



*“Have a plan. Follow the plan, and you’ll be surprised
how successful you can be.”*

- Paul “Bear” Bryant, Football Coach (1913-1983)

CHAPTER 4: PUBLIC FACILITIES & INFRASTRUCTURE

This chapter describes existing Keyport specific public facilities and infrastructure as they related to Keyport goals, policies, and projects. The following components are intended as a component of the Keyport Community plan and are referenced in further detail in the Kitsap County Capital Facilities Element adopted in December 11, 2006.

4.1 Naval and other Federal Facilities

Keyport Naval Undersea Warfare Center has a proud history and tradition of dedicated technical expertise in the unique world of undersea warfare. The Naval Undersea Warfare Engineering Center at Keyport is the second oldest of the county's military installations and was constructed in 1910 and activated in 1914 with a total appropriation of \$145,000. Today, the base has approximately

4,400 military and civilian personnel (300 military personnel, 3,300 federal civilian employees, and 800 private contractors).

Since 1914, Keyport has existed by federal authority to serve the public trust by providing Test, Training, and Evaluation services; Life-cycle support; and maintenance of Fleet Material Readiness. The Division operates and maintains unique national assets in the precision ranges and in the technologically unique maintenance and repair facilities. Established in the 1950's, the ranges were the first three dimensional underwater tracking ranges in the world.

Keyport's Naval Undersea Warfare Station Vision is to be the Center for:

- Integrated Undersea Warfare Systems Dependability
- Integrated Mine and Undersea Warfare Supportability
- Undersea Vehicle Maintenance and Engineering

Keyport's Naval Undersea Warfare Station Facilities

Keyport Naval Undersea Warfare Station's facility covers 243 acres with more than 160,000 square feet of industrial shops. Additional buildings include administrative offices, officer's quarters, and Keyport's major tourist facility, the Naval Undersea Museum. The base sports a boat launch, a large picnic area on a lagoon, and a number of hiking trails on "Radio Hill" used by employees during lunch breaks. The Keyport Naval Undersea Warfare Station also has two piers, designated as Pier 1 and Pier 2. Pier 1 has a moorage length of 495 ft, a width of 76 ft, and an alongside depth of 21 ft. Pier 2 has a moorage length of 950 ft, a width of 48 ft, and an alongside depth of 19 ft.

Keyport Post Office

The post office is conveniently located in downtown Keyport at 1998 State Highway 308 NE. The building has been at its current location since 1968. The post office offers postal boxes, mailing, package materials, and stamps. Peak hours tend to be around mid-morning and in the evening when most users return from work. No expansion or renovations are planned; however, users have stated the preference for an additional access. If an additional access were provided, a drive through mail drop could be provided, allowing for a smoother traffic flow during peak hours.

4.2 Sewer Collection & Treatment

The Keyport community lies within the Central Kitsap wastewater collection and conveyance system service area. The Central Kitsap collection and conveyance system delivers wastewater to the Central Kitsap Wastewater Treatment Plant (CKWWTP) through a system of over 100 miles of collector pipes, 44 pump stations, and over 35 miles of force main or gravity interceptors. The contributing

flows are conveyed to the treatment plant via two main interceptors, one from northern portions of the service area and one from the south. Wastewater treatment is provided at the Central Kitsap Wastewater Treatment Plant which is a regional facility designed to serve the central area of Kitsap County. The facility began operating in 1979 as a conventional activated sludge - secondary treatment facility. The treatment plant provides sewage service for the cities of Silverdale, Keyport, and Poulsbo, the Central Kitsap area, the Naval Submarine Base Bangor, and the Naval Undersea Warfare Engineering Station at Keyport.

The effluent from the Central Kitsap Treatment Plant is discharged to Port Orchard Bay, Puget Sound. The effluent is discharged approximately 3,200 feet offshore at a depth of 46 feet below mean low water.

Central Kitsap Wastewater Treatment Plant Key Facts:

- Treated 1.3 billion gallons of wastewater in 2005
- The average daily flow in 2005 was 3.5 million gallons of wastewater.
- Removed 93 percent of the suspended solids and 96 percent of the Biochemical Oxygen Demand (BOD) before discharging the effluent into Puget Sound.
- 815 dry tons of Biosolids were transported to Southwestern Washington for composting.
- Capacity average flow for the maximum month: 6.0 million gallons per day

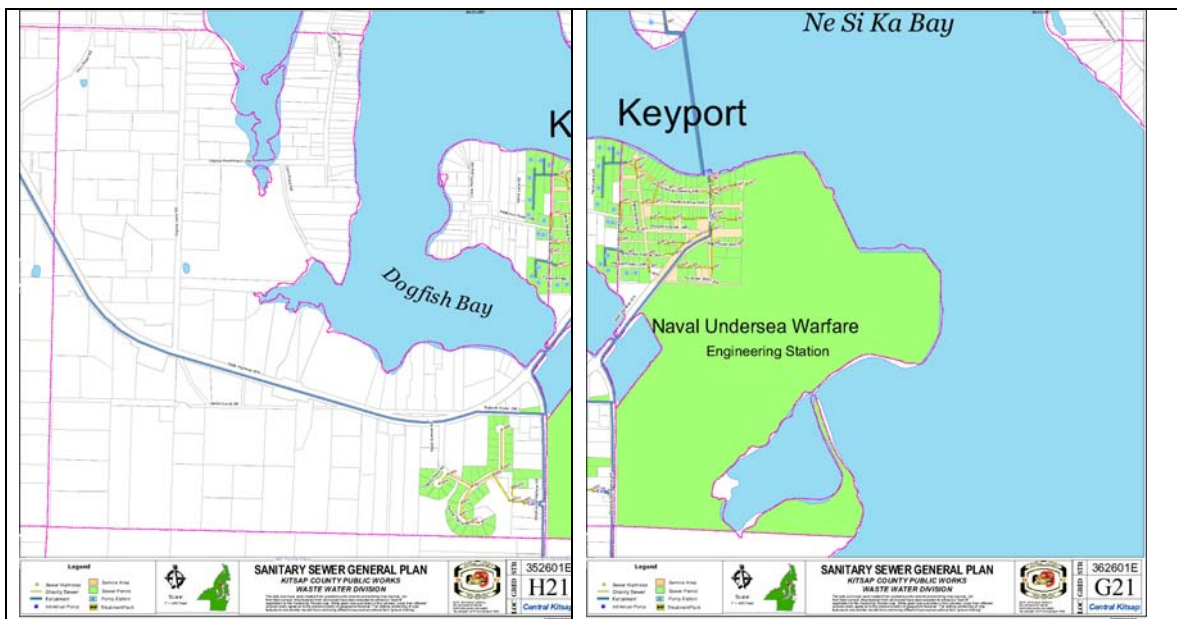


Figure 4.2.1 Keyport existing wastewater infrastructure.

Table 4.2.1. Central Kitsap Wastewater Treatment Plant Capacity Calculations		
	Average Gallons Per day	Population**
Existing Plant Capacity	6 million gallons per day	24,000 ERUs or 60,000 people
Existing Average volume	3.5 million gallons per day	14,000 ERUs or 35,000 people
Excess Capacity	2.5 million gallons per day	10,000 ERUs or 25,000 people
Total Future anticipated Keyport Population for 2025: 224 ERUs or 560 people		

* Population calculated by multiplying ERU's by the Kitsap County's average household size (2.5).

** Assumes Keyport average of 100 GPD per person.

This capacity calculations and above table concludes that even if every lot allowed under this Plan was developed and each was connected to the current sewer plant for the 224 proposed connections, it would result in little more than 2 percent of total excess available sewer capacity and 0.9 percent of total capacity. No expansion of the existing sewer treatment plant or any other capital improvements would be necessary.

Any new distribution lines would need to be funded through mechanisms such as a Port of Keyport funded project, developer extensions, or formation of a Local Improvement Districts (LID's). A LID requires petition signatures representing ownership of more than 51% of the land area within the boundary of the proposed LID. If a LID petition successfully passes, only those residents within the LID boundary would be assessed the new sewer costs.

4.3 Water Systems

Keyport is served by the Kitsap Public Utility District (KPUD or District), a municipal corporation in Washington State with incorporated boundaries the same as Kitsap County. The District is governed by an elected board of commissioners. The district's purpose is to preserve and protect the water resources of Kitsap County for the benefit of the people, and to supply public utility service. The district office is located at 1431 Finn Hill Road, in Poulsbo, Phone 360-779-7656.

As an operation of the water division and some level of services to tens of thousands of county residents, KPUD provides ongoing community and technical reports of our extensive water resource monitoring system, area specific weather and evapotranspiration (ET) data monitoring, broad based community water conservation education, and water reuse planning. Kitsap Public Utility District was designated lead agency for development of the county Coordinated Water System Plan and the county Ground Water Management Plan. In the process, KPUD initiated a comprehensive, county-wide water resource monitoring program which includes well water levels, rainfall, stream flow and Well Identification Number program.

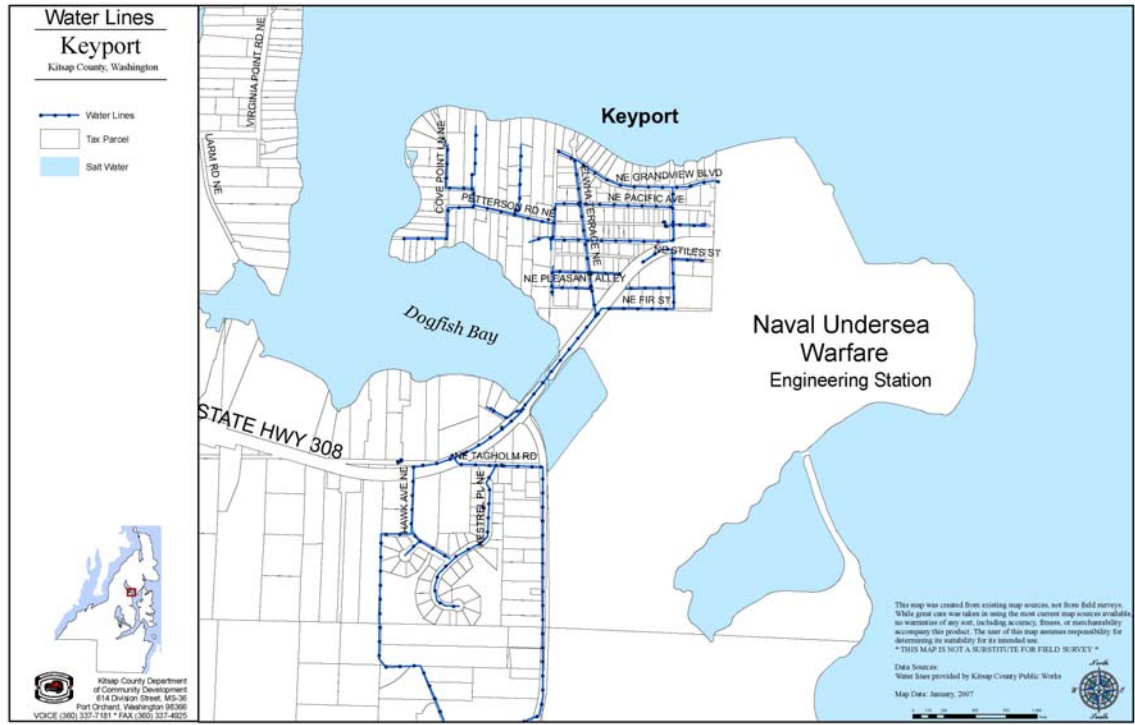


Figure 4.3.1 Keyport Water Lines.

Information from this section was compiled from Kitsap County’s Consolidated Water Plan dated May 9, 2005. Two Class A water systems exist in the Keyport Community, the Keyport Water System and the Naval Undersea Warfare Center at Keyport system. The two systems are connected with a metered 8 inch emergency intertie connection. The Keyport Water System (Public Water System ID# 38550J) includes capacity for 827 approved connections, with 386 connections existing; a source capacity of 600 gallons per minute and a storage capacity of 400,000 gallons. The Naval Undersea Warfare Center at Keyport water system (Public Water System ID# 90520E) includes 186 existing connections, a source capacity of 1,000 gallons per minute and a storage capacity of 600,000 gallons.

4.4 Surface & Storm Water Management

Storm water facilities are a tool to help minimize the impact of development on the quantity and the quality of water running off a site. The detention systems are designed to allow the water to run off the site at the same rate as it did before the property was cleared and developed. All storm water system required by Kitsap County Code Title 12 on property in the Keyport community are submitted to the County and approved before construction. Many sites are inspected during construction and most sites—whether they are maintained privately by the property owner or publicly by the County—are inspected periodically as part of a preventative maintenance program. Proper maintenance and regular inspection

of storm drainage facilities can reduce flooding and improve water quality in local streams.

Storm water facilities are engineered facilities that are designed to convey storm runoff, remove pollutants and control flow rates. These facilities include pipes, ditches, swales, filters, ponds, underground tanks and vaults. These systems are specifically designed to capture, treat, store, and then slowly release storm water runoff downstream or into the ground.

Keyport presently has a limited storm drainage system that is primarily centered around flows to the north via Washington Avenue NE and flows to the south via Highway 308. Figure 4.4.1 illustrates the location and type of existing stormwater facilities throughout Keyport.

The stormwater infrastructure in the north portion of the Keyport peninsula includes a drainage ditch along the south edge of NE Grandview Ave, a collection pipe system along NE Pacific Avenue, and a collection pipe system along the east side of NE Poulsbo Avenue, that all feed into a stormwater collection pipe system along Washington Avenue NE that outfalls near the Port of Keyport docks into Liberty Bay / Ne Si Ka Bay.

The stormwater infrastructure in the south portion of the Keyport peninsula includes a commercial pipe collection system along Poulsbo Avenue NE, a ditch along NE Stiles Road, a ditch along the southwestern portion of Washington Avenue NE, a collection pipe along the southeastern portion of Washington Avenue NE, and a ditch along the north edge of NE Harvard Avenue, that all feed into a stormwater collection system along Highway 308 that outfalls near the Naval Base Keyport entrance on the eastern edge of the Highway 308 causeway.

Additional stormwater infrastructure in the Keyport include a drainage ditch along Sunset Avenue NE that discharges into Keyport Saltwater Park and an isolated stormwater collection vault that collects on the west portion of NE Petterson Road.

The stormwater facilities often discharge through outfall or sheet flow directly into adjacent water bodies. Keyport is a community that is surrounded by water bodies that receive stormwater discharge, including Dogfish Bay, Liberty Bay, Ni Se Ka Bay, and the Port Orchard Channel. Table 4.4.1 below identifies these outfalls in the Keyport general area.



Figure 4.4.1 Keport Stormwater Facilities

The Kitsap County Health District issues Ongoing Warning Advisories for areas that periodically experience high levels of non-point pollution. Non-point pollution includes pollutants such as sewage, oil, and chemicals that run off the land into marine waters during periods of heavy rain. Consuming shellfish during these

periods may pose a threat to human health. However, it is difficult to predict when these periods might occur. A result of this non-point pollution that may impact Keyport, the Health District often advises against harvesting shellfish Liberty Bay near Poulsbo due to the uncertainties in these heavy rain incidents.

Designation of Keyport as a critical drainage area as defined by Kitsap County Code chapter 12. Section 28 would allow additional mitigation measures to be applied to Keyport to address some of the community’s specific stormwater and drainage issues.

KCC Chapter 12.28 Critical Drainage Areas

12.28.010 Special Drainage Improvements

In order to mitigate or eliminate potential drainage-related impacts on critical drainage areas, the director may require drainage improvements in excess of those required in other sections of this title.

(Ord. 199 (1996) § 9.10, 1996)

Outfall Number	Type of Infrastructure	Location
Washington Avenue Outfall	6 – 12 inch pipe	North terminus of Washington Avenue into Liberty Bay / Ne Si Ka Bay
LMK 257	6 – 12 inch pipe	Brownsville Highway into Dogfish Bay.
LMK 258	Greater than 12 inch pipe	Highway 308 causeway into Dogfish Bay (North)
LMK 259	6 – 12 inch pipe and greater than 12 inch pipe	Highway 308 causeway into Dogfish Bay (middle and South)
LMK 260	Stream or Seep/Stream	Into Dogfish Bay
LMK 261	Stream or Seep/Stream	Into Dogfish Bay
LMK 263	6 – 12 inch pipe and Stream or Seep Stream	From Virginia Point Road into Dogfish Bay
LMK 1034	Greater than 12 inch pipe	South Keyport Road into South Slough and Port Orchard Inlet.

Table 4.4.1 Keyport general area existing Marine Storm water Outfalls.

4.5 Electrical and Natural Gas Service

Electrical Service is provided to the Keyport community by Puget Sound Energy. Puget Sound Energy maintains a balanced power-supply portfolio containing a diversified mix of cost-effective resources with approximately one-third of the electricity PSE customers use comes from the utility's own power plants. Together, these plants have more than 1,800 megawatts of power-generating

capacity. The major electrical infrastructure serving Keyport includes the electrical sub-station south of Highway 308, the electrical Sub-station serving the Naval Undersea Warfare Center, and the electrical transmission lines to Poulsbo across Liberty Bay, located at the northern terminus of Elwha Terrace Road.

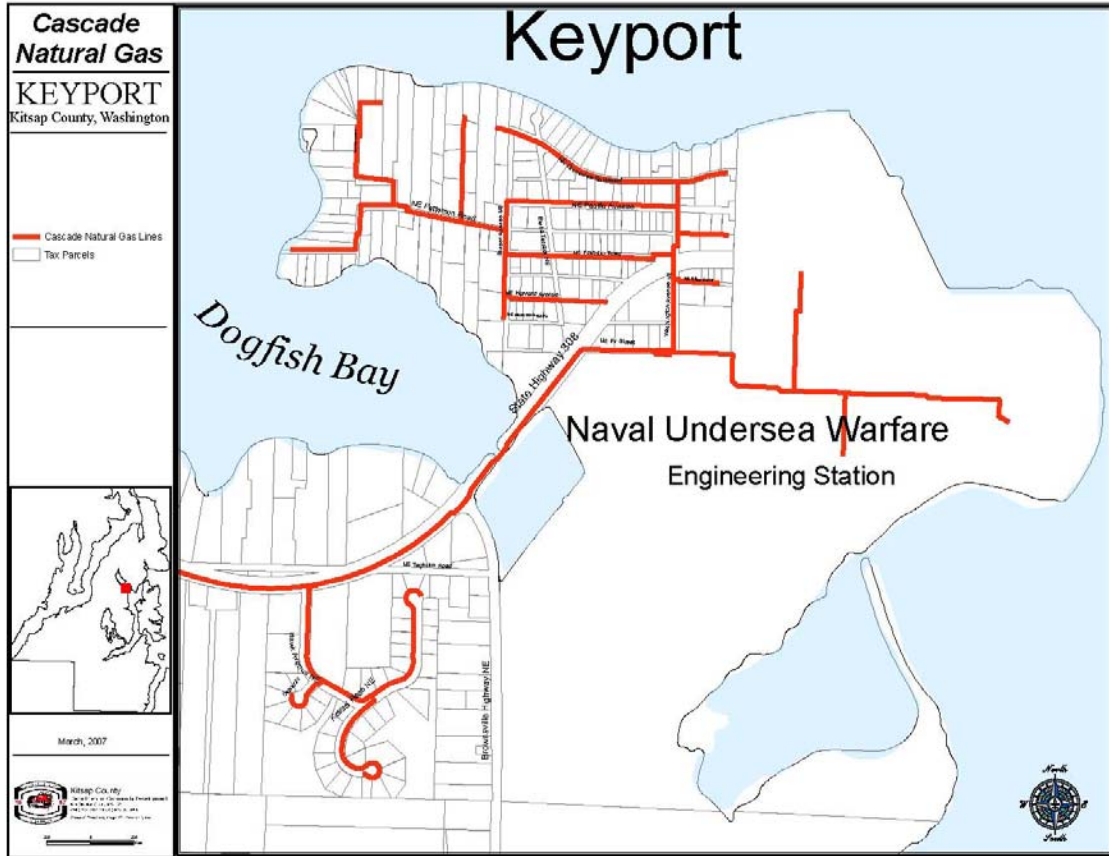


Figure 4.5.2 Keyport Natural Gas Lines

Natural Gas Service is provided to Keyport by Cascade Natural Gas, with a service center located approximately 13 miles southwest at 6313 Kitsap Way in Bremerton.

4.6 Fire Protection & Emergency Medical Services:

The Keyport community lies within the Poulsbo Fire Department district with the nearest service provided by Station #73. Station 73 is located in the downtown core of the Keyport Community at 1863 NE Pacific Avenue, Keyport, Washington 98345. Phone: 360-779-3456



Figure 4.6.1 Keyport Fire Station #73

Station 73 (Keyport Fire Station) was established in 1944 as Kitsap County Fire District 3 (KCFD 3) and merged with Kitsap county fire District 18 and the Poulsbo Fire Department in 1988. It is an unstaffed station and relies on an approximately 10 to 12-person volunteer crew who respond from home on an on call basis when alerted by the county's 911 system. Station 73 has three bays, a small office and kitchen. The station hosts the community's annual 4th of July pancake breakfast every year.

Engine 73 (#0108)

Year: 1996
 Make: E-One
 Model: Cyclone Engine: Cummins 8.3 L Diesel
 Pump: 1,250 GPM Hale
 Tank: 500 Gallons
 Color: Red & White



Aid Car 73 (#0307)

Year: 1991
 Make: Lifeline
 Model: Modular Type III
 Engine: 7.3 L Diesel
 Color: Neon Green & White



Brush Unit 73

Year: 1996
 Make: Ford
 Model: F-350
 Type 6 Wildland Engine*
 Pump: 150 GPM
 Tank: 240 Gallons
 15 Gallons of Class A Foam
 Color: Red & Silver
 *Co-op loan from Washington State Department of Natural Resources



Figure 4.6.2 Keyport Fire Station #73 equipment as of May 2007.

The Keyport community benefits from the nearby emergency medical services located at Harrison Hospital in Silverdale, approximately 7 miles to the southwest. The Harrison Hospital Silverdale campus, which opened in 2000 at the corner of Myhre Road and Ridgetop Boulevard offers 24/7 emergency care, Mother/baby care, outpatient surgery; rehabilitation services, and, advanced imaging services—including an open MRI—combined with a large array of physicians' offices complement patient care all located at this award-winning facility.

4.7 Law Enforcement

The Keyport community is served by the Kitsap County Sheriff's Office which provides police protection services through its Patrol, Detective and Support Services, and Correction Facilities Divisions. Kitsap County Law Enforcement Facilities serving Keyport include the Kitsap County sheriff's office located at 3951 Randall Way, located approximately 6 miles Southwest in Silverdale and the Kitsap County District Courts located in both Poulsbo and Silverdale.

Patrol Division. The Patrol Division provides 24-hour coverage and responds to calls for service, patrols neighborhoods and marine waters, enforces traffic laws, assures security in schools, coordinates search and rescue efforts, and trains new officers and volunteers to assist deputies with law enforcement duties.



Figure 4.7.1 Kitsap County Marine Unit Safe Boat

Detective and Support Services Division. Detectives in the Kitsap County Sheriff's Office investigate both crimes against persons such as homicide, rape, robbery and assault; and property crimes, such as fraud, identity theft, and computer crimes. The Support Services Division serves and processes court

papers, complaints, and reports, performs dispatch and reception duties, and orders, receives, and distributes equipment used by the Patrol Division, the Detective Division, and Court Security. .

Corrections Division. The mission of the Corrections Division is to manage a safe and humane environment for persons who have been charged with and/or convicted of criminal or civil offenses. The corrections facility offers a variety of inmate programs and correctional options, including Work Release, Community Inmate Worker Road Crew, Electronic Monitoring, Special Detention, and AmeriCorps.

4.8 Public Education & Library Services

The Keyport community primary education services are provided by North Kitsap School District, within the Pearson School Sub-District. The district covers 110 square miles, serves approximately 7000 students, and facilities include elementary schools (K-6), Two junior high schools (7-9), and Two high schools (10-12). Additionally, the North Kitsap School District includes a Spectrum Community School (alternative high school), the West Sound Vocational Skills Center offering career & technical education and the Marine Science Center programs.

Students from Keyport typically attend Hilder Pearson Elementary School on Central Valley Road, with upper grades at Poulsbo Middle School, and North Kitsap High School, located in Poulsbo. Transportation bus services for students are provided on a limited basis. School buildings also provide space throughout the year for community meetings, extra curricular activities, and special events. Community youth and athletic organizations also use school athletic fields and gymnasiums. Local higher education is provided mainly by Olympic College, with campuses in Bremerton and Poulsbo, and by a number of private colleges and schools in the district.

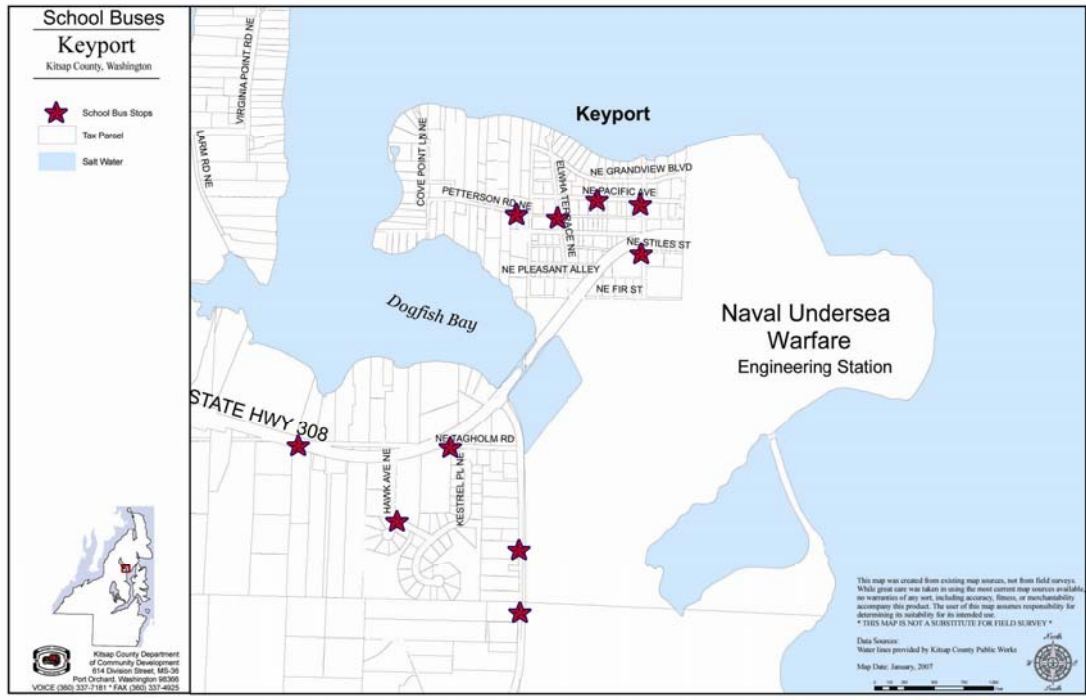


Figure 4.8.1 School Bus Stops in Keyport.

Library service is provided by Kitsap Regional Library at either the Poulsbo Library, located at 700 NE Lincoln Street, or the Silverdale Library located at 3450 NW Carlton in Silverdale. Both libraries have weekday hours beginning at 10 am and closing at either 6 pm or 8 pm, and with reduced hours on weekends. Additionally Kitsap Regional Library sponsors a Bookmobile throughout the rural communities of Kitsap County, but does not presently serve Keyport.

4.9 Solid Waste Disposal

Keyport solid waste disposal is managed by Waste Management. Waste Management offers residential, apartment, and condominium curbside services including garbage, recycling and yard waste collection for Keyport residents. Waste Management also provides commercial, industrial, construction, and demolition dumpster collection.

The nearest recycling centers for the Keyport community would be either the Silverdale solid waste drop box facility located approximately 10 miles to the Southwest at 8843 NW Dickey Road or the Poulsbo solid waste drop box facility located at 21868 NW Viking Way also approximately 10 miles away. The transfer facility handles recycling, sharps disposal, batteries, antifreeze, uncontaminated motor oil, Garbage, yard debris, and appliances. Additionally,

the Submarine Base Bangor Recycle Center is also available for Military personnel use.

4.10 Public Facilities and Infrastructure Goals and Policies

Goal 13 Encourage expansion of the existing sewer distribution system to all properties within the Keyport Limited Area of More Intense Rural Development boundary.

Policy Key-20 Encourage all new construction and remodel projects involving an increase in sewage beyond the existing capacity of the septic system to connect to sewer if within 200 feet of an existing line.

Policy Key-21 Immediately respond to all failed septic systems by notifying proper jurisdictional authority (Kitsap County Health District).

Policy Key-22 Encourage property owners on shorelines or near other critical areas to connect to the sewer system.

Policy Key-23 Create a Local Improvement District for properties west of Sunset Avenue.

Goal 14 Encourage enhanced Library Services in Keyport.

Policy Key-24 Encourage regular service of the Kitsap Regional Library Bookmobile within Keyport.

4.11 Public Facilities and Infrastructure Key Projects

Sewer Improvement District

Facilitate the creation of a Sewer Improvement District utilizing the Port of Keyport as the main organizing entity and working in conjunction with Kitsap County Public Works Department. The Port, with assistance from Kitsap County Public Works would create a minimum of two alternatives for providing sewer to parcels west of Sunset Avenue NE and a pricing structure for both proposals.

One proposal would include a centralized public pump station at the lowest point near Petterson Drive or Cove Point Lane and the second proposal would estimate individual grinder pump systems for each development that could tie into a centralized conduit or pipe within the Petterson Road right-of-way that could eventually accommodate sewerage of the all parcels west of Sunset Avenue. Funding may be implemented independently by a vote of the Port Commissioners, a vote of the entire Port District as component of a larger port improvement project, or a private Local Improvement District.