



THE CITY OF SAN DIEGO
REPORT TO THE CITY COUNCIL

DATE ISSUED: June 22, 2006

REPORT NO. 06-087

ATTENTION: Natural Resources and Culture Committee
Agenda of June 28, 2006

SUBJECT: Water Conservation Update

REQUESTED ACTION:

This report updates Water Conservation activities resulting in significant water savings to both the Water Department and Water Department customers. It incorporates data through Fiscal Year 2005, the latest year for which complete information is available. No action is required by the Committee or Council.

STAFF RECOMMENDATION:

Accept the status report.

SUMMARY:

Background

San Diego relies mostly upon imported water from Northern California and the Colorado River. Our pleasant Mediterranean climate attracts large numbers of potential residents, businesses, and tourists every year. It is important that the City of San Diego practices careful water resource planning to ensure an adequate water supply to sustain its economy and lifestyle.

The Water Department is committed to improving water supply reliability through an aggressive capital improvements program, and investigating new alternative sources of water (e.g., desalination, water transfers, groundwater storage management). In addition, water conservation is a critical component of the City's water resources management, as every gallon saved reduces the need to purchase, store, treat and deliver imported water. As part of its commitment to water conservation efforts, the Water Department has prepared the attached report outlining key conservation programs and initiatives.

Discussion

The City's Water Conservation Program has been and continues to be effective in promoting permanent water savings. Established by the City Council in 1985, the Water Conservation

Program now accounts for over 29,000 acre-feet (AF) of potable water savings each year. This is enough water to fill Lake Murray over six times.

The City's Water Conservation Program focused primarily on achieving indoor water savings at first, offering services and incentives such as the Residential Water Use Survey Program, the Ultra Low Flow Toilet (ULFT) and High-Efficiency Clothes Washer (HEW) incentive programs, the Residential Showerhead Retrofit Program, and a variety of public outreach and education efforts. These highly successful indoor water conservation programs generated significant water savings in the last 15 years and helped the City improve its overall water supply reliability while demonstrating its ongoing commitment to implement proven water conservation measures.

With the maturity of the indoor programs, water conservation efforts throughout California have now switched focus to outdoor programs where significant potential for water savings remain. During the summer, residents can use up to 75% of their water for outdoor uses such as irrigation. Several programs have been successful in assisting our customers to use water efficiently and to reduce irrigation water waste, such as:

1. Residential Water Use Survey – Single family residents benefit from an on-site survey that assesses irrigation systems, looks for leaks, and establishes customized irrigation schedules based on the plant's water needs.
2. Commercial Landscape Survey – A higher level survey that uses Geographic Information Systems (GIS) and satellite maps to measure irrigated areas, establish water budgets and irrigation schedules based on plant watering needs, and offer recommendations to irrigation systems and designs to improve watering efficiency. This program is popular with property managers and homeowner associations, golf courses, City parks, and commercial customers with sizeable landscape areas.
3. Landscape Watering Calculator – An easy-to-use web tool for anyone to access and create irrigations schedules year-round that minimize water waste and irrigation runoff. It takes the guess work out of programming irrigation run times. The tool can be accessed at <http://apps.sandiego.gov/landcalc/start.do>.
4. Weather Based Irrigation Controller and Landscape Incentives – Grants have been made available for City customers to receive these smart controllers and other irrigation devices for free or at substantial discounts through programs administered regionally by the Metropolitan Water District of Southern California (MWD) and the San Diego County Water Authority (CWA).
5. Water Conservation Garden at Cuyamaca College – Interest in this City co-sponsored water conservation demonstration garden has picked up through various activities such as: garden concerts, festivals and “paint-outs” as described in the attached report. Most visitors are impressed with the beauty and color of “water efficient” gardens, dispelling the myth that water conservation gardens are mostly rocks and cacti. More information about the garden can be found at www.thegarden.org.
6. California Friendly Plants – Working with water agencies like the City of San Diego Water Department, MWD developed the California Friendly Campaign to promote

water-efficient plants, appliances and homes. With the goal of having the same branding awareness as EPA's "Energy Star," the California Friendly Program works with nurseries, builders, appliance manufacturers, landscapers and other stakeholders to increase awareness and availability of California Friendly products.

7. Water Conservation Action Committee (CAC) – The CAC, specifically its members representing the San Diego Farm Bureau, California Landscape Contractors Association, nurseries, property management companies, and water agencies including the City of San Diego, has focused on making water efficient plants (calling out the most common as the Nifty 50 Plants) more readily available to customers in larger sizes and quantities. For example, Miramar Nursery recently set up a display area for the Nifty 50 plants to help promote them among customers and visitors.

In addition, City staff is involved in developing and coordinating regional water conservation programs. On May 25, 2006, the CWA Board approved an increase in its FY2007 water conservation budget from \$500,000 to \$1.8 million. This will increase funding for programs that support the initiatives listed above and those mentioned in the attached report. This action is a direct result of efforts by a CWA Member Agency General Manager Steering Committee who recommended stepped up efforts and funding for both short term and long term water conservation programs. The Committee which included the City's Acting Water Department Director and Water Resources Manager, realize that water conservation is an important and cost effective element of water supply reliability. This infusion of "new investment" in conservation will include funding for increased public education campaigns to ensure that conservation will once again be top-of-mind for San Diego residents, helping promote conservation programs that result in additional water savings.

Other recommendations from the General Managers that were approved by the CWA Board for Fiscal Year 2007 include:

1. A firm commitment to meet the 100,000 acre-feet per year water savings goal set by CWA for 2030. CWA staff estimate current water savings at 45,000 acre-feet/year.
2. Sufficient funding to support program marketing and education. The General Managers believe that education is immeasurable but leads to participation in conservation program.
3. Vigorous pursuit and funding for programs that produce water savings at or below the cost of imported water or local water development.
4. A focused effort by CWA to fund programs that provide regional benefit, including working with Land Use Approving Authorities to implement zoning and ordinance changes that advance water conservation programs and plans; leading efforts to secure program co-funding or grant funding; and taking the lead in funding research and development projects for the region.
5. A transition by CWA out of the more mature programs that have largely achieved their stated goals (e.g. toilet voucher program) and redirecting dollars to other programs, primarily for conserving outdoor water use. Such redirected focus will include the promotion of: irrigation equipment technology and system efficiency, landscape

conversion, land use ordinances for new homes, education, demonstration gardens, college level programs, landscape design and contractor training and certification, and outreach to property management.

6. The creation of a Water Conservation Summit. This day long event will bring together water stakeholders such as the building, landscape and property management industries, businesses, municipalities and residents to discuss pending legislation implementation, develop strategies and priorities for future programs, and chart a renewed direction for conservation efforts that are mutually beneficial yet challenging. This event is tentatively scheduled for September 29, 2006.

Conclusion

While current water conservation programs continue to attract participants, recent key developments will help sustain program participation as well as chart renewed directions for future conservation efforts. City staff have contributed greatly to these recent regional developments.

Attached is the Fiscal Year 2005 Water Conservation Update, the latest report available which outlines the City's efforts to meet recognized Best Management Practices (BMPs) and provides details of the City's various water conservation programs. The Fiscal Year 2006 Update will become available in September 2006.

FISCAL CONSIDERATIONS:

The Water Conservation Program actively pursues BMPs that implement water conservation measures at a cost less than the incremental charge for additional treated water. In 2005, the City's average cost to save one acre foot of water was less than \$120.00/AF. The current cost to the City of incremental treated water is \$529/AF.

PREVIOUS COUNCIL ACTION:

The Water Conservation Program has appeared before the City Council on numerous occasions. Perhaps the most significant date was on September 23, 1991, when the San Diego City Council joined the California Urban Water Conservation Council (CUWCC) by signing the Memorandum of Understanding (MOU) for Urban Water Conservation in California. The MOU is a collaborative effort by members of the CUWCC which gives strength and commitment to water rights decisions that affect California's water allocations and commits cities and jurisdictions throughout California to implementing BMPs as defined in the MOU.

COMMUNITY PARTICIPATION AND PUBLIC OUTREACH EFFORTS:

Central to the overall water conservation goal is community participation and public outreach efforts. Public education promotes new conservation efforts and reinforces the existing foundation of conservation programs. The outreach campaign is structured to reach schoolchildren as well as adults. Components of the campaign include: an annual children's poster contest; article placements in community newspapers; participation in community fairs and events; speakers bureau presentations to community, civic and business organizations; the

water conservation exhibit at the Reuben H. Fleet Space Theatre in Balboa Park, and the Water Conservation Garden on the campus of Cuyamaca College. Complete details of the Water Conservation Program's community participation and outreach efforts are detailed in the attached report.

J. M. Barrett
Water Department Director

R. F. Haas
Deputy Chief of Public Works

LSG/cdr

Attachment [1. Water Conservation Update](#)