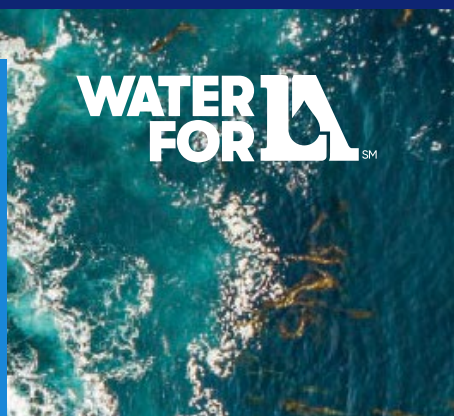
Recycled and Purified Water Glossary

All water is recycled water. Nature constantly cycles water through evaporation, condensation, and filtration. Today, advanced technology mirrors these natural processes to produce safe, high-quality water. This glossary breaks down a handful of commonly used terms to help you learn about the key elements in the recycled water process.



Advanced Oxidation Process (AOP):	A chemical treatment process that uses ultraviolet light and a powerful disinfectant to eliminate organic materials from water by breaking down their molecular structure.
Advanced Water Purification:	A process that uses proven technology, including membrane filtration with microfiltration or ultrafiltration, reverse osmosis, and UV disinfection/advanced oxidation, to purify recycled water into drinking water.
Advanced Water Purification Facility (AWPF):	A state-of-the-art facility that purifies recycled water already cleaned at a wastewater treatment plant using advanced water purification.
Desalination:	The process of removing salts and other minerals from water.
Direct Potable Reuse:	When purified water is sent directly to a drinking water plant.
Environmental Buffer:	A natural body of water, such as a groundwater basin or surface reservoir, where purified water is blended with existing water before being extracted for final purification into drinking water.
Groundwater Recharge:	The infiltration or injection of water into a groundwater aquifer.
Indirect Potable Reuse:	The process of purifying wastewater and using it to replenish environmental buffers like groundwater aquifers or surface water reservoirs.
Membrane Filtration:	A type of filter with thin barriers (membranes) and microscopic pores used to separate particles from water.
Microfiltration:	A low-pressure membrane filtration process that removes suspended solids, bacteria, and other materials from water.
Non-Potable Water:	Water that is not suitable for drinking.
Potable Water (Drinking Water):	Water that is safe for drinking.
Purified Water:	Recycled water that has been treated at an Advanced Water Purification Facility, so it can be added to water supplies and used for drinking water.
Purple Pipes:	Pipes that distribute non-potable municipal recycled water, distinct from pipelines that distribute drinking water.
Recycled Water:	Wastewater that has undergone multiple levels of purification to make it safe for beneficial uses, like irrigation, but not drinking water.
Reverse Osmosis:	A membrane filtration process that uses high-pressure to force water through several layers of plastic membranes that filter our minerals and contaminants, including salts, viruses, pesticides, and other materials.
Ultraviolet Light Disinfection and Advanced Oxidation:	A purification process where water is exposed to ultraviolet (UV) light before chemicals are added to stimulate an advanced oxidation reaction, eliminating compounds in water.
Wastewater:	Untreated water in the sewer system that comes from homes and businesses (bathrooms, showers, sinks, dishwashers, etc.)
Water Cycle:	The movement of water within Earth as it evaporates, returns as precipitation, flows through bodies of water and then evaporates again.
Water Reuse:	Using water more than once, for beneficial purposes.