Water Reuse Study

On average, 90 percent of the City of San Diego's water is imported from the Colorado River and Northern California. These water supplies are increasingly strained by a growing population and a lack of rainfall. Drought is a constant threat. Twentyfive years ago, the City of San Diego was home to 875,000 residents. Today, San Diego is a city of 1.3 million residents, and is projected to grow to 1.6 million people over the next 25 years. Even with aggressive water conservation, by 2030 San Diego will require 25 percent more water than it is using now.

297,000 acre-feet per year by 2030

244,000 acre-feet per year in 2000

At the direction of the San Diego City Council, the Water Reuse Study explored ways to optimize use of recycled water produced by the City, therefore reducing our demand for imported water.

PUBLIC INVOLVEMENT

Public participation is a critical component of the Study. It is the City's top priority that the public understand recycled water use and determine the best use of this resource. A wide range of meetings and communications have produced beneficial dialogue between city residents and the Study team.

- 113 presentations
- 6.168 website visits
- 398 on-line informal opinion surveys
- City of San Diego Assembly on Water Reuse
- Stakeholder Interviews
- CityTV 24 video presentation broadcast
- Monthly electronic newsletter Water bill insert
- July 26, 2005 Special Election Ballot ad

*as of 12/31/05

The Study team sought input and direction through two-way communication. A key feedback component was the City of San Diego

Recycled Water Use by 2030



Assembly on Water Reuse, a 67-member stakeholder group.

The group held two workshops and produced opinions on Study options and the evaluation criteria used for analyzing each option. After reviewing the proposed water reuse strategies, the assembly voted unanimously to endorse strategies utilizing indirect potable reuse.

Reuse Study Supporters*

BIOCOM/San Diego

Biosite Incorporated

Carmel Mountain Ranch **Community Council**

City of Coronado

City of Del Mar

City of El Cajon

City of Imperial Beach

City of La Mesa

City of National City

City of Poway

Del Mar Mesa Community Planning Board

Greater Skyline Hills Community Association

Metro Wastewater JPA

Padre Dam Municipal Water District

Public Utilities Advisory Commission

Ramona Municipal Water District

San Diego Regional Chamber of Commerce

San Dieguito Water District

Sweetwater Authority

Torrey Hills Community Planning Board

*as of 3/9/06



RECYCLED WATER PRODUCTION



North City Water Reclamation Plant Opened 1997 Design capacity: 30 MGD 24 MGD available for distribution after plant processing use

Study Research on Water Reuse Options

The City Council directed research on several ways to maximize recycled water use. These are: continue expanding the system for irrigation and industrial use, create storage reservoirs, add to streams or create wetlands, recharge or improve groundwater basins and reservoir augmentation. Graywater use was also researched.

The Study's research team developed six reuse strategies. Those maximizing the amount of recycled water available from the two plants utilized reservoir augmentation projects, which require advanced water treatment to the plants' tertiary level recycled water. After a blending time with untreated water stored in a reservoir, the water is treated at a drinking water plant to meet all required drinking water guidelines before distribution.

SOUTH BAY WATER RECLAMATION PLANT CITY-OF-SAN DIEGO Zili DAIRY MART ROAD

South Bay Water Reclamation Plant Opened 2002 Design capacity: 15 MGD 13.5 MGD available for distribution after plant processing use

Indirect Reuse Projects:

El Paso, TX	4-5 MGD
Fairfax County, VA	54 MGD
Las Vegas, NV	144 MGD
Orange County, CA*	70 MGD
Singapore	6 MGD
	*online 2007

BENEFITS OF RECYCLED WATER

Available year-round Enhances the environment Conserves imported water Locally controlled Variety of beneficial uses Drought-proof water supply Promotes sustainability

Water Reuse Study Information Line: (619) 533-4631 www.sandiego.gov/water/waterreusestudy As the costs of importing water continue to rise, producing a steady supply of recycled water is not just an economic advantage, but an ecological necessity.

Securing a reliable water supply is vital to local economic development. Businesses look at water reliability when making decisions about relocating or expanding facilities. Additionally, when wastewater is recycled and reused locally, less is treated and disposed of in the ocean.

CONCLUSION

Support for the Study will ensure San Diego's ability to increase our local water supply, decrease our reliance on imported water sources, promote self-sufficiency and optimize water assets for future residents, visitors and businesses.