Recycled Water: Frequently Asked Questions

Why do we need recycled water?

Recycled water is a safe, effective, and reliable new water supply available to help meet future water supply needs of our community. North Marin Water District (NMWD) was formed by local voters in 1948 due to shortfalls in local groundwater supplies. NMWD built Stafford Dam in 1951, but water supplies still lagged demand. Today, NMWD depends on the Russian River for 80% of Novato's water supply, but this source has been impacted by changed conditions to protect fish and environmental needs. The effects of global warming may further stress available water supplies.

How is recycled water made?

Recycled water is wastewater treated to tertiary recycled water standards (also referred to as advanced water treatment) which is the highest level of treatment defined by the State of California (referred to as Title 22). This level of treatment allows for unrestricted reuse in virtually all recycled water applications. There are four treatment steps that wastewater goes through before it is considered tertiary recycled water: primary treatment, biological treatment (secondary), filtration and disinfection (tertiary). These steps are necessary before recycled water is used for landscape irrigation.

What is the quality of recycled water?

Recycled water meets strict federal, state and county health and safety requirements. While it is not approved for drinking, it is second in purity only to potable water. Of the three quality standards for recycled water in California, NMWD's will be of the highest quality. It is safe, reliable and used in thousands of applications throughout the United States and the world. This water is treated to a quality that could supply a lake used for boating and swimming.

How can I be assured of the quality?

Recycled water treatment is monitored continuously and tested in a certified laboratory daily. The recycled water delivery pipes NMWD will be constructing are completely separate from those delivering drinking water. NMWD will ensure that no cross connections occur between the two systems.

Does recycled water smell or look different than tap water?

Recycled water is clear and colorless and may have a slight chlorine smell. It visibly looks like tap water.

What happens with recycled water now?

Currently, Novato's wastewater undergoes extensive treatment at Novato Sanitary District (NSD) and is then discharged to the Bay during the winter or recycled to irrigate hay fields along Highway 37 during the summer; these activities will not change. It must meet strict governmental regulations on the treatment, timing and quality of the treated water effluent that is released. A small amount is now filtered further enabling this highly polished recycled water to be used for "unrestricted use" as spray irrigation at StoneTree golf course. NMWD's Recycled Water Program will use more of this high quality resource to be reused productively and offset potable supplies now used for landscape irrigation.

Where has recycled water been used?

The most common uses of recycled water in Marin are to irrigate parks, school landscaping, golf courses and other large landscapes. Recycled water is currently being used in Novato, San Rafael, Calistoga, St Helena, Yountville, Napa, Santa Rosa, San Francisco, San Jose, Sunnyvale, Santa Clara, Daly City and many other Bay Area communities. It is also used in Southern California, in Orange County, Los Angeles County, and San Diego County—over 190 California communities in all. Parks are one of the most common uses for recycled water since their landscaping needs so much water. In San Francisco's Golden Gate Park, for example, recycled water has been used for irrigation since 1932.

Where will recycled water be used in Novato?

It may take many years to fully install NMWD's recycled water system. Some of the prominent sites identified for recycled water use expansion include: Fireman's Fund Insurance complex; Valley Memorial Park (cemetery); numerous homeowners association common landscaping areas, including Meadow Park HOA; city parks and recreational fields; and Olive, Hamilton and Novato Charter schools. Construction is likely to begin this summer and the first users will receive recycled water in 2012. It is not planned to use recycled water for single family residential customers.

How safe is recycled water?

<u>For schools and parks</u>. Recycled water served by NMWD will be treated to a very high level and certified safe for contact for all people including children. In over 80 years of use of recycled water in California, there have been no documented cases of any ill effects from proper use. There are 15 parks and playgrounds in Marin as well as 13 schools already using recycled water and around 400 others throughout the state.

<u>For pets.</u> Recycled water is near in quality to drinking water and would be safer than if your pet drank from a pond or ditch. It has been carefully treated and has been disinfected. As a result of this treatment, recycled water is ideal for use on landscapes, especially lawns.

Who develops the health standards for recycled water?

The California Department of Public Health (DPH) establishes and enforces the standards for recycled water. Both NMWD and the customers using the water for irrigation must meet stringent requirements when using recycled water. In addition, the California Regional Water Quality Control Board issues water recycling permits based on the established DPH regulations.

How will I know if the water irrigating parks and other outdoor spaces is recycled water? A landscape area using recycled water will be clearly marked with signage stating the use of recycled water.

Are there rules and regulations for recycled water use?

Customers are required to adhere to regulations which minimize or eliminate possible misuse. The publication, Rules and Regulations for Recycled Water Use, is available to recycled water customers at nmwd.com.

Is recycled water really good for irrigating?

Recycled water is already being used as a reliable drought-proof source of water for the turf grasses in our area. Recycled water has a higher nutrient content and is beneficial to landscape plants and turf grasses.

Is recycled water cost effective?

The biggest cost for recycled water is building the pipelines to deliver it. NMWD has carefully identified the shortest pipeline routes that can deliver recycled water to the largest landscape areas which are primarily found at multi-family housing developments, schools, parks and large businesses.

Does recycled water save the user money?

Recycled water users will save on their water bill, because they will no longer have to pay the +8% seasonal rate now in place on non residential water use from May through November. Furthermore, NMWD expects to fund retrofit costs to connect recycled water to existing irrigation systems. To help make an easy and successful transition, NMWD will provide an extensive program of informational support services and direct assistance to recycled water customers.

Who pays for the recycled water connections?

For existing customers, such as landscape irrigation accounts, NMWD will pay the connection cost. There will be no connection fees for existing customers. For future new customers, a connection fee will apply.

Where can I get more information on recycled water?

- California Department of Public Health Recycled Water: Regulations and Guidance (http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Lawbook.aspx)
- Unites States Environmental Protection Agency Guidance for Water Reuse (http://www.epa.gov/nrmrl/pubs/625r04108/625r04108.pdf
- Water Reuse www.athirstyplanet.com