

RESOLUTION NUMBER 200  
**Kitsap County Public Works Sewer Utility  
Six-Year Capital Facilities Plan 2024-2029**

**WHEREAS**, in compliance with RCW 90.48 and Kitsap County Code 13.12, the Kitsap County Department of Public Works/Sewer Utility has conducted an assessment of the County owned/operated municipal sanitary sewer systems and has developed a six-year capital facilities plan for financing municipal sanitary sewer system improvements for the period of January 1, 2024 through December 31, 2029 and,

**WHEREAS**, in further compliance with said RCW, the Board of Kitsap County Commissioners has held a public hearing this 27th day of November 2023,

**BE IT THEREFORE RESOLVED**, by the Board of Kitsap County Commissioners, that the attached Six-Year Capital Facilities Plan for Kitsap County Department of Public Works/Sewer Utility be adopted as set forth in detail, for the period mentioned, consisting of four pages, which are incorporated and made part of this Resolution.

**BE IT FURTHER RESOLVED**, that, pursuant to RCW 36.70A.130(2)(a)(iv) and KCC 21.08.040, the Board of County Commissioners hereby incorporates portions of the Sewer Utility Six-Year Capital Facilities Plan into the Kitsap County Comprehensive Plan, Capital Facilities Plan. This incorporation by reference replaces and updates the Kitsap County Sanitary Sewer section, specifically the subsection entitled "Capital Facilities Projects and Financing: 2023-2028." The portions of the Sewer Utility Six-Year Capital Facilities Plan that are incorporated are only those components necessary for the Capital Facilities Plan and set forth in the current Capital Facilities Plan.

DATED this 27 day of November, 2023.



ATTEST:

*Dana Daniels*

Dana Daniels  
Clerk of the Board

**BOARD OF COUNTY COMMISSIONERS  
KITSAP COUNTY, WASHINGTON**

*Charlotte Garrido*

CHARLOTTE GARRIDO, Chair

*Katherine T. Walters*

KATHERINE T. WALTERS, Commissioner

*Christine Rolfes*

CHRISTINE ROLFES, Commissioner

Kitsap County Sewer Utility 6-Year Capital Facility Plan (CFP) 2024-2029

Project Type  
T - Treatment  
C/C - Collection and Conveyance

Project Purpose  
A. Capacity  
B. Outdated Infrastructure/Redundancy  
C. Water Quality / Water Resource  
D. Energy Efficiency  
E. Planning

Table SS.3-1. Capital Facilities Projects and Financing 2024-2029

CFP #	Project #	Project Identification & Scope	Project Type	Project Purpose(s)	Project Phase	2024	2025	2026	2027	2028	2029	6-Year CFP Total	Estimated Total Project Cost**
1	PR000847	<p><b>CKTP HVAC Upgrades</b> The project is to replace the HVAC system including duct work and controls in the Admin and Process Buildings with more efficient equipment. The existing HVAC system in the Administration Bldg does not maintain the a reliable temperature required in the laboratory for accreditation.</p> <p>Proportionate share from Poulsbo and Keyport USN *</p>	T	B & D	Eng/Permitting	\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 200,000	\$1,750,000
					Const/CM	\$ -	\$ 750,000	\$ 750,000	\$ -	\$ -	\$ -	\$ 1,500,000	
					<b>Total</b>	\$ 200,000	\$ 750,000	\$ 750,000	\$ -	\$ -	\$ -	\$ 1,700,000	
2	PR001012	<p><b>CKTP Solids and Liquid Hauled Waste Upgrades</b> Long term solids improvements and development liquid hauled waste facilities. Elements of the project include adding a third digester, new thickening process, in-plant pump station, septage and FOG receiving stations, and rehabilitate an existing digester</p> <p>Proportionate share from Poulsbo and Keyport USN *</p>	T	A & B	Eng/Permitting	\$ 11,032,000	\$ 1,833,300	\$ 1,833,300	\$ -	\$ -	\$ -	\$ 14,698,600	\$82,000,000
					Const/CM	\$ 21,661,000	\$ 30,642,700	\$ 13,398,700	\$ -	\$ -	\$ -	\$ 65,702,400	
					<b>Total</b>	\$ 32,693,000	\$ 32,476,000	\$ 15,232,000	\$ -	\$ -	\$ -	\$ 80,401,000	
3	PR000859	<p><b>Suquamish TP Upgrades</b> Replace existing headworks (screening and grit removal) and construct an influent EQ tank. Replace corroded piping and obsolete valve actuators. Perform upgrades to conform to NFPA 820 fire code deficiencies.</p>	T	B	Eng/Permitting	\$ 1,796,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,796,000	\$10,500,000
					Const/CM	\$ -	\$ 7,000,000	\$ 1,704,000	\$ -	\$ -	\$ -	\$ 8,704,000	
					<b>Total</b>	\$ 1,796,000	\$ 7,000,000	\$ 1,704,000	\$ -	\$ -	\$ -	\$ 10,500,000	
4	NEW	<p><b>CKTP Third Secondary Clarifier &amp; Replace RAS Pumps</b> Construct 3rd clarifier. Two clarifiers not capable of meeting Ecology redundancy requirements for the clarifiers to be capable of 75% of the peak flow with one clarifier out of service by 2028</p> <p>Proportionate share from Poulsbo and Keyport USN *</p>	T	A & B	Eng/Permitting	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,643,750	\$ 1,643,750	\$9,900,000
					Const/CM	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
					<b>Total</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,643,750	\$ 1,643,750	
5	NEW	<p><b>CKTP RAS Box Hydraulic Eval and Improvements</b> Evaluate hydraulics at splitter box and construct improvements to eliminate short circuiting of RAS and implement flow pacing of RAS flow. Will be required if regulated to improve TIN effluent concentration consistently below 10 mg/L</p> <p>Proportionate share from Poulsbo and Keyport USN *</p>	T	C	Eng/Permitting	\$ -	\$ -	\$ -	\$ -	\$ 328,000	\$ -	\$ 328,000	\$2,000,000
					Const/CM	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,672,000	\$ 1,672,000	
					<b>Total</b>	\$ -	\$ -	\$ -	\$ -	\$ 328,000	\$ 1,672,000	\$ 2,000,000	
6	PR000586	<p><b>CKTP Nutrient Process Upgrades (Methanol Tank)</b> Construct second methanol storage tank. Required to flow pace methanol pumps and meet a 10 mg/L TIN effluent concentration.</p> <p>Proportionate share from Poulsbo and Keyport USN *</p>	T	C	Eng/Permitting	\$ 239,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 239,000	\$1,500,000
					Const/CM	\$ 1,261,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,261,000	
					<b>Total</b>	\$ 1,500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,500,000	

CFP #	Project #	Project Identification & Scope	Project Type	Project Purpose(s)	Project Phase	2024	2025	2026	2027	2028	2029	6-Year CFP Total	Estimated Total Project Cost**
7	PR001013	<u>SCADA System Upgrades</u> Long term upgrades to the Supervisory Control and Data Acquisition (SCADA) system to improve communications between all the pump stations and treatment plants. Proportionate share from Poulsbo and Keyport USN *	T	B	Eng/Permitting	\$ 100,000	\$ 200,000	\$ 200,000	\$ 615,000	\$ 421,000	\$ 210,000	\$ 1,746,000	\$3,300,000
		Const/CM			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
		<b>Total</b>			<b>\$ 100,000</b>	<b>\$ 200,000</b>	<b>\$ 200,000</b>	<b>\$ 615,000</b>	<b>\$ 421,000</b>	<b>\$ 210,000</b>	<b>\$ 1,746,000</b>		
8	NEW	<u>CKTP Recycled Water Upgrades</u> Complete CKTP facilities to produce recycled water. Proportionate share from Poulsbo and Keyport USN *	T	C	Eng/Permitting	\$ -	\$ -	\$ 200,000	\$ -	\$ -	\$ -	\$ 200,000	\$1,200,000
		Const/CM			\$ -	\$ -	\$ 1,000,000	\$ -	\$ -	\$ -	\$ 1,000,000		
		<b>Total</b>			<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,200,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,200,000</b>		
9	NEW	<u>Replace KTP, STP, and MTP UV Disinfection Systems</u> Replace Kingston TP, Suquamish TP, and Manchester TP UV disinfection systems due to obsolescence and energy inefficiency.	T	B & D	Eng/Permitting	\$ -	\$ -	\$ -	\$ 441,000	\$ -	\$ -	\$ 441,000	\$2,740,000
		Const/CM			\$ -	\$ -	\$ -	\$ 2,299,000	\$ -	\$ -	\$ 2,299,000		
		<b>Total</b>			<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 2,740,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 2,740,000</b>		
10	PR000744	<u>Sewer Utility Facility Plans</u> Update Sewer Utility 20-year facility plans for all four County sewer service areas. Updates include treatment and collection/conveyance recommendations. Proportionate share from Poulsbo and Keyport USN *	T&C/C	E	Eng/Permitting	\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 200,000	\$3,763,000
		Const/CM			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
		<b>Total</b>			<b>\$ 200,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 200,000</b>		
11	PR000054	<u>Pump Station 3 Upgrades</u> Replacement of existing PS 3 with new facility, in conjunction with Port of Silverdale, incl. Old Town Silverdale sewers. Elements of the project include a new building, wetwell, pumps, drives, motors, instrumentation controls, and electrical.	C/C	A, B, & D	Eng/Permitting	\$ 400,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 400,000	\$8,134,000
		Const/CM			\$ -	\$ -	\$ 4,451,500	\$ 2,000,000	\$ -	\$ -	\$ 6,451,500		
		<b>Total</b>			<b>\$ 400,000</b>	<b>\$ -</b>	<b>\$ 4,451,500</b>	<b>\$ 2,000,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 6,851,500</b>		
12	PR000860	<u>Johnson Rd to Norum Rd Pipeline Replacement</u> The project is to replace the existing forcemain with a new upsized pipe for capacity and replace outdated material. Project includes 4,300 LF of 24-inch pipe. Poulsbo taking the lead on engineering design* Proportionate share from Poulsbo *	C/C	A & B	Eng/Permitting	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$7,430,000
		Const/CM			\$ -	\$ 6,880,000	\$ -	\$ -	\$ -	\$ -	\$ 6,880,000		
		<b>Total</b>			<b>\$ -</b>	<b>\$ 6,880,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 6,880,000</b>		
13	PR000064	<u>Third Lemolo Siphon</u> The project will construct a third siphon under Liberty Bay for capacity and redundancy. City of Poulsbo will conduct pre-design and permitting effort. Proportionate share from Poulsbo *	C/C	A & B	Eng/Permitting	\$ -	\$ -	\$ -	\$ 500,000	\$ 603,000	\$ -	\$ 1,103,000	\$8,000,000
		Const/CM			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
		<b>Total</b>			<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 500,000</b>	<b>\$ 603,000</b>	<b>\$ -</b>	<b>\$ 1,103,000</b>		

CFP #	Project #	Project Identification & Scope	Project Type	Project Purpose(s)	Project Phase	2024	2025	2026	2027	2028	2029	6-Year CFP Total	Estimated Total Project Cost**
14	PR001014	<u>Pump Station 4 and CK Piping Upgrades</u> The project will increase capacity and upgrade pump station 4 including new wetwell, pumps, drives, motors, instrumentation controls, and generator. Replace 2,050 LF of forcemain and 640 LF of gravity piping in Old Town, Silverdale and adjacent to Pump Station 4.	C/C	A & B	Eng/Permitting	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$12,164,000
					Const/CM	\$ 5,525,000	\$ 5,525,000	\$ -	\$ -	\$ -	\$ -	\$ 11,050,000	
					<b>Total</b>	\$ 5,525,000	\$ 5,525,000	\$ -	\$ -	\$ -	\$ -	\$ 11,050,000	
15	PR000861	<u>Navy Yard City I&amp;I Repair</u> Repair of collection system elements to eliminate infiltration and inflow into the treatment system. Various locations in Navy Yard City and Sherman Heights.	C/C	B	Eng/Permitting	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$2,400,000
					Const/CM	\$ 400,000	\$ 400,000	\$ 400,000	\$ 400,000	\$ 400,000	\$ 400,000	\$ 2,400,000	
					<b>Total</b>	\$ 400,000	\$ 400,000	\$ 400,000	\$ 400,000	\$ 400,000	\$ 400,000	\$ 2,400,000	
16	PR000059	<u>Old Military Rd. Piping Upgrades</u> Replacing existing sewer on Old Military Road from Steele Creek to Waaga Way to increase capacity.	C/C	A & B	Eng/Permitting	\$ 1,000,000	\$ 1,000,000	\$ -	\$ -	\$ -	\$ -	\$ 2,000,000	\$12,200,000
					Const/CM	\$ -	\$ -	\$ -	\$ -	\$ 5,100,000	\$ 5,100,000	\$ 10,200,000	
					<b>Total</b>	\$ 1,000,000	\$ 1,000,000	\$ -	\$ -	\$ 5,100,000	\$ 5,100,000	\$ 12,200,000	
17	PR001230	<u>Pump Station 24 Emergency Upgrades</u> Emergency upgrades to PS 24 in north CK due to criticality and excessive lead times for equipment to replace pumps, upgrade controls, and reconfigure piping and valves.  Proportionate share from Poulsbo and Keyport USN *	C/C	B	Eng/Permitting	\$ 900,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 900,000	\$4,000,000
					Const/CM	\$ 3,100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,100,000	
					<b>Total</b>	\$ 4,000,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,000,000	
18	NEW	<u>Replace Pump Station 53 and Forcemain</u> Replace pump station in Suquamish to increase firm capacity to approximately 1,200 gpm and replace 1,100 LF forcemain along McKinstry with 10-inch pipe.	C/C	A & B	Eng/Permitting	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,142,750	\$ 1,142,750	\$6,900,000
					Const/CM	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
					<b>Total</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,142,750	\$ 1,142,750	
19	NEW	<u>Replace Pump Station 54 and Forcemain</u> Replace pump station in Suquamish to increase firm capacity to approximately 1,200 gpm and replace 900 LF of forcemain with 10-inch diameter.	C/C	A & B	Eng/Permitting	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,114,000	\$ 1,114,000	\$6,500,000
					Const/CM	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
					<b>Total</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,114,000	\$ 1,114,000	
20	NEW	<u>Replace Pump Station 13</u> Replace aging pump station in CK maintain 400 gpm capacity. Construct all new station including wet well, generator, pumps and equipment, electrical and controls.	C/C	B	Eng/Permitting	\$ -	\$ -	\$ -	\$ -	\$ 532,000	\$ -	\$ 532,000	\$3,200,000
					Const/CM	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,668,000	\$ 2,668,000	
					<b>Total</b>	\$ -	\$ -	\$ -	\$ -	\$ 532,000	\$ 2,668,000	\$ 3,200,000	
21	NEW	<u>Replace Pump Station 41 and Upsize Forcemain</u> Replace Kingston pump station with firm capacity of 630 gpm. Replace 1400 LF with 8-inch diameter forcemain along West Kingston Rd. Install standby generator. LS is 50 years old and is directly on the Appletree Cove shoreline.	C/C	A & B	Eng/Permitting	\$ -	\$ -	\$ 600,000	\$ -	\$ -	\$ -	\$ 600,000	\$3,700,000
					Const/CM	\$ -	\$ -	\$ -	\$ 3,100,000	\$ -	\$ -	\$ 3,100,000	
					<b>Total</b>	\$ -	\$ -	\$ 600,000	\$ 3,100,000	\$ -	\$ -	\$ 3,700,000	

CFP #	Project #	Project Identification & Scope	Project Type	Project Purpose(s)	Project Phase	2024	2025	2026	2027	2028	2029	6-Year CFP Total	Estimated Total Project Cost**
22	NEW	<b>Pump Station 71 Upgrade and Upsize Forcemain</b> Upgrade pump station to firm capacity of 790 gpm. Upgrade mechanical, electrical, instrumentation, and and controls. Replace 9,500 LF forcemain along West Kingston Rd with 8-inch diameter.	C/C	A & B	Eng/Permitting	\$ -	\$ -	\$ -	\$ 1,233,000	\$ -	\$ -	\$ 1,233,000	\$7,400,000
					Const/CM	\$ -	\$ -	\$ -	\$ -	\$ 6,167,000	\$ -	\$ 6,167,000	
					<b>Total</b>	\$ -	\$ -	\$ -	\$ 1,233,000	\$ 6,167,000	\$ -	\$ 7,400,000	
<b>Totals</b>						\$ 47,814,000	\$ 54,231,000	\$ 24,537,500	\$ 10,588,000	\$ 13,551,000	\$ 13,950,500	\$ 164,672,000	\$ 200,681,000

**Summary: Costs and Revenues**

Costs:								
Capacity Projects	\$ 39,618,000	\$ 45,881,000	\$ 20,283,500	\$ 6,833,000	\$ 11,870,000	\$ 9,000,500	\$ 133,486,000	
Non-capacity Projects	\$ 8,196,000	\$ 8,350,000	\$ 4,254,000	\$ 3,755,000	\$ 1,681,000	\$ 4,950,000	\$ 31,186,000	
<b>Total Project Costs</b>	<b>\$ 47,814,000</b>	<b>\$ 54,231,000</b>	<b>\$ 24,537,500</b>	<b>\$ 10,588,000</b>	<b>\$ 13,551,000</b>	<b>\$ 13,950,500</b>	<b>\$ 164,672,000</b>	
Revenues:								
Sewer Revenue Bonds	\$ -	\$ 35,000,000	\$ 15,000,000	\$ -	\$ -	\$ -	\$ 50,000,000	
DOE State Revolving Fund Loan	\$ 9,850,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,850,000	
DOE Puget Sound Nutrient Reduction Grant	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 100,000	
Department of Defense Grant	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Public Works Trust Fund Loan	\$ 5,000,000	\$ 5,000,000	\$ -	\$ -	\$ -	\$ -	\$ 10,000,000	
City of Poulsbo Proportionate Share	\$ 8,063,648	\$ 12,227,189	\$ 2,848,842	\$ 623,000	\$ 752,800	\$ 705,150	\$ 25,220,629	
USN Keyport Proportionate Share	\$ 1,239,009	\$ 890,307	\$ 474,332	\$ 20,480	\$ 24,942	\$ 117,407	\$ 2,766,477	
Sewer Fees/Construction Fund	\$ 23,561,342	\$ 1,113,504	\$ 6,214,326	\$ 9,944,521	\$ 12,773,258	\$ 13,127,943	\$ 66,734,894	
<b>Balance</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	

\* The City of Poulsbo will pay a proportionate share of the cost of the following projects in accordance with the sewer service contact with Kitsap County  
 CKTP Projects - 20%  
 Lemolo Shores and Lemolo Siphon - 100.0%  
 Pump Station 24 Emergency Upgrades - 61.8%

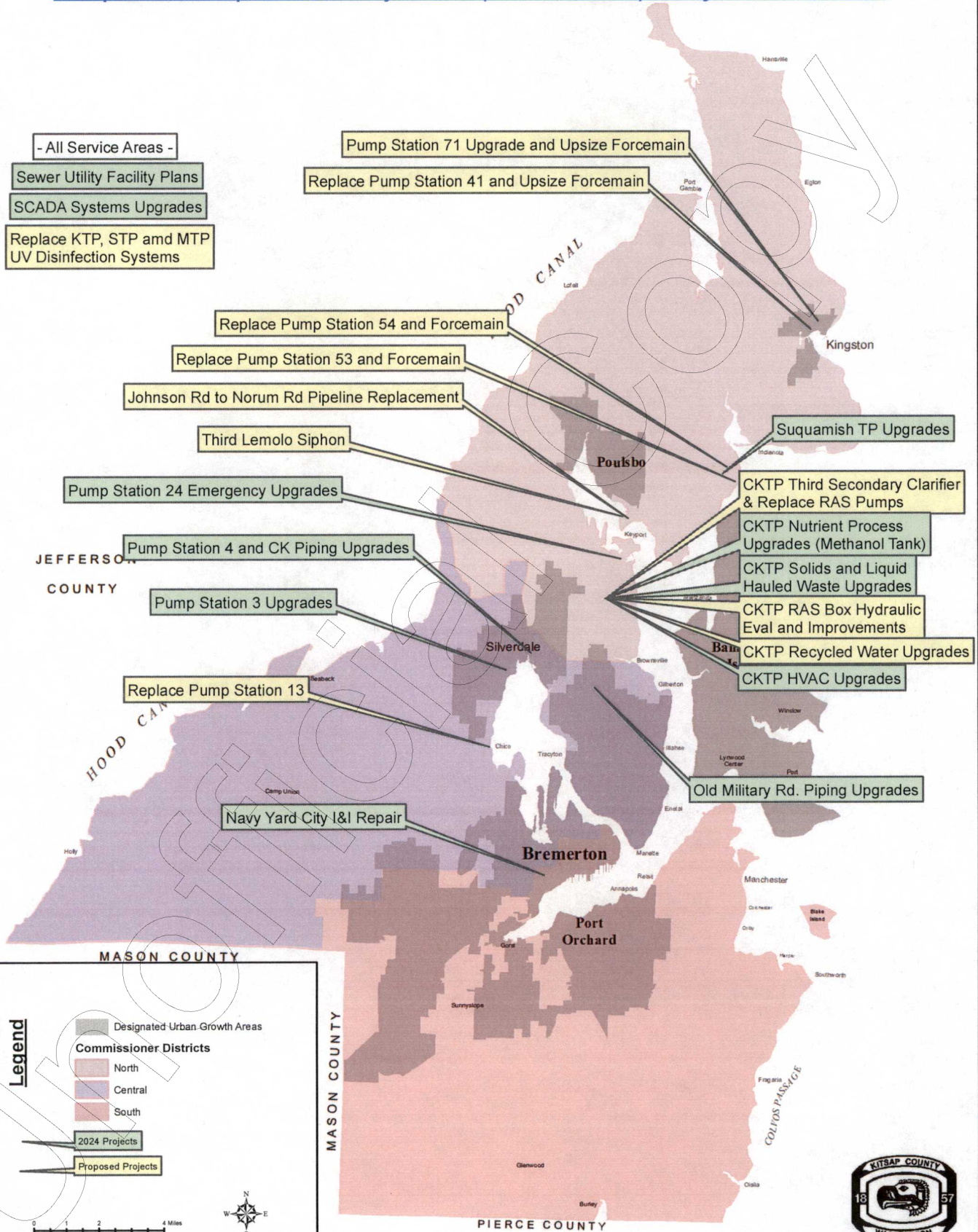
\* The Keyport USN Base will pay a proportionate share of the cost the following projects in accordance with the sewer service contract with Kitsap County  
 CKTP Projects - 3.33%  
 Pump Station 24 Emergency Upgrades - 7.7%

\*\* The estimated total project costs include costs prior to and after the 2024 to 2029 time frame.

# Kitsap County Sewer Utility Division

## Proposed Capital Facility Plan (2024-2029) Project Locations

- All Service Areas -
- Sewer Utility Facility Plans
- SCADA Systems Upgrades
- Replace KTP, STP and MTP UV Disinfection Systems



Pump Station 71 Upgrade and Upsize Forcemain

Replace Pump Station 41 and Upsize Forcemain

Replace Pump Station 54 and Forcemain

Replace Pump Station 53 and Forcemain

Johnson Rd to Norum Rd Pipeline Replacement

Third Lemolo Siphon

Pump Station 24 Emergency Upgrades

Pump Station 4 and CK Piping Upgrades

Pump Station 3 Upgrades

Replace Pump Station 13

Navy Yard City I&I Repair

Suquamish TP Upgrades

CKTP Third Secondary Clarifier & Replace RAS Pumps

CKTP Nutrient Process Upgrades (Methanol Tank)

CKTP Solids and Liquid Hauled Waste Upgrades

CKTP RAS Box Hydraulic Eval and Improvements

CKTP Recycled Water Upgrades

CKTP HVAC Upgrades

Old Military Rd. Piping Upgrades

**Legend**

- Designated Urban Growth Areas
- Commissioner Districts
  - North
  - Central
  - South
- 2024 Projects
- Proposed Projects

0 1 2 4 Miles

