



Russian River Watershed Association

300 Seminary Ave, Ukiah, CA 95482 • (707)833-2553 • www.rrwatershed.org

RRWA Environmental Column – November 2015

Recycled Water: A Valuable Resource

Water is a precious resource and commodity. Of the 365 billion gallons of water that cover about 71% of the earth's surface, less than one percent is fresh water readily available for human consumption and use.

As the human population continues to grow, and climate changes shifts precipitation patterns and increases the intensity of normal drought cycles in California, it is increasingly important that we manage our water resource thoughtfully and responsibly to ensure that there is enough to support not only the water needs of our human population but also that of our watershed, aquatic and wild life, and the ecosystems of which we are members. The best way to do this is to reuse water whenever appropriate instead of using drinking (also known as potable) water for applications that do not require it.

Although many communities throughout California have been working to implement new and innovative programs to conserve and reuse water over the last several years, Governor Jerry Brown's Executive Order, issued on April 1, 2015, brought water reuse and conservation to the forefront. Noting the unprecedented lack of Sierra snowpack, used for drinking water for a majority of the State, the Governor collaborated with the State Water Resources Control Board to issue Emergency Regulations requiring all Californians to reduce water consumption by 25%. Since about 47% of water is used for irrigation purposes, an easy and effective way to meet the Governor's mandate would be to switch our irrigation water from potable sources (drinking water) to recycled water sources.

Recycled water is produced at wastewater treatment facilities where sewage goes through a very rigorous treatment process to produce tertiary-treated, or recycled, water. This high-quality resource is safe to use for irrigation of landscapes, agricultural crops, and vegetable crops as well as industrial processes, construction purposes, and many other non-drinking purposes.

Recycled water is one of the most highly-regulated water sources in the nation and must meet strict standards for health and safety set by the California Department of Public Health and environmental quality standards set by the Regional Water Quality Control Board. To ensure the safety of this water supply, recycled water is continuously tested and strictly monitored by regulatory agencies.

To help stretch California's limited water supply, the State Water Resources Control Board adopted a Recycled Water Policy in 2009. The purpose of this policy is to safely increase the use of recycled water throughout the State. California set a goal of increasing the amount of recycled water used by one million acre-feet per year by 2020 and by at least two million acre-feet per year by 2030, when compared to 2002 levels. An acre-foot is the amount of water needed to cover one acre of land with one foot of water. An acre-foot is approximately 326,000 gallons and can satisfy the water needs of approximately three households for one year.

Recycled water is used in thousands of locations across the world with no documented cases of illness from its use. In the Russian River watershed, several communities, including Healdsburg, Rohnert Park, Santa Rosa, Ukiah, and Windsor, are using recycled water for landscape irrigation, agricultural irrigation, construction purposes, as well as other approved uses.



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By using recycled water, communities are reducing their overall demand for drinking water and helping the State to meet its short-term mandatory water conservation targets as well as implementing behavior, programs, and infrastructure that will ensure long-term water conservation.

Recycled water is a local, reliable, and safe water supply that reduces the need to develop new freshwater supply sources and helps to preserve the environment. Nature has recycled our planet's finite water supply for billions of years. As is often the case, by duplicating a process found in nature, we can produce a high-quality source of water to be used for beneficial, non-potable purposes. It is our responsibility to ensure the availability of a consistent and well-managed water resource to all that may need it in the future.

This article was authored by Meg Lawrence of the City of Healdsburg, on behalf of RRWA. RRWA (www.rwatershed.org) is an association of local public agencies in the Russian River Watershed that have come together to coordinate regional programs for clean water, fisheries restoration, and watershed enhancement.