

DATE ISSUED: June 19, 2002

REPORT NO. 02-147

ATTENTION: Natural Resources and Culture Committee
Agenda of June 26, 2002

SUBJECT: Commercial Landscape Survey Program

REFERENCE: Strategic Plan for Water Supply (1997-2015)
Managers Report No. 02-014, dated January 11, 2002

SUMMARY

Issues - 1) Shall the Water Department implement a new Commercial Landscape Survey Program (Program) that provides voluntary water budgets and landscape surveys for customers with large irrigated landscape areas? 2) Shall the City Manager enter into a two-year agreement with the San Diego County Water Authority (CWA) which will provide program co-funding?

Manager's Recommendations - 1) Authorize the City Manager to implement the new Commercial Landscape Survey Program. 2) Authorize the City Manager to enter into an agreement with the CWA for program co-funding.

Other Recommendations - None

Fiscal Impact - Water Department revenue would increase by a maximum of \$61,034 per year.

BACKGROUND

The City of San Diego imports as much as 90% of its potable water. This percentage varies with the amount of local rainfall, which has been below average for the past three years, resulting in increased expenditures for imported water. While the availability of imported water is fairly stable, with an estimated two year supply in storage statewide, the cost of these purchases will continue to increase over time. The City is actively pursuing solutions that will increase local storage capacity and diversify its water portfolio, resulting in lower operating costs. Water conservation programs also reduce the City's expenditures for imported water. Consistent with City Council Policy 400-11, and the Strategic Plan for Water Supply, the Water Department's water conservation programs have worked to maximize available water resources since 1985. These programs are widely recognized for their effectiveness and innovation in providing water management and achieving significant water savings. The Strategic Plan identifies the goal of achieving 26,000 acre feet per year water savings through conservation programs by the year 2005. Existing conservation programs, which include landscape water conservation programs, now yield over 18,000 acre feet of potable water savings each year.

DISCUSSION

In addition to current plans laid out in the Strategic Plan for Water Supply, the Water

Department has also developed plans to meet this demand via new conservation programs. Specifically, the new Commercial Landscape Survey Program will improve the ability for commercial, industrial, and institutional customers to manage their irrigation needs.

Currently the City pays a 25% cost share (up to a maximum of \$21,444 per year) for landscape surveys administered by San Diego County Water Authority (CWA) and provided by an outside contractor. Under the current Program, the City has received an average of 53 surveys per year, from 1991-2000, with an average estimated water savings of 104 acre feet per year (afy). In Fiscal Year 2001, 36 surveys were completed, resulting in 186 afy in estimated savings.

Under the proposed new Program, rather than paying a 25% cost share, the City will perform these surveys in-house and will itself receive a reimbursement of up to \$61,034 in program costs from CWA (combined funds from CWA and the Metropolitan Water District of Southern California). Using existing staff the City can expect to complete a minimum of 120 surveys and 600 water budgets per year with a potential water savings of 650 afy. (See Table 1). \$61,034 will fully cover the expected costs of the City's program.

In order to provide resources needed, staff will be shifted from the Residential Survey Program (RSP), which was established in 1992. To date, the City has completed over 32,000 surveys of single and multi-family residences and the RSP is ahead of schedule in meeting overall conservation goals as a required Best Management Practice under the Memorandum of Understanding Regarding Urban Water Conservation in California¹. Given the additional potential for water conservation within the commercial/ industrial/ institutional landscaping sector, staff resources can achieve a greater water savings per labor hour expended in the new Program vis-a-vis the RSP. In addition, the new Program will satisfy the requirement to implement BMP #5 under the above MOU. It is expected that this realignment of resources will result in an increase in the turnaround time in responding to a request for a residential water conservation survey from 3 - 5 days to 7 - 10 days.

The increase in potential water savings will be achieved by two methods. First, each customer who receives a survey will be entered into the new Water Resources Landscape Database (WRLD). This database allows staff to record all of the site and contact information related to the landscape, and create a water budget based on plant types, climate, and irrigation system efficiency. Once the budget is created the customer will receive a complete package of information, including the budget, an aerial photograph of their property, and a watering schedule they can enter into their irrigation controller. WRLD will then automatically print the budget on the water bill, to remind the customer of their recommended water use goal. The budget will be updated once a year and a new information package will be mailed to the customer.

Second, Program staff will utilize WRLD to create an additional 600 water budgets each year, for customers who have not received a survey. The combination of the increase in the number of surveys, water budgets printed on water bills, and the opportunity to track and compare actual water use versus the recommended water budget, using the WRLD system, is expected to greatly increase the effectiveness of the City's landscape conservation efforts.

As part of its on-going response to Council regarding the improvement of water conservation landscape requirements, the Water Department and the City's Development Services Department

(DSD), Landscape Review Section, will take advantage of the new capabilities of WRLD by implementing a program which requires more site-specific and target-oriented water budgets for new landscape developments. The proposed program will require customers applying for discretionary landscape development permits to include a WRLD budget as part of the water management plan for the site. As part of the permit process, the landscape architect for the site will be required to fill out an information sheet, provided by DSD, detailing the size and type of landscape area(s) at the site. This information will be sent to the Water Department, where Program staff will generate a WRLD budget and return it to the architect to include in a more detailed water management plan.

In addition to the water budgeting component of the WRLD database, staff will also be able to market other City conservation and environmental programs, including recycled water, storm drain pollution prevention, protection of native MSCP areas, and green waste reduction.

TABLE 1							
Current CWA Program	Proposed City Program						
# of Surveys and Water Budgets	City Cost	Acre Ft/Yr. Savings	Co-Funding Received	# of Surveys and Water Budgets	Addition al City Cost	Acre Ft/Yr. Savings	Co-Funding Received
53 per year average	\$13,250 per year average	104 afy estimate d	\$0	720	\$0	650 afy estimate d	Up to \$61,034 per year

The CWA Program agreement, with the current contractor, expires June 30, 2002. The new agreement between CWA and the City would begin July 1, 2002 or when the agreement is executed, and continue to June 30, 2004. Future agreements could be renewed every four years.

CONCLUSION

Beautiful landscapes are a hallmark of our City, contributing to our quality of life, economic vitality, and world famous standing as a tourist destination. As the City's population continues to grow at its projected rate, the environmental benefits of healthy landscapes will become increasingly important. A proactive effort to monitor and optimize irrigation water use will help insure adequate water supplies, even during cyclical periods of drought, and have a major impact on reducing storm drain pollution and other citywide environmental programs. Achieving our conservation goals will ultimately result in lower system and delivery costs and insure the vitality of our landscape resources.

ALTERNATIVE

Continue existing contractor-operated landscape survey program with CWA, including providing City co-funding of up to \$21,444 per year.

Respectfully submitted,

Mark Stone
Acting Water Department Director

Approved: Richard Mendes
Utilities General Manager

STONE/DC

Attachment [1. Memorandum of Understanding](#)