



THE CITY OF SAN DIEGO

# Recycled Water

## use in San Diego

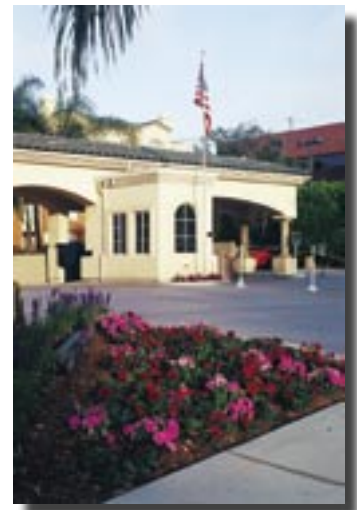


# Recycled Water Use in San Diego

## Recycled Water Makes Sense for San Diego

In San Diego, water is too precious a resource to use just once. A safe, dependable water supply is vital to our economy and quality of life. San Diego currently imports up to 90 percent of its water supply from Northern California and the Colorado River.

To meet future water demands and avoid shortages, while reducing our dependence on imported water, the City of San Diego has built the North City Water Reclamation Plant and the South Bay Water Reclamation Plant. These plants treat wastewater to a level suitable for irrigation, manufacturing and other non-drinking, or non-potable purposes. The North City Plant has the capability to treat 30 million gallons a day and the South Bay Plant can treat 15 million gallons a day. Recycled water (also referred to as reclaimed water) gives San Diego a dependable, year-round, locally controlled water resource. Using recycled water is cost-effective, reliable and good for the environment.



## About the City of San Diego Water Department



The City of San Diego Water Department is committed to providing our customers with safe, high-quality, reliable water service. Through the use of long-range planning, innovative cost-saving measures and cutting-edge technology, the Water Department is working to ensure safe, reliable service for generations to come.

**For more information about the City of San Diego Recycled Water program, please call (619) 533-7556**

**Visit our website at: [www.sandiego.gov/water/recycled](http://www.sandiego.gov/water/recycled)**

## Recycled Water Uses

Landscape irrigation is the single largest use for recycled water within the City of San Diego. Recycled water is also used for industrial processes, cooling towers, soil compaction, dust suppression, and toilet and urinal flushing.

The City is currently working with businesses, public agencies, homeowners associations and academic institutions with proximity to the optimized system, to retrofit their properties and educate them on the use of recycled water.

Many customers are already using recycled water. Some of these customers include General Atomics, Motorola, CalTrans, UCSD, Torrey Pines Municipal Golf Course, Nissan Design, Burnham Institute, Metro Biosolids, Miramar Landfill, Marine Corps Air Station Golf Course, and the City of Poway.



## Rules and Regulations

The State of California Department of Health Services sets the standards for required levels of treatment and types of uses for recycled water. These standards are included in the California Code of Regulations, Title 22.

There are extensive rules and regulations covering its usage. These include proper signage and making sure all pipes, sprinkler heads, meter boxes and other irrigation equipment are properly marked or color-coded purple to distinguish them from potable supplies and avoid any potential for cross-connections. The Water Department will work with customers to ensure they are in compliance with all State and local health regulations.



Approved uses include irrigation of food crops, parks, playgrounds, school yards, residential landscaping, common areas, nurseries, freeway landscaping, golf courses, pastures for animals and wetland projects. Additional approved uses are for recreational water bodies including fishing, boating, fish hatcheries, industrial processing, commercial laundries and soil compaction.



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## Quality and Safety

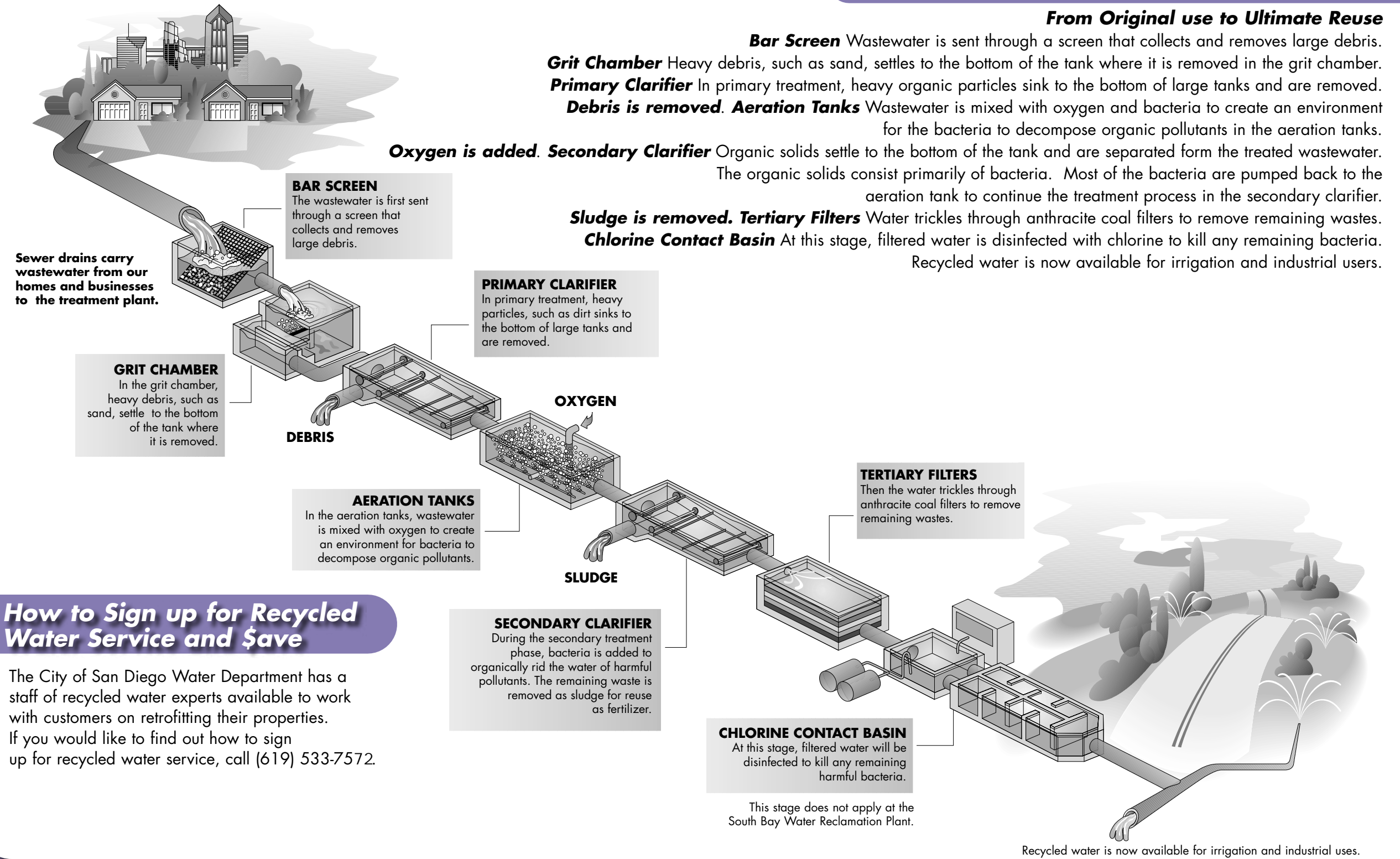


Careful monitoring by responsible local health and water quality control agencies ensures that the City of San Diego produces a high quality water product that meets all federal, state and local water quality standards. According to the strict standards set out in Title 22 of the California Code of Regulations, recycled water is safe for all human contact. For more than 30 years, recycled water has been safely used throughout the country in recreational lakes, sprinkler systems for homes and businesses, crop irrigation and manufacturing processes. Since recycled water is used for non-drinking purposes, a separate set of distribution pipelines has been built to deliver recycled water from the North City Water Reclamation Plant and the South Bay Water Reclamation Plant to customers.



## Typical Recycled Water Treatment Process:

### From Original use to Ultimate Reuse



**Bar Screen** Wastewater is sent through a screen that collects and removes large debris.

**Grit Chamber** Heavy debris, such as sand, settles to the bottom of the tank where it is removed in the grit chamber.

**Primary Clarifier** In primary treatment, heavy organic particles sink to the bottom of large tanks and are removed.

**Debris is removed. Aeration Tanks** Wastewater is mixed with oxygen and bacteria to create an environment for the bacteria to decompose organic pollutants in the aeration tanks.

**Oxygen is added. Secondary Clarifier** Organic solids settle to the bottom of the tank and are separated from the treated wastewater. The organic solids consist primarily of bacteria. Most of the bacteria are pumped back to the aeration tank to continue the treatment process in the secondary clarifier.

**Sludge is removed. Tertiary Filters** Water trickles through anthracite coal filters to remove remaining wastes.

**Chlorine Contact Basin** At this stage, filtered water is disinfected with chlorine to kill any remaining bacteria. Recycled water is now available for irrigation and industrial users.

### How to Sign up for Recycled Water Service and Save

The City of San Diego Water Department has a staff of recycled water experts available to work with customers on retrofitting their properties. If you would like to find out how to sign up for recycled water service, call (619) 533-7572.