Utilities Committee Meeting Agenda
February 9, 2021, 5:00 p.m.

Pursuant to the Governor's "Stay Home - Stay Safe" Order, the City is prohibited from conducting meetings unless the meeting is NOT conducted in-person and instead provides options for the public to attend through telephone access, internet or other means of remote access, and also provides the ability for persons attending the meeting (not in-person) to hear each other at the same time. Therefore;

Remote access only
Link:
https://us02web.zoom.us/j/81097192413
Zoom Meeting ID: 810 9719 2413

- Project Funding – Updates:
  - American Water Infrastructure Act
  - Splash Pad VE
  - Sidney Avenue Sewer & Roadway Repair
  - 2021 DWSRF Well #11 Application
  - 2014 DWSRF Well #10/Well #13 Project
- Foster Pilot Project – Update
- Water System Plan 2020/2030 – Update:
  - Pending WSP Update Adoption
  - Water Rates & CFC Adjustments
  - Rate Structure
  - CFC Credits
- General Sewer Plan Amendment
  - Pending GSP Amendment Adoption
  - 2022 GSP Update/Sewer Rates
- Watershed Restoration Enhancement Committee and Brochure
- Next Meeting: March 9, 2021

Future Agenda Items:

- Utility Department Work Plan - Update:
- McCormick Sewer Pump Station #1 Repairs - Update
- Cross Connection Control & FOG Programs - Discussion
- 580 Transmission Main
- Marina Sewer Pump Station 80% Design
- Option to Levy Excise Taxes on W/S - Discussion
- SKWRF Nutrient Cap - Update
- 2019-2024 NPDES Permit Draft Comments - Update
- Bay Street - Street Lighting & Marquee - Update
- Water System Fluoridation - Update
- Sanitary Side Sewer Policy - Discussion

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RISK AND RESILIENCE ASSESSMENTS AND EMERGENCY RESPONSE PLANS:

NEW REQUIREMENTS FOR DRINKING WATER UTILITIES

Section 2013 of America's Water Infrastructure Act of 2018 (AWIA) requires community water systems[1] that serve more than 3,300 people to complete a risk and resilience assessment and develop an emergency response plan.

RISK AND RESILIENCE ASSESSMENT

Your utility must conduct a risk and resilience assessment and submit certification of its completion to the U.S. EPA by the following dates:

Important Dates

- March 31, 2020 if serving ≥100,000 people.
- December 31, 2020 if serving 50,000 to 99,999 people.
- June 30, 2021 if serving 3,301 to 49,999 people.

Recertification

Every five years, your utility must review the risk and resilience assessment and submit a recertification to the U.S. EPA that the assessment has been reviewed and, if necessary, revised.

Visit the U.S. EPA website to find more information on guidance for developing a risk and resilience assessment at https://www.epa.gov/waterriskassessment/conduct-drinking-water-or-wastewater-utility-risk-assessment.

EMERGENCY RESPONSE PLAN

Your utility must develop or update an emergency response plan and certify completion to the U.S. EPA **no later than six months** after risk and resilience assessment certification. Each utility deadline is unique; however, the dates below are the due dates for utilities who submit a risk and resilience assessment certification by the final due date according to the population served.

- September 30, 2020 if serving ≥100,000 people.
- June 30, 2021 if serving 50,000 to 99,999 people.
- December 30, 2021 if serving 3,301 to 49,999 people.

Within six months of submitting the recertification for the risk and resilience assessment, your utility must certify it has reviewed and, if necessary, revised, its emergency response plan.

Visit the U.S. EPA website for guidance on developing an Emergency Response Plan at https://www.epa.gov/waterutilityresponse/develop-or-update-drinking-water-or-wastewater-utility-emergency-response-plan.

TOOLS OR METHODS

AWIA does not require the use of any standards, methods or tools for the risk and resilience assessment or emergency response plan. Your utility is responsible for ensuring that the risk and resilience assessment and emergency response plan address all the criteria in AWIA Section 2013(a) and (b), respectively. The U.S. EPA recommends the use of standards, including AWWA J100-10 Risk and Resilience Management of Water and Wastewater Systems, along with tools from the U.S. EPA and other organizations, to facilitate sound risk and resilience assessments and emergency response plans.

[1] Section 2013 of AWIA applies to community water systems. Community water systems are drinking water utilities that consistently serve at least 25 people or 15 service connections year-round.

Still have questions about the new AWIA requirements?
Contact the U.S. Environmental Protection Agency (U.S. EPA) at dwresilience@epa.gov.

Office of Water (4608T)
EPA-817-F-19-004
May 2019

FREQUENTLY ASKED QUESTIONS

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I need more information about risk and resilience assessments and emergency response plans:

Risk and resilience assessments evaluate the vulnerabilities, threats and consequences from potential hazards.

What does a risk and resilience assessment include?

- Natural hazards and malevolent acts (i.e., all hazards).
- Resilience of water facility infrastructure (including pipes, physical barriers, water sources and collection, treatment, storage and distribution, and electronic, computer and other automated systems).
- Monitoring practices.
- Financial systems (e.g., billing systems).
- Chemical storage and handling.
- Operation and maintenance.

What does an emergency response plan include?

- Strategies and resources to improve resilience, including physical security and cybersecurity.
- Plans and procedures for responding to a natural hazard or malevolent act that threatens safe drinking water.
- Actions and equipment to lessen the impact of a malevolent act or natural hazard, including alternative water sources, relocating intakes and flood protection barriers.
- Strategies to detect malevolent acts or natural hazards that threaten the system.

Who should I work with when creating my emergency response plan?

- Utilities must coordinate the risk and resilience assessments, as well as the emergency response plans with local emergency planning committees.

For more information, see www.congress.gov/bill/115th-congress/senate-bill.

I need more information on the certification process:

What do I need to submit to the U.S. EPA?

- Each utility must submit a certification of your risk and resilience assessment and emergency response plan. Each submission must include: utility name, date and a statement that the utility has completed, reviewed or revised the assessment. The U.S. EPA has developed an optional certification template that can be used for email or mail certification. The optional certification form will be available in August 2019.

Who can certify my risk and resilience assessment and emergency response plan?

- Risk and resilience assessments and emergency response plans can be self-certified by the utility.

How do I submit my certification?

- Three options will be provided for submittal: regular mail, email and a user-friendly secure online portal. The online submission portal will provide drinking water systems with a receipt of submittal. The U.S. EPA recommends using this method. The certification system will be available in August 2019.

When can I submit the initial certification?

- Utilities should wait to submit the initial certification to the U.S. EPA until the U.S. EPA publishes *Baseline Information on Malevolent Acts Relevant to Community Water Systems,* which is required under AWIA by August 2019.

Do I need to submit my certification to my state or local government?

- No. Section 2013 of AWIA does not require utilities to submit the certification to state or local governments.

How long do I need to keep a copy of my risk and resilience assessment and emergency response plan?

- Utilities need to keep a copy of both documents for five years after certification.

What if I do not have a copy of my most recent risk and resilience assessment?

- The U.S. EPA intends to destroy vulnerability assessments (VAs) submitted in response to the Bioterrorism Act of 2002, but if utilities would like to have their VA and certification documents mailed to them, contact WSD-Outreach@epa.gov, and on utility letterhead, include the utility name, PWSID, address and point of contact as an attachment to the email.

RESOURCES & TOOLS

Conducting a Risk and Resilience Assessment

- The U.S. EPA's Risk and Resilience Baseline Threat Document (available August 2019).
- The U.S. EPA's Vulnerability Self-Assessment.

Developing an Emergency Response Plan

- Emergency Response Plan Guidance.
- The U.S. EPA's Emergency Response Webpage.
- Local Emergency Planning Committees.

The U.S. EPA Website

- https://www.epa.gov/waterresilience/americas-water-infrastructure-act-2018-risk-assessments-and-emergency-response-plans.

Still have questions about the new AWIA requirements?
Contact the U.S. Environmental Protection Agency (U.S. EPA) at dwresilience@epa.gov.

Office of Water (4608T)
EPA-817-F-19-004
May 2019

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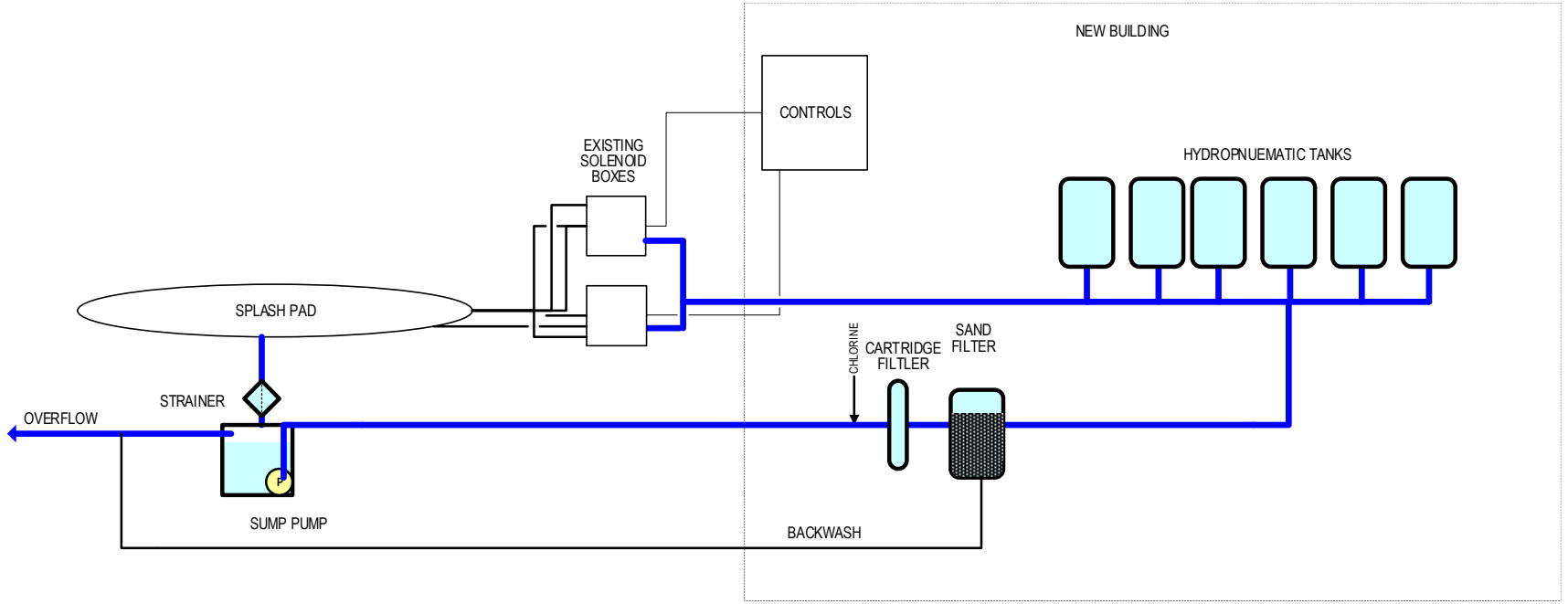
Schematic of Proposed Modification For McCormick Village Splash Pad



Fact Sheet

Drinking Water State Revolving Fund (DWSRF) Preconstruction Loan Overview

331-664 • 11/1/2020

Cycle open for applications: Applications accepted year-round starting January 19, 2021, until funding is exhausted. An online application in Washington Loan Tracking network (WALT) is available for application submittal and a WALT user's guide is posted on the DWSRF webpage at doh.wa.gov/DWSRF.

Amount available to award: $3 million.

Maximum award: $500,000 per jurisdiction.

Loan information: 2.0 percent loan origination fee, 0 percent standard interest rate, two-year time of performance, ten-year loan term. No subsidy available.

Eligible entities: Group A community water systems (publicly owned, privately owned, and for-profit), Group A nonprofit non-community water systems, and tribal systems not receiving other SRF set-aside funding for the project

Non-eligible entities: Federally and state owned systems (however, these systems can be part of a consolidation project) and Group A for-profit non-community water systems.

Eligible projects: Projects that eventually lead to a construction project. Eligible activities include consolidation feasibility studies, planning documents, permitting, cultural and environmental reviews, preliminary engineering design reports, construction documents, asset management as part of a larger infrastructure project, and value planning. Projects where the primary focus is for operation and maintenance, future growth, or fire flows will not be eligible for funding.

Scoring and ranking: All projects scored and ranked based on the health risk being addressed. Funds awarded on a first-come basis until funding is exhausted. Project scores and ranking will be used in the event multiple applications are received on the same day and funding is limited.

Application review process: All applications reviewed for completeness and eligibility as received. If the application is incomplete, systems will be notified and have 14 calendar days to provide any missing information. If funded, loan agreements will be generated within 90 days of receiving a complete application.

The DWSRF Preconstruction Loan Guidelines available at doh.wa.gov/DWSRF.

For more information, contact Janet Cherry, 360-236-3153.

Port Orchard Municipal Code
Chapter 13.04
WATER and SEWERS

13.04.010 Bimonthly water rates.
Water rates are based on a bimonthly schedule and are a function of size of service plus consumption.

(1) Effective January 1, 2016, and January 1st of each subsequent year shown, the water rates, as calculated bimonthly, are shown on the water rate table.

(a) Single Connections. Single connections are where one customer is being served through a master meter and the billing is based on the flow through such master meter. The minimum bimonthly base rate is shown on the water rate table, plus consumption charges for water usage in excess of 5,000 gallons are set forth in subsection (1)(c) of this section.

(b) Larger Meters. Base rate for the first 5,000 gallons is calculated based on the size of service plus the meter size cost difference as shown on the water rate table. Consumption charges for water usage in excess of 5,000 gallons are set forth in subsection (1)(c) of this section.

(c) Consumption charges in excess of 5,000 gallons allotted per customer will be charged in the five tiers as shown in the water rate table.

(d) Multiple Connections. Multiple connections are where more than one customer is being served through a master meter and the billing is based on the flow through such master meter. The minimum bimonthly base rate is determined by the number of customers multiplied by the base rate plus the difference in cost between three-fourths-inch service and the actual meter size. The consumption charge will be computed by subtracting the amount equal to the number of customers multiplied by 5,000 gallons from the total gallons consumed. Consumption charges for water usage in excess of 5,000 gallons allotted per customer are set forth in subsection (1)(c) of this section. See water rate table.

(e) Properties Outside City Limits. Properties served outside the city limits shall have a 50 percent surcharge on the bimonthly rate.

(f) Fire Hydrant Service. See the water rate table.

(g) Temporary Service. See the water rate table.

(h) Meter Rentals. All persons renting a meter shall pay a refundable deposit. The following rental fees plus sales tax listed in the water rate table shall apply to all persons renting a meter.

Water Rates		2016	2017	2018	2019	2020
a) Single Connections	**Bimonthly**					
3/4" meter, 0 – 3,000 gal	base	$35.10	$39.70	$44.30	$48.90	$53.50
3/4" meter, 3,001 – 5,000 gal	base	$53.50	$60.50	$67.50	$74.50	$81.50
5,001 – 10,000 gal	per 1,000g	$2.45	$2.75	$3.05	$3.35	$3.65
10,001 – 20,000 gal	per 1,000g	$2.55	$2.90	$3.20	$3.50	$3.85
20,001 – 30,000 gal	per 1,000g	$2.65	$3.00	$3.35	$3.70	$4.05
30,001 – 50,000 gal	per 1,000g	$2.80	$3.20	$3.55	$3.90	$4.30
50,001+ gal	per 1,000g	$3.00	$3.40	$3.80	$4.20	$4.60

b) Larger Meters	**Bimonthly**					
3/4" meter, 0 – 5,000 gal per unit	base	$53.50	$60.50	$67.50	$74.50	$81.50
3/4" Meter Base Plus the Following Meter Size Differentials – Bimonthly						
1" meter, 0 – 5,000 gal	base + diff.	$2.00	$3.00	$4.00	$5.00	$6.00
1-1/2" meter, 0 – 5,000 gal	base + diff.	$8.00	$12.00	$16.00	$20.00	$24.00
2" meter, 0 – 5,000 gal	base + diff.	$14.00	$21.00	$28.00	$35.00	$42.00
3" meter, 0 – 5,000 gal	base + diff.	$26.00	$39.00	$52.00	$65.00	$78.00
4" meter, 0 – 5,000 gal	base + diff.	$50.00	$75.00	$100.00	$125.00	$150.00
6" meter, 0 – 5,000 gal	base + diff.	$92.00	$138.00	$184.00	$230.00	$276.00
8" meter, 0 – 5,000 gal	base + diff.	$134.00	$201.00	$268.00	$335.00	$402.00
10" meter, 0 – 5,000 gal	base + diff.	$182.00	$273.00	$364.00	$455.00	$546.00

c) Plus Consumption Charge in Excess of 5,000 Gallons – Bimonthly						
5,001 – 10,000 gal	per 1,000g	$2.45	$2.75	$3.05	$3.35	$3.65
10,001 – 20,000 gal	per 1,000g	$2.55	$2.90	$3.20	$3.50	$3.85
20,001 – 30,000 gal	per 1,000g	$2.65	$3.00	$3.35	$3.70	$4.05
30,001 – 50,000 gal	per 1,000g	$2.80	$3.20	$3.55	$3.90	$4.30
50,001+ gal	per 1,000g	$3.00	$3.40	$3.80	$4.20	$4.60

d) Multiple Connections – Where Multiple Units Are Served Through One Meter – Bimonthly						
Base rate per unit, 0 – 5,000 gal per unit	base	$53.50	$60.50	$67.50	$74.50	$81.50

Water Rates		2016	2017	2018	2019	2020
Plus meter differential for actual meter size		as shown in b) above				
Plus consumption charges in excess of 5,000 gal – allotted per unit		as shown in c) above				

e) Outside City Limits	50% surcharge

f) Fire Hydrant Service	Bimonthly					
Schools	per hydrant	$13.80	$15.60	$17.40	$19.20	$21.00
Private service	per hydrant	$25.30	$28.60	$31.90	$35.20	$38.50

g) Temporary Service	Bimonthly					
	Greater of flat rate (base + meter size differential) or as metered					
One-day service:	base rate	$53.50	$60.50	$67.50	$74.50	$81.50

Water Rates		2016	2017	2018	2019	2020
Plus meter differential for actual meter size	meter diff.	as shown in b) above				
	per 1,000g	$2.80	$3.20	$3.55	$3.90	$4.30
Construction / hydrant account:	base rate	$53.50	$60.50	$67.50	$74.50	$81.50
Plus meter differential for actual meter size	meter diff.	as shown in b) above				
0 – 50,000 gal	per 1,000g	$2.80	$3.20	$3.55	$3.90	$4.30
50,001+ gal	per 1,000g	$3.00	$3.40	$3.80	$4.20	$4.60

h) Meter Rentals	Refundable deposit for meter rental; sales tax added to 30-day rental fees					
First 60 days	rental + tax	$0.00	$0.00	$0.00	$0.00	$0.00
Next 120 days	rental + tax	$260.00	$270.00	$280.00	$290.00	$300.00
In excess of 180 days	rental + tax	$520.00	$540.00	$560.00	$580.00	$600.00

(Ord. 020-15 § 1; Ord. 026-11 § 2; Ord. 021-09 § 2; Ord. 013-08 § 2; Ord. 010-05 § 2; Ord. 1897 § 2, 2003; Ord. 1799 § 2, 2000).

13.04.020 Bimonthly sewer rates.

Effective January 1, 2016, and January 1st of each subsequent year shown, the sewer rates, as calculated bimonthly, are shown as follows:

Sewer Rates			2016	2017	2018	2019	2020
Class No.	**Class Description**	**Description**					
1	Single-family residences and mobile home on single parcel	For each dwelling unit	$111.00	$124.00	$137.00	$150.00	$163.00
2	Business and professional	For each business with a fixture	$111.00	$124.00	$137.00	$150.00	$163.00
		For each business with an employee present, without a fixture	$22.20	$24.80	$27.40	$30.00	$32.60
		For each floor of an office building or retail complex that has a public or community bathroom	$111.00	$124.00	$137.00	$150.00	$163.00
		Plus the following surcharge, based on the store/office interior size:					
		Small, less than 15,000 sf, or	$0.00	$0.00	$0.00	$0.00	$0.00
		Medium, 15,000 to 30,000 sf, or	$111.00	$124.00	$137.00	$150.00	$163.00
		Large, more than 30,000 sf	$222.00	$248.00	$274.00	$300.00	$326.00
3	Churches	For the church, plus*	$111.00	$124.00	$137.00	$150.00	$163.00
		For the rectory, plus*	$111.00	$124.00	$137.00	$150.00	$163.00
		For the annex	$111.00	$124.00	$137.00	$150.00	$163.00
		*Class 6 for educational parochial schools					
4	Hotels and motels, rest homes and care centers, and Kitsap County jail	Base fee, plus	$111.00	$124.00	$137.00	$150.00	$163.00

Sewer Rates			2016	2017	2018	2019	2020
Class No.	Class Description	Description					
		Per unit	$22.20	$24.80	$27.40	$30.00	$32.60
5	Apartments and mobile home parks	Per dwelling unit	$111.00	$124.00	$137.00	$150.00	$163.00
6	Schools	For each pupil, teacher, maintenance and administrative person	$3.30	$3.70	$4.10	$4.50	$4.90
7	Kitsap County courthouse (main complex)		$4,329.00	$4,836.00	$5,343.00	$5,850.00	$6,357.00
8	Restaurants	Based on the seating capacity as determined by the building official					
	Espresso Bar	Seating not applicable. Classification includes similar food preparation businesses which do not require the cooking of food or the maintenance of kitchen equipment.	$111.00	$124.00	$137.00	$150.00	$163.00
	Deli	No seating	$166.50	$186.00	$205.50	$225.00	$244.50
	Small	Seating for 1 to 50	$333.00	$372.00	$411.00	$450.00	$489.00
	Medium	Seating for 51 to 150	$499.50	$558.00	$616.50	$675.00	$733.50
	Large	Seating for more than 150	$666.00	$744.00	$822.00	$900.00	$978.00
9	Laundromats	Base fee, plus	$55.50	$62.00	$68.50	$75.00	$81.50
		Per washing machine	$22.20	$24.80	$27.40	$30.00	$32.60
		Laundromats with less than 4 washing machines are considered Class 2. Dry					

Sewer Rates			2016	2017	2018	2019	2020
Class No.	Class Description	Description					
		cleaners without washing machines are Class 2.					
10	Taverns		$277.50	$310.00	$342.50	$375.00	$407.50
11	Car dealerships	For sales and administrative office, plus	$111.00	$124.00	$137.00	$150.00	$163.00
		For service department, plus	$111.00	$124.00	$137.00	$150.00	$163.00
		For car washing when the water is used to determine cost sharing for the sewer treatment plant	$111.00	$124.00	$137.00	$150.00	$163.00
12	Post office		$388.50	$434.00	$479.50	$525.00	$570.50
13	Grocery stores	Basic fee, plus the following surcharges	$55.50	$62.00	$68.50	$75.00	$81.50
		Basic store	$55.50	$62.00	$68.50	$75.00	$81.50
		Bakery	$55.50	$62.00	$68.50	$75.00	$81.50
		Wetted-down produce	$111.00	$124.00	$137.00	$150.00	$163.00
		Food disposal	$111.00	$124.00	$137.00	$150.00	$163.00
		Meat cutting area	$222.00	$248.00	$274.00	$300.00	$326.00
14	Bowling alley, boat marina, health maintenance organizations and work release and juvenile facilities	Base fee, plus	$55.50	$62.00	$68.50	$75.00	$81.50
		For each equivalent residential unit (ERU) as determined for the cost-sharing	$55.50	$62.00	$68.50	$75.00	$81.50

Sewer Rates			2016	2017	2018	2019	2020
Class No.	Class Description	Description					
		formula for the sewer treatment plant					
15	Car washes	Base fee, plus	$55.50	$62.00	$68.50	$75.00	$81.50
		Per car washing bay	$166.50	$186.00	$205.50	$225.00	$244.50
16	Beauty shops and barber shops		$111.00	$124.00	$137.00	$150.00	$163.00
17	Day care	Basic fee, plus	$111.00	$124.00	$137.00	$150.00	$163.00
		For less than or equal to 6 children	$0.00	$0.00	$0.00	$0.00	$0.00
		For 7 to 25 children	$222.00	$248.00	$274.00	$300.00	$326.00
		For more than 25 children, use Class 6 rates					
18	Gas stations	For gasoline retail, which could include service bay	$111.00	$124.00	$137.00	$150.00	$163.00
		For nonautomotive retail	$111.00	$124.00	$137.00	$150.00	$163.00
19	Assisted living units	Base fee, plus	$111.00	$124.00	$137.00	$150.00	$163.00
		Per unit with private kitchen	$111.00	$124.00	$137.00	$150.00	$163.00
		Per unit without private kitchen or studio apartment	$22.20	$24.80	$27.40	$30.00	$32.60
20	Bed and breakfasts	Base fee, plus	$111.00	$124.00	$137.00	$150.00	$163.00
		Per rentable bedroom	$8.90	$9.90	$11.00	$12.00	$13.00
21	Public market	Basic fee, plus the following surcharges	$222.00	$248.00	$274.00	$300.00	$326.00
		Nonfood retail	$27.80	$31.00	$34.30	$37.50	$40.80

Sewer Rates			2016	2017	2018	2019	2020
Class No.	Class Description	Description					
		Nonfood service business	$27.80	$31.00	$34.30	$37.50	$40.80
		Juice/soda/ice cream/espresso bar	$111.00	$124.00	$137.00	$150.00	$163.00
		Restaurant (consume and buy on premises)	$222.00	$248.00	$274.00	$300.00	$326.00
		Delicatessen (counter sales takeout ready-to-eat food products)	$111.00	$124.00	$137.00	$150.00	$163.00
		Retail meat/seafood	$111.00	$124.00	$137.00	$150.00	$163.00
		Retail bakery	$111.00	$124.00	$137.00	$150.00	$163.00
Special notes:		a) Home occupations will not be charged additional sewer fees. b) For a combination of classes in one business, the highest rate will be selected. c) In the event that an established rate class does not accurately reflect the impact on the sewer system, the city engineer may determine the specific monthly rate. d) Water accounts which serve a marina pier and do not have a connection to the sewer shall not be charged a sewer bill. A sewer bill will be charged and based on winter consumption if the water meter serves both the marina pier and any facility or pump station that is connected to the sewer system. For billing purposes, live-aboards will not be considered as a dwelling unit. e) Properties served which are outside the city limits shall have a 50 percent surcharge on the bimonthly rates.					

(Ord. 038-16 § 2; Ord. 020-15 § 2; Ord. 027-11 § 1; Ord. 016-10 § 2; Ord. 021-09 § 3; Ord. 027-08 § 2; Ord. 010-05 § 3; Ord. 1897 § 3, 2003; Ord. 1799 § 3, 2000).

13.04.025 Fee schedule.

(1) The fees set forth below are referenced in POMC 13.04.030, 13.04.033, 13.04.035 and 13.04.040.

Water Sewer Connection Fees

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Water Sewer Connection Fees	
Water Capital Facility Charge	**POMC 13.04.030(1)(a)**
Residential – Per ERU	$5,945

Water Capital Facility Charge Nonresidential – Based on Meter Size	**POMC 13.04.030(1)(b)**
3/4"	$5,945
1"	$9,928
1-1/2"	$19,797
2"	$31,687
3"	$59,450
4"	$99,103
Irrigation	No connection fee

Water Inspection Fee	**POMC 13.04.030(7) and 13.04.033(3)**
Per Meter	$111.37

Connection Fees/Labor Installation Fees	**POMC 13.04.033(1)**
3/4"	$1,113.73
1"	$1,336.49
1-1/2"	$1,670.61
2"	$2,227.48
Larger	Estimated case by case

Water in Lieu of Assessment	**POMC 13.04.035**
Per Front Foot	$111.37

Water Sewer Connection Fees	
Sewer Wastewater Treatment Facility Fee	**POMC 13.04.040(2)**
Per ERU	$3,597.37
McCormick Land Co. Div. 1-10 Per ERU	$881.25

Sewer Capital Facility Charge	**POMC 13.04.040(2)**
Per ERU	$8,525

Sewer Inspection Fee	**POMC 13.04.040(8)**
Per Lateral Connection	$111.37

(2) The fees set forth below are referenced in POMC 13.04.050, 13.04.055, and 13.04.120.

Billing and Miscellaneous Charges	
Billing Charges	**POMC 13.04.050**
Water/Sewer Delinquency Notice at Location	$10.00
Water Shutoff Fee	$40.00
Meter Turn-Off Violations (as Determined by City)	$250.00
Damaging the Utility System	**POMC 13.04.120**
Violation Fine (as Determined by the City)	$250.00
Miscellaneous Charges	**POMC 13.04.055**
After Hours Turn-On/Shutoff	$75.00

Notification to Tenant of Water Shutoff Per Hold Harmless Agreement	$10.00
Service Fee for Estimated or Final Billing Closing Requests	$20.00

(3) The fees set forth below are referenced in POMC 13.04.031 and 13.04.045.

Water Plan Review Fees	
Review	**POMC 13.04.031**
Main Extension Review Per lineal foot of main	$0.30
Pump Station Review	$300.00
Significant Facility Review*	Consultant fee** plus 10%

Sewer Plan Review Fees	
Review	**POMC 13.04.045**
Main Extension Review Per lineal foot of main	$0.30
Pump Station Review	$300.00
Significant Facility Review*	Consultant fee** plus 10%

Water Inspection Fees	
Inspection	**POMC 13.04.031**
Main Extension Inspection Per lineal foot of main	$1.25
Pump Station Inspection	$600.00
Significant Facility Inspection*	Consultant fee** plus 10%

Sewer Inspection Fees	
Inspection	**POMC 13.04.045**
Main Extension Inspection Per lineal foot of main	$1.50

Sewer Inspection Fees	
Pump Station Inspection	$600.00
Significant Facility Inspection*	Consultant fee** plus 10%

* Significant facilities include improvements such as sewer lift station construction or enlargement, force main construction, water system storage tanks, well construction, and water treatment facilities.

** This review and inspection shall be performed by the city's water or sewer consultant under contract with the city for services of this type.

(Ord. 027-20 § 1; Ord. 018-17 § 2; Ord. 005-17 § 2; Ord. 020-15 § 3).

13.04.030 Water capital facility charge – Extension of water.

(1) The water capital facility charge is designed to mitigate the impact of new demands on the existing water system and to require new users to pay their fair share of the value of the water system including, but not limited to, water supply, treatment, transmission, storage and distribution facilities. The water capital facility charge applies to new construction, changes in use, and building modifications which increase the total number of equivalent residential units (ERUs). An ERU is 180 gallons per day for nonresidential connections. Prior to connecting to the city's water system the property owner shall pay, in addition to other applicable charges, the applicable water capital facility charge.

(a) The water capital facility charge for a residential connection is based on a set fee per ERU which is set forth in POMC 13.04.025. An ERU for this purpose shall be computed based on the water meter size and shall be calculated according to the average flow factor of a displacement type meter where a three-quarter-inch meter shall have a flow factor equal to one ERU. An ERU for residential connections is one single-family dwelling unit, whether detached or attached and configured as an apartment unit, condominium unit, townhouse unit, or any other configuration.

(b) The water capital facility charge for a nonresidential connection shall be calculated based on meter size as set forth in POMC 13.04.025.

(c) Per Resolution No. 1666, the city treasurer is authorized to waive the connection fee of the water systems which do not impact the fire flow storage requirements of the city. All other fees, charges and expenses shall be paid as in accordance with this chapter. Examples of these connections are irrigation systems, fire protection systems, and relocating service lines which cross private property.

(2) If, after connection of a nonresidential service, the actual water usage has increased or the property use expanded so that there are a greater number of ERUs being used on the property than for which the water capital facility charge was paid, the property owner shall pay to the city an additional water capital facility charge based upon the new or expanded use. The additional water capital facility charge shall be based upon the charge rate in effect at the time the increase in use is requested and/or detected, whichever first occurs.

(3) Water Capital Facility Charge – Exception. The following exception applies to the assessment of the water capital facility charge. All four elements of the below-listed requirements must be present to qualify for the exception:

(a) A nonresidential account paid the water capital facility charge at the time the property connected to the city's water system;

(b) Sometime after the original connection, the property owner decides to construct a new building, change the original use, or modify the original building;

(c) After the building improvements are completed, the total water usage for the nonresidential account will be equal to or less than the usage at the time of the original connection; and

(d) The new construction, change in use, or building modification has not resulted in an additional direct connection to the city's water system or the establishment of an additional water account.

(4) A credit against the water capital facility charge may be applied for those property owners that paid their assessments in full through a local improvement district formed by the city where such local improvement district is formed to finance the construction of any of the improvements that are a basis for calculating the value of the water capital facility charge. The credit shall be equal to that portion of the property owner's principal assessment, not including interest and penalties, which is directly applicable to the construction of the improvements that are a basis for calculating the value of the capital facility charge. The credit shall be applied at the time of payment of the water capital facility charge and shall not be used to reduce any assessments in the local improvement district.

(5) A credit against the water capital facility charge may be applied for those property owners that construct at their own expense any of the improvements that are a basis for calculating the value of the water capital facility charge or for those property owners that pay a latecomer's fee toward those same improvements. The credit shall be the smaller of the following:

(a) That portion of the design and construction costs of the latecomer's agreement that are directly applicable to the construction of the improvements that are a basis for the value of the water capital facility charge; or

(b) That proportionate amount of the water capital facility charge that is attributable to the water facilities either constructed by the property owner or paid through a latecomer's fee.

(6) The above provisions notwithstanding, the amount of any credit shall not exceed the amount of the water capital facility charge for the property to which the credit is being applied.

(7) At the time the water capital facility charge is paid, a water inspection fee shall be paid. The water inspection fee is set forth in POMC 13.04.025.

(8) All materials shall comply with the requirements of the city. If the city supplies any materials, the cost of these plus overhead and sales tax will be paid by the customer or property owner.

(9) If a property owner requests a credit or exemption as described above, the director of public works shall make an administrative determination regarding the applicability and amount of the credit or exemption. The director's decision may be appealed to the hearing examiner.

(10) The exceptions and credits described above shall not apply to any costs of construction incurred or payments made to the city for improvements that are a basis for the value of the capital facility charge and that were made 15 years or more prior to the date the property owner requests the exception or credit. (Ord. 020-15 § 4; Ord. 008-13 § 1; Ord. 027-11 § 2; Ord. 021-09 § 4; Ord. 013-08 § 3; Ord. 023-06 § 1; Ord. 010-05 § 4; Ord. 1897 § 4, 2003; Ord. 1799 § 4, 2000).

13.04.031 Water system extensions and improvements.
All water system extensions and/or improvements shall be reviewed, approved, and inspected by city staff or selected representatives in conjunction with the submittal of an excavation permit (Chapter 12.04 POMC), land disturbing activity permit (LDAP) and/or stormwater drainage permit (SDP) application(s) as may be required under other sections of this code prior to the starting of construction on the proposed water system improvement. Review fees for water system extensions or improvements shall be paid in addition to required application fees for the above mentioned permits. Water system extension and improvement inspection fees shall be paid prior to permit issuance. Fees associated with the construction of significant facilities shall be determined at project completion and paid prior to project acceptance. All review and inspection fees shall be charged as set forth in POMC 13.04.025. (Ord. 018-17 § 3).

13.04.033 Connection fees.
(1) Connection fees are designed to reimburse the utility for the cost required to connect the new service to the water main. The labor installation fee is a flat fee set forth in POMC 13.04.025 plus associated materials plus sales tax based on the size of the water meter for service lines less than 25 feet. This fee is charged when installed by city employees.

(2) If the water service line exceeds 25 feet, or if the proposed construction is unusually difficult, the connection fee will be based on an estimate completed by the city for the required labor and material.

(3) If the service is connected by other than city employees, the water inspection fee per meter will be charged as set forth in POMC 13.04.025. All materials shall comply with the requirements of the city. If the city supplies any materials, the cost of these, plus overhead and sales tax, will be paid by the customer. If the installation is satisfactory, the city shall set the meter if it is one inch or less in size. Larger meters shall be installed by the contractor.

(4) All new construction, residential and commercial, on property which is located within 200 feet of a water main of the city shall be required to extend the water to and across the entire frontage of their property and connect to the city water system prior to the occupancy of the building. No new wells except municipal wells shall be constructed and no expansions of existing wells, except municipal wells, shall be permitted on properties that can be served, within 200 feet of a water main of the city, or are now served by the city water system. (Ord. 020-15 § 5; Ord. 008-13 § 2; Ord. 027-11 § 3; Ord. 013-08 § 4).

13.04.035 Water main fees in lieu of assessment.
(1) Where all or a portion of the premises to be served has not been previously assessed or contributed its share towards the cost of installing a permanent main to serve such premises, or the property does not abut a water main, water service shall be provided upon payment of a water main fee as provided for in this section, in addition to the water capital facility charge set forth in POMC 13.04.030 and the connection fee set forth in POMC 13.04.033.

(2) The water main fee shall be based on the frontage of the property served, as determined by the public works director. Properties situated on corner lots abutting utility mains on two sides shall have the front footage charge computed by averaging the two sides. The fee shall be charged per front foot as set forth in POMC 13.04.025.

(3) Water main fees in lieu of assessment shall be charged on new accounts unless exempted as explained below:

(a) The property has previously paid its share of a local water main as part of a water local improvement district and there are records to verify this;

(b) The property has extended the local water main as required by the city and paid all costs associated with the extension;

(c) The property has paid its equitable share of the cost of a previously installed local water main pursuant to a latecomer’s agreement; or

(d) The agreement for purchase and sale of assets of McCormick Water Company, Inc., waives the city fee in lieu of assessment for water services. These are the services within McCormick Woods, Campus Station, Kenmore Court, and McCormick 620.

(4) If a property owner requests an exemption as described above, the director of public works shall make an administrative determination regarding the applicability and amount of the exemption. The director's decision may be appealed to the hearing examiner.

(5) The exemptions described in subsections (3)(a) through (c) of this section shall not apply to any costs of construction incurred or payments made to the city for improvements that are a basis for the value of the water main fee in lieu of assessment and that were made 15 years or more prior to the date the property owner requests the exemption. (Ord. 020-15 § 6; Ord. 008-13 § 3; Ord. 027-11 § 4; Ord. 013-08 § 5).

13.04.037 Extension of water to property contiguous to the city. SHARE
Property lying within the urban growth boundary and contiguous to the Port Orchard city limits shall annex to the city as a condition of water connection. In the alternative, the city may elect to defer the annexation and require the owner to execute a utility extension agreement as described in POMC 13.04.040(11). (Ord. 013-08 § 6).

13.04.039 Payment. SHARE
All charges and fees set forth in this chapter shall be paid in full prior to any issuance of permits and the physical connection of the private service line to the water system. (Ord. 013-08 § 7).

13.04.040 Sewer capital facility charge – Extension of sewer. SHARE
(1) The sewer capital facility charge is designed to mitigate the impact of new demands on the existing sewer system and to require new users to pay their fair share of the value of the sanitary sewer system. The sewer capital facilities charge applies to new construction, changes in use, and building modifications that increase the total number of equivalent residential units (ERUs). An ERU is 180 gallons per day for nonresidential connections. An ERU for residential connections is one single-family dwelling unit, whether detached or attached and configured as an apartment unit, condominium unit, townhouse unit or any other configuration. The ERU consumption is based upon metered water consumption or comparison to similar accounts when metered water consumption data is not readily available.

(a) Sewer Capital Facility Charge – Exception. The following exception applies to the assessment of the sewer capital facility charge. All four elements of the below-listed requirements must be present to qualify for the exception:

(i) A nonresidential account paid the sewer capital facility charge at the time the property connected to the city's sewer system;

(ii) Sometime after the original connection, the property owner decides to construct a new building, change the original use, or modify the original building;

(iii) After the building improvements are completed, the total sewer usage for the nonresidential account will be equal to or less than the usage at the time of the original connection; and

(iv) The new construction, change in use, or building modification has not resulted in additional direct connection to the city's sewer system or the establishment of an additional sewer account.

(2) The sewer capital facility charge consists of two components: the general facility fee and the wastewater treatment facility fee. The general facility fee and the wastewater treatment facility fees are set forth in POMC 13.04.025. The properties within Divisions 1 through 10, inclusively, of the McCormick Woods Land Company shall have a wastewater treatment fee which is set forth in POMC 13.04.025.

(3) The sewer capital facility charge shall be paid before connecting to the city sanitary sewer system, or before changing the use, or increasing the total ERU count above the amount for which a sewer capital facility charge has been paid. If work is to be done that requires a sewer capital facility charge, it shall be paid before a permit shall be issued.

(4) If, after connection of a nonresidential service, the actual sewer usage has increased or the property use expanded so that there are a greater number of ERUs being used on the property than for which the sewer capital facility charge was paid, the property owner shall pay to the city an additional sewer capital facility charge based upon the new or expanded use. The additional sewer capital facility charge shall be based upon the charge rate in effect at the time the increased use is requested and/or detected, whichever first occurs.

(5) A credit against the sewer capital facilities charge may be applied for those property owners that paid their assessments in full through a local improvement district formed by the city, where such local improvement district is formed to finance the construction of any of the improvements that are a basis for calculating the value of the sewer capital facilities charge. The credit shall be equal to the amount of the property owner's principal assessment, not including interest and penalties. The credit shall be applied at the time of payment of the sewer capital facilities charge and shall not be used to reduce any assessments in the local improvement district.

(6) A credit against the sewer capital facilities charge may be applied for those property owners that construct at their own expense any of the improvements that are a basis for calculating the value of the sewer capital facilities charge or for those property owners that pay a latecomer's fee toward those same improvements. The credit shall be the smaller of the following:

(a) That portion of the design and construction costs of a latecomer's agreement that is directly applicable to the construction of the improvements that are a basis for the value of the sewer capital facilities charge; or

(b) That proportionate amount of the sewer capital facilities charge that is attributable to the sewer facilities either constructed by the property owner or paid through a latecomer's fee.

(7) The above provisions notwithstanding, the amount of credit shall not exceed the amount of the sewer capital facilities charge for the property to which the credit is being applied.

(8) At the time the sewer capital facilities charge is paid, a sewer inspection fee shall be paid per lateral connection to the main. The sewer inspection fee is set forth in POMC 13.04.025.

(9) All materials shall comply with the requirements of the city. If the city supplies any materials, the cost of these plus overhead and sales tax will be paid by the customer.

(10) Extension of Sewer to Property Contiguous to the City Shall Annex – Exception. Property lying within the urban growth boundary and contiguous to the Port Orchard city limits shall annex to the city as a condition of sewer connection. In the alternative, the city may elect to defer annexation and require the owner to execute a utility extension agreement as described in subsection (11) of this section.

(11) Requirement for Utility Extension Agreement.

(a) Property lying within the urban growth area which is not contiguous to the Port Orchard city limits shall be permitted water and/or sewer connection only upon entering into an appropriate agreement with the city containing a waiver of protest to annexation/limited power of attorney authorizing annexation at such time as the city determines the property should be annexed to the city. Application for extension of utilities is subject to the following provisions:

(i) Application fees as established by the city council shall be paid upon the submittal of a signed utility extension agreement (UEA) requesting water and/or sewer for property outside the city, but located within the urban growth area;

(ii) The applicant will bear the entire cost of water and/or sewer connection pursuant to this chapter, as written or hereafter amended, subject to any provision in effect at the time of connection for latecomer reimbursement;

(iii) The applicant will be subject to all applicable provisions of this chapter, as written or hereafter amended, for extension of city utilities, the payment therefor, and all enforcement provisions therein; and

(iv) The UEA shall not be executed prior to the time formal application is made for approval of the project for which utilities are requested. The term of said agreement shall terminate at the time any project application or approval expires or is revoked for any reason. A new agreement shall also be required for any extension of project application or approvals or when the director of planning determines that a substantial change or addition has been made to the project.

(b) The city may disconnect the utilities for failure of the applicant or his/her successors or assigns, for violation of this chapter, or for violation of the terms and conditions of the UEA.

(c) Following execution, such agreement shall be recorded by the city clerk in the chain of title for such property in the records of the Kitsap County auditor. (Ord. 020-15 § 7; Ord. 008-13 § 4; Ord. 027-11 § 5; Ord. 013-08 § 9; Ord. 023-06 § 2; Ord. 010-05 § 5; Ord. 1897 § 5, 2003; Ord. 1799 § 5, 2000).

13.04.045 Sewer system extensions and improvements.
All sewer system extensions and/or improvements shall be reviewed, approved, and inspected by city staff or selected representatives in conjunction with the submittal of an excavation permit (Chapter 12.04 POMC), land disturbing activity permit (LDAP) and/or stormwater drainage permit (SDP) application(s) as may be required under other sections of this code prior to starting construction on the proposed sewer system improvement. Review fees for sewer system extensions or improvements shall be paid in addition to required application fees for the above mentioned permits. Sewer system extension and improvement inspection fees shall be paid prior to permit issuance. Fees associated with the construction of significant facilities shall be determined at project completion and paid prior to project acceptance. All review and inspection fees shall be charged as set forth in POMC 13.04.025. (Ord. 018-17 § 4).

13.04.050 Billing.
(1) The water and/or sewer charges shall be billed by the city treasurer bimonthly, on the last day of the bimonthly period, to the property owner. The charges and rates shall be due to the treasurer, who is authorized and empowered to collect and receipt for such payments, on the first day of the month following the receipt of services.

(2) Charges remaining unpaid 25 days after the due date shall be considered delinquent and shall be subject to an additional charge of 10 percent of the unpaid balance as a penalty.

(3) When a water and/or sewer bill shall become delinquent and a city employee must go to the premises during normal working hours for the purpose of hanging a written notice on the door, there shall be a charge added to the account set forth in POMC 13.04.025.

(4) If the delinquent water and/or sewer charges remain unpaid over a period of 30 days after the due and payable date, service will be discontinued by turn-off. Service will not resume thereafter until the delinquent charges and penalties, together with a turn-off fee, have been paid in full. The turn-off fee shall be set forth in POMC 13.04.025.

(a) It is unlawful for the owner or occupant of the premises to turn on/off the water, cause damage, or cause it to be turned on after it has been shut off or locked by the city. The above charges under this subsection (4) will apply if the city has to return to re-shut off an account that is supposed to be turned off at the meter for nonpayment. Violations will result in a fee as determined by the city which is set forth in POMC 13.04.025.

(b) In the event of a declared state of emergency, due to a natural disaster, weather or public health emergency, the city treasurer is authorized to suspend disconnection of water and/or sewer services and to waive turn-off fees for the duration of the declared emergency. All other fees and charges shall continue to accrue.

(5) Where both water and sewer delinquent charges are involved, the customer shall not be billed double penalties.

(6) In the event of a declared local state of emergency, due to a natural disaster, weather or public health emergency, the city treasurer is authorized to suspend disconnection. (Ord. 004-20 § 2; Ord. 020-15 § 8; Ord. 027-11 § 6; Ord. 013-08 § 10; Ord. 010-05 § 6; Ord. 1897 § 6, 2003; Ord. 1799 § 6, 2000).

13.04.055 Miscellaneous charges.

(1) The charge for turning on or shutting off service, other than the regular City Hall business hours, and any time on weekends or holidays, shall be set forth in POMC 13.04.025.

(2) In order for a landlord to shut off a tenant's water, the landlord must be the responsible party for the account, and the landlord must sign a hold harmless agreement and pay a service charge set forth in POMC 13.04.025. The city will give advance notice at the service address of at least eight hours, or such greater time as is required by law.

(3) When a closing agent requests, by law, a final billing of utility services to real property being sold, the utility shall provide the requesting party with a written estimated or actual final billing. There will be a service fee charged for each request set forth in POMC 13.04.025. (Ord. 020-15 § 9; Ord. 010-05 § 7; Ord. 1897 § 7, 2003; Ord. 1799 § 7, 2000).

13.04.056 Waiver authority.

The finance director, or his/her designee, at his/her discretion, shall have the authority to adjust or waive utility late fees, penalties, and/or disconnection charges during a

local, state or federally declared emergency; or, in the case of errors or other similar extenuating circumstances, as long as the utility account has not received a waiver in the previous 12 months.

The finance director, or his/her designee, at his/her discretion, shall have the authority to make alternative utility payment arrangements during a local, state or federally declared emergency; or, in the case of errors or other similar extenuating circumstances, as long as the utility account has not received an alternative utility payment arrangement in the previous 12 months. (Ord. 009-20 § 1; Ord. 005-19 § 1).

13.04.060 Liens.
The finance director is directed to prepare and file a lien against any property where water and/or sewer charges or water and/or sewer connection fees remain unpaid for four months as provided in RCW 35A.60.010, 35.21.290 and 35.67.200. The fee to be applied to the account will be based on the current charges as established by the county auditor when the lien is filed. The remedy provided in this section shall be in addition to any other remedy now and hereafter provided by law. All charges, together with penalties and interest which may be provided by this chapter, shall be a lien upon the property to which such service is furnished. Water and/or sewer charges or sewer connection liens shall be superior to all other liens and encumbrances whatsoever, except those for general taxes and local and special assessments. The liens shall be enforced by the city in the manner provided by law. The additional and concurrent method of enforcing the lien of the city for the delinquent and unpaid charges by turning off the water and/or sewer service from the premises shall not be exercised after two years from the date of recording the lien notice, as provided by law. One exception to this is to enforce payment of six months' charges for which no lien notice is required by law to be recorded. (Ord. 051-17 § 1; Ord. 027-11 § 7; Ord. 1897 § 8, 2003; Ord. 1896 § 2, 2003; Ord. 1799 § 8, 2000).

13.04.065 CPI adjustment.
Commencing October 1, 2021, and on October 1st of each successive year thereafter, unless otherwise adjusted by the city council during the previous six-month period, all capital facility charges, connection fees, and fees in lieu of assessment set forth in this chapter, but excluding water and sewer rates, shall be automatically adjusted based upon the All Urban Consumers Price Index for the Seattle-Tacoma-Bremerton area as published by the U.S. Department of Labor, Bureau of Labor Statistics, for the prior June; but in no event shall the adjustment be less than zero. (Ord. 027-20 § 2).

13.04.070 Vacancies.
Repealed by Ord. 010-05. (Ord. 1897 § 9, 2003; Ord. 1799 § 9, 2000).

13.04.080 Mother-in-law apartments and converted homes.
These are apartments contained in a single-family dwelling and are not separate structures. These apartments are other than duplexes or multifamily units.

(1) Mother-in-Law Apartments.

(a) The property owner lives in the single-family dwelling.

(b) The apartment does not have both a separate full kitchen and full bath. A full kitchen is defined as one with a full size refrigerator, a stove, a sink and cabinets. A full bath is defined as one with a sink, a toilet and a bathing facility.

(c) There is the capability of the apartment dweller to pass from the apartment to the house through an interior door.

(d) A mother-in-law apartment would be considered a single-family residence and would not be charged an extra connection fee or an extra monthly rate.

(e) The building department shall inspect the proposed mother-in-law apartment and report its findings to the city treasurer. The city treasurer shall make the determination if a unit is a mother-in-law apartment and shall so notify the property owner. The property owner may appeal the treasurer's determination with a written petition to the city council.

(2) Converted Homes.

(a) The property owner lives in the single-family dwelling.

(b) The apartment has both a separate full kitchen and full bath.

(c) In order to be a converted home, the structure shall have been a single-family residence for at least five years.

(d) A converted home would not be charged an extra connection fee, but would be charged an extra monthly rate.

(e) A property owner may apply for an exemption from the additional monthly rate if a family member lives in the apartment. Application for exemption shall be made on forms provided by the city treasurer. When the family member moves out of the apartment, the property owner shall notify the city.

A "family member" is defined as a father, mother, spouse, children or stepchildren.

Mother-in-law apartments and converted homes in existence prior to September 24, 1990, shall be grandfathered and associated connection fees are waived.

A duplex would still be charged two connection fees and two monthly rates and is not a single-family residence. (Ord. 1897 § 10, 2003; Ord. 1799 § 10, 2000).

13.04.090 Discontinuation of sewer charges.

Upon receipt of a written statement by the owner of a lot or parcel of property which has previously been connected to the public sewer system that there is no longer any building or structure for human occupation or use or for any business purpose located thereon and that the toilet and other facilities therein have been removed, disconnected and properly plugged from the public sewer system, and upon inspection by the superintendent or his designated representative to ascertain that the statement is true, the sewer charges shall cease as of the first day of the following month. (Ord. 1897 § 11, 2003; Ord. 1799 § 11, 2000).

13.04.100 Cross connections.

The installation or maintenance of any cross connection which would endanger the water supply of the city of Port Orchard is prohibited. Such cross connections are declared to be a public health hazard and shall be abated.

The control or elimination of cross connections shall be in accordance with WAC 246-290-490. The policies, procedures and criteria for determining appropriate levels of protection shall be in accordance with the Accepted Procedure and Practice in Cross Connection Control Manual – Pacific Northwest Section – American Water Works Association, Fourth Edition, or any superseding edition.

It shall be the responsibility of the city to protect the potable water system from contamination or pollution due to cross connections. Water service to any premises shall be contingent upon the customer providing cross connection control in a manner approved by the city engineer. Backflow prevention assemblies required to be installed shall be a model approved by the Kitsap County health department.

The city engineer, or his designated representative with proper identification, shall have free access at reasonable hours of the day to all parts of the premises or within the building to which the water is supplied. Water service may be refused or terminated to any premises for failure to allow necessary inspections. (Ord. 027-11 § 8; Ord. 1897 § 12, 2003; Ord. 1799 § 12, 2000).

13.04.110 Emergency water supply conditions.

Whenever an emergency exists affecting the water supply of the city and it becomes necessary to curtail the use of water through regulation and control of the use thereof, the mayor shall declare such an emergency. Notice of the emergency shall be published in the official newspaper by the city clerk, setting forth rules under which water will be used. The notice may include defining zones for use of water and setting forth hours during which lawn sprinkling may be done. The notice shall include any restriction, as approved by the city council, on the use of water that is deemed necessary for the welfare of the inhabitants of the city and other users of city water. Such notice and regulations established for the emergency shall be subject to change and shall be in full force and effect throughout the emergency. Any changes in such regulations as published shall likewise be published before taking effect. Regulations established for the emergency shall remain in effect until notice is published that the emergency has passed. (Ord. 1897 § 13, 2003; Ord. 1799 § 13, 2000).

13.04.120 Damaging the utility system.
No unauthorized person shall maliciously, willfully or negligently break, damage, destroy, uncover, deface or tamper with any structure, appurtenance or equipment that is part of the public water or sewer system. No person shall connect another structure, apartment, or dwelling unit with a temporary hose or other pipe not permitted by the Uniform Plumbing Code for the purpose of providing water to that structure, apartment, or dwelling unit. Violations will result in a fee as determined by the city which is set forth in POMC 13.04.025. (Ord. 020-15 § 11; Ord. 1897 § 14, 2003; Ord. 1799 § 14, 2000).

13.04.130 Discharging of sewerage.
It shall be unlawful to discharge or cause to be discharged into the city sewer system, or cause to be placed where they are likely to run, leak or escape into the public sewer, any of the following:

(1) Ashes, cinders, sand, earth, rubbish, mud, straw, shavings, metal, glass, rags, feathers, tar, plastic, wood, or any matter which is capable of or likely to obstruct or interfere with the capacity or operation of the public sewer;

(2) Gasoline, benzine, naphtha, fuel oil, lubricating oil or any other matter which is inflammable or explosive upon introduction to the public sewer;

(3) Any matter having a temperature greater than 150 degrees Fahrenheit;

(4) Sewage containing suspended solids in excess of 350 milligrams per liter;

(5) Sewage containing grease or oil in excess of 100 parts per million by weight;

(6) Matter with a BOD greater than 300 milligrams per liter;

(7) Sewage with a pH lower than 5.5 and greater than 9.0;

(8) Garbage that has not been properly shredded;

(9) Sewage containing toxic or poisonous substances in sufficient quantity to injure or interfere with any sewage treatment process or constituting a hazard in the receiving waters of the sewage treatment plant;

(10) Any noxious or malodorous matter capable of creating a public nuisance;

(11) Waters from irrigation, storm drains, sump pumps, surface runoff, roof runoff, subsurface drainage, ponds or reservoirs. When an unauthorized hookup of a drain or excess infiltration is found to exist, the city engineer shall notify the property owner that corrective action is required and shall be accomplished within 60 calendar days. The city engineer may allow drainage of areas, not to exceed 750 square feet, if that area cannot be economically drained other than by using the sanitary sewer system;

(12) Contents from any septic tank or cesspool;

(13) Any unauthorized use of an established recreational vehicle dump station for other than recreational vehicles or camp trailers. (Ord. 1897 § 15, 2003; Ord. 1799 § 15, 2000).

13.04.140 Connection to sewer.

(1) The owner of each lot or parcel of real property within the city shall connect to the public sewer system if the public sewer system is within 200 feet of the lot or parcel and if one of the following conditions occurs:

(a) A new building or structure is constructed on an undeveloped parcel or lot and use of the new building or structure generates wastewater;

(b) An existing building or structure, which is served by an existing septic tank and drainfield, is remodeled or repaired in such a manner that the drainfield would have to be expanded, as required by the health officer. In such a case, the entire structure would have to be served by the public sewer system;

(c) The existing drainfield has failed and needs repair or replacement, as determined by the health officer.

(2) The city council may schedule a public hearing to review the circumstances of the property to be connected to the sewer system, if requested by the property owner. The city council may modify or remove the requirements of mandatory sewer connection, if it deems it necessary. (Ord. 1897 § 16, 2003; Ord. 1799 § 16, 2000).

13.04.150 Side sewer responsibilities.

That portion of any side sewer pipe lying within a street right-of-way or easement shall be kept within the exclusive control of the city. That portion of the side sewer lying beyond said right-of-way or easement shall be the responsibility of the sewer customer which is served by the pipe.

When a side sewer is blocked, it is the responsibility of the sewer customer to remove the blockage. If the blockage is shown to the satisfaction of the city council to be within the right-of-way or easement, the city council may reimburse all or part of the cost to remove the blockage. (Ord. 1897 § 17, 2003; Ord. 1799 § 17, 2000).

13.04.160 Industrial sewer users.

(1) All major contributing industrial users of the public sewer system shall be required to enter into an agreement with the city of Port Orchard to provide for the payment of their proportionate share of the federal share of the capital costs of the sewage project allocable to the treatment of such industrial waste.

(2) The recovery of the proportionate share of costs shall be determined by agreement between the city and the industrial user. The share of costs shall be based upon all factors, which significantly influence the cost of the treatment works, and shall be repaid, without interest, in at least annual payments during the recovery period, not to exceed the life of the project or 30 years. In the event the city and users cannot agree as to the proportionate share to be repaid to the city, said proportionate share shall be determined by arbitration and the arbitrator shall be appointed by the presiding judge of the Kitsap County superior court.

(3) All major contributing users discharging into the treatment works shall be required to comply, within three years, with the pretreatment standards established by the Environmental Protection Agency. In accordance with the pretreatment requirements, major industries are defined as those industries that:

(a) Have a wastewater flow of 50,000 gallons, or more, per average day;

(b) Have a wastewater flow greater than one percent of the flow carried by the municipal system receiving the waste;

(c) Include the discharge of a toxic material. (Ord. 1897 § 18, 2003; Ord. 1799 § 18, 2000).

13.04.170 Violation.

Any person who violates any of the provisions of this chapter shall become liable to the city for any expense, loss or damage occasioned by the city by reason of such violation. Such person will be charged for any damage and may be assessed a civil penalty in an amount not to exceed $5,000. Every day that the person is in violation shall be considered a separate event and may be charged as such under this section. (Ord. 1897 § 19, 2003; Ord. 1799 §§ 19, 20, 2000).

13.04.180 Appeals.

The person may appeal the penalty to the city council; provided, that the appeal is made in writing and filed with the city clerk within 15 calendar days from the date of notice imposing the penalty. The failure to appeal will constitute a waiver of all rights to an administrative hearing and determination of the matter. (Ord. 1897 § 20, 2003).

13.04.200 Low flow toilet rebate.

A cash rebate shall be paid to the owners of single-family or multifamily residences for the installation of a 1.6-gallon low flow toilet replacing a standard toilet when the following conditions are present:

(1) The homeowner has submitted an application for rebate on a form designated by the city; and

(2) The installation address has an active water account in good standing with the city.

(3) Multifamily rebates to be limited to the first 250 applications received in a calendar year. (Ord. 009-10 § 1; Ord. 018-09 § 1).

13.04.300 Water and sewer standards.
All water and sewer improvements shall be designed and constructed in accordance with the “2019 City of Port Orchard Public Works Engineering Standards and Specifications (PWESS),” three copies of which are on file with the city clerk. (Ord. 006-19 § 2).

Back to Agenda

CITY OF PORT ORCHARD
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General Sewer Plan Amendment

September, 2020

FORWARD

Recent land development activity in the area identified as Basin 7 Subarea of the City of Port Orchard's Sewer Collection System has created the need to identify additional Capital Improvement Projects in order to provide adequate sewer collection service. The Public Works Department contracted with BHC Consultants for modeling of the current system and evaluation of projects required to provide the necessary infrastructure. Additionally, the City contracted with Katy Isaksen and Associates to provide a financial analysis of the Improvements.

The following is amended material for the Executive Summary, Section 7 – Conveyance System Analysis, and Section 8 – Collection Facility Improvements of the General Sewer Plan Update of June 2016.

CONTENTS

Executive Summary

ES.1 Introduction (Chapter 1)

The City of Port Orchard's (City) General Sewer Plan Update (Plan) provides a summary of the City's current sewage capacities and an analysis of the impact of projected growth on the City's sewage collection and conveyance system, and proposes a Capital Improvement Program to alleviate system deficiencies. It also documents the utility's policies, operation and maintenance practices, and financial condition.

The City is located in Kitsap County and is bounded to the north by Sinclair Inlet. The location is shown on Figure 1-1. The surrounding area is a combination of rural and suburban lands in unincorporated Kitsap County.

The City was incorporated in 1890 as the Town of Sidney, and was renamed in 1903 as the City of Port Orchard. The City is primarily residential with some commercial areas and industrial activity. The current population within the existing City limits was estimated by the Washington State Office of Financial Management to be 13,150 in 2014. As of 2015, approximately 11,550 are within the City's sewer service area. Residents outside of the City's service area are served by the West Sound Utility District (WSUD) or by individual septic tanks.

The City owns, operates, and maintains existing wastewater collection and conveyance facilities that provide sewer service to the City's current service area of approximately 2,100 acres. The collection system consists of gravity sewers, pump stations, force mains, Septic Tank Effluent Pump (STEP) systems in McCormick Woods, and grinder pump systems that convey wastewater to the South Kitsap Water Reclamation Facility (SKWRF). The SKWRF is owned jointly by the City and WSUD, and operated and maintained by WSUD.

Over the next twenty years the population within the Urban Growth Area (UGA) in the City's sewer service area is expected to grow to over 24,000 people. The City's sewer service area is expected to grow to approximately 5,700 acres. This Plan evaluates future facilities required to accommodate both existing and future wastewater collection needs.

This Plan complies with the Washington State Department of Ecology (Ecology) regulations for general sewer plan (Washington Administrative Code [WAC] 173-240-050) as shown in Table E-1.

Table E-1 Comprehensive Sewer Plan Requirements per WAC 173-240-050		
WAC 173-240-050 Reference Paragraph	**Description of Requirement**	**Location in Plan**
3a	Purpose and need for proposed plan	Section 1.2
3b	Who owns, operates, and maintains system	Section 1.3
3c	Existing and proposed service boundaries	Chapter 5
3d	Layout map showing boundaries; existing sewer facilities; proposed sewers; topography and elevations; streams, lakes; and other water bodies; water systems	Figures 3-3, 3-5, 5-1, and 8-4
3e	Population trends	Chapter 4
3f	Existing domestic and/or industrial wastewater facilities within 20 miles	Figure 1-1
3g	Infiltration and inflow problems	Section 6.4
3h	Treatment systems and adequacy of such treatment	Section 5.7
3i	Identify industrial wastewater sources	Section 6.7
3j	Discussion of water systems	Section 3.9
3k	Discussion of collection alternatives	Chapter 7
3l	Define construction cost and O&M costs	Chapter 8
3m	Compliance with water quality management plan	Section 3.7
3n	SEPA compliance	Appendix A

ES.2 Policies and Standards (Chapter 2)

The City manages and operates their sewer system in accordance with state, local, and federal regulations. The policies and standards described in the Plan provide a framework for the planning, design, operation, and management of the system to maintain the desired level of service to sewer utility customers. These policies are limited to the sewer system and its design and operation. The City's policies and criteria summarized in Chapter 2 include the following:

- Design standards
- Construction standards
- Pretreatment
- Developer sewer system extensions and upgrades
- Septic to sewer conversion

ES.3 Service Area Characteristics (Chapter 3)

The City is located along the south shore of Sinclair Inlet, which is an arm of Puget Sound.

A number of streams flow north into Sinclair Inlet. The more prominent creeks within the City sewer service area are Blackjack Creek, Ross Creek, and Anderson Creek.

The soils in the City consist primarily of glacial outwash, glacial till, glacial drift, volcanic ash, and glaciomarine soil.

There are critical areas throughout the City which will limit development. Most of these areas are wetlands, floodplains, geologically sensitive areas, and aquifer protection areas. Several species of fish are also present, of which the Puget Sound Evolutionary Significant Unit Chinook is a State Candidate for endangered species and considered threatened by the Federal Government. In addition, other species that are State Candidates for endangered species and considered threatened by the Federal Government include bald eagle, marbled murrelet, Steller sea lion, and bull trout.

A majority of the City's water supply comes from 6 active wells. There is also an intertie with the City of Bremerton.

ES.4 Population (Chapter 4)

The projected population for the City over the planning horizon of this Plan is presented in Table E-2. Kitsap County provided 2015 residential population estimates and the Puget Sound Regional Council (PSRC) provided 2013 Covered Employment estimates. The build out scenario is for modeling purposes only and does not reflect population growth goals or constraints. The City's service area is shown on Figure 5-1.

Table E-2
Service Area Population and Employment Estimates

Year	Sewered Population	Employment
2016	11,837	4,779
2022	13,558	5,114
2026	14,706	5,338
2036	17,575	5,898
Build Out	24,074	8,343

ES.5 Existing Sewer Facilities (Chapter 5)

The City of Port Orchard owns, operates, and maintains approximately 70 miles of sewer pipes ranging from 2-inch to 24-inch diameter. This includes approximately 49 miles of gravity sewers, 8 miles of force mains, and 14 miles of STEP mains. There are 16 pump stations within the City's sewer system. 17 mini-basins were defined within the City's sewer service area, shown on Figure 5-1.

ES.6 Wastewater Flows (Chapter 6)

The unit and projected flows used to model the City's collection system are presented in Table E-3.

Table E-3
Unit and Projected Flows

Year	Residential Flow (gpcd[1])	Employment Flow (gped[2])	Average Annual Flow (mgd)	I/I (gpd/acre)	Peak Day Flow (mgd)	Peak Hour Flow (mgd)
2016	78	32	1.08	1,046	3.53	6.52
2022	78	32	1.22	1,046	3.92	7.26
2026	78	32	1.32	1,046	4.16	7.68
2036	78	32	1.56	1,046	4.75	8.74
Build Out	78	32	2.14	1,046	6.13	11.18

Notes:
1) Gallons per capita per day.
2) Gallons per employee per day.

ES.7 Sewer System Analysis (Chapter 7)

The existing wastewater conveyance system was analyzed using the InfoSWMM modeling platform. The projected populations and their distributions are the basis for establishing future system requirements.

Model files were developed from AutoCAD files of the sewer system from 2002 provided by the City which had manhole depths and were supplemented with LIDAR obtained from PACE to determine manhole rim elevations and as-builts. Some elevations were still missing after this process, including some of the smaller pump stations. Estimates for depths, pipe slopes, wet well sizes, and pump operation elevations were made to develop a functional model that reasonably represents the sewer system.

A truncated model was used consisting of all pump stations and the major sewer mains within the City's collection system. The model can be expanded in the future as needed and when budget allows.

The design capacity of the gravity mains is considered to be 100 percent depth (1.0 d/D ratio, where d is the flow depth and D is the pipe diameter). The maximum design capacity of STEP mains and force mains are exceeded when flow velocities are greater than 8 feet per second. The firm capacity of a lift station is defined as the capacity of the lift station with the largest pump out of service. When model simulation results exceed these design capacities in piping or in lift stations, they are identified as deficient and system improvements are identified to resolve them.

Where pipe sections were identified as requiring an upgrade, the proposed upgrade was sized to provide capacity equal to or greater than the estimated build-out flows according to the design criteria above.

At lift stations where the estimated peak hour flows were shown to exceed the current firm capacity, the build out flow capacity was estimated and incorporated into the model for the improved system model runs. This enabled the impact of the increased flow on the downstream sewer network to be investigated. It is unlikely that the mechanical and electrical improvements to the lift stations will be sized for the build-out conditions.

ES.8 Capital Improvements Plan (Chapter 8)

The 6 year capital improvement projects as determined by model results and the City desired improvements are presented in Table E-4. Actual costs can and will differ from the opinions of probable costs. Volatility in the bidding climate, the number of contractors bidding on a project, and their approach to bidding and completing the work will all impact actual project costs.

Table E-4
Opinion of Probable Project Costs, 6-Year CIP (2020-2025)

CIP No.	Project	Opinion of Probable Construction Cost[(1)(2)]	Opinion of Probable Project Cost[(1)(3)]
6-1	Marina Pump Station Improvements	$6,500,000	$8,000,000
6-2	Bay Street Pump Station Improvements	$975,000	$1,300,000
6-3	McCormick Lift Station 2	$3,200,000	$4,500,000
6-4	Eagle Crest Generator Set	$225,000	$300,000
6-5A	Bravo Terrace Lift Station and Force Main	3,750,000	$5,000,000
6-5B	South Sidney Lift Station	$1,875,000	$2,500,000
6-5C	North Sidney Lift Station	$1,875,000	$2,500,000
6-5D	Sidney Second Force Main	$1,200,000	$1,600,000
6-6	McCormick Woods Lift Station 3	$750 ,000	$1,000,000

Notes:
1) All costs are in 2020 dollars.
2) The opinion of probable construction cost includes the costs to build the various components, sales tax, and contingency. The construction costs are assumed to be 75-percent of total project costs, except for CIP 6-3 which is currently under construction in 2020.
3) Opinions of probable project costs include planning, surveying, engineering services, permitting, bid advertisement, contract award, construction, and services during construction, in addition to the probable construction cost.

ES.9 Financial (Chapter 9)

The financial analysis for the sewer system was performed by Katy Isaksen & Associates as part of the “City of Port Orchard Utility Gap Analysis” and is included as Appendix H.

ES.10 Operations and Maintenance (Chapter 10)

Chapter 10 summarizes general operations and maintenance activities and staffing needs. The City has approximately 0.95 maintenance staff per 100,000 lf of pipe and 0.22 maintenance staff per pump station, which is similar to other sewer utilities in this region of similar size.

ES.11 Reclaimed Water (Chapter 11)

Only one reclaimed water customer was being served by the WSUD. The costs to provide reclaimed water to this customer were higher than what the customer is charged, resulting in the City and WSUD subsidizing the reclaimed water customer. Reclaimed water was provided to this customer until the end of 2015, at which point reclaimed water distribution was ceased. Reclaimed water is blended with effluent from the secondary clarifiers prior to discharge.

If water system demands increase to the point that reclaimed water is necessary to adequately address water demands in the area, the reclaimed water distribution system will be placed back into service.

Section 7 Conveyance System Analysis

7.1 Introduction

Analysis of the City's wastewater conveyance system is a critical component in determining the ability of the existing infrastructure to accommodate future growth. This section describes the analysis necessary for strategic, long-term infrastructure planning and development of the Capital Improvement Plan (CIP). The City's conveyance system was analyzed using a truncated model, simulating only trunk and interceptor gravity mains and all pump stations. This allows for an accurate representation of the most critical components of the City's conveyance system, and the simultaneous analysis of both gravity and pressure systems. The system was analyzed for existing conditions (2016), a 6-year planning horizon (2022), a 10-year planning horizon (2026), a 20-year planning horizon (2036), and the theoretical build-out conditions.

7.2 Model Software

InfoSWMM 12.0 by Innovyze was the hydraulic modeling software used to model the City sewer system. InfoSWMM 12.0 is a dynamic hydraulic model that uses the EPA SWMM 5.0 computer program for the hydraulic analysis calculations. The model is designed specifically for modeling urban sanitary and combined sewer systems. The current version operates within an ArcGIS (ArcMap) platform.

7.3 Model Development

Model files were developed from AutoCAD files of the sewer system from 2002 provided by the City which had manhole depths, and were supplemented with LIDAR obtained from PACE to determine manhole rim elevations and as-builts. Some elevations were still missing after this process, including some of the smaller pump stations. Estimates for depths, pipe slopes, wet well sizes, and pump operation elevations were made to develop a functional model that reasonably represents the sewer system.

A truncated model was used consisting of all pump stations and the major sewer mains within the City's collection system. The model can be expanded in the future as needed and when budget allows.

The following information was used in developing the hydraulic model of the existing sewer collection system. Additional detail on the existing sewer system is included in Section 6.

7.3.1 Gravity Sewers

Elevations were obtained using LIDAR for rim elevations and depth to invert provided by the City in an AutoCAD file to calculate invert elevations. Record drawings were used to evaluate pipe invert elevations in areas where abnormal or adverse grades were present. Where no elevation data was available, reasonable estimates based on pipe slopes and depths were used.

7.3.2 Lift Stations

Lift stations were imported to the model from the AutoCAD file provided by the City. Pump curves were added to simulate pump operation. Wet wells are modeled based on lift station data sheets maintained by O&M staff. Depth to volume relationships and pump on/off set points were also added. Modeled pumping rates were compared against factory pump curve data when available to ensure model accuracy and that the model outputs were within a range of reasonably expected values.

Data for some of the smaller lift stations were unavailable. Reasonable estimates were used for depth, wet well size, and pump curves. Because these smaller lift stations represent a fraction of the flows, this will not significantly impact the results of the model. These lift stations can be updated in the future.

7.4 Model Loading

Meaningful modeling results can only be obtained if the quantity of flows and the location where they enter the system in the model reflect actual conditions. Wastewater flow consists of two separate elements: sanitary sewer flow and infiltration and inflow (I/I). Sanitary sewer flow is typically referred to as Dry Weather Flow (DWF) in the model (DWF in the collection system usually includes a minor amount of base I/I that is accounted for in the model I/I loading). I/I is loaded into the model as an external source of flow. All flow is loaded to model "nodes", which are manholes in gravity systems.

7.4.1 Sanitary Sewer Flows

Existing and projected sanitary sewer flow rates were developed for each basin on a gpd/acre basis using the following information:

- Population and employment data and projections (described in Section 4)
- Existing measured flow rates (described in Section 5)
- Unit sewer flows (described in Section 5)
- Diurnal curves (described in Section 5)
- Mini-basin areas (described in Section 6)

Model loading is assigned on a flow per unit area basis for nodes identified in each basin. The model assigns flow to the nodes, based on the amount of contributing area calculated for each node using the Thiessen polygon method.

7.4.2 Infiltration and Inflow (I/I)

Existing and projected I/I rates were developed on a gallons/acre basis using the following information:

- I/I (described in Section 5)
- Diurnal curves (described in Section 5)
- Mini-basin areas (described in Section 6)
- Sewered areas (described below)

Total I/I for each basin was calculated using the unit I/I rates described in Section 5 and approximate area contributing to the sewer system. The existing sewered area was derived from the area of parcels and rights-of-way adjacent to existing sewers and was adjusted based on engineering judgment and knowledge of the sewer system. Build-out sewered area was calculated by taking the existing sewered area and adding the net developable area from the Kitsap County Updated Land Capacity Analysis (ULCA) plus 54 percent for right-of-way and public and quasi-public facilities based on assumptions in the ULCA. Sewered areas for 2022, 2026, and 2036 were interpolated between existing and build-out sewered areas by calculating the change in sewered area divided by the change in population between existing conditions and build-out conditions, which is approximately 3,300 sf per person and includes parcels, right-of-way, and other public facilities.

Model I/I loading was assigned to nodes based on the ratio of contributing area calculated for each node using the Thiessen polygon method to total basin area.

Determining how I/I is projected into the future as the collection system expands and ages is a key issue. Based on the King County Regional Infiltration/Inflow Control Program, a widely accepted assumption in Western Washington is to increase the I/I component of sewer flow by 7 percent per decade, up to a maximum of 28 percent. Much of the City's existing sewer collection system was built 40 years ago or more, and has reached the maximum I/I rate. Newer infrastructure typically has lower rates of I/I. As the sewer system expands with new construction, it is likely that the I/I rate will remain the same or drop due to improved materials and construction. Therefore, a constant I/I rate was assumed for future I/I projections.

For future model runs, the I/I curve is shifted to maximize flows to the system, effectively increasing the peak hour factor. This is a conservative approach since a major storm flow may occur at any time of the day. Existing model runs were used for calibration purposes and do not utilize the shifted I/I curve.

7.5 Model Calibration

The model was calibrated using the flow meters at the SKWRF for average flows and MPS for peak day flows.

7.5.1 Calibration to Recorded Flow Data

Average Annual Flow Calibration

The first step in calibrating the model was to compare predicted sanitary flows calculated in Section 5 to measured average annual flow data. After the modeled sanitary sewer volumes were verified, diurnal flow patterns were loaded and adjusted until the variations in simulated flow throughout the day reasonably matched the measured average annual flow conditions.

Peak Day Flow Calibration

Peak day I/I was loaded into the model and simulation results were compared with the peak day flow at the MPS. The modeled flow volume was compared with the measured flow volume during peak days to ensure model loading reasonably matched the field data.

Peak Hour Flow Calibration

There was not sufficient data available to calibrate peak hour flow. The peak day flow occurred in 2012, for which only total daily flow volumes were available. Therefore, an I/I curve was developed using the peak day flow from 2014, which was the second largest peak day flow, and applied to the peak day flow of 2012. Based on the calibration of the average annual flow, peak day flow, and sanitary sewer diurnal curve, this gives a reasonable result. As more data is made available, the peak hour flow calibration may be revisited.

For future model runs, the I/I curve was shifted to align peak sanitary and peak I/I flows to simulate peak flows to the system. This is a conservative approach since a major storm flow may occur at any time of the day. Existing model runs were used for calibration purposes and do not utilize the shifted I/I curve.

7.5.2 Calibration Results

The model was calibrated to SKWRF flow meter data for average annual flow and MPS flow monitoring data for peak day flow. Average annual flows were calibrated to within 3 percent and peak day flows to within 2 percent. This is within the accuracy limits of the flow meters used and is acceptable.

7.6 Future Sewer System Expansion

Future sewer system expansion was modeled by adding flow from all future population growth into the existing system model. Sewer extensions were not sized, but as the need arises, the model can be updated to ensure that the new sewer systems are constructed with adequate capacity for future growth.

It is anticipated that most of the future infrastructure into unsewered areas will be constructed by developers. Due to the topography, some new developments may require pump stations.

7.7 Modeling Scenarios

Five scenarios were developed to analyze the City's wastewater conveyance system utilizing the population and unit flow projections described in Sections 4 and 5 and are summarized in Table 7-1.

Table 7-1
Projected Wastewater Flows (mgd)

Flow	2016	2022	2026	2036	Build-Out
Average Annual	1.08	1.22	1.32	1.56	2.14
Peak Day	3.53	3.92	4.16	4.75	6.13
Peak Hour	6.52	7.26	7.68	8.74	11.18

7.8 Hydraulic Modeling Analysis

7.8.1 Design Capacity

The design capacity of the gravity mains is considered to be 100 percent depth (1.0 d/D ratio, where d is the flow depth and D is the pipe diameter). The maximum design capacity of STEP mains and force mains are exceeded when flow velocities are greater than 8 feet per second. The firm capacity of a lift station is defined as the capacity of the lift station with the largest pump out of service. When model simulation results exceed these design capacities in piping or in lift stations, they are identified as deficient and system improvements are identified to resolve them. Modeling results for all scenarios are included in Appendix G.

7.8.2 Existing System – Results

The existing system model results for peak day flow are shown on Figure 7-1. The gravity sewer and pump station capacity deficiencies are summarized in Table 7-2 and Table 7-3. The modeled surcharging in the McCormick Woods Drive SW gravity sewer has not been confirmed by the City. The City will monitor the sewer to verify if there are capacity issues in that pipeline.

Table 7-2
2016 Gravity Sewer Deficiencies

Map ID	Location	Diam. (in)	Length (lf)	Upstream Manhole	Downstream Manhole	Flooding (gallons)	Surcharge (d/D)
1	McCormick Woods Drive SW	10	1,130	506-2-2-0060	506-2-2-0030	0	2.2

Table 7-3
2016 Pump Station Deficiencies

Map ID	Pump Stations	Lag Pump Runtime (minutes)	PS Capacity (gpm)	PS Peak Inflow (gpm)	Flooding (gallons)
A	Flower Meadows	22	104	230	0

7.8.3 2022 Scenario – Results

The 2022 model results for peak day flow are shown on Figure 7-2. The gravity sewer and pump station capacity deficiencies are summarized in Table 7-4 and Table 7-5. The City will monitor the McCormick Woods Drive SW gravity sewer to verify if it surcharges. Orchard Avenue and Bay Street surcharge due to insufficient capacity in the MPS.

Table 7-4
2022 Gravity Sewer Deficiencies

Map ID	Location	Diam. (in)	Length (lf)	Upstream Manhole	Downstream Manhole	Flooding (gallons)	Surcharge (d/D)
1	McCormick Woods Drive SW	10	2,420	506-2-2-0100	506-2-2-0030	0	4.5
2	Orchard Avenue	30	110	115-2-2-0020	Marina PS	0	1.3
3	Bay Street	24	1,170	115-2-2-0190	115-2-2-0020	0	1.5
4	Bay Street	18	1,620	313-2-2-0060	115-2-2-0190	0	2.2

Table 7-5
2022 Pump Station Deficiencies

Map ID	Pump Stations	Lag Pump Runtime (minutes)	PS Capacity (gpm)	PS Peak Inflow (gpm)	Flooding (gallons)
A	Flower Meadows	103	104	285	0
B	Albertsons	243	176	193	0
C	Marina	245	3,800	4,800	0
D	McCormick Woods 1	150	1,000	1,750	0

Figure 7-1 Existing Peak Day Flow

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Figure 7-2 2022 Peak Day Flow

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7.8.4 2026 Scenario – Results

The 2026 model results for peak day flow are shown on Figure 7-3. The gravity sewer and pump station capacity deficiencies are summarized in Table 7-6 and Table 7-7. The McCormick Woods Drive SW gravity sewer may not surcharge. The City will monitor the sewer to verify if there is a capacity issues in that pipeline. Orchard Avenue and Bay Street surcharge due to insufficient capacity in the MPS, and Albertsons surcharges due to insufficient capacity in the Albertsons Pump Station.

Table 7-6
2026 Gravity Sewer Deficiencies

Map ID	Location	Diam. (in)	Length (lf)	Upstream Manhole	Downstream Manhole	Flooding (gallons)	Surcharge (d/D)
1	McCormick Woods Drive SW	10	2,420	506-2-2-0100	506-2-2-0030	905	4.9
2	Orchard Avenue	30	110	115-2-2-0020	Marina PS	0	1.3
3	Bay Street	24	1,170	115-2-2-0190	115-2-2-0020	0	1.6
4	Bay Street	18	1,900	313-2-2-0070	115-2-2-0190	0	2.3
5	Albertsons	8	570	507-2-2-0040	Albertson PS	0	12

Table 7-7
2026 Pump Station Deficiencies

Map ID	Pump Stations	Lag Pump Runtime (minutes)	PS Capacity (gpm)	PS Peak Inflow (gpm)	Flooding (gallons)
A	Flower Meadows	134	104	295	0
B	Albertsons	441	176	228	0
C	Marina	305	3,800	5,243	0
D	McCormick Woods 1	229	1,000	2,046	0

7.8.5 2036 Scenario – Results

The 2036 model results for peak day flow are shown on Figure 7-4. The gravity sewer and pump station capacity deficiencies are summarized in Table 7-8 and Table 7-9.

Table 7-8
2036 Gravity Sewer Deficiencies

Map ID	Location	Diam. (in)	Length (lf)	Upstream Manhole	Downstream Manhole	Flooding (gallons)	Surcharge (d/D)
1	McCormick Woods Drive SW	10	2,420	506-2-2-0100	506-2-2-0030	7,915	4.9
2	Orchard Avenue	30	110	115-2-2-0020	Marina PS	0	3.5
3	Bay Street	24	1,170	115-2-2-0190	115-2-2-0020	2,693	4.2
4	Bay Street	18	2,620	313-2-2-0100	115-2-2-0190	40,611	6.0
5	Albertson	8	570	507-2-2-0040	Albertson PS	37,473	13
6	Bay Street	8	120	313-2-2-0110	313-2-2-0100	0	4.6
7	Bay Street	30	40	115-2-2-0030	115-2-2-0020	11	3.1
8	Bay Street	24	10	115-2-2-0040	115-2-2-0030	0	3.3
9	Bay Street	18	230	115-2-2-0070	115-2-2-0040	39	4.0
10	Bay Street	15	950	115-2-2-0090	115-2-2-0050	0	4.2
11	Bay Street	12	840	115-2-2-0110	115-2-2-0090	0	2.4
12	Port Orchard Boulevard	12	890	114-2-2-0040	115-2-2-0200	0	7.0

Table 7-9
2036 Pump Station Deficiencies

Map ID	Pump Stations	Lag Pump Runtime (minutes)	PS Capacity (gpm)	PS Peak Inflow (gpm)	Flooding (gallons)
A	Flower Meadows	198	104	320	0
B	Albertsons	816	176	317	0
C	Marina	400	3,800	5,984	0
D	McCormick Woods 1	425	1,000	2,444	0
E	McCormick Woods 2	88	1,000	1,730	0

Figure 7-3 2026 Peak Day Flow

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Figure 7-4 2036 Peak Day Flow

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7.8.6 Build-Out Scenario – Results

The build-out model results for peak day flow are shown on Figure 7-5. The gravity sewer, pump station capacity, and force main deficiencies are summarized in Table 7-10, Table 7-11, and Table 7-12.

Table 7-10
Build-Out Gravity Sewer Deficiencies

Map ID	Location	Diam. (in)	Length (lf)	Upstream Manhole	Downstream Manhole	Flooding (gallons)	Surcharge (d/D)
1	McCormick Woods Drive SW	10	2,620	506-2-2-0100	506-2-2-0020	56,344	4.9
2	Orchard Avenue	30	110	115-2-2-0020	Marina PS	0	3.6
3	Bay Street	24	1,170	115-2-2-0190	115-2-2-0020	51,233	4.4
4	Bay Street	18	2,620	313-2-2-0100	115-2-2-0190	284,218	6.0
5	Albertson	8	570	507-2-2-0040	Albertson PS	146,123	13
6	Bay Street	8	120	313-2-2-0110	313-2-2-0100	0	4.8
7	Bay Street	30	40	115-2-2-0030	115-2-2-0020	35	3.1
8	Bay Street	24	10	115-2-2-0040	115-2-2-0030	0	3.3
9	Bay Street	18	230	115-2-2-0070	115-2-2-0040	207	4.0
10	Bay Street	15	950	115-2-2-0090	115-2-2-0050	0	4.2
11	Bay Street	12	840	115-2-2-0110	115-2-2-0090	0	3.7
12	Port Orchard Boulevard	12	1,670	114-2-2-0090	115-2-2-0200	55,869	7.2
13	Port Orchard Boulevard	10	1,620	114-2-2-0170	114-2-2-0100	0	5.8

Table 7-11
Build-Out Pump Station Deficiencies

Map ID	Pump Stations	Lag Pump Runtime (minutes)	PS Capacity (gpm)	PS Peak Inflow (gpm)	Flooding (gallons)
A	Flower Meadows	505	104	449	1,930
B	Albertsons	1,384	176	448	0
C	Marina	742	3,800	7,142	0
D	McCormick Woods 1	731	1,000	3,221	0
E	McCormick Woods 2	372	1,000	2,500	0
F	Eagle Crest	365	100	313	831

Table 7-12
Build-Out Force Main Deficiencies

Map ID	Pump Station	Diam. (in)	Length (lf)	Peak Velocity (fps)	Time Exceeding 8 fps (minutes)
20	Marina Pump Station	18	8,200	8.81	92

Figure 7-5 Build-Out Peak Day Flow

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7.9 Sedgwick Subarea Analysis

The City and WSUD are currently investigating changing the service area boundary between the two sewer utilities in Basin 8 to more accurately reflect how parcels in that area would be served. The resulting changes under build-out conditions are shown in Table 7-13.

Table 7-13
Sedgwick Subarea Basin 8 Build-Out Changes

Scenario	Population	Employment	Area (acre)	Average Annual Flow (mgd)	Peak Day Flow (mgd)
Current Boundary	1,193	993	529	0.125	0.201
Revised Boundary	1,299	1,061	323	0.135	0.218

The updated build-out peak day flows were loaded into the model to determine additional deficiencies as a result of the service area boundary change. The peak hour flow to the Bravo Terrace Pump Station (BTPS, also known as the Sedgwick Pump Station) is approximately 250 gpm, which exceeds the rated capacity of 180 gpm. However, the model results indicate that the actual capacity may be up to 290 gpm based on the pump curve. It is recommended that a draw down test be performed at the station as flows to the station approach the rated capacity of the pump station. As development occurs, developers will need to obtain a Certificate of Reservation, which will include a capacity analysis. If sewer flows from the development exceed the capacity of the Sedgwick Pump Station, the developer will be required to make capacity upgrades to the station.

The Sedgwick Subarea Analysis build-out model results for peak day flow are shown on Figure 7-6. The gravity sewer, pump station capacity, and force main deficiencies are summarized in Table 7-14, 7-15, and 7-16.

Table 7-14
Sedgwick Subarea Build-Out Gravity Sewer Deficiencies

Map ID	Location	Diam. (in)	Length (lf)	Upstream Manhole	Downstream Manhole	Flooding (gallons)	Surcharge (d/D)
1	McCormick Woods Drive SW	10	2,620	506-2-2-0100	506-2-2-0020	54,221	4.9
2	Orchard Avenue	30	110	115-2-2-0020	Marina PS	0	3.6
3	Bay Street	24	1,170	115-2-2-0190	115-2-2-0020	18,735	4.4
4	Bay Street	18	2,620	313-2-2-0100	115-2-2-0190	354,451	6.0
5	Albertson	8	570	507-2-2-0040	Albertson PS	134,335	13.0
6	Bay Street	8	120	313-2-2-0110	313-2-2-0100	0	4.8
7	Bay Street	30	40	115-2-2-0030	115-2-2-0020	93	3.1
8	Bay Street	24	10	115-2-2-0040	115-2-2-0030	0	3.3
9	Bay Street	18	230	115-2-2-0070	115-2-2-0040	184	4.0
10	Bay Street	15	950	115-2-2-0090	115-2-2-0050	9	4.2
11	Bay Street	12	840	115-2-2-0110	115-2-2-0090	0	3.7
12	Port Orchard Boulevard	12	1,670	114-2-2-0090	115-2-2-0200	19,014	7.2
13	Port Orchard Boulevard	10	1,620	114-2-2-0170	114-2-2-0100	0	5.8

Table 7-15
Sedgwick Subarea Build-Out Pump Station Deficiencies

Map ID	Pump Stations	Lag Pump Runtime (minutes)	PS Capacity (gpm)	PS Peak Inflow (gpm)	Flooding (gallons)
A	Flower Meadows	500	104	449	1,834
B	Albertsons	1,353	176	448	0
C	Marina	655	3,800	7,571	0
D	McCormick Woods 1	709	1,000	3,230	0
E	McCormick Woods 2	365	1,000	2,468	0
F	Eagle Crest	355	100	300	770

Table 7-16
Sedgwick Subarea Build-Out Force Main Deficiencies

Map ID	Pump Station	Diam. (in)	Length (lf)	Peak Velocity (fps)	Time Exceeding 8 fps (minutes)
20	Marina Pump Station	18	8,200	9.32	133

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Figure 7-6 Sedgwick Subarea Alternative Build-Out Peak Day Flow

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7.10 Basin 7 Subarea Analysis

This section has been added to the General Sewer Plan (Plan) as part of the Basin 7 and CIP Amendment project. The purpose of this section is to document analysis performed to determine required upgrades to the City's sewer collection system to provide adequate service to additional developments proposed in the area after the finalization of the 2016 Plan.

The model has been updated to reflect several projects since the completion and approval of the 2016 General Sewer Plan. McCormick LS1 has been upgraded with larger capacity pumps. McCormick LS2 is currently under construction, and Marina PS is under design. Although McCormick LS2 and Marina PS are not completed, the upgrades are included in the model because they are anticipated to be completed prior to construction of the new Basin 7 sewer infrastructure.

Conversations with the City and developers have resulted in a decision by the City to allow two new pump stations to be constructed in order to serve the area and in order to allow the developers to build more quickly while minimizing total pump station maintenance for the City. Proposed locations of these facilities are shown in Figure 7-7. The City's Planning Department provided the estimated number of residential units and areas of commercial space proposed in Basin 7, and these are included in Appendix D. These also include estimated capacity for parcels that do not currently have development plans but have potential to be developed in the future. These flows were added to the estimated current flows from the 2022 model runs previously performed. The estimated flows are shown in Table 7-17.

Table 7-17
Estimated Basin 7 Build-Out Flows

Area of Basin	Tributary to Lift Station	Average Annual Flow (gpm)	I/I Flow (gpm)	Peak Hour Flow (gpm)
Southwest of Sidney and Sedgwick	South Sidney	176	176	609
North of Sedgwick, South of Ruby Creek	South Sidney	25	34	105
North of Ruby Creek, South of SR-16	North Sidney	68	30	157
North of SR-16	Pottery	3	1	7

The updated build-out peak day flows were loaded into the 2022, 2026, 2036, and build-out models to determine if there will be additional deficiencies as a result of the proposed developments. Two new pump stations (South Sidney Lift Station and North Sidney Lift Station) and associated piping improvements were also added. Although the Basin 7 flows increased by approximately 820 gpm, the downstream system did not experience additional deficiencies beyond those identified in the previous build-out analysis. It did cause some deficiencies to occur earlier than previously projected. Figure 7-8 shows under which model run the downstream system exceeds capacity, assuming Basin 7 is fully built out.

The Basin 7 Analysis build-out model results for peak day flow are shown on Figure 7-8, with callouts showing when downstream capacity is exceeded.

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Figure 7-7 Future Basin 7 Upgrades

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Figure 7-8 Build-Out Peak Day Flow with Basin 7 Upgrades

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Section 8 Collection Facilities Improvements

8.1 Introduction

This section provides a compilation of specific projects, improvements, and programs the City should implement to alleviate the deficiencies identified in Section 7. These projects are derived primarily from the system analysis and discussions with the City's operations and engineering staff. Each project is accompanied by a planning level opinion of probable cost and a schedule identifying when the project is anticipated to begin and end. The City should review the CIP periodically to adjust for significant changes in the priority of each project, its cost, and scope.

Collection facilities improvement projects for the City wastewater system are categorized into the following five categories:

- **Capacity:** Improvements classified as insufficient in capacity are determined based on whether or not the infrastructure can effectively convey the incoming flow. Gravity sewer pipes are considered to have insufficient capacity when the pipe is full or surcharged. Force mains are considered to have insufficient capacity when the velocities exceed 8 feet per second. Pump stations are considered to have insufficient capacity when inflow exceeds the flow produced by the pump station with the largest pump out of service. As described in Section 7, the conveyance system was evaluated using existing flows and flows projected for 2022, 2026, 2036, and build-out conditions. The evaluations determined system deficiencies when subjected to these existing and future flow conditions. Following identification of system deficiencies, the computer model was used to evaluate and select system improvements to alleviate the system deficiencies.
- **Operations & Maintenance (O&M):** O&M projects will rehabilitate or replace facilities identified by the City O&M staff as having unacceptably high maintenance requirements, both in terms of frequency and in magnitude.
- **Obsolescence:** Improvements classified as obsolete are based on the age of the infrastructure. Mechanical and electrical equipment is expected to have a typical usable life of 25 years. Structures are expected to have a typical usable life of 50 years. Pipes are expected to have a typical usable life of 100 years.
- **General:** General improvement projects are those identified by City staff for various reasons that do not fall within any of the remaining four categories. These projects may be needed to simplify system operation, ease O&M efforts and reduce O&M costs, consolidate and/or eliminate redundant facilities, reduce or eliminate non-critical O&M concerns, or to meet ongoing sewer system management needs.
- **Developer:** Projects identified as developer dependent are needed to serve new developments but are not needed to provide continuation of service to existing customers.

When possible, system improvement projects should be coordinated with other utilities to minimize disruption and reduce associated costs such as road and surface restoration.

8.2 Six-Year Capital Improvement Program

8.2.1 Project Descriptions

CIP 6-1: Marina Pump Station Improvements

The high flow pumps are reaching the end of their useful life and are projected to have insufficient capacity for peak hour flows within the 6-year planning horizon. The sea wall protecting the controls building is failing and needs to be replaced along with a seismic retrofit of the controls building.

The existing pump station dry well and wet well will remain in place. The existing two high-flow and one low-flow pumps will be replaced with three larger pumps. One existing Vaughan Chopper pump will remain in place. The existing control building will be demolished and replaced with a new control facility to house electrical equipment and odor control. The existing corroding control building foundation will be replaced and retrofited with an observation area connected to pedestrian path. Odor control ducting from new control facility to existing wet well will be installed. The existing 200 kw interior generator will be replaced with a 450-kw exterior generator and fuel storage. The existing bathroom and pump station entrance will be demolished and replaced with a multi-use facility for diesel-driven pump, pump station entrance, public restroom, oil spill response trailer storage, and garbage and recycling receptacles. Emergency storage structure will be built adjacent the existing pump station. Construction of emergency storage structure may need to be delayed to spread out the cost to meet the City's capital budgeting.

CIP 6-2: Bay Street Pump Station Improvements

The pumps, mechanical, and electrical components have reached the end of their useful life. There is no generator set on site. There is some structural degradation in the wet well riser. The structure should be evaluated to determine requirements to convert the dry well to a non-confined space.

Replace dilapidated wet well riser; replace dry well access with flush hatch; coat interiors of wet well and dry well; replace existing constant speed dry pit pumps with new constant speed dry pit pumps; replace all mechanical components; replace all electrical components; improve ventilation to six air exchanges per hour; evaluate revision to dry well layout to allow for retrieval; reroute gravity main from the west around the north side of dry well; install generator set; relocate sidewalk to provide better access for wet well manhole lid.

CIP 6-3: McCormick Pump Station 2

The pumps, mechanical, and electrical components have reached the end of their useful life. There is significant corrosion on the mechanical equipment.

Construct new pump station with a wet well, dry well, three chopper pumps with VFDs, backup generator, diesel pump, pig launch vault, emergency storage, electrical equipment housed in a new controls building, and odor control.

CIP 6-4: Eagle Crest Generator Set

The Eagle Crest pump station does not have an on-site generator set.

This project would install a generator set and related equipment necessary for the proper function of the generator set, and would include site grading, equipment pads, and an automatic transfer switch.

CIP 6-5A: Bravo Terrace (Sedgwick) Lift Station and Force Main

The pumps, mechanical, and electrical components have reached the end of their useful life. Flows are expected to exceed pump station capacity as new development occurs. This project will include a new wet well, three Vaughan chopper pumps with a firm capacity of 1,000 gpm, generator, and a diesel backup pump. There is an existing storage tank on site that will be evaluated for use during pre-design. If it cannot be used, additional storage will be provided for a reasonable response time in the event of a station failure. A new 4,100 lf 10-inch inside diameter force main will also be required for the additional flows. This pump station replacement and new force main will be funded by connection charges or built by a developer.

CIP 6-5B: South Sidney Lift Station

A new 1,000 gpm lift station will be constructed south of Ruby Creek to provide sewer service to the portion of Basin 7 south of Ruby Creek. It will be a submersible station equipped with three Vaughan chopper pumps, VFDs, an emergency generator, and diesel backup pump. Pumps shall be sized to operate concurrently with the North Sidney Lift Station.

CIP 6-5C: North Sidney Lift Station

A new 350 gpm lift station will be constructed north of Ruby Creek to provide sewer service to the portion of Basin 7 north of Ruby Creek. It will be a submersible station equipped with three Vaughan chopper pumps, VFDs, an emergency generator, and diesel backup pump. Pumps shall be sized to operate concurrently with the South Sidney Lift Station.

CIP 6-5D: Sidney Second Force Main

The existing 6-inch force main serving the Albertsons Pump Station does not have sufficient capacity to serve the projected Basin 7 flows. A new 4,800 lf 10-inch inside diameter force main will be needed to provide sufficient capacity and will be shared by the South and North Sidney Lift Stations.

CIP 6-6: McCormick Woods Lift Station 3

A new lift station will be constructed to provide sewer service to new development in the McCormick Woods area. It will be a submersible station equipped with Vaughan chopper pumps, VFDs, and an emergency generator.

8.2.2 Summary

The projects recommended for the 6-year Capital Improvement Program (CIP) are described in Table 8-1 and illustrated on Figure 8-1. The project order was developed with the City.

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Table 8-1
6-Year CIP (2016-2021)

CIP No.	Project	Capacity	Obsolescence	O&M	General	Developer	Project Description
6-1	Marina Pump Station Improvements	☑	☑	☑			▪ Existing pump station dry well and wet well to remain in place. The existing two high-flow and 1 low-flow pumps will be replaced with three larger pumps. The 1 existing Vaughan Chopper pump to remain in place. ▪ Construct a second 24-inch force main for primary use by 2036 and the existing 18-inch force main to remain in place as a backup. ▪ Demolish the existing control building and construct new control facility to house electrical equipment and odor control. ▪ Retrofit or replace existing corroding control building foundation and replace with observation area connected to pedestrian path. ▪ Install odor control ducting from new control facility to existing wet well. ▪ Replace existing 200 kw interior generator with 450 kw exterior generator and fuel storage. ▪ Demolish existing bathroom and pump station entrance. Replace with multi-use facility for diesel-driven pump, pump station entrance, public restroom, oil spill response trailer storage, and garbage and recycling receptacles. ▪ Emergency storage structure built adjacent the existing pump station. Construction of emergency storage structure may need to be delayed to spread out the cost to meet the City's capital budgeting.
6-2	Bay Street Pump Station Improvements		☑	☑			▪ Replace dilapidated wet well riser ▪ Replace dry well access with flush hatch ▪ Coat interiors of existing wet well and dry well ▪ Replace existing constant speed dry pit pumps with new constant speed dry pit pumps ▪ Replace all mechanical components ▪ Replace all electrical components ▪ Reroute gravity main from the west around the north side of dry well ▪ Install generator set ▪ Relocate sidewalk to provide better access for wet well manhole lid ▪ Site paving/restoration ▪ Install fencing around site
6-3	McCormick Pump Station 2 - Construction	☑	☑	☑			▪ New wet well and dry well ▪ New electrical and controls located in a new building ▪ Three chopper pumps with VFDs and a backup diesel pump ▪ Backup generator ▪ Pig launch vault ▪ Emergency storage ▪ Odor control.

Table 8-1
6-Year CIP (2016-2021)

CIP No.	Project	Capacity	Obsolescence	O&M	General	Developer	Project Description
6-4	Eagle Crest Generator Set			☑	☑		▪ Install new generator set, equipment pad, automatic transfer switch, and any other appurtenances necessary for proper function of generator set
6-5A	Bravo Terrace Lift Station and Force Main	☑	☑			☑	▪ Replace existing pump station ▪ Submersible triplex pumps with a firm capacity of 1,000 gpm ▪ New wet well ▪ New electrical equipment ▪ New mechanical equipment ▪ Reuse existing emergency storage or install new emergency storage ▪ New generator set ▪ New diesel pump sized for full build-out flow ▪ New 10-inch force main
6-5B	South Sidney Lift Station	☑				☑	▪ New submersible pumps with a firm capacity of 1,000 gpm ▪ New wet well ▪ New electrical equipment ▪ New mechanical equipment ▪ New generator set ▪ New diesel pump sized for full build-out flow
6-5C	North Sidney Lift Station	☑				☑	▪ New submersible pumps with a firm capacity of 350 gpm ▪ New wet well ▪ New electrical equipment ▪ New mechanical equipment ▪ New generator set ▪ New diesel pump sized for full build-out flow
6-5D	Sidney Second Force Main	☑				☑	▪ Construct new 10-inch force main to serve the South Sidney and North Sidney lift stations
6	McCormick Woods Lift Station 3					☑	▪ Submersible triplex pumps with a firm capacity as determined by the Developer and confirmed by the City ▪ New wet well ▪ New electrical equipment ▪ New mechanical equipment ▪ New generator set ▪ New diesel pump sized for full build-out flow

Figure 8-1 6-Year CIP

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8.3 10-Year Capital Improvement Program

8.3.1 Project Descriptions

CIP 10-1: McCormick Woods Drive SW Gravity Sewer Upgrades

If development occurs in Basin 6, the existing gravity sewer could surcharge and flood during peak hour conditions. It is recommended that the pipe be upsized as necessary to prevent surcharging. This project will be funded by developers.

CIP 10-2: Flower Meadows Pump Station

The pumps, mechanical, and electrical components have reached the end of their useful life.

Replace pumps, controls and panels, level sensors, rails, and reducers connecting to existing discharge elbows. Provide free standing roof structure above the pump control panel with integrated lights to illuminate area and to protect workers from the rain with a design similar to the McCormick Ridge installation. Replace check valves, plug valves and saddles downstream of the pump station in kind. Install odor control facilities.

CIP 10-3: Bay Street Gravity Sewer Upgrades

The existing gravity sewer between Port Orchard Boulevard and the Marina Pump Station is projected to be under capacity within the 20-year planning horizon. The pipe should be upsized, or a parallel gravity sewer should be installed, to ensure sufficient hydraulic capacity and to prevent flooding and surcharging during peak hour conditions.

CIP 10-3: Port Orchard Boulevard Gravity Sewer Upgrades

The existing gravity sewers in Port Orchard Boulevard are projected to be under capacity within the 20-year planning horizon. The pipes should be upsized to ensure sufficient hydraulic capacity and to prevent flooding and surcharging during peak hour conditions. Because there are two parallel pipes, pipe bursting or pipe reaming may be used to minimize costs and disruptions during construction.

8.3.2 Summary

The projects recommended for the 10-year Capital Improvement Program (CIP) are described in Table 8-2 and illustrated on Figure 8-2.

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Table 8-2
10-Year CIP (2022-2026)

CIP No.	Project	Capacity	Obsolescence	O&M	General	Developer	Project Description
10-1	McCormick Woods Drive SW Gravity Sewer Upgrades	☑				☑	▪ Replace 1,390 lf of 10-inch pipe with 15-inch pipe from manhole 115-2-2-0200 to manhole 115-2-2-0020 ▪ May not be necessary depending on future development patterns
10-2	Flower Meadows Pump Station	☑		☑			▪ Replace pumps ▪ Replace all electrical equipment ▪ Replace all mechanical equipment ▪ Clean and re-coat wet well
10-3	Bay Street Gravity Sewer Upgrades	☑					▪ Replace 1,330 lf of 18-inch pipe with 30-inch pipe from manhole 115-2-2-0200 to manhole 115-2-2-0020
10-4	Port Orchard Boulevard Gravity Sewer Upgrades	☑					▪ Replace 5,760 lf of 12-inch pipe with 15-inch pipe from manhole 312-2-2-0220 to manhole 115-2-2-0200

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Figure 8-2 10-Year CIP

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8.4 20-year Capital Improvement Program

No additional capital projects are currently projected to be needed for the 20-year capital improvement program.

8.5 Opinions of Probable Cost

Opinions of probable project costs for the 6-year CIP are listed in Table 8-3. These projects have been defined only to a preliminary level of design with approximate dimensions. All projects will require further definition and design refinement as part of the design process.

Construction costs were estimated were provided by the City and are in 2020 dollars. The opinion of probable construction cost includes the costs to build the various components, sales tax, and contingency. Opinions of probable project costs include planning, surveying, engineering services, permitting, bid advertisement, contract award, and services during construction. No costs are included for financing, easements, right-of-way, or property acquisition.

Actual costs can and will differ from the opinions of probable costs. Volatility in the bidding climate, the number of contractors bidding on a project, and their approach to bidding and completing the work will all impact actual project costs.

Table 8-3
Opinion of Probable Project Costs, 6-Year CIP (2020-2025)

CIP No.	Project	Opinion of Probable Construction Cost[1,2]	Opinion of Probable Project Cost[1,3]
6-1	Marina Pump Station Improvements	$6,500,000	$8,000,000
6-2	Bay Street Pump Station Improvements	$975,000	$1,300,000
6-3	McCormick Lift Station 2	$3,375,000	$4,500,000
6-4	Eagle Crest Generator Set	$225,000	$300,000
6-5A	Bravo Terrace Lift Station and Force Main	3,750,000	$5,000,000
6-5B	South Sidney Lift Station	$1,875,000	$2,500,000
6-5C	North Sidney Lift Station	$1,875,000	$2,500,000
6-5D	Sidney Second Force Main	$1,200,000	$1,600,000
6-6	McCormick Woods Lift Station 3	$750,000	$1,000,000
		Estimated City Total	**$26,700,000**

Table 8-3
Opinion of Probable Project Costs, 6-Year CIP (2020-2025)

CIP No.	Project	Opinion of Probable Construction Cost[1,2]	Opinion of Probable Project Cost[1,3]

Notes:
1) All costs are in 2020 dollars and were provided by the City.
2) The opinion of probable construction cost includes the costs to build the various components, sales tax, and contingency. The construction costs is assumed to be 75 percent of total project costs, except for 6-3 which has already being designed and is currently under construction in 2020.
3) Opinions of probable project costs include planning, surveying, engineering services, permitting, bid advertisement, contract award, construction, and services during construction.

Additional improvements required as development occurs will be funded by developers under a less definite time frame. Some further sewer extensions from the existing system will also be required to serve specific parcels within the various developments. These extensions are not included in the CIP and cannot be identified until the development plan is defined, which may occur in several phases.

The City-funded 6-year capital improvement program schedule is shown as Table 8-4.

Table 8-4
6-Year Capital Improvement Program (2020-2025) in 2020 Dollars

CIP No.	Project	Project Costs per Year [1]						
		Total	2020	2021	2022	2023	2024	2025
6-1	Marina Pump Station Improvements [2]	$8,000,000	$1,000,000	$3,500,000	$3,500,000			
6-2	Bay Street Pump Station Improvements [2]	$1,300,000		$1,300,000				
6-3	McCormick Lift Station 2 [2]	$4,500,000	$4,500,000					
6-4	Eagle Crest Generator Set [2]	$300,000			$300,000			
6-5A	Bravo Terrace Lift Station and Force Main [3]	$5,000,000	$1,250,000	$3,750,000				
6-5B	South Sidney Lift Station [3]	$2,500,000		$2,500,000				
6-5C	North Sidney Lift Station [3]	$2,500,000		$2,500,000				
6-5D	Sidney Second Force Main [3]	$1,600,000	$400,000	$1,200,000				
6-6	McCormick Woods Lift Station 3 [3]	$1,000,000	$250,000	$750,000				
	City Costs	$14,100,000	$5,500,000	$4,800,000	$3,800,000			
	Developer Costs	$12,600,000	$ 1,900,000	$ 10,700,000				

Notes:
1) Opinions of probable project costs include planning, surveying, engineering services, permitting, bid advertisement, contract award, construction, and services during construction.
2) To be funded and built by the City.
3) To be funded and built by Developers.

8.6 Sewer Extensions into Undeveloped Basins

New sewer extensions will be needed to serve new developments expected in unsewered areas of the City as shown on Figure 8-3. Specific plans for the sewer extensions have not been prepared and will be the responsibility of the developer. Some of the developments shown will require local pump stations.

Major land developers will be preparing site-specific plans for street layouts, residential lot distribution, commercial parcels, sensitive area delineations, required setbacks with buffers, and other land use intentions for approval by the permitting authorities. These land use decisions, and the timing of when specific parcels are developed will influence the sewer collection facilities within these basins. The City has decided that no additional STEP units will be allowed.

Coordination between the City and the West Sound Utility District will be required as properties are developed along the fringes of their two sewer service areas to establish which agency will serve which properties. These sewer extensions are not expected to require significant financial investment by the City.

Figure 8-3 Future Sewer Extensions

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SEPA ENVIRONMENTAL CHECKLIST

Purpose of checklist:

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Instructions for Lead Agencies:

Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

Use of checklist for nonproject proposals:

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in Part B - Environmental Elements –that do not contribute meaningfully to the analysis of the proposal.

A. Background

1. Name of proposed project, if applicable:
   City of Port Orchard – 2020 Amendment to 2016 General Sewer Plan; also referred to as 'Amendment' in the following portions of this checklist.

2. Name of applicant:

City of Port Orchard Public Works Department

3. Address and phone number of applicant and contact person:

City of Port Orchard Public Works Department
216 Prospect Street
Port Orchard, WA 98366
(360)876-4991
Contact: **Jacki Brown, Utility Manager**

4. Date checklist prepared:

June, 2020

5. Agency requesting checklist:

City of Port Orchard Planning Department
Washington State Department of Ecology

6. Proposed timing or schedule (including phasing, if applicable):

The proposed date for adoption of the 2020 Amendment to 2016 General Sewer Plan is expected to be July, 2020.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

This is a non-project action amending the 2016 General Sewer Plan. In addition to the City's General Sewer Plan and the Capital Improvement Plan (CIP), incremental sanitary sewer facilities may be constructed in conjunction with private development, as they occur.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

City of Port Orchard Comprehensive Plan Update, 2018
City of Port Orchard General Sewer Plan Update, 2016
City of Port Orchard 2017 Water System Plan Update (adoption pending)
2016 Kitsap County Comprehensive Plan
West Sound Utility District Sewer Comprehensive Plan 2007
West Sound Utility District Water System Plan 2013

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

Property owners have and are expected to apply for approval of development that will require sanitary sewer service. These developments are not addressed specifically in the Amendment. The Amendment provides for necessary public sewer collection improvements necessary to support such development in accordance with the Comprehensive Plan and development codes. All project-level improvements will be subject to environmental review at the time of their application. No pending proposal will affect this non-project application.

10. List any government approvals or permits that will be needed for your proposal, if known.

The Amendment must be approved by the Washington State Department of Ecology. Review by other jurisdictions and agencies include Kitsap County, West Sound Utility District, The City of Bremerton, the City of Port Orchard City Council, Kitsap County Health District, and The Washington State Department of Health, Office of Drinking Water.

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

As needed for for demonstrating compliance with the Growth Management Act (GMA), this proposal involves adoption of amendments to the 2016 City of Port Orchard General Sewer Plan. The amendments identify three categories of action:

<u>Programmatic</u> – Updating the General Sewer Plan to address a revised 25-year population forecast for the urban growth area which has been expanded since the 2016 Plan. This will enable the City to address future needs for sanitary sewer service within the defined urban growth area.

<u>Capital Projects</u> – Updating the list of specific capital projects that are necessary to implement the General Sewer Plan. These will be included in the Comprehensive Plan Capital Improvement Program Element. Subsequent project-level environmental review will be conducted at the time these projects are proposed for implementation.

<u>Operation, Maintenance, & Repair</u> – Day-to-day and periodic projects necessary to maintain the current and future sewer system in working order are described in the General Sewer Plan as further addressed in the sewer utility operations and maintenance standards and procedures.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The service area covered by the 2016 General Sewer Plan Update includes area within the current City of Port Orchard municipal limits and portions of the designated Urban Growth Area (UGA), which includes established boundaries of Kitsap County ULID #6, as agreed upon by Kitsap County, the City of Bremerton, and West Sound Utility District. Port Orchard is located on the Kitsap Peninsula, south of Sinclair Inlet. The main body of Puget Sound is to the east.

B. Environmental Elements

1. *Earth*

a. General description of the site:

(circle one): Flat, rolling, **hilly**, steep slopes, mountainous, other _____

The City of Port Orchard is characterized by shoreline adjacent to Sinclair Inlet. The topography is generally hilly with some flat areas.

b. What is the steepest slope on the site (approximate percent slope)?

There are steep slopes within the City (100% in places), however, this non-project action will not impact slopes generally, and any project proposed under this ordinance will be reviewed separately for SEPA compliance where required.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

Soils and soil types are not generally impacted by this non-project action. An extensive discussion of the soils and their properties can be found in the *USDA Soil Survey of Kitsap County*.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

Unstable soils and steep slopes do exist but will not generally be impacted by this non-project action. Separate site-specific review will determine impacts to soils and slopes and SEPA compliance.

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.

No filling or grading is proposed as part of this non-project action. Fill or grading related to site-specific proposals under this ordinance will be reviewed separately for SEPA compliance.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

No clearing or construction is proposed as part of this non-project action.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

No construction is proposed as part of this non-project action.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

No specific measures are proposed as part of this non-project action. Each project will be evaluated as part of site-specific project review for compliance with SEPA and other regulations in the Port Orchard Municipal Code.

2. Air

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

Sewer odors have been reported for a few locations in the past. The General Sewer Plan

lists future projects that will address odors. This non-project action will have no impact on air quality. Air quality will be evaluated as part of site-specific project review and SEPA analysis.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

This non-project action will have no impact on air quality. Air quality will be evaluated as part of site-specific project review and SEPA analysis.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

The Six-year Capital Improvement Program includes improvements to McCormick Woods Pump Station No. 2 that will specifically address odor. This non-project action will have no impact on air quality. Air quality will be evaluated as part of site-specific project review and SEPA analysis.

3. Water

a. Surface Water:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

Port Orchard is bordered on the north by the waters of Puget Sound. There are numerous wetlands, streams and creeks. Impacts on shoreline, surface water, seasonal streams and wetlands will be evaluated as part of site-specific project review and SEPA analysis.

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

This non-project action will not require any work over, in or adjacent to these waters. Impacts on wetlands, surface water, seasonal streams and shoreline will be evaluated as part of site-specific project review and SEPA analysis.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

This non-project action will not require any filling or dredging. Impacts as a result of filling or dredging will be evaluated as part of site-specific project review and SEPA analysis.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

This non-project action will not require any surface water withdrawals or diversions. The proposed permit, policy, and ordinances will provide additional protection for all water bodies. Impacts of this type will be evaluated as part of site-specific project review and SEPA analysis.

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

Some areas of the City are identified as lying within the 100-year flood plain (as defined in the Federal Flood Disaster Protection Act of 1973.) This non-project action does not

impact flood areas specifically. Any proposal involving flood areas will comply with Chapter 20.170*, Flood Damage Prevention,* of the Port Orchard Municipal Code and will be evaluated as part of site-specific review and SEPA analysis.

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

This non-project action will not require discharge of materials to surface waters. The proposed ordinance will prohibit the discharges of waste materials and provide additional protection for all water bodies. Impacts of this type will be evaluated as part of site-specific project review and SEPA analysis

b. Ground Water:

1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

This non-project action will not require any withdrawal of groundwater or discharge to groundwater. Impacts of this type will be evaluated as part of site-specific project review and SEPA analysis.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

This non-project action will not require any discharge of waste material to groundwater. Existing health regulations control the location, type and density of development which utilizes septic tanks.

c. Water runoff (including stormwater):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

This non-project action will not impact surface and stormwater. Stormwater flow and outfall will be evaluated as part of site-specific project review and SEPA analysis

2) Could waste materials enter ground or surface waters? If so, generally describe.

This non-project action will not impact ground or surface waters and the goals to minimize the effects of discharge of waste materials. Possible contamination of ground or surface waters with waste materials will be evaluated as part of site-specific project review and SEPA analysis.

3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

This non-project action will not have an effect on drainage patterns. Possible impacts of drainage patterns will be evaluated as part of site-specific project review and SEPA analysis.

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:

This non-project action will not have effect on surface, ground or runoff waters. Possible surface, ground, and runoff water impacts will be evaluated as part of site-specific project review and SEPA analysis.

4. Plants

a. Check the types of vegetation found on the site:

_X__deciduous tree: alder, maple, aspen, other
_X__evergreen tree: fir, cedar, pine, other
_X__shrubs
_X__grass
_X__pasture
_X__crop or grain
____ Orchards, vineyards or other permanent crops.
____ wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
____water plants: water lily, eelgrass, milfoil, other
_X__other types of vegetation

b. What kind and amount of vegetation will be removed or altered?

This non-project action will have no effect on vegetation removal or alteration. Vegetation removal and enhancement will be evaluated as part of site-specific project review and SEPA analysis.

c. List threatened and endangered species known to be on or near the site.

This non-project action will have no impact on threatened or endangered species. Flora will be evaluated as part of site-specific project review and SEPA analysis.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

No landscaping is proposed as part of this non-project action. Open space and planting regulations will be evaluated as part of site-specific project review and SEPA analysis.

e. List all noxious weeds and invasive species known to be on or near the site.

This non-project action will have no impact on noxious weeds and invasive species. Flora will be evaluated as part of site-specific project review and SEPA analysis.

5. Animals

a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site.
birds: **hawk, heron, eagle, songbirds, other;**
mammals: **deer, bear, beaver, sea lion, raccoon, other;**
fish: **bass, salmon, trout, herring, shellfish, other.**

b. List any threatened and endangered species known to be on or near the site.

This non-project action will not have an effect on wildlife. Effects of proposals on wildlife

will be evaluated as part of site-specific project review and SEPA analysis.

c. Is the site part of a migration route? If so, explain.

Puget Sound, including Port Orchard, is an important nesting place, feeding area, and wintering ground for thousands of birds in the Pacific Flyway. This non-project action will have no effect on migration patterns. Effects on wildlife will be evaluated as part of site-specific project review and SEPA analysis.

d. Proposed measures to preserve or enhance wildlife, if any:

This non-project action will not have an effect on animals or birds. Effects of individual proposals on wildlife will be evaluated as part of site-specific project review and SEPA analysis.

e. List any invasive animal species known to be on or near the site.

This non-project action will not have an effect on animals or birds. Effects of individual proposals on wildlife will be evaluated as part of site-specific project review and SEPA analysis.

6. Energy and Natural Resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

No energy is required for this non-project action. Energy consumption will be evaluated as part of site-specific project review and SEPA analysis and in accordance with the Washington State Energy Code which the City has adopted.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

This non-project action will have no effect on solar access. Solar access will be evaluated as part of site-specific project review and SEPA analysis.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

None. The City uses the Washington State Energy Code to enhance electricity conservation. Energy conservation features will be evaluated as part of site-specific project review and SEPA analysis.

7. Environmental Health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

This non-project action not effect threats of environmental health hazards. Environmental health hazards will be evaluated as part of site-specific project review and SEPA analysis.

1) Describe any known or possible contamination at the site from present or past uses.

No possible contamination has been identified as part of this non-project action. Possible contamination will be evaluated as part of site-specific project review and SEPA analysis.

2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

No hazardous chemicals have been identified as part of this non-project action. Possible hazardous chemicals/conditions will be evaluated as part of site-specific project review and SEPA analysis.

3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

No toxic or hazardous chemicals will be stored, used, or produced as part of this non-project action.

4) Describe special emergency services that might be required.

No special emergency measures will be required as part of this non-project action.

5) Proposed measures to reduce or control environmental health hazards, if any:

No measures to reduce or control environmental health hazards are necessary as part of this non-project action.

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

Existing noise types and levels have no impacts on this non-project action. Existing noise types of individual proposals will be evaluated as part of site-specific project review and SEPA analysis

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

This non-project action will have no effect on noise levels. Noise impacts of individual proposals will be evaluated as part of site-specific project review and SEPA analysis.

3) Proposed measures to reduce or control noise impacts, if any:

Noise levels in Port Orchard are regulated under Chapter 9.24 *(Offenses Against Public Order)* of the Port Orchard Municipal Code.

8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

Land uses in Port Orchard are primarily residential and commercial, with some industrial,

light Manufacturing, recreation, and open space.

b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?

Not applicable to this non-project action. Conversion of agriculture or forest lands will be evaluated as part of site-specific project review and SEPA analysis.

1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:

Not applicable to this non-project action. Impacts on agriculture or forest lands will be evaluated as part of site-specific project review and SEPA analysis.

c. Describe any structures on the site.

The proposal is a non-project action and includes no specific development activity. Any structures in individual proposals will be evaluated as part of site-specific project review and SEPA analysis.

d. Will any structures be demolished? If so, what?

This non-project action requires no demolition. Any future proposed demolition will be evaluated as part of site-specific project review and SEPA analysis.

e. What is the current zoning classification of the site?

Zoning in Port Orchard is according to the currently adopted Zoning Map, which is available at the Department of Planning and Community Development.

f. What is the current comprehensive plan designation of the site?

Comprehensive Plan designations are according to the Comprehensive Plan Land Use Map in accordance with GMA requirements. The Land Use Map is available at the Department of Planning and Community Development.

g. If applicable, what is the current shoreline master program designation of the site?

The proposal is a non-project action and includes no specific development activity. Any individual proposals that have current shoreline master program designation will be evaluated as part of site-specific project review and SEPA analysis.

h. Has any part of the site been classified as a critical area by the city or county? If so, specify.

Critical Areas in Port Orchard include wetlands, aquifer recharge areas, geologically hazardous areas, continuous and seasonal streams and waters including the waters of Puget Sound, and fish and wildlife habitat. These areas are inventoried in the City's Comprehensive Plan and are regulated under Chapter 20.162, *Critical Areas Regulations*, of the Port Orchard Municipal Code. Environmentally sensitive areas will be evaluated as part of site-specific project review and SEPA analysis.

i. Approximately how many people would reside or work in the completed project?

Not applicable to this non-project action.

j. Approximately how many people would the completed project displace?

Not applicable to this non-project action.

k. Proposed measures to avoid or reduce displacement impacts, if any:

Not applicable to this non-project action.

L. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

This non-project action will have no effect on existing and projected land uses and plans.

m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:

This non-project action will have no impact to agricultural and forest lands of long-term commercial significance.

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

Not applicable to this non-project action.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

No units will be eliminated by this non-project action.

c. Proposed measures to reduce or control housing impacts, if any:

Not applicable.

10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

This non-project action has no effect on building and structure height. Building and structure height are regulated in the Zoning Code.

b. What views in the immediate vicinity would be altered or obstructed?

This non-project action will have no impact on views. View alteration and obstruction is regulated by the Zoning Code and the Shoreline Management Master Program. Views will be evaluated as part of site-specific project review and SEPA analysis.

b. Proposed measures to reduce or control aesthetic impacts, if any:

Not applicable.

11. Light and Glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

This non-project action will not produce any light and/or glare. Light and glare will be evaluated as part of site-specific project review and SEPA analysis.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

This non-project action will not produce any light and/or glare. Light and glare will be evaluated as part of site-specific project review and SEPA analysis.

c. What existing off-site sources of light or glare may affect your proposal?

This non-project action will not be affected by any light and/or glare. Off-site sources of light and glare will be evaluated as part of site-specific project review and SEPA analysis.

d. Proposed measures to reduce or control light and glare impacts, if any:

Not applicable.

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

Not applicable to this non-project action.

b. Would the proposed project displace any existing recreational uses? If so, describe.

This non-project action will not displace any existing recreational uses.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

Not applicable.

13. Historic and cultural preservation

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers ? If so, specifically describe.

Not applicable to this non-project action. Archeological and historic resources are recorded at the State of Washington Departments of Community, Trade and Economic Development, Office of Archeology and Historic Preservation. Cultural resources will be evaluated as part of site-specific project review and SEPA analysis.

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

Not applicable to this non-project action. Archeological and historic resources are recorded at the State of Washington Departments of Community, Trade and Economic Development, Office of Archeology and Historic Preservation. A map and listing of all the historic resources are available at the City of Port Orchard Department of Community Development, 720 Prospect Street, Port Orchard, WA 98366.

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

Not applicable to this non-project action. Cultural resources will be evaluated as part of site-specific project review and SEPA analysis.

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

Not applicable to this non-project action. Cultural resources will be evaluated as part of site-specific project review and SEPA analysis.

14. Transportation

a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.

State Route 16 connects the City with the balance of the Kitsap Peninsula. The City has an extensive system of arterials, suburban and local public streets. Location of, and access to, public streets and highways will be evaluated as part of site-specific project review and SEPA analysis.

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

The City is served by Kitsap Transit. Kitsap Transit operates a commuter system which is coordinated with the ferry schedules in neighboring communities in addition to a dial-a-ride service. Location of, and access to, public transit will be evaluated as part of site-specific project review and SEPA analysis.

c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?

This is a non-project action. Parking requirements are contained in Chapter 20.124, *Development Standards – Parking and Circulation,* of the Port Orchard Municipal Code.

d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

This non-project action will not create the need for any new or improved streets. Transportation facilities will be evaluated as part of site-specific project review and SEPA analysis.

e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

The various modes of transportation will be evaluated as part of site-specific project review and SEPA analysis.

f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?

This non-project action will have no direct impact on vehicular trips. Trip generation and the cumulative impact will be evaluated as part of site-specific project review and SEPA analysis.

g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

This non-project action will have no impact on agricultural or forest land operations. Agricultural or forest land operations impacts will be evaluated as part of site-specific project review and SEPA analysis.

h. Proposed measures to reduce or control transportation impacts, if any:

This non-project action will have no direct impact on transportation. Transportation impacts will be evaluated as part of site-specific project review and SEPA analysis.

15. Public Services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.

This non-project action will have little effect on public services, except as would normally be required for individual proposals. The need for public services will be evaluated as part of site-specific project review and SEPA analysis.

b. Proposed measures to reduce or control direct impacts on public services, if any.

This non-project action will have no effect on public services.

16. Utilities

a. Circle utilities currently available at the site:

electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.

c. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

This non-project action will not directly affect public utilities. The provision of utilities for individual proposals will be evaluated as part of site-specific project review and SEPA analysis.

C. Signature

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: _____

Name of signee Jacki Brown

Position and Agency/Organization Utility Manager; City of Port Orchard

Date Submitted: June 12, 2020

D. Supplemental sheet for nonproject actions

(**IT IS NOT NECESSARY** to use this sheet for project actions)

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment.

When answering these questions, be aware of the extent the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?

This non-project action will have no effect on discharges to water bodies. No negative impacts will occur in terms of emissions to air; production or storage of toxic or hazardous substances; or production of noise.

Proposed measures to avoid or reduce such increases are:

Effects on discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise will be reviewed as part of site-specific review and SEPA analysis.

2. How would the proposal be likely to affect plants, animals, fish, or marine life?

This non-project action will have no effects to plants, animals, fish or marine life. All specific effects to plant, animal, fish and other marine life will be evaluated as part of site-specific project review and SEPA analysis.

Proposed measures to protect or conserve plants, animals, fish, or marine life are:

Effects of individual proposals on wildlife and marine life will be reviewed as part of site-specific review, and SEPA analysis.

3. How would the proposal be likely to deplete energy or natural resources?

This non-project action will not affect energy or natural resources. Effects of individual proposals on energy or natural resources will be reviewed as part of site-specific review, and SEPA analysis.

Proposed measures to protect or conserve energy and natural resources are:

Construction of individual projects is reviewed under the Washington State Energy Code, adopted under Chapter 20.200, *Building Code,* of the Port Orchard Municipal Code.

4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection; such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?

This non-project action will not impact environmentally sensitive areas or other areas designated for protection. Effects of individual proposals on environmentally sensitive areas or other protected areas will be reviewed as part of site-specific review, and SEPA analysis.

Proposed measures to protect such resources or to avoid or reduce impacts are:

Impacts of individual proposals on environmentally sensitive areas or other protected areas will be reviewed as part of site-specific review, and SEPA analysis.

5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?

This non-project action will not affect land or shoreline use. Impacts of individual proposals on land or shoreline use will be reviewed as part of site-specific review, and SEPA analysis.

Proposed measures to avoid or reduce shoreline and land use impacts are:

Impacts of individual proposals on land or shoreline use will be reviewed as part of site-specific review, and SEPA analysis.

6. How would the proposal be likely to increase demands on transportation or public services and utilities?

This non-project action will have no effect on the demand for transportation or public service and utilities.

Proposed measures to reduce or respond to such demand(s) are:

None. Projects approved under this ordinance are subject to review by the City Planning Department, Public Works Department, and the local Health District.

7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.

This non-project proposal is consistent with all local, state and federal requirements for the protection of the environment.

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CITY OF PORT ORCHARD
Department of Community Development
720 Prospect Street, Port Orchard, WA 98366
Phone: (360) 874-5533
planning@cityofportorchard.us
www.cityofportorchard.us

CITY OF PORT ORCHARD
PROGRAMMATIC DETERMINATION OF NON-SIGNIFICANCE (DNS)
2020 Update to the 2016 Port Orchard General Sewer Plan

DESCRIPTION OF PROPOSAL: The City of Port Orchard has prepared an update to the City's 2016 General Sewer Plan ("Plan"). The updated Plan provides a summary of the City's current sewage capacities and an analysis of the impact of projected growth on the City's sewage collection and conveyance system, and proposes a Capital Improvement Program to alleviate system deficiencies. It also documents the sewer utility's policies, operations and maintenance practices, and financial condition. The Plan complies with the Washington State Department of Ecology regulations for a general sewer plan as provided in WAC 173-240-050.

PROPONENT: City of Port Orchard Public Works Department

LOCATION OF PROPOSAL: This is a programmatic, non-project action to update the 2016 General Sewer Plan, which covers areas within the current City limits and portions of the City's urban growth area.

LEAD AGENCY: City of Port Orchard

SEPA OFFICIAL: Nicholas Bond, Development Director
City of Port Orchard
720 Prospect Street
Port Orchard, WA 98366

DETERMINATION: The lead agency for this proposal has determined that it does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(c). The decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request. The proposal (update of the Plan) is a non-project action per WAC 197-11-774; however, all project-level improvements will be subject to individual environmental review at the time of their application.

The DNS is issued pursuant to WAC 197-11-340(2)(a)(v); the lead agency will not act on this proposal for 15 days from the date of issue.

DATE OF ISSUANCE: **June 26, 2020**

COMMENT DEADLINE: **July 13, 2020 at 4:00 pm**

Ordinance No. XXX – Tracked Changes of Proposed Amendments

13.04.040 Sewer capital facility charge – Extension of sewer.

(1) The sewer capital facility charge is designed to mitigate the impact of new demands on the existing sewer system and to require new users to pay their fair share of the value of the sanitary sewer system. The sewer capital facilities charge applies to new construction, changes in use, and building modifications that increase the total number of equivalent residential units (ERUs). An ERU is 180 gallons per day for nonresidential connections. An ERU for residential connections is one single-family dwelling unit, whether detached or attached and configured as an apartment unit, condominium unit, townhouse unit or any other configuration. The ERU consumption is based upon metered water consumption or comparison to similar accounts when metered water consumption data is not readily available.

(a) Sewer Capital Facility Charge – Exception. The following exception applies to the assessment of the sewer capital facility charge. All four elements of the below-listed requirements must be present to qualify for the exception:

(i) A nonresidential account paid the sewer capital facility charge at the time the property connected to the city's sewer system;

(ii) Sometime after the original connection, the property owner decides to construct a new building, change the original use, or modify the original building;

(iii) After the building improvements are completed, the total sewer usage for the nonresidential account will be equal to or less than the usage at the time of the original connection; and

(iv) The new construction, change in use, or building modification has not resulted in additional direct connection to the city's sewer system or the establishment of an additional sewer account.

(2) The sewer capital facility charge consists of two components: the general facility fee (GFF) and the wastewater treatment facility fee (WTFF). The general facility fee and the wastewater treatment facility fees are set forth in POMC 13.04.025. The properties within Divisions 1 through 10, inclusively, of the McCormick Woods Land Company shall have a wastewater treatment fee which is set forth in POMC 13.04.025.

(3) The sewer capital facility charge shall be paid before connecting to the city sanitary sewer system, or before changing the use, or increasing the total ERU count above the amount for which a sewer capital facility charge has been paid. If work is to be done that requires a sewer capital facility charge, it shall be paid before a permit shall be issued.

(4) If, after connection of a nonresidential service, the actual sewer usage has increased or the property use expanded so that there are a greater number of ERUs being used on the property than for which the sewer capital facility charge was paid, the property owner shall pay to the city an additional sewer capital facility charge based upon the new or expanded use. The additional sewer capital facility charge shall be based upon the charge rate in effect at the time the increased use is requested and/or detected, whichever first occurs.

(5) A credit against the sewer capital facilities charge may be applied for those property owners that paid their assessments in full through a local improvement district formed by the city, where such local improvement district is formed to finance the construction of any of the improvements that are a basis for calculating the value of the sewer capital facilities charge. The credit shall be equal to the amount of the property owner's principal assessment, not including interest and penalties. The credit shall be applied at the time of payment of the sewer capital facilities charge and shall not be used to reduce any assessments in the local improvement district.

(6) Upon petition to the city engineer by the property owner or developer, ~~A~~a credit against the sewer ~~sewer capital facilities~~general facility fee ~~charge~~ (GFF) may be applied for those ~~property owners~~developers that construct at their own expense and with the City's advance agreement any of the improvements that are a basis for calculating the value of the sewer ~~capital~~ general facilities charge and result in upsized capacity over that required to serve their development, or for those property owners that pay a latecomer's fee toward those same improvements. The credit shall be ~~the smaller of the following~~shall be memorialized in a ~~CFC~~GFF credit agreement approved by the City Council.~~:~~

The value of the credit shall be determined by the city engineer and shall be based on (1) conformance of the work with the utility plan of the city, and (2) shall be proportional to the additional capacity provided by the ~~off-site~~ planned capital improvement. The credit shall be limited to the development identified in the initial credit request that installed the upsized or additional infrastructure. The agreement may allow for phased projects.

Alternatively, the value of the credit shall be the amount paid as a latecomer fee towards the improvement(s).

~~(a)That portion of the design and construction costs of a latecomer's agreement that is directly applicable to the construction of the improvements that are a basis for the value of the sewer capital facilities charge; or~~

~~(b) That proportionate amount of the sewer capital facilities charge that is attributable to the sewer facilities either constructed by the property owner or paid through a latecomer's fee.~~

The total credit, if any, as provided in this subsection shall not exceed the amount of the

total general facility fee due and payable to the utility that applies to the property or development requiring service because of the improvements.

The full actual costs of drafting and processing the GFF agreement shall be reimbursed by the owner or applicant prior to final City Council action on the agreement, to such extent that the actual costs exceed the initial application fee.

The process for approving a GFF credit shall be as follows:

(a) The developer shall request a credit in writing in conjunction with permit submittal or a pending permit application and include the following eligibility information in their request:
    i. Identification of the project proposed for construction as listed in the City's sewer general facilities charge calculation.
    ii. Identification of the size of the facility to be constructed in ERUs as well as share of the facility in ERUs to be used by the proposed development.
    iii. Identification of the sizing requirements for the proposed facility based on the City's adopted sewer system plan.
(b) The City may create an application form to accompany credit requests.
(c) The Director shall verify the information provided under section (a) above and may seek peer review at the requestor's expense of any technical reports submitted to justify proposed credit amounts or proportionate shares.
(d) Upon verification of eligibility, the Director shall prepare a GFF credit agreement for City Council consideration.
(e) The GFF credit agreement may allow the deferral of GFF charges pending completion of the facility to be constructed by the developer in exchange for credit. In such cases, the agreement shall stipulate that no certificates of occupancy shall be granted prior to substantial completion of the facility and/or payment of the GFF. This deferral is allowed because the total amount of GFFs owed to the Ceity may not be known prior to project completion and verification of construction costs. Where credit amounts are anticipated to be less that the total GFFs owed to the city, the agreement shall stipulate that a partial payment be made towards the GFFs owed for a project. The City Council may require a performance bond if deferral is allowed.
(f) Credit shall not be granted until the Director has deemed the capital project as completed.
(g) Project completion shall not occur until:
    i. The City deems it substantially complete; and
    ii. All punch list items are finished; and
    iii. The facility passes final inspection; and
    iv. The Developer has put a 2-year warranty and maintenance bond in place; and
    v. The City releases the performance bond (if applicable); and

vi. The Developer has completed all property dedications; and

vii. The Developer has provided the City with a Bill of Sale for the improvements containing the certified construction costs (stamped by licensed engineer) to the City for determination of the maximum credits available under this Agreement. The Director shall have the authority to approve or reject project cost estimates and may request additional information in support of certified construction cost estimates.

(h) The City will confirm completeness of the Project by issuing a Final Notice of Completeness to the Developer.

(i) Upon certification of completeness, the developer shall pay any balance owed for GFFs within 90 days or prior to the city's issuance of a certificate of occupancy, whichever occurs first.

For illustrative purpose only, a GFF credit is calculated as follows:

Example #1 – Anticipated Developer's General Facility Fees Exceed Project Cost Eligible for Credit		
Certified Project Cost	**$ 1,000,000**	
Developer's Engineer Certified ERU's	**250**	25%
Excess (Future) Engineer Certified ERU's	**750**	75%
Total Project ERU's	**1,000**	
Project Cost Attributed to Developer Connections	**$ 250,000**	
Project Cost Attributed to Excess (Future) Connections	**$ 750,000**	
Project Cost Eligible for Credit	**$ 750,000**	
Sewer General Facility Fee's	**$ 8,525**	
Anticipated Developer's General Facility Fee's	**$ 2,131,250**	
Estimated Sewer General Facility Fee Credit	**$ 2,131,250**	
Total Credit Available (based on GFF at time of permit issuance)	**$ 750,000**	

Example #2 – Project Cost Eligible for Credit Exceeds Anticipated Developer's General Facility Fees		

Certified Project Cost	$ 10,000,000	
Developer's Engineer Certified ERU's	250	25%
Excess (Future) Engineer Certified ERU's	750	75%
Total Project ERU's	1,000	
Project Cost Attributed to Developer Connections	$ 2,500,000	
Project Cost Attributed to Excess (Future) Connections	$ 7,500,000	
Project Cost Eligible for Credit	**$ 7,500,000**	
Sewer General Facility Fee's	$ 8,525	
Anticipated Developer's General Facility Fee's	$ 2,131,250	
Estimated Sewer General Facility Fee Credit	$ 2,131,250	
Total Credit Available (based on GFF at time of permit issuance)	**$ 2,131,250**	

(7) The City Council may require the GFF credit agreement to prorate GFF credits across all lots or units in a development when the amount of GFFs owed by the developer exceeds the amount of credit requested.

(8) The above provisions notwithstanding, the amount of credit shall not exceed the amount of the sewer ~~capital~~general facilities charge for the property to which the credit is being applied.

(9) At the time the sewer ~~-general~~capital facilities charge is paid, a sewer inspection fee shall be paid per lateral connection to the main. The sewer inspection fee is set forth in POMC 13.04.025.

(10) All materials shall comply with the requirements of the city. If the city supplies any materials, the cost of these plus overhead and sales tax will be paid by the customer.

(11) Extension of Sewer to Property Contiguous to the City Shall Annex – Exception. Property lying within the urban growth boundary and contiguous to the Port Orchard city limits shall annex to the city as a condition of sewer connection. In the alternative, the city may elect to defer annexation and require the owner to execute a utility extension agreement as described in subsection (11) of this section.

(12) Requirement for Utility Extension Agreement.

(a) Property lying within the urban growth area which is not contiguous to the Port Orchard city limits shall be permitted water and/or sewer connection only upon entering

into an appropriate agreement with the city containing a waiver of protest to annexation/limited power of attorney authorizing annexation at such time as the city determines the property should be annexed to the city. Application for extension of utilities is subject to the following provisions:

(i) Application fees as established by the city council shall be paid upon the submittal of a signed utility extension agreement (UEA) requesting water and/or sewer for property outside the city, but located within the urban growth area;

(ii) The applicant will bear the entire cost of water and/or sewer connection pursuant to this chapter, as written or hereafter amended, subject to any provision in effect at the time of connection for latecomer reimbursement;

(iii) The applicant will be subject to all applicable provisions of this chapter, as written or hereafter amended, for extension of city utilities, the payment therefor, and all enforcement provisions therein; and

(iv) The UEA shall not be executed prior to the time formal application is made for approval of the project for which utilities are requested. The term of said agreement shall terminate at the time any project application or approval expires or is revoked for any reason. A new agreement shall also be required for any extension of project application or approvals or when the director of planning determines that a substantial change or addition has been made to the project.

(b) The city may disconnect the utilities for failure of the applicant or his/her successors or assigns, for violation of this chapter, or for violation of the terms and conditions of the UEA.

(c) Following execution, such agreement shall be recorded by the city clerk in the chain of title for such property in the records of the Kitsap County auditor.

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To: WRIA 15 Watershed Restoration and Enhancement Committee

From: Stacy Vynne McKinstry, Washington Department of Ecology, Chair of the WRIA 15 Committee

Date: February 1, 2021

Re: Review of WRIA 15 FINAL Draft Watershed Restoration and Enhancement Plan

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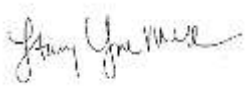
Thank you for all of your hard work over the last two and a half years to develop the WRIA 15 Watershed Restoration and Enhancement Plan. At our January 25, 2021 Committee meeting, we completed the Committee's review of the watershed plan. We are distributing the final draft watershed plan for entities to complete their review based on the process and schedule provided to the chair. It is at the discretion of each entity to determine their local review process.

The watershed plan is available on the WRIA 15 Committee's website. In addition, the website includes links to the WRIA 15 Committee Overview brochure and template presentation to support your review.

The WRIA 15 Committee will meet on April 15, 2021 via WebEx to vote on final plan approval. RCW 90.94.030 (3) states that "… all members of a watershed restoration and enhancement committee must approve the plan prior to adoption." The watershed plan will not be submitted to Ecology for review, NEB determination, or consideration for adoption until all Committee representatives have approved the watershed plan.

If you have any questions or needs during your review, you can reach me at 425-516-4385 or at stacy.vynnemckinstry@ecy.wa.gov.

Sincerely,



Stacy Vynne McKinstry

WRIA 15 Kitsap Watershed Restoration and Enhancement Committee Overview

More information

Visit the Streamflow Restoration webpage[1].

Contact information

Stacy Vynne McKinstry
Committee Chair
Svyn461@ecy.wa.gov
425-649-7114

ADA accommodations

To request ADA accommodation including materials in a format for the visually impaired, call Ecology at 360-407-6872 or visit ecology.wa.gov/accessibility. For TTY or Relay Service call 711 or 877-833-6341.

Background

In January 2018, the Legislature passed the Streamflow Restoration law to help restore streamflow levels. Its purpose is to support robust, healthy, and sustainable salmon populations while providing water for homes in rural Washington.

The law calls for local watershed planning and project implementation that improve streamflows. The Department of Ecology funds implementation through its competitive grant program[2].

Specifically, the law directs Ecology to convene Watershed Restoration and Enhancement Committees in eight watersheds surrounding Puget Sound. Each of these committees will develop a watershed restoration and enhancement plan (watershed plan).

The plan must identify projects that: offset the potential impacts future permit-exempt domestic groundwater withdrawals will have on streamflows; and, provide a net ecological benefit[3] (NEB) to the Water Resource Inventory Area (WRIA).

All members of the WRIA 15 Watershed Restoration and Enhancement Committee must approve the watershed plan prior to submitting its plan to Ecology for review. Ecology must complete its review by June 30, 2021. If it meets the requirements of the law and guidance, Ecology will adopt the plan.

[1] https://ecology.wa.gov/StreamflowRestoration
[2] https://ecology.wa.gov/StreamflowGrants
[3] Final Guidance for Determining Net Ecological Benefit
https://fortress.wa.gov/ecy/publications/summarypages/1911079.html

Committee Membership

The Streamflow Restoration law instructed Ecology to chair the WRIA 15 Watershed Restoration and Enhancement Committee[4] and invite entities in the watershed to participate, including tribal governments, county governments, city governments, Department of Fish and Wildlife, the largest non-municipal water purveyor, and interest groups. Local governments on the Committee selected organizations to represent agricultural interests, the residential construction industry, and environmental interests through a nomination process. The WRIA 15 Committee also added "ex officio" members, who were not listed in the law but provide valuable information and perspective. **Members include:**

- Skokomish Tribe
- Squaxin Island Tribe
- Suquamish Tribe
- Port Gamble S'Klallam Tribe
- Puyallup Tribe
- King County
- Kitsap County
- Mason County
- Pierce County
- City of Port Orchard
- City of Bremerton
- City of Gig Harbor
- City of Bainbridge
- City of Poulsbo
- Washington Department of Ecology
- Washington Department of Fish and Wildlife
- Kitsap Public Utility District
- Kitsap Building Association, representing the residential construction industry
- Kitsap Conservation District, representing agricultural interests
- Great Peninsula Conservancy, representing environmental interests
- Mason-Kitsap Farm Bureau - ex officio member
- Washington Water Service - ex officio member

Approval Overview

Ecology, the WRIA 15 Committee, and technical consultants have been developing the plan since October 2018. The Committee aims to finalize the plan for local review and Committee approval in late 2020 or early 2021. The law states that all members of the Committee must approve the plan prior to adoption. The law also requires that Ecology adopt the watershed plan by June 30, 2021, so Ecology must begin review of approved plans in early 2021.

Committee members are expected to communicate frequently on Committee decisions and progress to their decision making bodies throughout the planning process. This includes thorough review and feedback of materials developed for the plan, such as technical memos and optional sections not required to be part of the plan. Ecology staff are available to support Committee members in preparing briefings, presentations, or other materials to ensure that decision making bodies are informed throughout the process and prepared to make a decision on the final plan.

Reaching consensus on all plan components will be critical for final plan approval. Only plans approved by all members of the Committee will move forward for Ecology review.

[4] https://www.ezview.wa.gov/site/alias__1962/37327/watershed_restoration_and_enhancement_-_wria_15.aspx

Steps to Completing the Plan

Step 1. Delineate Subbasins - Mid 2019

Divide the watershed into suitably sized areas that allow for meaningful analysis of the relationship between new consumptive water use and water offset projects.

Step 2. Project Growth of New Permit-Exempt Domestic Wells – Mid 2019

Estimate the number of new homes built between 2018 and 2038 that will rely on wells as their water source.

Step 3. Estimate New Consumptive Water Use – Late 2019

Estimate the consumptive water use associated with new permit-exempt domestic wells for each subbasin. The consumptive water use estimate includes the indoor household use and outdoor use to maintain a noncommercial lawn or garden.

Step 4. Identify Projects and Actions – Early 2020

Identify projects and actions that offset impacts associated with new consumptive water use. The Committee may, at their discretion, decide to include projects and actions that go above and beyond the minimum requirements as time and resources allow.

Step 5. Additional Plan Components (Not Required) – Mid 2020

The statute and the NEB guidance suggest other plan components for the Committee to consider. For example, adaptive management and a NEB evaluation of the plan.

Step 6. Plan Finalization and Committee Review – Mid 2020

Compile technical memos summarizing methods, data and results, and additional plan components previously reviewed by the Committee.

Step 7. Approve Plan and Submit to Ecology – Early 2021

The Committee must submit the locally approved watershed plan within a reasonable time (early first quarter 2021) for Ecology review prior to the adoption deadline of June 30, 2021.

Step 8. Ecology Review – Early 2021

Ecology will begin its review after the plan is formally approved by the Committee. **If Ecology adopts the plan by the statutory deadline of June 30, 2021, the planning process is completed.**

Step 9. If Needed: Plan Finalization and Rulemaking – After June 30, 2021

If the Committee does not approve the plan or if Ecology determines that a locally approved plan does not meet the law's requirements prior to June 30, 2021, then Ecology is required to finalize the plan and begin a rulemaking process. Per the statute, Ecology will prepare a draft plan to submit to the Salmon Recovery Funding Board (SRFB) and request that the SRFB provide a technical review and recommendations to amend the final draft plan, if necessary, to result in a net ecological benefit to instream resources within the WRIA. Ecology will then consider the recommendations and finalize the plan. After adoption of the final plan, Ecology must initiate rule making within six months to incorporate recommendations into rules adopted under 90.94, 90.22 or 90.54 RCW. Ecology then has two years to adopt amended rules.

Timeline for Watershed Planning Process

2018 / Early 2019	Mid 2019	Late 2019	Early 2020	Mid 2020
	Steps 1 & 2	Step 3	Step 4	Step 5
· Law is passed · Committees are formed · Agreement on operating principles	· Delineate subbasins · Project growth of new permit-exempt domestic wells	· Estimate new consumptive water use	· Identify projects and actions	· Consider Additional Plan Components (Not Required)

Late 2020	Early 2021	Early 2021	After June 30, 2021
Step 6	Step 7	Step 8	Step 9
· Plan Finalization and Committee Review	· Local and Committee Plan Approval · Submit approved plan to Ecology in early Quarter 1 of 2021	If approved, Ecology: · Reviews and makes NEB determination · Adopts plan, if meets requirements of law and guidance, by June 30, 2021	If plan is not adopted, Ecology: · Prepares plan · Submits plan to SRFB for technical review and recommendations · Finalizes and adopts plan · Initiates rulemaking