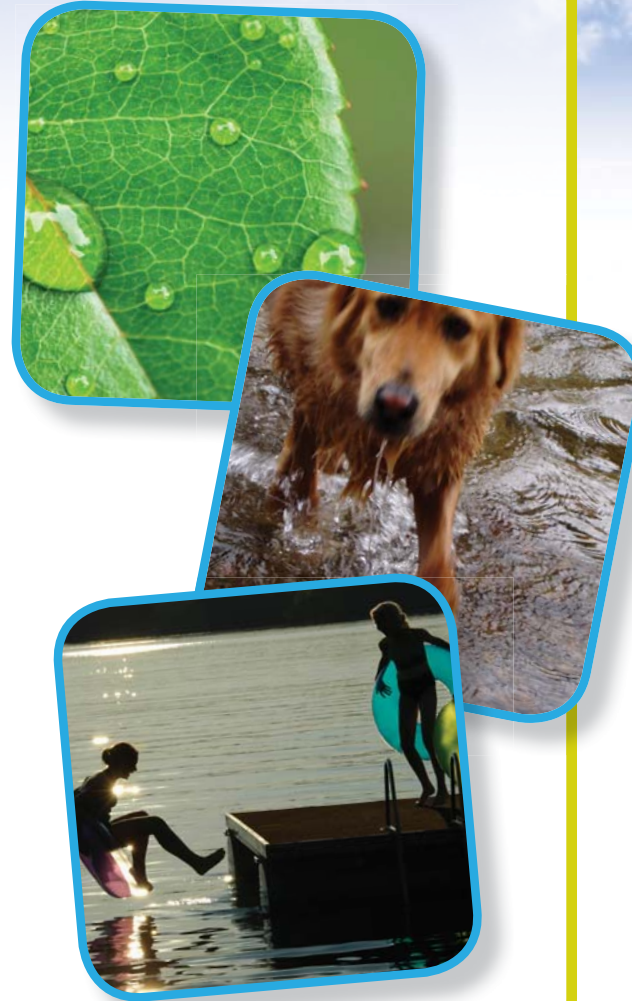


## Where Recycled Water is Used

Nationwide, recycled water is used in thousands of locations. Here are some examples of how recycled water is used in Oregon and the US:

- In Silverton, Oregon, recycled water flows through the Oregon Garden's 17-acre wetlands and irrigates the gardens
- Over 80 Oregon communities use recycled water, including irrigation use at over a dozen Oregon golf courses
- In Texas, San Antonio's famed Riverwalk experience is made possible by the flow of up to 100 million gallons per day of recycled water
- In Santa Rosa, California, over 350 acres of Gallo's wine vineyards are irrigated with recycled water
- About 250,000 residences in Florida use recycled water for irrigation and/or toilet flushing
- Recycled water irrigates more than 12,000 acres of food crops in Monterey County, California
- Nearly 2,000 U.S. parks, playgrounds, and schoolyard sites are irrigated with recycled water

Source: MWMC and <http://www.athirstyplanet.com/>



### A Strong Partnership

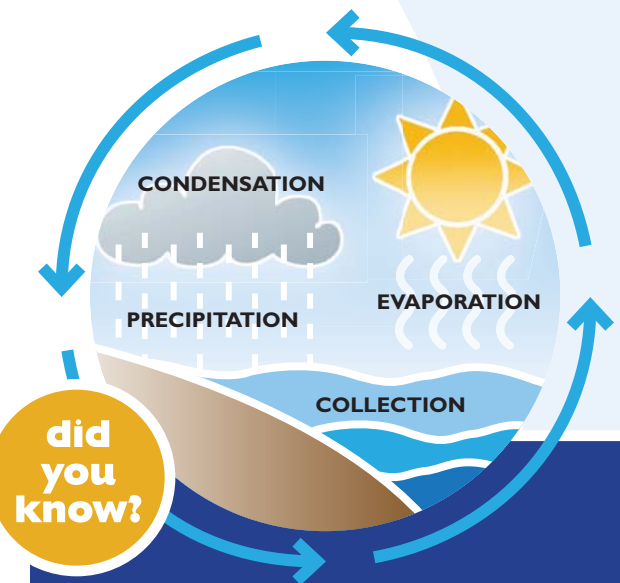
The MWMC is built on a partnership between the Cities of Eugene and Springfield and Lane County. The MWMC's purpose is to protect public health and safety and the environment by providing high quality wastewater management services to the Eugene-Springfield metropolitan area. The MWMC and the regional partners are committed to providing these services in a manner that will achieve, sustain and promote balance between community, environmental, and economic needs while meeting customer service expectations.

# recycled water

## A Sustainable Resource

Communities across the nation have been changing the way they think about water resources—surface water, groundwater, rainwater, and conserved and reused water. Even in the rain-blessed Pacific Northwest, water is a precious resource—especially with our renowned fisheries, farms, forests, and recreational opportunities. Water recycling is gaining recognition as an important conservation tool. Across the country and around the globe, people recycle water for the same reasons that they recycle other materials: to make more efficient use of a finite resource.

Recycled water is cleaned and disinfected wastewater restored for beneficial use. Recycled water is clear, safe, and has been treated to strict standards. It is a valuable, sustainable resource that matches water quality to specific reuse applications. Every gallon of recycled water that's used for irrigation, industrial processes, wetland enhancement and other beneficial uses potentially can save a gallon of our community's drinking water, river flow, or groundwater supplies for other competing demands.



Water is continually recycled in nature through the water cycle. The water we use every day is as old as the Earth itself. Modern wastewater treatment replicates the natural water recycling process to restore large quantities of water used by communities—quickly and effectively. See inside to learn how we produce recycled water.

more info

### Metropolitan Wastewater Management Commission

To tell us what you think about recycled water use or for more information, contact MWMC administration at 541.726.3694 or email [mwmcpartners@springfield-or.gov](mailto:mwmcpartners@springfield-or.gov). To learn more about the MWMC, visit us on the web at [www.mwmcpartners.org](http://www.mwmcpartners.org).

The following organizations also provide information about recycled water:

#### Water Reuse Association

[www.watereuse.org](http://www.watereuse.org)  
[www.athirstyplanet.org](http://www.athirstyplanet.org)

#### Oregon Department of Environmental Quality

<http://www.deq.state.or.us/wq/reuse/recycled.htm>



Metropolitan Wastewater Management Commission



partners in wastewater management



## Planning for Recycled Water's Regional Advantages

The MWMC currently uses recycled water to irrigate landscaping at our facilities and on our poplar plantation, Biocycle Farm. Soon the MWMC will have the ability to produce the highest class of recycled water recognized in Oregon—making it suitable for a wide variety of community uses. The MWMC is interested in exploring potential and interest in using more recycled water.

Any new recycled water uses will reflect community needs and values. It's important to the MWMC to engage stakeholders early to ensure that we use this resource in a way that is the best fit with our community. We want to find out what the community thinks about recycled water possibilities. Potential future uses could include increasing the amount of recycled water used at the MWMC's facilities, or extending recycled water use to the MWMC's neighbors in agriculture, sand and gravel, and other industrial operations.

### biocycle farm

In 2010, over 55 million gallons of the Eugene/Springfield community's recycled water irrigated nearly 88,000 poplar trees at the 600-acre Biocycle Farm.



## OREGON'S RECYCLED WATER CLASSIFICATIONS

CLASS	USES	QUALITY
Class D	Non-food agriculture	River quality—meets all standards for returning to the Willamette River
Class C	Orchards and vineyards Industry and construction Golf courses and landscaping	Increased disinfection and testing criteria over Class D
Class B	Recreational ponds Toilet flushing Fire suppression	Highly disinfected—10 times more stringent testing than Class C
Class A	Food crops Parks and sports fields Car washes and fountains	Very high—water is additionally filtered and disinfected with daily testing required

## Responsible and Sensible Investment

Recycling water in a way that is protective of human health, the environment, and of our ratepayers' investment is very important to the MWMC. That's why the MWMC is planning flexibility and adaptability in any of its recycled water considerations. Current and future regulatory compliance requirements will be balanced with the appropriate opportunities for recycled water uses.

**Meeting our regulatory obligations.** Water quality standards for the Willamette River and our nation's waters continue to become more stringent as the sensitivity of our waters to pollution—including temperature—becomes better understood. Meanwhile, the treatment technology needed to meet these strict requirements becomes more costly. What if there was a cost-effective community solution that protected water quality?

The MWMC believes recycled water could be an additional tool to meet regulatory requirements in a fiscally responsible way. By diverting recycled water, which can be warmer than river temperature standards, away from the river to a beneficial use, the total daily temperature impact on the river is lowered. And if recycled water substitutes for a

water supply extracted from the river, more cool river water stays in the stream.

**Benefitting our community and the environment.** Recycling water is a sustainable way to supply water for uses that do not require treatment to drinking water quality. As an alternative source to water extracted from streams and aquifers, recycled water use can help preserve our local river flow and groundwater.

Other communities are realizing some of these additional benefits of recycled water:

- Going "green" by mixing concrete, sweeping streets, and washing vehicles with recycled water
- Reducing stress on well fields and creeks by irrigating farms, vineyards, and orchards with recycled water
- Saving costs on golf course and park irrigation needs
- Enhancing stream and wetland habitat with recycled water

### we care!

## Safety: Our Highest Concern

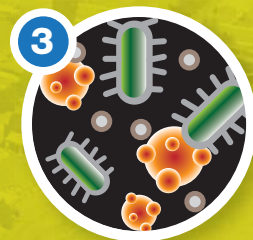
Protecting human health and the environment is the MWMC's first and foremost concern. All recycled water use is regulated and registered by the State of Oregon through the Department of Environmental Quality and the Oregon Water Resources Department. Recycled water is monitored and tested to ensure that it meets strict quality standards. Only water that meets those strict standards can be put to use.

## Producing Recycled Water at Eugene/Springfield's Regional Facilities

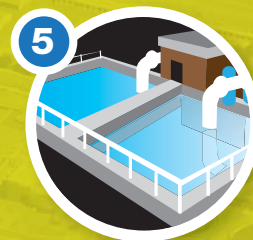
Restoring water through natural treatment processes produces recycled water from wastewater



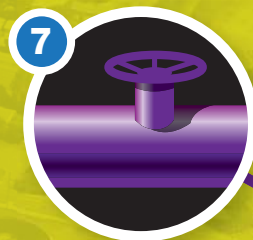
1 Wastewater from homes and businesses in Eugene and Springfield enters the wastewater treatment plant.



2 "Good" bacteria further clean the wastewater by digesting any leftover solid material that was too light to settle out.



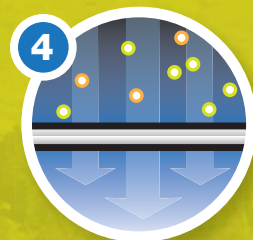
3 The water is disinfected through a concentrated chlorination process (similar to drinking water and swimming pool processes).



4 Recycled water is transported through a separate system of purple pipes. Purple pipes are used exclusively for recycled water in order to clearly distinguish them from drinking water lines.



5 Solid matter is settled out of the wastewater and removed.



6 Some of the water may be processed through filters to remove very fine particles—producing extremely clear water.



7 Depending on the level of disinfection and filtration applied, recycled water is classed as A, B, C, or D.

