



Meeting Date: 5/18/10

ACTION	TYPE OF ITEM
<input type="checkbox"/> Approved Recommendation	<input checked="" type="checkbox"/> Info/Consent
<input type="checkbox"/> Ord. No(s). _____	<input type="checkbox"/> Report
<input type="checkbox"/> Res. No(s). _____	<input type="checkbox"/> Public Hearing (Info/consent)
<input type="checkbox"/> Other _____	<input type="checkbox"/> Other _____

Prepared By: Anthony Emmert, Water Resources Manager *ME* Agenda Item No. **I-6**

Reviewed By: City Manager *[Signature]* City Attorney *[Signature]* Finance *[Signature]* Other (Specify) *[Signature]*

DATE: May 10, 2010

TO: City Council

FROM: Mark S. Norris, Assistant Public Works Director
Public Works Department, Utilities Services Branch *[Signature]*

SUBJECT: **Application for the United States Bureau of Reclamation's 2010 WaterSMART: Water and Energy Efficiency Grant Program to Demonstrate Water Savings with Smart Irrigation Controllers**

RECOMMENDATION

1. Adopt a resolution approving an application for and execution of a cooperative agreement with the United States Bureau of Reclamation (BOR) for the United States Bureau of Reclamation's 2010 WaterSMART: Water and Energy Efficiency Grant application.
2. Authorize the City Manager or his designee to appropriate grant and matching funds to Water Fund 601 upon award of the grant.

DISCUSSION

The United States Bureau of Reclamation Department's WaterSMART (Sustain and Manage America's Resources for Tomorrow) program is working to achieve a sustainable water strategy to meet the Nation's water needs. Through WaterSMART grants, the BOR provides cost-share funding on a competitive basis for on-the-ground water conservation and energy efficiency construction projects. It is expected that up to a total of \$14,000,000 will be available for project awards under this program. The maximum grant under Tier 1 is \$300,000, with 30 - 40 awards expected in this category. The maximum grant under Tier 2 is \$2 million, with 4 - 8 awards expected. The program is open to applicants throughout the American West and US Territories.

On May 4, 2010 the Water Resources Division submitted an application to the BOR's 2010 WaterSMART: Water and Energy Efficiency Grant for a project to improve the efficiency of the irrigation systems in select City Parks and medians. The program will be a collaborative effort between the Water Resources Division and the General Services Department's Parks and Facilities Division. The focus of the application is a comprehensive project designed to improve the efficiency of water use in City-maintained landscapes, particularly in parks and medians that have been identified as having

high water demands. If awarded, Parks and Facilities staff will oversee outside service providers who will retrofit and modernize irrigation controllers with weather-based irrigation controllers (WBIC) in Oxnard parks and on Oxnard Boulevard medians. Water Resources Division staff will develop water budgets for each location and provide water-use monitoring and reporting.

Targeting water waste situations such as over-irrigation, excessive run-off and poor landscape planning, water agencies are tapping into common sense and technology to improve water conservation efforts and enhance the health and beauty of landscapes. WBICs utilize real-time weather data to apply the proper amount of water to landscape areas. WBICs communicate wirelessly with local weather stations to determine an area's evapotranspiration rate, or the rate at which the soil's moisture is lost to the atmosphere through evaporation and plant transpiration. Pre-programmed watering schedules are then modified to replace only the amount of water lost to evapotranspiration, reducing overall water use. In addition, the WBICs will feature flow sense technology, which will alert Parks staff when breaks or leaks occur, allowing Parks staff to make quick repairs and minimize water loss to leaks. All of these controls can be operated remotely via an office-based computer software system (central hub), or remotely by a hand-held unit – which reduces the demand on staff time for irrigation.

Through the Controller Program, the City aims to reduce water consumption of its irrigated landscapes while maintaining healthy, aesthetically pleasing parks, medians, and parkways. Similar controller programs studied throughout southern California have resulted in a range of water savings from 26% (Los Angeles) to 55% (Irvine). A conservative 25% estimate for the potential water savings associated with this program results in 106 acre-feet per year of water saved. Along with the reduction in water quantity used for irrigation, there are also benefits for water quality through the reduction of excess run-off that contains harmful chemicals and fertilizers. In addition, there will likely to be overall energy savings from the installation of WBICs due to the more efficient use of water and reduction in staff trips to the park sites to monitor irrigation. Overall, it is anticipated that the program will reduce General Fund expenditures by the Parks and Facilities Division on landscape irrigation water in the long-term.

Aside from the direct environmental impacts of the Controller Program, this will also provide an important opportunity for the City to demonstrate wise use of water resources in areas that are highly visible to the public. Teaching by leading, this project will display a proven water conservation technology that has the potential for applications in residential, commercial, and agricultural operations. The project includes outreach to homeowners associations and businesses with large landscapes in order to demonstrate the smart irrigation controller technology.

It is expected that potential award recipients will be announced in late June 2010. Within one to three months after the initial announcement, assistance agreements will be awarded to applicants that successfully pass all pre-award reviews and clearances. If awarded, the Controller Program is expected to commence in September 2010 and last approximately 12 months, including equipment procurement, installation, programming, and monitoring of results.

FINANCIAL IMPACT

The total project cost is estimated at \$727,400. The City's match will be a minimum of \$427,400 of which \$21,786 will be in-kind services provided by Parks Division and Water Division. The maximum grant funds provided by the BOR will be \$300,000.

There are sufficient funds in the Water Conservation/Outreach Fund, Account No. 601-6011-842-8209 to pay for the City's match.

AAE:drc:joh

- Attachment #1 - United States Bureau of Reclamation's 2010 WaterSMART: Water and Energy Efficiency Grant application
- #2 - Resolution Approving an Application for and Execution of a Cooperative Agreement with the United States Bureau of Reclamation (BOR)

Note: Attachment #1 has been provided to City Council under separate cover. Copies for review are available at the Help Desk in the Library after 6:00 p.m. on Thursday prior to the Council meeting and in the City Clerk's Office after 8:00 a.m. on Monday prior to the Council meeting.

CITY COUNCIL OF THE CITY OF OXNARD

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF OXNARD APPROVING AN APPLICATION FOR AND EXECUTION OF A COOPERATIVE AGREEMENT WITH THE UNITED STATES BUREAU OF RECLAMATION

The City of Council of the City of Oxnard hereby resolves as follows:

1. The City Council of the City of Oxnard supports preparation and submittal of an application to the United States Bureau of Reclamation's 2010 WaterSMART: Water and Energy Efficiency Grant Program for a project to Demonstrate Water Savings with Smart Irrigation Controllers.
2. If selected for a grant under the United States Bureau of Reclamation's 2010 WaterSMART: Water and Energy Efficiency Grant Program to assist in the funding of "Demonstrate Water Savings with Smart Irrigation Controllers", the City of Oxnard will work with the United States Bureau of Reclamation to prepare the necessary materials needed to enter into a cooperative agreement and to meet deadlines established for entering into a cooperative agreement.
3. The City of Oxnard will fund at least 50 percent of the project costs.
4. That the City Manager of the City of Oxnard is hereby authorized and directed to deliver a copy of this resolution to the United States Bureau of Reclamation.

PASSED AND ADOPTED THIS 18th DAY OF MAY, 2010, with the following vote:

AYES:

NOES:

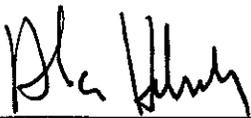
ABSENT:

Dr. Thomas E. Holden, Mayor

ATTEST:

APPROVED AS TO FORM:

Daniel Martinez, City Clerk



Alan Holmberg, City Attorney