



**WATER REUSE SUMMARY PLAN
for the
Budd Inlet Treatment Plant
Reclaimed Water Facility**

January 26, 2026

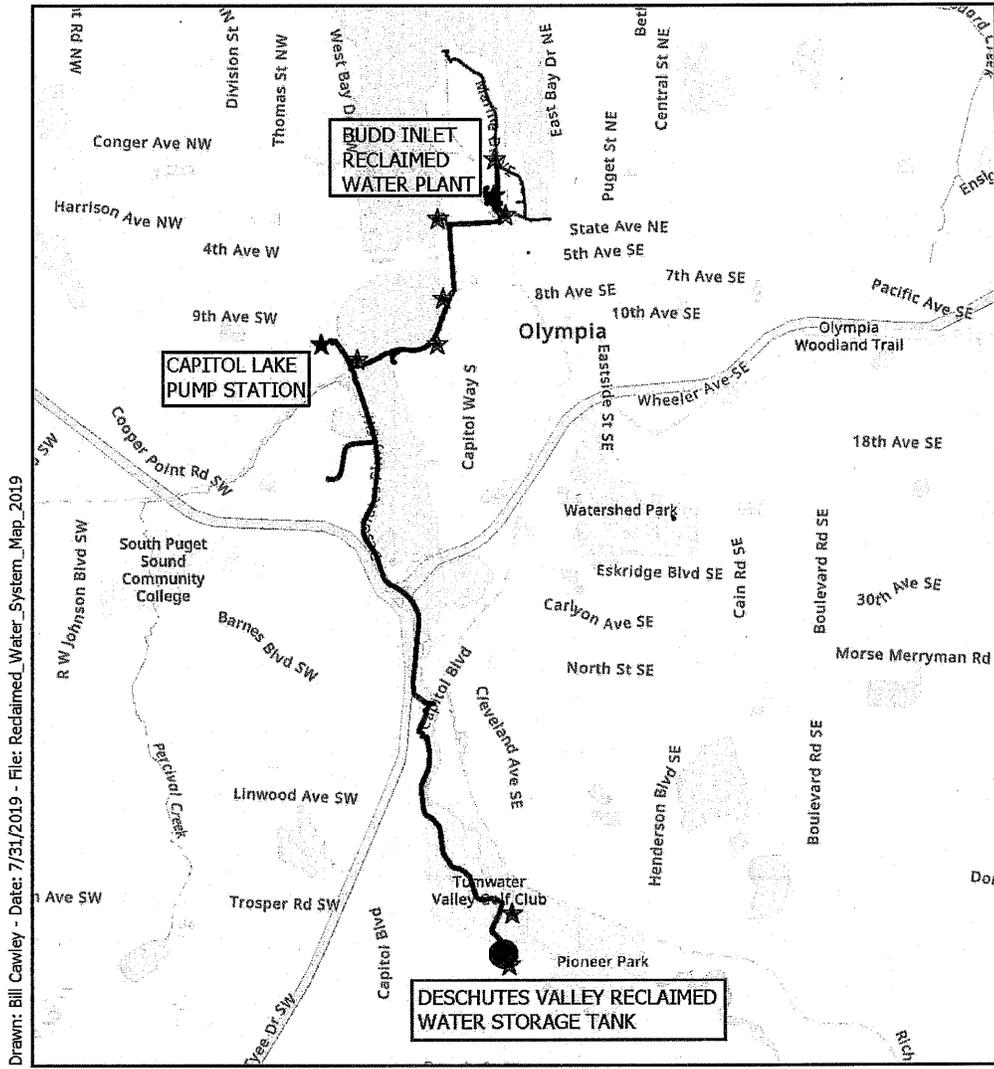
The purpose of this Water Reuse Summary Plan is to provide a summary description of the water reuse system and uses of the Class A reclaimed water distributed from the LOTT Clean Water Alliance's (LOTT) Budd Inlet Reclaimed Water Plant during 2025. This report is required by NPDES Permit No. WA0037061. Consistent with permit requirements, this plan is updated annually and submitted to Ecology by January 31 of each year and covers the previous calendar year. The permit specifies that this plan contains, but not limited to, the following:

1. Description of any additions to the reuse distribution system.
2. Identification and current list of all water purveyors, uses, users, and location of reuse sites.
3. Estimated volume of reclaimed water use at reuse sites, means of application, and application rates.
4. Description of any additional treatment provided to the reclaimed water.

1. Description of any additions to the reuse distribution system

There have been no additions to the reuse distribution system since the previous Water Reuse Summary Plan was submitted in 2025. March of 2024 an air vacuum valve was exposed to frigid temperatures. Since then, the valve has been enclosed with additional insulation to protect it from freezing and prevent any recurrences.

The following map and narrative provide a summary of the reuse distribution system. LOTT owns the main distribution pipeline that extends from the Budd Inlet Reclaimed Water Plant, south through downtown Olympia, across Capitol Lake, south along Deschutes Parkway to Capitol Way, through the Tumwater Valley Golf Course, to LOTT's Reclaimed Water Storage Tank at the City of Tumwater's Deschutes Valley Park. The City of Olympia owns distribution pipelines in the East Bay development district and north along Marine Drive to the northern tip of the Port Peninsula. The City of Tumwater owns distribution pipelines that serve the Tumwater Valley Golf Course.



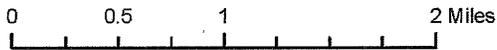
RECLAIMED WATER SYSTEM

BUDD INLET RECLAIMED WATER PLANT

- LOTT Reclaimed Pipe
- Lacey Reclaimed Pipe
- Olympia Reclaimed Pipe

Connection Locations

- ★ LOTT
- ★ LACEY
- ★ OLYMPIA
- ★ TUMWATER



LOTT *Clean Water Alliance*
 Lacey • Olympia • Tumwater • Thurston County

Distribution System Development

- 2002: LOTT's initial reclaimed water distribution pipeline consisted of:
 - A twelve-inch ductile iron pipe extending from the Budd Inlet Treatment Plant through downtown Olympia to Heritage Park
 - A four-inch ductile iron pipeline that extended under the pedestrian walkway bridge over Capitol Lake to the Capitol Lake Pump Station.
 - An eight-inch ductile iron pipeline that traverses most of the Budd Inlet Treatment Plant property to the north, used to distribute reclaimed water throughout the treatment plant site. This pipe reduces down to a 100 foot six-inch ductile iron pipe at the north end of the plant and connects to the City of Olympia reclaimed water distribution system currently serving the Port of Olympia and East Bay areas.
 - A reclaimed water "filling station" near the Reclaimed Water Facility inside the Budd Inlet Treatment Plant.
- 2004: Port of Olympia installed a six-inch Class 900 purple PVC reclaimed water pipeline that crosses Market Street and runs along the east side of Marine Drive for approximately 4,000 feet to the north end of the peninsula. The City of Olympia later assumed ownership of the pipeline.
- 2009-2010: LOTT's reclaimed water pipeline extension along Deschutes Parkway to Tumwater occurred in four phases
 - Conversion of 9,220 feet of existing twenty-inch HDPE sanitary sewer force main running southward along Deschutes Parkway to a reclaimed water pipeline.
 - Installation of 1,800 feet of eight-inch HDPE reclaimed water pipeline westward to Lakeridge Drive
 - Replacement of 1,230 feet of the original four-inch ductile iron reclaimed water pipeline spanning the pedestrian walkway bridge over Capitol Lake with 12-inch ductile iron pipe
 - Installation of 5,340 feet of eighteen-inch HPDE and ductile iron reclaimed water pipeline along Capitol Boulevard from Tumwater Falls Park to the Tumwater Valley Golf Course.
- 2010-2012: City of Olympia owned reclaimed water distribution pipeline in the East Bay Redevelopment area that is routed east down Olympia Avenue NE, turning north up the west side of Marine Drive NE, connecting to reclaimed water pipelines north of the Budd Inlet Treatment Plant, and south of the plant at Adams Street NE and Olympia Avenue NE.
- 2015: LOTT constructed a One-million-gallon pre-stressed concrete reservoir at the Deschutes Valley Park site in Tumwater.

Since off-site end uses of the reclaimed water are primarily for seasonal irrigation, the distribution system is sometimes shut down in winter months and brought back online in preparation for irrigation season.

- LOTT typically ceases delivery of reclaimed water to the City of Olympia's irrigation users during the winter months. At the end of the irrigation season, the city closes and locks its customer's supply meters. The City of Tumwater also shuts down the irrigation systems for its sites irrigated with reclaimed water.

- This procedure is adjusted and flushing curtailed if the reclaimed water distribution system remains in year-round use to convey water to LOTT's reclaimed water storage tank.

2. Identification and current list of all water purveyors, users, and location of reuse sites.

Reclaimed water from the Budd Inlet Treatment Plant is used by LOTT itself and conveyed to the Cities of Tumwater and Olympia, who use the water themselves and serve as purveyors for any additional end use customers. LOTT uses reclaimed water for its own internal uses, consistent with the terms of the Reclaimed Water Conditions included in LOTT's combined NPDES and Reclaimed Water Permit, Permit # WA0037061. These terms and conditions are passed along to the Cities of Tumwater and Olympia in a series of agreements, all dated August 13, 2020:

- General Interlocal Agreement between The LOTT Clean Water Alliance, Thurston County and the Cities of Lacey, Olympia and Tumwater for Distribution and Use of Reclaimed Water
- Reclaimed Water Distribution Agreement No. 2 between The LOTT Clean Water Alliance, Thurston County and the Cities of Lacey, Olympia and Tumwater
- Reclaimed Water Supply Agreement between The LOTT Clean Water Alliance and the City of Tumwater regarding The Budd Inlet Reclaimed Water Plant
- Reclaimed Water Supply Agreement between The LOTT Clean Water Alliance and the City of Olympia regarding The Budd Inlet Reclaimed Water Plant

Additionally, the City of Olympia purveys reclaimed water to other end users. These users are required to conform to the State's *Water Reclamation and Reuse Standards* and the City of Olympia's cross-connection control plan as part of their End User Agreements. The City of Olympia retains responsibility for inspection, compliance, and testing of cross-connection control measures in their jurisdiction. Table 1 summarizes current sites and uses during 2025.

Table 1: Summary of Reclaimed Water Purveyors, Uses, Users, and Location of Reuse Sites		
Users	Location of Reuse Sites	Uses
Purveyor : LOTT		
LOTT	Budd Inlet Treatment Plant	Irrigation, Pump Seals, Cleaning, Process Control, Fill Station
LOTT	Capitol Lake Pump Station	Irrigation, Cleaning, Odor and Grease Control Systems Make-Up Water
LOTT	Regional Services Center & WET Science Center	Toilet/urinal flushing, green roof irrigation, reclaimed water feature (including fountain and pond), demonstration wetland, and landscaping irrigation
LOTT	East Bay Public Plaza	Reclaimed water features, toilet/urinal flushing, landscaping irrigation
Purveyor : City of Olympia		
City of Olympia	Percival Landing Area	Irrigation
Port of Olympia	Port Peninsula	Irrigation
Hands On Children's Museum	Hands On Children's Museum	Toilet/urinal flushing, irrigation
Washington State Department of Enterprise Services	Marathon Park & Deschutes Parkway	Irrigation
Washington State Department of Enterprise Services	Heritage Park	Irrigation
Purveyor: City of Tumwater		
City of Tumwater	Tumwater Valley Golf Course	Irrigation
City of Tumwater	Deschutes Valley Park	Irrigation

3. Estimated volume of reclaimed water use at reuse sites, means of application and application rates

During 2025, reclaimed water produced at the Budd Inlet Reclaimed Water Plant was conveyed to use sites located at the Budd Inlet Treatment Plant and surrounding LOTT-owned properties; City of Olympia, State of Washington, and Port of Olympia-owned properties in downtown Olympia; and City of Tumwater-owned properties in Tumwater. Uses range from industrial in-plant purposes to toilet flushing to irrigation.

Reuse for seasonal irrigation of urban landscaping associated with streetscapes, parks, and golf courses, have application rates less intensive than that typical of agricultural irrigation. Water balance and agronomic rate information are not readily available (or applicable) for these urban sites. However, the potential for excessive watering and flooding at these urban reuse sites is mitigated through careful management of the timing and rate of application to the landscaped areas. A summary of reuse at irrigation sites is found in Table 2.

**Table 2
Summary Evaluation of Irrigation Use Sites, Volumes, and Application Methods for 2025**

Site	Area	Land Cover	Soil Type	Timing of Irrigation	Application Method	Application Rate	Total Annual Volume-MG	Potential for Groundwater Impacts
Marathon Park	1.72 ac	Turf, native plants	Fill	May – Oct	Automatic sprinkler	1" / week	.954	None
Heritage Park	21 ac	Turf, trees, sustain new hydro-seeded	Fill	May – Oct	Automatic sprinkler & drip irrigation	1" / week	1.311	None
Deschutes Parkway	1.72 ac	Native trees, shrubs	Fill	May – Oct	Automatic sprinkler	1" / week	2.589	None
Port of Olympia	6 ac	Shrubs, perennials, small trees,	Fill	May – Oct	Automatic sprinkler	1" / week	2.111	None
Percival Landing Park	3.4 ac	Turf, shrubs, annuals, perennials	Fill	May – Oct	Automatic sprinkler & drip irrigation	1" / week	2.111	None
East Bay Public Plaza & City of Olympia Parks	0.72 ac	Trees, shrubs, annuals, perennials	Fill	May – Oct	Automatic sprinkler & drip irrigation	1" / week	2.242	None
Hands On Children's Museum	2.88 ac	Trees, shrubs, annuals, perennials	Fill	May – Oct	Automatic sprinkler & drip irrigation	1" / week	.482	None
Tumwater Valley Golf Course	170 ac	Turf, trees, shrubs, annuals,	Native	May – Dec	Automatic sprinkler & drip irrigation	1" / week	40.74	Very Low
Tumwater Deschutes Valley Park	1 ac.	Trees, shrubs, annuals, perennials	Native	May – Oct	Automatic sprinkler & drip irrigation	1" / week	.019	Very Low

Description of 2025 Use Sites

1. Budd Inlet Treatment Plant

LOTT's Budd Inlet Treatment Plant is located between downtown Olympia and the Port of Olympia peninsula at the southern end of Budd Inlet in Puget Sound. The 15-acre site is approximately ten feet above mean sea level and is relatively flat and level. It is heavily developed with industrial structures. The site landscaping consists of ornamental shrubs, small trees, and ground cover. The plant site is underlain by filling materials over recent alluvium. Fill materials generally consist of a mixture of clay loam, silt loam, and silty clay loam (soil classification-Hoogdal and Xerorthents). Based on soil surveys in the area, the vertical hydraulic conductivity of the site is estimated at 0.6 to two inches per hour, and the groundwater levels range from approximately two to five feet below the ground surface.

During 2025, the Budd Inlet Treatment Plant consumed a substantial quantity of reclaimed water on-site for pump seal water, cleaning, process control, and limited irrigation. Irrigation needs are seasonal, while the water needed for the other uses is generally constant throughout the year. LOTT's Regional Services Center, located at the south end of the Budd Inlet Treatment Plant includes office spaces, meeting rooms, and the WET Science Center. The service center utilizes reclaimed water for toilet/urinal flushing. The building uses an estimated 30,000 gallons of reclaimed water annually.

During 2025, the Budd Inlet Treatment Plant, Regional Services Center and WET Center used an average of **543,000** gallons per day of reclaimed water for industrial, irrigation, and other uses. In plant industrial uses include the operation and maintenance of pump seals (an average of 280 gallons per minute year-round usage) and cleaning. Reclaimed water used for the Regional Services and WET Center's landscaping is seasonal, whereas the reclaimed water used inside the wrap-around outside water feature, fountain, and adjacent demonstration wetland is year-round. The Regional Service Center also utilizes reclaimed water for toilet/urinal flushing, estimated at 30,000 gallons of reclaimed water annually (this estimate is not included in the total above).

LOTT also owns and operates the East Bay Public Plaza, located between the Hands On Children's Museum and the LOTT WET Science Center. The plaza features an interactive splashing stream that runs west to east across the site. Class A reclaimed water is the source water for the recreational water feature. The water is continuously recirculated through the stream bed, into a holding tank where it is pumped through a filter, then adjusted for pH and chlorine before it is returned to the head of the stream. As an interactive water feature, visitors can wade in the entire length of the reclaimed water stream. Construction of this stream was authorized by a Water Recreation Special Use Pool Permit from the Washington State Department of Health, and operation is authorized under an annually renewable Pool Operating Permit from Thurston County Environmental Health. Reclaimed water is also used for landscaping irrigation and toilet flushing at the Plaza's public restroom facilities. The East Bay Public Plaza used a total of **3,513,452** gallons of reclaimed water in 2025.

2. Capitol Lake Pump Station

LOTT's Capitol Lake Pump Station is located near the southwest shore of Capitol Lake on Deschutes Parkway and is the midpoint of the reclaimed water distribution pipeline. Reclaimed water is used for cleaning the pump station and wet wells. Marathon Park, Heritage Park, and Deschutes Parkway

Marathon Park is adjacent to the southwest end of Capitol Lake along Deschutes Parkway. It is 2.1 acres in size and is vegetated with grass and native plants. Approximately 1.72 acres of the park are currently irrigated during the summer months. There are also approximately 1.72 acres of irrigated landscape along Deschutes Parkway on the west side of the lake, which are tied into the Marathon Park sprinkler system. Heritage Park is located on the northeast side and north end of Capitol Lake and consists of 18 acres of turf and about 2.7 acres of trees and shrubs.

No tests were conducted to determine the soil permeability/hydraulic conductivity at these locations. However, based on soil maps of the area, a vertical hydraulic conductivity of 0.6 to two inches per hour is assumed. Due to the sites' proximity to Capitol Lake and Budd Inlet, groundwater was assumed to be at approximately the same depth as at the LOTT Budd Inlet Treatment Plant site (two to five feet below the surface). Because of the close proximity to Capitol Lake and Budd Inlet, reclaimed water application rates are kept below agronomic rates to prevent nutrients remaining in reclaimed water from leaching into nearby surface waters. The total volume of reclaimed water used for irrigation at Marathon Park, Heritage Park and Deschutes Parkway during the 2025 season was **4,512,240** gallons.

3. Port of Olympia

The Port of Olympia properties in the area are often referred to as the Port Peninsula and include properties generally north of Marine/Market Drives between the East and West Bay portions of southern Budd Inlet, as well as the streetscape, park area and walking trail along Marine Drive and the western shoreline of East Bay. The Port's marine terminal includes a substantial log yard to support shipping services for Weyerhaeuser Company. Soil studies show that the drainage characteristics and groundwater levels of the Port site are similar to those of the Budd Inlet Treatment Plant site. In 2025, the Port of Olympia used a total of **4,512,240** gallons for irrigation of ornamental shrubs, small trees, perennial plants, and turf grass in these areas.

4. Percival Landing Area

Percival Landing is City of Olympia Park and open space that wraps around the southern end of Budd Inlet, encompassing a total of 3.38 acres of boardwalk and planted area on the eastern shoreline of Budd Inlet's West Bay. One acre of turf grass, and perennial and annual plants are irrigated by the City of Olympia's Parks, Arts and Recreation Department at these sites. A total of **866,823** gallons of reclaimed water was used at Percival Landing during the 2025 irrigation season.

5. Hands On Children's Museum

The Hands On Children's Museum is located directly across Jefferson Street from LOTT's WET Science Center. The building is owned by the City of Olympia and Class A reclaimed water is used for toilet flushing and for landscape irrigation. A total of **369,119** gallons of reclaimed water was used at the Hands On Children's Museum in 2025.

6. City of Tumwater – Tumwater Valley Golf Course

The City of Tumwater-owned Tumwater Valley Golf Course is located between Capitol Boulevard and Cleveland Avenue in the Deschutes River Valley. It covers 170 acres and has a peak irrigation water demand of over 600,000 gallons per day. An estimated total of **51,990,000** gallons of reclaimed water was used for irrigation at the Tumwater Valley Golf Course in 2025.

7. City of Tumwater – Deschutes Valley Park

The City of Tumwater uses reclaimed water to irrigate Deschutes Valley Park, located on the south edge of Tumwater Valley Golf Course. The estimated water used for irrigation in 2025 was 1,547,000 gallons. 2025 is the first full year of obtaining the meter reading data for irrigation at this park.

4. Description of any additional treatment provided to the reclaimed water

No additional treatment was provided to the Class A reclaimed water produced at the Budd Inlet Reclaimed Water Plant and distributed for reuse as described in this Water Reuse Summary Plan.