



**City Council Study Session
Tuesday, May 19, 2026**

Council Chambers
280 Madison Ave N
Bainbridge Island, WA

and

Remote Meeting on Zoom
<https://bainbridgewa.zoom.us/j/92947338351>
or Telephone: US: +1 253 215 8782
Webinar ID: 929 4733 8351

Agenda

- 1. Call to Order / Roll Call - 6:00 pm**
- 2. Approval of Agenda / Conflict of Interest Disclosure - 6:05 pm**
- 3. Regular Business**
 - A. (6:10 pm) Receive Update from Bainbridge Island Senior Center regarding Redevelopment Project, Including Review of 90% Design
 - B. (6:30 pm) Present 2027-2028 Economic Outlook, Assumptions and Forecast
 - C. (7:00 pm) Consider Environmental Element of the Comprehensive Plan
 - D. (7:15 pm) Consider Economics Element of the Comprehensive Plan
 - E. (7:35 pm) Consider Capital Facilities Element of the Comprehensive Plan
- 4. Committee Reports - 7:55 pm**
- 5. Adjournment - 8:05 pm**

The City of Bainbridge Island's meetings are wheelchair accessible. The City also provides auxiliary aids and services for effective communication such as assistive listening devices, closed captioning, and print materials in digital format. For other reasonable accommodations and/or modification to programs, services, or activities, please contact the ADA Coordinator at cityadmin@bainbridgewa.gov or 206-842-2545 as soon as possible, preferably at least 2 business

days prior to the meeting.



City Council Study Session Agenda Bill **Tuesday, May 19, 2026**

Agenda Item: (6:10 pm) Receive Update from Bainbridge Island Senior/Community Center regarding Redevelopment Project, Including Review of 90% Design

Department: City Council Study Session

Agenda Section: Regular Business

Estimated Time: 20 Minutes

Recommendation:

I move to forward the 90% design for the Bainbridge Island Senior/Community Center Redevelopment to the May 26, 2026, consent agenda for approval.

Narrative:

The City of Bainbridge Island (City) has entered into a Memorandum of Understanding (MOU) for the redevelopment of the Waterfront Park Senior/Community Center. The agreement envisions that the Bainbridge Island Senior & Community Center (BISCC) will develop plans for a new Senior/Community Center and raise sufficient funds to construct the project. A new parcel will be created and transferred to the control of BISCC. BISCC will construct the improvements and then deed the improvements back to the City. After the building is completed and deeded to the City, the City will own and maintain the new larger facility, from which BISCC will offer services and programs for the Bainbridge Island senior community.

To ensure the design of the new Senior/Community Center is acceptable to the City, the MOU requires the design of the new Senior/Community Center be submitted

for review and approval by the City Council at the 30% design stage, 60% design stage, and 90% design stage of the project. Council received information about the 60% design on August 12, 2025.

Representatives from BISCC will provide a check-in with the Council at the 90% design stage for Council's review and concurrence at this evening's meeting.

Fiscal Impact:

Community Engagement and Outreach:

Attachments:

1. BISCC - 20260519 90%DESIGN MEETING



BAINBRIDGE ISLAND SENIOR COMMUNITY CENTER - COMMUNITY CONNECTIONS THROUGH PARKS



PROJECT: **BAINBRIDGE ISLAND SENIOR COMMUNITY CENTER**
PROJECT NUMBER: **2024-001**
SUBMITTAL: **DESIGN DEVELOPMENT**
DATE: **FEBRUARY 2, 2026**

REVISIONS:		
NO.	DATE	DESCRIPTION

STAMP:

PRINCIPAL IN CHARGE: JB
DRAWN BY: JP DATE: 02/02/2026
REVIEWED BY: JB DATE: 02/02/2026

SHEET TITLE:
ILLUSTRATIVE SITE PLAN

SCALE: 1"=10'
SHEET NUMBER:
L000



NORTH ENTRY SIGNAGE & WAYFINDING

BAINBRIDGE ISLAND SENIOR & COMMUNITY CENTER

EXTERIOR DESIGN PROGRESS 2/18/26





EXTERIOR DESIGN PROGRESS 2/18/26

BAINBRIDGE ISLAND SENIOR & COMMUNITY CENTER





EXTERIOR DESIGN PROGRESS 2/18/26

BAINBRIDGE ISLAND SENIOR & COMMUNITY CENTER

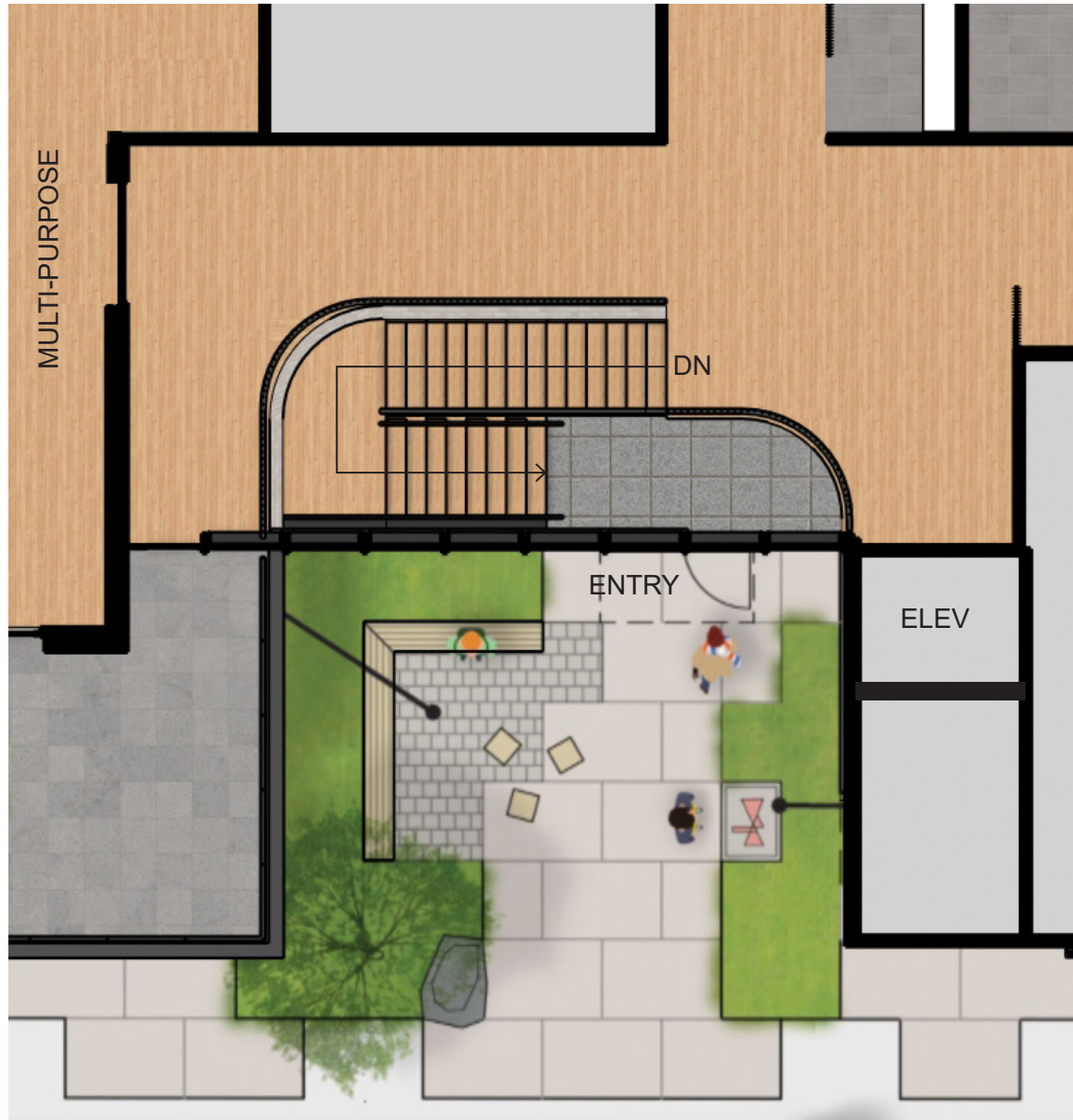




EXTERIOR DESIGN PROGRESS 2/18/26

BAINBRIDGE ISLAND SENIOR & COMMUNITY CENTER





6:12 STAIR STUDY

BAINBRIDGE ISLAND SENIOR & COMMUNITY CENTER

EXTERIOR DESIGN PROGRESS 2/18/26



UPPER LEVEL ENTRY

BAINBRIDGE ISLAND SENIOR & COMMUNITY CENTER

INTERIOR DESIGN PROGRESS 2/18/26



CAFE

BAINBRIDGE ISLAND SENIOR & COMMUNITY CENTER

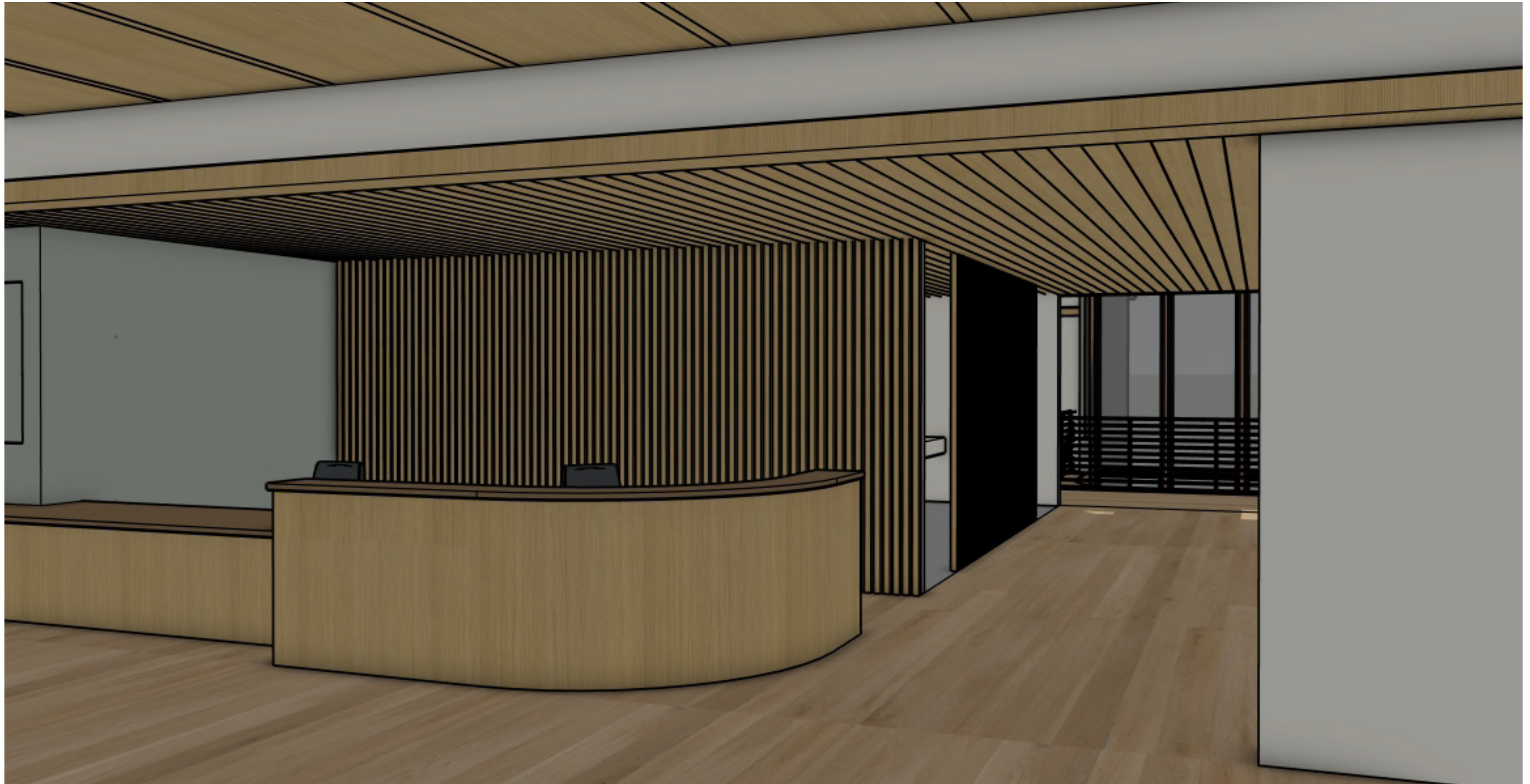
INTERIOR DESIGN PROGRESS 2/18/26



FIRESIDE

BAINBRIDGE ISLAND SENIOR & COMMUNITY CENTER

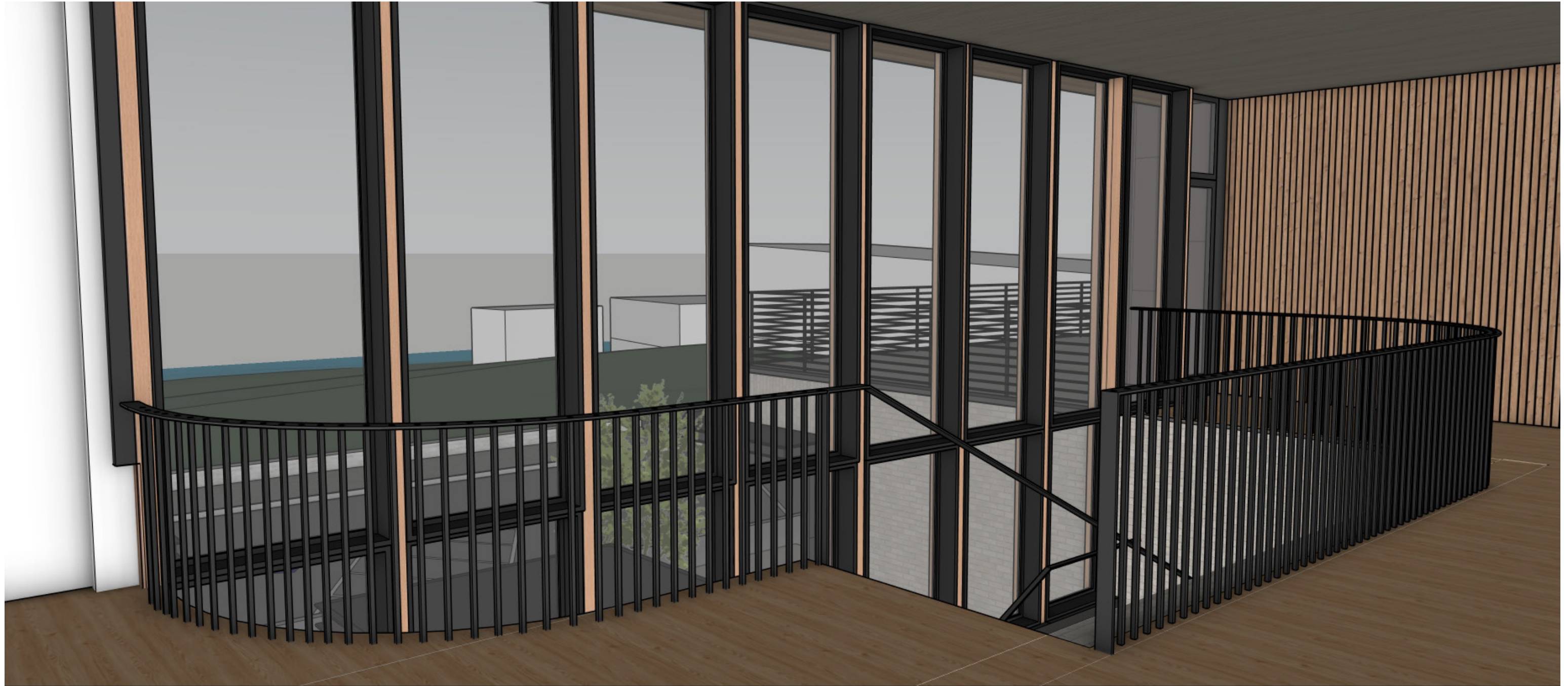
INTERIOR DESIGN PROGRESS 2/18/26



RECEPTION AND MAIN CORRIDOR

BAINBRIDGE ISLAND SENIOR & COMMUNITY CENTER

INTERIOR DESIGN PROGRESS 2/18/26



EXTERIOR DESIGN PROGRESS 2/18/26

BAINBRIDGE ISLAND SENIOR & COMMUNITY CENTER





MULTI-PURPOSE ROOM

BAINBRIDGE ISLAND SENIOR & COMMUNITY CENTER

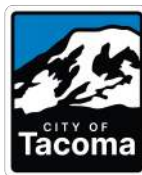
INTERIOR DESIGN PROGRESS 2/18/26

BISCC Resilience Hub Review

Regional Catastrophic Preparedness Grant
20 October 2025



Seattle
Office of Emergency
Management



**Resilient
Communities**

City of Seattle Contact: [Consuelo Crow](#)
Resilient Communities Contact: [Travis Shappell](#)

YOUR CUSTOM SOLAR SYSTEM DESIGN



System Size
91.45 kW

Total DC nameplate rating solar array,
made up of 155 solar modules



Annual Production
79,049 kWh

Amount of energy your system is
expected to produce in the first year



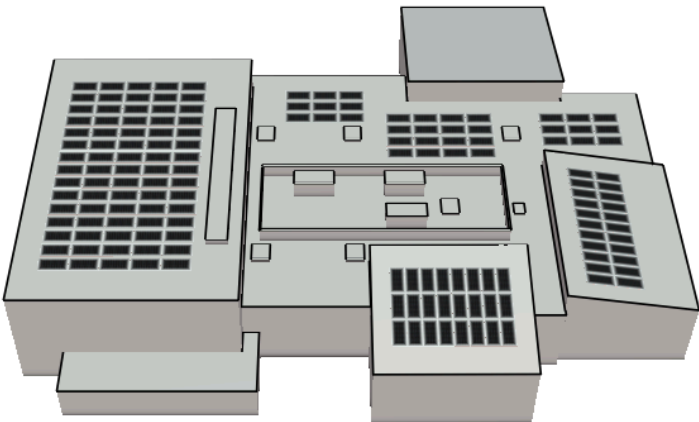
Energy Offset
22%

Percentage of your current electricity
bill that will be offset by your solar
system



Est. Annual Savings
\$15,252.83

Amount you are expected to save on
your electricity bill in the first year



System Cost \$234,154.00

Price per watt \$2.56*

*Price per watt is calculated by dividing the System Cost by the total DC name plate rating of the solar energy system (System Size above in watts)



 System

SEG-590-BTA-BG
SEG SOLAR INC.

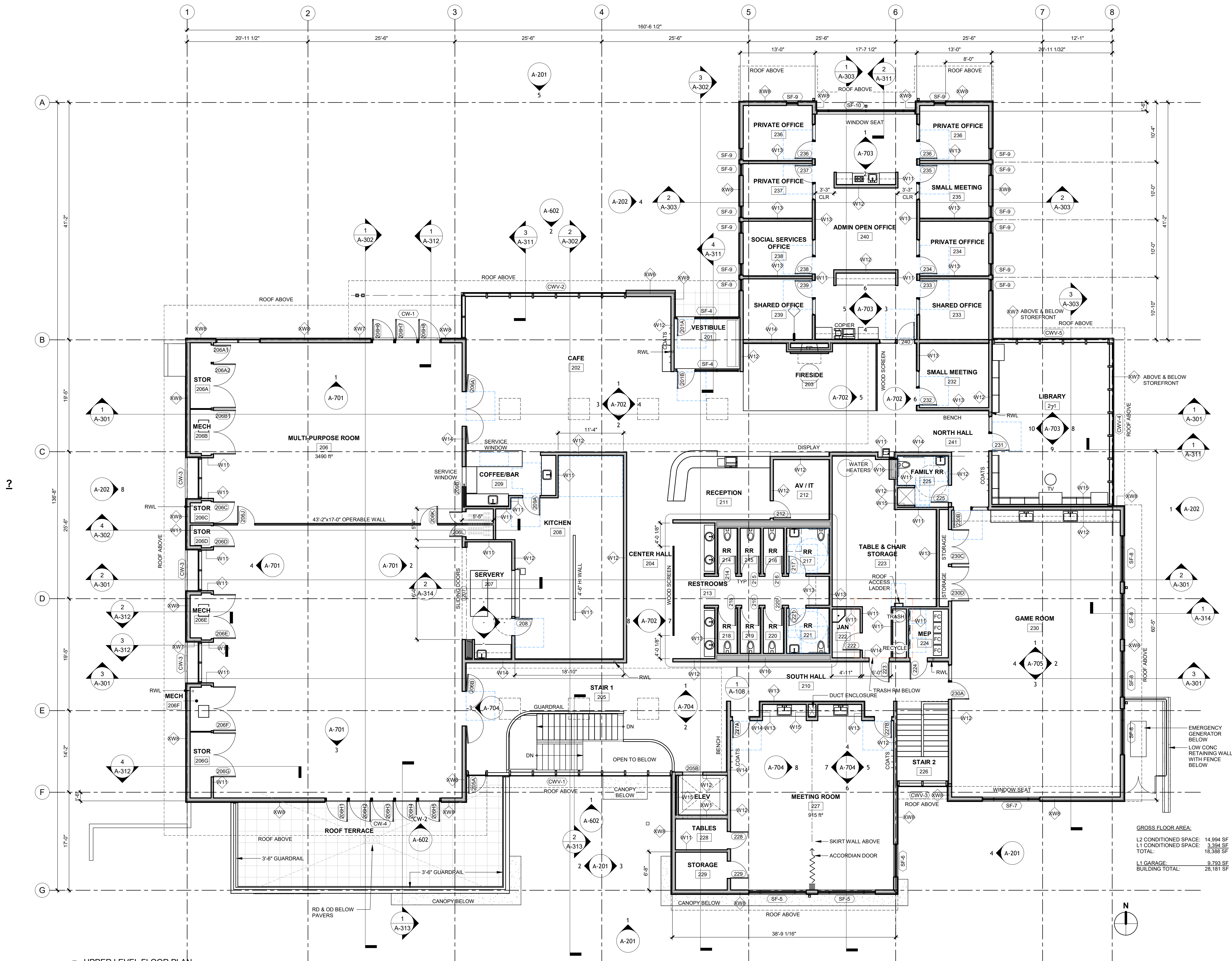
Modules Qty: 155

SE50kUS
SolarEdge Technologies Inc.

Inverters Qty: 2

C651U
SolarEdge Technologies Inc.

DC optimizers Qty: 155



1 UPPER LEVEL FLOOR PLAN
1/8" = 1'-0"

BAINBRIDGE ISLAND SENIOR
& COMMUNITY CENTER
370 BRIEN DRIVE SOUTHWEST
BAINBRIDGE ISLAND, WA

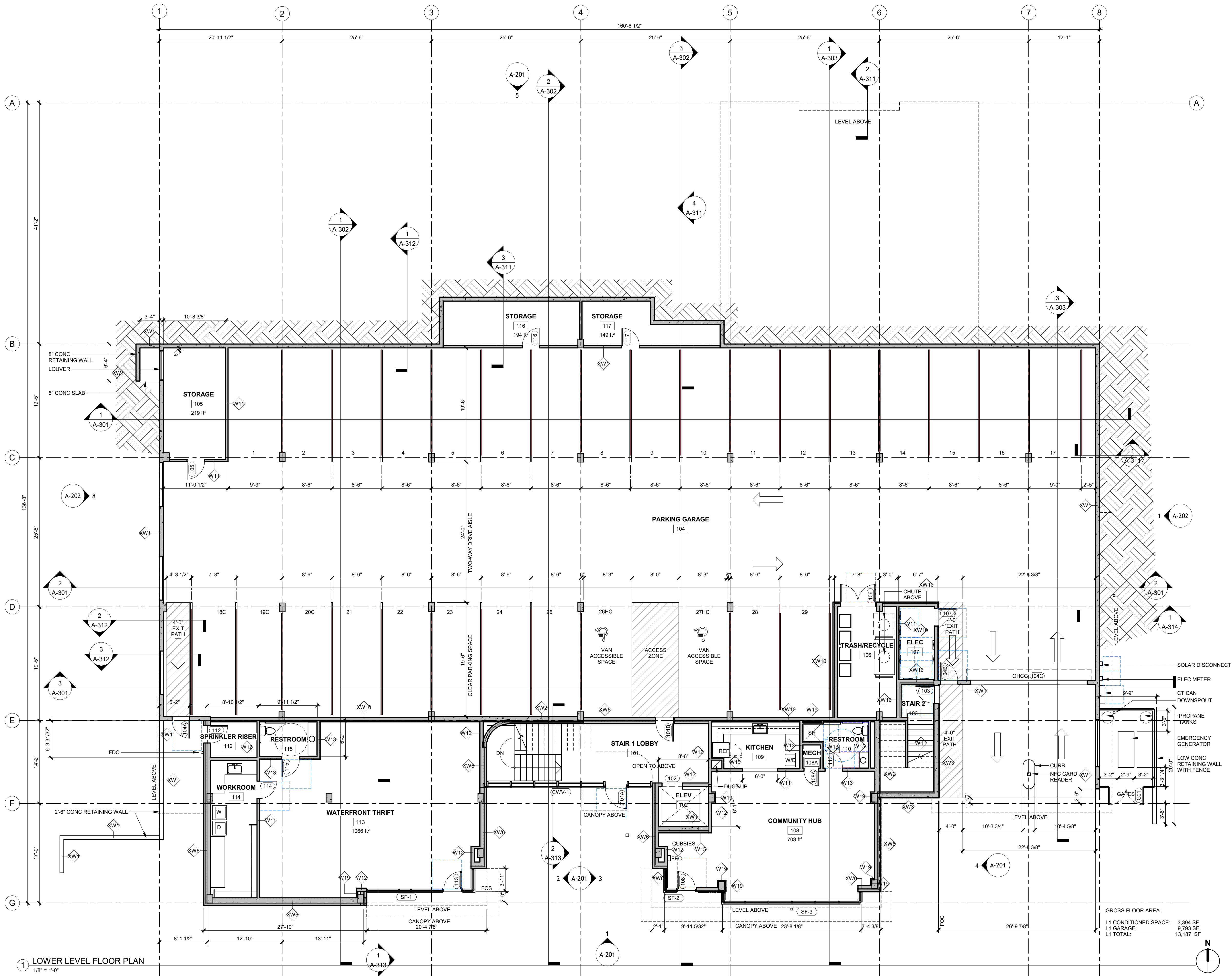
BAINBRIDGE ISLAND SENIOR & COMMUNITY CENTER

CONSTRUCTION
DOCUMENTS
PROGRESS SET

PROJECT #	2224
ISSUE DATE	5/6/2026
# Description	Date

UPPER LEVEL FLOOR
PLAN

A-105



1 LOWER LEVEL FLOOR PLAN
1/8" = 1'-0"

GROSS FLOOR AREA:	
L1 CONDITIONED SPACE:	3,394 SF
L1 GARAGE:	9,793 SF
L1 TOTAL:	13,187 SF

BAINBRIDGE ISLAND SENIOR
& COMMUNITY CENTER
370 BRIEN DRIVE SOUTHWEST
BAINBRIDGE ISLAND, WA
BAINBRIDGE ISLAND SENIOR & COMMUNITY CENTER

CONSTRUCTION
DOCUMENTS
PROGRESS SET

PROJECT #	2224
ISSUE DATE	5/6/2026
# Description	Date

TO THE FULLEST EXTENT PERMITTED BY LAW, THIS DOCUMENT, REGARDLESS OF FORM, SHALL REMAIN THE EXCLUSIVE PROPERTY OF WENZLAU ARCHITECTS, P.C. (WENZLAU). WENZLAU ARCHITECTS DOES NOT REPRESENT THAT THIS DOCUMENT IS COMPLETE, OR THAT IT IS CONSISTENT WITH CURRENT CONDITIONS, OR THAT ANY PART OF THE PROJECT HAS BEEN COMPLETED. THIS DOCUMENT SHALL NOT BE USED WITHOUT THE FULL AND UNREVOKED PARTICIPATION OF WENZLAU ARCHITECTS.

LOWER LEVEL FLOOR
PLAN

A-104



City Council Study Session Agenda Bill **Tuesday, May 19, 2026**

Agenda Item: (6:30 pm) Present 2027-2028 Economic Outlook, Assumptions and Forecast

Department: City Council Study Session

Agenda Section: Regular Business

Estimated Time: 30 Minutes

Recommendation:

N/A - Information only

Narrative:

This agenda item is part of an ongoing series of Council discussions regarding the 2027-2028 Biennial Budget, which is currently scheduled for adoption in November 2026. Today's discussion will focus on the 2027-2028 baseline budget, consisting of all operating revenues and expenditures at current service and staffing levels, and assuming increases for inflation. Staff will recap the economic assumptions and key budget drivers, present financial forecasts for 2027-2028 and a longer-term outlook, and review projected fund balance levels incorporating both operating revenues and expenditures and capital projects previously adopted in the Capital Improvement Plan.

Fiscal Impact:

Community Engagement and Outreach:

Attachments:

1. Presentation-Baseline Budget Forecast_20260519_PDF



**CITY OF
BAINBRIDGE ISLAND**

Baseline Budget 2027-28 Biennial Budget

Prepared for:
City Council
May 19, 2026





Today's Financial & Budget Policy Discussion

1

Calendar, Revenue &
Expense Overview

2

Baseline
Discussion & Key
Factors

3

Baseline
Assumptions

4

General Fund &
Utility Forecast

Budget Timeline



May

- 2027-2028 Economic Outlook presentation

June-August

- Staff development of 2027-2028 Proposed Operating Budget
- Staff development of 2027-2032 Capital Improvement Plan (CIP)

2027-2028 Baseline Budget



Budget Timeline

September

- City Manager delivery of the 2027-2028 Proposed Budget to Council

October

- Council Review
- Hold Public Hearings for Property Tax and Initial Budget Ordinance (including 6-year CIP)

November

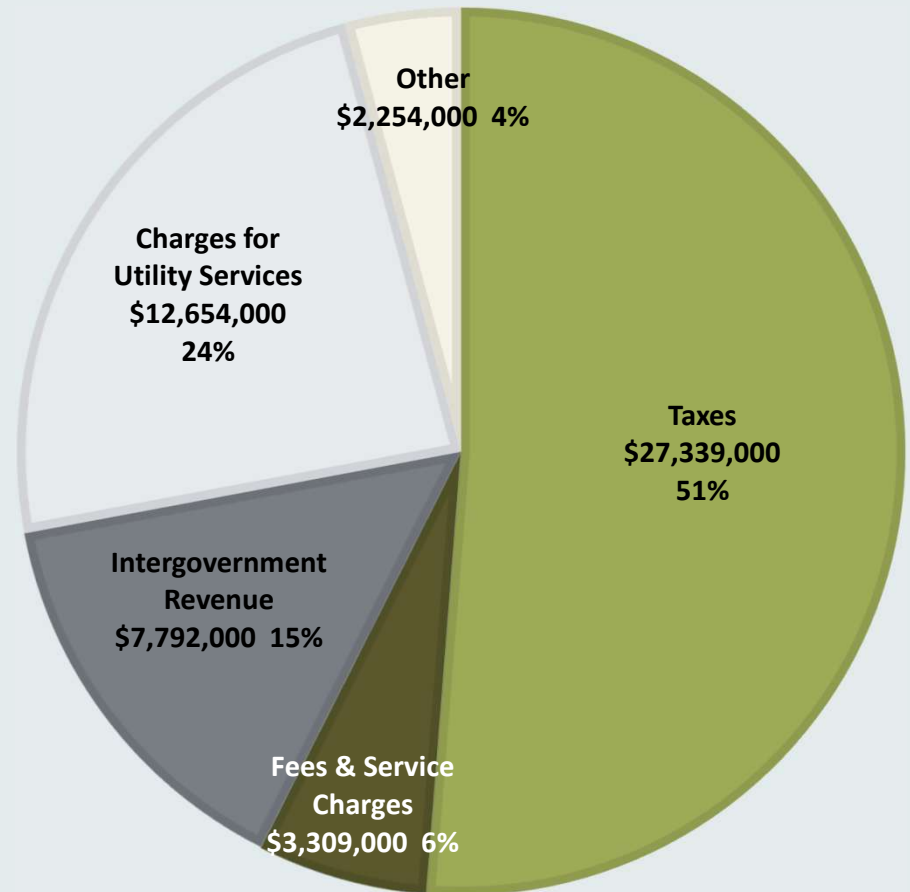
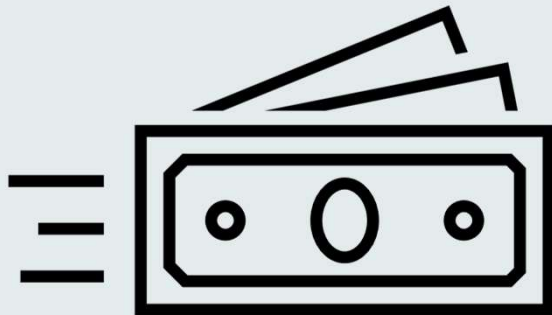
- Council Review
- Final Budget Public Hearing and planned adoption of 2027-2028 Budget and 6-year CIP

2027-2028 Baseline Budget

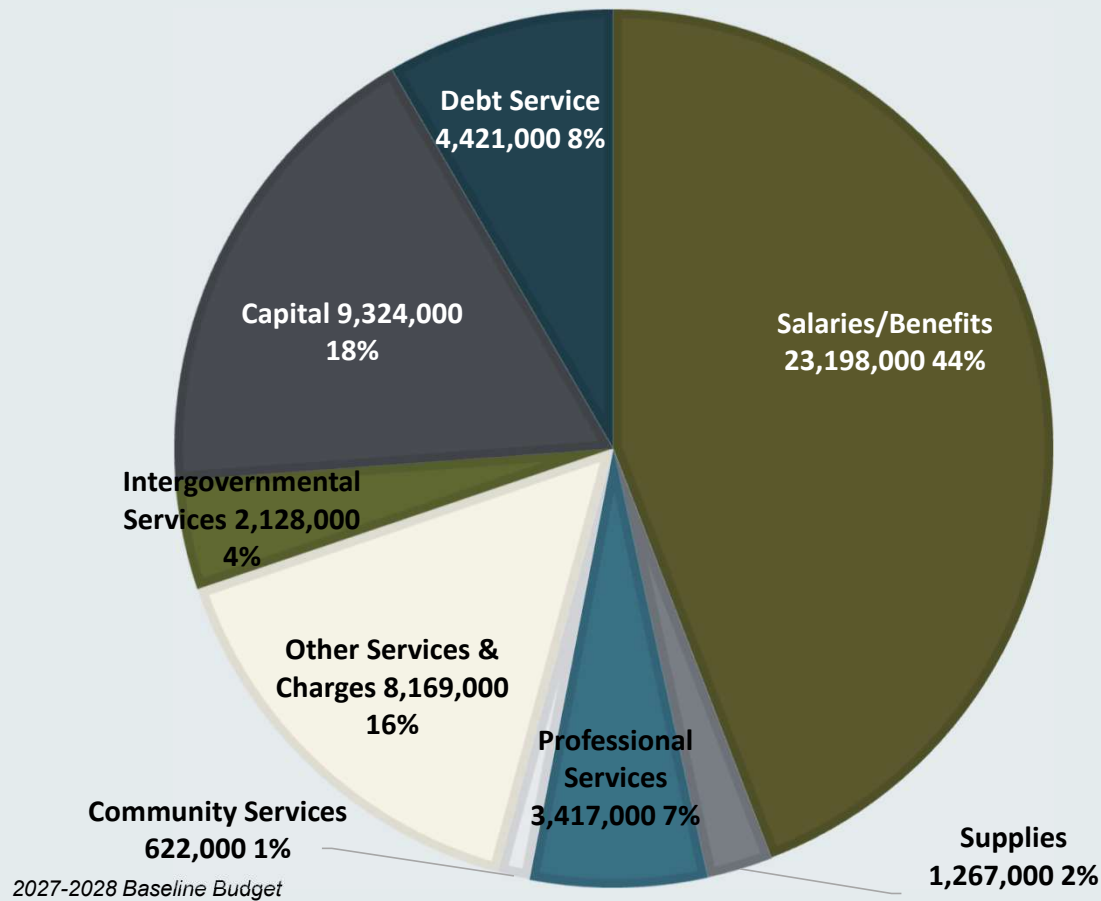


Where Does the Money Come From?

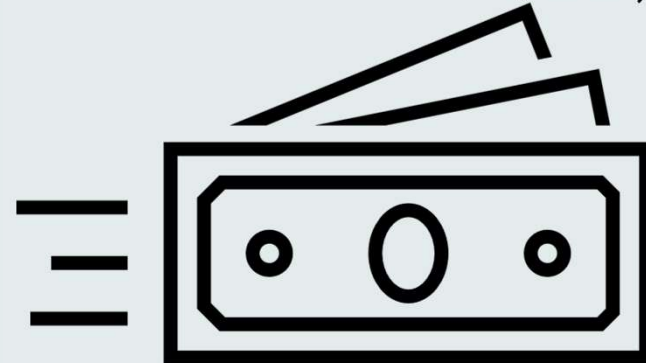
2026 Modified Budget
\$53,348,000



Where Does the Money Go?



2026 Modified Budget
\$52,546,000



What is a Baseline Budget & its Purpose?

- Baseline forecast using current revenues, staffing, service levels, and capital plans
- **Short-term:** Identify potential 2027–2028 budget gaps
- **Long-term:** Balance current spending with future financial capacity

2027-2028 Baseline Budget



What does it Include?

- Existing recurring revenues and expenses
- Current staffing and service levels
- Adopted capital and operating projects
- Existing interfund transfers for operations and capital projects

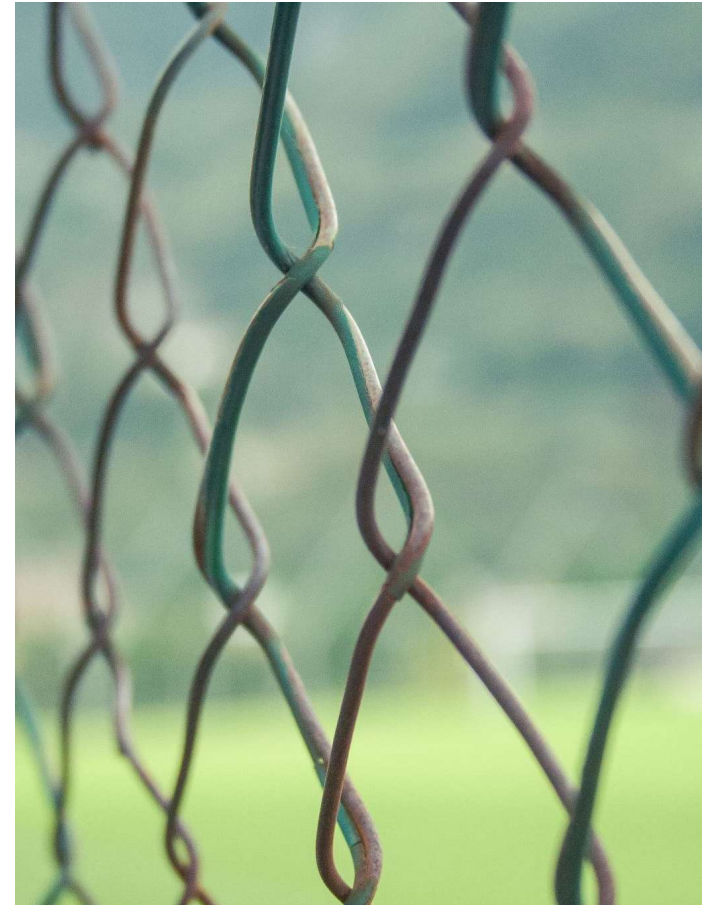
2027-2028 Baseline Budget



What does it Exclude?

- New operating or capital initiatives
- Budget balancing strategies or gap solutions
- Emerging issues and new policy priorities
- One-time revenues (e.g., grants)

2027-2028 Baseline Budget



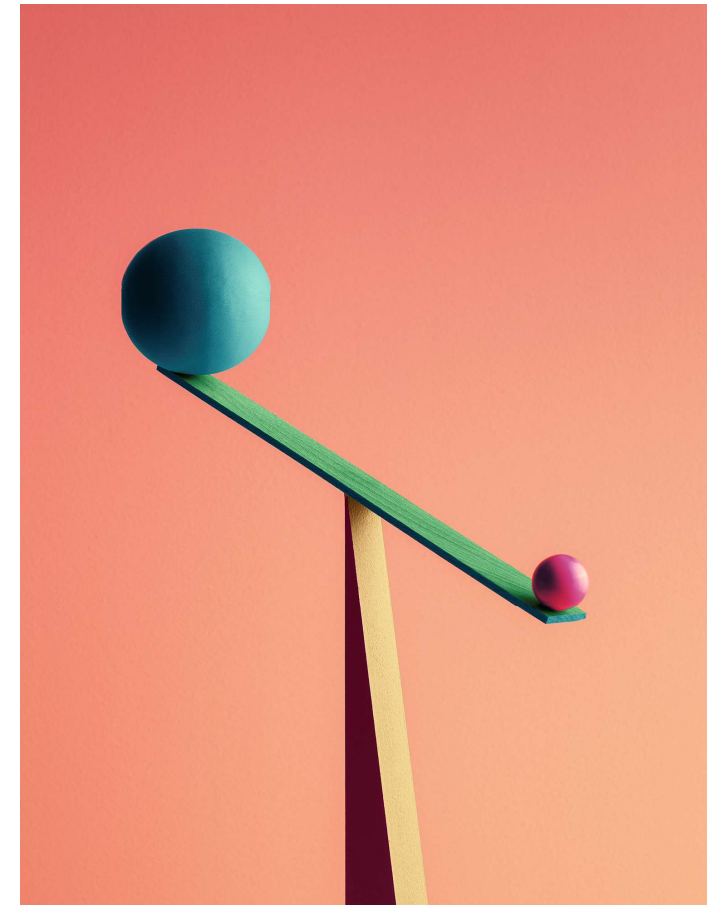
Key Factors Affecting the 2027-28 Budget

Risks

- Inflation
- Comprehensive Plan delays
- Building and Development Services permit activity

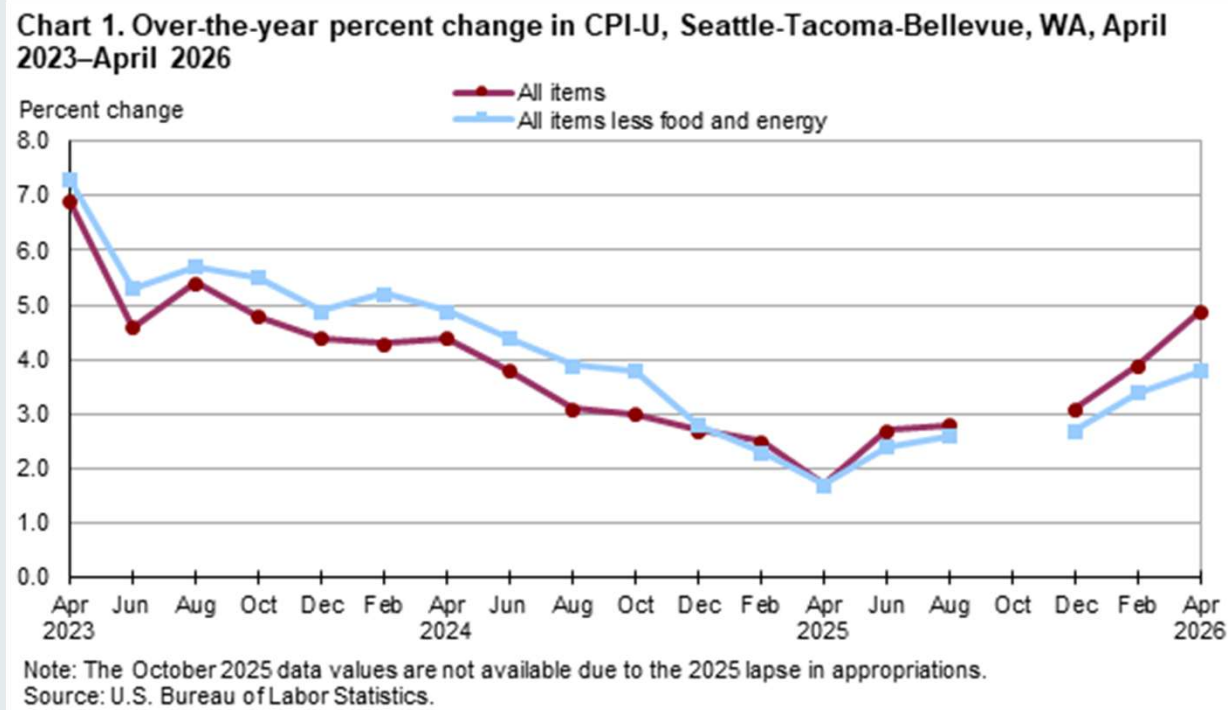
Positive Indicators

- Key revenue increases: sales tax and real estate excise



Current Seattle Area Inflation

- Seattle Area Composite - 4.9% in Seattle as of April 2026



Inflation - New Normal?

- US Inflation is up over the last 5 to 10 years compared to Historical Average

Time Frame	Inflation	Year
30 Years	2.50%	1996-2026
20 Years	2.50%	2006-2026
15 Years	2.60%	2011-2026
10 Years	3.10%	2016-2026
5 Years	4.50%	2021-2026

Potential Consequences of Continued Delay Comprehensive Plan

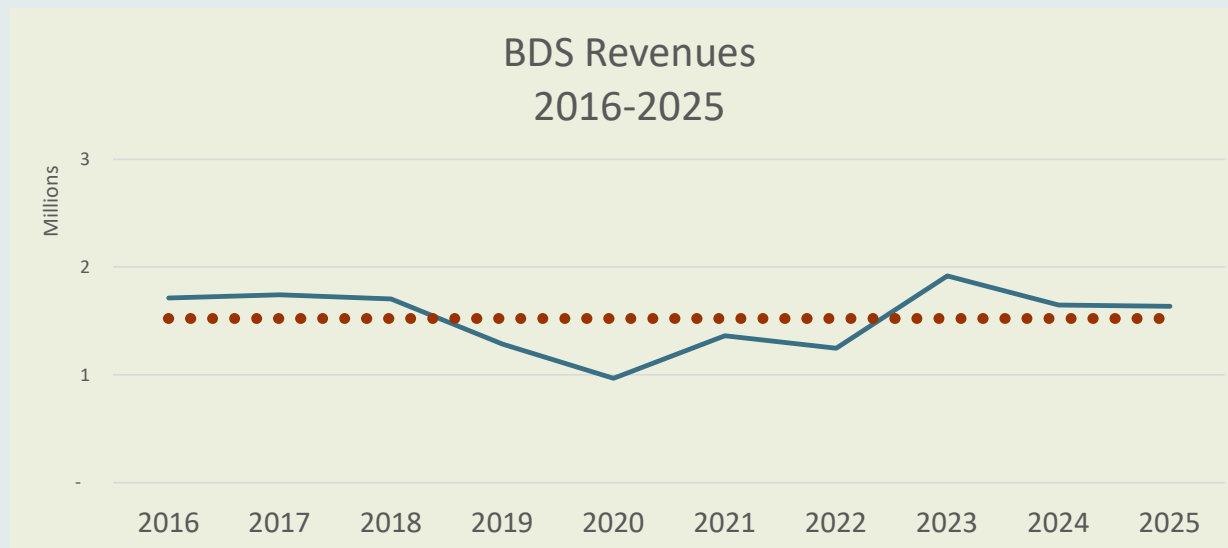
- RCW 36.70A.340 Authorizes State revenue sanctions for Growth Management Act (GMA) non-compliance.
- Potentially impacted revenues include:
 - Sales Tax
 - Real Estate Excise Tax (REET)
 - Motor Vehicle Fuel Tax distributions
 - Certain grant/loan funding
- Sales Tax & REET comprise ~44% of the City's ongoing tax-supported revenues.
- Loss or interruption of these revenues would have significant operational and capital budget impacts.

2027-2028 Baseline Budget



Building & Development Services

- Building & Development Services revenues are down 7% despite recent fee increase
- Key permitting volumes are down
- Development activity can fluctuate significantly year to year



2027-2028 Baseline Budget



May 19, 2026

City Staffing Levels

Department	2008 Adopted*	2013 Adopted	2018 Adopted	2025- 2026 Adopted	2027-2028 Baseline
Court	7.02	5.02	4.85	4	4
Executive	13.8	9.75	13.4	21.3	21.3
Finance	14	8.8	9.8	10	10
Planning	32.45	18	20	21	21
Police	28.25	26.25	28.35	31	31
Public Works Eng.	23	15	20	20	20
Public Works O&M	35	21	23	34	34
Total FTE	153.52	103.82	119.4	141.3	141.3
<i>Change from highest level:</i>	<i>0%</i>	<i>-32%</i>	<i>-22%</i>	<i>-8%</i>	<i>-8%</i>

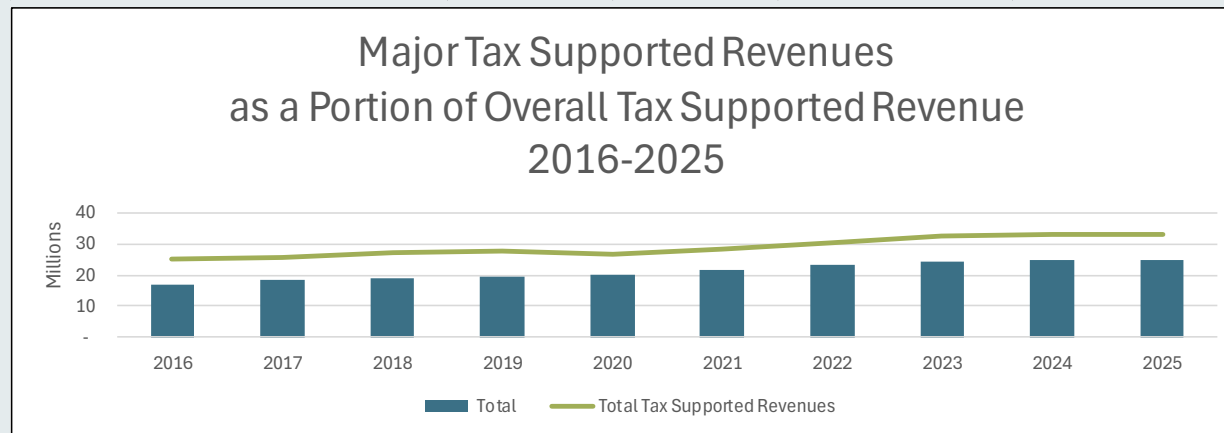
*2008 is historically the City's highest personnel level, measured in full time equivalents (FTE)



May 19, 2026

Revenue:Tax Supported – Top 5

Revenue	5-Year Low/High		Avg 5-Year % Change 2021-2025	2027/2028 Baseline
	Low %	High %		
Property Tax	1%	4%	+2%	2%
Sales Tax	-2%	17%	+9%	3%
Utility Tax (Private)	0.3%	15%	+5%	3%
REET	-25%	13%	-3%	3%
Investment	-63%	488%	+134%	-3%



2027-2028 Baseline Budget

2027-2028 Revenue Assumptions

Top 5 Tax Supported Revenues

	2026 Forecast	2027 Estimate	2028 Estimate
Property Tax- 1.75%	8,773,000	8,927,000	9,083,000
Sales Tax - 3%	7,774,000	8,007,000	8,247,000
Private util Tax - 3%	3,538,000	3,644,000	3,753,000
Real Estate Excise Tax - 3%	3,104,000	3,197,000	3,293,000
Investment - *	1,328,000	1,359,000	1,408,000
Total	24,517,000	25,134,000	25,784,000
% of Total Tax Supported	73%	73%	72%

2027-2028 Expense Assumptions



May 19, 2026

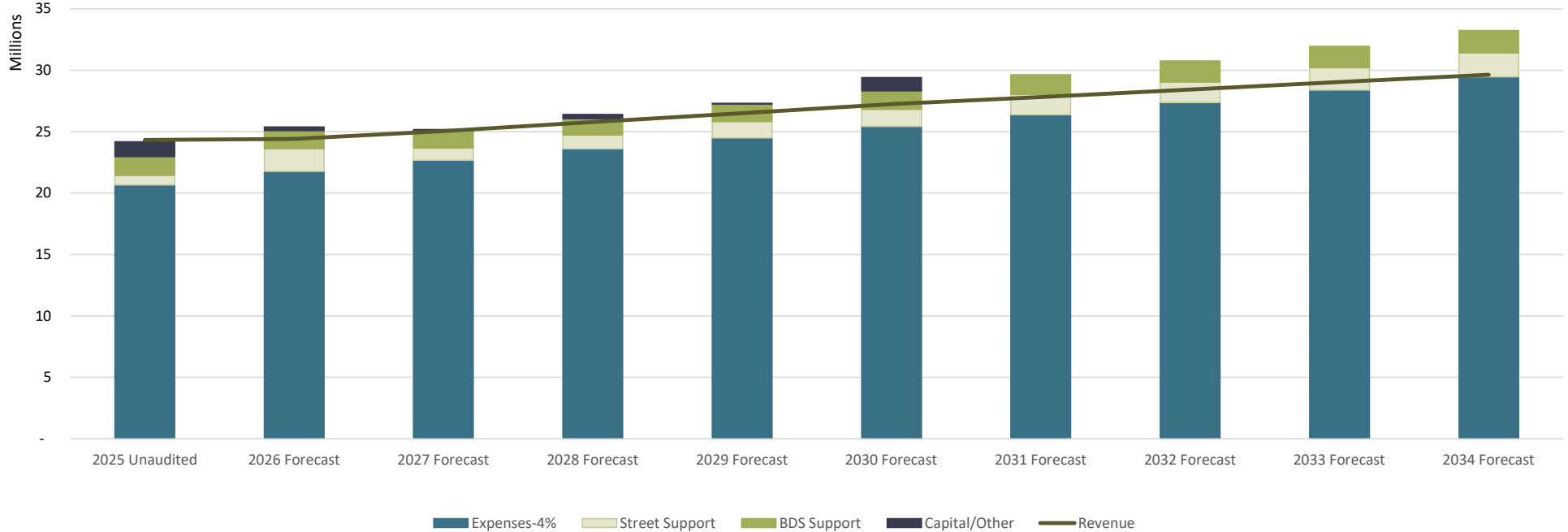
Expenditure	2027	2028
Salary	4.25%	4.25%
Benefit	4%	4%
Other Operating	4%	4%

10-Year Financial Forecast – General Fund



May 19, 2026

General Fund - 4% Inflation
2025-2034

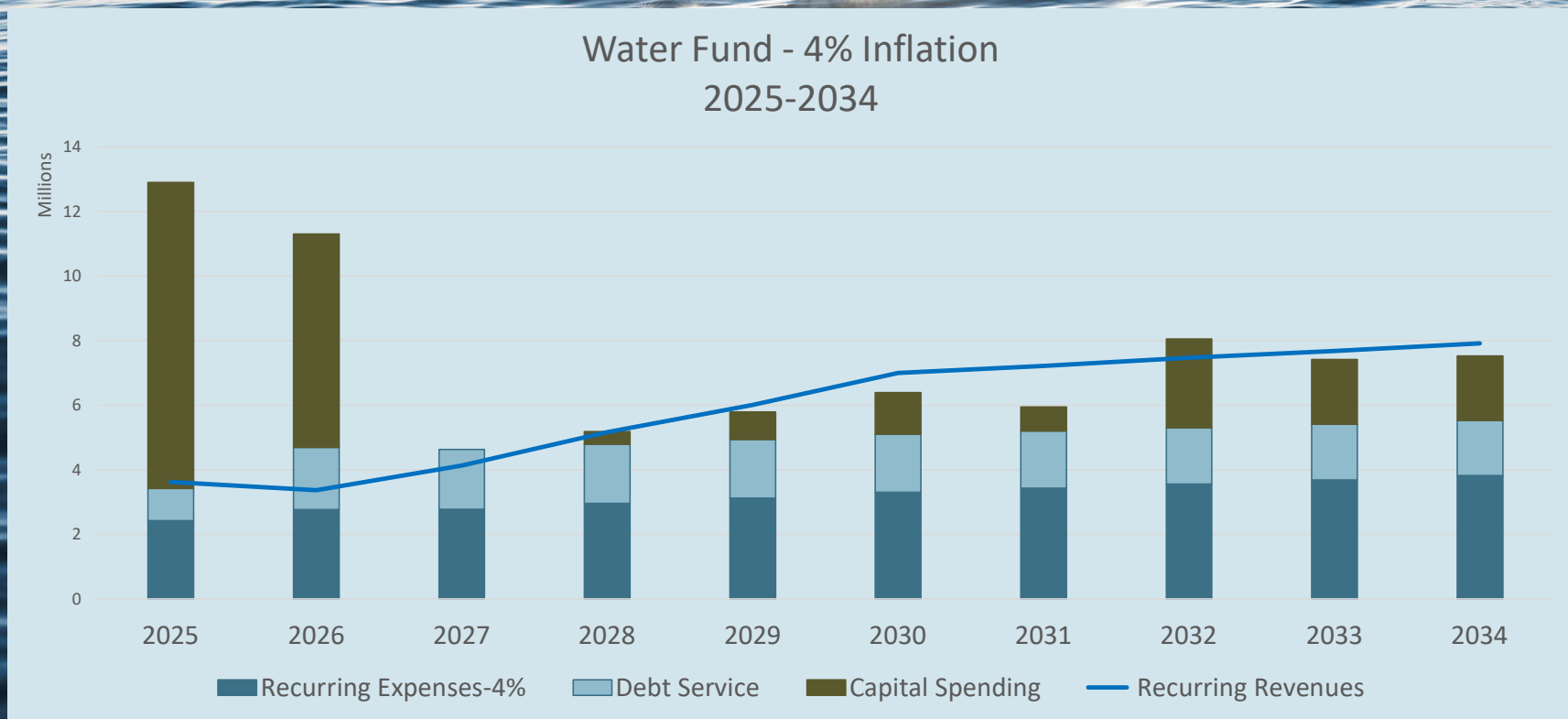


2027-2028 Baseline Budget

Water Fund



May 19, 2026

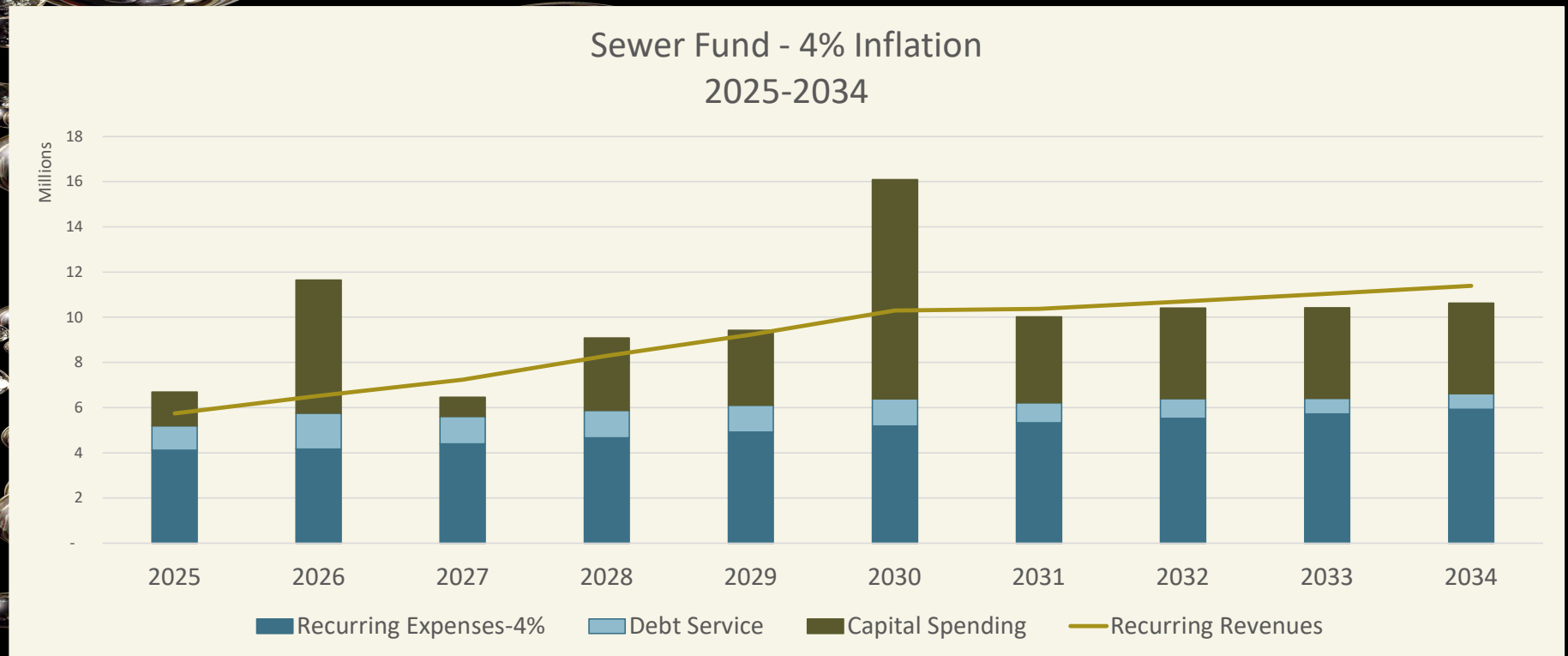


2027-2028 Baseline Budget

Sewer Fund



May 19, 2026

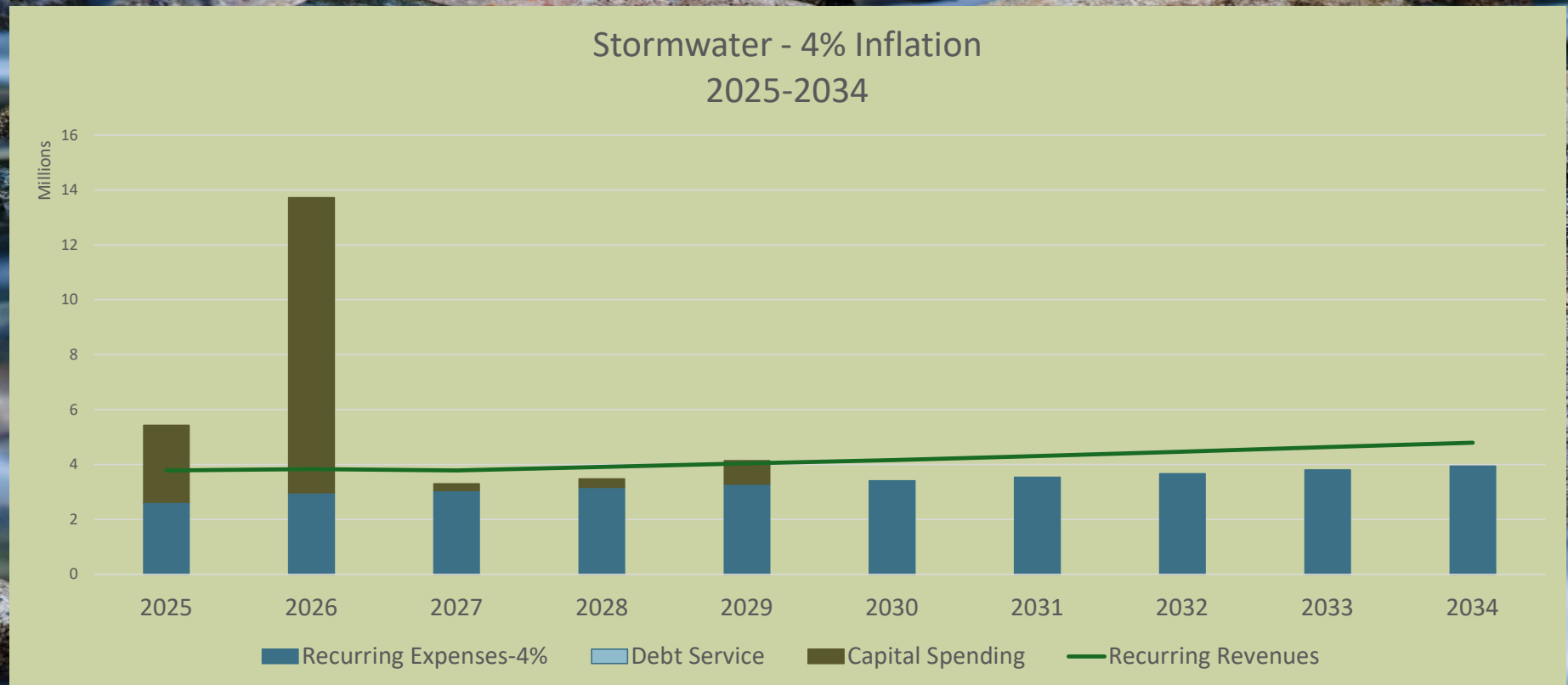


2027-2028 Baseline Budget

Stormwater Fund



May 19, 2026



2027-2028 Baseline Budget

What Does This Tell Us?

- Recurring revenues and ongoing service costs are in balance in the short term
- Current approach supports maintaining existing service levels
- One-time spending should be evaluated case-by-case basis to make sure it fits priorities and available resources

2027-2028 Baseline Budget





Thank You



**CITY OF
BAINBRIDGE ISLAND**

Submitted by:

*DeWayne Pitts, Director of Finance
and Administrative Services*





City Council Study Session Agenda Bill
Tuesday, May 19, 2026

Agenda Item: (7:00 pm) Consider Environmental Element of the Comprehensive Plan

Department:

Agenda Section: Regular Business

Estimated Time: 15 Minutes

Recommendation:

I move to forward the Environmental Element of the Comprehensive Plan to a future Council business meeting for further discussion and consideration of approval.

Narrative:

The Environmental Element is an optional element that has been a long-standing part of our Comprehensive Plan. It was considered by the Planning Commission and approved as presented on 2/12/26.

The Environmental Element of the City's Comprehensive Plan addresses the natural environment of Bainbridge Island. It includes goals and policies that address a wide variety of topics like sustainability, habitat, noise, climate change, and agriculture. This element also includes goals and policies for all lands that are considered critical areas under the Growth Management Act, such as wetlands, streams, aquifer recharge areas, fish and wildlife habitat, frequently flooded areas and geologically hazardous areas. The Environmental Element also addresses natural resources like forests, agricultural lands, and mineral resources while

providing goals and policies concerning air quality, the retention and development of trails and open space systems.

Since the previous Comprehensive Plan was updated, the City has undertaken substantial work regarding climate change. This includes a greenhouse inventory, a Climate Action Plan (2020) and the completion of a 2024 Bainbridge Island Sea Level Rise Vulnerability and Risk Assessment. Reference to that work has been suggested to be added to the Environmental Element. Preserving and protecting the environmental resources and natural amenities of the Island is an important component for the vision of our city.

The proposed discrete updates to the Environment Element are in order to reflect the updated planning period and acknowledge the changing conditions & updated information since 2017. Changes of note include:

- Promote sustainable consumption within City operations with continued support of the City's Green Team.
- Coordinate and implement the Strategies/Actions detailed in the 2020 Climate Action Plan as adopted.
- Maximize opportunities for agricultural practices that mitigate the impacts of climate change, including lower energy intensive practices, carbon storage, and aquifer recharge

Fiscal Impact:

Community Engagement and Outreach:

Attachments:

1. Draft Updated Environmental Element
2. Environmental Element Motions Lant
3. Motions about Environmental Element from CM Nelson for CC Mtg on 5-19-2026

ENVIRONMENTAL ELEMENT

NOTE: PAGE NUMBERS TO BE UPDATED AT LATER DATE
TABLE OF CONTENTS

	PAGE
INTRODUCTION	EN-1
VISION.....	EN-2
GOALS AND POLICIES.....	EN-2
ENVIRONMENT.....	EN-2
FISH AND WILDLIFE	EN-5
FREQUENTLY FLOODED AREAS	EN-6
SEA LEVEL RISE.....	EN-7
GEOLOGICALLY HAZARDOUS AREAS	EN-7
AIR QUALITY	EN-9
NOISE.....	EN-10
GREENHOUSE GASES	EN-10
DARK SKIES	EN-11
INVASIVE SPECIES	EN-11
AGRICULTURAL LANDS	EN-12
FOREST LANDS.....	EN-14
FORESTS AND TREES	EN-15
MINING	EN-16
ENVIRONMENTAL ELEMENT IMPLEMENTATION	EN-16

ENVIRONMENTAL INTRODUCTION

This element addresses the natural environment of Bainbridge Island. The Environmental Element includes *goals* and *policies* for all lands considered *critical areas* under the *Growth Management Act* (GMA), such as *wetlands*, *streams*, *aquifer recharge areas*, *fish and wildlife habitat*, *frequently flooded areas* and *geologically hazardous areas*.

This element also addresses natural resources such as forests, *agricultural lands* and *mineral resources* and provides *goals* and *policies* concerning air quality and the retention and development of the trails and *open space* systems.

Preserving and protecting the environmental resources and natural amenities of the Island is an important component for the vision of our city. Bainbridge Island contains interconnected forests, meadows, *wetlands* and *stream* systems, and saltwater shorelines, all of which provide wildlife habitat and scenic value, and some of which are protected as public parkland. The Island also contains *agricultural lands* and land areas that are sensitive due to geological conditions, slope and/or soil types.

As our Island grows and develops continued protection of varied *open space* areas and environmentally sensitive landscape is necessary to maintain the quality of life that is currently enjoyed on Bainbridge Island. Additionally, the unpredictable cumulative impacts of *climate change* in our region justify appeals to the *precautionary principle*. *Climate change* may require that the areas we protect and approaches we use to achieve our *goals* and *policies* will change.

Citizens of Bainbridge Island enjoy and value the Island's natural environment. The public parklands, *open spaces*, and other natural areas contribute to the quality of life on the Island. Support for preservation of *environmentally sensitive areas* and *agricultural lands* is high. The community is supportive of providing pedestrian and bicycle trails and increased public access to shorelines.

Understanding the functions of the Island's valuable natural systems and what types of activities may impact these functions now and in the future as conditions change, is key to protecting these lands and natural resource areas. Retaining the viability and ecological functions of our natural systems and protecting those areas that are sensitive to development is paramount to maintaining a healthy natural environment and a high quality of life.

The goals and policies of the Environmental Element attempt to guide future action such that the quality of the Island's natural environment is protected and maintained and when possible, restored and improved. Future actions will incorporate the *best available science* as required by RCW 36.70A.172.

ENVIRONMENTAL VISION 2036 44

It is well understood that the integrity of our environment – the foundation of our quality of life – sets limits on the growth of our population and our economic life. We have faced some distressing events within the changing natural order and have survived as a stronger community.

A culture of stewardship has preserved and even improved the varied landscapes, forests and views that contribute so much to the sense of place that is valued here. Monitoring and regulation of the impacts of human activities on the Island's natural resources has been successful in maintaining their resilience. Public policies and many initiatives of citizens and businesses have been proactive in response to the anticipated effects of climate change, such as sea level rise, adapting where necessary and mitigating impacts to the extent possible.

GOALS & POLICIES

ENVIRONMENT

GOAL EN-1

Preserve and enhance Bainbridge Island's natural systems, natural beauty and environmental quality.

Policy EN 1.1

A primary goal of the *Comprehensive Plan* is protecting the Island's natural environment; land use decisions implement this *goal*.

Policy EN 1.2

Taking into account the present and future need to reduce the potential for personal injury, loss of life, or property damage due to flooding, erosion, landslides, seismic events, *climate change* or soil subsidence, properties adjoining or adjacent to *critical areas* must be developed in observance of the following principles in descending order:

- Avoid the impact if possible.
- Minimize or limit the degree or magnitude of the action and its implementation by using appropriate technology to avoid or reduce impacts.
- Reduce or eliminate the impact over time by preservation and maintenance operations during the life of the action.
- Rectify by repair, rehabilitation or restoration of the affected environment.
- Compensate for unavoidable impacts by replacing, enhancing or providing substitute resources or environments.

Critical areas are identified in order to flag concerns during the review process and to make applicants aware of potential hazards or areas where development may be constrained.

Compatible development will be allowed which avoids designated *critical areas*, minimizes the impact or mitigates potential problems through engineering, siting or design. Proposals will be examined on a case-by-case basis to allow for creative solutions and to assure that the special combinations of factors in a particular case are addressed.

Policy EN 1.3

Protect and enhance the natural systems and environmental quality of Bainbridge Island by continuing to build cooperative relationships between the City, citizens, landowners and other public, non-profit and private organizations.

Policy EN 1.4

Maintain and enhance natural systems and protect wildlife, fish resources and *open spaces* through *land use* plans and development patterns including tree retention and planting.

Policy EN 1.5

Create and maintain overlay maps that show the location of *agricultural lands*, critical *aquifer recharge areas*, *geologically hazardous areas*, floodplains, *streams*, *wetlands* and *fish and wildlife habitat*, and critical forest stocking density. ~~Integrate the maps from the Bainbridge Island Climate Impact Assessment (2016).~~

Policy EN 1.6

Use the City's Shoreline Master Program to address and protect marine fish and marine shoreline habitat.

Policy EN 1.7

To protect the Island's ecosystems, discourage the use of *neonicotinoid* pesticides.

Policy EN 1.8

Consider the potential impacts of *climate change* and its impacts in all decisions related to natural systems, and environmental quality, forest systems, local food production, shorelines, and groundwater recharge.

GOAL EN-2

Encourage *sustainability* in City Government operations.

Policy EN 2.1

In managing City government operations, take reasonable steps to reduce impacts to the environment and ecosystems upon which we depend. This includes recognizing and preparing for the impacts of *climate change*.

Policy EN 2.2

Seek to minimize the quantity and toxicity of materials used and waste generated for City facilities and operations through reduction, reuse and recycling. Use products made from recycled materials when available.

Policy EN 2.3

Use new technologies to reduce environmental impacts such as solar panels, electric and hybrid vehicles, high-efficiency lights and heating systems.

Policy EN 2.4

Utilize integrated pest management practices.

Policy EN 2.5

Promote sustainable consumption within City operations, including with continued support of the City's Green Team.

Goal EN-3

Consider the impact on *critical areas* whenever land is subdivided.

Policy EN 3.1

Design lots to protect natural systems and avoid or minimize impact to *critical areas*. In order to protect *critical areas*, the full *density* permitted under the zoning ordinance might not be achieved.

Policy EN 3.2

Use *Transfer of Development Rights* (TDRs) and *Purchase of Development Rights* (PDRs) to protect critical areas.

Policy EN 3.3

Include in any lot created by *subdivision* of land sufficient area to accommodate a building site outside of a *critical area* and its buffers.

Goal EN-4

Encourage sustainable development that maintains diversity of healthy, functioning ecosystems that are essential for maintaining our quality of life and economic viability into the future.

Policy EN 4.1

Employ conservation design methods and principles such as *low impact development* techniques for managing storm and waste water, *green building* materials, high-efficiency heating and lighting systems.

Policy EN 4.2

Create a program with effective mechanisms intended to offset development impacts to the Island's ecosystems.

FISH AND WILDLIFE

GOAL EN-5

Protect and enhance wildlife, fish resources and ecosystems.

Policy EN 5.1

The protection and enhancement of *fish and wildlife habitat*, especially during offspring rearing season, and wildlife corridors, including Tribal Usual and Accustomed fishing areas, are integral components of the *land use* planning process.

Policy EN 5.2

The identification of *fish and wildlife habitat* is based on a current evaluation of the species of wildlife on the Island and the habitat requirements of these species now and in the future.

Policy EN 5.3

The protection and enhancement of mature trees, and *fish and wildlife habitat* are important criteria used when evaluating the preservation of *open space* as part of development techniques such as clustering, *flexible lot design subdivisions* and *transfer of development rights* (TDRs).

Policy EN 5.4

Protect and restore *fish and wildlife habitat* and limit fragmentation of habitat that physically and genetically isolates fish and wildlife populations by identifying an interconnected system of corridors that will provide continuous links east to west and north to south connecting larger tracts that are important habitat.

Policy EN 5.5

Identify and classify streams and stream reaches which have an anadromous fish presence.

Policy EN 5.6

Protect *wetlands* and riparian areas.

Policy EN 5.7

Undertake appropriate, adequate and timely actions to protect and recover state priority species, species listed under the federal *Endangered Species Act*, local species of concern and their habitats located within the City to 1) avoid *local extirpation* of such species from the lands or fresh waters or nearshore of the City and 2) contribute to the protection and recovery of such species throughout the greater region in cooperation with federal, state and other local agencies.

Policy EN 5.8

Work closely with Tribes, the Park District, local conservation organizations and the Washington State Department of Fish and Wildlife (the agency with expertise to “preserve, protect, and perpetuate” wildlife resources of the state) in matters involving wildlife including identifying “priority *fish and wildlife habitat*.”

Policy EN 5.9

Develop in coordination with the Department of Fish and Wildlife, the Bainbridge Island Metropolitan Park and Recreation District and the Bainbridge Island Land Trust a program to educate the citizens of the Island, particularly those citizens who reside adjacent to priority wildlife habitat, on ways to utilize private property in a manner that will help protect and enhance wildlife habitat.

Policy EN 5.10

Consider *climate change* and its impacts in all decisions related to wildlife, fish resources and natural systems.

FREQUENTLY FLOODED AREAS

Regulation of *frequently flooded areas* is important for property and habitat protection. Floodplains are valuable natural resource areas that play a major role in the function of ecosystems. Floods are a natural process where rising water inundates otherwise dry land. Floodplains provide storage for floodwaters which reduces downstream erosion and improves downstream water quality. Floodplains allow infiltration for *aquifer recharge* and provide important habitat necessary for the survival of many invertebrate, fish and wildlife species. Flood courses can change naturally over time. As impervious development covers more land surface and encroaches on floodplains, damage increases to both the built and natural environments.

The Federal Emergency Management Agency (FEMA) has designated *frequently flooded areas* as areas that have a 1% or greater chance of flooding in any given year. Also known as the 100-year flood, this level was chosen to manage flooding as a compromise between an economic use of the land and an understanding of the natural benefits of flooding. *Frequently flooded areas* are *Critical Areas*.

GOAL EN-6

Protect the natural functions of *frequently flooded areas*.

Policy EN 6.1

Minimize public and private losses due to flood conditions by limiting development in *frequently flooded areas* as shown on the Flood Insurance Rate Maps. Educate property owners and residents in proximity to *frequently flooded areas* about vulnerability over time.

Frequently flooded areas can and do migrate over time. Increased development may affect the level of occurrence and location of *frequently flooded areas*. The Flood Insurance Rate Maps adopted by the City were originally produced in 1975 and updated in 1977, and need to be kept current.

Policy EN 6.2

Limit the alteration of natural floodplains, *stream* channels and natural protective barriers that help accommodate, dissipate, or channel floodwaters.

Policy EN 6.3

Emphasize nonstructural methods such as setbacks and vegetation, to prevent or minimize flood damage.

Policy EN 6.4

Locate public facilities such as sewer and water lines outside of *frequently flooded areas* and with consideration of future sea level rise in order to minimize damage to both the *public facility* and the natural environment. *Public facilities* may be located within *frequently flooded areas* only if no environmentally preferable alternative exists to mitigate environmental concerns. Additional development is not encouraged in *frequently flooded areas*.

SEA LEVEL RISE

GOAL EN-7

Anticipate and prepare for the consequences of sea level rise.

Sea level rise may happen as the result of natural or human activity such as geologic subduction or *climate change*. Here in the Puget Sound, we experience the effects of both the geologic and climatological forces. Cumulative sea level rise has serious implications for the shorelines and lowland areas of the Island such as beach and bluff erosion and loss of intertidal zones. These areas serve such purposes as nursery habitat, feeding grounds for fish and fowl, stormwater collection and water filtration.

Policy EN 7.1

Consider the implications of sea level rise in all relevant decision-making by using regional sea level rise projections and shoreline instability maps (as provided by the WA Department of Ecology and utilized and ~~interpreted with the Bainbridge Island Climate Impact Assessment~~ informed by the 2024 Bainbridge Island Sea Level Rise Vulnerability & Risk Assessment).

Policy EN 7.2

Coordinate with Tribal, Federal, State and local agencies to address issues related to sea level rise.

GEOLOGICALLY HAZARDOUS AREAS

GOAL EN-8

Protect *landslide hazard areas* and *erosion hazard areas* from the impacts of use and development for the protection of public safety, property and the environment.

Policy EN 8.1

Avoid *land uses* on *landslide hazard* and *erosion hazard areas*. If the hazard caused by development can be mitigated, then design *land use* to prevent damage to persons or property and environmental degradation and to preserve and enhance existing vegetation to the maximum extent possible.

Policy EN 8.2

As the degree of slope increases, decrease development intensity, site coverage, and vegetation removal to mitigate problems of drainage, erosion, siltation and landslides.

Policy EN 8.3

In order to protect *landslide and erosion hazard areas* from damage during construction and from intrusion following construction, an analysis by a geotechnical engineer and a certified arborist may be required.

Policy EN 8.4

Construct roads, driveways and utility corridors to preserve the integrity of the existing land forms, drainage ways, and natural systems minimizing impact to the *landslide and erosion hazard areas*. Utilize common access drives and utility corridors where feasible.

Policy EN 8.5

Allow clearing, grading or filling on sloped areas containing *landslide hazard and erosion hazard areas* only when other alternatives are not feasible and when it will not destabilize those areas. Such activity is limited to the dry period of the year.

Policy EN 8.6

Any alteration of a *landslide hazard area* or *erosion hazard area* may not increase the rate of surface water discharge or sedimentation and may not decrease slope stability on adjacent property. Landscape the altered area to provide erosion control.

GOAL EN-9

Identify and map areas that are at risk due to seismic activity and regulate activities in these areas for public safety and property protection.

Policy EN 9.1

Consider the *best available science* in mapping these high-risk areas and in regulating and permitting *land use* activities in areas that have a heightened risk from earthquakes such as liquefaction areas and fault rupture zones, tsunami or other geological hazards.

Policy EN 9.2

Consider tsunami hazards in regulating *land use* activities on Bainbridge Island.

Policy EN 9.3

Consider seismic activity and the potential for earthquake-induced landslides in the determination of *geologically hazardous areas*. Areas that are stable under normal conditions can become landslides during earthquake events.

Policy EN 9.4

Provide information and educational opportunities to the citizens of Bainbridge Island on the hazards posed by seismic events.

AIR QUALITY

GOAL EN-10

Protect and promote clean air.

These policies address the need for clean air to protect the Island's residents and ecosystems, under current and future climatological conditions. For example, increasing regional air temperatures are increasing air pollution components such as ground level ozone and smog.

Policy EN 10.1

Promote *land use* patterns and transportation policies that ensure that the Island's contribution to regional air quality is consistent with or better than State and Federal standards.

Policy EN 10.2

Encourage the retention of existing trees and vegetation and the planting of new trees and vegetation that provides natural filtration of suspended particulate matter, removes carbon dioxide and improves air quality.

Policy EN 10.3

Evaluate the impacts and consequences of new development both during and subsequent to construction on air quality as a part of the environmental review process and require mitigation when appropriate.

Policy EN 10.4

Cooperate with the Puget Sound Clean Air Agency in providing information to the community about available and innovative emission controls for residential, commercial, vehicular and light industrial use.

Policy EN 10.5

Ensure beneficial indoor air quality in all renovations and new construction of City-owned facilities and promote design choices that enhance beneficial indoor air quality in private construction.

Policy EN 10.6

Reduce the quantity of airborne particulates through regulations for dust abatement of construction sites and street sweeping programs in areas with concentrations of both vehicular and pedestrian traffic.

Policy EN 10.7

Maintain nuisance regulations to minimize offensive odors generated by commercial or industrial uses in proximity to *residential uses*.

Policy EN 10.8

Encourage the retrofit or replacement of non-certified wood stoves with certified appliances.

Policy EN 10.9

Transportation and energy production diminish air quality when power is produced with fossil fuel combustion. Maintain and improve Island air quality, by promoting the development of carbon free *infrastructure*.

NOISE

GOAL EN-11

Promote the reduction of invasive noise impacts.

Policy EN 11.1

Review the effectiveness of current noise standards and modify these standards as necessary to ensure acceptable noise levels.

Policy EN 11.2

Promote actions such as equipment modifications and operational requirements that reduce noise from transportation modes, construction sites, industrial uses and commercial business establishments.

Policy EN 11.3

Work with the Federal Aviation Administration to design flight paths and schedules that minimize the airplane noise over Bainbridge Island.

GREENHOUSE GASES

GOAL EN-12

Reduce *greenhouse gas* emissions through compliance with federal, state and regional policies while developing local strategies to reduce emissions further. Reduce greenhouse gas emissions by 90% by 2045 compared to 2014 levels with interim milestones of 25% reduction by 2025 and 60% by 2035 compared to 2014 levels.

Policy EN 12.1 Coordinate and implement the Strategies/Actions detailed in the most current Climate Action Plan as adopted.

~~Support and implement climate pledges and commitments undertaken by the City and other multi-jurisdictional efforts to reduce *greenhouse gas* emissions, address *climate change*, sea-level rise, ocean acidification and other impacts of changing global conditions.~~

Policy EN 12.2

Facilitate the improvement and convenience of low carbon mass transit and increased car-sharing, cycling, walking and the development of alternative vehicle infrastructure (e.g., charging stations) to reduce *greenhouse gas* emissions.

Policy EN 12.3

Strive for reduced *greenhouse gas* emissions by, among other actions, integrating *climate change* into the city planning process, including *land use* and transportation planning and management, and making *climate change* considerations and meeting *greenhouse gas* emission reduction goals a component of city decision making.

Policy EN 12.4

Establish benchmarks, metrics and targets for reduction of *greenhouse gas* emissions, assess current conditions and progress in reducing *greenhouse gas* emissions from municipal, commercial, residential and transportation-related land uses, projects and programs.

Policy EN 12.5

Support the development of a public education program which informs all citizens on the methods and progress for meeting the Island's *greenhouse gas* emission *goals* and ways citizens can assist in reaching the reduction *goals*.

Policy EN 12.6

Promote energy conservation measures by all government entities including:

- Retrofitting offices, shops and garages with high-efficiency lighting;
- Converting vehicles to ~~hybrid-fuel~~ zero-emission vehicles as replacement or new vehicles are acquired;
- Converting traffic signals and lighting to the most energy efficient and spectrum appropriate technology available; and
- Adopting incentive programs and design standards that encourage the employment of renewable energy sources and energy efficient appliances on the Island.

Policy EN 12.7

Promote the installation of residential solar panels and the adoption of other energy saving technologies such as LED lights, heat pumps and insulation.

DARK SKIES

Goal EN-13

Preserve and enhance the view of the dark sky by controlling glare and light trespass, thereby protecting human health and the health of the natural world.

Policy EN 13.1

Enforce *development regulations* that provide standards for appropriate lighting practices and systems that will curtail the degradation of the nighttime visual environment.

INVASIVE SPECIES

Goal EN-14

Collaborate with the Kitsap County Noxious Weed Board and other relevant agencies and organizations to develop and maintain a plan to remove and control invasive plant and animal species, as well as prepare for vulnerability to future invasive plant and animal species resulting from *climate change* and international commerce.

Policy EN 14.1

Coordinate with public agencies and nonprofit organizations to control and where feasible, eradicate invasive plant species from public lands.

Policy EN 14.2

Improve public outreach to encourage residents to control and where feasible, eradicate invasive plant species on private property, and use the City's See-Click-Fix tool for reporting invasive species on City property.

Policy EN 14.3

Tree clearing permits may require a surety bond for larger-scale tree clearing to cover the costs of invasive species removal in the eventuality that land is not properly managed and results in invasive weed infestation.

AGRICULTURAL LANDS

GOAL EN-15

Conserve and protect the Island's existing agricultural uses and increase the acreage of permanently protected and productive farmland by using preservation methods including incentive-based programs.

Policy EN 15.1

Provide owners of *farms* the option of participating in the *transfer of development rights (TDRs)/purchase of development rights (PDRs) program*.

Policy EN 15.2

Inventory land currently used and/or potentially available for *agriculture*, including community gardens.

Policy EN 15.3

Where land that had historically been used for *agriculture* is being subdivided for residential development, a portion *should* be reserved for agricultural use or community gardens. Existing traditional agricultural lands *should* be included in the *open space* of clustered development.

Policy EN 15.4

Develop a procedure to allow public and private property owners to designate their properties Agricultural Resource Land, consistent with WAC 365-190-050.

Policy EN 15.5

Utilize the Floor Area Ratio (FAR) Farmland/Agriculture fund for viable farmland preservation projects.

Policy EN 15.6

Prioritize food production on public farmland to address long-term food security for Island residents.

Policy EN 15.7

Encourage the use of native and/or regionally produced edible plants for use in required landscape and roadside vegetation buffers.

Policy EN 15.8

Ensure protection of the Island's *aquifers* and streams by promoting agricultural uses that are not water intensive, and *agriculture* practices that protect water quality.

Policy EN 15.9

Work with the Conservation District and nonprofits to encourage farming that accounts for changing Island conditions with regard to hydrology, temperature and other climatologically influenced factors. Promote crops and commodities that are adapted to future conditions and do not rely on chemical amendments that may adversely impact future water availability.

Policy EN 15.10

Improve public information and creating new programs to promote *agriculture* while advocating for farming practices that protect water quality and quantity.

Policy EN 15.11

Maximize opportunities for agricultural practices that mitigate the impacts of *climate change*, including lower energy intensive practices, carbon storage, *aquifer recharge*, and smaller foodsheds.

GOAL EN-16

Minimize conflict between agricultural and non-agricultural uses.

Policy EN 16.1

Design and locate development adjacent to areas designated or registered as agricultural land to avoid or minimize potential conflicts with agricultural activities.

Policy EN 16.2

Require notification on all plats, development permits and building permits of the existence of any registered agricultural lands within 300 feet of the development.

Policy EN 16.3

Maintain the Right to Farm Ordinance.

Policy EN 16.4

Cooperate with the Kitsap Conservation District to promote use of Best Management Practices.

GOAL EN-17

Encourage and support farming as an economically viable option for *land use* and as a means to providing diversity of lifestyle.

Policy EN 17.1

Preserve existing farmland and eEncourage small-scale farming.

Policy EN 17.2

Work with the Kitsap County Assessor's office to educate the farming community about the availability of the Tax Reduction Program.

Policy EN 17.3

Elevate and encourage public appreciation and awareness of *farms* by allowing tours of *farms* and farming facilities.

Policy EN 17.4

Permit the production, processing and marketing of *farm* products from Island *farms*.

Policy EN 17.5

Support the Farmers' Market and promote the sale of local *farm* products in other locations.

Policy EN 17.6

Minimize the parking requirements for agricultural uses (i.e., number of parking spaces, paved parking and landscaping requirements), due to the seasonal nature of the marketing of *farm* products.

Policy EN 17.7

Support agricultural tourism that ensures compatibility with surrounding uses.

Policy EN 17.8

Consider establishing a Citizen Advisory Group on *Agriculture* comprised of citizens representing farmers, non-profit organizations involved with local *agriculture* and businesses with an interest in local *farm* produce.

FOREST LANDS

Propose language to make sure that the paragraph below is on BI

Few large tracts of second-growth timber remain on the Island and some of these could be converted to other uses in the near future. As of August 2015, there were approximately 529.34 acres classified as timberlands by the Kitsap County Tax Assessor. Forty-six parcels are classified as *Forest Land* including the 42-acre Port Madison watershed. These *forest lands*, together with tracts that are protected by conservancy agreements and other privately owned forested acres that may not be classified as timberlands, have immeasurable value within the Island-wide conservation strategy.

GOAL EN-18

Encourage the retention of *forest land* and multiple-aged forests since healthy forests provide many ecological benefits to all forms of life on the Island and help mitigate climate change.

Policy EN 18.1

Encourage stewardship of forests, to promote forest health, provide for selective harvest of merchantable timber and protect *critical areas*. Department of Natural Resources and City regulations apply when converting *forest land* to agricultural, residential or other uses.

Policy EN 18.2

When acreage classified as timberlands or *forest land* is being converted to residential or agricultural use promote protection of the most valuable trees and forested area and compact development to limit the extent of clearing and soil disturbance.

FORESTS & TREES

GOAL EN-19

Retain, conserve and improve portions of the community forests where people live, work and learn through public education and through management and protection measures that will help to conserve these resources.

The community forests on Bainbridge Island are comprised of the street tree system in the urban center, trees in parks and on other public lands, and trees and forested areas on private properties throughout the Island. Bainbridge Island's urban and rural forests have historically been a resource for logging but more recently have become a source of community identity and civic pride. Trees and forested areas are essential to the Island's conservation strategy. It is recognized that in addition to biological benefits a community forest provides a significant return by creating appealing streets and *neighborhoods* with resulting higher property values in the built environment. In addition, trees and forests provide buffering and screening between differing *land uses*, reduce surface water *runoff*, improve air and water quality, help maintain soil and slope stability, provide wildlife habitat, reduce energy consumption by providing shade and functioning as windbreaks, and sequester carbon dioxide.

Policy EN 19.1

Encourage protection, restoration and maintenance of existing vegetation that has environmental, wildlife habitat and aesthetic qualities including tree groves, significant tree stands, forested hillsides and vegetation associated with *wetlands*, *stream* corridors, riparian areas, steep slopes and areas subject to erosion.

Policy EN 19.2

Utilize various tools to understand and monitor existing conditions and changes of Island-wide tree cover, significant tree groves and significant individual trees over time. Undertake periodic tree inventories to assess canopy cover and health of forested areas and significant trees.

Policy EN 19.3

In pre-application conferences and as part of the review of development applications, encourage property owners to maximize the preservation of trees and to maintain and enhance the cohesive quality of tree groves through appropriate site design and construction methods as well as *open space* dedication of areas that contain these resources.

Incentives such as a building height bonus could be used to encourage tree preservation greater than the preservation required by code during site design. Update Guidelines for Commercial and Mixed Use Projects including Guidelines for Lynwood Center, Island Center and Rolling Bay to incorporate tree preservation practices and policies.

Policy EN 19.4

Implement a community-wide program to educate Island residents about the functions and values of trees.

Policy EN 19.5

Consider partnering with other organizations and re-establishing a Community Forestry Commission.

Policy EN 19.6

Encourage Best Management Practices to protect and enhance community forests.

Policy EN 19.7

Encourage activities that enhance the community's awareness of the value of trees and the community forest.

Policy EN 19.8

Develop street tree programs for the commercial and mixed-use zones, and the more densely developed residential zones.

MINING

GOAL EN-20

Manage the remaining mining operations on the Island.

Bainbridge Island has had a history of mining, predominantly sand and gravel. While multiple sites have been reclaimed there are still two active mining operations on the Island. One operation functions as a recycling/mulching facility and another as a sand mining operation.

Policy EN-20.1

Rigorously control the excavation of sand and gravel and other minerals.

ENVIRONMENTAL IMPLEMENTATION

To implement the goals and policies in this Element, the City must take a number of actions, including adopting or amending regulations, creating outreach and educational programs, and staffing or other budgetary decisions. Listed following each action are several of the comprehensive plans policies that support that action.

HIGH PRIORITY ACTIONS

EN Action #1 When updating the City's Critical Areas Ordinance, integrate the precautionary principle and mitigation sequencing to protect and preserve natural resources

Policy EN 1.2 Taking into account the present and future need to reduce the potential for personal injury, loss of life or property damage due to flooding, erosion, landslides, seismic events, *climate change* or soil subsidence, properties adjoining or adjacent to *critical areas* must be developed in observance of the following principles in descending order:

- Avoid the impact if possible.
- Minimize or limit the degree or magnitude of the action and its implementation by using appropriate technology to avoid or reduce impacts.
- Reduce or eliminate the impact over time by preservation and maintenance operations during the life of the action.
- Rectify by repair, rehabilitation or restoration of the affected environment.
- Compensate for unavoidable impacts by replacing, enhancing or providing substitute resources or environments.

Critical areas are identified in order to flag concerns during the review process and to make applicants aware of potential hazards or areas where development may be constrained. Compatible development will be allowed which avoids designated *critical areas*, minimizes the impact, or mitigates potential problems through engineering, siting, or design. Proposals will be examined on a case-by-case basis to allow for creative solutions and to assure that the special combinations of factors in a particular case are addressed.

Policy EN 5.7 Undertake appropriate, adequate and timely actions to protect and recover state priority species, species listed under the federal *Endangered Species Act*, local species of concern and their habitats located within the City to 1) avoid *local extirpation* of such species from the lands or fresh waters or nearshore and 2) contribute to the protection and recovery of such species throughout the greater region in cooperation with federal, state and other local agencies.

Policy EN 6.1 Minimize public and private losses due to flood conditions by limiting development in *frequently flooded areas* as shown on the Flood Insurance Rate Maps. Educate property owners and residents in proximity to *frequently flooded areas* about vulnerability over time.

Frequently flooded areas can and do migrate over time. Increased development may affect the level of occurrence and location of *frequently flooded areas*. City Flood Insurance Rate Maps originally produced in 1975 and updated in 1977, and need to be kept current.

Policy EN 8.1 Avoid *land uses* on *landslide hazard* and *erosion hazard areas*. If the hazard caused by development can be mitigated, then design *land use* to prevent damage to persons or property and environmental degradation and to preserve and enhance existing vegetation to the maximum extent possible.

EN Action #2 Integrate sustainability and conservation into regulations.

Goal EN-4 Encourage sustainable development that maintains diversity of healthy, functioning ecosystems that are essential for maintaining our quality of life and economic viability into the future.

Policy EN 4.1 Employ conservation design methods and principles such as *low impact development* techniques for managing storm and waste water, *green building* materials, high-efficiency heating and lighting systems.

EN Action #3 Consider *climate change* in all relevant City decisions, including capital projects, budgeting, staffing, and program creation.

GOAL EN-2 Encourage sustainability in City Government operations.

Policy EN 1.8

Consider the potential impacts of *climate change* and its impacts in all decisions related to natural systems, and environmental quality, forest systems, local food production, shorelines, and groundwater recharge.

Policy EN 2.1 In managing City government operations, take reasonable steps to reduce impacts to the environment and ecosystems upon which we depend. This includes recognizing and preparing for the impacts of *climate change*.

Policy EN 6.4 Locate public facilities such as sewer and water lines outside of *frequently flooded areas* and with consideration of future sea level rise, in order to minimize damage to both the *public facility* and the natural environment. *Public facilities* may be located within *frequently flooded areas* only if no environmentally preferable alternative exists to mitigate environmental concerns. Additional development is not encouraged in *frequently flooded areas*.

Policy EN 10.10 Transportation and energy production diminish air quality when power is produced with fossil fuel combustion. Maintain and improve Island air quality by promoting the development of carbon free *infrastructure*.

EN Action #4 Consider creating a new “Agricultural Resource Land” (ARL) designation consistent with WAC 365-190-050, and consider designating City-owned farmland ARL.

Policy EN 15.2 Inventory land currently used and/or potentially available for *agriculture*, including community gardens.

Policy EN 15.4 Develop a procedure to allow public and private property owners to designate their properties Agricultural Resource Land, consistent with WAC 365-190-050.

Policy EN 15.6 Prioritize food production on public farmland to address long-term food security for Island residents.

Policy EN 15.8 Ensure protection of the Island’s *aquifers* and streams by promoting agricultural uses that are not water intensive and *agriculture* practices that protect water quality.

Policy EN 17.7 Support agricultural tourism that ensures compatibility with surrounding uses.

Policy EN 17.8 Consider establishing a Citizen Advisory Group on *Agriculture* comprised of citizens representing farmers, non-profit organizations involved with local *agriculture* and businesses with an interest in local *farm* produce.

EN Action #5 Incorporate *low impact development* principles, goals, and approaches into all land use and development codes.

NOTE: SAME ACTION IN WATER RESOURCES ELEMENT

EN Action #6 ~~Review and update BMC 16.22 Vegetation Management and other~~ Assess if City tree regulations and programs should be updated.

Policy EN 18.2 When acreage classified as timberlands or *forest land* is being converted to residential or agricultural use promote protection of the most valuable trees and forested area and compact development to limit the extent of clearing and soil disturbance.

Policy EN 19.8 Develop street tree programs for the commercial and mixed-use zones and the more densely developed residential zones.

EN Action #7 Evaluate the reasons why the City's PDR and TDR programs have not been successful and explore ways to make them functional to meet City objectives.

NOTE: SAME ACTION IN LAND USE ELEMENT

Policy EN 3.2 Use *Transfer of Development Rights (TDRs)* and *Purchase of Development Rights (PDRs)* to protect critical areas.

Policy EN 5.3 The protection and enhancement of mature trees, and *fish and wildlife habitat* are important criteria used when evaluating the preservation of *open space* as part of development techniques such as clustering, *flexible lot design subdivisions* and *transfer of development rights (TDRs)*.

Policy EN 15.1 Provide owners of *farms* the option of participating in the *(TDRs)/(PDRs)* program.

MEDIUM PRIORITY ACTIONS

EN Action #8 Improve City outreach programs to educate the public about how they can protect and enhance natural resources and respond to climate change.

Policy EN 1.3 Protect and enhance the natural systems and environmental quality of Bainbridge Island by continuing to build cooperative relationships between the City, citizens, landowners, and other public, non-profit and private organizations.

Policy EN 5.9 Develop in coordination with the Department of Fish and Wildlife, the Bainbridge Island Metropolitan Park and Recreation District and the Bainbridge Island Land Trust a program to educate the citizens of the Island, particularly those citizens who reside adjacent to priority wildlife habitat, on ways to utilize private property in a manner that will help protect and enhance wildlife habitat.

Policy EN 19.4

Implement a community-wide program to educate Island residents about the functions and values of trees.

EN Action #9 Coordinate with other agencies to promote safe and sustainable pest and weed management.

Goal EN-14 Collaborate with the Kitsap County Noxious Weed Board and other relevant agencies and organizations to develop and maintain a plan to remove and control invasive plant and animal species, as well as prepare for vulnerability to future invasive plant and animal species resulting from *climate change* and international commerce.

Policy EN 1.7 To protect the island's ecosystems, discourage the use of *neonicotinoid* pesticides.

Policy EN 14.1 Coordinate with public agencies and nonprofit organizations to control, and where feasible, eradicate invasive plant species from public lands.

Policy EN 14.2 Improve public outreach to encourage residents control and where feasible, eradicate invasive plant species on private property.

OTHER ACTIONS

EN Action #10 ~~Coordinate with organizations and governments at all levels to prepare for and respond to climate change. Implement actions as outlined in the City of Bainbridge Island Climate Action Plan.~~

GOAL EN-12 Reduce *greenhouse gas* emissions through compliance with federal, state and regional policies while developing local strategies to reduce emissions further. Reduce greenhouse gas emissions by 90% by 2045 compared to 2014 levels with interim milestones of 25% reduction by 2025 and 60% by 2035 compared to 2014 levels.

Policy EN 7.1 Consider the implications of sea level rise in all relevant decision-making by using regional sea level rise projections and shoreline instability maps (as provided by the WA Department of Ecology and utilized and ~~interpreted with the Bainbridge Island Climate Impact Assessment and informed by the 2024 Bainbridge Island Sea Level Rise Vulnerability & Risk Assessment~~).

Policy EN 10.1 Promote *land use* patterns and transportation policies that ensure that the Island's contribution to regional air quality is consistent with or better than State and Federal standards.

Environmental Element Motions

Councilmember Lant

Policy EN 5.9

Motion: Develop in coordination with the Department of Fish and Wildlife, the Suquamish Tribe, the Bainbridge Island Metropolitan Park and Recreation District, the Bainbridge Island Land Trust and private parks such as Bloedel and Islandwood, a program to educate the citizens of the Island, particularly those citizens who reside adjacent to priority wildlife habitat, on ways to utilize private property in a manner that will help protect and enhance wildlife habitat.

Policy EN 10.4

Motion: Support and assist the Puget Sound Clean Air Agency in providing information to the community about available and innovative emission controls for residential, commercial, vehicular and light industrial use.

Policy EN 10.8

Motion: Using guidance from the Puget Sound Clean Air Agency, encourage and promote the retrofit or replacement of non-certified wood stoves with certified appliances.

Policy EN 11.2

Motion: Promote actions such as equipment modifications and operational requirements that reduce noise from transportation modes, construction sites, industrial and residential uses and commercial business establishments.

Policy EN 11.4

Motion: Support targeted community outreach, multilingual communication and education, and transition support to individuals affected by the Island's clean air, noise, or greenhouse regulations.

Policy EN 12.5

Motion: Support the development of a public education program which informs individuals on the methods and progress for meeting the Island's greenhouse gas emission goals and ways individuals can assist in reaching the reduction goals.

Goal EN-14

Collaborate with the Kitsap County Noxious Weed Board and other relevant agencies and organizations to develop and maintain a proactive plan for invasive plant and animal management that focuses removal efforts on high-priority locations and areas of greatest spread risk, as well as prepare for vulnerability to future invasive plant and animal species resulting from climate change and international commerce.

Policy EN 15.6

Motion: Prioritize food production on public and private farmland to address long-term food security for Island residents.

Policy EN 17.9

Motion: Exempt sign code requirements and fees for agricultural uses due to the seasonal nature of farms.

Mike Nelson

Environmental Element

Page EN-14

Question: Should we delete the bolded statement under “Forest Lands” title, which states “Propose language to make sure that the paragraph below is on BI”?



City Council Study Session Agenda Bill
Tuesday, May 19, 2026

Agenda Item: (7:15 pm) Consider Economics Element of the Comprehensive Plan

Department: City Council Study Session

Agenda Section: Regular Business

Estimated Time: 20 Minutes

Recommendation:

I move to forward the Economics Element of the Comprehensive Plan to a future meeting for further discussion and consideration of approval.

Narrative:

The Economic element is a required element by the Growth Management Act. It was considered by the Planning Commission and approved as presented on 3/18/26.

The future economy of Bainbridge Island is linked to the community's vision and strategy for dealing with future needs. A healthy, resilient economy is a tool for accomplishing larger community goals and creating a more robust future. The Economic Element of the Comprehensive Plan is intended to guide the enterprise and commercial exchange on Bainbridge Island to help reinforce the overall vision and values of the Comprehensive Plan, to strengthen a sustainable community, to protect the quality of our environment, and to encourage traditional resource-based activities such as agriculture. A community that creates for itself an environment that is attractive to new business while nurturing existing business, that maintains adequate public facilities, and one that preserves its natural

resources will have an edge when it comes to improving its economy.

The proposed discrete updates to the Economic Element reflect the updated planning period and acknowledge the changing conditions and updated information since 2017. Changes to note include:

- A statement that, since 2020, we have seen a notable increase in home-based businesses and remote workers on the island, further diversifying the local economy and workforce.
- fostering a positive business climate and expand employment opportunities specifically for businesses that provide living wage jobs, are owned locally, are women or minority-owned small businesses, or that support environmental sustainability.
- encouraging diverse local employment opportunities, including home-based and remote employment.

Fiscal Impact:

Community Engagement and Outreach:

Attachments:

1. Draft Updated Economic Element
2. Economic Element Motions - Lant 05152026
3. Motions about Economic Element from CM Nelson for CC Mtg on 5-19-2026

ECONOMIC ELEMENT

NOTE: PAGE NUMBERS TO BE UPDATED AT LATER DATE
TABLE OF CONTENTS

	PAGE
ECONOMIC ELEMENT INTRODUCTION	EC-1
ECONOMIC VISION	EC-1
GOALS AND POLICIES	EC-2
DIVERSIFIED ECONOMY	EC-2
INFRASTRUCTURE	EC-3
SUSTAINABILITY	EC-3
CIVIC LIFE.....	EC-4
JOBS/HOUSING BALANCE	EC-5
DEVELOPMENT IN <i>DESIGNATED CENTERS</i>	EC-5
PUBLIC/PRIVATE PARTNERSHIPS	EC-6
RETAIL AND SERVICES	EC-7
SERVICES SECTOR	EC-8
BUILDING, DESIGN AND CONSTRUCTION SECTOR.....	EC-8
TOURISM	EC-9
ARTS	EC-9
HOME-BASED BUSINESSES	EC-10
AGRICULTURE	EC-10
BUSINESS/INDUSTRIAL.....	EC-11
IMPLEMENTATION	EC-11

ECONOMIC ELEMENT INTRODUCTION

The future economy of Bainbridge Island is linked to the community's *vision* and strategy for dealing with future needs. A healthy, resilient economy, based on our collective future vision of the Island, is a tool for accomplishing larger community *goals* and creating a robust future.

"The *vision* a community has of itself is important to its economy. Each community plays a crucial role in creating for itself an environment that is attractive to and nurturing of new and existing businesses. A vital economy requires adequate *public facilities* (water, sewer, roads, schools, parks, libraries, emergency services and utilities). A community that does all that AND preserves its natural features will have an edge when it comes to improving its economy."

Washington State Department of Commerce

The *Growth Management Act (GMA)* addresses the concerns of "uncoordinated and unplanned growth that potentially pose a threat to the environment, sustainable economic development, and the health, safety and high quality of life enjoyed by residents." An important part of a healthy economy is the quality of the environment.

The Economic Element of the *Comprehensive Plan* is intended to guide the climate for enterprise and commercial exchange on Bainbridge Island and reinforce the overall vision and values of the *Comprehensive Plan* adopted in 1994, and subsequently updated in 2004, ~~and~~ 2016, and 2024; to steward a sustainable community; to protect the quality of its environment: the water, air and land; and to encourage traditional resource based activities such as *agriculture*. Since 2020 there has been a notable increase in home-based businesses and remote workers living on the Island, which further diversifies the local economy and workforce.

ECONOMIC VISION-~~2036~~ 2044

Bainbridge Island has developed in a manner that is consistent with stewardship of our Island's finite natural resources and the needs of a diverse population. *Affordable housing* is available for much of the local service sector workforce and improvements in communications infrastructure have enabled more successful local enterprises, including home-based businesses.

The economy of Bainbridge Island reaps advantages from proximity to the Seattle area and the Kitsap Peninsula. The Island is a destination for visitors interested in learning about sustainability and resilient community development. Local employment opportunities are diverse, including small manufacturing, artisanal crafts, high tech, e-commerce, arts, and food. Small retailers are thriving by serving the needs of local residents as well as visitors.

Agriculture is a thriving part of the Island's economy: City-owned agricultural lands are being sustainably cultivated and producing seasonal foods for local consumption. The number of *farms* on private acreage has increased and is supplementing the local food supply. To enhance the viability of local *farms*, *affordable housing* for farm workers has been appropriately built on City owned farmland.

Innovative and flexible city programs encourage the real estate market to adapt to trends that favor conservation, efficient use of land and resources, and homes of modest size and price.

Islanders recognize that a sense of community as well as economic value is achieved by neighborly acts. A robust non-profit sector strengthens social capital, provides services and employment opportunities.

GOALS & POLICIES

DIVERSIFIED ECONOMY

GOAL EC-1

Promote economic vitality, growth and stability.

Bainbridge Island has the opportunity to create a robust, resilient and durable economy by demonstrating early leadership and acknowledging the changes that will affect our economy. Planning for these changes and taking actions that support and encourage a local economy will help reduce community vulnerability to issues such as aging demographics, housing availability, transportation constraints, and *climate change*.

By providing enterprises that both serve and employ local residents, Bainbridge Island will be better able to withstand fluctuations in the larger regional economy. In addition, people who live and work in their community are available to invest time and money in their families, organizations, and community life. A key to a healthy, stable and vital economy is to create and undertake business opportunities that anticipate and respond to conditions that affect our community. This would include identifying emerging needs and markets so that Bainbridge Island businesses benefit from being on the leading edge of change.

Policy EC 1.1

Develop and maintain regulations and programs that provide support for our community's businesses.

Policy EC 1.2

The city *should* embrace diverse and innovative business opportunities compatible with community values and develop programs to make Bainbridge Island an attractive location for those businesses.

Bainbridge Island is affected by regional, national, international and global environmental and economic trends and changes in the physical environment. While we cannot control global economic or environmental conditions we can support the local economy by providing *policy* direction and *land use infrastructure* to allow for and encourage robust economic activities that are prepared for and responsive to change.

Policy EC 1.3

Coordinate with local business groups to track commercial activity, identify trends and assess the economic health of the Island. ~~Create an Economic Development Strategy to identify creative and appropriate ways for the City to encourage and stimulate business activity.~~

Policy EC 1.4

Support existing partnerships of business leaders and community members that work together to enhance the economic vitality of Bainbridge Island.

Policy EC 1.5

Address potential physical, economic, and cultural displacement of existing businesses that may result from redevelopment or market pressure.

Policy EC 1.6 4

Support entrepreneurship by providing adequate *land use* designations in keeping with the character of the Island, while avoiding investment in sectors, activities, or *infrastructure* that will not remain viable in the foreseeable future.

Policy EC 1.7 5

In order to provide opportunities for business enterprise, adequate space must be provided for efficient use of existing developed areas near public transportation (e.g. ferry, bus service) and for growth that recognizes and protects the Island's valued natural amenities, its limits of land and water and the quality of its residential *neighborhoods*.

Policy EC 1.8 6

Coordinate with the business community and others to monitor the Island's business climate and make appropriate adjustments to diversify and make more resilient the economic health of the island, the Economic Development vitality Strategy.

Policy EC 1.9

Foster a positive business climate and expand employment opportunities specifically for businesses that provide living wage jobs, are owned locally, are women or minority-owned small businesses, or that support environmental sustainability.

Policy EC 1.10

Encourage diverse local employment opportunities, including home-based and remote employment.

Policy EC 1.11

Prioritize services and access to opportunity for people of color, people with low incomes, and historically underserved communities to ensure all people can attain the resources and opportunities to improve quality of life and address past inequities.

INFRASTRUCTURE

GOAL EC-2

Provide sufficient and resilient infrastructure that is supportive of a healthy economy and environment, particularly telecommunications and electrical reliability.

Policy EC 2.1

Identify long-term *infrastructure* needs that support economic *sustainability* and are designed to withstand future conditions.

Policy EC 2.2

Support *infrastructure* enhancement to accommodate new information technology and changing conditions.

Policy EC 2.3

Implement infrastructure and technology improvements around *designated centers* to provide enhanced service and to retain and attract business.

Policy EC 2.4

Utilize Local Improvement Districts or Tax Increment Financing to spur *infrastructure* development.

Policy EC 2.5

Consider the development of a downtown parking structure, possibly through a public/private partnership.

SUSTAINABILITY

GOAL EC-3

Promote business practices that protect the Island's natural beauty, ~~and environmental~~ and public health, and support long-term business success.

Environmental protection is a value expressed in the *guiding principles* that are the foundation of the comprehensive plan. A quality environment incorporates and enhances financial, natural, and social *economic capital* of the community.

Policy EC 3.1

Encourage the use of *green building* materials and techniques in all types of construction, as well as design approaches that are responsive to changing conditions, as outlined in the Buildings section of the Climate Action Plan

Policy EC 3.2

Help businesses find markets for surplus materials, by-products and waste.

Policy EC 3.3

Provide up-to-date information about solid waste management, including the Kitsap County Solid and Hazardous Waste Management Plan. ~~Encourage local enterprises to participate in programs such as the Kitsap County Waste Wise and Green Community Initiative, which recognize and to~~ assist business efforts to protect the environment.

Policy EC 3.4

Encourage public sector solid waste reduction, reuse and recycling.

Policy EC 3.5

Encourage existing and new businesses to become part of a linked cooperative whereby the by-products and waste of one enterprise become the raw materials of another.

Policy EC 3.6

Create opportunities to foster green technology and industries, such as energy, waste and information technology, which have the potential to create local, family wage jobs in our community at the same time we are protecting our natural beauty, environmental and economic health.

CIVIC LIFE

GOAL EC-4

Encourage a broad range of civic activities and organizations.

Non-profit organizations are a source of employment and other economic benefits for Islanders and utilize many local commercial and service providers. Volunteers also provide significant contributions to the local economy and provide valuable human resources to the community.

Policy EC 4.1

Support the non-profit sector of human and social service providers.

Policy EC 4.2

Encourage and recognize individuals, organizations, and businesses that volunteer time and skills to the community.

Policy EC 4.3

Encourage local business groups, educational institutions, and other entities to provide continuing education and skills development.

Policy EC 4.4

Promote Bainbridge Island as a family-friendly community with high quality schools, recreational opportunities and a safe, clean environment.

JOBS/HOUSING BALANCE

GOAL EC-5

Provide a variety of *affordable housing* choices so that more people who work on Bainbridge Island can live here.

The Housing Element of the *comprehensive plan* provides several options for the development of *affordable housing* on the Island.

Policy EC 5.1

Continue to monitor the progress in implementing the Housing Element and evaluate new ways of providing *affordable housing*.

Policy EC 5.2

In concert with the Housing Element's Goals and Policies, pursue a housing strategy that seeks to accommodate a wide variety of housing options, both in design and affordability, to meet the demands of the full range of the population including service sector employees, retirees, students, artists, farmers and craftspeople.

DEVELOPMENT IN DESIGNATED CENTERS

GOAL EC-6

As the city's *designated centers* evolve, balance their functions as places of commerce and employment with their roles helping to meet housing needs and provide focal points for civic engagement and cultural enrichment.

Policy EC 6.1

Enhance the existing *designated centers* to help the Island economy prosper and provide a high quality of life, creating ancillary benefits such as decreasing pollution (including *greenhouse gas emissions*), protecting *open space*, and creating local family wage jobs.

Policy EC 6.2

Utilize urban design strategies and approaches to ensure that changes to the built environment are at a locally appropriate scale and enhance the Island's unique attributes, in recognition of the economic value of "sense of place."

Policy EC 6.3

Establish procedures and regulations ~~Develop urban design strategies~~ to ensure that the built environment is prepared ~~appropriate~~ for present and future conditions, including the impacts of *climate change*.

Policy EC 6.4

Ensure the efficient flow of people, goods, services, and information in and throughout the Island with *infrastructure* investments, particularly within and connecting to *designated centers*, to anticipate the needs of the Island's businesses.

Policy EC 6.5

Promote emerging business sectors such as artisanal and small-scale producers, including *craft food and beverages*, as well as low-impact, specialty manufacturing, including software, electronics and green technology.

Policy EC 6.6

Preserve and enhance activities that feature Bainbridge Island's history of maritime, agricultural and artistic enterprises.

Policy EC 6.7

Monitor parking requirements in the *designated centers* and revise them as needed to encourage business development, while reasonably accommodating parking demand. This should be done in concert with efforts to increase use of multi-modal transportation options, reduce dependence on automobiles and improve our local environment.

PUBLIC/PRIVATE PARTNERSHIPS

GOAL EC-7

Partner with local businesses and business associations on programs and projects to diversify and grow the City's economic make-up, reduce sales leakage, attract spending by visitors, enhance local employment, and increase municipal tax revenues to support local services.

Policy EC 7.1

Leverage technology assets, such as existing fiber connections, to support technology-based businesses and potentially to pursue new revenue streams.

Policy EC 7.2

Focus "buy local" community marketing on consumer spending segments in which there is significant "leakage" and also a strong possibility of recapturing spending.

Policy EC 7.3

Support and enhance social, cultural, artistic, nature based recreational and other learning activities for residents, workers and visitors.

Policy EC 7.4

Integrate programs and activities related to economic prosperity with objectives related to environmental *sustainability*, social and political equity, *climate change* adaptation and cultural engagement.

Policy EC 7.5

Continue to support and enhance the arts/culture sector and the visitors that arts and cultural events attract.

Policy EC 7.6

Support and enhance the role of the *craft food and beverage* industry as attractions for residents and visitors alike.

Policy EC 7.7

Support and enhance recreational, nature-based, and other outdoor events that attract visitors.

Policy EC 7.8

Support and make Bainbridge Island a model community for *climate change* preparedness and *sustainability* practices that ensure long-term business viability while attracting and protecting visitors, businesses and residents.

Policy EC 7.9

Support and enhance our waterfront, including docks and maritime services that attract visitors and residents.

Policy EC 7.10

Provide an efficient, timely and predictable regulatory environment within the framework of a strong customer service approach.

Policy EC 7.11

Encourage the private, public, and non- profit sectors to incorporate environmental and social responsibility into their practices.

RETAIL AND SERVICES

GOAL EC-8

Maintain and enhance Winslow as the commercial hub of Bainbridge Island. Position the Neighborhood Centers to provide the opportunities for smaller-scale commercial and service activity.

Policy EC 8.1

Reinforce Winslow as the mixed-use center for commerce and exchange by fully implementing the Winslow ~~Master~~Subarea Plan.

Policy EC 8.2

Develop Neighborhood Centers at higher residential *densities*, as recommended in the Land Use Element, in order to attract a variety of small-scale retail and service providers.

Policy EC 8.3

Promote locally-owned and independent businesses with standards that foster unique development.

SERVICES SECTOR

GOAL EC-9

Grow a healthy service sector to increase employment opportunities, enhance local revenues, and meet emerging needs of the Island's changing demographics.

Policy EC 9.1

Increase availability of housing to enable service sector employees to live on the Island.

Policy EC 9.2

Increase access to transportation options that better enable service sector employees who live off-Island to work on-Island.

Policy EC 9.3

Promote an emerging professional services sector that recognizes the Island's linkage to the Seattle job market for managerial jobs and information-based industries.

Policy EC 9.4

Promote on-Island access to healthcare facilities and medical services, particularly those addressing the needs of the Island's increasing older population.

BUILDING DESIGN AND CONSTRUCTION SECTOR

GOAL EC-10

Support building design and construction industries to increase employment opportunities, enhance local revenues, and help ensure a built environment that responds to and reflects the Island's Vision and Guiding Principles.

The professions and trades involved in design, construction, furnishing, renovation and marketing of commercial and residential real estate constitute a large and very important sector of the Island's economy. Productivity and profits within that sector are crucial factors in the stability and well-being of the entire community. Good development, in a community such as ours, must work within limits and be compatible with the goals of environmental conservation.

Policy EC 10.1

Make the City's development permit and code enforcement action process timely, fair and predictable.

Policy EC 10.2

Partner with Island architects, landscape architects, builders and related construction professionals to draft development standards and practices that incorporate *green building* practices and *context-sensitive design*.

TOURISM

GOAL EC-11

Tourism is a key sector of the Island's economy and needs to be supported. Bainbridge Island provides unique opportunities for visitors to experience internationally recognized gardens, cultural centers, parks, and recreational events.

Policy EC 11.1

Improve pedestrian links between the ferry terminal, downtown Winslow, and the harbor. Encourage visitors on foot and bicycle and support public *transit* and shuttle services.

Policy EC 11.2

The predominant focus of downtown Winslow is to serve the commercial and social needs of Island residents. A lively, *pedestrian-oriented* town center that provides a mix of commercial and *residential uses* creates a potential tourist destination.

Policy EC 11.3

Support the Island as a visitor destination by preserving and enhancing the unique qualities of our community.

Policy EC 11.4

Encourage multiple-day stays and participation in selected Island events and destinations by off-Island visitors.

Policy EC 11.5

Encourage bed and breakfasts and other creative tourist accommodations.

Policy EC 11.6

Continue to mMonitor the Island's short-term rentals to gauge their impact on the long-term housing supply and their surrounding neighborhoods-community.

Policy EC 11.7 Consider updates to City short-term rental regulations to ensure compliance with any applicable health and safety standards, including requirements of the Kitsap Public Health District.

ARTS

GOAL EC-12

Continue to promote the arts as a significant component of the Bainbridge Island economy.

Policy EC 12.1

Encourage and support the creative and economic contribution of the arts by implementing the *goals* and *policies* of the Cultural Element.

Policy EC 12.2

Promote the arts community within the region as an economic asset of the Island.

HOME-BASED BUSINESSES

GOAL EC-13

Foster home-based businesses as a key to a present and future vital economy.

~~Nearly half~~ Just over thirty percent of all businesses licensed on Bainbridge Island are reported as home-based. Bainbridge Island allows home-based businesses in all zones; ~~and 16.3% of the Island workforce works from home.~~ Home-based businesses are divided into two categories: minor and major *home occupations*.

Policy EC 13.1

Apply performance standards to limit impacts of home-based businesses in residential *neighborhoods*. Home-based business that do not meet performance standards may qualify as a major *home occupation* and will require a conditional use permit.

Policy EC 13.2

Support home-based businesses through business licensing and other City programs.

AGRICULTURE

GOAL EC-14

Recognize that farming is a part of the Island's heritage and contributes to the island's economy.

The Environmental and Land Use Elements contains several *goals* and *policies* intended to sustain and enhance agriculture.

Policy EC 14.1

Support the market for Island-grown *agriculture* products by:

- Recognizing and supporting the Bainbridge Island Farmers' Market, including permanently dedicating space for the market and enhancing the market area.
- Allowing and promoting roadside stands that sell Island-grown products.
- Promoting and supporting Community Supported Agriculture (CSA).
- Encouraging the development of value-added processing facilities that can be shared by many farmers.
- Encouraging food crops to be planted on public land.

Policy EC 14.2

Support a program that helps working farms through educational, historic, farm stay and tourist visits.

Policy EC 14.3

Support working farms through the creation and sale of locally-constituted, high-grade compost to maintain the fertility of Island soils.

BUSINESS/INDUSTRIAL

GOAL EC-15

The Business/Industrial (B/I) *land use* designation should provide space for job creating enterprises. Island based businesses provide the possibility of living and working in the community. It is the purpose of the B/I land use designations to provide opportunities for light industrial and other ~~non-retail~~ commercial activities. The City should be prepared to respond to a changing marketplace and the business opportunities perceived by its citizens, when those opportunities require pre-existing infrastructure and well-designed accommodations in order to flourish.

Policy EC 15.1

Promote manufacturing and business/industrial employment as an important source of family wage jobs on Bainbridge Island.

Policy EC 15.2

New Business/Industrial (B/I) *land use* designations will be considered based on the following:

- Proximity to existing B/I.
- The total amount of and expected need for B/I-zoned land.
- Compliance with ~~all~~ *policies* in the Land Use Element.
- ~~Reasonable proximity to SR 305.~~ Adequate transportation access.
- Availability of public sewer and water, *or* whether permitted uses might safely use wells and septic systems or other alternative systems that are approved by the Kitsap Public Health District.
- Consideration of pollution and *aquifer recharge* concerns.

- Adjacency to non-residential land uses.
- Minimal impact to residential land uses, neighborhoods and open space/conservancy and agriculture areas.

Policy EC 15.3

Conform Business/Industrial development to all Business/Industrial performance standards, the requirements of Site Plan and Design Review, and applicable design guidelines.

ECONOMIC IMPLEMENTATION

To implement the goals and policies in this Element, the City must take a number of actions, including adopting or amending regulations, creating partnerships and educational programs, and staffing or other budgetary decisions. Listed following each action are several of the comprehensive plans policies that support that action.

HIGH PRIORITY ACTIONS

EC Action #1 ~~Adopt and maintain an Economic Development Strategy to~~ **Coordinate public and private efforts to grow and sustain a healthy economy on the Island.**

Policy EC 1.3

Coordinate with local business groups to track commercial activity, identify trends and assess the economic health of the Island. ~~Create an Economic Development Strategy to identify creative and appropriate ways for the City to encourage and stimulate business activity.~~

Policy EC 1.4

Support existing partnerships of business leaders and community members that work together to enhance the economic vitality of Bainbridge Island.

Policy EC 1.5

Address potential physical, economic, and cultural displacement of existing businesses that may result from redevelopment or market pressure.

Policy EC 1.6

Coordinate with the business community and others to monitor the Island's business climate and make appropriate adjustments to diversify and make more resilient the economic health of the island, the Economic Development vitality Strategy.

EC Action #2 **Continue efforts to promote and support agriculture as a component of the Island's economy, landscape and culture.**

Policy EC 14.1

Support the market for Island-grown agriculture products by:

- Recognizing and supporting the Bainbridge Island Farmers' Market, including permanently dedicating space for the market and enhancing the market area.
- Allowing and promoting roadside stands that sell Island-grown products.
- Promoting and supporting Community Supported Agriculture (CSA).
- Encouraging the development of value-added processing facilities that can be shared by many farmers.
- Encouraging food crops to be planted on public land.

EC Action #3 Assure that adequate parking is available to support businesses.

Policy EC 6.7

Monitor parking requirements in the *designated centers* and revise them as needed to encourage business development, while reasonably accommodating parking demand. This should be done in concert with efforts to increase use of multi-modal transportation options, reduce dependence on automobiles and improve our local environment.

EC Action #4 Identify capital projects and streetscape standards to implement Policy EC 11.1, to improve non-motorized facility links between the ferry terminal, downtown Winslow, and the harbor.

Policy EC 11.1

Improve pedestrian links between the ferry terminal, downtown Winslow, and the harbor. Encourage visitors on foot and bicycle and support public transit and shuttles.

Economic Element Motions
Councilmember Lant

Policy EC 1.11

Motion: Prioritize services and access to opportunity for people of color, people with low incomes, and historically underserved communities to ensure all people can attain the resources and opportunities to improve quality of life.

Policy EC 2.4

Motion: Utilize Local Improvement Districts and other financial tools to spur infrastructure development.

Policy EC 3.4

Motion: Encourage public and private sector solid waste reduction, reuse, and recycling and partner with nonprofit organizations and community-led initiatives that advance sustainability, resiliency, and resource-sharing goals.

Policy EC 3.7

Motion: Support the development of community-based reuse, repair, and material recovery initiatives that reduce waste, extend product life cycles, and contribute to Bainbridge Island's climate resilience and sustainability goals.

Policy EC 1.4

Motion: Support existing and future partnerships of business leaders and community members that work together to enhance the economic vitality of Bainbridge Island.

Mike Nelson

Economic Element

Page EC-8, Policy EC 8.2

Motion: I move to strike Policy EC-8.2 in its entirety.



City Council Study Session Agenda Bill **Tuesday, May 19, 2026**

Agenda Item: (7:35 pm) Consider Capital Facilities Element of the Comprehensive Plan

Department: City Council Study Session

Agenda Section: Regular Business

Estimated Time: 20 Minutes

Recommendation:

I move to forward the Capital Facilities Element of the Comprehensive Plan to a future meeting for further discussion and consideration of approval.

Narrative:

The Capital Facilities element is a required element under the Growth Management Act. It was considered by the Planning Commission and approved as presented on 3/26/26.

Capital Facilities are the public facilities that we use on a daily basis. They are our streets, sidewalks, our City park and agricultural properties. Capital Facilities are our public buildings, like City Hall, the police and municipal court building, public water systems that deliver the drinking water and sanitary sewer systems that collect wastewater for treatment and safe disposal. Capital Facilities does not cover routine maintenance but does include renovation or major repair/reconstruction of damaged or deteriorating facilities. The Growth Management Act requires a Capital Facilities Plan. As part of the GMA requirements, the Capital Facilities element must contain a six-year financing plan, known as a Capital Improvement Plan, that

identifies the type and location of expanded or new capital facilities and the sources of funding that will be used to pay for them. The Capital Improvement Plan is an important ongoing part of the City's overall management process, ensuring that new information, grant-making and evolving priorities have a continual review.

The proposed discrete updates to the Capital Facilities Element reflect the updated planning period and acknowledge the changing conditions and updated information since 2017. Changes to note include:

- Ensuring that capital improvement projects are affordable and equitably accessible to all residents. (CF 1.4)

A summary of the updates to the Capital Facilities Element is included in the attached memorandum from former Public Works Director Chris Wierzbecki.

Fiscal Impact:

Community Engagement and Outreach:

Attachments:

1. Draft Updated Capital Facilities Element
2. CFP Element Update Summary Memo
3. Motions about Capital Facilities Element from CM Nelson for CC Mtg on 5-19-2026

CAPITAL FACILITIES ELEMENT

NOTE: PAGE NUMBERS TO BE UPDATED AT LATER DATE
TABLE OF CONTENTS

	PAGE
INTRODUCTION.....	CF-1
CAPITAL FACILITIES VISION.....	CF-3
GOALS AND POLICIES.....	CF-3
CAPITAL FACILITIES INVENTORY.....	CF-7
CITY FUNCTIONAL PLANS ADOPTED BY REFERENCE.....	CF-12
SPECIAL PURPOSE DISTRICT PLANS ADOPTED BY REFERENCE.....	CF-12
SIX-YEAR CAPITAL IMPROVEMENT PLAN.....	CF-13
CAPITAL FACILITIES IMPLEMENTATION.....	CF-13

CAPITAL FACILITIES INTRODUCTION

What Are *Capital Facilities* and Why Do We Need to Plan for Them?

Capital facilities are all around us. They are the *public facilities* we all use on a daily basis. They are our public streets and sidewalks, our City park and agriculture properties, our public buildings such as City Hall, the library, fire and police stations, our public water systems that bring us pure drinking water, and the sanitary sewer systems that collect our wastewater for treatment and safe disposal. Even if you don't reside within the City, you use *capital facilities* every time you drive, eat, shop, work, or play here.

While a *Capital Facilities Plan (CFP)* does not cover routine maintenance, it does include renovation and major repair or reconstruction of damaged or deteriorating facilities. *Capital facilities* do not usually include furniture and equipment. However, a capital project may include the furniture and equipment clearly associated with a newly constructed or renovated facility.

The planning period for a [Capital Improvement Plan \(CIP\)](#) is six years. Expenditures proposed for years one and two of the program are incorporated into the City's Biennial Budget as the Capital Budget.

The [CIP](#) process is an important ongoing part of the City's overall management process. New information, grant-making and evolving priorities require continual review. Each time the review is carried out, it must be done comprehensively.

All of these facilities should be planned for years in advance to assure they will be available and adequate to serve all who need or desire to utilize them. Such planning involves determining not only where facilities will be needed, but when, and not only how much they will cost, but how they will be paid for. It is important to note that the *CFP* is a planning document that includes timeline estimates based on changing dynamics related to growth projections, project schedules, or other assumptions.

Capital Facilities Plans are required under State law to identify *capital facility* deficiencies needed to serve our existing population, plan for capital facility improvements to meet the needs of our future population, and ensure that local governments have the fiscal capacity to afford to construct and maintain those capital facilities.

The *Capital Facilities Plan* includes summary details of the major capital projects of the City and a financial capacity analysis. As the general purpose government on Bainbridge Island, the City is required to analyze and integrate the *capital facilities plans* from special purpose districts (Schools, Parks, Fire, etc) into its *Capital Facilities Plan*. The City and the special purpose districts shall work together to integrate their capital planning efforts to provide a more even tax impact and to prioritize their projects while still providing quality facilities and services for the citizens they serve. This is consistent with *Guiding Principle #8* and its supporting policies 8.1,

8.2, 8.4, 8.5, 8.6. Staff Note: this last sentence could be updated pending final update to *Guiding Principles*.

Growth Management Act Requires a Capital Facilities Plan

This *Capital Facilities Element* update has been developed in accordance with the RCW 36.70A.070, the *Growth Management Act (GMA)*, and WAC 365-196, the Procedural Criteria. This *Capital Facilities Plan*, and other City plans adopted by reference, support the Land Use, Housing, and Economic Elements by utilizing the same ~~2036~~ 2044 population and employment forecasts.

This *Capital Facilities Plan* is the product of many separate but coordinated planning documents and planning bodies. Each special purpose district (Schools, Parks, Fire, etc.) has its own Capital Facility Plan, Strategic Plan, and/or budget. In this *Capital Facilities Plan*, the City adopts these special purpose district planning documents by reference. The City's adopted functional plans are adopted by reference in this *Capital Facilities Element*, including an Island-wide ~~Transportation~~ Mobility Plan, Water System Plan, a Sewer System Plan, a Storm and Surface Water Management Program, and a Pavement Asset Management ~~System~~ Plan – each operational plan providing an inventory of existing facilities, an analysis of deficiencies and future demand, and recommendations for capital improvements.

The *GMA* requires that the *Capital Facilities Element* contain a six-year financing plan, known as a *Capital Improvement Plan (CIP)* that identifies the type and location of expanded or new *capital facilities* and the sources of funding that will be used to pay for them.

Relationship of Capital Facilities Plan to the Budget

The *Capital Facilities Plan* and the City's budget serve different but related purposes. The budget authorizes the amount to be spent during the coming biennium; whereas the *Capital Facilities Plan* identifies needed capital facilities over a six-year period. A requirement of the *Capital Facilities Plan* is that it show how the needed facilities will be paid for during at least a six-year period (*Capital Improvement Plan*). Because State law requires that no money can be spent on capital projects which are not shown in the *Capital Facilities Plan*, it is important that the budget authorize spending only on *capital facilities* in the Plan.

Concurrency and Levels of Service (LOS)

The *Growth Management Act* requires jurisdictions to have *capital facilities* in place and readily available when new development occurs. This concept is known as concurrency. Specifically, this means that:

1. All public facilities needed to serve new development and/or a growing service area population must be in place at the time of initial need. If the facilities are not in place, a financial commitment must have been made to provide the facilities within six years of the time of the initial need; and

2. Such facilities must be of sufficient capacity to serve the service area population and/or new development without decreasing service levels below locally established minimum standards, known as *level of service*.
3. In the allocation of funds for *capital facilities*, choices will be made. The *CFP* may facilitate some forms of development while constraining other forms.

Levels of service (LOS) are usually quantifiable measures of the amount and/or quality of public facilities or services that are provided to the community and are usually expressed as a ratio of amount of service to a selected demand unit. For example, sewer *LOS* is expressed as 100 gallons per capita per day, public school *LOS* may be expressed as the number of square feet available per student or as the number of students per classroom. Police or Fire protection may be expressed as the average response time for emergency calls. Factors that influence local standards are citizen and City Council recommendations, national standards, federal and state mandates, and the standards of neighboring jurisdictions.

CAPITAL FACILITIES VISION ~~2036~~ 2044

Capital facilities planning has kept up with changes in the natural and built environments, meeting the needs of a population that expects a high level of service. The City's *Capital Improvement Plans* were coordinated with the strategic plans and budgets of the special purpose districts (e. g., Schools, Parks and Fire).

Planning and budgeting for facilities has been concurrent with subarea planning for the *designated centers*, and to a large extent, recent population growth and commerce have been concentrated in and near those centers. Planning and budgeting has kept pace with maintenance and expansion of recreational facilities and public lands preserved for agriculture or conservation.

Over the past twenty years, Capital Improvement Plans have responded to anticipated impacts of climate change and sea level rise. New construction and retrofits have made public buildings energy efficient and models of low impact design.

GOALS & POLICIES

GOAL CF-1

The Capital Facilities Element and *Capital Improvement Plan (CIP)* provides the public facilities needed to support orderly compact urban growth, protect and support public and private investments, maximize use of existing facilities, promote economic development and redevelopment, increase public well-being and safety, and implement the *Comprehensive Plan*.

Policy CF 1.1

Biennially review, update and amend a six-year *CIP* that:

- Is subject to review and adoption by the City Council.
- Is consistent with the *Comprehensive Plan*, functional plans and adopted capital and operating budgets.
- Defines the scope and location of capital projects or equipment;
- States why each project is needed and its relationship to established *levels of service*.
- Includes costs of property acquisition, if any, project construction costs, timing, funding sources, and projected operations and maintenance impacts.

Policy CF 1.2

Coordinate with other *capital facilities* service providers to keep each entity current, maximize cost savings, and schedule and upgrade facilities efficiently. In general, it is the policy of the City to transfer parklands to the Park District whenever desirable and practical.

Policy CF 1.3

Evaluate and prioritize proposed *capital improvement* projects using the following long-term financial strategy principles and guidelines:

- Preserve and maintain physical infrastructure.
- Use an asset management approach to the City's capital facilities.
- Use unexpected one-time revenues for one-time costs or reserves.
- Pursue innovative approaches.
- Maintain capacity to respond to emerging community needs.
- Address unfunded mandates.
- Selectively recover costs.
- Recognize the connection between the operating and capital budgets.
- Utilize partnerships wherever possible.
- Remain committed to City *goals* over the long run.
- Anticipate and respond to the impacts of *climate change*, including sea level rise.

Policy CF 1.4

Ensure that capital improvement projects are:

- Financially feasible.
- Consistent with planned growth patterns provided in the *Comprehensive Plan*
- Consistent with State and Federal law.
- Compatible with plans of state agencies.
- Sustainable within the operating budget.
- Affordable and equitably accessible to all residents.

Policy CF 1.5

Give priority consideration to projects that:

- Are required to comply with State or Federal law.
- Implement the *Comprehensive Plan*.
- Are needed to meet concurrency requirements for growth management.
- Are already initiated and to be completed in subsequent phases.

- Renovate existing facilities to remove deficiencies or allow their full use, and preserve the community's prior investment or reduce maintenance and operating costs.
- Replace worn-out or obsolete facilities.
- Are substantially funded through grants or other outside funding.
- Address public hazards.

Policy CF 1.6

Adopt each update of the *Capital Facilities Plan* as part of the *Comprehensive Plan*.

Policy CF 1.7

Recognize that the year in which a project is carried out, or the exact amounts of expenditures by year for individual facilities, may vary from amounts stated in the *Capital Facilities Plan* due to:

- Unanticipated revenues or revenues that become available to the City with conditions about when they may be used,
- Change in the timing of a facility to serve new development that occurs in an earlier or later year than had been anticipated in the *Capital Facilities Plan*,
- The nature of the *Capital Facilities Plan* as a multi-year planning document. The first year or years of the Plan are consistent with the budget adopted for that financial period. Projections for remaining years in the Plan may be changed before being adopted into a future budget.

GOAL CF-2

Provide the *capital facilities* needed to direct and serve future development and redevelopment.

Policy CF 2.1

When planning for public facilities, consider expected future land use activity.

Policy CF 2.2

Capital facilities planning is an essential component of subarea planning and promoting development in *designated centers*.

Policy CF 2.3

Require new development to fund the *capital facilities* needed to serve the development.

GOAL CF-3

Prudently manage fiscal resources to provide needed *capital facilities*.

Policy CF 3.1

Ensure a balanced approach to allocating financial resources among:

- Maintaining existing facilities and eliminating existing *capital facility* deficiencies, and
- Providing new or expanding facilities to serve development and encourage redevelopment.

Policy CF 3.2

Use the *CIP* to integrate all of the community's capital project resources (grants, bonds, city funds, donations, *impact fees*, and any other available funding).

Policy CF 3.3

Allow developers who install infrastructure with excess capacity to use *latecomer's agreements* wherever reasonable.

Policy CF 3.4

Assess the additional operations and maintenance costs associated with acquisition or development of new *capital facilities*. If accommodating these costs places a financial burden on the operating budget, consider adjusting the capital plans.

Policy CF 3.5

Achieve more efficient use of capital funds through joint use of facilities and services by utilizing measures such as interlocal agreements, regional authorities, and negotiated use of privately and publicly owned land.

Policy CF 3.6

Consider potential new revenue sources for funding capital facilities, such as:

- Growth-induced tax revenues.
- Additional voter-approved revenue.
- Impact Fees.
- Benefit Districts.
- Local Improvement Districts.

Policy CF 3.7

Choose among the following available contingency strategies should the City be faced with capital facility funding shortfalls:

- Increase general revenues, rates, or user fees; change funding source(s).
- Decrease level of service standards in the Comprehensive Plan and reprioritize projects to focus on those related to concurrency.
- Change project scope to decrease the cost of selected facilities or delay construction.
- Decrease the demand for the public services or facilities by placing a moratorium on development, developing only in served areas until funding is available, or changing project timing and/or phasing.
- Use Local Improvement Districts; or surplus City-owned assets.

Policy CF 3.8

Secure grants or private funds, when available, to finance capital facility projects when consistent with the Comprehensive Plan.

GOAL CF-4

Public facilities constructed on Bainbridge Island meet appropriate safety, construction, energy conservation, durability and sustainability standards.

Policy CF 4.1

Adhere to the City's Engineering Development and Design Standards when constructing utility and transportation related facilities.

Policy CF 4.2

Regularly update the Engineering Development and Design Standards, and ensure that the Standards are consistent with the *Comprehensive Plan*.

Policy CF 4.3

Apply value engineering approaches on major projects in order to use resources efficiently and meet community needs.

Policy CF 4.4

Require public facilities to incorporate energy generation when and where possible.

CAPITAL FACILITIES INVENTORY

The following is the City's *capital facilities* property inventory. The inventory is organized by category and includes a current inventory of facilities, a narrative providing a general background of the planning activities and some discussion of future plans, and a discussion of *level of service (LOS)*, if applicable. Inventories of public roads, water utility, and sewer utility *infrastructure* are found in the following functional plans (hyperlinked):

- [Island-wide ~~Transportation~~ Mobility Plan](#)
- [City General Sewer Plan](#)
- City Water System Plan
- [City Stormwater Management Program Plan](#)
- [City Stormwater System Plan](#)

City Offices, Facilities, and Undeveloped Land

City offices are located at several sites due to space constraints at City Hall. Additional City buildings and facilities provide a variety of functions, including public works operations, police and municipal court, and ~~house~~ cultural and social services.

Table CF-1: City Land and Office Facility Inventory

Building and Location	Land Area		Building Area		Owned or Leased	Uses
City Hall 280 Madison Ave. N	1.92	Ac	24,107	Sq Ft	Owned	Administration, Finance, Planning, & Engineering
Police Station 625 Winslow Way E	0.82	Ac	7,000	Sq Ft	Owned	Police
Municipal Court 10255 NE Valley Rd.	NA		2,289	Sq Ft	Leased	Municipal Court
<u>Ted Spearman Justice Center</u> 8804 Madison Avenue N.	<u>2.95</u>	<u>Ac</u>	<u>19,007</u>	<u>Sq Ft</u>	<u>Owned</u>	<u>Police and Municipal Court</u>
Subtotal Staff Office Space	<u>2.74</u> <u>4.87</u>	Ac	<u>33,396</u> <u>43,114</u>	Sq Ft		
Bainbridge Island Commons 223 Bjune Ave.	0.38	Ac	4,975	Sq Ft	Owned	Social Services & Public Meetings
Bainbridge Performing Arts (land only) 200 Madison Ave N	2.45	Ac	NA		Owned	Land leased to BPA for \$1/yr through May 2081
Public Works Facility 7305 NE Hidden Cove Rd	12.62	Ac	22,712	Sq Ft	Owned	O&M Offices, Shop, Covered Equipment Storage
Public Works Facility 7305 NE Hidden Cove Rd	Included Above		1,524	Sq Ft	Owned	Covered Storage
Public Works Facility 7305 NE Hidden Cove Rd	Included Above		NA		Owned	Fueling Facility
Land with City-owned utilities	15.42	Ac	NA		Owned	Wells, pump stations, etc.
<u>180 Olympic Drive</u>	<u>0.11</u>	<u>Ac</u>	<u>1,125</u>	<u>Sq Ft</u>	<u>Owned</u>	<u>Building rented to tenant</u>
Total	<u>34.79</u>	Ac	<u>68,132</u>	Sq Ft		

Table CF-2: City Public Works Facilities Inventory

Facility	Floor Area		Function
Portable office trailers (3)	2,520	Sq Ft*	Storage, safety & future parks buildings
Steel shop building	2,400	Sq Ft	Storage - holds telemetry
PW Facility - Wood Building	100	Sq Ft	Wellhouse
PW Facility - Shop	7,776	Sq Ft*	Mechanics Shop/Equipment Maintenance
PW Facility - Covered Equipment Storage	11,520	Sq Ft*	Covered Equipment Storage
PW Facility - Office Trailer	1,792	Sq Ft*	O & M Office
Fueling Facility			Vehicle Fueling inside covered equipment storage building
Total	26,108	Sq Ft	

*These facilities are also counted in the main office inventory above.

Table CF-3: City Undeveloped/Open Space Land Inventory

Location / Description	Land Area		Owned or Leased	Uses
High School Rd. near Madison	1.42	Ac	Owned	Proposed surplus property
Head of the Bay Wellhead	31.82	Ac	Owned	Wellhead protection
Head of the Bay	2.00	Ac	Owned	Proposed surplus property
Head of the Bay	6.00	Ac	Owned	Proposed surplus property
Suzuki Property	13.83	Ac	Owned	Potential Surplus property
Johnson Farm	14.51	Ac	Owned	Agricultural/Open space
Suyematsu Farm	15.00	Ac	Owned	Agricultural land
Lovgreen Pit	15.54	Ac	Owned	Land Reclamation/Spoils Disposal
Vincent Road Landfill	34.15	Ac	Owned	Public Works Facility
Manitou Beach Property	*1.36	Ac	Owned	Transferring to Park District
M & E Tree Farm	13.00	Ac	Owned	Open space/Agricultural
Morales Property	4.74	Ac	Owned	Agricultural land
Crawford Property	2.30	Ac	Owned	Agricultural land
Ft. Ward Wetlands – 8 lots	2.63	Ac	Owned	Open space
Lot Next to Parade Ground Ave.	0.04	Ac	Owned	Adjacent to Right-of-way
Lost Valley	13.57	Ac	Owned	Open space
Waypoint Park	1.03	Ac	Owned	Open space
Waterfront Park	5.76	Ac	Owned	Shoreline park
Strawberry Plant	4.20	Ac	Owned	Shoreline restoration and park
Bentryn Property	11.50	Ac	Owned	Agricultural land
Pritchard Park	27.18	Ac	Owned	Transferring to Park District (except Point area)
625 Winslow Way East	0.82	Ac	Owned	Vacant
Misc. unimproved land	2.24	Ac	Owned	No use specified
Total	224.64	Acres		
City Open Space/Park Land (including transfer to BIMPRD)	83.24	Acres		

*Not including tidelands

Parks & Trails

Most of the parks and recreational trails on Bainbridge Island are owned and managed by the Bainbridge Island Metropolitan Park and Recreation District. The City has a few parks which are generally maintained (with the exception of Waterfront Park) by the Park District under contract to the City. ~~During the past 10-15 years, the City has acquired or helped the Park District acquire a large amount of open space and park lands. A number of these parcels are being transferred to the Park District based on Resolution Number 2011-16.~~ The City adopts by reference [the 2014-2020 2026 Bainbridge Island Park and Recreation District Comprehensive Plan](#) (and any subsequent update), which establishes *levels of service* for park and recreation facilities for the Island.

Transportation Facilities (Roads, Bike Lanes, Sidewalks, Trails)

Of the many types of *capital facilities* that are constructed, operated and maintained by the City, the most familiar to citizens are the transportation facilities. Where there are facility needs that involve SR305 or the ferries, the Washington State Department of Transportation (WSDOT) is responsible for planning and improvements. For non-motorized and other desired facilities, the City may elect to plan and implement additional improvements. This may be accomplished by participating/funding elements in WSDOT projects or by undertaking City projects and obtaining the necessary permits and approvals from WSDOT. Kitsap Transit pays for facilities that support transit service. A complete inventory of the Island's transportation facilities is contained in the [Island-wide Transportation Mobility Plan](#).

Drinking Water

Domestic drinking water is supplied by the City of Bainbridge Island, Kitsap County P.U.D. No. 1, numerous smaller public water systems (2 or more hookups), and over 1,000 private single-dwelling wells. The *levels of service* for water systems on Bainbridge Island are the minimum design standards and performance specifications provided in the [2005 Kitsap County Coordinated Water System Plan](#). Fire flow requirements are regularly updated by the City, in coordination with the Bainbridge Island Fire Department, most recently adopted by Ordinance 2016-13 and are tiered based on zoning and type of construction. Residences can satisfy deficiencies by installing individual sprinkler systems. *Levels of service* for the City water system are identified in the [City Water System Plan Update](#).

The Kitsap Public Health District records indicate approximately 170 water systems on the Island that have 2 or more households connected. The number of Group A & B systems are listed below and following is a summary of systems with more than 100 connections.

Table CF-4: Group A & B Water Systems

Group A systems (15 or more connections)	39 32
Group B systems (under 15 connections)	145 126

Table CF-5: Water Systems with over 100 Connections (2016)

System	# Connections	Capacity		Storage
		(ERU)	(MGD)	Volumes (gal)
PUD #1 Island Utility (Eagledale)	197	455	0.43	400,000
PUD #1 North Island	1767	2,028	0.365	825,105
PUD #1 Fletcher Bay	102	Unspecified	Unspecified	0
Meadowmeer (MWSA)	306	335	.45	225,000
North Bainbridge Water Sys.	1,842	Unspecified	Unspecified	842,400
PUD #1 South Bain. Water Sys.	1,241 1,595	1,416 Unspecified	0.90 Unspecified	807,000 1,275,000
Winslow (City)	2,428 2,787	Unspecified	Unspecified	2,800,000
Total	6,041 6,530	Unspecified	Unspecified	5,107,105 5,142,400

Most existing water systems were established under state and local guidelines and generally provide high quality water at an adequate pressure and flow rate for residential use. However, because of the number of systems on the Island, there are systems that may not be in compliance with Department of Health water quality requirements and may not meet minimum requirements of pressure and reliability. It is also likely that most of the smaller systems have poor or nonexistent fire protection designed into their systems due to the cost of providing large diameter pipes and storage tanks.

Winslow Water System

The Winslow Water System is owned and operated by the City of Bainbridge Island under the direction and control of the Department of Public Works. It serves an area similar to the historic Winslow city limits plus Fletcher Bay and Rockaway Beach. The system gets all of its water from the eleven wells owned by the City. Water is pumped into the distribution system both directly from the well pumps and by booster pump stations. A detailed inventory and capacity analysis is provided in the [City of Bainbridge Island Water System Plan](#), which was accepted by the City Council in ~~2016~~ 2017, and updated in 2019 and 2023.

Sanitary Sewage Disposal

The City of Bainbridge Island provides for the collection, treatment, and disposal of effluent in the Winslow service area. The ~~Kitsap County Sewer District #7~~ Kitsap County Public Utility District treatment plant north of Fort Ward Park serving customers within the District's service area in Fort Ward and the City's sewer service areas in the Emerald Heights, Point White, North Pleasant Beach, and Rockaway Beach neighborhoods and Blakely School. All other residents not within the service areas of the above districts rely upon on-site septic systems that require approval from the Kitsap Public Health District.

Levels of service for wastewater treatment systems are typically expressed as the number of gallons of flow per capita per day and the level of treatment provided by the treatment plant. The current and proposed level of service for the Winslow service area follow the Department of Ecology guidelines of 100 gallons per capita per day (flow) and secondary treatment. In areas not served by treatment plants, on-site septic systems must be built to Kitsap Public Health District standards that consider combinations of lot size, soil type, infiltration capacity, depth to hardpan, and proximity to surface water among others.

The Winslow sanitary sewer system consists of two separate parts: the collection system, and the treatment plant. The City completed the update to the [General Sewer Plan](#) in 2015. The updated plan documents the inventory of the existing system and needs for new facilities and replacement or upgrading existing facilities during the coming decade.

Storm and Surface Water Management

In the Winslow urban area and a few smaller areas, stormwater is managed by a combination of piped collectors, roadside ditches and natural stream channels. All other watersheds and sub-basins on the Island are drained by natural streams and roadside ditches only. The existing

natural drainage system consists of wetlands, streams, springs, ditches, and culverts under roadways. Storm and surface water is managed by the City as a utility. [Ongoing surface and stormwater system evaluations are used to identify future capital projects](#). In addition, the City places priority on the improvement and restoration of stream channels, particularly undersized or perched culverts, for the improvement of fish passage and fish habitat.

CITY FUNCTIONAL PLANS ADOPTED BY REFERENCE

In planning for future *capital facilities*, several factors have to be considered. Many are unique to the type of facility being planned. The process used to determine the location of a new water line is very different from the process used to determine the location of a new bike lane. Many sources of financing can only be used for certain types of projects. Therefore, this Capital Facilities Element and Plan is actually the product of many separate but coordinated functional planning documents, each focusing on a specific type of facility. These plans utilize the same year 2036-2044 population forecast that the Land Use Element of this *Comprehensive Plan* accommodates. These functional plans are therefore adopted by referenced. They are listed (and hyperlinked) below.

- [Island-wide ~~Transportation~~ Mobility Plan](#)
- [City General Sewer Plan](#)
- [City Water System Plan](#)
- [City Stormwater Management Program Plan](#)
- [City Stormwater System Plan](#)
- [City Groundwater Management Plan](#)
- [March 2026 Capital Facilities Plan Update Memo and Reference Materials](#)

SPECIAL PURPOSE DISTRICT PLANS ADOPTED BY REFERENCE

In addition to planning for capital facilities and projects such as public buildings, bike lanes and sewer infrastructure, the GMA requires that jurisdictions plan public capital projects, such as for parks, fire and schools. The City has several special districts that serve the entire Island (e.g. B.I. Fire Department) and some that serve certain geographical areas, but not the entire Island (e.g. Kitsap County Sewer District 7). The City coordinates with these other special districts to ensure that they are using the same land use designations and population forecasts. These special district plans are therefore adopted by reference. They are listed (and hyperlinked) below.

- [Bainbridge Island Municipal Parks & Recreation District ~~2014-2026~~ Comprehensive Plan](#)
- [Bainbridge Island School District ~~2014-2020~~ Capital Facilities Plan ~~2024~~ Long-Range Strategic Facilities Plan and Sustainability Framework](#)
- [Bainbridge Island Fire Department ~~2013-2022~~ 2026-2028 Strategic Plan](#)
- [Kitsap Public Utility District 2011 Water System Plan](#)

- ~~Kitsap County Sewer District #7~~
- Washington State Ferries 2040 Long Range Plan
- Kitsap Regional Library ~~Vision 2020-2024-2029 Strategic Direction Plan~~

SIX-YEAR CAPITAL IMPROVEMENT PLAN

The Six-Year Financial Capacity Analysis and Capital Improvement Plan (CIP) for the City of Bainbridge Island is updated each year as part of the City's biennial budget process. This CIP list shows the anticipated expense and timing of each project and contains a project description, if available and *level of service (LOS)* deficiency analysis. The CIP lists for the special districts on Bainbridge Island are adopted by reference. The City conducts a financial capacity analysis in order to evaluate the City's ability to fund capital expenditures along with general operations. The financial capacity analysis is integrated into the CIP. Funding for the projects needed to meet LOS standards will come from a combination of local, State, and federal sources. ~~The Wyatt Way Reconstruction project will be funded with significant support from a State grant. In the next six years, given the past history of federal grant funding, it can be reasonably anticipated that grant funding can be secured for the Sportsman's Club/New Brooklyn Intersection Improvement project. In summary, t~~The City is well positioned to address projects to maintain LOS standards over the next six years, well before the 20-year planning horizon of this Comprehensive Plan.

CAPITAL FACILITIES IMPLEMENTATION

To implement the goals and policies in this Element, the City must take a number of actions, including adopting or amending regulations, creating partnerships and educational programs, and staffing or other budgetary decisions. Listed following each action are several of the comprehensive plans policies that support that action.

HIGH PRIORITY ACTIONS

CFE Action #1 Implement the priorities in the Capital Facilities Element through the adopted Capital Improvement Program

GOAL CF-1 The Capital Facilities Element and Capital Improvement Plan (CIP) provide the public facilities needed to promote orderly compact urban growth, protect investments, maximize use of existing facilities, encourage economic development and redevelopment, promote private investment, increase public wellbeing and safety, and implement the Comprehensive Plan.

Policy CF 1.1

Biennially review, update and amend a six-year Capital Improvement Program that:

- Is subject to review and adoption by the City Council.

- Is consistent with the *Comprehensive Plan*, functional plans and adopted capital and operating budgets.
- Defines the scope and location of capital projects or equipment;
- States why each project is needed and its relationship to established levels of service.
- Includes costs for property acquisition, if any, project construction costs, timing, funding sources, and projected operations and maintenance impacts.

CFE Action #2 Coordinate the City's plans and capital investment programs with those of other jurisdictions responsible for providing and maintaining capital facilities on the Island.

Policy CF 1.2 Coordinate with other capital facilities service providers to keep each other current, maximize cost savings, and schedule and upgrade facilities efficiently. In general, it is the policy of the City to transfer parklands to the Park District whenever desirable and practical.

GOAL CF-2 As growth occurs, provide the capital facilities needed to direct and serve future development and redevelopment.

MEDIUM PRIORITY ACTIONS

CFE Action #3 During the review of the Land Use Code, identify and adopt amendments that will facilitate achieving the objectives of both the City and the utility service providers.

GOAL CF-4 Public facilities constructed on Bainbridge Island meet appropriate safety, construction, durability and sustainability standards.

Policy CF 4.2 Regularly update the Engineering Development and Design Standards, and ensure that the Standards are consistent with the Comprehensive Plan.



DEPARTMENT OF PUBLIC WORKS MEMORANDUM

Date: March 20, 2026

To: Comprehensive Plan Update File

From: Christopher Wierzbicki, PE, Public Works Director

Subject: **2024-2044 Water and Sewer Utility Capital Facilities Plan Summary**

Purpose

The purpose of this memo is to supplement the 2024-2044 Capital Facilities Element of the updated Comprehensive Plan with references and supporting materials for the City's Water and Sewer Utility Infrastructure.

Background

The Water System Plan (2017, updated 2019) and the General Sewer Plan (2015) serve as the primary references for water and sewer utility infrastructure analysis in the current Capital Facilities Element of the Comprehensive Plan. Both plans evaluate the need for infrastructure through the year 2035. The Public Works Department plans to formally update both plans in the 2027-28 biennium following the completion and the performance evaluation of the two major system capacity upgrades currently under construction, the Winslow Water Tank and the Wastewater Treatment Plant Capacity Upgrades.

In the interim, a Capital Facilities Plan for the Water and Sewer Utility (Attachment A) was developed through 2044 using materials and analysis recently developed as part of ongoing system planning, as well as utility analysis performed for the Environmental Impact Statement (EIS) and other planning work associated with the Comprehensive Plan update.

The following list of reference materials is appended to this memo:

- Attachment A – 2031-2044 Water and Sewer Capital Facilities Plan
- Attachment B – Sewer Utility Technical Memo Prepared by BHC (2024)
- Attachment C – Winslow Sub-Area Water and Sewer Analysis Memo (2023)
- Attachment D – Wastewater Treatment Plant Population Projection Memo (2023)

Water Utility Summary

With the ongoing and planned improvements and upgrades, the Winslow Water System is adequate to serve the future projected population of the Winslow area. As identified in the Winslow Sub-Area Water and Sewer Analysis Memo, the demand for water service has not been growing as rapidly as anticipated in the 2017 Water System Plan. With the construction of the new Winslow

Water Tank, which will correct existing system deficiencies related to water pressure and storage, the water system is expected to be able to serve an increase in population of 6,600 people, which is almost double the projected Winslow area population (3,352) included in the Planning Commission's expected recommendation. Additionally, in 2025, the City was exercising less than half of the water rights currently allocated to the primary well sources. The surplus in capacity and supply is sufficient to also address the increases in commercial uses, the impact from which are less predictable than the impacts from residential uses. The draft Groundwater Management Plan is expected to recommend that exploring intertie connections with Kitsap Public Utility District Water System will allow for access to existing and new production wells that will relieve pressure and extend the life of aquifer systems. The 2031-2044 Water and Sewer Capital Facilities Plan identifies projects associated with those improvements.

Sewer Utility Summary

With the ongoing and planned improvements and upgrades, the Winslow Sewer Collection System is adequate to serve the future projected population of the Winslow area. As part of the preparation of the Environmental Impact Statement for the 2024 Winslow Subarea Plan Update, the City contracted with BHC Consultants to model the impacts of future population growth on the sewer collection system. The resulting technical memo analyzed a maximum Winslow population of 6,397 people by 2044, almost double the projected Winslow area population (3,352) included in the Planning Commission's expected recommendation. The surplus in capacity and supply is sufficient to also address the increases in commercial uses, the impacts from which are less predictable than the impacts from residential uses. The planned improvements and upgrades identified in the memo have been included in the 2031-2044 Water and Sewer Capital Facilities Plan, although depending on the rate of population growth, not all of the projects will be required within the 20-year timeframe.

Wastewater Treatment Plant Capacity Summary

The Winslow Wastewater Treatment Plant can be upgraded within the existing plant footprint to meet future population demand, but the timing of the upgrades are dependent on the pace of growth and the balance of uses (single family, multi-family, commercial). As identified in the Wastewater Treatment Plan Population Projection Memo, there are at least two capacity upgrade projects that could be implemented within the footprint of the existing plant, providing an ultimate capacity of 2,110 equivalent residential units (ERUS), which translates to a conservative residential population of 5,064 (using 2.4 people per unit). This is approximately 1.5 times the projected Winslow area population (3,352) included in the Planning Commission's expected recommendation. The surplus in capacity and supply is sufficient to also address the increases in commercial uses, the impacts from which are less predictable than the increases from residential uses. The first capacity upgrade is expected to be completed in 2027. The second upgrade is planned in the 2031-2044 Water and Sewer Capital Facilities Plan for implementation in 2040, in alignment with the population projection memo. Depending on the pace of growth, particularly the rate and types of commercial growth, the second capacity upgrade project may need to be implemented sooner than planned.

Attachment A - 2031-2044 Water and Sewer Capital Facilities Plan

2031-2044 Water/Sewer Utility Capital Facilities Plan

Project / Location	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	Total
Sewer Projects															
Village Pump Station Upgrade(9)	900	2,400													3,300
Hawley Pump Station Upgrade*	230		800												1,030
Ferry Terminal Pump Station Relocation ^h		250		1,200											1,450
Ferrisville Avenue Conveyance Upgrade*						1,285									1,285
Hillebrand Sewer Main Upgrade ^e	250		800												1,050
Wallace Sewer Main Upgrade (1)								1,100							1,100
WWTP Misc. Upgrades*		320		340		360		380	400	3,250	3,250	420		440	2,660
WWTP Capacity Upgrades ^{ee}							750	800							7,300
Rockaway Pump Station Rehabilitation (1.1)											800				800
Sakai Village Pump Station Rehabilitation (2)									775						775
Lynwood Center Pump Station Rehabilitation (3)												3,000			3,000
Old Treatment Plant Pump Station Upgrade (4)												800	2,450		3,250
Sunday Cove PS Pump Station Upgrade (5)													494		494
Sunday Cove Force Main Upgrade (5.1)															
Ill Source Reduction ^{eees}							500			500			500		1,500
South Island Sewer Force Main Upgrades ^{eees}					1,000										1,000
Lynwood Center Sewer Pump Station Rehabilitation (6)					423										423
WWTP Inflow Pipe Upgrade (7)	1,400	2,970	1,600	1,540	1,423	1,645	1,250	1,180	1,875	282	4,432	4,050	3,420	1,300	3,384
Water Projects															
Public Water System Coordination Projects - Moran (8)	800		1,000												1,800
Public Water System Coordination Projects - Mandu Olsen (9)		800			1,000										1,800
Private Water System Main Extension Projects ^{eees}	1,000				1,100				1,200				1,400		4,700
Head of the Bay Wall Site Main Replacement ^{eees}		200	750												950
Head of the Bay Wall Site Variable Frequency Drive (VFD) Upgrade ^{eees}				150	600										750
Sands Wall Site VFD Upgrade ^{eees}					150	600									750
Water Main Replacement/Upgrade Projects - Grow Avenue (10)						528									528
Water Main Replacement/Upgrade Projects - Shepherd Way (11)		430													430
Water Main Replacement/Upgrade Projects - Winslow Way West (12)		100													100
Water Main Replacement/Upgrade Projects - Erickson Avenue (13)					150	500									650
Water Main Replacement/Upgrade Projects - Cave Avenue and Hawley Way (14)								524							524
Byron Water Main Extension (15)		250													250
Fletcher Bay Main Extension (16)				1,100											1,100
Fletcher Bay Storage/Upgrade Improvements ^{eees}							4,000								4,000
Rockaway Storage/Fireflow Improvements ^{eees}											1,000	3,000			4,000
High School Tank 2 Demolition ^{eees}										450					450
TOTALS	1,800	1,780	1,750	2,250	2,000	1,628	4,000	524	1,200	450	1,000	3,000	1,400	500	23,282

* CIP Out Years (Beyond 6 Year Planning Horizon)

** Per WWTP Capacity Analysis Memo

*** Staff Recommendation

(0, 1, 4, 5, 1, 7) - Per BHC Memo

(1.1) - Rockaway Pump Station Rehabilitation: Long-Term Recommendation from General Sewer Plan (GSP)

(2) - Sakai Pump Station Rehabilitation: Long-Term Recommendation from GSF

(3) - Lynwood Center Pump Station Upgrades: Long-Term Recommendation from GSF

(6) - Lynwood Center Pump Station Rehabilitation: Long-Term Recommendation from GSF

(8) - Driat Water System Business Plan

(9) - Driat Water System Business Plan

(10) - Grow Avenue (Water System Plan (WSP) Projects P1-A & B

(11) - Shepherd Way (WSP Projects P1-D & P-3)

(12) - Winslow Way West (WSP Project P4-A)

(13) - Erickson Avenue (WSP Project P4-C)

(14) - Cave Avenue and Hawley Way (WSP Projects P1-G & F

(15) - Byron Main Extension (WSP Project P-2C)

(16) - Fletcher Bay Main Extension (WSP Project P-2B

Attachment B - Sewer Utility Technical
Memo Prepared by BHC Consultants



TECHNICAL MEMORANDUM

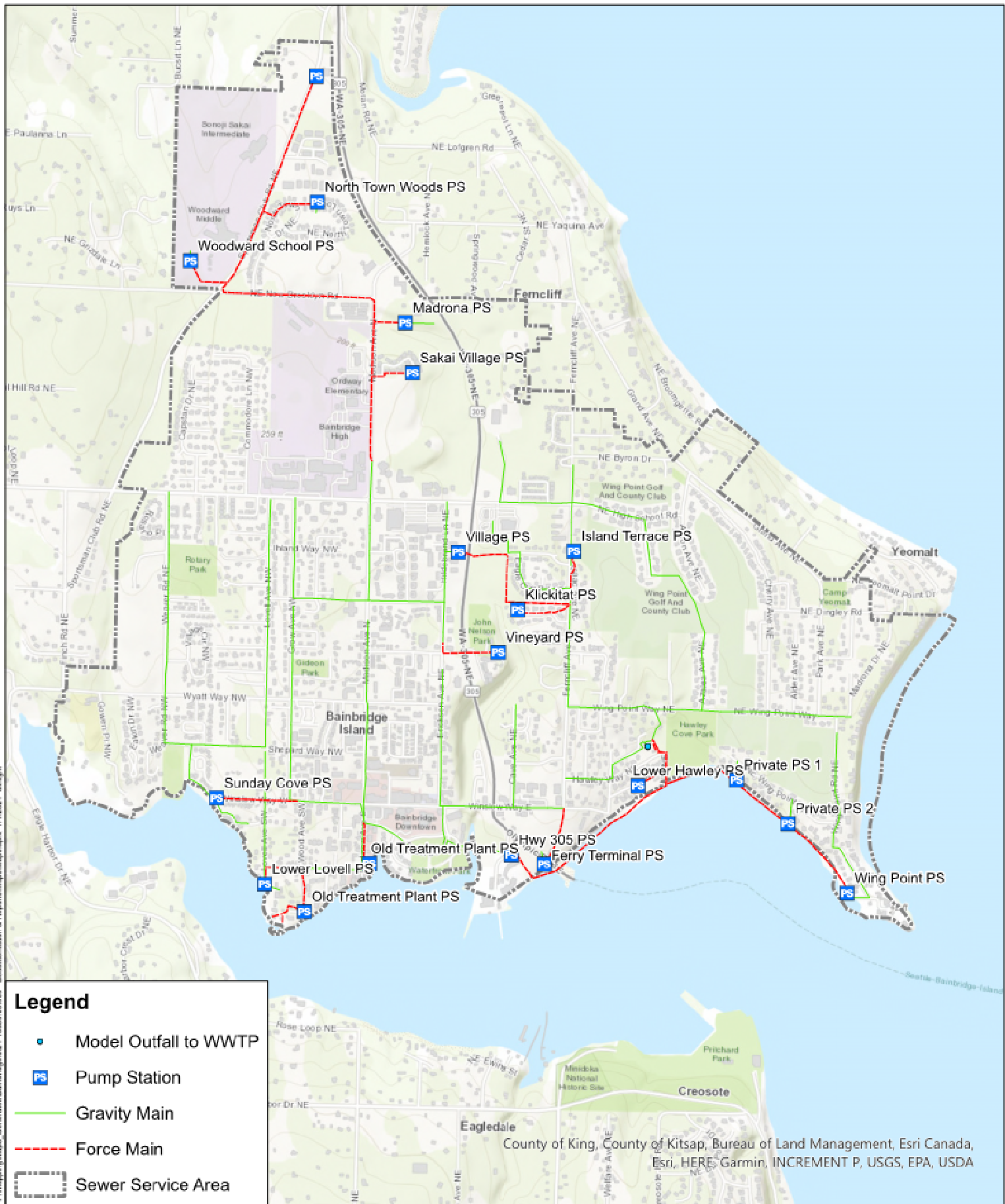
Date: July 2, 2024
To: Peter Corelis, P.E., City of Bainbridge Island
From: Kevin Cook, P.E.; Sudip Gautam, PHD, EIT., BHC Consultants, LLC
Subject: Capacity Analysis and Capital Improvement Project Identification

1. Introduction and Purpose

The City of Bainbridge Island (City) is conducting a sewer collection capacity analysis to support the City's Winslow Subarea Plan and Comprehensive Plan. This update to the Winslow Subarea Plan will incorporate subsequent planning efforts including the Sustainable Transportation Plan, the Housing Action Plan, and the Climate Action Plan with additional land use and transportation policy recommendations in coordination with the 2024 update to the Comprehensive Plan.

The last general sewer plan (GSP) for the City was prepared in 2015 to document the status of the City's sewer system and analyze the capacity of the system to accommodate future demands. The City has been using the GSP as a guide for operation, maintenance, and expansion of the sewer system since then. Since the 2015 GSP, the City has seen an increase in development activities creating capacity issues in pump stations and straining the capacity of the wastewater treatment plant. In response, the City conducted the New Brooklyn Sewer Basin Study in 2021, which provided four pump station design alternatives to improve the sewer capacity in the basin.

The purpose of this analysis is to gather information on the existing sewer collection system for the Winslow Subarea Plan Update 2024 to study a "no-action" alternative and compare the "no-action" alternative to two "action" alternatives that are anticipated to provide capacity for increased residential and commercial development within the existing service area. This analysis will focus on the "no-action" and "action" alternatives and identify potential capacity deficiencies within the City's collection system as well as develop recommendations for improvements, including sewer main extensions and upgrades, pump station capacity improvements, additional pumping systems, and other improvements. This analysis will help identify the impacts of increased flows, due to increased development, to the City's wastewater treatment plant via hydraulic modeling analysis. Figure 1 shows the Winslow Subarea and sewer collection system.



This map is a geographic representation based on information available. No warranty is made concerning the accuracy, currency, or completeness of data depicted on this map.



0 0.1 0.2 0.4 Miles



Study Area
Winslow SubArea Plan
City of Bainbridge Island
July 2024

Figure

1

2. Model Development

As a part of the 2015 GSP, hydraulic models of the sewer collection system within the City's sewer service area were developed. The 2015 models, created using InfoSWMM, were converted into the PCSWMM modeling software for update and further analysis. The model scenarios included in the 2015 GSP included the baseline/existing year (2013), short-term planning year (2025), and long-term planning year (2035). All these model scenarios were converted to PCSWMM models, and the model performance was validated to the previously simulated results. The baseline model was updated to reflect the current (2024) conditions to incorporate the hydraulic changes since the 2015 GSP. The following information was obtained and used to perform the hydraulic updates and update the model to reflect existing conditions:

- New Brooklyn Sewer Basin Study – Preliminary Design Report (2021)
- Coppertop North Addition Grinder Pump Station (2015)
- Madison Avenue Nonmotorized Improvements – SR 305 to Winslow Way (2023)
- West Eagle Harbor Pump Station Improvements (2024)
- Wintergreen Lane – Visconsi Masterplan (2014)
- Model hydraulic features validation with the City staff – updates to pipe GIS data (2024)

3. Flow Development

Flow assumptions from the 2015 GSP were used as a reference to ensure that similar assumptions were used such that flow projections were consistent and suitable for this analysis. Table 1 shows the flows from the 2015 GSP as a point of comparison.

Table 1
2015 GSP Table of Flows

Scenario	Dry Weather Flow (MGD)	Wet Weather Flow (MGD)	Peak Flow (MGD)
Existing (2013)	0.43	1.47	1.90
Short-term Planning Year (2025)	0.58	1.81	2.39
Long-term Planning Year (2035)	0.70	1.87	2.57

After incorporating and updating the model hydraulics and updating flows to represent current conditions (2024), the peak flow calculated in the system was computed to be 2.29 million gallons per day (MGD), which consists of 0.48 MGD of the dry weather flow and 1.81 MGD of the wet weather flow. This is similar to the 2015 GSP published values corresponding to the 2025 planning year.

For the alternatives, the “no-action” alternative (Alternative 1 – no action) and two additional land-use “action” alternatives (Alternative 2 – dense centers, and Alternative 3 – distributed density) from the Winslow Subarea Plan Update 2024 were used to develop estimated flows through the system.

Population, land use, and employment data for the alternatives were obtained from the City and projected flows for the alternatives were calculated based on the assumptions below.

- Alternative 1 is projected to add 592 dwelling units and 86 jobs,
- Alternative 2 is projected to add 2,868 dwelling units and 927 jobs, and
- Alternative 3 is projected to add 2,386 dwelling units and 689 jobs in the Winslow Subarea over current conditions.

Using this data, additional flows were computed and were distributed over the collection system that lies within the study area based on their assumed connection into the collection system based on the respective alternative. The Washington State Department of Ecology Orange Book (Publication # 98-37 WQ) was used to estimate the unit flows (including normal infiltration) and compute total flows corresponding to the additional population and jobs associated with the alternatives.

Wet weather flows were calculated for the 2044 planning horizon, consistent with the methodology outlined by the 2015 GSP. This included degradation of existing infrastructure contributing to increases in wet weather inflow and infiltration (I/I) as well as additional I/I due to development. Flows for the alternatives are higher given the additional degradation due to I/I, the assumptions regarding development for the alternatives, as well as inclusion of additional data and studies. The calculated flows as part of this analysis are higher than the 2015 GSP flows. A summary of flows simulated for the three alternatives is provided in Table 2.

Table 2
Summary of Flows for Alternatives Analysis

Alternative	Dry Weather Flow (MGD) ¹	Wet Weather Flow (MGD) ²	New Development Wet Weather Flow (MGD) ³	Peak Flow (MGD) ⁴
Alternative 1 – no action	0.62	1.95	1.58	4.15
Alternative 2 – dense centers	1.17	1.95	1.58	4.70
Alternative 3 – distributed density	1.04	1.95	1.58	4.57
Notes: 1) Represents average use over the course of a single day and does not consider diurnal pattern peaking factors based on usage through the course of a day. 2) Inflow and infiltration projections for future planning years consistent with previous degradation factors from 2015 General Sewer Plan. Representative of instantaneous peak I/I rate for existing areas. 3) Considers additional I/I from new developments, which are dependent on development size and intensity. Distribution of new development wet weather flow is dependent on locations where development is expected to occur for this analysis. A consistent value of the new development wet weather flow expected from development was used for all the alternatives to provide a conservative assumption for the analyses. In practical application, it is possible that existing Wet Weather flows due to I/I may be reduced due to infrastructure improvement and more or less New Development Wet Weather Flow is observed based on development type. 4) Peak flows representative of the sum of average daily dry weather, peak hourly wet weather inflow for existing areas, and peak hourly wet weather flow due to development. This is intended for relative comparison and peak flows may be slightly higher or lower due to timing of peaks and diurnal usage.				

4. Capacity Analysis - Deficiencies

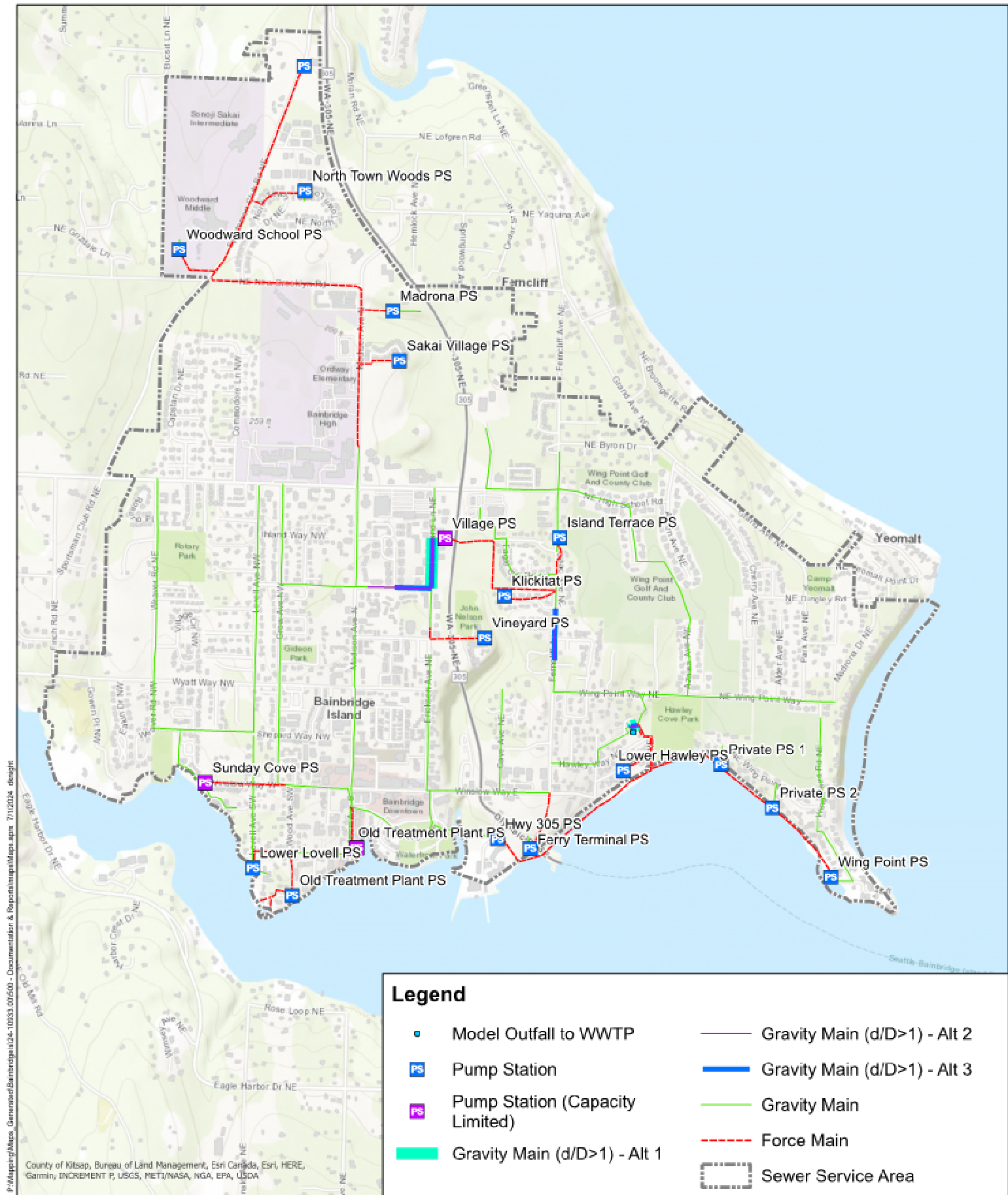
Model simulations representing the “no-action” alternative (Alternative 1 – no action) and two additional “action” alternatives (Alternative 2 – dense centers and Alternative 3 – distributed density) were run and the conveyance system deficiencies were identified based on further analysis of model results. To determine the location of capacity issues within the collection systems for each alternative, the following guidelines were observed:

- Gravity Pipe Segments: the flow depth is equal to or greater than the pipe diameter ($d/D > 1$).
- Manholes: the manhole is flooding, leading to sewer overflow.
- Pump Stations: the rated capacity is exceeded.

A comparative summary of the sewer deficiencies in the three alternatives modeled is provided in Table 3. Alternative 1 has four unique deficiency areas, whereas Alternative 2 and Alternative 3 both exhibit six unique deficiency areas, which include both pipe capacity and pump capacity issues. Alternative 2 has the longest length of pipes exceeding $d/D > 1$, indicating more extensive collection system deficiencies compared to Alternative 3, which has a slightly lower total length. Figure 2 shows the comparison and spatial distribution of deficiencies identified for the three alternatives modeled. In general, deficiencies between the alternatives are consistent with location and distributed density amongst the alternatives.

Table 3
Comparison of Deficiencies Between Alternatives

Alternative	Count of Unique Deficiency Areas	Length of Pipe Exceeding $d/D > 1$, ft	Count of Pump Stations Over Capacity
Alternative 1 – no action	4	724	3
Alternative 2 – dense centers	6	2,280	3
Alternative 3 – distributed density	6	1,890	3



This map is a geographic representation based on information available. No warranty is made concerning the accuracy, currency, or completeness of data depicted on this map.



0 0.1 0.2 0.4 Miles



Sewer Deficiencies
Winslow SubArea Plan
City of Bainbridge Island
July 2024

Figure

2

Deficiencies for the alternatives were disaggregated into individual project areas to further differentiate simulated capacity issues between alternatives. Table 4 provides a summary of the identified project areas, including a brief description of the issues identified and their status under the three alternatives. In summary, five pipe capacity projects and three pump capacity projects have been identified.

While all alternatives demonstrate deficiencies in pipe capacity and pump station capacity in the future, the nature and extent of these deficiencies vary. For example, Alternative 2 (Dense Centers) shows the most extensive pipe capacity issues, particularly in terms of length, while Alternative 3 (Distributed Density) shows a slightly reduced length of pipe issues but similar pump station deficiencies. Alternative 1 (No Action) shows fewer deficiencies overall but still suffers from critical pump station capacity problems, similar to Alternatives 2 and 3.

Table 4
Summary and Comparison of Deficiencies for Alternatives

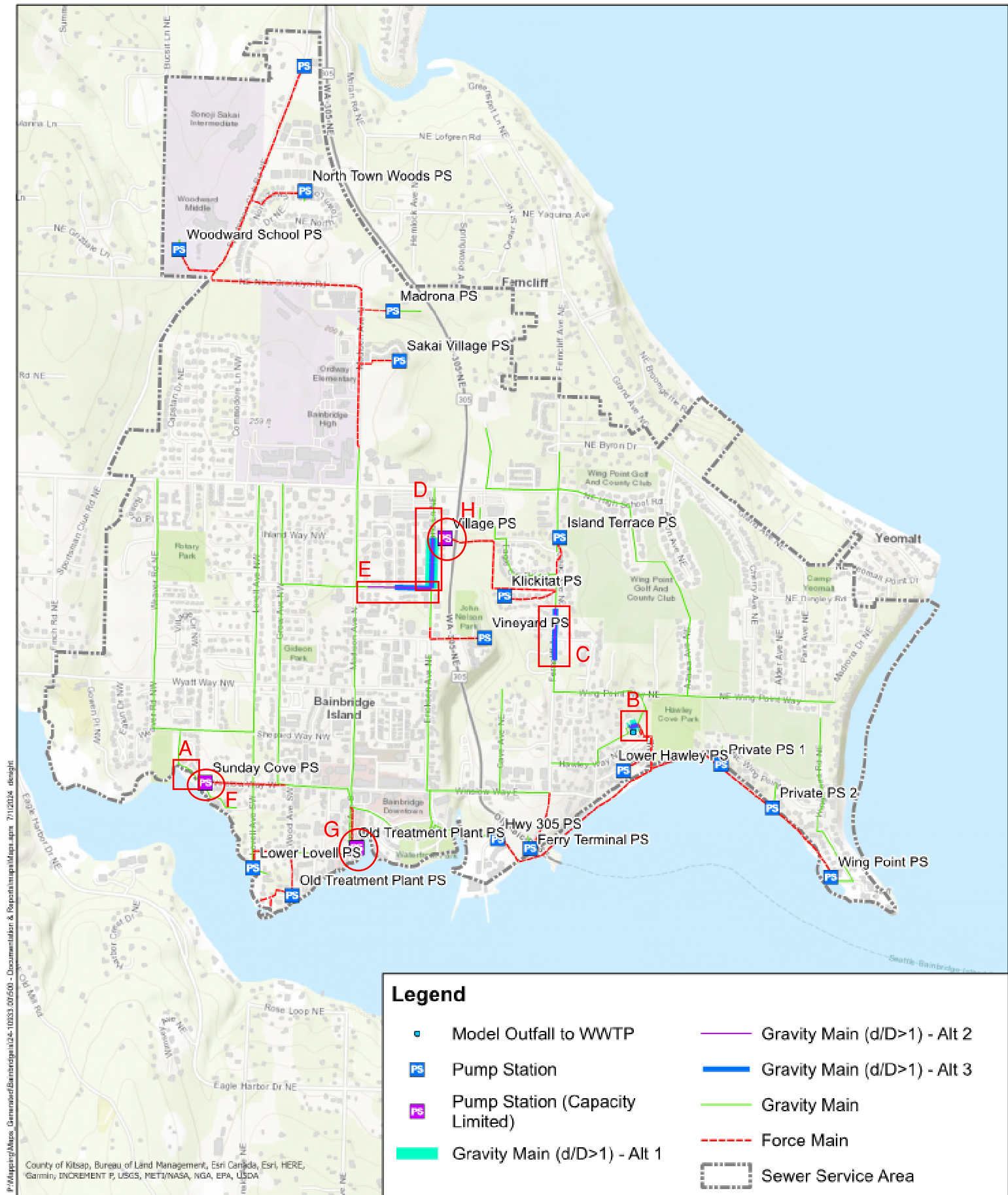
Project Area	Description	Alternative 1 – No Action	Alternative 2 – Dense Centers	Alternative 3 – Distributed Density
A	Pipe capacity limited due to small diameter/shallow slope	No Deficiency	Surcharging	No Deficiency
B	Pipe capacity limited due to small diameter	Surcharging	Surcharging	Surcharging
C	Pipe capacity limited due to small diameter/shallow slope	No Deficiency	Surcharging	Surcharging
D	Pipe capacity limited due to small diameter/shallow slope	Surcharging	Surcharging gets worse in depth of surcharge	Surcharging
E	Pipe capacity limited due to small diameter	No Deficiency	Surcharging gets worse in depth of surcharge and extent	Surcharging
F	Sunday Cove PS over capacity	Pump over capacity	Pump over capacity and backwater issue	Pump over capacity
G	Old Treatment Plant PS over capacity	Pump over capacity	Pump over capacity	Pump over capacity
H	Village PS over capacity	Pump over capacity	Pump over capacity	Pump over capacity

5. Capacity Analysis – Improvements

The deficiency modeling effort identified areas in the model where capacity issues were simulated under each of the alternatives. Additional modeling was completed to identify improvements to resolve existing deficiencies, as well as identify new potential deficiencies that could be simulated because of removing upstream restrictions. This was done in an iterative fashion, by increasing the pipe diameter in conformance to industry standard pipe diameters, as well as increasing lift station capacity, as necessary. This helped to identify the minimum required capacity improvements to alleviate the deficiency in the model, with the understanding that the purpose of this analysis was to compare relative differences between alternatives, and that final recommendations from pre-design through construction activities may warrant changes to the improvements. Table 5 provides a summary of the sewer improvements identified for the project areas for all the alternatives, and Figure 3 shows the location of the improvements.

Table 5
Summary and Comparison of Capacity Improvements for Alternatives

Project Area	Description	Alternative 1 – No Action	Alternative 2 – Dense Centers	Alternative 3 – Distributed Density
A	Pipe capacity limited due to small diameter/shallow slope	No Improvement	Upsize/replace 260-ft of pipe from 10-in to 12-in	No Improvement
B	Pipe capacity limited due to small diameter	Upsize/replace 107-ft of pipe from 16-in to 18-in	Upsize/replace 107-ft of pipe from 16-in to 18-in	Upsize/replace 107-ft of pipe from 16-in to 18-in
C	Pipe capacity limited due to small diameter/shallow slope	No Improvement	Upsize/replace 926-ft of pipe from 10-in to 12-in	Upsize/replace 926-ft of pipe from 10-in to 12-in
D	Pipe capacity limited due to small diameter/shallow slope	Upsize/replace 794-ft of pipe from 10-in to 12-in	Upsize/replace 794-ft of pipe from 10-in to 15-in	Upsize/replace 794-ft of pipe from 10-in to 15-in
E	Pipe capacity limited due to small diameter	No Improvement	Upsize/replace 838-ft of pipe from 8-in to 10-in	Upsize/replace 482-ft of pipe from 8-in to 10-in
F	Sunday Cove PS over capacity	Increase the firm capacity of the pump from 484-gpm to 650-gpm	Increase the firm capacity of the pump from 484-gpm to 650-gpm	Increase the firm capacity of the pump from 484-gpm to 650-gpm
G	Old Treatment Plant PS over capacity	Increase the firm capacity from 256-gpm to 400-gpm	Increase the firm capacity from 256-gpm to 400-gpm	Increase the firm capacity from 256-gpm to 400-gpm
H	Village PS over capacity	Increase the firm capacity from 614-gpm to 870-gpm	Increase the firm capacity from 614-gpm to 870-gpm	Increase the firm capacity from 614-gpm to 870-gpm



This map is a geographic representation based on information available. No warranty is made concerning the accuracy, currency, or completeness of data depicted on this map.



0 0.1 0.2 0.4 Miles



Sewer Improvements
Winslow SubArea Plan
City of Bainbridge Island
July 2024

Figure

3

6. Discussion

The comparative capacity analysis simulated deficiencies across all alternatives, primarily in pipe and pump station capacities. Both Alternatives 2 and 3 pose higher risks of service disruptions due to additional pipe capacity issues, with Alternative 2 facing additional challenges likely due to high-density urban development. Alternative 2 emerged with the most extensive simulated pipe capacity issues, evidenced by the longest length of pipes exceeding critical surcharge thresholds ($d/D > 1$). Alternative 3, while showing slightly reduced pipe capacity stresses compared to Alternative 2, presents similar challenges in pump station capacities. This was consistent with the simulated improvements, where Alternatives 2 and 3 would likely require more substantial investments in pipe capacity upgrades and operational improvements compared to Alternative 1.

Alternative 1, despite fewer identified deficiencies overall, simulated critical pump station capacity problems similar to Alternatives 2 and 3. This underscores the potential need for proactive measures to avoid service disruptions and maintain system integrity, regardless of changes to future population and land use.

7. Limitations and Sources of Uncertainty

The baseline hydraulic model was updated to reflect the current sewer collection in the Winslow Subarea based on the previously constructed model and newly available data. Judgment was used to fill in data gaps and make assumptions where necessary. Performance of the physical system for both existing and future conditions may differ than simulated results due to limitations and uncertainty, such as distribution and timing of dry weather flows within the system, distribution of inflow and infiltration within the system, etc. Industry standard efforts were made through internal quality assurance and quality control (QA/QC) of results to ensure that the model provided reliable information for use in deficiency identification and capital improvement project (CIP) development.

The model was used in conjunction with engineering practices and understanding of the system to review simulated results and qualify areas in the system as either CIP or Watch List project areas based on the deficiency criteria. The identification of CIP and Watch List areas is intended to provide planning level information to support City's efforts, such as financial outlay planning and areas of investigation for City staff. Planning year horizons are intended to provide a relative comparison based on the land use alternatives and potential degradation of the system and do not represent a deadline for planning purposes.

The identified CIPs were developed to provide preliminary opinions of probable construction costs, and their use in pre-design efforts should be supplemented with further field investigation and analysis.



TECHNICAL MEMORANDUM

Date: October 9, 2024
To: Peter Corelis, PE, City of Bainbridge Island
From: Kevin Cook, PE and Sudip Gautam, PHD, EIT, BHC Consultants, LLC
Subject: Addendum to Capacity Analysis and Capital Improvement Project Identification
Technical Memorandum

1. Introduction and Purpose

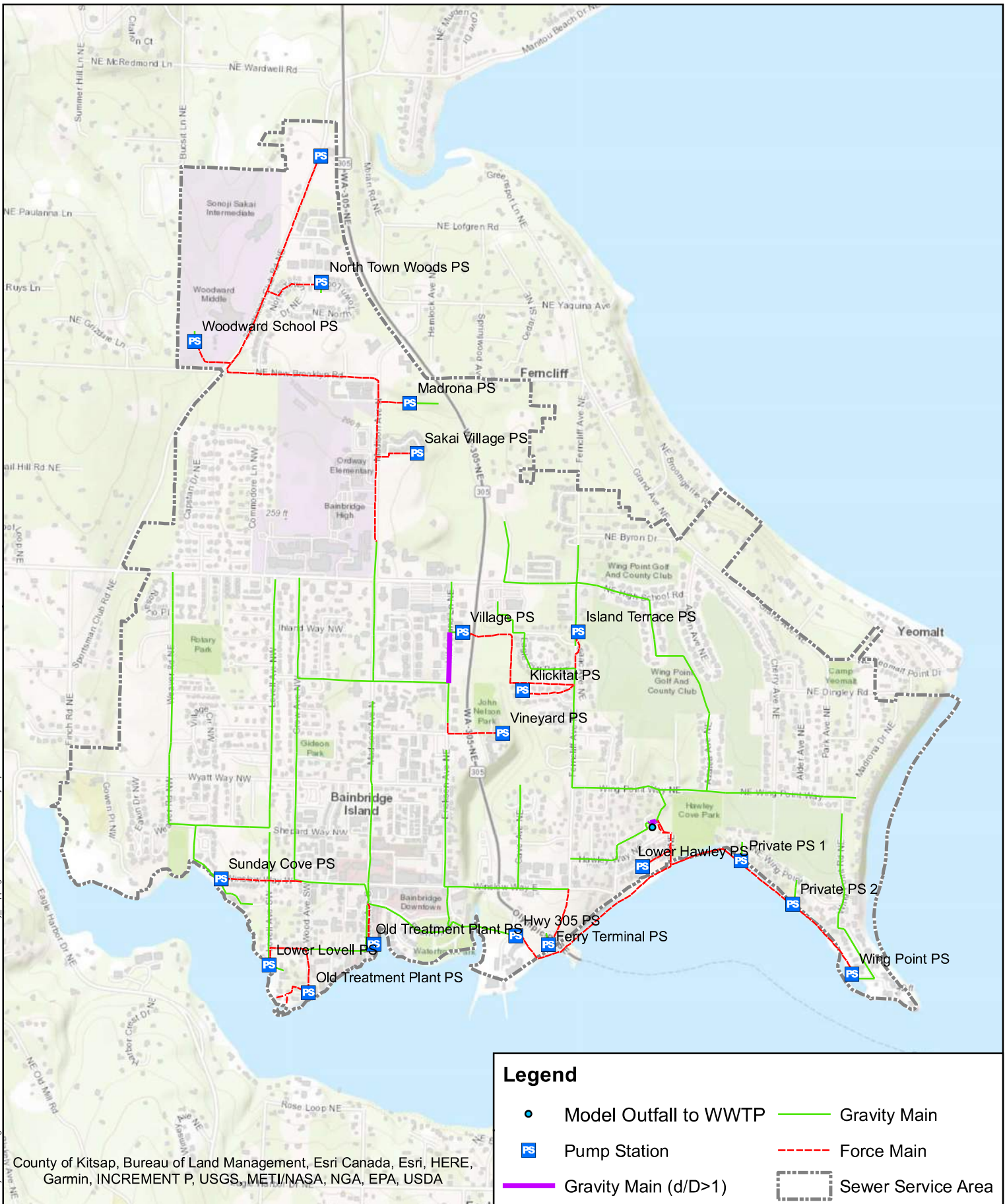
This Technical Memorandum (TM) serves as an addendum to the Capacity Analysis and Capital Improvement Project Identification TM for the capacity analysis and capital improvement project identification conducted to support the City of Bainbridge Island's (City) Winslow Subarea Plan and Comprehensive Plan update. This addendum covers the cost estimate for the capacity improvement projects (CIP) identified in the TM corresponding to the "no-action" alternative (Alternative 1 – No Action) and two additional land-use "action" alternatives (Alternative 2 – Dense Centers, and Alternative 3 – Distributed Density) from the Winslow Subarea Plan Update 2024. Details regarding the model development and capacity analysis can be found in the TM. Additionally, this TM also includes discussion on how these three alternatives differ from the current (baseline) conditions.

2. Model Results for the Baseline Conditions

The baseline (current) conditions model was run to identify any conveyance system deficiencies. Dry weather flow of magnitude 0.48 million gallons per day (MGD) and wet weather flow of magnitude 1.81 MGD were distributed over the collection system following the same methodology as the alternative scenarios models.

The baseline model showed two unique deficiency areas, both related to pipe capacity. The total length of pipes exceeding $d/D > 1$ for the baseline condition is 724 feet (ft), which is the same as Alternative 1. This suggest that the additional pipe deficiencies seen in Alternatives 2 and 3 might be due to the increased flow from additional development. Figure 1 shows the spatial distribution of deficiencies identified for the baseline condition modeled. It is to be noted that the pump station over-capacity issues observed in the three alternatives were not present in the baseline conditions.

T:\Projects\Bainbridge Island\24-10933.00 - Winslow Subarea Plan\GIS\Deficiency Mapping\WinslowSewerDeficiencyMap-Baseline.mxd 7/30/2024 SGautam



This map is a geographic representation based on information available. No warranty is made concerning the accuracy, currency, or completeness of data depicted on this map.



0 0.1 0.2 0.4 Miles



Sewer Deficiencies - Baseline
Winslow Subarea Plan
City of Bainbridge Island
July 2024

Figure

1

3. Cost Estimate for the CIPs

Opinions of Probable Project Costs (OPPC) were prepared for all the CIPs identified in the TM. Documentation for these OPPCs can be found in the Attachment A. The level of analysis performed is assumed to be sufficient to support developing planning level OPPCs. These projects will require further definition and design refinement as part of the design process. Each OPPC includes 9.2% Washington State sales tax (WSST) for Kitsap County, 30% construction contingency, and allied costs of 5% for planning, 15% for design and permitting, and 15% for engineering services during construction including inspection and observation services. Several unit price items were used to determine the cost estimates. Quantities were estimated for each item and unit prices were estimated from recent bid results in the Puget Sound area and Means “Estimating Guide.” Certain assumptions needed to be made in terms of quantities and unit prices. Those assumptions are presented below in Table 1.

Table 1
Basis of Project Cost Estimates

Construction Estimate Category	Cost	Notes
Mobilization	10% of Construction Costs	-
Traffic Control	4% of Construction Costs of Mainline Sewer	-
Trench Dewatering	\$15/LF	-
Sheeting, Shoring, Bracing	\$10/LF	-
Saw Cutting	Included in Pavement Removal Cost	Required for the entire length of the mainline sewer.
Pavement Removal	\$250/Ton	Limited to a trench width of 60 inches, plus 12 inches on both sides, total width of 84 inches.
Temporary Sewer Bypass	\$5,000/Week	For all open cut installations.
Import Trench Backfill	Included in Pipe Costs	100% of all excavation will require imported material. Maximum width 60 inches, average depth of 10.67 feet.
Crushed Surfacing, Base Course	\$50/Ton	Assumed to be 6 inches deep and a maximum pay width of 84 inches.
Crushed Surfacing, Top Course	\$50/Ton	Assumed to be 6 inches deep and a maximum pay width of 84 inches.
Hot Mix Asphalt (HMA)	\$250/Ton	Maximum thickness of 3 inches applied over a width of 84 inches for the entire length of all mainline sewers or where patching is required.

Construction Estimate Category	Cost	Notes
Restoration	2% of Construction Costs	-
Lift Station Rehabilitation	Assumed in Construction Costs	Assumes no excavation needed and the needed increase in capacity can be accomplished with pump and motor changes, and electrical revisions.
Allied and Other Costs – Assumptions		
Construction Contingency	30% of Estimated Construction Costs	-
State Sales Tax	9.2% of Estimated Costs	-
Engineering Design, Survey, Geotechnical Investigation, Permits	15% of Estimated Costs	-
Construction Services	15% of Estimated Costs	-
Planning	5% of Estimated Costs	-

Project costs are calculated based on current dollars and do not reflect future considerations for inflation with respect to the applicable future planning alternatives. Each project was considered equal with regards to complexity with no adjustments made for site specific constructability or other mitigating factors that would impact a project construction, design, or permitting costs for this level of planning. Table 2 provides a summary of the costs associated with linear improvements for all the individual CIP projects.

Table 2
Summary of Linear Improvement OPCC

Project Area	CIP Name	Description	Existing Diameter (in)	Proposed diameter (in)	Length (ft)	Total Opinion of Probable Construction Cost	Total Opinion of Probable Allied Cost	Total Estimated Project Cost
A	PR-A-2	Project Area A, Alternative 2	10	12	260	\$ 294,000	\$ 200,000	\$ 494,000
B	PR-B-123	Project Area B, All Alternatives	16	18	107	\$ 182,000	\$ 100,000	\$ 282,000
C	PR-C-23	Project Area C, Alternatives 2 and 3	10	12	926	\$ 885,000	\$ 400,000	\$ 1,285,000
D	PR-D-1	Project Area D, Alternative 1	10	12	794	\$ 752,000	\$ 300,000	\$ 1,052,000
D	PR-D-23	Project Area D, Alternatives 2 and 3	10	15	794	\$ 770,000	\$ 300,000	\$ 1,070,000
E	PR-E-2	Project Area E, Alternative 2	8	10	838	\$ 782,000	\$ 300,000	\$ 1,082,000
E	PR-E-3	Project Area E, Alternative 3	8	10	482	\$ 459,000	\$ 200,000	\$ 659,000

Detailed project cost estimates were not provided for lift station improvements given the uncertainty related to the need for large scale upgrades including but no limited to firm capacity, mechanical, electrical, force main, and site-specific details. The total estimated project cost shown in Table 3 represents a planning level comparative estimate based on firm capacity.

Table 3
Summary of Lift Station Improvement OPCC

Project Area	Lift Station Name	Existing Firm Capacity (gpm)	Increased Firm Capacity (gpm)	Total Estimated Project Cost
F	Sunday Cove PS	484	650	\$3,250,000
G	Old Treatment Plant PS	256	400	\$3,000,000
H	Village PS	614	870	\$3,500,000

Table 4 provides a summary of the estimated costs for the three future alternative conditions and the baseline condition.

Table 4
Comparison of the Estimated Costs Between Alternatives

Alternative	Count of Linear Projects	Count of Lift Station Projects	Sum of Linear Projects Cost	Sum of Lift Station Projects Cost	Sum of Total Estimated Costs
Baseline Condition	2	0	\$ 1,334,000	\$ 0	\$ 1,334,000
Alternative 1 – No Action	2	3	\$ 1,334,000	\$ 9,750,000	\$ 11,084,000
Alternative 2 – Dense Centers	5	3	\$ 4,213,000	\$ 9,750,000	\$ 13,963,000
Alternative 3 – Distributed Density	4	3	\$ 3,296,000	\$ 9,750,000	\$ 13,046,000

4. Discussion

Alternative 1, while showing fewer deficiencies overall compared to the other future options, simulated capacity issues at critical pump stations, likely requiring major investments in operational upgrades. Alternatives 2 and 3 carry a greater risk of service disruptions due to problems related to additional pipe capacity. Alternative 2, in particular, faces extra challenges stemming from high-density urban development. Overall, both Alternatives 2 and 3 would likely require additional investments for improvements compared to Alternative 1.

ATTACHMENT A

Opinion of Probable Project Costs

City of Bainbridge Island, WA
Capital Improvement Project Identification
Planning Level Opinion of Probable Project Costs

PR-A-2

Prepared by: SG

Reviewed by: KC

Bid Item No.	Bid Item Description	Unit Bid Price	Quantity	Unit	Total
1	Mobilization	\$17,300	1	LS	\$17,300
2	Temporary Erosion & Sediment Control	\$7,000	1	LS	\$7,000
3	Dewatering	\$3,900	1	LS	\$3,900
4	12-inch PVC Gravity Sewer	\$367	260	LF	\$95,420
5	48-inch Manhole	\$12,000	3	EA	\$36,000
6	HMA Trench Patch	\$250	50	TN	\$12,500
7	HMA Grind & Overlay	\$350	30	TN	\$10,500
8	HMA Sawcut and Seal	\$30	260	LF	\$7,800
9	Crushed Surfacing	\$50	50	TN	\$2,500
10	Sheeting, Shoring, Bracing	\$10	260	LF	\$2,600
11	Bypass	\$1,300	1	LS	\$1,300
12	Traffic Control	\$7,000	1	LS	\$7,000
13	General Restoration	\$3,500	1	LS	\$3,500
Construction Costs Subtotal					\$207,320
Construction Contingency		30%			\$62,196
Sales Tax		9.2%			\$24,795
Total Opinion of Probable Construction Cost					\$294,000
Allied Costs					
Planning		5%			\$14,700
Design and Permitting		15%			\$44,100
Services During Construction		15%			\$44,100
Total Opinion of Probable Allied Cost					\$200,000
TOTAL ESTIMATED PROJECT COST					\$494,000
Assumptions, Notes					
1. Import backfill assumed to be 100%					
2. Foundation Gravel assumed to be 100%					
3. Mobilization assumed to be 10% of construction costs					
4. Temporary Erosion Control and General Restoration assumed to be 2% of construction costs					
5. Traffic Control assumed to be 4% of construction costs					
6. Pipe costs includes all excavation, pipe, fittings, bedding, imported backfill, and haul					
7. Costs are in 2024 dollars					
The opinion of probable cost herein is based on our perception of current conditions at the project location. This opinion reflects our professional opinion of costs at this time and is subject to change as the project design progresses. BHC Consultants has no control over variances in the cost of labor, materials, equipment; nor services provided by others, contractor's means and methods of executing the work or of determining prices, competitive bidding or market conditions, practices or bidding strategies. BHC Consultants cannot and does not warrant or guarantee that proposals, bids, or actual construction costs will not vary from the costs presented as shown.					

City of Bainbridge Island, WA
Capital Improvement Project Identification
Planning Level Opinion of Probable Project Costs

PR-B-123

Prepared by: SG

Reviewed by: KC

Bid Item No.	Bid Item Description	Unit Bid Price	Quantity	Unit	Total
1	Mobilization	\$10,700	1	LS	\$10,700
2	Temporary Erosion & Sediment Control	\$4,300	1	LS	\$4,300
3	Dewatering	\$1,605	1	LS	\$1,605
4	18-inch PVC Gravity Sewer	\$398	107	LF	\$42,586
5	48-inch Manhole	\$12,000	4	EA	\$48,000
6	HMA Trench Patch	\$250	20	TN	\$5,000
7	HMA Grind & Overlay	\$350	10	TN	\$3,500
8	HMA Sawcut and Seal	\$30	107	LF	\$3,210
9	Crushed Surfacing	\$50	20	TN	\$1,000
10	Sheeting, Shoring, Bracing	\$10	107	LF	\$1,070
11	Bypass	\$535	1	LS	\$535
12	Traffic Control	\$4,300	1	LS	\$4,300
13	General Restoration	\$2,200	1	LS	\$2,200
Construction Costs Subtotal					\$128,006
Construction Contingency		30%			\$38,402
Sales Tax		9.2%			\$15,310
Total Opinion of Probable Construction Cost					\$182,000
Allied Costs					
Planning		5%			\$9,100
Design and Permitting		15%			\$27,300
Services During Construction		15%			\$27,300
Total Opinion of Probable Allied Cost					\$100,000
TOTAL ESTIMATED PROJECT COST (ROUNDED UP TO NEAREST \$1,000)					\$282,000
Assumptions, Notes					
1. Import backfill assumed to be 100%					
2. Foundation Gravel assumed to be 100%					
3. Mobilization assumed to be 10% of construction costs					
4. Temporary Erosion Control and General Restoration assumed to be 2% of construction costs					
5. Traffic Control assumed to be 4% of construction costs					
6. Pipe costs includes all excavation, pipe, fittings, bedding, imported backfill, and haul					
7. Costs are in 2024 dollars					
The opinion of probable cost herein is based on our perception of current conditions at the project location. This opinion reflects our professional opinion of costs at this time and is subject to change as the project design progresses. BHC Consultants has no control over variances in the cost of labor, materials, equipment; nor services provided by others, contractor's means and methods of executing the work or of determining prices, competitive bidding or market conditions, practices or bidding strategies. BHC Consultants cannot and does not warrant or guarantee that proposals, bids, or actual construction costs will not vary from the costs presented as shown.					

City of Bainbridge Island, WA
Capital Improvement Project Identification
Planning Level Opinion of Probable Project Costs

PR-C-23

Prepared by: SG

Reviewed by: KC

Bid Item No.	Bid Item Description	Unit Bid Price	Quantity	Unit	Total
1	Mobilization	\$52,000	1	LS	\$52,000
2	Temporary Erosion & Sediment Control	\$20,800	1	LS	\$20,800
3	Dewatering	\$13,890	1	LS	\$13,890
4	12-inch PVC Gravity Sewer	\$367	926	LF	\$339,842
5	48-inch Manhole	\$12,000	4	EA	\$48,000
6	HMA Trench Patch	\$250	160	TN	\$40,000
7	HMA Grind & Overlay	\$350	80	TN	\$28,000
8	HMA Sawcut and Seal	\$30	926	LF	\$27,780
9	Crushed Surfacing	\$50	160	TN	\$8,000
10	Sheeting, Shoring, Bracing	\$10	926	LF	\$9,260
11	Bypass	\$4,630	1	LS	\$4,630
12	Traffic Control	\$20,800	1	LS	\$20,800
13	General Restoration	\$10,400	1	LS	\$10,400
Construction Costs Subtotal					\$623,402
Construction Contingency		30%			\$187,021
Sales Tax		9.2%			\$74,559
Total Opinion of Probable Construction Cost					\$885,000
Allied Costs					
Planning		5%			\$44,300
Design and Permitting		15%			\$132,800
Services During Construction		15%			\$132,800
Total Opinion of Probable Allied Cost					\$400,000
TOTAL ESTIMATED PROJECT COST (ROUNDED UP TO NEAREST \$1,000)					\$1,285,000
Assumptions, Notes					
1. Import backfill assumed to be 100%					
2. Foundation Gravel assumed to be 100%					
3. Mobilization assumed to be 10% of construction costs					
4. Temporary Erosion Control and General Restoration assumed to be 2% of construction costs					
5. Traffic Control assumed to be 4% of construction costs					
6. Pipe costs includes all excavation, pipe, fittings, bedding, imported backfill, and haul					
7. Costs are in 2024 dollars					
The opinion of probable cost herein is based on our perception of current conditions at the project location. This opinion reflects our professional opinion of costs at this time and is subject to change as the project design progresses. BHC Consultants has no control over variances in the cost of labor, materials, equipment; nor services provided by others, contractor's means and methods of executing the work or of determining prices, competitive bidding or market conditions, practices or bidding strategies. BHC Consultants cannot and does not warrant or guarantee that proposals, bids, or actual construction costs will not vary from the costs presented as shown.					

City of Bainbridge Island, WA
Capital Improvement Project Identification
Planning Level Opinion of Probable Project Costs

PR-D-1

Prepared by: SG

Reviewed by: KC

Bid Item No.	Bid Item Description	Unit Bid Price	Quantity	Unit	Total
1	Mobilization	\$44,200	1	LS	\$44,200
2	Temporary Erosion & Sediment Control	\$17,700	1	LS	\$17,700
3	Dewatering	\$11,910	1	LS	\$11,910
4	12-inch PVC Gravity Sewer	\$367	794	LF	\$291,398
5	48-inch Manhole	\$12,000	3	EA	\$36,000
6	HMA Trench Patch	\$250	140	TN	\$35,000
7	HMA Grind & Overlay	\$350	70	TN	\$24,500
8	HMA Sawcut and Seal	\$30	794	LF	\$23,820
9	Crushed Surfacing	\$50	140	TN	\$7,000
10	Sheeting, Shoring, Bracing	\$10	794	LF	\$7,940
11	Bypass	\$3,970	1	LS	\$3,970
12	Traffic Control	\$17,700	1	LS	\$17,700
13	General Restoration	\$8,900	1	LS	\$8,900
Construction Costs Subtotal					\$530,038
Construction Contingency		30%			\$159,011
Sales Tax		9.2%			\$63,393
Total Opinion of Probable Construction Cost					\$752,000
Allied Costs					
Planning		5%			\$37,600
Design and Permitting		15%			\$112,800
Services During Construction		15%			\$112,800
Total Opinion of Probable Allied Cost					\$300,000
TOTAL ESTIMATED PROJECT COST (ROUNDED UP TO NEAREST \$1,000)					\$1,052,000
Assumptions, Notes					
1. Import backfill assumed to be 100%					
2. Foundation Gravel assumed to be 100%					
3. Mobilization assumed to be 10% of construction costs					
4. Temporary Erosion Control and General Restoration assumed to be 2% of construction costs					
5. Traffic Control assumed to be 4% of construction costs					
6. Pipe costs includes all excavation, pipe, fittings, bedding, imported backfill, and haul					
7. Costs are in 2024 dollars					
The opinion of probable cost herein is based on our perception of current conditions at the project location. This opinion reflects our professional opinion of costs at this time and is subject to change as the project design progresses. BHC Consultants has no control over variances in the cost of labor, materials, equipment; nor services provided by others, contractor's means and methods of executing the work or of determining prices, competitive bidding or market conditions, practices or bidding strategies. BHC Consultants cannot and does not warrant or guarantee that proposals, bids, or actual construction costs will not vary from the costs presented as shown.					

City of Bainbridge Island, WA
Capital Improvement Project Identification
Planning Level Opinion of Probable Project Costs

PR-D-23

Prepared by: SG

Reviewed by: KC

Bid Item No.	Bid Item Description	Unit Bid Price	Quantity	Unit	Total
1	Mobilization	\$45,200	1	LS	\$45,200
2	Temporary Erosion & Sediment Control	\$18,100	1	LS	\$18,100
3	Dewatering	\$11,910	1	LS	\$11,910
4	15-inch PVC Gravity Sewer	\$380	794	LF	\$301,720
5	48-inch Manhole	\$12,000	3	EA	\$36,000
6	HMA Trench Patch	\$250	140	TN	\$35,000
7	HMA Grind & Overlay	\$350	70	TN	\$24,500
8	HMA Sawcut and Seal	\$30	794	LF	\$23,820
9	Crushed Surfacing	\$50	140	TN	\$7,000
10	Sheeting, Shoring, Bracing	\$10	794	LF	\$7,940
11	Bypass	\$3,970	1	LS	\$3,970
12	Traffic Control	\$18,100	1	LS	\$18,100
13	General Restoration	\$9,100	1	LS	\$9,100
Construction Costs Subtotal					\$542,360
Construction Contingency		30%			\$162,708
Sales Tax		9.2%			\$64,866
Total Opinion of Probable Construction Cost					\$770,000
Allied Costs					
Planning		5%			\$38,500
Design and Permitting		15%			\$115,500
Services During Construction		15%			\$115,500
Total Opinion of Probable Allied Cost					\$300,000
TOTAL ESTIMATED PROJECT COST (ROUNDED UP TO NEAREST \$1,000)					\$1,070,000
Assumptions, Notes					
1. Import backfill assumed to be 100%					
2. Foundation Gravel assumed to be 100%					
3. Mobilization assumed to be 10% of construction costs					
4. Temporary Erosion Control and General Restoration assumed to be 2% of construction costs					
5. Traffic Control assumed to be 4% of construction costs					
6. Pipe costs includes all excavation, pipe, fittings, bedding, imported backfill, and haul					
7. Costs are in 2024 dollars					
The opinion of probable cost herein is based on our perception of current conditions at the project location. This opinion reflects our professional opinion of costs at this time and is subject to change as the project design progresses. BHC Consultants has no control over variances in the cost of labor, materials, equipment; nor services provided by others, contractor's means and methods of executing the work or of determining prices, competitive bidding or market conditions, practices or bidding strategies. BHC Consultants cannot and does not warrant or guarantee that proposals, bids, or actual construction costs will not vary from the costs presented as shown.					

City of Bainbridge Island, WA
Capital Improvement Project Identification
Planning Level Opinion of Probable Project Costs

PR-E-2

Prepared by: SG

Reviewed by: KC

Bid Item No.	Bid Item Description	Unit Bid Price	Quantity	Unit	Total
1	Mobilization	\$45,900	1	LS	\$45,900
2	Temporary Erosion & Sediment Control	\$18,400	1	LS	\$18,400
3	Dewatering	\$12,570	1	LS	\$12,570
4	10-inch PVC Gravity Sewer	\$358	838	LF	\$300,004
5	48-inch Manhole	\$12,000	3	EA	\$36,000
6	HMA Trench Patch	\$250	150	TN	\$37,500
7	HMA Grind & Overlay	\$350	80	TN	\$28,000
8	HMA Sawcut and Seal	\$30	838	LF	\$25,140
9	Crushed Surfacing	\$50	140	TN	\$7,000
10	Sheeting, Shoring, Bracing	\$10	838	LF	\$8,380
11	Bypass	\$4,190	1	LS	\$4,190
12	Traffic Control	\$18,400	1	LS	\$18,400
13	General Restoration	\$9,200	1	LS	\$9,200
Construction Costs Subtotal					\$550,684
Construction Contingency		30%			\$165,205
Sales Tax		9.2%			\$65,862
Total Opinion of Probable Construction Cost					\$782,000
Allied Costs					
Planning		5%			\$39,100
Design and Permitting		15%			\$117,300
Services During Construction		15%			\$117,300
Total Opinion of Probable Allied Cost					\$300,000
TOTAL ESTIMATED PROJECT COST (ROUNDED UP TO NEAREST \$1,000)					\$1,082,000
Assumptions, Notes					
1. Import backfill assumed to be 100%					
2. Foundation Gravel assumed to be 100%					
3. Mobilization assumed to be 10% of construction costs					
4. Temporary Erosion Control and General Restoration assumed to be 2% of construction costs					
5. Traffic Control assumed to be 4% of construction costs					
6. Pipe costs includes all excavation, pipe, fittings, bedding, imported backfill, and haul					
7. Costs are in 2024 dollars					
The opinion of probable cost herein is based on our perception of current conditions at the project location. This opinion reflects our professional opinion of costs at this time and is subject to change as the project design progresses. BHC Consultants has no control over variances in the cost of labor, materials, equipment; nor services provided by others, contractor's means and methods of executing the work or of determining prices, competitive bidding or market conditions, practices or bidding strategies. BHC Consultants cannot and does not warrant or guarantee that proposals, bids, or actual construction costs will not vary from the costs presented as shown.					

City of Bainbridge Island, WA
Capital Improvement Project Identification
Planning Level Opinion of Probable Project Costs

PR-E-3

Prepared by: SG

Reviewed by: KC

Bid Item No.	Bid Item Description	Unit Bid Price	Quantity	Unit	Total
1	Mobilization	\$27,000	1	LS	\$27,000
2	Temporary Erosion & Sediment Control	\$10,800	1	LS	\$10,800
3	Dewatering	\$7,230	1	LS	\$7,230
4	10-inch PVC Gravity Sewer	\$358	482	LF	\$172,556
5	48-inch Manhole	\$12,000	2	EA	\$24,000
6	HMA Trench Patch	\$250	90	TN	\$22,500
7	HMA Grind & Overlay	\$350	50	TN	\$17,500
8	HMA Sawcut and Seal	\$30	482	LF	\$14,460
9	Crushed Surfacing	\$50	80	TN	\$4,000
10	Sheeting, Shoring, Bracing	\$10	482	LF	\$4,820
11	Bypass	\$2,410	1	LS	\$2,410
12	Traffic Control	\$10,800	1	LS	\$10,800
13	General Restoration	\$5,400	1	LS	\$5,400
Construction Costs Subtotal					\$323,476
Construction Contingency		30%			\$97,043
Sales Tax		9.2%			\$38,688
Total Opinion of Probable Construction Cost					\$459,000
Allied Costs					
Planning		5%			\$23,000
Design and Permitting		15%			\$68,900
Services During Construction		15%			\$68,900
Total Opinion of Probable Allied Cost					\$200,000
TOTAL ESTIMATED PROJECT COST (ROUNDED UP TO NEAREST \$1,000)					\$659,000
Assumptions, Notes					
1. Import backfill assumed to be 100%					
2. Foundation Gravel assumed to be 100%					
3. Mobilization assumed to be 10% of construction costs					
4. Temporary Erosion Control and General Restoration assumed to be 2% of construction costs					
5. Traffic Control assumed to be 4% of construction costs					
6. Pipe costs includes all excavation, pipe, fittings, bedding, imported backfill, and haul					
7. Costs are in 2024 dollars					
The opinion of probable cost herein is based on our perception of current conditions at the project location. This opinion reflects our professional opinion of costs at this time and is subject to change as the project design progresses. BHC Consultants has no control over variances in the cost of labor, materials, equipment; nor services provided by others, contractor's means and methods of executing the work or of determining prices, competitive bidding or market conditions, practices or bidding strategies. BHC Consultants cannot and does not warrant or guarantee that proposals, bids, or actual construction costs will not vary from the costs presented as shown.					

Attachment C - Winslow Sub-area Water and Sewer Analysis Memo



DEPARTMENT OF PUBLIC WORKS MEMORANDUM

Date: March 14, 2023

To: Winslow Sub-Area Plan Team; File

From: Christopher Wierzbicki, Public Works Director
Peter Corelis, City Engineer

CC: Paul Nylund, Development Manager

Subject: Winslow Sub-Area Plan Sewer and Water Capacity Analysis

Executive Summary

This memo provides an analysis of the city's sewer and water service capacity for the purpose of informing the Winslow Sub-Area Plan process. In summary:

- With the planned upgrades to the wastewater treatment plan (WWTP), the city's sewer utility will have the capacity to serve a residential population of approximately 10,500 (an increase of approximately 2,700) in or around the Winslow sewer service area if carefully balanced out by commercial growth. The planned upgrades, which are currently underway, will allow the WWTP to meet existing regulations, and must be completed independent of planned future growth.

Additionally, within the existing footprint of the WWTP, the facility could be further upgraded to serve a greater population, the details of which will be determined later this year.

- With the planned upgrades to the Winslow Water Tank, the city's water utility will have the capacity to serve a population of approximately 17,600 (an increase of approximately 6,600) inside the Winslow water service area boundary, an area that includes the Winslow subarea, and in addition, the New Brooklyn Road corridor, Fletcher Bay, and Upper Ferncliff. The planned tank upgrades, which are currently underway, will allow the utility to meet both existing and future system requirements and standards.

Population/Development Background Information

The following population background information was used to inform the sewer and water service area capacity analysis:

- In 2005, the city documented residential population growth in a study titled “Population Allocation Study for Year 2005 Preliminary Report” which estimated the Winslow Study Area at approximately 5,800 residents. The study predicted a 20-year average annual residential growth rate of 2.4%.
- The 2020 census population numbers for greater Winslow (census tracts 909.01 and 909.02, which combined is slightly larger than the Winslow Study area) add up to 7,967 people, which represents an actual average annual residential growth rate between 2005 and 2020 of 2.2%.
- Assuming the actual 2.2% average annual growth rate, the 2022 population of the Winslow Study Area is approximately 8,321 people. The sewer population – which is less than the overall population due to some houses still being served by septic systems - is approximately 7,769.
- The 2021 Buildable Lands Report (BLR) estimated that the maximum residential population capacity in Winslow in 2020 - under the current development regulations - was an additional approximately 1,000 residents (144 single-family units, and 258 multi-family units.) Therefore, assuming the 2019 population was 7,795 (7,967 in 2020 minus 2.2%), then the current maximum population in Winslow according to the BLR would be approximately 8,795, or an additional 474 residents.
- The 2005 population study referenced earlier estimated a 1.4% annual increase in commercial growth between 2005 and 2025. An analysis using commercial sewer and water usage rates indicates that the actual increase in commercial growth since 2005 was close to zero. Estimating the capacity for commercial growth in the future is a challenging exercise, as many commercial zoning districts allow mixed-uses and therefore need to be analyzed for capacity on a parcel-by-parcel basis to effectively measure capacity. However, the BLR estimated that there are currently 36 acres of commercial development remaining, which equates to about 14% of the total acreage (261) that allows commercial uses. Therefore, this analysis assumes a relatively low rate of commercial growth in the future, absent significant zoning changes.
- The Winslow water service area is larger than the sewer service area – the latter of which largely mimics the Winslow Study Area – and includes the New Brooklyn Road corridor, Fletcher Bay, and Upper Ferncliff. The number of Equivalent Residential Units (ERU) currently served (an approximation of single-family, multi-family, and commercial water connections in terms of single-family households) is approximately 4,775 ERUs, which equates to approximately 11,000 residents currently being served with water (assuming an average of 2.3 people per household/ERU.)

Sewer Service Analysis

The following analysis of the sewer system is based on a technical memo prepared by Tetra Tech entitled “TM1 – Analysis of Treatment Plant Flows and Loads” dated October 3, 2022.

The city's sewer service area mostly mimics the Winslow Study area, despite being slightly smaller, and includes some residences that are still served by septic systems. As mentioned previously, the system serves approximately 7,769 residents and also commercial establishments. The Tetra Tech report analyzed the sewer service area using the capacity of the wastewater treatment plant as the limiting factor on serving new growth. The plant capacity was analyzed from the perspective of both flows (volume) and loads (concentration). The plant loading is considered to be the limiting factor for serving new growth.

From a *flow* perspective, based on the trending data from 2017 to 2022, the annual average flow is projected to remain steady, with limited increases. This is due to larger commercial service areas being largely built-out – as mentioned previously, only about 14% of commercially zoned land is available for new development. Additionally, residential water consumption per capita flows are likely dropping as older fixtures and appliances are upgraded with new low-flow fixtures.

From a *loading* perspective, despite low commercial growth (commercial development contributes to higher loads than residential,) loads measured at the plant have been steadily increasing. Some of this increase is likely the result of discharges to the sewer system from commercial winery and brewery establishments. The Tetra Tech report projects that based on current trends, the plant loading will likely reach capacity by mid-year 2026 (2,642 lbs/day of biological oxygen demand (BOD)). To meet current state regulations and best serve the existing customer base, the city is currently planning near-term operational and capital upgrades that will likely increase the plant capacity by about 25% (to 3,200 lbs/day BOD). These upgrades will also serve a 25% increase in the customer base.

In terms of population growth, at current trends, the current configuration of the WWTP can be expected to serve a sewered population of 8,475 (a population increase of 706 from the time of this memo), increasing to sewered population of approximately **10,500** (a population increase of 2,700). This includes new growth, and potential new connections from existing residences in the sewer service area currently served by septic.

Sewer Service Capacity Context

For context, the growth target for the entire island over the next 20 years is estimated to be an increase of around 4,500. If one goal of the Winslow Sub-Area plan is to accommodate a majority of that growth in Winslow, *the city can only expect to serve about half of that population in the sewer service area with the planned upgrades to the treatment plant.* Larger, long-term expansions of the treatment plant capacity are also possible, and capacity forecasts are currently being developed by the city's design team. More information on the maximum capacity of the plant within the current footprint will be developed later this year.

Another factor for consideration includes any potential increases in commercial development, which have remained flat for the last several years, but which absorb treatment plant capacity more quickly than residential development. Planned expansions for commercial development in Winslow must be carefully considered in the future capacity analysis along with residential population growth.

Water Service Analysis

The Winslow water service area includes the Winslow Subarea, in addition to New Brooklyn Road corridor, Fletcher Bay, and Upper Ferncliff areas. The service area is documented in the 2017 Water System Plan, prepared by Carollo Engineers, Inc., without providing an account of system customers in the Subarea only, therefore, this capacity analysis applies to the larger service area.

The System Plan predicted water use demand in 2021 at 5,312 equivalent residential units (ERUs), which equates to 12,218 residents (assuming 2.3 people per household/ERU to estimate equivalent residents.) However, in reviewing the City's actual annual well production data from 2021, the Winslow Water System is actively supplying only 4,775 ERUs, or approximately 11,000 residents. This decrease in expected demand may have resulted from a number of factors, such as a lack of commercial businesses expansions, conditions related to the COVID-19 epidemic, inflationary pressures on construction, or the slow production of new housing stock.

To serve existing and new customers, the city is planning to replace the two existing water storage tanks serving the system with a new elevated tank in 2024. The Winslow Water Tank project addresses several system deficiencies as well as managing projected customer growth. The system deficiencies include excessive dead storage in the current tanks due to their minimal height, resulting in water quality issues, over-cycling of well-site booster pumps, limitations on serving existing high elevation customers with adequate pressure, system fire flows, and seismic resiliency of the tanks – the latter of which is a critical public safety issue. The city is temporarily addressing some of these deficits by augmenting the reservoir levels to operate in a much narrower band (i.e. maintaining higher water levels and replenishing them more often) but this configuration is not sustainable in the long-term as it creates a dead-storage column of water in the tanks that is mostly useless for daily system needs. The deficiencies have led to a reduction in estimated capacity to 5,200 ERUs (or 11,960 residents.)

With regards to customer growth, there is currently a surplus of connections totaling approximately 425 ERUs (5,200 ERUs of capacity minus 4,775 served,) which is capable of serving approximately another 1,000 residents. Accounting for 182 ERUs worth of binding reservations for water service that are not yet connected to the system, it is estimated that only 243 of the 425 total ERUs are available, which equates to an additional 559 residents. Therefore, if the population growth continues at a rate of 2.2% annually, the remaining ERUs will run out in early to mid-2024, just in time for the completion of the tank project. The new tank, which will replace 2.5M gallons of ground-tank storage with 2.0M gallons of elevated storage, will correct existing system deficiencies and add 2,866 ERUs to the system capable of serving a population of 17,600 (an increase of 6,600 residents.)

Other limiting factors on the Winslow water system include well capacity and/or the well pump's ability to deliver water from the wells; the instantaneous or total water withdrawals permitting as determined by the system's water rights; and, the volume of groundwater supply. In review of the former two factors, the city's infrastructure and available water rights are mostly sufficient to meet the system capacity that will be available when the new water tank comes online in 2024. Small deficits in infrastructure capacity will be addressed in the coming years through planned capital improvements such as well rehabilitations and booster pump upgrades. Water rights currently

exceed the needs of the planned capacity upgrades, and the availability of groundwater supply was confirmed in the city's 2016 evaluation of the groundwater model. The model is being updated and re-evaluated as part of the ongoing development of the Groundwater Management Plan.

Water Service Capacity Context

In the context of planned population growth, *the existing Winslow water system with planned improvements will be able to serve the estimated growth target for the entire island over the next 20 years*, which is estimated to be an increase of around 4,500 residents (1,953 ERUs.) Additionally, the system will also have the capacity to serve an excess population of approximately 2,100 residents (913 ERUs.) In the short-term, prior to the planned improvements, the Winslow water system can support an additional population growth of approximately 559 residents (243 ERUs).

Attachment D - Wastewater Treatment Plant Population Projection Memo



DEPARTMENT OF PUBLIC WORKS MEMORANDUM

Date: April 7, 2023

To: City Manager
City Council

From: Christopher Wierzbicki, Public Works Director

Subject: **Council Request: House Bill 1220 (Housing Needs) Sewer Assessment**

Background

At the Regular Meeting of March 21, 2023, the City Council was presented with an overview of a draft housing allocation process under House Bill 1220, which requires Comprehensive Plans to plan for housing for all income levels. The Council requested input from the staff on the City's capacity for serving the housing allocation with sewer in advance of the Kitsap Regional Coordinating Council's adoption of the allocation into the Countywide Planning policies.

Housing Allocation Summary

At the above-mentioned Council meeting, staff presented a chart that outlined the draft 20-year housing allocation. The chart is reproduced below as Figure 1.

			Permanent Housing Unit Needs by Income Level (% of Area Median Income)						
			0-30%						
			Non-PSH	PSH	>30-50%	>50-80%	>80-100%	>100-120%	>120%
Total Units									
City of Bainbridge Island	Estimated Housing Supply (2020)	11,251	331	0	331	788	1,150	2,073	6,578
	Allocation Method A (2020-2044)	1,977	377	166	324	272	140	138	560
			1,139 Multi-Family Units in Winslow						

Figure 1 – House Bill 1220 Housing Draft Housing Allocation for the City of Bainbridge Island

The chart indicates that the draft 20-year housing allocation would require zoning capacity for 1,139 multi-family (MF) units to serve between 0 and 80% of area median income, which are presumed to be located in the Winslow subarea. According to the 2019 Buildable Lands Report, the Winslow subarea already has capacity for 258 MF units, as well as 144 single-family units. Therefore, the total number of planned housing units to be accommodated for sewer capacity in Winslow is 1,283 units.

Sewer Population Capacity

As outlined in Figure 2 below, with the upgrades planned in the 2023-28 Capital Improvement Plan, the Wastewater Treatment Plant (WWTP) can accommodate approximately 85% of the current and future housing allocated for the Winslow sewer service area (this area closely, but not exactly mimics the Winslow subarea boundary.) The capacity of the WWTP is measured in equivalent residential units, or ERUs, which is calculated by multiplying the number of housing units by the number of members in each house (the average for Bainbridge Island is 2.48 per household.)

Assuming a steady annual trend in housing, future upgrades to the plant would need to be designed in 2038 for implementation in 2040. The future upgrades would include new capital infrastructure within the existing footprint of the plant site and would conservatively accommodate an additional increase in housing up to 2,110 units.

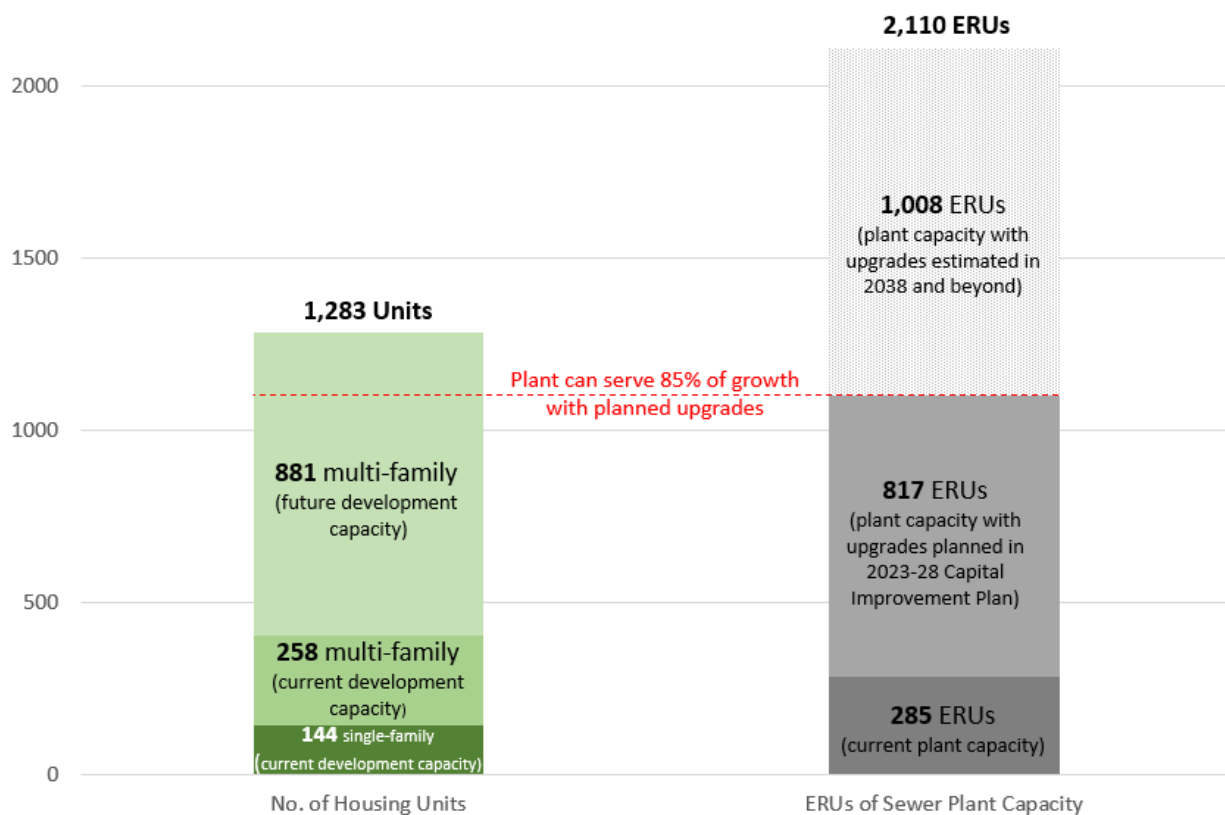


Figure 2 –Current/Planned Housing Units in Winslow Compared with Sewer Utility Capacity

Other Factors for Consideration

- Consideration should be made for any potential increases in *commercial* development, which has remained flat for the last several years, but which absorb treatment plant capacity more quickly than residential development. Planned increases in commercial development in the Winslow sewer service area must be carefully balanced along with residential population growth and reflected in future evaluations of the plant capacity.

- Within the Winslow sewer service area, the sewer population is approximately 200 housing units (500 persons) *less* than the overall population due to some houses still being served by septic systems. Some accommodation for the connection of existing homes to the sewer system should be considered as part of the analysis.
- Multifamily housing has a lower household occupancy level (2.3) for multi-family housing than average (2.48). Therefore, the analysis provided in this memo can be considered conservative on the order of 8-10%.
- Lastly, for context, the planned upgrades to the Winslow Water Tank will provide the city's water utility the capacity to serve approximately 2,600 new ERUs inside the Winslow water service area boundary, an area that closely mimics the Winslow subarea, and also includes the New Brooklyn Road corridor, Fletcher Bay, and Upper Ferncliff.



DEPARTMENT OF PUBLIC WORKS MEMORANDUM

Date: March 20, 2026

To: Planning Commission

From: Christopher Wierzbicki, PE, Public Works Director

Subject: **Summary of Updates to the Capital Facilities Plan Element of the Comprehensive Plan**

Purpose

The purpose of this memo is to provide the Planning Commission with a summary of proposed updates to the Capital Facilities Plan Element of the Comprehensive Plan. A copy of the strike and underline version of the Element is attached this memo.

High-Level Summary of Capital Facilities Plan Element Updates

Overall, very few updates were required for this Element. Capital facility inventories and projected needs are included in the referenced plans. Water and Sewer capital facility needs are documented in the referenced plans, and in a supplemental memo prepared by City staff and attached to this memo.

- References to the Islandwide Transportation Plan were revised in all places to reflect the Islandwide Mobility Plan.
- The referenced plans were updated in the Capital Facilities Inventory.
- The tables listing City-owned buildings and land were updated to reflect the demolition of the old police station, the construction of the Ted Spearman Justice Center, and the purchase of 180 Olympic Drive.
- The Table of Group A and B water systems were updated.
- References to the Kitsap County Sewer District #7 were removed or revised to Kitsap Public Utility District.
- The Stormwater System Plan, Groundwater Management Plan and Capital Facilities Plan Update Memo were added to the plans adopted by reference.
- Functional and inventory plans from partners agencies such as the State Department of Transportation are still being collected for reference in the plan.
- Special Purpose District plans were revised to reflect the most recent documents.

Mike Nelson

Capital Facilities Element

(1) Page CF-2, 2nd Full Paragraph

Motion: I move to insert “a Groundwater Management Plan,” after “Water System Plan,” in the second full paragraph on page CF-2.”

(2) Page CF-3, 2nd Paragraph under Capital Facilities Vision 2044

Motion: I move to strike “, and to a large extent, recent population growth and commerce have been concentrated in and near those center” in the second paragraph under Capital Facilities Vision on page CF-3.

(3) Pages CF-3/CF-13, Goal CF-1

Motion: I move to strike the word “compact” in Goal CF-1 on pages CF-3 and CF-13.

(4) Page CF-10, 1st Sentence under “Drinking Water”

Motion: I move to strike “over 1,000” and insert “approximately 1,700” in the first sentence under “Drinking Water” on page CF-10.

(5) Page CF-11, 1st Paragraph, Last Sentence

Question: Do we have any basis for the statement that it is “likely” that “most of” the smaller systems have poor or nonexistent fire protection?

Possible Motion: I move to strike “It is also likely that most of the smaller systems have” and insert “Some of the smaller systems may also have” in the last sentence of the first paragraph on page CF-11.

(6) Page CF-12: 1st Paragraph under “Special Purpose District Plans Adopted By Reference,” Parenthetical at the End of 2nd Sentence

Question: Is the reference to “Kitsap County Sewer District 7” still accurate?

(7) March 20, 2026 Public Works Memo from Christopher Wierzbicki, Page 2, 3rd Sentence Under “Sewer Utility Summary”

Question: This sentence mentions a “maximum Winslow population of 6,397 people by 2044, almost double the projected Winslow area population (3,352) included in the Planning Commission’s expected recommendation.” This sentence appears to be comparing the overall maximum Winslow population with the expected *increase* in population (not the expected total population). What is the current Winslow population, and what would be the total Winslow population following the expected increase?

(8) March 20, 2026 Public Works Memo from Christopher Wierzbicki, Page 2, 2nd and 3rd Sentences Under “Wastewater Treatment Plant Capacity Summary”

Question: This section of the memo appears to compare the “ultimate capacity” of the Winslow Wastewater Treatment Plant, following two upgrades, to the expected *increase* in the Winslow population over the next 20 years (not the expected total population). What is the current Winslow population, and what would be the total Winslow population following the increase?