

Water Reuse Study 2005 An Overview

A need for more water

The Water Department's mission is to meet the City of San Diego's current and future water supply needs. Currently, approximately 90 percent of the City's water supply is imported, with the remaining sources coming from stored local runoff and recycled water. Over the past 19 years, the City's conservation programs have helped reduce the City's dependence on imported water. Today, the program saves approximately 20,000 acre feet of potable(drinking) water a year, which is enough to meet the water needs of 40,000 typical families for a year. Even with continued conservation measures, by 2030, San Diego will need 25 percent more water than it uses now. The City must diversify its sources of water and increase the use of locally-produced water to assure an adequate and reliable supply for the future.

One-year study

As part of this diversification effort, the City is undertaking a one-year study to evaluate all opportunities for increasing the use of recycled water. Recycled water is municipal wastewater that has been treated to a high level so that it can be reused for a variety of beneficial purposes. Water that is recycled and reused locally helps reduce the demand for imported water, and is an available water supply even during a drought.

Current recycled water system

The City currently operates two water recycling plants. The North City Water Reclamation Plant, opened in 1997, is distributing recycled water for irrigation and industrial use. The second plant is the South Bay Water Reclamation Plant that began operations in 2002, and is currently treating wastewater to a secondary level. Final certification for recycled water production is expected soon from a state regulatory agency. Agreements are in place to deliver recycled water to customers once construction of the distribution system is completed. Both plants are able to increase the production of recycled water as they were constructed to handle larger amounts of wastewater than are currently being treated.

Study objectives

The study will be a comprehensive, impartial, balanced, and science-based review of all recycled water use opportunities for the City. All options will be thoroughly analyzed using a variety of criteria. Opportunities that will be evaluated include:

- expanding the existing distribution system for irrigation and industrial use
- additional customer uses for construction, manufacturing, cooling towers, etc.
- adding storage reservoirs
- options for excess recycled water produced during low demands for irrigation
- discharge into flowing streams
- wetlands development
- recharging groundwater storage basins

- after additional advanced treatment, blending with water stored in reservoirs that are used as drinking water sources
- graywater use

Public participation

The public's participation in this study is critical. It is a top priority that the public become involved in the study, understand the recycling process and help determine the best use of this water resource. A wide range of meetings and communication opportunities will facilitate dialogue and information sharing with city residents and the study team over the next year.

Health and safety

The study will focus on the health and safety aspects of the recycled water opportunities. An independent advisory panel from the fields of science, economics, medicine and education will analyze the information and make recommendations to the study team. The team will compile research and studies on the health impacts of various constituents that may be in wastewater. The study will also look at other important factors including an assessment of the costs and benefits of the various options, public acceptance, health and safety concerns, and environmental considerations.

City Council direction

On January 13, 2004, the City Council directed the City Manager to conduct a study of all aspects of increasing the City's production and use of recycled water. The Water Reuse Study 2005 is the response to this direction and is an expansion to the scope of the City's "Water Reclamation Master Plan," which is updated every five years. The study will take about one year to complete and will cost approximately \$900,000.

Contacting the study team

For further information on the Water Reuse Study 2005, please call Marsi Steirer, City of San Diego Project Director at (619) 533-4112; Mike Wallace, City of San Diego Project Manager at (619) 533-7570; or the study's Community Information Line at (619) 533-4631. The Study's website is www.sandiego.gov/water/waterreusstudy.