

RIVERSIDE PUBLIC UTILITIES

Board Memorandum

BOARD OF PUBLIC UTILITIES

DATE: JUNE 11, 2018

ITEM NO: 16

SUBJECT: RESULTS OF THE WATERSMART EXPERIMENT IN RIVERSIDE PUBLIC UTILITIES:

WATER AND ELECTRICITY SAVINGS

ISSUE:

Receive an update on the results of the Smart Water-Energy Savings Project that studied the life-cycle energy savings secured through behavior-based residential water conservation in the cities of Modesto, Ontario, and Riverside.

RECOMMENDATION:

That the Board of Public Utilities receive this report and presentation.

BACKGROUND:

In September 2015, Riverside Public Utilities (RPU) executed an agreement with WaterSmart Software to implement their customer engagement water conservation tool. RPU obtained the use of this tool at zero cost to RPU due to a California Department of Water Resources (DWR) grant issued to University of California, Davis (UC Davis). The DWR grant provided funding for UC Davis to study the impact of customer engagement tools on a customer's conservation efforts for both water and power consumption.

UC Davis studied the effects of how different messaging, included in WaterSmart Home Water Reports, alter a customer's water and electric consumption. UC Davis also analyzed embedded energy contained in RPU's water and the energy savings associated with RPU's water conservation efforts.

DISCUSSION:

Dr. Katrina Jessoe, Associate Professor of Agricultural and Resource Economics, and Kendra Olmos, M.S. Executive Director of UC Davis Center for Water-Energy Efficiency, will present the attached Smart Water-Energy Savings UC Davis study findings.

The final results of the study revealed a 2.2 percent reduction in water consumption when the controlled group was compared to those customers who received the WaterSmart letters. There was also a 0.7 percent reduction in energy consumption for those customers in the study who received hot waterspecific messaging. This difference suggests that targeted hot-water messaging can provide spillover electricity savings as well as water savings.

Overall, the WaterSmart program generated approximately 88,385 hundred cubic feet of water savings in Riverside. The Hot WaterSmart program generated 477,004 kilowatt-hours (kWh) of direct electricity savings in the residential sector in Riverside. Additionally, the study revealed 39,410 kWh saved in Riverside's water network as a result of the embedded energy study.

FISCAL IMPACT:

There is no cost associated with this presentation.

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Attachments:

- 1. Presentation
- 2. Smart Water-Energy Savings Project Report
- 3. Smart Water-Energy Savings Project Report Appendices