

The Reclaimed Water Rule

The Washington State Legislature directed the Department of Ecology, in coordination with the Department of Health, to adopt a rule for reclaimed water. When adopted, the new rule will be *chapter 173-219 WAC Reclaimed Water*. The rule provides a consistent, predictable, and efficient regulatory process. It also encourages the generation and beneficial use of reclaimed water while preserving and protecting public health, the environment, and existing water rights.

Q: What is reclaimed water?

A: Reclaimed water is a water supply produced by treatment of municipal or domestic wastewater. The treatment processes are designed to assure that the water is safe and suitable for the intended use. Sometimes called water recycling or water reuse, the process of reclaiming water involves an engineered treatment system that speeds up nature's restoration of water quality.

Q: How does reclaimed water help Washington?

A: Washington's economy and quality of life are intimately tied to our water. Throughout history, investments in water and wastewater infrastructure have been central components of successful civilizations.

We rely heavily on rain and snowmelt to replenish our aquifers and supply our lakes, streams, and rivers with water. At the same time our population is increasing, scientists predict that, as the climate changes, snow stored in the mountains will continue to decrease. With reduced snow to melt, less water will be available during critical summer months for both in-stream needs and human water demands.

Reclaimed water can be used to meet these increasing demands, allowing our drinking water supplies to last longer. Reclaimed water may also replace diversions from aquifers, rivers, or lakes. This allows the water replaced by reclaimed water to stay in the stream for fish, wildlife, and recreation.

WHY IT MATTERS

The goal is greater certainty for future development of reclaimed water. The state believes water supplies are limited. We can use *reclaimed* water for specified uses to augment current drinking water supply to supplement surface and groundwater supplies, and assist in meeting the future water requirements of the state, while at the same time protecting existing water rights. It is also an important tool to address our changing climate.

Contact information

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More Information

Reclaimed Water website
www.ecy.wa.gov/programs/wq/reclaim/

Special accommodations

To request ADA accommodation or materials in a format for the visually impaired, call the Water Quality Program at 360-407-6600. Persons with impaired hearing may call Washington Relay Service at 711. Persons with speech disability may call TTY at 877-833-6341.

Q: How does Washington use reclaimed water?

A: We use reclaimed water for a wide variety of beneficial uses such as irrigation, industrial processes and cooling water, toilet flushing, dust control, construction activities, and as a source of many other non-potable water supplies. Reclaimed water is also a resource for creating, restoring, and enhancing wetlands. We use it for recharging groundwater supplies and to increase flows in rivers and streams.

The Legislature put into law: “To the extent reclaimed water is appropriate for beneficial uses, it should be so used to preserve potable water for drinking purposes, contribute to the restoration and protection of instream flows that are crucial to preservation of the state’s salmonid fishery resources, contribute to the restoration of Puget Sound by reducing wastewater discharge, ...be a source of supply integrated into state, regional, and local strategies to respond to populations growth and global warming.” (Chapter 90.46.005 RCW)

Q: How does the new rule improve program administration?

A: This is the first rule to establish administrative procedures and technical requirements for the use of reclaimed water in Washington State. It helps proponents navigate through the requirements for planning, design, construction, and permitting of the generation, distribution, and use of reclaimed water and to weigh the costs and benefits of their proposal.

Q: How do I know reclaimed water is safe and will not harm my children or my pets? If reclaimed water is so safe, why can't I drink it?

A: Wastewater must be treated to a “Class A” standard before it can be used as a non-potable water supply. That means limited exposure to it does not put people at risk for health problems. For example, outdoor activity in a ball field irrigated with reclaimed water does not increase exposure to bacterial infection any more than the general environment.

Although reclaimed water is of very high quality, it is not used directly for drinking water in the United States. Reclaimed water planned for use in recharging our aquifers or augmenting our surface water receives adequate and reliable treatment before mixing with naturally occurring water and undergoing natural restoration processes. Some of this water eventually becomes part of our drinking water supplies.

Q: It rains all the time in western Washington. Why encourage the development of reclaimed water projects in Washington State?

A: The state of Washington is aware of the growing scarcity of adequate drinking water and encourages inclusion of reclaimed water in future water system planning. Most of western Washington receives between 40 and 53 inches of precipitation per year. However, the majority of it falls between November and March. In the summer months, decreased precipitation coupled

with increased demand affects human communities and the environment. Reclaimed water helps address these needs by providing more water for people while protecting instream flows.

Q: How does the rule remove barriers to reclaimed water use?

A: The rule brings consistency, credibility, and predictability to the regulatory process. The rule provides sufficient flexibility to accommodate the diversity of proposed projects while ensuring that reclaimed water projects are considered within the context of state and federal requirements.

Q: What is Ecology doing to ensure that reclaimed water projects do not degrade groundwater supplies?

A: It is the public policy of the state of Washington to maintain the highest possible quality of our groundwater. Ecology requires an evaluation to determine if there is potential for a reclaimed water project to degrade existing groundwater quality. Based on that determination, Ecology establishes enforceable limits and monitoring requirements of reclaimed water projects as needed to protect existing and future beneficial uses of groundwater.

Q: What is Ecology's timeline for processing a reclaimed water proposal?

A: This is a two-step process. First, the potential for water rights impairment must be determined. In the planning phase, a project proponent will evaluate and determine the potential, if any, for water right impairment. The proponent conducts an evaluation for Ecology's consideration. Ecology's determination, early in the planning process, allows the proponent to decide to abandon or modify the project or consult with affected water rights holders to compensate or mitigate for the project. Ecology has up to 180 days to make a determination after the evaluation is submitted.

Second, after the water right determination is made and a complete application is submitted, Ecology must take action to approve, or reject a Reclaimed Water Permit application submittal within 90 days of receipt. If circumstances prevent review within that time, Ecology must notify the applicant of the reason for the delay and provide an estimated review time.

Q: Who has an exclusive right to reclaimed water?

A: Whenever utilities put water to beneficial use in Washington, they must do so under an appropriative water right unless they have a specific exemption under state law. To streamline the permitting processes, the Reclaimed Water Use Act provides an exemption for the owner of reclaimed water facilities from these appropriative water right permitting requirements. The law provides a right to distribute and use reclaimed water under the reclaimed water permit. This right is called an exclusive right and belongs to the owner of the water reclamation treatment facility.

Q: How will the new rule prevent reclaimed water projects from affecting existing water rights?

A: Under western water law, new water uses, and/or changes to use, may not adversely affect (impair) existing water rights. That is, senior water right holders may not alter their use in a way that impairs junior water right holders and vice versa. The new rule requires an evaluation to determine whether or not there is a potential to impair existing water rights when a wastewater facility decreases or stops its discharge to state waters and reclaims the water for a new beneficial use (such as irrigation). There are many wastewater discharges where existing water rights would not be affected. For example:

- The wastewater facility discharges to marine water, therefore no water rights exist downstream.
- The facility decides to reclaim water during high flow periods and store it to provide more water during low flow periods.
- The facility is brand new and never discharged wastewater.

However, a project may not proceed if impairment is found and compensation or mitigation has not been secured.

Q: What happens if there is impairment?

A: The proponent may decide to modify the project so that water rights will not be impaired. For example, the facility might continue to discharge the reclaimed water during certain periods or store reclaimed water and release it later to prevent impairment. The proponent may also decide to negotiate compensation or mitigation with the water right holder or abandon the project. Affected water right holders might be farms, industries, tribes, water suppliers, or a state instream flow.

Q: What regulations/standards apply to using reclaimed water to augment a wetland?

A: Any use of reclaimed water in wetlands must be consistent with the applicable requirements of the state Water Pollution Control Act chapter 90.48.RCW, the Shoreline Management Act of 1971 (chapter 90.58 RCW), local government adopted Critical Areas Ordinances, Water Quality Standards for Ground Waters (chapter 173-200 WAC), and Water Quality Standards for Surface Waters (chapter 173-201A).

Q: Can an existing water system be converted to reclaimed water?

A: Yes. It is relatively straightforward to convert an existing water system to non-potable systems. A water system may include reservoirs and piping infrastructure; the rule requires labeling all accessible points as reclaimed water. To convert an existing potable system to

reclaimed water, the project developer must take every precaution to ensure there is no potential for cross connections with any remaining potable waterlines. Once a potable system has been converted to reclaimed water, it cannot be converted back to a potable water system.

Q: What application rates apply to irrigation uses of reclaimed water?

A: The application of irrigation water is limited to methods and agronomic rates established in standard manuals of practice (such as the *Washington Irrigation Guide*) for the type of vegetation or crop irrigated. In addition to the minimum technology-based standards, the quality of the reclaimed water must be sufficient for the uses approved in the engineering report.

Q: Does treatment to reclaimed water remove chemicals?

A: Some chemicals are removed that have attached to biosolids while some chemical will continue to exist in the reclaimed water. Prior to advances in scientific measurements, most chemicals appeared not to exist. Observing concentrations in parts per trillion, new chemicals are detected. Levels of concentrations in reclaimed water are way below what toxicologists consider an Acceptable Daily Dose or no risk to human health.

Q: How can I get reclaimed water for use in my home garden?

A: Contact your local water provider and ask about its availability.

Q: What is the future of reclaimed water in Washington State?

A: For customers, the benefits of reclaimed water use are high. Usually, the reclaimed water is available at a lower cost than drinking water. In addition, because wastewater treatment is an ongoing and essential public service, the resulting reclaimed water supply is drought resistant and relatively assured.

The environmental and economic consequences of using water once and throwing it away make reclaimed water use an increasingly attractive alternative.

Alternative water supplies such as reclaimed water are beginning to take hold as more communities throughout Washington realize the value of this alternative water resource. In some cases, the impetus for using reclaimed water begins with a need to eliminate or decrease wastewater discharges. In other cases, it begins with the need for more water supplies. Most successful projects include elements of both.