

DATE: June 2, 2009

TO: Mayor and City Council

FROM: Director of Public Works

SUBJECT: Authorization for the City Manager to Execute a Professional Services Agreement for Landscape Water Use Study and Survey

RECOMMENDATION

That Council adopts the attached resolution authorizing the City Manager to execute a Professional Services Agreement with Gates + Associates for a Landscape Water Use Study and Survey in an amount not to exceed \$70,000.

BACKGROUND

Hayward is one of 28 suburban purchasers of potable water from the San Francisco Public Utilities Commission's (SFPUC) regional water system and receives 100 percent of its water supply from SFPUC's Hetch Hetchy system. The City water system consists of approximately 32,300 accounts, including about 1,200 water meters for irrigation uses only.

Increasing demands for urban, agricultural, and environmental water uses call for conservation and the elimination of waste as important elements in the overall management of water resources. Hayward's water use has been historically low in comparison to nearby cities. For example, the residential per capita use in 2008 was 70 gallons per day (gpd). The gross per capita use, which includes all commercial, industrial, and institutional use, both indoor and outdoor, was 130 gpd during the same period. Nonetheless, the City has been actively engaged in many indoor water conservation programs such as household fixture replacements, residential toilet replacement rebates, commercial and multifamily high efficiency toilet replacements, ultra low water use urinal replacements, residential and commercial washing machine rebates, cooling tower controller rebates, and pre-rinse spray valves program.

The Landscape Water Use Study and Survey is the City's first active step toward understanding existing landscape water use practices in larger commercial, industrial, and institutional accounts and engaging them in meaningful landscape water conservation programs and practices. This project will help the City address and meet the requirements set forth by the California Urban Water Conservation Council's (CUWCC) Memorandum of Understanding, to which Hayward is a signatory. One of the required Best Management Practices addresses reduction of water use for large landscaped areas. This project will assist the City to develop meaningful and result-oriented

programs that eliminate water waste and make recommendations for effective and efficient delivery of water for sustainable, healthy, and regionally-appropriate environments.

DISCUSSION

This project will begin with an initial water use study that includes developing water use “budgets” using the calculation methodology established by the Department of Water Resources. The second step will be water use field surveys for selected large Commercial, Industrial, and Institutional landscape sites. The City and the Consultant will work with Hayward Area Recreation District and Hayward Unified School District staff to identify appropriate park and school properties that will benefit most from a survey. Staff will also contact California State University East Bay to evaluate the benefits of a site survey in view of the University’s current master planning effort. Other sites may include business parks, and large residential common landscape sites maintained by Homeowner Associations (HOA). The field survey will evaluate the efficiency of existing irrigation systems and landscape design to determine potential water saving opportunities. The project will address the following:

- Select and conduct water use studies of 40 high-water use accounts
- Develop water use budgets for the 40 accounts
- Conduct water use field survey of 20 selected sites from the 40 accounts
- Develop site specific water saving recommendations for the 20 sites
- Conduct post-implementation site verifications for the 20 sites

The initial 40 high-water use accounts will be a combination of mixed-use and dedicated irrigation water meter accounts, which will receive water budget information by mail. The 20 sites will be chosen for the field survey from the initial water use study accounts based on estimated maximum water saving potential and geographic diversity. The customers will be contacted by phone, e-mail, or letter to arrange for the Consultant to meet with on-site landscape maintenance staff and perform on-site water use surveys. The Consultants will prepare a water use survey report for each site summarizing findings and site specific recommendations for implementations and pay-back time for the recommended equipment and other upgrades. The recommendations will include irrigation system repair, equipment and scheduling adjustments, irrigation system updates, and other measures to increase soil protection, prevent run off, and increase watering efficiency by grouping vegetation with similar watering needs together. Implementation of recommendations will not be required but will be highly recommended. The consultants will conduct site surveys after recommendations are implemented and will monitor the success of the implementations through actual water savings on all 20 sites. The findings will be incorporated in the final water use summary report. The findings in the final summary report will include the following:

- Customer Willingness to Participate,
- Implementation of Actual Site Improvement Recommendations,
- Common Problems at Sites,
- Time Spent to Survey 20 sites,
- Average Actual Water Savings per Site, and
- Return-On-Investment

The project results will be presented to the Sustainability Committee upon completion of the project.

On March 12, 2009, a Request for Proposals to provide landscape water use study and survey services was sent to five qualified consultants. On April 15, 2009, three proposals were received from Gates + Associates, Green Squad (a division of Waste Management, Inc.), and John B. Whitcomb; interviews were conducted with the three candidates. The selection panel judged Gates + Associates as the best match for this project. This was based on the fact that the firm is a landscape architectural and irrigation planning and design firm, and as such has a more holistic view of efficient use of water in landscaping. Also the firm has various design experiences for projects in Hayward, with a local office in San Ramon. Gates + Associates proposed fee of \$59,240 was in line with fees proposed by two other firms and is reasonable for the scope of work. Therefore, staff recommends that the City execute a professional services agreement with Gates + Associates for a not to exceed amount of \$70,000 including about \$11,000 in potential additional services, to provide a landscape water use study and survey.

FISCAL AND ECONOMIC IMPACT

The FY 2008-2009 Capital Improvement Program (CIP) includes \$100,000 in the Water System Replacement Fund for Landscape Audits and Water Efficient Landscape Rebates.

Based upon the results of this project, staff will evaluate and make a recommendation regarding expansion of the water use budget and water use survey effort, and possible incentive programs, such as rebates for the installation of higher efficiency irrigation systems and weather and soil moisture based controllers.

SCHEDULE

The estimated schedule for this project is summarized as follows:

Initiate Notice to Proceed	June 2009
Develop Water Budget	July – August 2009
Water Use Study and Survey	September 2009
Post Implementation Evaluation	August 2010
Project Complete: Final Water Use Summary Report	October 2010

Prepared by:



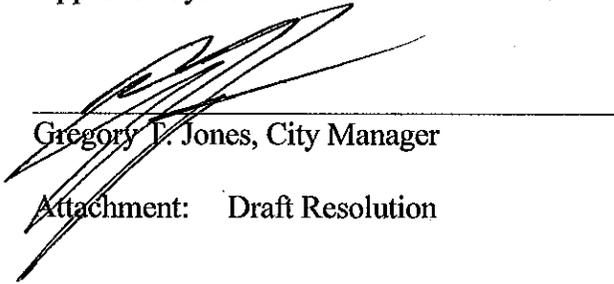
Alex Ameri, Deputy Director of Public Works

Recommended by:



Robert A. Bauman, Director of Public Works

Approved by:



Gregory T. Jones, City Manager

Attachment: Draft Resolution

