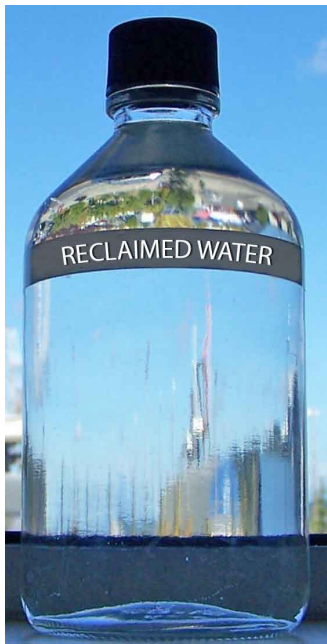




The Right Water for the Right Use

Frequently Asked Questions About Reclaimed Water

SAFE | SENSIBLE | SUSTAINABLE



What does reclaimed water look like? It looks like clean, clear water.

What is reclaimed water? Reclaimed water is used water that has been cleaned to a high level so it can be beneficially reused. Under Washington State law, reclaimed water is considered a new, basic water supply, similar to surface water or groundwater supplies. The State

Departments of Health and Ecology define four classes of reclaimed water – A, B, C, and D. The LOTT Alliance is producing only Class A Reclaimed Water, the highest quality.

Why is LOTT producing reclaimed water? LOTT's decision to begin producing Class A Reclaimed Water was the result of public opinion expressed during LOTT's long-range planning process. Citizens told us we can't afford to waste drinking water any more, and that we should manage wastewater as a resource. Our groundwater supply is not infinite, and our communities are beginning to feel water supply pressures. Cleaning and restoring our water to productive use is the responsible thing to do, and will preserve the highest quality drinking water supplies for uses that require that quality.

What is reclaimed water used for? Class A Reclaimed Water is safe for public contact and suitable for almost all uses except drinking. It can be used for irrigation of landscapes, parks, and golf courses. It is also commonly used for street washing, dust suppression, decorative ponds and fountains, and commercial and industrial processes. Class A Reclaimed Water can also provide environmental benefits such as streamflow augmentation, wetland enhancement, and groundwater recharge.

How safe is reclaimed water? Other states, such as California, Nevada, Arizona, and Florida, have used reclaimed water successfully for decades. Washington State's reclaimed water standards are based on those experiences and are among the most stringent in the country. Class A Reclaimed Water is very safe for its intended non-potable uses.

What safeguards are in place to ensure the quality of the water is maintained?

The Washington State Departments of Health and Ecology jointly issue the State Reclaimed Water Permits that regulate production, distribution, and use of the water. The Permits require LOTT to meet strict water quality requirements. No water can be distributed to use sites if it fails to meet the Class A Reclaimed Water standards. Regular monitoring and reporting is required.

What kind of technology is LOTT using to produce Class A Reclaimed Water? The Martin Way Reclaimed Water Plant uses a membrane filtration system to produce Class A Reclaimed Water. It provides a level of filtration described as “microfiltration.” The Budd Inlet Reclaimed Water Plant utilizes a sand filter. In each process, a final disinfection step is used to kill bacteria and viruses. At the Budd Inlet Plant, the water gets disinfected twice. It receives ultraviolet disinfection before the sand filtration, and chlorine disinfection after. At the Martin Way Reclaimed Water Plant, filtered water receives chlorine disinfection using sodium hypochlorite (bleach).

Is reclaimed water safe for public contact? When cleaned to Class A Reclaimed Water standards, the water is considered safe for human contact. With permission from the State Department of Health, Class A Reclaimed Water could even be used for swimming.

Why don't we make it drinking water quality? It would be possible to clean the water to drinking water quality by adding another step – reverse osmosis – to the treatment process. However, this step is very expensive. Adding the extra treatment could significantly increase capital costs and double or triple operating costs, resulting in dramatically higher monthly sewer rates and connection fees. It would be difficult to justify the added costs unless the water was needed to directly increase drinking water supplies, or unless we were facing regulatory requirements to treat to such a high level. Neither of those extreme conditions is expected in the foreseeable future.

Does reclaimed water have any odor? Class A Reclaimed Water smells like any other source of clean, fresh water. Because Class A Reclaimed Water is disinfected with chlorine, there may be a slight chlorine odor.

Where does LOTT produce reclaimed water? The Budd Inlet Reclaimed Water Plant, housed at LOTT's central Budd Inlet Treatment Plant in Downtown Olympia, produces up to one million gallons daily. LOTT has also completed construction of its first satellite plant, the Martin Way Reclaimed Water Plant, in Lacey, which can produce two million gallons per day. Two other satellite plants could be built in the future – one serving the Chambers Prairie area and one in Tumwater.

Who will use the water, and how will users be identified? Within the next 20 years, Class A Reclaimed Water will be available to many portions of Lacey, Olympia, and Tumwater. The three Cities will be distributing the water to customers and using some of it themselves. In the Downtown Olympia area reclaimed water is used for irrigation by the Port of Olympia along Marine Drive, the State Department of General Administration at Heritage and Marathon Parks, and the City of Olympia at Percival Landing Park. The City of Lacey plans to irrigate city-owned rights-of-way along Britton Parkway, portions of the Gateway Project, and eventually, the regional athletic complex and other sites. The Cities will be working with many other businesses, industries, developers, and public agencies that are potential users of the water.

How much will reclaimed water cost? The City of Olympia will charge 70 percent of its irrigation water rate for reclaimed water. There may be additional costs to install the pipelines needed to carry the water, since reclaimed water systems must be built separate from drinking water systems.

Why are reclaimed water pipelines color-coded purple? The color-coding is intended to clearly distinguish reclaimed water lines from those carrying potable water or wastewater. This helps prevent any accidental cross-connection of pipelines from one system to another, thus further protecting public health and the environment.

How can I learn more? Additional information is available on LOTT's website www.lottonline.org or you can contact Lisa Dennis-Perez at the LOTT Alliance office at (360) 528-5719 or lisadennis-perez@lottonline.org



Where else in Washington is reclaimed water used?

Although reclaimed water is relatively new to the Northwest, use has been steadily growing. In 1997, four cities – Yelm, Sequim, Ephrata, and Royal City – received State funding support to design and construct demonstration projects modeling reclaimed water use. Now, 17 projects are operating in Washington, with many more planned or under construction. The Brightwater Plant serving portions of King and Snohomish Counties is one of the largest facilities under construction, anticipated to eventually produce up to 22 million gallons of reclaimed water per day. Several Indian Tribes, including the Squaxin Island Tribe, are also building reclaimed water facilities.

