping Fees, Bonds	2,775	2,200	4,975
Olympic View Transfer Station - Intermodal Facility and Rail Expansion	Tipping Fees	9,925		9,925
Olympic View Transfer Station - Stormwater Improvements	Tipping Fees	2,850		2,850
Olympic View Transfer Station - Backup Generator	Tipping Fees	375		375
Olympic View Transfer Station - Trackout Mitigation	Tipping Fees	1,100		1,100
Olympic View Transfer Station - General Capacity Upgrades	Tipping Fees	4,800		4,800
Silverdale Recycling and Garbage Facility - Improvements and Construction	Tipping Fees, Bonds	17,000	1,300	18,300
Household Hazardous Waste Collection Facility - Repairs and Improvements	Tipping Fees	350		350
North-end Household Hazardous Waste Collection Facility - Construction	Tipping Fees, Bonds, REET	10,100	1,400	11,500
Hansville Recycling and Garbage Facility - Improvements	Tipping Fees	220		220
Olalla Recycling and Garbage Facility - Improvements	Tipping Fees	275		275

Category II: Capital Replacement, Maintenance and Operations				
Hansville Landfill Closure - Ongoing Improvements	Landfill Post Closure Funds	1,050		1,050
Olalla Landfill Closure - Ongoing Improvements	Landfill Post Closure Funds	750		750
Total		51,570	4,900	56,470

Source: Personal Communication with Keli McKay-Means, Projects and Operations Manager, Kitsap County Public Works Solid Waste Division, 2023

Exhibit 4-81. Kitsap County Solid Waste Capital Project Costs (All numbers are in 2024 $1000s)

Category Summary	Cost Years 2024-2029	Cost Years 2030-2044	Total Cost
Category I (Capacity Projects Required to Meet LOS)	49,770	4,900	54,670
Category II (Other Projects Needed for Maintenance and Operations)	1,800	0	1,800
Total	51,570	4,900	56,470

Source: Personal Communication with Keli McKay-Means, Projects and Operations Manager, Kitsap County Public Works Solid Waste Division, 2023

Exhibit 4-82. Kitsap County Solid Waste Capital Project Revenues (All numbers are in 2024 $1000s)

Revenue Source	Revenue Years 2024-2029	Revenue Years 2030-2044	Total Revenue
Tipping Fees, REET, and Bonds	49,770	4,900	54,670
Landfill Post-Closure Funds	1,800	0	1,800
Total	51,570	4,900	56,470

Source: Personal Communication with Keli McKay-Means, Projects and Operations Manager, Kitsap County Public Works Solid Waste Division, 2023

4.7 STORMWATER

Overview

Kitsap County has three types of drainage facilities:

- Conveyance network
- Runoff quantity and flow-control facilities

- Stormwater quality treatment systems

The drainage infrastructure is guided by topography and flows, without consideration to property ownership, land use, or political boundaries. The conveyance network includes all natural (streams and swales) and constructed open channels (swales and ditches), as well as piped drainage systems (including catch basins and conveyance structures) and culverts.

Quantity and flow-control facilities include infiltration facilities, retention and detention ponds, tanks, vaults, and bioretention systems. The purpose of these facilities is to reduce the rate of stormwater flow from a specific site or area to reduce the potential for localized flooding, minimize flow damage to natural water courses, and prevent downstream erosion problems. These facilities are designed to hold a volume of runoff based on the amount of impervious area and a specific design storm event.

Stormwater quality enhancement facilities include water-quality (wet) ponds, biofiltration swales, infiltration facilities, and bioretention systems. The purpose of these facilities is to remove a certain type and/or amount of pollutant from the runoff before it is discharged into a water body or collection system or dispersed over the ground for infiltration.

Permit conditions may apply to development activities taking place within Kitsap County, for compliance with minimum requirements of the Kitsap County Stormwater Management Ordinance. Drainage control and water quality enhancement facilities constructed for large residential projects may be dedicated to Kitsap County Stormwater Division for maintenance. Facilities constructed for commercial and multifamily developments are maintained privately.

Inventory of Current Facilities

Exhibit 4-83. Inventory of Current Facilities - Stormwater

Type of System	Quantity	Note
Basins		
Detention Dry	268	(Detention Pond)
Detention Wet	3	(Detention Pond)
Retention	76	(Retention Pond)
Tank	102	(Tank or Vault)
Vaults	46	(Tank or Vault)
Constructed Wetland	3	
Infiltration Trench	1	
Natural	0	
Conveyance		
Perf Pipe	130	(Infiltration basin/trench)

LID		
Bioretention Cell	113	(Bioretention facility)
Bioretention planter	0	
Bioswale	12	(Biofiltration Swale)
Enhanced Ditch	40	
Filterra Strip	0	
Filterra	29	(Tree box filter)
Grass Swale	170	(Biofiltration Swale)
Modular Wetland	5	(Underground WQ filter)
Permeable Pavement	28	
Rain Garden	21	(WQ filter)
Rain Garden in a box	4	(Tree box filter)
Inlets		
CDS	24	(Hydro WQ Device)
OWS2	89	(WQ Device)
Tide gates	13	(Tide gates)

Source: Kitsap County Stormwater Division, 2023

Level of Service Capacity Analysis

The Kitsap County Stormwater Division has maintenance responsibility for more than 615 stormwater retention/detention and runoff quality enhancement facilities. More than 55 newly constructed and private residential facilities are expected to be included in the Stormwater Division Inspection and Maintenance Programs within the next two years. Approximately 43 percent of the 2016 Stormwater Division Program budget is slated for inspection, maintenance, and retrofitting of County stormwater facilities.

The goals and objectives of the County's Stormwater Program reflect the level of service (LOS) for stormwater management facilities. The Stormwater Capital Improvement Program, adoption of the Kitsap County Stormwater Management Ordinance, and watershed planning activities undertaken by the Department of Community Development all contribute to the public's level of service expectations.

Current Level of Service

The current level of service complies with a 2024 National Pollution Discharge Elimination System permit. Land development activities requiring land use approval from Kitsap County are conditioned to meet the water quality, runoff control, and erosion control requirements of Kitsap County's Stormwater Design Manual, which was updated in 2021.

The Kitsap County Stormwater Design Manual requires development projects to provide water quality enhancement for 91 percent of the runoff volume generated at the project

site. When discharging to streams or open channels, runoff rates from development sites are required to be controlled to meet stream bank erosion control standards. These standards require that post-developed peak flow runoff rates do not exceed pre-developed rates for all stormwater flows ranging from 50 percent of the two-year flow through the 50-year flow as predicted by the Western Washington Hydrology Model. Alternative design criteria are pending by December 2013 based on the National Pollution Discharge Elimination System permit for Western Washington Phase II, issued by the Department of Ecology in 2024.

Capital Projects and Funding

The Stormwater Capital Improvement Program focuses on correction of drainage problems that are not likely to be financed by the County's road fund. The objective of the program element is to secure enough funding to construct projects that address identified water quality problems, publicly owned fish passage barriers, and serious flooding problems located beyond County rights-of-way.

The County's stormwater facilities include 13 capital projects in the six-year planning period at a cost of $17.5 million. See Exhibit 4-84.

New development in the 2030-2044 period will meet LOS criteria through compliance with applicable regulatory criteria. Other stormwater capital projects in the 2030-2044 period may include regional retrofits or restoration projects designed to address historical problems. The specific schedule, costs, and revenue sources for these 2030-2044 projects will be identified through future six-year CIP planning processes.

Exhibit 4-84 Kitsap County Stormwater Capital Projects (All numbers are in 2024 $1000s)

Category/Project Description	Revenue Source other than Stormwater Fee Funding	Cost 2024-2029	Total Cost
Category I: Capacity Increasing Projects			
Bucklin Hill/Tracyton Regional Stormwater Facility	Ecology and other grant funding	2,900	2,900
Category II: Capital Replacement, Maintenance and Operations			
Silverdale Way Preservation	Grant Funding	550	550
CIPP (Cured-In-Place-Pipe) Pipe Replacement Project	Grant Funding	2,750	2,750
Illahee Regional Stormwater Treatment Facillity	Grant Funding	1,150	1,150
Spirit Ridge Asset Replacement	Grant Funding	1,150	1,150

Suquamish Regional Stormwater Treatment Facility	Ecology and other grant funding	3,912	3,912
Tracyton Green Streets Stormwater Retrofit	Ecology and other grant funding	2,000	2,000
Lund Avenue Bioretention	Grant Funding	500	500
Tracyton Boat Ramp Bioretention	Grant Funding	500	500
Silverdale Way Stormwater Retrofit	Grant Funding	500	500
Navy Yard City Stormwater Retrofit	Grant Funding	700	700
Bellpark/Virginia Stormwater Retrofit	Grant Funding	345	345
Tracyton Blvd Bioretention	Grant Funding	517.5	517.5
Total		17,474.5	17,474.5

Source: Kitsap County Stormwater Division, 2023

Exhibit 4-85. Kitsap County Stormwater Capital Project Costs (All numbers are in 2024 $1000s)

Category Summary	Cost Years 2024-2029	Total Cost
Category I (Capacity Projects Required to Meet LOS)	2,900	2,900
Category II (Other Projects Needed for Maintenance and Operations)	14,575	15,457.5
Total	17,474.5	17,474.5

Source: Kitsap County Stormwater Division, 2023

Exhibit 4-86. Kitsap County Stormwater Capital Project Revenues (All numbers are in 2024 $1000s)

Revenue Source	Revenue Years 2024-2029	Total Revenue
Dept. of Ecology/Other Grant Funding	6,156	6,156
REET-2	0	0
Stormwater Fees	11,318.5	11,318.5
Total	17,474.5	17,474.5

Source: Kitsap County Stormwater Division, 2023

4.8 TRANSPORTATION

Overview

This section addresses motorized and non-motorized modes of travel. The section provides an inventory of existing facilities, an analysis of levels of service, a six-year transportation

improvement program and a 20-year project list describing improvements and costs. Detailed revenue sources are provided for the six-year program. Long-range revenue projections and alternative sources are addressed in Chapter 3.

Exhibit 4.87. Federal Functional Classifications

Functional Classification	Description
Freeway	A freeway is a multilane, high-speed, high-capacity roadway intended primarily for motorized traffic. Freeways in Kitsap County are all under the jurisdiction of WSDOT.
Principal Arterial	Principal arterials primarily serve a mobility function, and typically have uncontrolled access. Principal arterials provide for movement between surrounding urban and rural intra-county population centers. As such, this roadway facility classification predominantly serves "through" traffic with minimum direct service to abutting land uses. Principal arterials provide routes for public transit systems between major communities within the county.
Minor Arterial	Minor arterials provide access to the principal arterial and freeway systems. They provide a lower level of travel mobility than principal arterials to major communities within the county. They provide primary access to or through communities of high-density residential, commercial, or retail, or industrial land areas. They provide access to abutting properties at predetermined locations. Trip lengths on minor arterials are moderate and generally exceed 5 miles. Minor arterials provide routes for public transit systems between major communities within the county.
Major Collector	Major collectors provide the primary access to a minor arterial for one or more neighborhoods or non- residential areas. Collectors distribute trips to and from the arterial system. They provide a limited amount of travel through neighborhoods and non-residential areas that originate and terminate externally. Collectors provide direct connections to local roads and minor collectors. They provide collection and distribution routes for public transit systems. The basic trip length is generally between 2 and 10 miles.
Minor Collector	Minor collectors provide direct access to local roads and driveway access points to abutting properties. They provide for internal distribution of trips within a neighborhood or non-residential area, or part of a neighborhood or non-residential area. Minor collectors contain a limited amount of through traffic; traffic is primarily local in nature.
Local	A local access street provides access immediately to adjacent properties. Characteristics of local streets include low traffic volumes, maximum of two travel lanes, no medians, 3 to 4 foot shoulders, no access control, and no preference at signals. Sidewalks and parking may be permitted. Local streets should connect local properties to minor collector streets

	and, in turn, to higher-class facilities. Fixed bus service is generally not provided along local streets.
Local Sub-Collector	Local Sub-collectors serve as primary access to developments and provide circulation within neighborhoods. They typically serve one neighborhood or a combination of a few small developments. They channel traffic to the collect system from the local roads in residential neighborhoods.

Source: Kitsap County Public Works Department, 2020.

Inventory of Current Facilities

Exhibit 4-88. County Roadway Inventory

Functional Classification	Total Miles of Roadway	Percentage of Total
Freeway/Expressway	0.22	0.2
Principal Arterial	5.54	0.6
Minor Arterial	106.58	11.6
Major Collector	146.51	15.9
Minor Collector	49.91	5.4
Local Collector	94.22	10.2
Local Sub-Collector	94.22	10.2
Total	922.13	100.0 percent

Source: Kitsap County Public Works Department, 2020.

Level of Service Capacity Analysis

Roadway Level of Service

Level of Service (LOS) designations are qualitative measures of congestion that describe operational conditions within a traffic stream and take into consideration such factors as volume, speed, travel time, and delay. Six letter designations, "A" through "F," are used to define level of service. LOS A and B represent conditions with the lowest amounts of delay, and LOS C and D represent intermediate traffic flow with some delay. LOS E indicates that traffic conditions are at or approaching congested conditions and LOS F indicates that traffic volumes are at a high level of congestion with unstable traffic flow (Transportation Research Board, 2010). The characteristics of the six LOS designations for roadway segments and intersections are summarized in Exhibit 4-87.

Level of Service Standards

Level of service standards are used to evaluate the transportation impacts of long-term growth and to ensure concurrency. Jurisdictions must adopt standards by which the minimum acceptable roadway operating conditions are determined and deficiencies may be identified.

Level of service standards for county arterials and state highways in Kitsap County involve three different policy approaches established by Kitsap County, PSRC, and WSDOT. While somewhat diverse in application, all the standards and methodologies are consistent with the Highway Capacity Manual (Transportation Research Board 2016) definitions and procedures.

County Roadways

Kitsap County's level of service policy generally recognizes that urban areas are likely to have more congestion than rural areas. This reflects the different characteristics of land use and transportation in these areas. For purposes of defining level of service standards, urban areas are the geographic areas located within a UGA boundary, and rural areas are the geographic areas located outside UGA boundaries.

In rural areas, the system of major roads must have sufficient access to the abutting land uses, but because of the low level of land development, rural roads have small capacity requirements. In contrast, urban areas typically attract and generate high volumes of traffic. In order to facilitate through traffic and minimize congestion, major roads may have limited access to adjacent land uses while the more minor roads serve as access points to the surrounding development. The increased density and activity in an urban area inherently results in higher levels of congestion. Drivers are aware of the differences in land use between urban and non-urban areas and generally are more tolerant of congestion and the associated lower level of service in urban areas than in rural areas.

Level of Service Analysis

Level of service standards are used to evaluate the transportation impacts of long-term growth and to ensure concurrency. Jurisdictions must adopt standards by which the minimum acceptable roadway operating conditions are determined, and deficiencies may be identified.

Kitsap County's level of service policy generally recognizes that urban areas are likely to have more congestion than rural areas. This reflects the different characteristics of land use and transportation in these areas. For purposes of defining level of service standards, urban areas are the geographic areas located within a UGA boundary, and rural areas are the geographic areas located outside UGA boundaries.

In rural areas, the system of major roads must have sufficient access to the abutting land uses, but because of the low level of land development, rural roads have small capacity requirements. In contrast, urban areas typically attract and generate high volumes of traffic. In order to facilitate through traffic and minimize congestion, major roads may have limited access to adjacent land uses while the more minor roads serve as access points to the surrounding development. The increased density and activity in an urban area inherently results in higher levels of congestion. Drivers are aware of the differences in land use between urban and non-urban areas and generally are more tolerant of congestion and the associated lower level of service in urban areas than in rural areas.

The level of service standards shown in Exhibit 4-89 are based on the location and functional classification of the roadway facilities to which they apply. Kitsap County uses traditional engineering methodology to evaluate level of service of roadway segments, which are sections of roadway located between major intersections. Level of service is based on the Volume-to-Capacity ratio (V/C), which is calculated by dividing the traffic volume on a roadway by the roadway's vehicle capacity. However, the measure is multimodal in nature: For each street, the capacity is based upon its multimodal characteristics, including the number of lanes, traffic control, and whether or not it has transit, pedestrian, and bicycle facilities. The County has adopted roadway volume-to-capacity (V/C) thresholds of 0.79 to 0.89 (depending on rural versus urban respectively) that indicate the highest level of traffic that a roadway can carry before it is considered deficient.

Exhibit 4-89. Level of Service - County Roadway Inventory

Functional Classification	Maximum V/C Ratio/LOS Standard	
	Urban	Rural
Principal Arterial	0.89/D	0.79/C
Minor Arterial	0.89/D	0.79/C
Collector	0.89/D	0.79/C
Minor Collector	0.89/D	0.79/C
Residential/Local	0.79/C	0.79/C

Source: Kitsap County Transportation Planning, 2023

The Kitsap County Concurrency Ordinance, codified in KCC 20.04, establishes the process for determining whether a development project meets concurrency. Though the County's goal is to have no LOS deficiencies, it is recognized that not all roadways will meet the standards all the time given the limits of county, state, and federal funding and timing of project improvements. Therefore, 15 percent of lanes miles tested for concurrency will be allowed to temporarily exceed LOS standards. This 15 percent allowance shall be applied at both the system wide and project site level. Generally, the 15 percent threshold for road

concurrency is the County's adopted strategy to ensure LOS standards are within an accepted range and is not an acknowledgement of an LOS deficiency. This 15 percent is evaluated on a county wide basis and includes both rural and urban areas. Concurrency is satisfied if no more than 15 percent of county road lane-miles exceed LOS standards.

By adopting an area-wide standard, the County acknowledges the fact that not every roadway facility or link in the network will meet the adopted facility LOS standards all the time. Measures of area-wide concurrency are conducted periodically, such as during updates of the Comprehensive Plan, for sub-area planning, and when corridor studies are conducted.

The 15 percent allowance relates to individual development proposals undergoing a concurrency test. If LOS is equal to or better than the adopted standard, the concurrency test is passed, and an applicant is issued a Capacity Reservation Certificate. For purposes of concurrency determination, the analysis of LOS adequacy would only be applied to County arterials and collectors in rural areas and urban areas under the County's jurisdiction. A Certificate of Concurrency is not issued to any proposed development if the standards in this section are not achieved and maintained within the six-year period allowed by GMA for transportation concurrency. The applicant has the option of accepting the denial of application; appealing the denial of application; or accepting a 90-day reservation period and, within this time, revising the development proposal to bring transportation within concurrency requirements. Approximately 2.2 percent of lane-miles of functionally classified roadways in Kitsap County currently exceed adopted segment LOS standards. This is well below the 15 percent concurrency threshold, and indicates that under the current concurrency management program, the system-wide concurrency test would be passed for a considerable level of additional development.

Exhibit 4-90 Transportation Capital Improvement Projects (All numbers are in 2024 $1000s)

Category/Project Description	Revenue Source	Total Cost 2024-2029
Capital I: Capacity Increasing Projects		
Fairgrounds Road- Sidewalk Improvements	Federal Funds, Local Funds	5010
STO-Port Gamble Trail Segments AE	Local Funds	250
NSTO- Port Gamble Trail Segment C	Federal and Local Funds	12,410
SR 104 Holding Lane/ ATMS	Federal, State, Other Funds	1646

Lund- Harris to Chase	State, Local, Impact Fee Funds	4586
Lund & Hoover	Federal, Impact Fee, Local Funds	3318
Ridgetop Mickelberry to Myhre (All Phases)	Federal, Local, and Impact Fee Funds	23,020
Sidney- City Limits to Lider	Local Funds	50
North Kitsap Service Center		
STO- Port Gamble Trail Carver Dr.	Local Funds	210
STO- Port Gamble Trail Segment D	Local Funds	1470
Burley Olalla- Bandix to Fagerud	State, Local, Other Funds	818
Lund- Chase to Jackson	Federal and Impact Fee Funds	3275
Sidney & Pine	Federal Funds	3190
Squamish/Augusta- South St. Winfred	Federal and Local Funds	4324
Anderson Hill Road/ Apex Airport Road	State and Local Funds	500
Anderson Hill- Segment Phase 1	Local Funds	400
North Kitsap Service Center	Local Funds	10149
County Wide Sidewalk	Local Funds	1200
Category II: Capacity Increasing Projects		
Taylor Road Bridge	Federal Funds	10
160th Street	Local Funds	165
W. Hills STEM School- Nat'l Ave. Roadway Improvement	Federal and Local Funds	2550
East Hilldale Road- Culvert	Local Funds	725
CodeGreen	Federal Funds	484
Newberry Hill Road- Culvert	Federal and Local Funds	3670
Oak Road (SE) - Culvert	Local Funds	125
Bahia Vista Slide Repair	Local Funds	500
SR 104 Realignment	Local Funds	40
Glenwood Road	State and Other Funds	2520
Lake Flora- City Limits to J M Dickinson	Federal and Local Funds	911
Silverdale Way Preservation Project	Local Funds	3160

Harper Estuary Restoration	Federal, State, Local, Other Funds	6109
Lund & Chase Roundabout	State, Impact Fee Funds	3335
Perry- Stone to Sheridan	Federal and Local Funds	3297
Norwegian Point Restoration	Federal and Local Funds	1700
Beach Drive- Main to Calm Bay Ct	Federal and Local Funds	3150
Little Boston Road- Shipbuilder Creek Culvert #15115	State Funds	1500
Glenwood Pint to Christmas Tree	State and Local Funds	1948
Viking- Sherman Hill to city limits	Local Funds	980
Viking & Sherman Hill	Local Funds	240
Hansville- Delaney to Salish	Local Funds	10
Horizon Lane SE	Local Funds	70
Hansville and SR 104	Federal and State Funds	409
Anderson Hill Road Corridor Study	Federal and Local Funds	500
Brownsville- Gilberton Bridge (Bridge #2)	Local Funds	225
Riddell & Almira	Local Funds	225
Newberry Hill & Dickey & Eldorado	Local Funds	200
Sidney & Lider	Local Funds	255
Provost Rd. – Strawberry Creek Culvert	Local Funds	40
North STO Planning Study	Federal Funds	20
Hansville NM Pre-Design Study	Local Funds	20
STO- Central Pre-Design Study	Federal Funds	500
Suquamish to Gunderson NM Pre-Desing Study	Federal Funds	500
Little Boston NM Pre-Design Study	Local Funds	20
Project Close-Out and Plant Establishment	Local Funds	240
County Wide Culvert Projects	Local Funds	600
County Wide Surfacing Upgrades	Local Funds	1200
County Wide Safety Improvements	Local Funds	1200
County Wide Bicycle/Ped. Improvements	Local Funds	1350
WSDOT Project Participation	Local Funds	600
Total		**115,379**

Source: Kitsap County TIP, 2023

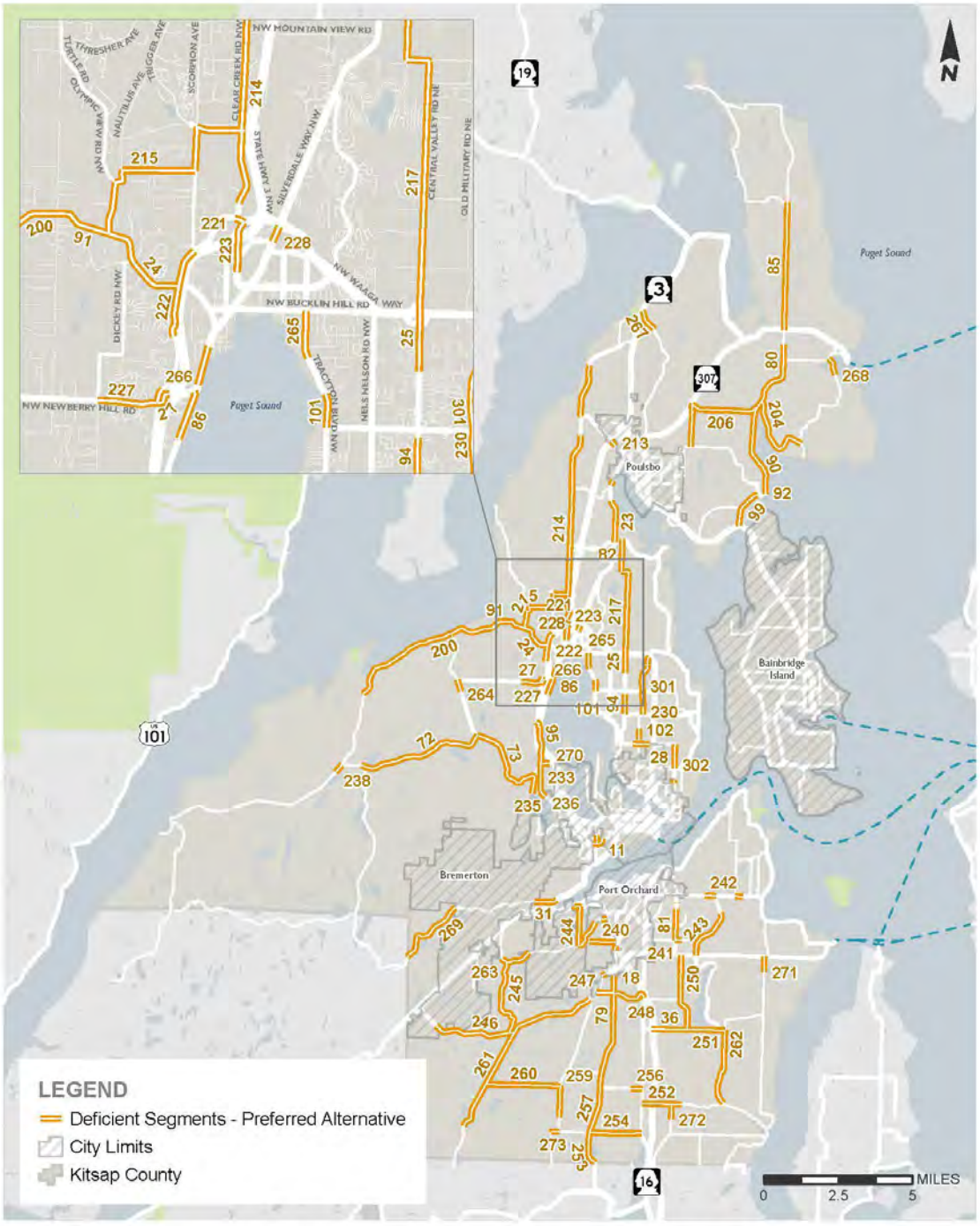
Exhibit 4-91 Transportation Projects and Cost Estimates 2030 - 2044 (All numbers are in 2024 dollars)

Project ID	Street Name	Project Recommendation	Project Cost
11	W LOXIE EAGANS BLVD	Pedestrian and intersection improvements and overlay	2,959,000
23	VIKING WAY NW	Access management, LT lanes, Shared use path, intersection improvements @ Sherman	14,000,000
24	NW ANDERSON HILL RD	WB climbing lane, sidewalk, bike lane or MUP, new RR bridge	11,000,000
25	CENTRAL VALLEY ROAD NE	Sidewalks & bike lane	4,000,000
27	NW NEWBERRY HILL RD	SB/WB slip lane, add WB lane, add bike lane, sidewalks	8,000,000
28	NE RIDDELL RD	Sidewalk and bike lane, LT lanes	2,000,000
31	W BELFAIR VALLEY RD	Access control, bike lane & sidewalks	4,340,480
36	SE MULLENIX RD	Eastbound climbing lane and shoulder	8,680,980
73	SEABECK HWY NW	Add shoulders, Access control, LT lanes	8,500,000
79	SIDNEY RD SW	Add shoulders, access management, LT lanes	7,500,000
80	MILLER BAY RD NE	Access management, LT lanes, shoulders or MUP	10,000,000
81	JACKSON AVE SE	Bike lane, sidewalk, median control, U Turns	5,000,000
82	CENTRAL VALLEY RD NW	Access control, left turn lanes, buffered sidepath or MUP	3,000,000
85	HANSVILLE RD NE	Access control, LT lanes, shared use path	6,000,000
86	CHICO WAY NW	Access control, left turn lanes, sidewalk and bike lanes	6,000,000
90	MILLER BAY RD NE	Access management, LT lanes, shoulders or multi-use path	8,000,000
91	NW ANDERSON HILL RD	Acess management, shoulders & NM path, LT lanes	2,000,000
92	AUGUSTA AVE NE	Access management, sidewalk, bike lane	2,000,000
95	CHICO WAY NW	Access management, sidewalks/MUP, center curb, roundabouts (Eldorado)	4,500,000

99	SUQUAMISH WAY NE	Access management, sidewalk, bike lane	2,300,000
72	NW HOLLY RD	Access management, shoulders, left turn lanes	14,000,000
102	PINE RD NE	Sidewalk and bike lane, LT lanes	2,500,000
200	NW ANDERSON HILL RD	Lane Adjustments	12,849,018
204	INDIANOLA RD NE	8 ft shoulder	2,838,095
206	NE GUNDERSON RD	8 ft shoulder	9,023,852
214	CLEAR CREEK RD NW	Sidewalk	25,785,705
215	NW WESTGATE RD	Lane Adjustments	3,954,633
217	CENTRAL VALLEY ROAD NW	8 ft shoulder	6,066,354
222	PROVOST Rd NW	8 ft shoulder	2,153,755
223	KITSAP MALL BLVD NW	Lane Adjustments	2,452,952
228	SILVERDALE WAY NW	Lane Adjustments	471,455
230	Old Military Road NE	Sidewalk	3,094,938
233	CHICO WAY NW	8 ft shoulder	4,121,225
235	NORTHLAKE WAY NW	8 ft shoulder	874,468
236	CHICO WAY NW	8 ft shoulder	460,417
240	SW BERRY LAKE RD	8 ft shoulder	1,847,913
241	SE SALMONBERRY RD	8 ft shoulder	333,633
242	SE MILE HILL DR	8 ft shoulder	487,174
244	ANDERSON HILL RD SW	Lane Adjustments	8,094,395
245	SUNNYSLOPE RD SW	8 ft shoulder	5,498,310
246	SW LAKE FLORA RD	Lane Adjustments	9,051,470
248	SW LIDER RD	8 ft shoulder	2,754,705

250	PHILLIPS RD SE	Lane Adjustments	11,049,205
251	SE MULLENIX RD	Lane Adjustments	3,407,900
252	SE BURLEY OLALLA RD	Lane Adjustments	6,143,138
253	SIDNEY RD SW	8 ft shoulder	1,745,568
256	SW LAKEWAY BLVD	8 ft shoulder	573,040
257	SIDNEY RD SW	Lane Adjustments	5,504,729
259	GLENWOOD RD SW	8 ft shoulder	1,559,956
260	SW LAKE HELENA RD	Lane Adjustments	6,746,999
261	J M DICKENSON RD SW	Lane Adjustments	25,213,521
263	SUNNYSLOPE RD SW	8 ft shoulder	307,526
265	Tracyton Blvd NW	8 ft shoulder	782,321
268	S Kingston Rd NE	Sidewalk	1,924,692
269	W Belfair Valley Rd	Lane Adjustments	6,736,201
302	PERRY AVE	8 ft shoulder	1,383,883
			311,573,607

Exhibit 4-91.1 Transportation Projects 2030 - 44



Roadway Projects for Land Use Preferred Alt

Kitsap County Comprehensive Plan

transpogroup

Exhibit 4-92 Transportation Capital Improvement Revenue Sources (All numbers are in 2024 $1000s)

Revenue Source	Total Revenue Years 2024-2029	Total Revenue Years 2030-2044
Federal Funding	53,732	150,000
Local Funds	42,269	150,000
State Funds	13,315	50,000
Impact Fees	6,063	20,000
Total	**115,379**	**370,000**

Source: Kitsap County TIP, 2023

4.9 WASTEWATER: SANITARY SEWER

Overview

There are a total of 13 wastewater collection systems and 10 wastewater treatment facilities in Kitsap County, which serve approximately 40 percent of the total County population. The majority of the rural population uses on-site septic systems.

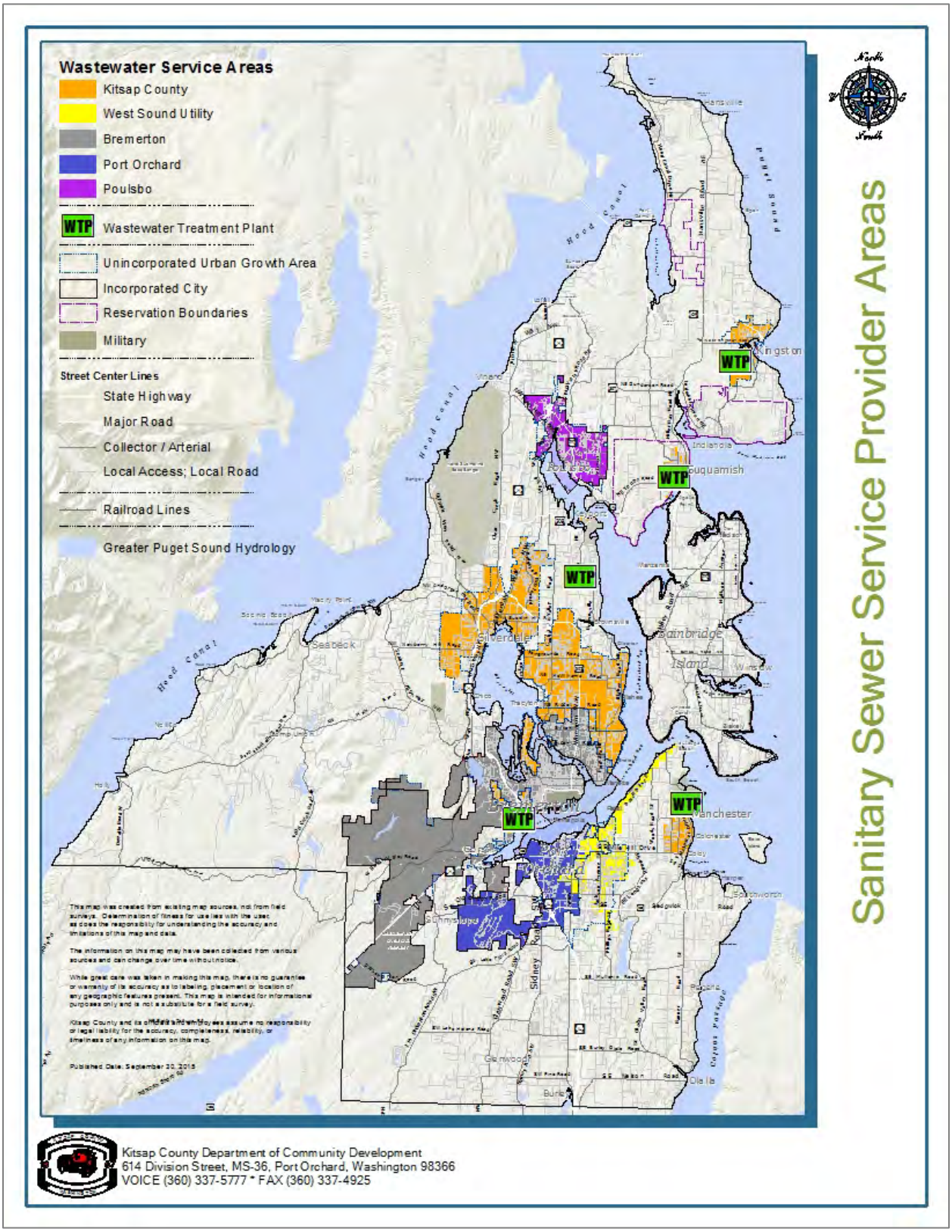
Several agencies within the County provide sanitary sewer services:

1. Kitsap County manages five wastewater collection systems: Central Kitsap, Kingston, Manchester, Navy Yard City, and Suquamish, and four treatment plants servicing Central Kitsap, Manchester, Suquamish, and Kingston.
2. The City of Bremerton maintains and operates collection and treatment systems for the East Bremerton UGA, portions of the West Bremerton UGAs, and the Gorst UGA.
3. The City of Poulsbo maintains a collection system and contracts with the County to treat city wastewater at the Central Kitsap Treatment Plant in Brownsville.
4. The City of Port Orchard and West Sound Utility District independently operate their respective collection systems and jointly own the treatment facility at Annapolis. West Sound Utility District is responsible for daily operation of the treatment plant.

5. The Port Gamble/S'Klallam Tribe owns and operates a small collection system and treatment facility that serves the community east of Port Gamble Bay.
6. Pope Resources owns and operates a collection system and secondary treatment plant serving the Port Gamble town site and mill site.
7. The Port of Bremerton owns and operates a collection and treatment system that serves the commercial development on Port property.
8. The U.S. Navy manages wastewater collection systems on federal reservations and contracts with Kitsap County and the City of Bremerton to treat its effluent. It is a major contributor to several wastewater treatment plants in Kitsap County, with the Central Kitsap plant receiving the most.

Major providers to urban areas are shown in Exhibit 4-93

Exhibit 4-93. Wastewater Service Areas



Inventories of the existing municipal, county, and private wastewater facilities located in Kitsap County are presented in this section. The inventories are summarized within each facility section below. The inventory tables are defined as follows: Columns (4) – (6) show the LOS as flow design capacity in millions of gallons per day (mgd), 2022 existing flow capacity, and corresponding 2022 flow capacity surpluses or deficits for each of the 10 major wastewater management systems in the County. Column (7) shows the existing populations served within each wastewater system. Maps are provided in Appendix A that show location and type of existing and future sanitary sewer facilities.

City of Bremerton

Overview

The City of Bremerton maintains and operates a wastewater collection and treatment system that provides service to the West Bremerton, East Bremerton, and Gorst UGAs.

The system also accepts wastewater flows from the Puget Sound Naval Shipyard (PSNS), other U.S. Navy facilities, and Kitsap County Sewer District No. 1 (KCSD No. 1) in West Bremerton. Other than the U.S. Navy, the system does not provide sewer service for any significant industrial dischargers.

Inventory of Current Facilities

The City of Bremerton currently operates two wastewater treatment facilities. The Westside Wastewater Treatment Plant (WWTP) in West Bremerton provides secondary wastewater treatment for the entire service area and discharges to Sinclair Inlet. Biosolids produced at the Westside Plant are treated through anaerobic digestion, dewatered by centrifuge, transported and applied to permitted forestland owned by the City. The Eastside Treatment Facility provides treatment for combined wet weather and sewer flows from East Bremerton and discharges to Port Washington Narrows.

A network of gravity sanitary sewer pipelines, pump stations, and force mains delivers flows from the collection system to these treatment facilities. The various East Bremerton collection facilities deliver combined sanitary sewer flows to the East Bremerton beach main. During normal dry weather operations East Bremerton flows are delivered from the East Bremerton beach main to West Bremerton through 16- and 24-inch inverted siphons.

The wastewater is then pumped into the Crosstown Pipeline force main and gravity-pressure sewer main system by pump station CE-1, along with flows from various West Bremerton basins. The Crosstown Pipeline delivers these pumped flows to the Westside WWTP. Wastewater from the remaining West Bremerton service areas is delivered to the WWTP via gravity sewer mains and pump stations.

During wet-weather conditions the East Bremerton beach main is pressurized by pump station EB-2 to increase peak flow capacity and most of the combined sewage flow is diverted to the Eastside Treatment Facility. The flow is treated at the facility and discharged to Port Washington Narrows.

The hydraulic capacity of the city's combined wastewater collection system and associated components is adequate to convey dry weather wastewater flows to the Westside WWTP for treatment. However, during extreme wet weather storm events, combined wet weather and wastewater flows can exceed the hydraulic capacity of the city's existing conveyance. When this occurs, excess untreated combined sanitary sewer flows have historically been allowed to overflow to receiving waters of Puget Sound. As a result of increasing water quality and environmental mandates, federal and state regulations have been developed to limit the occurrence of untreated CSOs.

The Eastside Treatment Facility was designed to provide treatment for the East Bremerton sewer flows during wet weather storm events to meet Puget Sound water quality standards. The facility was functional in December 2001 and completed in 2002.

The Health District declared Gorst and the surrounding area a "severe public health hazard" in 1997, due to the large number of failing septic systems in the area. The City of Bremerton received American Resource Recovery Act and other grant funding to construct two new municipal pump stations and a collection system that covers a 326-acre area. A total of 103 residences and 29 existing commercial businesses are connected to the Gorst sewer system. Flows are pumped to the Westside Wastewater Treatment Plant (WWTP).

The City of Bremerton updated the Combined Sewer Overflow (CSO) Reduction Plan for Bremerton's drainage basins and began the "Cooperative Approach to CSO Reduction" in 2000. A total of 23 projects were completed, including two new pump stations, seven pump station upgrades, over 12 miles of new sanitary and storm sewers, construction of the new Eastside Wet Weather Treatment Plant, and a major upgrade to the WWTP. The final CSO project was completed in 2009.

The city produces a CSO report that is submitted to Ecology on an annual basis. The 2010 report shows that the CSO reduction program has been very successful in reducing total overflow volume and frequency, with overflow volume reduced by 96.4 percent, frequency of events reduced by 99 percent, and compliance with CSO reduction requirements at all 15 sites. See the Bremerton Comprehensive Plan, 2014 Wastewater Comprehensive Plan (WWCP) Update, 2008 Wastewater Conveyance Planning document, and 2016 Capital Improvement Plan for further details.

The City is currently is updating its WWCP with an intended completion by the end of 2024. With the update, the City is evaluating the capacity and redundancy of the Crosstown Pipeline, which is the City's largest sewer pipeline and conveys wastewater from all of East Bremerton and a significant portion of West Bremerton to the WWTP, which includes the west half of Naval Base Kitsap – Bremerton (Navy shipyard). Because of the significance of this pipeline, the City is evaluating constructing an additional pipeline that is parallel to the existing pipe or uses an alternative route. This would allow for more regular maintenance of the existing pipe and an alternative route in the event of an emergency if the main pipeline failed.

The City is also evaluating the Central Bremerton Force Main (CBFM), another significant force main that conveys wastewater from the east half of the NBK- Bremerton, the Washington State Ferry terminal and the downtown core along Washington Avenue, Pacific Avenue, Park Avenue, and Warren Avenue, where significant residential growth is expected to occur over the next 20 years. Additionally, expansion of operations in the east half of the Navy shipyard will also impact the CBFM and Pump Station CE-4 (located at the Bremerton waterfront). CE-4 receives flow from the ferry terminal, the east half of the Navy shipyard, and properties along Washinton Avenue and Pacific Avenue as far north 6th Street and will likely require capacity upgrades to accommodate growth in the downtown core, Bremerton, waterfront, and expansion of operations in the east half of the Navy shipyard. Pump Station CE-6 (located at Park Avenue and Burwell may require upsizing due to residential growth in the downtown core along Park Avenue. Collection system modeling is currently being done by the City's consultant tasked with updating the WWCP to identify system restrictions and develop the CIP to accommodate this anticipated growth in the downtown core.

The WWCP Update is also evaluating the impacts and options of the City taking over wastewater operations at the Port of Bremerton (Port), as part of continued growth in the PSIC (Puget Sound Industrial Center) located at the south end of Kitsap County along SR3. The City is evaluating wastewater treatment and conveyance options including treating wastewater generated at the Port at the site using a membrane bioreactor (MBR) treatment system. The effluent from this treatment process could be discharged to the ground, or potentially used at the City's golf course for irrigation. Alternatively, the wastewater could be pumped to the City's WWTP, which would require constructing 3 miles of force main and pump stations to convey the wastewater to Gorst. However, as of this publication the City is considering and evaluating alternatives and there are no conclusions.

Exhibit 4-94. Inventory of Current Facilities – City of Bremerton

Miles of Pipe[1]	Existing Flow (mgd)[1]	Design Flow (mgd)[1]	Surplus/ Deficit, (mgd)	2023 Population Served	Existing Connections ERU[2]	Surplus/ Deficit ERU[3]
176					10608	

Source: City of Bremerton Public Works, 2023 (additional information not currently available).

Level of Service Analysis

The wastewater facilities in place currently meet level of service standards for the population served.

Capital Projects and Funding

City of Bremerton

Exhibit 4-95 shows planned capital projects and capital projects costs for 2024-2028.

Exhibit 4-95. Bremerton Solid Waste Capital Projects (All numbers are in 2024 $1000s)

Category/Project Description	Revenue Source	Total Cost 2022-2028
Capital Improvement Projects		
Mains		24,706
Pump Stations and Treatment		22,365
Total		**47,071**

Source: City of Bremerton Public Works, 2023 (additional information not currently available).

City of Port Orchard

Overview

The City of Port Orchard maintains and operates a wastewater collection system that provides service to the City of Port Orchard. The collection system includes 46 miles of gravity sewer, 9 miles of force mains, and 11 miles of septic tank effluent pumping (STEP) mains. Three new pump stations have been built for a total of 19 pump stations in the collection system. Pipes range from 2-inch to 24-inch in diameter.

The City of Port Orchard and West Sound Utility District (WSUD) jointly own the South Kitsap Water Reclamation Facility located east of Port Orchard along the south shore of Sinclair Inlet. The facility is operated by WSUD.

2023 City of Port Orchard population is approximately 13,250. Future wastewater collection system needs for the City are described in the City of Port Orchard Comprehensive Sanitary Sewer Plan Update, which is currently being updated.

Inventory of Current Facilities

Exhibit 4-96. Inventory of Current Facilities – City of Port Orchard

Miles of Pipe[1]	Existing Flow (mgd)[1]	Design Flow (mgd)[1]	Surplus/ Deficit, (mgd)	2023 Population Served	Existing Connections ERU[2]	Surplus/ Deficit ERU[3]
66	1.1	2.1	1.0	13,250	6,111	5,556

Source: Port Orchard CIP, 2016 (newer information not currently available)

McCormick Lift Stations No. 1 and 2 have been replaced. The Marina Lift Station is currently under design.

Level of Service Analysis

The system has 46 miles of gravity sewers, 9 miles of force mains, and 11 miles of STEP mains. There are 19 pump stations in the system.

Capital Projects and Funding

City of Port Orchard

Exhibit 4-97 shows the City of Port Orchard's planned capital projects and total cost for 2016-2021.

Exhibit 4-97. Port Orchard Capital Projects (All numbers are in 2016$1000s)

An updated version of the Port Orchard Capital Improvement Plan is in progress and the following tables will be updated when it is made available.

Category/Project Description	Revenue Source	Total Cost 2016-2021
Capital Improvement Projects		
McCormick Pump Station 2-Construction		1100
McCormick Pump Station 1-Construction		1100
Category II: Capacity Increasing Projects		
Marina Pump Station Improvements		3800
Bay Street Pump Station Improvements		1100

McCormick Pump Station 2-Design		190
McCormick Pump Station 1 - Design		180
Eagle Crest Generator Set		155
Total		**7,625**

Source: Port Orchard CIP, 2016 (newer information not currently available)

City of Poulsbo

Overview

The current sanitary sewer service area for the City of Poulsbo is primarily within the city limits. The city contracts with Kitsap County for wastewater treatment at the Central Kitsap Treatment Plant. The City and County are currently planning and implementing improvements to both the City and County's existing systems to reduce infiltration and inflow and to increase the capacity of the conveyance system.

Inventory of Current Facilities

Exhibit 4-98. Inventory of Current Facilities – City of Poulsbo

Miles of Pipe[1]	Existing Flow (mgd)[1]	Design Flow (mgd)[1]	Surplus/ Deficit, (mgd)	2022 Population Served	Existing Connections ERU[2]	Surplus/ Deficit ERU[3]
31	0.61	1.2	0.59	9,950	4,540	1,940

Source: City of Poulsbo CIP, 2022

Level of Service Analysis

As Exhibit 4-92 shows, the City of Poulsbo wastewater system has a current (2024) surplus of 1,940 equivalent residential units (ERUs), which has sufficient capacity to accommodate population growth for the City of Poulsbo during the planning period.

Capital Projects and Funding

Exhibit 4-99 shows the City of Poulsbo's planned capital projects. Exhibit 4-94 shows the capital projects costs for 2024-2029 and 2030-2044 and Exhibit 4-95 shows the capital project revenues for the same time periods.

Exhibit 4-99. City of Poulsbo Sewer Capital Projects (All numbers are in 2022 $1000s)

Category/Project Description	Revenue Source	Cost 2024-2029	Cost 2030-2044	Total Cost
Category I: Capacity Increasing Projects				

Kitsap County - Lemolo Shores Pipeline Upgrade	Sewer Reserves	4,100		4,100
Kitsap County - Nutrient Process Upgrade	Sewer Reserves	79.15		79.15
Lemolo House Purchase	Sewer Reserves	500		500
SR305 Force Main Extension	Sewer Reserves	2,810		2,810
Category II: Capital Replacement, Maintenance and Operations				
Bangor/Keyport Forcemain Replacement	Sewer Reserves	955.66		955.66
Kitsap County - HVAC Upgrades	Sewer Reserves	350		350
Kitsap County - Solids & Liquid Haul Upgrade	Sewer Reserves	11,459.6		11,459.6
Kitsap County – SCADA System Upgrades	Sewer Reserves	590.4		590.4
Kitsap County - Third Lemolo Siphon	Sewer Reserves	1,420		1,420
Lindvig Pump Station Redundent	Sewer Reserves	500		500
Noll Road Sewer Improvements	Sewer Reserves	70		70
Old Town Sewer Upgrades	Sewer Reserves	240		240
Poulsbo MH Sewer Re-Route	Sewer Reserves	350		350

Source: City of Poulsbo CIP, 2022

Exhibit 4-100. City of Poulsbo Sewer Capital Project Costs (All numbers are in 2022 $1000s)

Category Summary	Cost Years 2024-2029	Cost Years 2030-2044	Total Cost
Category I (Capacity Projects Required to Meet LOS)	7,489.15		7,489.15
Category II (Other Projects Needed for Maintenance and Operations)	15,935.66		15,935.66
Total	23,424.81		23,424.81

Source: City of Poulsbo CIP, 2022

Exhibit 4-101. City of Poulsbo Sewer Capital Project Revenues (All numbers are in 2022 $1000s)

Revenue Source	Revenue Years 2024-2029	Revenue Years 2030-2044	Total Revenue
Sewer Reserve	23,424.81		23,424.81
Total	23,424.81		23,424.81

Source: City of Poulsbo CIP, 2022

West Sound Utility District

Overview

West Sound Utility District (WSUD) generally serves the City of Port Orchard, including the UGA east and south of the city limits. The district also provides sewer collection service in the rural area along Beach Drive to Watauga Beach. The current service area is approximately 6.25 square miles. The collection system consists of 18 pumping stations and approximately 68 miles of force and gravity main pipeline ranging in size from 2" to 24". The maximum capacity of the conveyance system is estimated to be 6.0 million gallons per day (mgd). Exhibit 4-54 shows the joint West Sound-Port Orchard wastewater system has a current surplus of about 3,804 ERUs.

Inventory of Current Facilities and Level of Service Analysis

West Sound Utility District (WSUD) is currently able to meet community needs. WSUD's current 20-year CFP identifies ongoing rehabilitation and replacement of aging infrastructure within its collection and conveyance system. WSUD is in the process of updating its General Sewer Plan which will include adopted Comprehensive Alternatives by Kitsap County and updates to its long-term planning. The City of Port Orchard (COPO) and WSUD jointly own the South Kitsap Water Reclamation Facility located east of Port Orchard along the south shore of Sinclair Inlet. The facility is operated by WSUD and treats wastewater from the service areas of both WSUD and COPO totaling approximately 22,000 people, and discharges to Sinclair Inlet. WSUD and COPO jointly own the facility; however, WSUD is responsible for management and daily operations. Annual average day flow for 2022 was approximately 1.9 mgd. WSUD and COPO expect to continue sharing treatment capacity.

Upon the expansion in 2006, the facility was re-rated, increasing its capacity from 2.8 mgd to 4.2 mgd, with a peak day capacity of 16 mgd. The current Capital Facilities Plan identifies MBR Capacity Expansion scheduled for 2025 which will accommodate a re-rating increasing capacity from 4.2 mgd to 4.8 mgd with a peak day capacity of 16 mgd. In January of 2022, the Department of Ecology implemented a Nutrients General Permit on the facility whereby additional consideration of facility loadings are necessitated. The SKWRF has planned in 2026 to assess the impacts of the new permitting requirements and growth potential within the community served.

Exhibit 4-102. Inventory of Current Facilities – West Sound Utility District

Miles of Pipe[1]	Existing Flow (mgd)[1]	Design Flow (mgd)[1]	Surplus/ Deficit, (mgd)	2023 Population Served	Existing Connections ERU[2]	Surplus/ Deficit ERU[3]
68	1.4	2.1	.07	11,491	4,596	3,804

Capital Projects and Funding Exhibit 4-103 shows WSUD's planned capital projects. Exhibit 4-98 shows the capital projects costs for 2024-2029 and 2030-2044 and Exhibit 4-99 shows the capital project revenues for the same time periods.

Exhibit 4-103. WSUD Sewer Capital Projects (All numbers in 2024 $1000s)

Category/Project Description	Revenue Source	Cost 2024-2029	Cost 2030-2044	Total Cost
Category I: Capacity Increasing Projects				
Replace Snug Harbor lift station pumps and controls	CAP	252		252
Construct lift station and collection system on Beach Dr. at Lidstrom	CAP		1,077.6	1,077.6
Brada lift station upsize wet well, pumps, and discharge to accommodate growth	CAP		1,238.9	1,238.9
Lift Station Fish Barrier Project HWY 166	CAP	1,600		1,600

Beach Drive to Gravity		850		850
Horstman Capacity Enhancement Project	R&R	362		362
Category II: Capital Replacement, Maintenance and Operations				
Spare Pumps for Lift Stations	R&R	53		53
Replace Conifer Park lift station	R&R		411.4	411.4
Replace Grand Ridge lift station	R&R		423.7	423.7
Replace Aidan Lift Station	R&R	386.5		386.5
Replace Conifer Park lift station	R&R		356.5	356.5
Replace Sinclair lift station	R&R		356.5	356.5
Replace Villa Carmel pumps and controller	R&R		366.7	366.7
Replace Orchard Bluff lift station	R&R		378.1	378.1
Replace Crownwood lift station	R&R		233.6	233.6
Replace concrete mains in area of Lincoln	R&R	1,880		1,880
Replace Aging Mains	R&R	4,527.8	18,376.1	22,903.9
Manhole Rehabilitation		337.9	1,043.1	1,381
Engineering Sewer stations and main replacements		540.7	1,668.7	2,209.4
Equipment Replacement	R&R	894	3,065	3,959
Sewer Linings		200		200
Sewer Main Spot Repairs		150		150
Lift Station Building Repairs	CAP	17		17
Excise Tax		46.1	120.1	166.2

Source: West Sound Utility District Capital Plan 2023-2043

Exhibit 4-104. WSUD Sewer Capital Projects Cost (All numbers in 2024 $1000s)

Category Summary	Cost Years 2024-2029	Cost Years 2030-2044	Total Cost
Category I (Capacity Increasing Projects)	3,064	2,316.5	5,380.5
Category II (Other Projects Needed for Maintenance and Operations)	8,866	26,699	35565
Total	11,930	29,015.8	40,945.8

Source: West Sound Utility District Capital Plan 2023-2043

Exhibit 4-105. WSUD Sewer Capital Projects Revenues (All numbers in 2024 $1000s)

Revenue Source	Revenue Years 2024-2029	Revenue Years 2030-2044	Total Revenue
General Fund	12,390.4	26,360.2	38,750.6
General Facility Charges	2,583.8	7,716.6	10,300.4
Misc. Revenue	211.5	169.1	380.6
Other	8,000	23,800	31,800
Total	23,185.7	58,045.9	81,231.6

Source: West Sound Utility District Capital Plan 2023-2043

Port of Bremerton

Overview

The Port of Bremerton operates a public wastewater treatment plant located in the Olympic View Industrial Park on State Route 3 west of Gorst. The service area encompasses the Port's 1,800 acres, which includes the Bremerton National Airport, the Olympic View Industrial Park, and most recently an Amazon Warehouse.

Inventory of Current Facilities

The plant is currently treating between 19,000 – 55,000 gallons per day (gpd) depending on weather and business cycles, and is serving approximately 410 persons. The base flow is 19,000-gpd. Flows in excess of that are due to Rainfall Derived Infiltration and Inflow (RDII). Typical levels of sewage generation for light industrial business activity are 25 to 45 gallons of wastewater per day per person.

Exhibit 4-106. Inventory of Current Facilities – Port of Bremerton

Miles of Pipe[1]	Existing Flow (mgd)[1]	Design Flow (mgd)[1]	Surplus/ Deficit, (mgd)	2023 Population Served	Existing Connections ERU[2]	Surplus/ Deficit ERU[3]
1.6	19,000 – 55,000 gpd	72,500 gpd	17,500 - 53,500 gpd	963	165	1000

Level of Service Analysis

The Port has recently completed a capacity evaluation and is currently working with DOH to obtain an increase in the design capacity of the existing treatment facilities.

Kitsap County Sanitary Sewer Facilities

Overview

Kitsap County manages five wastewater collection systems: Central Kitsap, Kingston, Manchester, Navy Yard City, and Suquamish, and four treatment plants servicing Central Kitsap, Manchester, Suquamish, and Kingston.

Kitsap County Sewer Utility Division will provide an in depth discussion on all topics and projects discussed within this chapter is much greater detail within the 20-year Kitsap County Sewer Utility General Sewer Plan Updates for each service area covering the years 2024-2044 (under separate cover). These Plans provide rationale for project selection, how the projects play into responsible management of the utility, funding mechanisms for successful delivery of the CIP, and includes a robust public outreach effort for community input.

Inventory of Current Facilities

Exhibit 4-107. Inventory of Current Facilities – Kitsap County Sanitary Sewer Facilities

Service Area	Miles of Pipe[1]	Existing Flow (mgd)[1]	Design Flow (mgd)[1]	Surplus/ Deficit, (mgd)	2023 Population Served	Existing Connections ERU[2]
Central Kitsap	163	3.5	6.0	2.5	57,939	23,176
Kingston	15.8	0.11	0.292	0.182	2,553	1,021
Manchester	15.2	0.19	0.46	0.27	2,613	1,045
Suquamish	12.2	0.23	0.4	0.17	2,663	1,065

Central Kitsap Wastewater Facilities

Kitsap County owns and operates conveyance and treatment facilities in the Central Kitsap service area. This service area is the largest system in Kitsap County and includes the naval facilities at Bangor, Keyport, and the City of Poulsbo along with the Silverdale and Central Kitsap UGAs. The plant also treats septic tank waste hauled to the plant.

The Central Kitsap collection system consists of approximately 45 lift stations and over 163 miles of gravity mains and force mains ranging in size from 2-36 inches in diameter.

Flows from the City of Poulsbo enter the northern portion of the collection system via a gravity siphon crossing from Lemolo to Keyport, across the mouth of Liberty Bay. Some of the collection and transfer systems serving the Meadowdale areas, downtown Silverdale, and northern portion of the Central Kitsap collection system are undersized for existing wastewater flows. A phased expansion of the conveyance and treatment facilities is planned to repair and replace worn facilities, and to extend service to surrounding areas. Construction to accommodate current and future flows are in progress. Treatment facilities at the Central Kitsap Wastewater Treatment Plant (CKWWTP) are currently rated for an Average Daily Flow (ADF) of 6.0 mgd, with a peak hour flow of 15 mgd. The plant utilizes an

activated sludge and filtration process for tertiary treatment of wastewater and an ultraviolet light disinfection system. The existing 68-acre site is expected to accommodate layout of facilities for capacity in excess of 25 mgd ADF.

Treated wastewater from the CKWWTP is discharged into the northern portion of Port Orchard Bay in Puget Sound. The outfall pipe has a maximum hydraulic capacity of approximately 31 mgd. The diffuser has a maximum hydraulic capacity of 16 mgd. Future extension of the existing diffuser is expected to provide sufficient dilution for the increased flow. The Central Kitsap Treatment Plant treats 3.5 mgd average annual flow (2020). The effluent is discharged approximately 3,200 feet offshore at a depth of 46 feet below mean low water.

The CKWWTP is the regional sludge treatment center for all County-owned treatment plants and septage from on-site treatment systems. Approximately 30 to 40 percent of the solids treated at the CKWWTP are derived from septage or sludge from the County's outlying treatment plants. Sludge treatment facilities at the CKWWTP include thickening, anaerobic digestion and dewatering. Currently, dewatered sludge is hauled to eastern or southwestern Washington for composting or land application. Future wastewater collection systems for the Silverdale and Central Kitsap UGAs include a total of 52 new pumping stations, with 135 miles of new gravity sewer and force mains to complete the major sewer collection system of these UGAs.

Kingston Wastewater Facilities

Sewer service in the Kingston area is owned and maintained by Kitsap County. The existing Kingston collection system consists of approximately 57,400 feet of gravity sewer pipe ranging in size from 6 to 12 inches in diameter and approximately 26,000 feet of force main ranging from four to eighteen inches in diameter. 7 pump stations serve the Kingston area, which serves approximately 1021 ERUs.

Completed in May 2005, the Kingston wastewater treatment facility is designed to treat an average daily flow of 292,000 gallons per day. This is a 95 percent increase in capacity from the previous facility, and will accommodate residential and commercial growth in the Kingston area for the next 20 years. The plant utilizes an oxidation ditch, with fine-bubble diffused aeration, for biological treatment. Two oxidation ditches were constructed; one for current flows and one to accommodate future growth (500,000 gallons per day). Only the active ditch contains rotating brushes.

Built in conjunction with the new treatment plant and located on the old plant grounds, Pump Station 71 pumps all of the sewage generated in Kingston approximately 1.8 miles to the new plant.

Construction of a new outfall into Puget Sound was included in the improvements. Since the previous outfall was damaged during dredging operations by the State ferry system, the new pipe was located well outside the ferry corridor and extended to 165 feet below sea level to limit impacts on shellfish harvesting areas. Waste sludge from the Kingston WWTP is currently trucked to the Central Kitsap WWTP for digestion and treatment.

Suquamish Wastewater Facilities

Kitsap County owns and operates the Suquamish wastewater conveyance and treatment facilities that provide sewer service to approximately 2,663 residents in the Suquamish area with sewer service available within the LAMIRD. The newest extension of the existing service area beyond the LAMIRD covers about 37 acres and lies west of Urban Avenue between Geneva Street and South Street. The plant serves the Suquamish Tribal Casino. The Tribal Casino pump station and collection system consist of approximately 64,400 linear feet of pipeline.

The McKinstry Street pumping station and the Division Street pump station are the pumping stations in the collection system. All wastewater in the system flows by gravity to these stations for transfer to the Suquamish WWTP. Existing sewers are sufficient to accommodate additional growth within the existing service area.

The Suquamish WWTP is a secondary plant with an ADF capacity of 0.4 mgd. The U.S. Environmental Protection Agency (EPA) is responsible for issuing the required National Pollutant Discharge Elimination System (NPDES) permit since the treatment plant is located within the Port Madison Tribal Reservation boundary. The County upgraded the existing facilities in 1997, expanding the plant from 0.2 to 0.4 mgd ADF capacity. Sludge from the plant is hauled for further treatment at the Central Kitsap WWTP.

Manchester Wastewater Facilities

Kitsap County owns and operates a small sewer collection and treatment system in Manchester. This system serves a population of approximately 2,613 people and treats an average flow of 0.19 mgd. The Manchester collection system consists of 7 pumping stations and approximately 80,000 linear feet of pipeline. Public sewers now serve approximately 25 percent of the land within the LAMIRD boundary, although the remaining area is subdivided into smaller parcels and much of it is built out.

The current service area includes the EPA laboratory at Clam Bay and the Manchester Naval Fuel Depot. Waste flows from the Manchester Naval Fuel Depot originate from ships discharging sewage at the facility. Kitsap County has an agreement with the Navy that requires the County to be notified when the Navy plans to discharge wastewater to the

County's system. The Navy has storage facilities at the depot to allow holding of wastewater if the County does not permit immediate discharge.

The plant provides for an ADF capacity of 0.46 mgd. Sludge from the Manchester WWTP is thickened, temporarily stored on the plant site and then hauled to the Central Kitsap WWTP for treatment. The outfall provides sufficient capacity for discharge of the projected future wastewater flows. Sludge from the plant is hauled for further treatment at the Central Kitsap WWTP.

Navy Yard City Sanitary Sewer Facilities (Sewer District 1)
Kitsap County owns and maintains a sewage collection system in the area commonly referred to as Navy Yard City within the West Bremerton UGA. The collection system consists of two pump stations and 9.2 miles of pipeline and serves approximately 970 residential and commercial units.

Over the years, Kitsap County and the City of Bremerton have discussed the possibility of transferring a collection system. Currently, the County contracts with the City for treatment capacity at the West Bremerton treatment facility. Kitsap County and the City of Bremerton expect to continue to discuss the possibility of transferring the collection system to the city through an ILA and Resolution.

Capital Projects and Funding

Kitsap County Sewer
Exhibit 4-108 shows planned capital projects. Exhibit 4-109 shows the capital projects costs for 2024-2029 and 2030-2044 and Exhibit 4-110 shows the capital project revenues for the same time periods.

Exhibit 4-108. Kitsap County Sewer Capital Projects (All numbers are in 2024 $1000s)

Category/Project Description	Revenue Source	Cost 2024-2029	Cost 2030-2044
Category I: Capacity Increasing Projects			
CKTP Solids and Liquid Hauled Waste Upgrades	Multiple	140,000	
LS-4 and Forcemain Replacement	Multiple	13,200	
LS-24 Upgrade	Multiple	7,300	
Suquamish TP Influent Equalization Basin	Multiple	9,650	
Replace LS-41 and Upsize Force Main	Multiple	3,700	
Anderson Hill Sewer Upgrades	Multiple		5,500
Northern Old Military Road Sewer Upgrades	Multiple		12,200
Dickey Road Sewer Upgrades	Multiple		3,800

Myhre Road Sewer Upgrades	Multiple		3,700
LS-3	Multiple		7,800
LS-12	Multiple		7,600
LS-34	Multiple		7,600
LS-53 and Upsize Force Main	Multiple		7,200
LS-54 and Upsize Force Main	Multiple		7,000
LS-69	Multiple		1,900
LS-71 and Upsize Force Main	Multiple		7,400
CKTP Third Primary Clarifier	Multiple		12,400
CKTP Third Secondary Clarifier	Multiple		9,900
Manchester TP Upgrades	Multiple		200
CKTP Aeration Basins 5 & 6	Multiple		23,900
CKTP Long Term Recycled Water Improvements	Multiple		4,700
Category II: Capital Replacement, Maintenance and Operations			
CKTP HVAC Upgrades	Multiple	2,200	
Suquamish TP Upgrades	Multiple		10,240
Kingston TP UV System Replacement	Multiple		880
Manchester TP UV System Replacement	Multiple		1,100
Suquamish TP UV System Replacement	Multiple		760
CKTP Obselecence Projects	Multiple		1,750
Kingston TP Obselecence Projects	Multiple		480
Manchester TP Obselecence Projects	Multiple		4,300
CKTP Regulatory Projects	Multiple		5,500
Kingston Regulatory Projects	Multiple		100
Manchester Regulatory Projects	Multiple		5,000
LS Operation and Maint. Projects	Multiple		20,960
Kingston TP Class A Recycled Water	Multiple		33,600
CKTP Long Term Recycled Water Improvements	Multiple		4,700

Source: Kitsap County, 2023

Exhibit 4-109. Kitsap County Sewer Capital Project Costs (All numbers are in 2024 $1000s)

Category Summary	Cost Years 2024-2029	Cost Years 2030-2044	Total Cost
Category I (Capacity Projects Required to Meet LOS)	173,850	122,800	296,650
Category II (Other Projects Needed for Maintenance and Operations)	2,200	89,370	91,570

Total	176,050	212,170	388,220

Source: Kitsap County, 2023

Exhibit 4-110. Kitsap County Sewer Capital Project Revenues (All numbers are in 2024 $1000s)

Revenue Source	Revenue Years 2024-2029	Revenue Years 2030-2044	Total Revenue
Sewer Revenue Bonds	TBD	TBD	TBD
DOE State Revolving Fund Loan	9,850	TBD	TBD
DOE Puget Sound Nutrient Reduction Grant	TBD	TBD	TBD
Public Works Trust Fund Loan	TBD	TBD	TBD
City of Poulsbo Proportionate Share per Interlocal Agreement	TBD	TBD	TBD
USN Keyport Proportionate Share per Interlocal Agreement	TBD	TBD	TBD
Strategic Loan and Grant Pursuit	TBD	TBD	TBD
Sewer Fees/Construction Fund	66,735	TBD	66,735
Total	164,672	TBD	164,672

Source: Kitsap County, 2024

4.10 WATER

Overview

Water systems are classified into two categories, Group A (former Classes 1–3) and Group B (former Class 4) systems. According to the Washington State Department of Health (DOH), Group A systems, which have 15 or more service connections or regularly serve 25 or more people 60 or more days per year, currently comprise approximately 95 percent of all the County's public connections; Group B systems, which have less than 15 connections or serve less than 25 people, serve approximately 5 percent of the connections. Most of the Group B systems were developed with a shallow well to serve short plats or small subdivisions and serve only that development. Exhibit 4-111 below shows the breakdown of connections in the County served by each type of water system.

Kitsap County Water Planning Programs

Kitsap Public Utility District (KPUD) has been designated by the Kitsap County Board of Commissioners as having countywide responsibility for technical, managerial, financial, operational, and support services needed to provide satisfactory water resource

development, protection, and utility service. KPUD also functions as a Satellite System Management Operator throughout the County by provision of direct service, contract service, and support service.

The KPUD has worked cooperatively with the County and local water purveyors to conduct the Groundwater Management Plan (GWMP) process. The District and County have also jointly sponsored the preparation of a Coordinated Water System Plan (CWSP) for Kitsap County. The District, in coordination with Ecology, completed the initial basin assessment for Kitsap County. Each of these planning processes is described in more detail below.

Kitsap County Ground Water Management Plan

To meet the requirements of the Ground Water Management Act, the KPUD served as a co-lead agency to develop the Draft Kitsap County Groundwater Management Plan completed in 2004. All of Kitsap County has been identified as a groundwater management area. KPUD coordinated with water purveyors in the County, as well as other members of the Kitsap County Groundwater Advisory Committee.

Preparation of the GWMP was done in accordance with the requirements of Chapter 173-100 WAC, Groundwater Management Areas, and Programs. These regulations led to the designation of Kitsap County as a Groundwater Management Area (GWMA) on October 7, 1986. An Interlocal Agreement was entered into between the KPUD and the Kitsap County Board of Commissioners on December 15, 1986. This Agreement established both entities as co-lead agencies for the evaluation and preparation of the GWMP.

Kitsap County Coordinated Water System Plan (CWSP)

The Kitsap County CWSP (revised May 9, 2005) presents an assessment of municipal and industrial water supply needs in Kitsap County and a program to effectively provide water supply and service to customers throughout the area. The CWSP was developed to comply with Chapter 70.116 RCW and Chapter 246-293 WAC by the Water Utility Coordinating Committee (WUCC). The WUCC consists of representatives from each purveyor with over fifty services within the declared area, the county legislative authority, the Kitsap County Department of Community Development and the Kitsap County Health District.

The CWSP provides a process and strategy for the existing water utilities to define their role in a program consistent with adopted land use polices and the projected growth strategy. The regional water supply, transmission, and storage plan represents the collective views of the WUCC and integrates the findings of the Kitsap County GWMP (Water Conservation per Groundwater Plan Volume III).

The September 2011 CWSP Update addresses only those eight water systems that meet the Department of Health definition of "expanding." These include the Indian Hills, Indianola, Keyport, North Bainbridge, North Peninsula, Suquamish, Vinland, and West Kitsap systems.

Water Conservation in the County

County government supports Group-A water utilities as they pursue ongoing conservation programs. These programs include both supply and demand management measures within individual service areas.

In June 2009, the Board of County Commissioners adopted by resolution a new policy treating water as a resource, not a waste stream. This policy establishes a culture of innovative development and operating practices in order to preserve this natural resource on public property.

Members of the Water Purveyors of Kitsap County (WATERPAK) provide basic conservation kits and literature for water users. They also evaluate the advisability of countywide programs to retrofit existing homes with low flow toilets, low-flow shower heads, restricted flow aerators, and other appropriate devices on a cost-effective basis.

Water utilities conduct leak detection programs that identify problem water losses in distribution systems. The Kitsap County WATERPAK plans to evaluate a regional approach to leakage analysis efforts.

The WATERPAK developed a comprehensive, model water conservation program for small utilities. The conservation program includes conservation objectives, demand forecasting methods, program activities, and level of effort, budget estimates, savings estimates, and evaluation and monitoring criteria. Program activities include education, system monitoring and improvements, promotion of conservation devices, incentives for customers, water production monitoring, drought response conservation, and other appropriate supply and demand management measures. WATERPAK plans to conduct joint conservation efforts with Pierce and Mason counties.

Inventory of Current Facilities

Exhibit 4-105 shows the current inventory and capacity for the Group "A" Community Water Systems that currently serve the County with 50 approved DOH connections or more. The inventory includes the name of the water system, existing and approved DOH connections, and the capacity of each system.

Exhibit 4-111. Inventory of Current Facilities - Water

50+ Connections	Connections(1)		Water Rights (2)			System Information		
System Name	**Existing**	**Approved**	**Qa (afy)**	**Qi (gpm)**	**Qi (cfs)**	**Source Capacity (gpm)(2)**	**Storage Capacity(1) (gal in 1,000)**	**System Owner/ Op (1,3)**
Alpinewood	98	99	44.6	161		300	0	WW
Bainbridge Island, City of	3,419	Unspec	2,564	3,456	0.35	1,993	2,800	COBI
Bear Cub	58	70	49.5	107		160	17	NWW
Bethel East	52	55	17	20		120	11	NWW
Bill Point Water	84	84	64.2	42		124	30	NWW
BKS	71	73	35	126		180	0	WW
Bremerton West 517 Zone, City of	137	Unspec	6,658	5,743		8,820	1,210	
Bremerton, City of	29,192	Unspec	N/A	17,952	40	13,200	33,200	COB
Bucklin	108	121	42.5	139		114	117	WW
Cedar Glen Mobile Home Park	137	137	31	100		120	32	NWW
Cedarbrook	34	56	30	600		232	0	WW
Driftwood Cove	70	120	32	50		100	83	KPUD
Eldorado Hills	153	157	69	180		210	254	KPUD
Emerald Heights	84	92	90	150		152	95	
Erland Point Water Co	910	Unspec	1344	900	0.25	500	385	
Foss Road	45	51	-	-		-	35	WW
Fragaria Landing	96	99	32	98		177	28	
Gala Pines Water	52	52	54	155		150	50	KPUD
Glenwood Station	60	62	25	100		100	47	WW
Harbor Heights	71	71	22	100		135	20	WW
Hintzville Acres	66	66	32.5	105		82	11	WW
Holly	87	107	26	110		85	30	NWW
Horizons West	1011	Unspec	449	856		1,210	555	WW
Indian Hills Estates	110	110	115.5	250		126	30	KPUD
Indianola Water	680	Unspec	492	690		481	287	KPUD

Island Lake	323	441	92	80		140	209	AU
Jackson Park Naval Hospital	320	Unspec	-	-		-	3,500	
Johanson	57	56	-	-		-	35	WW
Keyport Water	434	827	858	685		600	401	KPUD
Kitsap Memorial State Pk	38	50	-	-		-	20	
Kitsap West MHC Water Co	96	146	45	250		80	7	
Little Tree	54	54	36	100		70	35	WW
Long Lake View Est 2 5	367	399	152.4	360		212	187	KPUD
Mainland View Manor	54	57	32.5	150		150	0	WW
Manchester Water District	3,495	Unspec	1,673.7	2,260		3,630	3,200	
Martell Mobile Manor	79	79	39.5	171		140	38	NWW
McCormick Woods	1,191	Unspec	450	600		1,830	569	
Meadowmeer	311	355	150	250		432	225	
Miller Bay	429	460	112	200		170	167	KPUD
Minter Creek Rapids	49	55	93	250		235	0	WW
Naval Base Kitsap At Bangor (Subase Bangor)	2,348	Unspec	N/A	N/A		3,050	3,500	
Naval Base Kitsap At Bremerton (Puget Sound Naval Yard)	1,042	Unspec	N/A	N/A		import	2,500	
Naval Base Kitsap At Keyport (Navy Undersea War Ctr.)	176	Unspec	N/A	N/A		1,000	600	
Navy Yard Park	105	121	48	60		52	110	KPUD
Newberry Hill	81	140	1,950	1,720		100/200	749	KPUD
North Bainbridge Water Co	1,944	2,028	647	1,646		911	842	KPUD
North Peninsula	5,426	10,000	3,885	2,599.5		1,880	2,602	KPUD

North Perry Ave Water District	8,096	Unspec	4,089.6	4,540		3,560	4,750	
Olalla	81	99	55	130		130	24	WW
Olympic View Mobile Manor	76	76	13	26		70	5	PLC
Parkview Terrace	898	1067	587.1	748		1,580	699	WW
Pine Lake Mobile Home Est 1 3	79	82	48.6	112		138	0	
Port Gamble	61	61	-	-		50	46	KPUD
Port Madison Water Company	103	144	80	30		158	65	KPUD
Port Orchard Water Dept	3,940	Unspec	2,330	1,600		2,600	4,300	
Poulsbo, City Of	5,968	Unspec	2,147	1,940	1.2	2,060	3,050	
Priddy Vista	84	85	56	47		123	47	KPUD
Rockaway Beach Water	72	88	80	34		80	132	
Rocky Point Water District 12	717	1,000	N/A	N/A		import	0	
Sandy Hook Park Community Club	104	189	80	160		57	61	NWW
Seabeck	243	300	3,000	3,000		600	580	KPUD
Silverdale Water Dist 16	8,688	Unspec	4,664.9	4,835	0.78	6,730	5,184	
South Bainbridge	1,530	Unspec	885.3	1,064.4	0.11	625	899	KPUD
Strattonwood	80	99	40.5	160		160	37	WW
Strawberry Hill	94	94	83.7	275		125	80	KPUD
Sunnyslope	383	455	1,456.6	200		270	375	
Suquamish	1,548	2,965	960	1,750		1,240	816	KPUD
Surfrest Park Water Company	48	54	47	105		110	50	KPUD
Tahuyeh Lake Community Club	224	259	2,000	334		196	106	NWW
Viewside Community	49	64	36	125		175	40	KPUD
Vinland	1,374	10,000	860	933		1,530	1,150	KPUD
West Kitsap	699	740	991.6	924		521	278	KPUD

West Sound Utility District #1	8,710	Unspec	-	-		-	4,100	
Wicks Lake Ranches	228	355	142	300		225	56	WW
Total	88,741	11,282	57,680.8	56,239	42.94	63,216	84,898	

Notes: All KPUD owned systems were updated March 2023 by KPUD. All other data is from Department of Health Drinking Water Sentry Database March 2023 System Operator or Owner: AU –Aquarius Utilities; COB – City of Bremerton; COBI – City of Bainbridge Island; COPO – City of Port Orchard, KPUD – Kitsap Public Utility District; NWW – Northwest Water; PLC – Peninsula Light; WW – Washington Water Service

- Qa = Annual Quantity; Qi = Instantaneous Quantity; afy = Acre Feet per Year; gpm = gallons per minute; cfs = cubic feet per second.
- Unspec – Unspecified by DOH – System sets capacity; NA = Not Applicable

Totals are shown for systems with multiple water rights, not by water system name. This table may not present water rights information pertaining to those systems for which the owner's name differs from the water system name.

Kitsap Public Utility District Water System Facilities

The general characteristics of five major water systems managed by the KPUD are summarized below.

Eldorado Hills.
Eldorado Hills is located in Section 31 and 32, Township 25N, Range 1E. It serves an area that ranges from approximately 100 feet to 500 feet in elevation. Eldorado Hills serves only residential customers.

Keyport Water System.
A majority of the Keyport Water System is located in Section 35 and 36, Township 26N, Range 1E, along the south end of Liberty Bay, north of Bremerton along the western shores of the Puget Sound. The remainder of the system is situated in Sections 1 and 2, Township 25N, Range 1E. The topography within this system also varies substantially, rising from sea level to approximately 260 feet. The water system supplies a mix of residential, multi-family, and commercial uses within Keyport.

North Peninsula.
The North Peninsula water system was created in 1995 through the consolidation of seven District systems, including Kingston, Hansville, Jefferson Beach, Jefferson Point, Gamblewood, Cedar Acre 5, and Kingston Farms. The North Peninsula Water System is

located on the northern end of the Kitsap Peninsula between the communities of Jefferson Beach and Hansville. The system serves residential and commercial customers.

Suquamish Water System.
The Suquamish Water System includes Indianola, Miller Bay, and Suquamish. It is located along Puget Sound north of the Agate Passage Bridge in Sections 8, 9, 16, 17, 20, 21, 28 and 29, Township 26N, Range 2E. Approximately 75 percent of the system is within the Port Madison Indian Reservation. The system serves a diverse mix of residential and commercial customers.

Vinland.
The Vinland system was formed in October 1994 through the intertie of the Edgewater Estates and Bella Vista systems. The system is located north of the Bangor Submarine Base in Sections 4 and 5 of Township 26N, Range 1E and Section 27, Township 27N Range 1E. The topography within the area rises from sea level near Hood Canal to elevations of 260 feet along Pioneer Way and 280 feet at Edgewater Estates to the north. As reported in the 2012 Kitsap County CFP, the District is under contract with the City of Poulsbo to sell 120 gpm continuously from the Vinland system.

Municipal Water Systems

City of Bremerton.
The City of Bremerton Water Utility's system serves over 54,000 residents in Bremerton and portions of Kitsap County, including the Gorst area to the south and the western portion of the Manette Peninsula in central Kitsap County, from the city limits to Bucklin Hill Road. The current service area includes approximately 8,724 acres within the Bremerton City limits and approximately 3,376 acres within Kitsap County. This description does not include other areas with service area agreements, such as PSNS, Jackson Park, and Rocky Point Water District, or the City of Port Orchard. In 2004, the city assumed the Tracyton water system.

The City of Bremerton Water Utility service area is essentially contiguous with the surrounding water purveyors. Erlands Point Water District is located at the northwestern boundary of the Bremerton Water Utility service area. The Silverdale Water District is to the northeast. The City of Bremerton Water Utility service area is bounded to the east by the North Perry Avenue Water District, and to the south by the City of Port Orchard and the Sunnyslope Water Districts.

City of Port Orchard.
The Port Orchard existing service area includes the majority of the current city limits, as well as the annexed community of McCormick Woods in the western portion of the service

area. The City maintains service to the majority of its residents and a variety of commercial and governmental activities within the City limits, and the West Sound Utility District serves a small area in the eastern portion of the City.

State Highway 166 extends along the north of the city and travels eastward from it. Commercial development has typically occurred along the corridor. Since the opening of the Port Orchard Bypass, commercial development has begun to accelerate in the Bethel corridor. Residential development is occurring primarily in the center of the city and in the McCormick Woods subdivision within the City UGA.

The northern half of the city has the greatest population density. The property development becomes more rural toward the south. It is the policy of the city to provide utility service outside its corporate limits if the city council approves the action.

City of Poulsbo.
The City of Poulsbo is a community of about 11,970 (2022 Census) people located at the north end of Liberty Bay in Kitsap County. The center of the city is on the east shore of the bay about one mile south of the head of the bay. The city extends around the head of the bay and about 0.5 mile south on the west side, and the city limits are about two miles down the east side of the bay. The incorporated area extends up from the shore into the low hills. It reaches elevations of 300 to 400 feet on the east, and 100 to 200 feet on the north and west.

The City has a policy of requiring new customers outside city limits to file petitions for annexation and to provide power of attorney to the mayor to file petitions of annexation. This has assured that the water system service area is within the City of Poulsbo.

Other Water Systems

West Sound Utility District.
West Sound Utility District was formed by the consolidation of Annapolis Water District and Karcher Creek Sewer District in November 2007. The district provides potable water in the Port Orchard urban area and south Kitsap County. It serves from Watauga Beach to Long Lake and includes Beach Drive, East Port Orchard, south of Sedgwick Road, and portions of the City of Port Orchard. The 8.3 square miles of service area with three primary pressure zones range from sea level to an upper pressure zone of 487 feet.

Manchester Water District.
The Manchester Water District serves the Southworth, Colby, and Manchester areas. The district's southern boundary borders Sedgwick Road and extends to Colvos Passage of

Puget Sound. To the west, the boundary follows Woods Road and a portion overlaps into the Annapolis (now West Sound) Water District.

The existing water system serving the district is composed of two service levels. There is a storage reservoir in each subsystem. These service levels are delineated by the 180-foot contour running through the district. The low-level system (elevation 275 feet) serves the majority of the customers. The high level (elevation 430 feet) system has a majority of the Water District supply and storage capacity.

North Perry Avenue Water District.
North Perry Avenue Water District extends from Illahee to Keyport Road along Port Orchard Bay and is bounded to the south and west by the City of Bremerton. Although the two systems are connected, this interconnection is not currently utilized. However, it could be activated to aid either district under emergency conditions.

Silverdale Water District bounds North Perry Avenue Water District to the west. The long-range plan for the North Perry Avenue and Silverdale districts is to enter into an agreement to intertie strictly for emergency use. A portion of North Perry Avenue Water District's service area west of Central Valley Road was designated an uncontested overlap with Silverdale Water District. This designation took into consideration demand and growth factors to the area, and therefore no further changes to the North Perry Avenue service area are anticipated in the near future.

KPUD bounds North Perry Avenue Water District to the north. At the end of 1989, the KPUD took over a small section of the north end of the North Perry Avenue Water District. This change had a minimal effect on the North Perry Avenue water system because the rural area had only a minor influence on the overall demand.

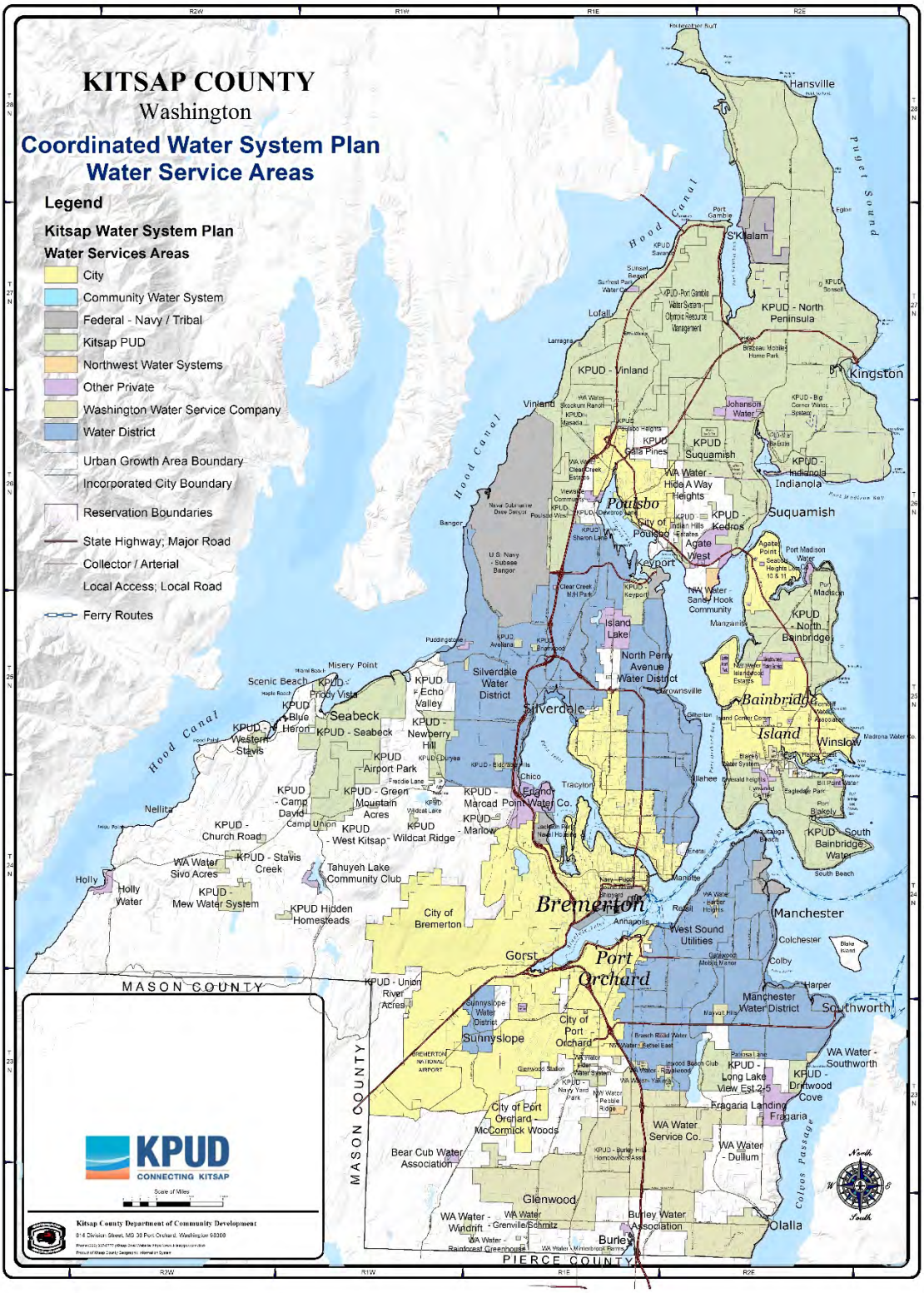
Rocky Point Water District.
The Rocky Point Water District serves an area on the west side of City of Bremerton that is outside the city limits and generally encompasses the peninsula known as Rocky Point. The southern boundary is Kitsap Way. The majority of the system was constructed in the early 1940s, but several extensions have been made since that time to complete the system as it exists today. The City of Bremerton's existing water systems surround the district. The system serves mostly residential customers, with a few commercial customers adjacent to Kitsap Way in the southern end of the district. There is some vacant land in the district that could provide space for the construction of additional residential units. However, part of the area is not suitable for septic tanks, which will likely preclude home construction at this time. Therefore, it is not anticipated that much expansion will occur in the near future.

Silverdale Water District.

The Silverdale Water District provides water service to approximately 8,688 customer connections within the district's retail water service area (DOH, 2015), which primarily serves the community of Silverdale and its outlying areas. The district's existing retail service water service area comprises an area of approximately 25.22 square miles within unincorporated Kitsap County according to their 2013 Comprehensive Water System Plan. This area includes portions of the Silverdale and Central Kitsap UGAs. The current population served by the district is estimated at 20,665 (DOH, 2015).

Sunnyslope Water District.

The service area includes the community of Sunnyslope primarily south of SR 3, northeast of the Bremerton National Airport, and east of McCormick Woods. There is an approximately 1,600-acre service area that crosses the highway and is contiguous with the City of Bremerton watershed. The district serves Sunnyslope Elementary School and several commercial businesses, but primarily serves single-family residential units at one dwelling unit per acre or greater.


KITSAP COUNTY
Washington
Coordinated Water System Plan
Water Service Areas
Legend
Kitsap Water System Plan
Water Services Areas
City
Community Water System
Federal - Navy / Tribal
Kitsap PUD
Northwest Water Systems
Other Private
Washington Water Service Company
Water District
Urban Growth Area Boundary
Incorporated City Boundary
Reservation Boundaries
State Highway; Major Road
Collector / Arterial
Local Access; Local Road
Ferry Routes
Hansville
S'Klallam
KPUD - North Peninsula
KPUD - Vinland
Kingston
Suquamish
Poulsbo
Keyport
Agate West
Island Lake
Silverdale
Bainbridge Island
Winslow
Seabeck
Nellita
Holly
Bremerton
Port Orchard
Manchester
Gorst
Sunnyslope
Southworth
Glenwood
Olalla
Burley
Fragaria
MASON COUNTY
PIERCE COUNTY
Hood Canal
Puget Sound
Colvos Passage
KPUD
CONNECTING KITSAP
Kitsap County Department of Community Development

Level of Service Analysis

Exhibit 4-112 from the CWSP shows the projected water demands for the county in 2010, 2020, and 2030. These calculations were based on the Puget Sound Regional Council's (PSRC) demographic forecasts for each forecast analysis zone (FAZ), on past water consumption rates and peaking factors, estimates of future commercial/industrial demand, and effects of conservation. Each of these is described in more detail in the following paragraphs.

The CWSP used water consumption rate estimates of 356 gallons per household per day (gphpd) inside UGAs and 237 gphpd outside UGAs, and a peaking factor of 2.32 to calculate future water demand. These figures are based on average trends in several representative water systems within the county. PSRC demographic forecasts were made at the FAZ level, and then UGAs, and sub-areas were used to assess water demand and water use characteristics. When water districts plan for future growth, each calculates future demand based on past water use trends within the individual district.

Since rate estimates are based on past water consumption rates and do not account for the possibility of a new, large commercial or industrial water consumer, it was assumed in the CWSP that between 2000 and 2010 new industries with a total demand of 1.25 mgd would locate in the City of Bremerton's service area, while an additional 0.25 mgd of new industrial demand would develop elsewhere throughout the County. Additional new industrial demands of these same amounts were estimated to develop between the years of 2010 and 2020, and between 2020 and 2030 an additional 0.5 mgd industrial demand would develop in the City of Bremerton.

Effects of conservation were also incorporated into demand calculations to account for implementation of conservation and efficiency measures. WATERPAK, an organization of the larger water purveyors, has pursued an effective conservation program over the past decade. In most cases, larger systems have reduced water losses below ten percent of their water production. For the CWSP, a one percent per year reduction in water supply requirements was assumed for years 2001 through 2010. Further reductions beyond 2010 were not included, based on the assumption that the majority of conservation gains, using current technology, will likely be realized by that time.

Exhibit 4-112. Water Demand Projections (in mgd) from the CWSP

Year	Average Day Demand*	Maximum Day Demand**
2010	30.03	69.67
2020	37.57	87.16
2030	42.89	99.5

Notes:
**Based on per household approach, including conservation and additional industrial water supply requirements.*
***Based on peak day factor of 2.32*
Source: Kitsap County Water Utility Coordinating Committee. 2005 (CWSP Table 7-10 Kitsap County Water Supply Requirement Projections (in mgd))

Capital Facility Plan Growth Estimates and Provider Plans

Population estimates used in functional plans prepared by the water purveyors vary from the estimates used in the preparation of this CFP. This is attributable to two factors. The County's population estimates for each district are based on transportation analysis zones which overlap but do not coincide with the district's water service area boundaries. The result is a likely overestimation of the current and future population of each district. Further, water districts' baseline population estimates are taken from existing connections, which are converted to population estimates through persons per household assumptions. This approach does not account for households served by private systems and therefore may result in an under-estimate of actual population located within the district service area (but not an under-estimate of actual population served by the district).

Capital Projects and Funding

West Sound Utility District

Table 2-8 Planning Population 2022-2042 from the 2022 WSUD Water Service Plan, shows the projected water demands for the county in 2022, 2032 and 2042.

Official population growth projections from the County Comprehensive Plan, which in turn are based on the Puget Sound Regional Council (PSRC) VISION 2050 regional plan, that are relevant to the areas served by the WSUD include:

- City of Port Orchard – 1.99 percent
- Port Orchard UGA – 1.34 percent
- Rural Kitsap County – 0.50 percent.

WSUD utilized a population growth rate of 1.75 percent compounded annually from 2022 through 2042, applied to single family residential and multi-family demands. This accounts for the realistic range in growth rates between the areas served by WSUD while remaining conservative overall. Based on the above discussion, the planning populations for the existing WSUD boundaries are presented in Table 2-8 of the WSUD 2022 Water System Plan Update. Also here for reference.

Table 2-8. Planning Population, 2022 – 2042

Year	Population	Year	Population
2022	20,303	2033	24,572
2023	20,658	2034	25,002
2024	21,019	2035	25,439
2025	21,387	2036	25,884
2026	21,762	2037	26,337
2027	22,142	2038	26,798
2028	22,530	2039	27,267
2029	22,924	2040	27,744
2030	23,325	2041	28,230
2031	23,734	2042	28,724
2032	24,149		

Exhibit 4-113. Water Demand Projections (in mgd) from the CWSP

Year	Average Day Demand	Maximum Day Demand
2022	1.81	3.74
2032	2.21	4.57
2042	2.55	5.27

Source: WSUD 2022 Water System Plan Update

Exhibit 4-114 shows planned capital projects. Exhibit 4-115 shows the capital projects costs for 2024-2029 and 2030-2044 and Exhibit 4-116 shows the capital project revenues for the same time periods.

Exhibit 4-114. WSUD Water Capital Project Costs (All numbers are in 2022 $1000s)

Category/Project Description	Revenue Source	Total Cost 2024-2029	Total Cost 2030-2044	Total Cost
Category I: Capacity Increasing Projects				
Purchase Property, Drill New Well and Construct New South Reservoir	CAP	6,315.8		6,315.8
Intertie with Manchester Water at Beach Dr. and Watauga intersection	CAP	425		425

Install 12-inch ductile iron water main on Bethel from Lund to Sedgewick	R&R	3,100		3,100
Install 2,600' of 12" ductile water main on Jackson from Salmonberry to Sedgewick	R&R	1,961		1,916
Install 750' of 8" water main on Downing Pl from Higgins Rd to end of Downing Pl	R&R	316		316
Install 3,750' of 8" Ductile Iron Pipe on Beck, Hoover, McKinley Pl to Replace Cast Iron Pipe	R&R		2,541	2,541
Install Generator at well 22	CAP	87		87
Install on-site generator at well #1&5	CAP	87		87
Category II: Capital Replacement, Maintenance and Operations				
Aquifer Field Characterization	R&R	80		80
Install Generator at well 20	CAP	90		90
Port Orchard intertie - pump & check valve	CAP	73		73
Routine Maintenance Tank Cleaning (5 Storage Tanks)	R&R	356	1,294	1650
Paint Int. (2001) & ext. (1991)of Salmonberry elevated, make safety imp, install cat protection	R&R	970		970
Repaint interior of Fircrest Standpipe (NW Corrosion recommendation)	R&R	565		565
Paint interior and exterior Salmonberry reservoir (2008)	R&R	487		487
Paint interior of Powell Reservoir and caulk roof seams	R&R		193	193
Paint Well 1 reservoir int. and ext. (2016)	R&R		91	91
Paint exterior of Fircrest standpipe (2016)	R&R		183	183
Paint exterior of Powell tank (2016)	R&R		146	146

Replace Fircrest elevated reservoir (75 Years)	R&R		3,629	3,629
Replace Salmonberry elevated reservoir (75 Years)	R&R		4,356	4,356
Powell Booster Station Upgrades	R&R	2,850		2,850
Replace Failing AC pipe on Harris From Lund to McKinley Pl w/ 10" Ductile	R&R	698		698
Replace 900' of 8" AC with 12" water main on Mile Hill Rd from Fircrest Dr. to Harrison Ave	R&R		509	509
Replace 500' of 2" PVC with 12" DI water main on Mile Hill Dr. from 4648 to Baby Doll Rd.	R&R		348	348
Install 4,000' of 8" Ductile Iron on Lincoln Ave. to Replace Cast Iron Pipe	R&R		2,077	2,077
Replace 1,000' of 4" AC with 8" water main on Russell Ave from Horstman Rd to Lovell St	R&R	410		410
Replace 1,100' of 4" AC with 8" water main on Orchard Ln from Horstman Rd to Gregory Ln	R&R	538		538
Replace AC Main on Horstman Rd from Prosperity Plat to Peru Ave	R&R		1,908	1,908
Replace 5,400' of 8" CI Pipe on Mitchell and Jefferson	R&R		3,157	3,157
Replace 5,000' cast iron main in area of Well 1 to Mile Hill Road and West to Ballfield	R&R		2,080	2,080
Install 3,750' of 8" Ductile Iron Pipe on Beck, Hoover, McKinley Pl to Replace Cast Iron Pipe	R&R		2,541	2,541
Replace 1,300' of 6" AC with 8" water main on Colonial Ln from Salmonberry Rd to Berger Ln	R&R	655		655
Replace 1,400' 8" w/ 12" water main on Mile Hill Dr. from Baby Doll Rd to Saddle Club Rd	R&R		591	591
"Replace 200' of 4"" with 8"" water main on	R&R	84		84

Bethel Rd from 2500 to 2530"				
Replace 3,200' of 6" PVC Pipe on Point Glover Lane Due to Frequent Joint Failure	R&R		1,433	1,433
Replace 5,300' of 8" PVC Pipe on Watauga Beach Dr. Due to Frequent Joint Failure	R&R	1,680		1,680
Beach Drive 16,000' AC Water Main Replacement Phase 1	R&R		8,560	8,560
Beach Drive 16,000' AC Water Main Replacement Phase 2	R&R		8,817	8,817
South Park Main Relocate	R&R	110		110
Replace 900' of 8" AC with 12" Ductile water main on Mile Hill Rd from Fircrest Dr. to Harrison Ave	R&R	466		466
Replace 2800' of 6" AC w/ 8" DI water main on Leighton. Loop to Beach DR	R&R	1,150		1,150
INFORMATION SYSTEMS		26.9		26.9
SERVICES (2.0%/Year Cost Escalation)		1,033	3,129	4,162
Main Relocation Fircrest to Madrona 680’		420		420
Replace 850’ 2” Main on Mile Hill from Harrison	R&R	370		370
Powell Booster Station Upgrades	R&R	2,850		2,850
Well 11 Rehabilitation		355		355
Well 14 Rehabilitation		355		355
Well 16 Rehabilitation		355		355
Well 17 Rehabilitation		355		355
Well 18 Rehabilitation		355		355
Well 20 Rehabilitation		355		355
Total		30,383.7	47,583	77,921.7

Source: WSUD 2022 Water System Plan Update

Exhibit 4-115. WSUD Capital Project Costs (All numbers in 2022 $1000s)

Category Summary	Cost Years 2024-2029	Cost Years 2030-2044	Total Cost

Category I (Capacity Projects Required to Meet LOS)	12,291.8	2,541	14,787.8
Category II (Other Projects Needed for Maintenance and Operations)	18,091.9	45,042	63,133.9
Total	30,383.7	47,583	77,921.7

Exhibit 4-116. WSUD Water Capital Project Revenues (All numbers are in 2022 $1000s)

Revenue Source	Total Revenue Years 2024-2029	Revenue Years 2030-2044	Total Revenue
Miscellaneous Revenue	599	1,613	2,212
PWB Loans	6,650	12,000	18,650
General Facility Charges	761	1,806	2,567
Total	8,010	15,419	23,429

Source: WSUD 2022 Water System Plan Update

City of Bremerton

Exhibit 4-111 shows planned capital projects. Exhibit 4-112 shows the capital projects costs for 2024-2029 and 2030-2044 and Exhibit 4-113 shows the capital project revenues for the same time periods.

Exhibit 4-117. City of Bremerton Capital Projects (All numbers in 2020 $1000s)

Category/Project Description	Revenue Source	Cost 2024-2029	Cost 2030-2044	Total Cost
Category I: Capacity Increasing Projects				
Meter Installation		2662	426	2662
Meter Replacement (≥1.5")		2218	355	2218
West Branch Diversion Expansion			86	86
New Well in East Bremerton		1896		1896

SCADA Lifecycle Improvements		665	106	771
Category II: Capital Replacement, Maintenance and Operations				
Casad Dam Early Warning System		112		112
W580 Zone - Reservoir		4,113		4,113
West 440 Zone Reservoir		4,277		4,277
West 256 Zone Reservoir		23,896	12795	36,691
Reservoir 14 - Evaluate/Demolish		1,367		1,367
Reservoirs - Coatings (Interior and Exterior) & Cathodic Protection		3,343	628	3,971
Reservoirs - Cleaning and Inspection		412		412
Other Reservoir/Dam Projects (recoat Morning Glory)		116		116
Substandard Water Main Improvements		745	142	887
Distribution Main Improvements		1,490	284	1,774
Taps		1,788	341	2,129
Service Line Replacement Program		1,232	213	1445
Water Main Replacement w/ Pavement Reconstruction		2,154	568	2,722
Cathodic Protection on Steel Mains		402		402
Redundant Pipeline for Critical W256 Supply		546	3696	4,242
Transmission Main McKenna Fals to Gorst		683	7,108	7,791
Sherman Heights Water Main Replacement		2,050		2,050
Gold Mountain Golf Course Irrigation		647		647
Pressure Relief/Pressure Reducing Valves		642		642
Water System Plan Update		410		410
Well 13 Replacement		683		683
Well 14 Replacement		657		657
Well 16 Retrofit		683	2843	3526
Wells 4(AC) and 10 (Parkwood East) - Well Decommissioning		243		243
Old PS14 Demolition		280		280

Manganese Treatment Facilities (Roll-up)		1,169		1,169
Well Pump/Motor Replacement and Redevelopment (Roll-up)		2,526	568	3,094
Emergency Power Plan Implementation (Roll-up)		449		449
Machinery/Equipment - Water Resources		1,490	284	1,774
PS 1 Asbestos Survey, Testing & Removal		189		189

Source: City of Bremerton Water District 2020 Water System Plan

Exhibit 4-118. City of Bremerton Capital Project Costs (All numbers in 2020 $1000s)

Category Summary	Cost Years 2024-2029	Cost Years 2030-2044	Total Cost
Category I (Capacity Projects Required to Meet LOS)	7,441	973	8,414
Category II (Other Projects Needed for Maintenance and Operations)	37,520	29,470	66,990
Total	44,961	30,443	75,404

Source: City of Bremerton Water District 2020 Water System Plan

Exhibit 4-119. City of Bremerton Capital Project Revenues (All numbers in 2020 $1000s)

Revenue Source	Revenue Years 2024-2029	Revenue Years 2030-2044	Total Revenue
GFC Revenue Toward Capital	14,468	30,614.4	45,082.4

Cash Financing	15,918	3,191.8	19,109.8
Debt Financing	26,446.4	2,796	49,242.4
Total	56,832.4	36,602.2	113,434.6

Source: City of Bremerton Water District 2020 Water System Plan

The City of Port Orchard

Exhibit 4-120 shows planned capital projects. Exhibit 4-121 shows the capital project costs for 2024-2029 and 2030-2044 and Exhibit 4-122 shows the capital project revenues for the same time periods.

Exhibit 4-120. City of Port Orchard Capital Projects (All numbers in 2020 $1000s)

Category/Project Description	Revenue Source	Cost 2024-2029	Cost 2030-2044	Total Cost
Category I: Capacity Increasing Projects				
Well 12 Development, Treatment, and Booster Pump Station	CFC	7000		7000
580 to 660 Zone Booster Station	CFC	750		750
Category II: Capital Replacement, Maintenance and Operations				
Well 7 Treatment/Pump Station Upgrade	Rates	750		750
Combined Water Main Replacements from Hydraulic Modeling	CFC/Rates	500		500
Annual Main Replacement Program (Upsize 1"-4" main to 6"-8")	Rates	1,500	3,500	5000
Well 10 Rehabilitation, Activation, and Water Main	CFC	3092		3092
Black Jack Creek Crossing at Kendall St.	Rates	750		750
Annual Hydrant Replacement Program	Rates	300	1,120	1420
Annual Valve Replacement Program	Rates	480	700	1480
390 Zone Storage	CFC	3000		3000
Telemetry Upgrades	CFC/Rates	600		600
580 to 390 Zone Transmission Main	CFC/Rates	1325		1325

(580/390 PRV to Old Clifton Tank				
660 Zone Storage	CFC/Rates	2850		2850
Total		22897	5320	28217

Source: City of Port Orchard 2020 Water System Plan

Exhibit 4-121. City of Port Orchard Capital Project Costs (All numbers in 2020 $1000s)

Category Summary	Cost Years 2024-2029	Cost Years 2030-2044	Total Cost
Category I (Capacity Projects Required to Meet LOS)	7,750		7,750
Category II (Other Projects Needed for Maintenance and Operations)	15,147	5,320	20,467
Total	22,897	5,320	28,217

Source: City of Port Orchard 2020 Water System Plan

Exhibit 4-122. City of Port Orchard Capital Project Revenues (All numbers in 2020 $1000s)

Revenue Source	Revenue Years 2024-2029	Revenue Years 2030-2044	Total Revenue
Capital Facilities Charges	13,842		13,842
Rates	3,780	5,320	9,100
CFC/Rates	5,275		5,275
Total	22,897	5,320	28,217

Source: City of Port Orchard 2020 Water System Plan

City of Poulsbo

Exhibit 4-123 shows planned capital projects. Exhibit 4-124 shows the capital projects costs for 2024-2029 and 2030-2044 and Exhibit 4-125 shows the capital project revenues for the same time periods.

Exhibit 4-123. City of Poulsbo Capital Projects (All numbers in 2014 $1000s)

Category/Project Description	Revenue Source	Cost 2024-2029	Cost 2030-2044	Total Cost
Category I: Capacity Increasing Projects				
Big Valley Well #3	Water Reserves	1,675		1,675
3rd Ave Water	Water Reserves	700		700
Hostmark Pipe/SR305 Crossing	Water Reserves	1,825		1,825
Noll Road Water Improvements	Water Reserves	100		100

Raab Tank	Water Reserves	1,666		1,666
				5,966
Category II: Capital Replacement, Maintenance and Operations				
340 Zone Fire Flow – 4th Ave	Water Reserves	250		250
Caldart Main	Water Reserves	700		700
Finn Hill Tank Retrofit	Water Reserves	1,750		1,750
Front Street Water Main Replacement	Water Reserves	1,100		1,100
Old Town Water Main Replacement	Water Reserves	350		350
Westside Well Emergency Access	Water Reserves	120		120
Well VFD Upgrades	Water Reserves	200		200
Wilderness Tank Retrofit	Water Reserves	2,200		2,200
				6,670

Source: Direct Coordination with Charlie Roberts at City of Poulsbo. Costs based on 2014 Water System Plan and most current City CIP; City of Poulsbo currently developing updated capital costs for the 2024 Water Facilities Plan. Projects and costs subject to change upon completion of the City 2024 Water Facility Plan.

Exhibit 4-124. City of Poulsbo Capital Project Costs (All numbers in 2014 $1000s)

Category Summary	Cost Years 2024-2029	Cost Years 2030-2044	Total Cost
Category I (Capacity Projects Required to Meet LOS)	5,966		5,966
Category II (Other Projects Needed for Maintenance and Operations)	6,670		6,670
Total	12,636		12,636

Source: Direct Coordination with Charlie Roberts at City of Poulsbo. Costs based on 2014 Water System Plan and most current City CIP; City of Poulsbo currently developing updated capital costs for the 2024 Water Facilities Plan. Projects and costs subject to change upon completion of the City 2024 Water Facility Plan.

Exhibit 4-125. City of Poulsbo Capital Project Revenues (All numbers in 2014 $1000s)

Revenue Source	Revenue Years 2024-2029	Revenue Years 2030-2044	Total Revenue
Water Reserves	12,636		12,636
Total	12,636		12,636

Source: Direct Coordination with Charlie Roberts at City of Poulsbo. Costs based on 2014 Water System Plan and most current City CIP; City of Poulsbo currently developing updated capital costs for the 2024

Water Facilities Plan. Projects and costs subject to change upon completion of the City 2024 Water Facility Plan.

Silverdale Water District No. 16

Exhibit 4-126 shows planned capital projects. Exhibit 4-127 shows the capital projects costs for 2024-2029 and 2030-2044, and Exhibit 4-128 shows the capital project revenues for the same time periods.

Exhibit 4-126. Silverdale Water District Capital Projects (All numbers in 2024 $1000s)

Category/Project Description	Revenue Source	Cost 2024-2029	Cost 2030-2044	Total Cost
Category I: Capacity Increasing Projects				
WMN-2: Luoto and Cox Road	District	346		346
WMN-3: Mountain View Road/SR 3	District	1470		1470
WMN-4: Provost Road	District	1050		1050
WMN-6: Ridgetop Boulevard	District	640		640
WMN-7: Paulson Road	District	372		372
WMN-8: Silverdale Way 9448	District	161		161
WMN-10: Clear Creek Apartments Z1 (DEA)	District	80		80
WMN-11: Silverdale Transit Center (DEA)	District	21		21
WMN-13: Fieldstone Independent Living Z1 (DEA)	District	197		197
WMN-15: Clear Creek	District	256		256
WMN-16: Pacific Avenue	District	246		246
WMN-17: Cascadia Point (DEA)	District	71		71
WMN-18: Nels Nelson / Barker Creek	District	326		326
WF-5: Wixson Reservoir – 2 MG	District	3861		3861
WF-11: Bella Vista Reservoir	District	2106		2106
WR-1: Water Main- Ridgetop Boulevard	District	584		584
WR-2: Water Main- Paulson Road	District	567		567
WR-3: Anderson Hill Road Pump Station	District	900		900
WR-4: Water Main- Fieldstone 2 DEA	District	148		14
WR-5: Water Main- Fieldstone 3 DEA	District	140		140
WF-7: Anderson Hill Booster Pump Station	District	436		436
Category II: Capital Replacement, Maintenance and Operations				

WF-1: Administrative Building Expansion Phase 2	District/Partnerships	532		532
WF-2: Warehouse - Pad 3	District/Partnerships	4170		4170
WF-4: Shadow Glen Reservoir Mixing Valves	District	9		9
WF-6: Wixson Pump Station – Well/Chlorine Generation	District	690		690
WF-8: Apex Well	District	690		690
WF-9: Ridgetop Well	District	490		490
WF-10: Mountain View Road Booster Pump Station	District	1302		1302
WF-12: Bella Vista Pump Station	District	1266		1266
WF-13: Well Decommissioning	District	248		248
WF-14: Water Shed Well	District	440		440
WF-15: Newberry Hill Pressure Reducing Station	District	70		70
WF-16: Newberry Hill Property Acquisition	District	305		305
M-1: Annual Water Main Replacement Program	District	600	300	900
M-2: Reservoir Recoating	District	100	100	200
M-3: Water Rights (Ridgetop/Westwind)	District	40		40
M-4: Water Use Efficiency Program and Leak Detection	District	90	45	135
M-5: Cross-Connection Control Program	District	42	21	63
M-6: Wellhead Protection Program	District	72	36	108
M-8: Equipment Purchase - Vehicles	District	665	0	665

Source: Silverdale Water District 2024 Water System Plan Update

Exhibit 4-127. Silverdale Water District Capital Project Costs (All numbers in 2024 $1000s)

Category Summary	Cost Years 2024-2029	Cost Years 2030-2044	Total Cost
Category I (Capacity Projects Required to Meet LOS)	13,402		13,402
Category II (Other Projects Needed for Maintenance and Operations)	11,821	502	12,825
Total	25,223	502	26,227

Source: Silverdale Water District 2024 Water System Plan Update

Exhibit 4-128. Silverdale Water District Capital Project Revenues (All numbers in 2024 $1000s)

Revenue Source	Revenue Years 2024-2029	Revenue Years 2030-2044	Total Revenue
District	28,466	1,764	20,729
Partnership	5,832		5,832
Total	25,909	652	26,561

Source: Silverdale Water District 2024 Water System Plan Update

Kitsap Public Utility District (KPUD)

Exhibit 4-129 shows planned capital projects. Exhibit 4-130 shows the capital projects costs for 2024-2029 and 2030-2044 and Exhibit 4-131 shows the capital project revenues for the same time periods.

Exhibit 4-129. KPUD Capital Projects (All numbers in 2024 $1000s)

Category/Project Description	Revenue Source	Cost 2024-2029	Cost 2030-2044	Total Cost
Category I: Capacity Increasing Projects				
North Peninsula 272nd 2nd Tank	New Debt	638		638
North Peninsula Phase 8C/D Phase 2	New Debt	250		250
South Bainbridge Deer Path Tank Replacement / DWL27106	KPUD General Revenue	190		190
South Bainbridge Deer Path Tank Replacement / DWL27106	New Debt (LUD borrowing)	605		605
South Bainbridge Fort Ward Tank Replacement	New Debt	250		250
Vinland Well 3 Water Main & Facility	New Debt	828		828
Vinland Well 4	New Debt	410		410
Category II: Capital Replacement, Maintenance and Operations				
Eldorado Hills Water Main Replacement	New Debt (PWB Loan)	2,471		2,471
Gazzam Lake Parking Lot	New Debt	25		25
HWY 104 Fish Passage Project (1 of 3)	New Debt (PWB Loan)	260		260

HWY 104 Fish Passage Project (2 of 3)	New Debt (PWB Loan)	260		260
Indian Hills Isolation Valves	New Debt	25		25
Indianola Water System Control & SCADA Improvements	New Debt	71		71
Keyport Intertie w/ SWD	New Debt	259		259
Long Lake - Ebbert Intertie	New Debt	25		25
Newberry Hills Wells 1	New Debt	115		115
North Bainbridge Hyla Ave	New Debt	36		36
North Bainbridge Sunrise Drive Services	New Debt	62		62
North Bainbridge Torvanger Road	New Debt	560		560
North Bainbridge Well 10 Fill Line	New Debt	25		25
North Peninsula 272nd 2nd Tank	New Debt	638		638
North Peninsula Downtown Kingston Water Main Replacement	New Debt	204		204
North Peninsula Hansville Booster Station Consolidations	New Debt	100		100
North Peninsula Jefferson Beach	New Debt	42		42
North Peninsula Kingston Control & SCADA Improvements	New Debt	125		125
North Peninsula Kingston Well 6 Control Upgrades	New Debt	21		21
North Peninsula Phase 8C/D Phase 2	New Debt	250		250
North Peninsula Phase 9 Water Main	New Debt	2,430		2,430
North Peninsula Ritter Well/Tanks Control & SCADA Improvements	New Debt	32		32
North Peninsula West Kingston Water Main Replacement	New Debt (PWB Loan)	1,130		1,130
Seabeck/Turko Generator	New Debt	50		50
South Bainbridge Abandon Sullivan Tank	New Debt	75		75
South Bainbridge Baker Hill Transfer Station Pumps/Wells/SCADA	New Debt	100		100

South Bainbridge Baker Hill Water Main	New Debt	583		583
South Bainbridge Blakely Avenue Water Main	New Debt	360		360
South Bainbridge Deer Path Tank Replacement / DWL27106	Grant (Federal) / DWSRF	1,205		1,205
South Bainbridge Well 10 Filter Plant / DWL26156	KPUD General Revenue	69		69
South Bainbridge Well 10 Filter Plant / DWL26156	Grant (Federal) / DWSRF	431		431
South Bainbridge Fort Ward Intertie & Control Valve	New Debt	450		450
South Bainbridge Fort Ward Tank Replacement	New Debt	250		250
South Bainbridge Fort Ward Water Main Replacement	New Debt	6,603		6,603
South Bainbridge Island Utility Filter Plant	New Debt	984		984
South Bainbridge Pleasant Beach Drive Water Main	New Debt	90		90
South Bainbridge West Blakely Avenue Water Main	New Debt	325		325
Suquamish Pressure Improvements - Alder St.	New Debt	210		210
Suquamish Pressure Improvements - Center St. & Pear St.	New Debt	210		210
Suquamish Watermain Replacement - Division St.	New Debt	330		330
Suquamish Watermain Replacement 2	New Debt	104		104
Vinland Bela Vista Phase 2 - Water Main	New Debt (PWB Loan)	830		830
Vinland Water System Control & SCADA Improvements	New Debt	100		100
Vinland Well 2 Filter Plant	New Debt	860		860
Vinland Well 2 Pump Replacement	New Debt	110		110
West Kitsap Isolation Valves	New Debt	68		68
West Kitsap Well 3 & Bridletree Booster Control & SCADA Upgrade	New Debt	50		50

Source: Direct Coordination with KPUD and 2024-2029 KPUD Water CIP

Exhibit 4-130. KPUD Capital Project Costs (All numbers in 2024 $1000s)

Category Summary	Cost Years 2024-2029	Cost Years 2030-2044	Total Cost
Category I (Capacity Projects Required to Meet LOS)	3,170		3,170
Category II (Other Projects Needed for Maintenance and Operations)	23,613		23,613
Total	26,783		26,783

Source: Direct Coordination with KPUD and 2024-2029 KPUD Water CIP

Exhibit 4-131. KPUD Capital Project Revenues (All numbers in 2024 $1000s)

Revenue Source	Revenue Years 2024-2029	Revenue Years 2030-2044	Total Revenue
New Debt	25,888		25,888
KPUD General Revenue	259		259
Grants	1,636		1,636
Total	26,783		26,783

Source: Direct Coordination with KPUD and 2024-2029 KPUD Water CIP

North Perry Water District

Exhibit 4-132 shows planned capital projects. Exhibit 4-133 shows the capital projects costs for 2024-2029 and 2030-2044 and Exhibit 4-134 shows the capital project revenues for the same time periods.

Exhibit 4-132. North Perry Capital Projects (All numbers in 2024 $1000s)

Category/Project Description	Revenue Source	Cost 2024-2029	Cost 2030-2044	Total Cost
Category I: Capacity Increasing Projects				
Well Drilling (345 Pressure Zone)	Rate Funded		330	330
Acquire Future Well Sites	Rate Funded		330	330
Perry Site – Drill test well	Rate Funded	290		290
New Riddell Reservoir	Rate Funded	2,400		2,400
New Keyport Reservoir	Rate Funded	3,600		3,600
New 490 Reservoir	Rate Funded		4,800	4,800

Reservoir Capacity/Safety/Seismic Improvements	Rate Funded	300	530	830
Category II: Capital Replacement, Maintenance and Operations				
Water Main Replacement - Fir to Illahee 8"	Rate Funded	210		210
Water Main Replacement - Pine from Riddell to Ridgemont 8"	Grant/Loan Funded	480		480
Water Main Replacement - NE 30th from Hillside to Pickering 8"	Grant/Loan Funded	1,200		1,200
Water Main Replacement - Denny from 8"	Rate Funded	675		675
Water Main Replacement - East 30th St from 8"	Rate Funded	1,420		1,420
Water Main Replacement - Franklin and Trenton 8"	Rate Funded	2,215		2,215
Water Main Replacement - Riddell Rd from Petersville to Olympus 8"	Rate Funded	685		685
Water Main Replacement - Riddell Rd from Almira to Pine 8"	Rate Funded	2,010		2,010
Water Main Replacement - Rue Villa 8"	Rate Funded	515		515
Water Main Replacement - Illahee 8"	Rate Funded	2,280		2,280
Water Main Replacement - Sunrise, Madrona, Allview 8"	Rate Funded		1,335	1,335
Water Main Replacement - Lonetree 6"	Grant/Loan Funded	400		400
Water Main Replacement - Grahns Ln 8"	Rate Funded	500		500
Water Main Replacement - Ortis, Fern Glen 8"	Rate Funded	1,005		1,005
Water Main Replacement - Skyline Acres 8"	Rate Funded		2,685	2,685
Water Main Replacement - Illahee Hill 12"	Rate Funded	1,220		1,220
Water Main Replacement - Sunset Reservoir to Illahee 12"	Rate Funded		1,855	1,855
Water Main Replacement - Cantershire Res to Bucklin Hill Rd 10"	Rate Funded		1,885	1,885
Water Main Replacement - Enetai 4"	Rate Funded		710	710
Water Main Replacement - Perry Ave Area 10" (Phase II)	Rate Funded	1,098	1,098	2,195
Water Main Replacement - Stone Way/Center St 8"	Rate Funded	650		650
Lead Fitting Replacement Program	Rate Funded	180	330	510
Annual Pipeline Replacement Program	Rate Funded	360	660	1,020
New Water Main - Highway 303 8" Extension	Rate Funded	650		650
New Water Main - East Sutton 8" Connection	Rate Funded		305	305
New Water Main - McWilliams to Sunset Reservoir - 12"	Rate Funded	1,085		1,085
New Water Main - 345 Pressure Zone - 8"	Rate Funded	1,225	9,605	10,830

New Water Main - 315 Pressure Zone - 8"	Rate Funded		5,560	5,560
New Water Main - 303 - 8"	Rate Funded		4,555	4,555
New Water Main - Hillside Drive 8" Extension	Rate Funded		220	220
Canoe Trail PRV station SCADA	Rate Funded	30		30
University Point PRV station SCADA	Rate Funded	30		30
SCADA Radio Upgrade 20171102-01	Rate Funded	30		30
Paulson PRV station SCADA/Vault Installation	Rate Funded	60		60
Old Military PRV station SCADA	Rate Funded	35		35
Olympic Village PRV SCADA / Vault Installation	Rate Funded	60		60
Allview PRV station SCADA	Rate Funded	35		35
Forest Dr PRV station SCADA	Rate Funded	35		35
Varsity PRV station SCADA	Rate Funded		35	35
Sabbatical PRVs SCADA	Rate Funded		35	35
Fern Glen PRV station SCADA	Rate Funded		35	35
Grahns PRV station SCADA	Rate Funded		35	35
Bahia Vista PRV Station	Rate Funded		35	35
District-wide SCADA Improvements	Rate Funded	60	130	190
Bucklin Site - Drill Test Well	Rate Funded	180		180
Perry Well Mn Treatment System	Grant/Loan Funded	1,200		1,200
Gilberton Well #1 Mn Treatment System	Grant/Loan Funded	1,080		1,080
Paulson Well Sounder Installation	Rate Funded	25		25
Center 2 Well Rehabilitation	Rate Funded	35		35
Meadowdale #2 Rehabilitation	Rate Funded	35		35
Bucklin Well House, Sandtrap, and Mn Treatment System	Rate Funded	600		600
Perry Site - Well House	Rate Funded	240		240
Various Well-Site Improvements	Rate Funded	150	265	415
Intertie with Silverdale Water District	Rate Funded		120	120
Reclaimed Water Evaluation	Rate Funded	90		90
Chlorination Changes / Upgrades	Rate Funded	150	265	415
Well 14 Rehabilitation	Rate Funded	35		35
Olympus Reservoir Flow Meter / Chlorine Analyzer Installation	Rate Funded	25		25
Sunset Reservoir Flow Meter / Chlorine Analyzer Installation	Rate Funded	25		25
Riddell Reservoir Flow Meter / Chlorine Analyzer Installation	Rate Funded	25		25
Badger Meter Replacement 20150112-02 (continued)	Rate Funded	960		960
Main Line Flow Meters	Rate Funded	75		75

District-wide Flow Meter Improvements	Rate Funded	60	130	190
Olympus 1 MG Reservoir Seismic Upgrade	Grant/Loan Funded			TBD
Keyport, Cantershire, Riddell Reservoir Seismic Evaluation	Rate Funded	60		60
Recoat Keyport 0.3MG Reservoir	Rate Funded	240		240
New 1MG Tank in 345 Pressure Zone (King Property)	Rate Funded	3,000		3,000
Reservoir Interior Cleaning (Every 5 years)	Rate Funded	60	60	120
Sunset Reservoirs Seismic Upgrades	Rate Funded	90	3,000	3,090
Sunset Power Upgrade 20190404-01 (continued)	Rate Funded	600		600
Bucklin Power	Rate Funded	60		60
Gilberton Generator	Rate Funded	90		90
Pickering Generator	Rate Funded	90		90
Meadowdale Generator	Rate Funded	90		90
Riddell Well Generator	Rate Funded	90		90
District-wide Generator Upgrades	Rate Funded	60	130	190
New District Office	Rate Funded	6,600	4,200	10800
Sunset Storage Building Replacement	Rate Funded	635		635
Riddell Roof Replacements (2015)/ 2015011203	Rate Funded	30		30
Shop Roof Replacement 20180206-04	Rate Funded	30		30
Olympus Pump Station Patch / Paint and Soft Starts Installation / Pump Replacement	Rate Funded	120		120
Riddell Pump Station Patch / Paint and Soft Starts Installation / Pump Replacement	Rate Funded	180		180
Cantershire Booster Pump Station	Rate Funded	70		70
Sunset Well House Construction	Rate Funded	60		60
Sunset Chlorine Storage Building Construction	Rate Funded	60		60
Illahee Firs Services (Arrowhead)	Rate Funded	10		10
Illahee Firs Services (Quinault Dr)	Rate Funded	10		10
Illahee Firs Services (Quinault Ct)	Rate Funded	10		10
Woodmere Services (Clover Blossom Ln)	Rate Funded	10		10
Roy / Roanoke Services (Roy)	Rate Funded	10		10
Illahee Rd Services (California to Arizona) / 20120103-05	Rate Funded	10		10
Illahee Rd Services (Oregon to Washington)	Rate Funded	10		10
Canoe/Navajo Area Services	Rate Funded	10		10
Lead Potholing (2017) 20170127-01 (continued)	Rate Funded	90		90

Site Security	Grant/Loan Funded	140		140
CDL Training	Rate Funded			TBD
Fire Station Fill Stations / 20140221-04	Rate Funded	10		10
Allview WM Disconnect	Rate Funded	10		10
Remove Individual Boosters and Install Centralized BPSs	Rate Funded	120		120
Install PRV at Bucklin Well	Rate Funded	90		90
District-wide PRV Improvements	Rate Funded	60	130	190
Consolidations with or Acquisitions of Neighboring Systems	Rate Funded		240	240
Flush 315/490 (W)	Rate Funded	30	60	90
Flush 345/490 (E)	Rate Funded	30	70	100
Update to the District GIS Database (20130823-05)	Rate Funded	180		180
Vehicle Replacement Program	Rate Funded	480	80	560
2025 Sanitary Survey	Rate Funded	10		10
2027 Water System Plan Update	Rate Funded	360		360

Source: North Perry Water District 2024 CIP

Exhibit 4-133. North Perry Capital Project Costs (All numbers in 2024 $1000s)

Category Summary	Cost Years 2024-2029	Cost Years 2030-2044	Total Cost
Category I (Capacity Projects Required to Meet LOS)	6,590	5,990	12,580
Category II (Other Projects Needed for Maintenance and Operations)	39,433	39,858	79,290
Total	46,023	45,848	91,870

Source: North Perry Water District 2024 CIP

Exhibit 4-134. North Perry Capital Project Revenues (All numbers in 2024 $1000s)

Revenue Source	Revenue Years 2024-2029	Revenue Years 2030-2044	Total Revenue
Rate Funds	41,523	45,848	87,370
Grants	4,500		4,500
Total	46,023	45,848	91,870

Source: North Perry Water District 2024 CIP

Sunnyslope Water District

Exhibit 4-135 shows planned capital projects. Exhibit 4-136 shows the capital projects costs for 2024-2029 and 2030-2044 and Exhibit 4-137 shows the capital project revenues for the same time periods.

Exhibit 4-135. Sunnyslope Water District Capital Projects (All numbers in 2013 $1000s)

Category/Project Description	Revenue Source	Cost 2024-2029	Total Cost
Category I: Capacity Increasing Projects			
Diesel Booster Pump Telemetry System	General Fund	2,000	2,000
Total			2,000
Category II: Capital Replacement, Maintenance and Operations			
Well No. 1 Water Level Monitoring	General Fund	5	5
Seismic Evaluation of Storage Reservoirs	General Fund	5	5
Seismic Upgrades to Reservoirs	General Fund	TBD	TBD
Reservoir Cleaning and Inspection	General Fund	10	10
Pipe Condition Assessment	General Fund	30	30
Alameda Neighborhood Water Main Replacement	General Fund	160	160
Clifton Road Water Main Replacement	General Fund	130	130
Eastview Neighborhood Water Main Replacement	General Fund	140	140
Westview Neighborhood Water Main Replacement	General Fund	120	120

Victory Place Water Main Replacement	General Fund	60	60
Sunnyslope Road Water Main Replacement	General Fund	90	90
Rhododendron Dr. Water Main Replacement	General Fund	100	100
Well No. 2 Water Main Replacement	General Fund	45	45
Victory Drive Loop	General Fund	200	200

Source: Direct Coordination with Sunnyslope Water District and 2013 Sunnyslope Water District Comprehensive Plan

Exhibit 4-136. Sunnyslope Water District Capital Project Costs (All numbers in 2013 $1000s)

Category Summary	Cost Years 2024-2029	Cost Years 2030-2044	Total Cost
Category I (Capacity Projects Required to Meet LOS)	2,000		2,000
Category II (Other Projects Needed for Maintenance and Operations)	1,095		1,095
Total	3,095		3,095

Source: Direct Coordination with Sunnyslope Water District and 2013 Sunnyslope Water District Comprehensive Plan

Exhibit 4-137. Sunnyslope Water District Capital Project Revenues (All numbers in 2013 $1000s)

Revenue Source	Revenue Years 2024-2029	Revenue Years 2030-2044	Total Revenue
General Fund	3,095		3,095
Total	3,095		3,095

Source: Direct Coordination with Sunnyslope Water District and 2013 Sunnyslope Water District Comprehensive Plan

Manchester Water District

Exhibit 4-138 shows planned capital projects. Exhibit 4-139 shows the capital projects costs for 2024-2029 and 2030-2044 and Exhibit 4-140 shows the capital project revenues for the same time periods.

Exhibit 4-138. Manchester Water District Capital Projects (All numbers in 2019 $1000s)

Category/Project Description	Revenue Source	Cost 2024-2029	Cost 2030-2044	Total Cost
Well 12 Development			950	950
WM1 Annual Water Main Replacement		1,200	7,237	8,437
PZ4 South 430 Zone to 500 Zone Conv.		875		875
PZ2 North 430 Zone to 480 Zone Conv.			1,780	1,780
WSUD Mile Hill Drive Intertie			305	305
Well 5 Rehabilitation		400		400
Cedar Avenue BPS Replacement		810		810
WSUD Nevada Street Intertie			100	100
Total		3,285	10,372	

Source: Manchester Water District 2019 Water System Plan

Exhibit 4-139. Manchester Water District Capital Project Costs (All numbers in 2019 $1000s)

Category Summary	Cost Years 2024-2029	Cost Years 2030-2044	Total Cost
Category I (Capacity Projects Required to Meet LOS)	0	950	950
Category II (Other Projects Needed for Maintenance and Operations)	3,285	9,422	12,707
Total	3,285	10,372	13,657

Source: Manchester Water District 2019 Water System Plan

Exhibit 4-140. Manchester Water District Capital Project Revenues (All numbers in 2019 $1000s)

Revenue Source	Revenue Years 2024-2029	Revenue Years 2030-2044	Total Revenue
Yearly Allowance	800	2,800	3,600
Total	800	2,800	3,600

Source: Manchester Water District 2019 Water System Plan

REFERENCES

To be used as needed.

Example reference below:

Kitsap County Department of Emergency Management (DEM). (2020). *Comprehensive Emergency Management Plan.* **https://www.kitsapdem.com/wp-content/uploads/2021/08/2020-Kitsap-County-Comprehensive-Emergency-Management-Plan.pdf.**

In-text citation style: (Kitsap County DEM 2020).

Appendix A

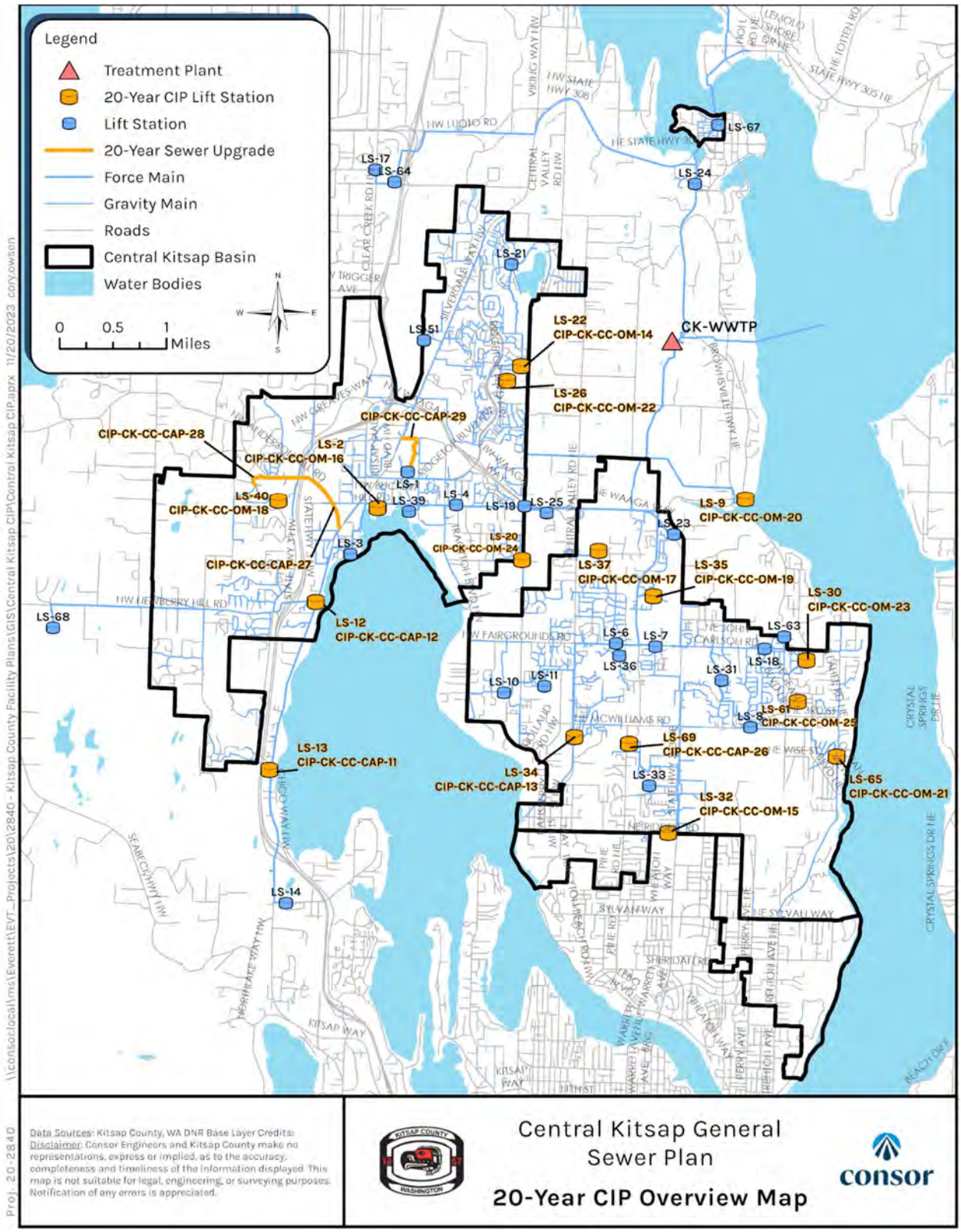
SANITARY SEWER SYSTEM MAPS

Appendix A

SANITARY SEWER SYSTEM MAPS

- Central Kitsap General Sewer Plan
- Kingston General Sewer Plan
- Manchester Sewer Plan
- Port Orchard General Sewer Plan
- Poulsbo Sewer Plan
- Suquamish General Sewer Plan
- West Sound Utility District Sewer Plan

Figure 11-2| 20-Year Collection and Conveyance CIP (2029-2048)



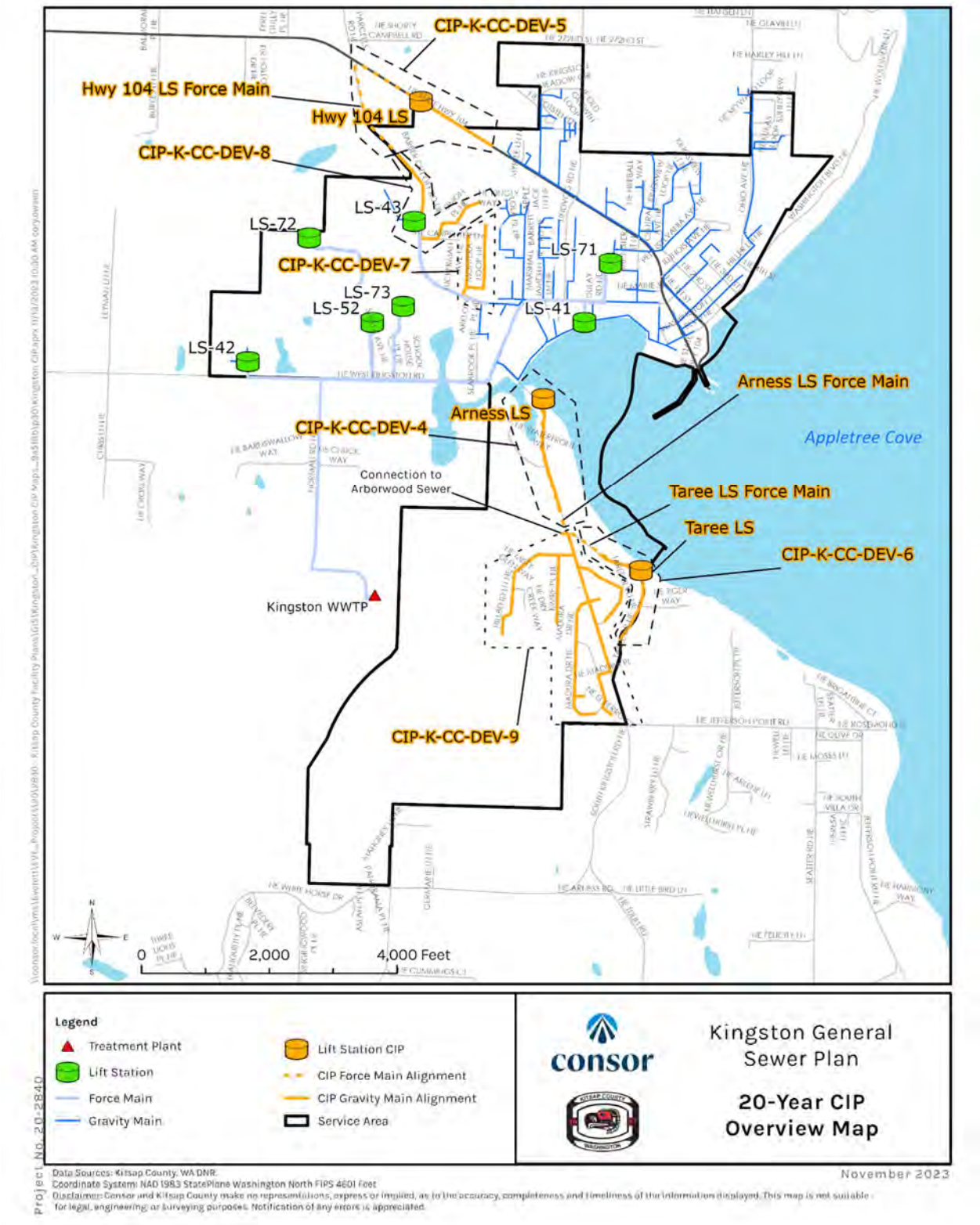
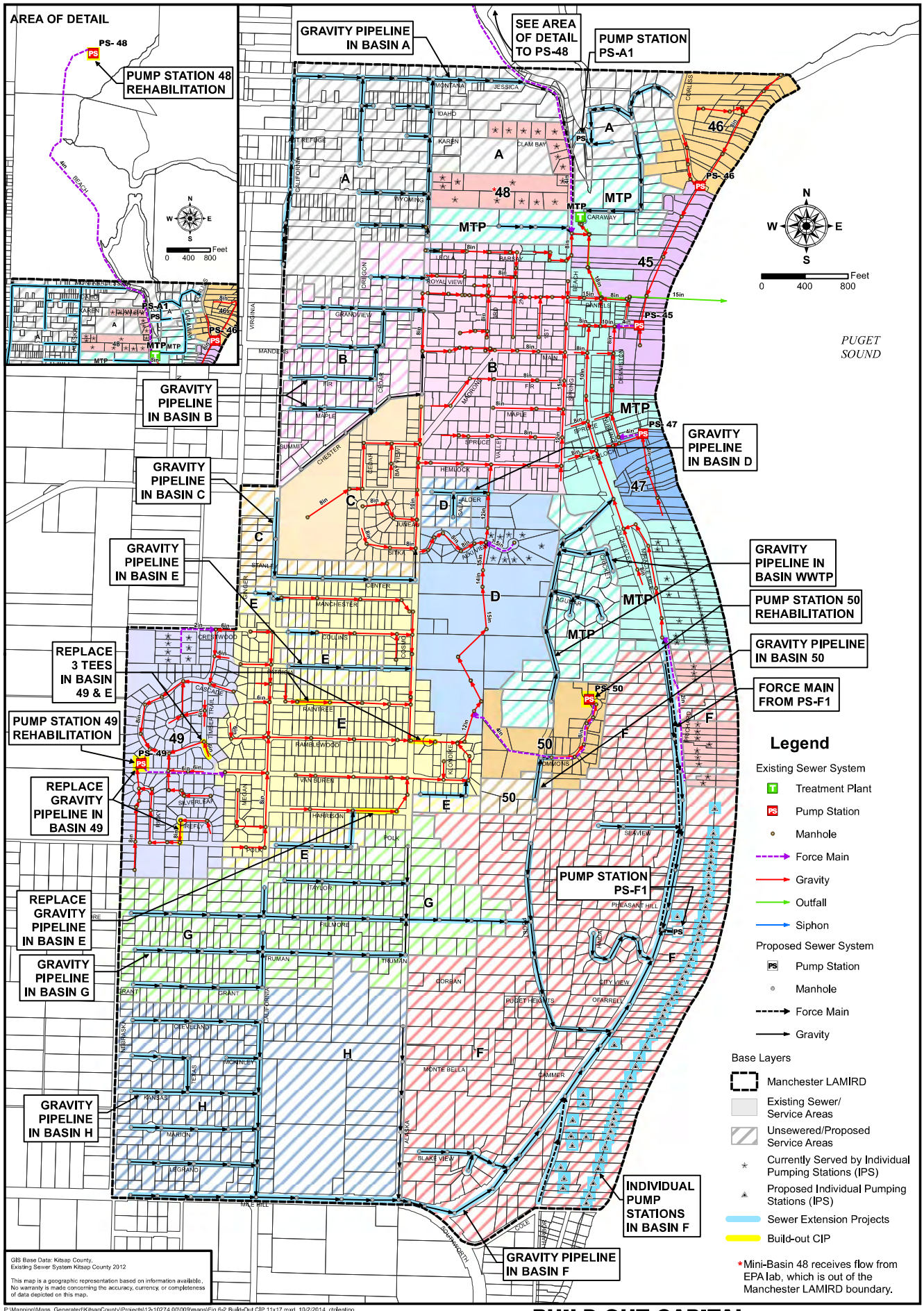


Figure 11-2 | 20-year CIP Overview Map



P:\Mapping\Maps_Generated\KitsapCounty\Projects\12-10274.00\009\maps\Fig 6-2 Build-Out CIP 11x17.mxd 10/2/2014 ctolentino

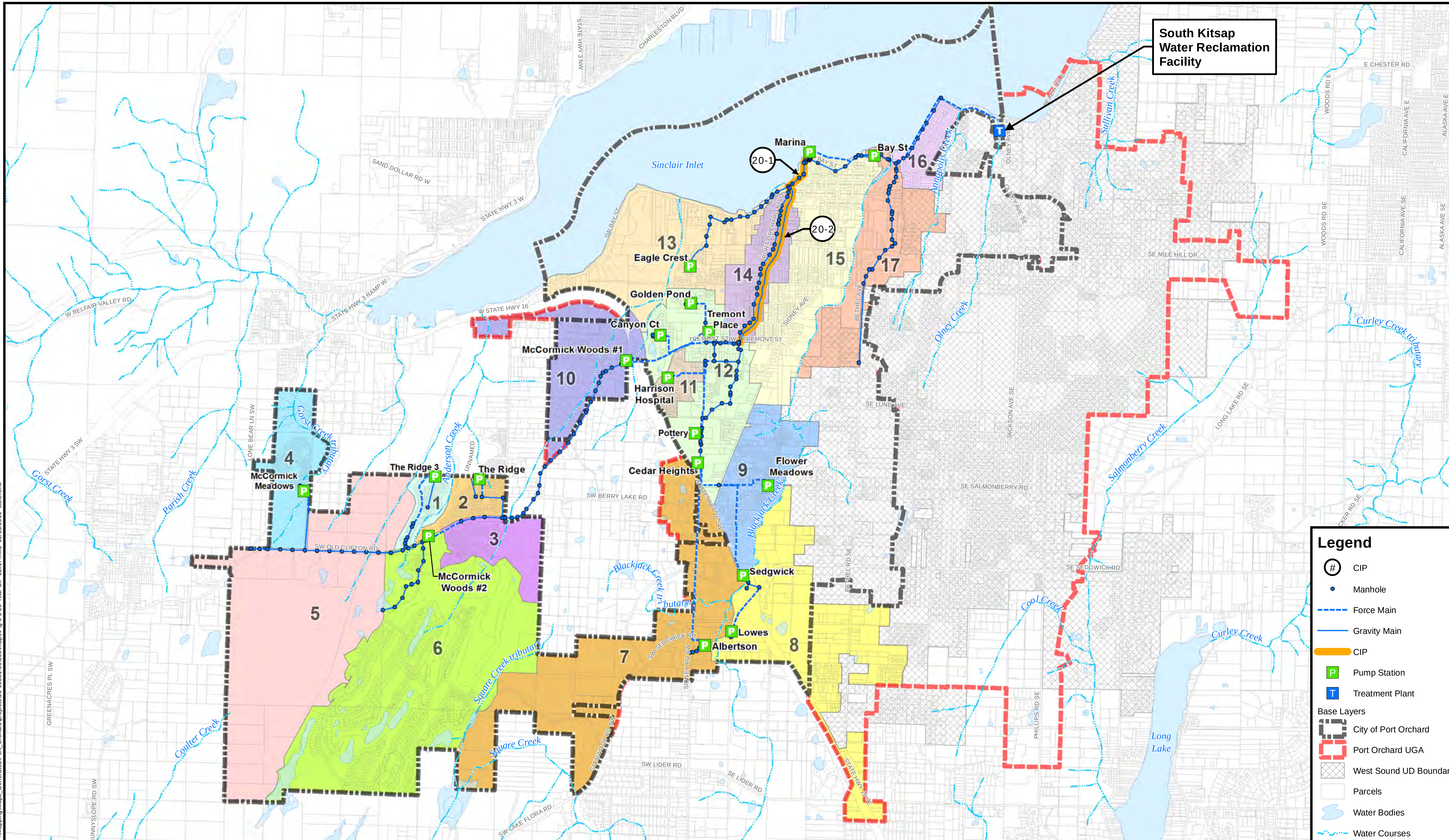
BHC Consultants, LLC
1601 Fifth Avenue, Suite 500
Seattle, Washington 98101

206.505.3400
206.505.3406 (fax)
www.bhcconsultants.com

BUILD-OUT CAPITAL IMPROVEMENT PROJECTS

MANCHESTER SEWER
FACILITIES STRATEGY PLAN
Kitsap County
October 2014

Figure
6-2


South Kitsap Water Reclamation Facility
Sinclair Inlet
Marina
Bay St
20-1
20-2
13
14
15
16
17
Eagle Crest
Golden Pond
Tremont Place
Canyon Ct
McCormick Woods #1
10
11
12
Harrison Hospital
Pottery
Cedar Heights
9
Flower Meadows
4
McCormick Meadows
The Ridge 3
The Ridge
1
2
3
McCormick Woods #2
5
6
7
8
Sedgwick
Lowes
Albertson
Gorst Creek
Parish Creek
Coulter Creek
Square Creek
Square Creek tributary
Blackjack Creek
Blackjack Creek tributary
Anderson Creek
Annapolis Creek
Olney Creek
Sullivan Creek
Salmonberry Creek
Cool Creek
Curley Creek
Curley Creek tributary
Long Lake
W BELFAIR VALLEY RD
STATE HWY 3 RAMP W
W STATE HWY 16
SAND DOLLAR RD W
STATE HWY 3 W
STATE HWY 3 NW
CHARLESTON BLVD
SW BAY ST
BAY ST
PORT ORCHARD BLVD
TREMONT ST W
TREMONT ST
SIDNEY AVE
BETHEL AVE
OLNEY AVE
SE MILE HILL DR
SE LUND AVE
SE SALMONBERRY RD
SE SEDGWICK RD
SW SEDGWICK RD
SW BERRY LAKE RD
SW OLD CLIFTON RD
SW LIDER RD
SE LIDER RD
SW LAKE FLORA RD
STATE HWY 16 SW
STATE HWY 3 SW
LONE BEAR LN SW
GREENACRES PL SW
SUNNYSLOPE RD SW
JACKSON AVE SE
PHILLIPS RD SE
BETHEL RD SE
LONG LAKE RD SE
E CHESTER RD
WOODS RD E
WOODS RD SE
CALIFORNIA AVE E
CALIFORNIA AVE SE
ALASKA AVE E
ALASKA AVE SE
Legend
CIP
Manhole
Force Main
Gravity Main
CIP
Pump Station
Treatment Plant
Base Layers
City of Port Orchard
Port Orchard UGA
West Sound UD Boundary
Parcels
Water Bodies
Water Courses

P:\Mapping\Maps_Generated\Port_Orchard\projects\15-10381.00\005\maps\Fig 8-3 20-Year CIP 11x17.mxd 12/15/2015 ctolentino

BHC CONSULTANTS

Sewer System: City of Port Orchard 2015
Kitsap County base data 2015
Data sources supplied may not reflect current or actual conditions. This map is a geographic representation based on information available. It does not represent survey data. No warranty is made concerning the accuracy, currency, or completeness of data depicted on this map.
BHC Consultants LLC., assumes no responsibility for the validity of any information presented herein, nor any responsibility for the use or misuse of the data.

N

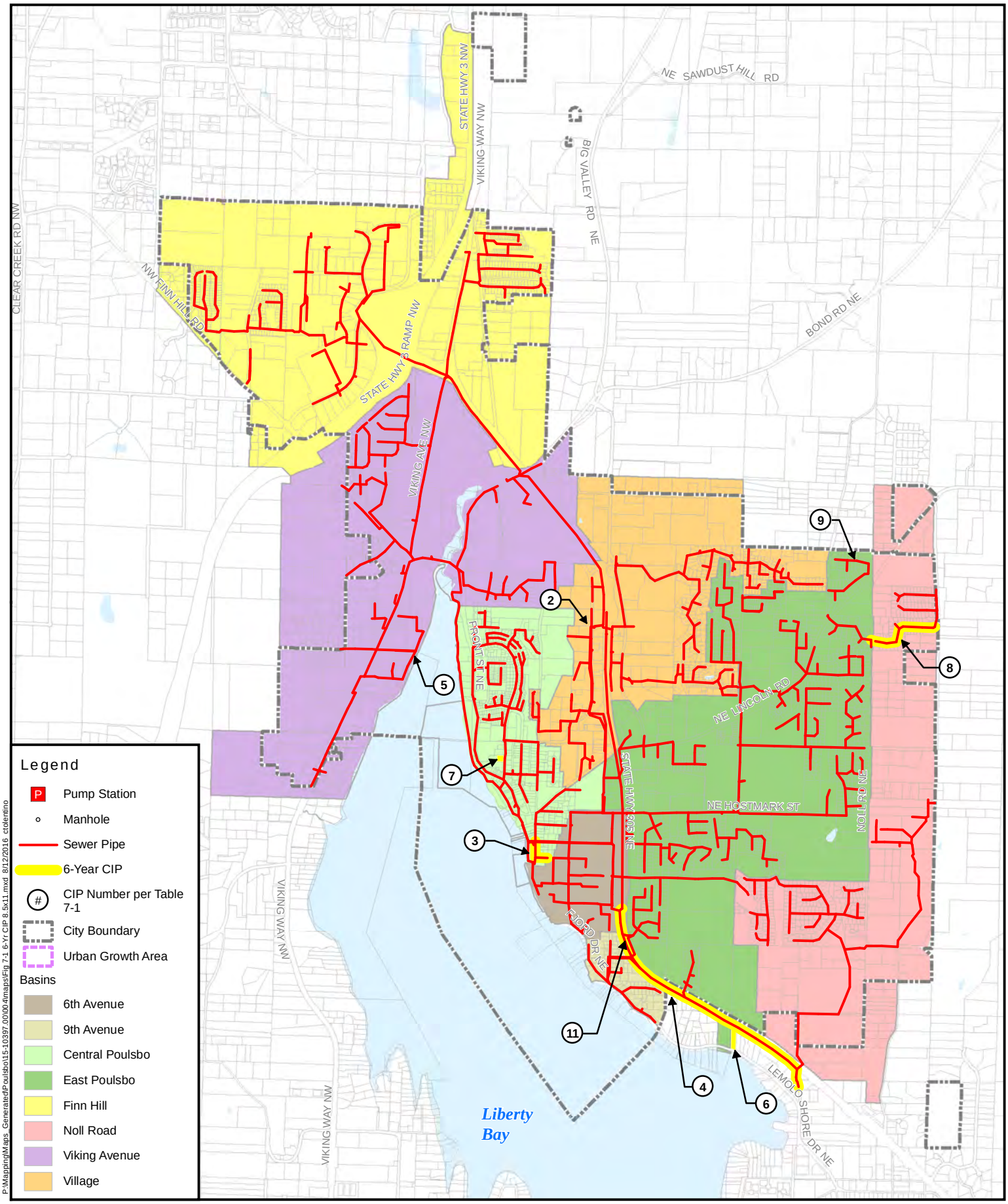
0 3,000 6,000 Feet

City of Port Orchard

20-Year CIP

General Sewer Plan Update
City of Port Orchard, Washington

Figure
8-3



P:\Mapping\Maps_Generated\Poulsbo\15-10397.000\04maps\Fig 7-1 6-Yr CIP 8.5x11.mxd 8/12/2016 ctolentino

This map is a geographic representation based on available information. No warranty is made concerning the accuracy, currency, or completeness of data depicted on this map. Source: Kitsap County.

BHC CONSULTANTS

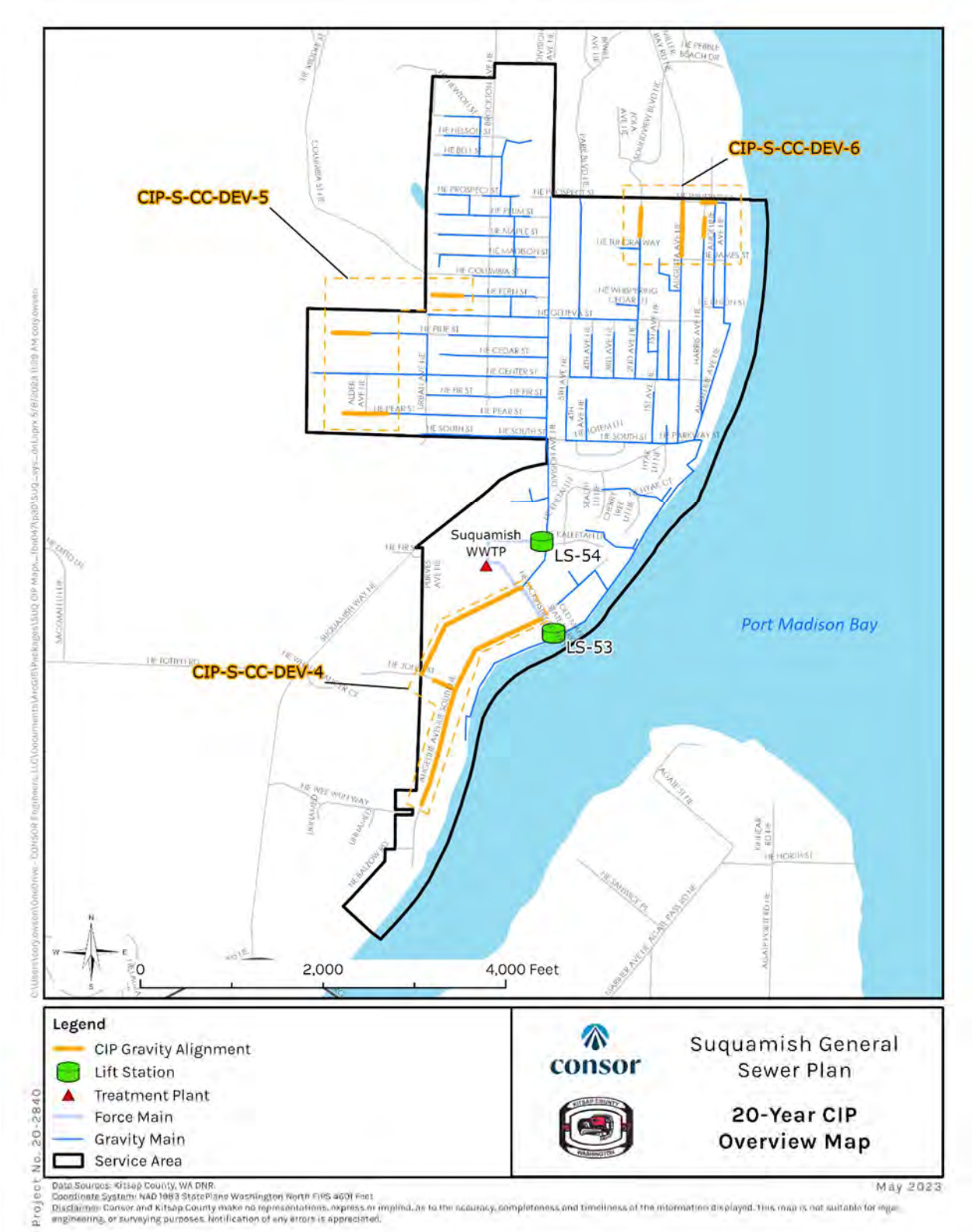
N
W E
S

0 1,250 2,500 Feet

6-Year CIP
Comprehensive Sewer Plan
City of Poulsbo
August 2016

Figure
7-1

Figure 11-2 | 20-year CIP Overview Map



Sewer Service Area

Force Main
Gravity Main
Sanitary Basin
Future Sanitary Basin
Annexed Area
2016 Urban Growth Area

Treatment Plant

Lift Stations
Active
Future
To Retire

N
W E
S

Data Sources;
West Sound Utility District GIS Department
Kitsap County GIS Department

This map was printed on Friday, December 29, 2023

0 0.25 0.5 1 1.5 2 Miles

West Sound UTILITY DISTRICT
2924 SE Lund Ave
Port Orchard, WA 98366
PHONE# 360-874-5008