CITY OF BENICIA
COMMUNITY SUSTAINABILITY COMMISSION
2015 - 2016 GRANT APPLICATION

TITLE PAGE

PART A - BASIC INFORMATION

1. PROJECT/PROGRAM NAME: WaterSmart Software and Home Water Reports

Amount of Funding Request: ANNUAL: $69,889
GRANT PERIOD = 2 YEARS:

Organization and/or Person(s) Submitting Proposal:

City of Benicia (Public Works Department)

2. ORGANIZATION INFO:

City of Benicia
Organization Name

250 East L Street, Benicia, CA 94510
Address

707-746-4240 N/A
Phone Fax

cwenslawski@ci.benicia.ca.us
Email

Federal ID # (for non-profit or business): 94-6000298

If a non-profit organization, the year legally established: _____

State in which established: _____

If a business, the year established, number of years: 1848

Location: Benicia, CA

3. CONTACT PERSON (for this Application)

Name: Carrie Wenslawski
Title: Management Analyst
Address: 250 East L Street, Benicia
Phone: 707-746-4236 Fax: N/A
Email: cwenslawski@ci.benicia.ca.us

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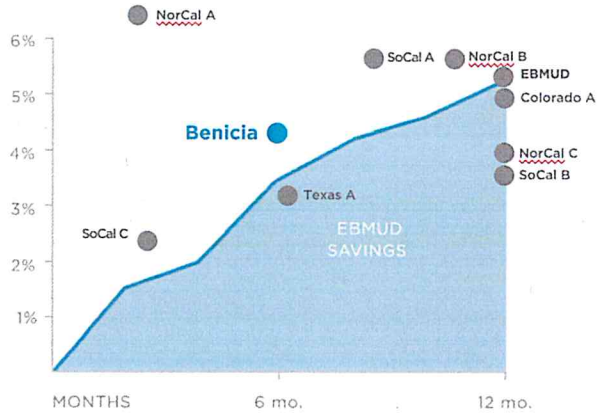
4. The proposed Project/Program will serve FOCUS AREAS of the Benicia Climate Action Plan [CAP] to reduce Greenhouse gases [GHG] and thereby also support Community Sustainability. Please list specific STRATEGIES within the FOCUS AREAS below that will be addressed (fully or partially) by the proposed Project/Program. Include and explanation of the importance of each STRATEGY to the Project/Program's mission. [See CAP page 15 for Focus Areas.]

- **EDUCATION/PUBLIC OUTREACH**
- **ENERGY PRODUCTION**
- **TRANSPORTATION & LAND USE**
- **BUILDINGS**
- **INDUSTRIAL & COMMERCIAL**
- **WATER & WASTEWATER**

Objective WW-1: Reduce the Amount of Water Consumed 20% by 2020

The City began a one-year pilot program with WaterSmart in November 2014. WaterSmart statistics show that residential water use decreases by 3-7% after one year of being on the program. Based on information received at a mid-year meeting with WaterSmart managers on May 14, 2015, Benicia has already achieved 4.2% cumulative water savings at only six months into the pilot program. Benicia is on-track to reach the annual goal of 5% water savings. Below is a graph that shows Benicia at 4.2% at six months into the one-year pilot program compared to other anonymous agencies, all of which are compared to East Bay Municipal Utilities District which serves as the trend line. WaterSmart is an effective way to reduce the amount of water consumed by residential customers.



The attached abstract (Attachment 4) from an article in the October 2014 American Economic Review shows that the best long term behavioral change for water conservation habits is after the

program has been in place for two years. It is recommended that the Community Sustainability Commission approve grant funding for the second year of the WaterSmart Program.

- **SOLID WASTE**
- **PARKS & OPEN SPACE**

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ORGANIZATION CERTIFICATION: I hereby certify that all information contained in this application and any attachments is true and accurate.

NO CITY EMPLOYEE SHALL BE SIGNATORY ON BEHALF OF AN APPLICANT ORGANIZATION REQUESTING FUNDS FROM THE COMMUNITY SUSTAINABILITY COMMISSION. A CITY EMPLOYEE MAY BE SIGNATORY WHEN APPLYING FOR FUNDS FOR A PROJECT TO BE ADMINISTERED BY THE CITY OF BENICIA.

Authorizing Signature | Public Works Director (Title) | 5/15/15 (Date)

Graham Wadsworth
Typed Name

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PART B – BUDGET INFORMATION **

5. Please provide a budget for the proposed Project/Program. Expenses listed in this document should be consistent with the Project Description. This budget is only for the Project utilizing grant monies.

Do not leave any blank boxes. Use "N/A", if cost category is not applicable.
Note: Column "A" = Total cost of the proposed Project.
Column "B" = Amount requested in this grant application.
Column "C" = The difference between Column A and Column B, or the costs of the Project that are not included in this grant request, if any.

PROJECT DIRECT EXPENSES		TOTAL PROJECT COSTS (A)		GRANT REQUEST AMOUNT (B)		APPLICANT'S OTHER COSTS (C)
Personnel (direct [1])		$6,600		$0		
Personnel (direct [1])						
Personnel (support [1])						
Benefits (direct [1])						
Contract Services						
Project Supplies						
Project Equipment						
Transportation costs: e.g., gas, rental						
Other Direct Costs		$69,889		$69,889		
SUBTOTAL		$76,489		$69,889		$

[1] **[Provide names, titles & total estimated annual salary or stipend. Attach additional sheets if needed and summarize total here.]**

Lisa Kemmer, Public Works Administrative Secretary (15 hours/year @ $58.63 = $880)
David Wenslawski, Water Quality Technician (20 hours/year @ $69.00 = $1,380)
Carrie Wenslawski, Management Analyst (10 hours/year @ $74.97 = $750)
Dan Jackson, Water Quality Supervisor (10 hours/year @ $84.18 = $840)
Graham Wadsworth, Public Works Director (2 hours/year @ $134.07 = $270)
Finance Staff (Sr. Account Clerk, Account Clerk II and Accounting Technician), 45 hours per year (average of $55 x 45 hours = $2,475)

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PART B – BUDGET INFORMATION (continued)

INDIRECT EXPENSES						
Administrative - personnel						
Benefits						
Space/office rental						
Utilities						
Telephone						
Office Supplies						
Transportation (gas, rental)						
Other Indirect Costs						
SUBTOTAL		$		$		$
TOTAL COSTS		$		$		$

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PART B – BUDGET INFORMATION (continued)

6. **APPLICANT'S FINANCIAL SOURCES:** Please provide sources of other funds for the proposed Project/Program. Total amount should correspond with Total in Column C (from previous page). Do not include your entire budget here. (It should be attached).

Applicant's Sources of Other Funding (be specific)		Amount or Value		Cash or In-kind (indicate)
TOTAL		$		$

7. List any prior City of Benicia grants or loans awarded to your organization and the number of Benicians served with the funds. (If more space is needed to complete your answer, use the reverse side of this page).

Fiscal Year	Project/Program	Amount of City Grant or Loan	Benicians served
2014-15	Water-Efficient Landscaping Rebate Program	$100,000	Benicia Residents
2012-13	Land purchase for solar panels at Pump Station #3.	$556,909	Benicia Water Users
2011-12			
2010-11			
2009-10			
TOTALS		$656,909	

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PART C – PROJECT/PROGRAM ORGANIZATION DISCUSSION
(Please limit Part C to 5 pages)

8. Brief Project/Program Summary (Three to four sentences describing the grant proposal).

The City of Benicia began the WaterSmart Program in the Fall of 2014 to deliver bi-monthly Home Water Reports and Customer Web Portal access to approximately 5,000 single family residences. This application seeks to continue this program for another year (Nov 2015-Nov 2016) for the existing 5,000 homes, add 1,750 additional homes to the participant group, and allow all 8,325 single-family residential water customers to access a personalized Customer Web Portal. It is critical to Benicia's drought response plan to continue WaterSmart's conservation program involving direct outreach to 6,750 Benicia homes and tools for all residents. In six months, this program has saved 4.2% of residential water consumption.

9. Describe the Project/Program's general purpose and activities:

The WaterSmart Program is the leading behavioral water efficiency solution, helping water utilities educate and engage their customers to save water and money. WaterSmart offers a turnkey, cloud-based engagement, analytics, and water efficiency solution that has been independently proven to double customer satisfaction, triple rebate program participation, and decrease residential water consumption by 5%. The Program includes the following products:

Home Water Reports (HWRs): The primary outbound communication component that WaterSmart uses to engage City customers. HWRs provide residential customers with a water score, a social norm-based ranking of water consumption compared to other homes with similar attributes, household specific water saving recommendations and other programmatic or promotional messages that coincide with the program design and objectives.

Web and Mobile Customer Portal (Portal): An interactive and personalized online data portal that reveals tailored and actionable guidance on exactly how to save water allowing each household to more deeply engage with the City staff. The Portal is branded for the City and provides all residential customers detailed information on their water score, water savings recommendations, consumption history, disaggregated water use estimates, real-time consumption details and leak notifications and a water savings plan interface. The Customer Web Portal is also optimized for use on mobile devices.

Utility Analytics Dashboard: A web-based data-analytics platform designed specifically to support City staff's efforts to analyze water consumption behaviors, engagement and program participation. One-click reporting allows City staff to quickly and efficiently view program performance, customer segmentation and geospatial analytics, rebate program participation, leak and high-use alerts and more. The City dashboard also features a full suite of Customer Relationship Management tools that dramatically reduce staff time in responding to customer inquiries around high bills, conservation program applications, and other standard requests.

10. If sponsored by a non-profit or business, list all financial liabilities or pending legal action:
N/A

11. If applying for other grants for fiscal years 2015 - 2016, please list the project, funding source(s), proposed budgets and requested amount(s).

The Public Works Department is also applying for a CSC Grant for FY 2015-16 for $100,000 to enhance the Water-Efficient Landscaping Rebate Program

12a. How much if any money will this project save the organization?

N/A (Zero)

12b. If costs savings are involved, when do you anticipate this project will pay for itself, if at all?

N/A

13. At what location(s) will the proposed Project/Program take place, and, if applicable, how long has the organization been at this location?

6,750 random single-family home water customers will receive a customized Home Water Report (either via mail or e-mail).

PART C – PROJECT/PROGRAM ORGANIZATION DISCUSSION (continued)

14. What are your proposed hours of operations for this Project/Program? Please indicate hours that actual services will be provided, and how this may or may not differ from the hours project staff will be available to respond to inquiries by phone or email, answer general questions, etc.?

The Public Works Department operates approximately 8:30 am to 5:00 pm Monday through Friday and staff is available to respond to inquiries during those hours.

15. Describe the Project/Program associated with this grant request. Include the goals to be achieved and the strategy that will be used to meet the goals. Be specific when discussing what will be achieved as a result of the proposed Project/Program, with respect to goals of the Benicia Climate Action Plan to reduce GHG emissions.

The goals of the WaterSmart Program are to increase residential water use efficiency, increase water user customer satisfaction, and increase the participation in water efficiency programs offered by the City of Benicia and/or the Solano County Water Agency (such as the turf replacement, irrigation controller, and washer rebate programs). WaterSmart Software is currently providing these services via partnerships with 38 water utilities in California, Colorado, Utah, Texas, and Massachusetts. WaterSmart's achievement of these goals for the East Bay Municipal Utilities District were independently verified by the California Water Foundation and can be found online.[1]

16. Please describe why the proposed Project/Program is necessary for citizens of Benicia and the community as a whole?

Benicia has already achieved 4.2% cumulative water savings at only six months into the current WaterSmart pilot program. Benicia is on-track to reach the annual goal of 5% water savings. WaterSmart is an effective way to reduce the amount of water consumed by residential customers. Furthermore, the Home Water Reports provide customers with personalized information about their water use that is easy to understand (e.g. it converts billing units (which are hundred cubic feet) to gallons.

17. How will outreach be conducted so that services provided will have an educational "ripple effect" throughout the community?

WaterSmart proactively reaches out to over half of all single-family households in Benicia currently. An expansion of the WaterSmart program funded by this request will increase the number of residents that receive Home Water Reports and enable all customers to access their water consumption information and personalized recommendations for water saving actions in the mobile and desktop Customer Web Portal.

[1] http://www.watersmart.com/wp-content/uploads/2015/03/EBMUD_Watersmart-Evaluation-Report-Executive-Summary.pdf

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PART C – PROJECT/PROGRAM ORGANIZATION DISCUSSION (continued)

17a. List the specific, quantifiable goals of the proposed Project/Program. (Please state the goals in numbers of individuals, families, households or groups projected to be served and then estimate the amount of energy or water savings that may be achieved for each, then total those figures in each category and estimate GHG reduced by the Project/Program over one year.)

ANNUAL GOALS	Numbers served, e.g. individuals, families, households and/or groups	Water & Energy Savings in 1 year	GHG reductions (estimate) in 1 year
Increase residential water use efficiency	6,750 homes	**5%** water use reduction at end of year 1 and 2. **65 acre-feet** of water saved at the end of year 1. **87 acre-feet** of water saved at the end of year 2.	

17b. Discuss how this data will be collected, organized and disseminated throughout the community.

WaterSmart will measure increases in residential water use efficiency by continuing its existing use of randomized participant and control groups that receive Home Water Reports. An interim statistical analysis of water savings will be provided in May 2015 and a full analysis provided in November 2015. This is the gold-standard methodology for measuring the efficacy of conservation programs. Increases in customer satisfaction will be measured through a follow-up survey in November 2015 to the survey that Benicia residents completed in November 2014. Increases in program participation will be measured using data from Solano County as it is made available. Although savings in residential gas consumption

through reductions in hot water use are an expected result of this program, they cannot be measured for Benicia residents at this time. In Spring 2016, WaterSmart will make available the gas savings results of its ongoing, independently verified study with another California water utility.

18. If the proposed Project/Program is an already existing activity, or part of an existing program of the applicant or his or her organization or business, please explain.

Benicia formally launched the WaterSmart Program on October 30, 2014 with a Welcome Letter and request to complete a Residential Water Use Survey that was sent to 5,165 residences. These same residences then began receiving Home Water Reports on alternating months (based on their water meter read schedule) beginning December 6, 2014. Since then, each resident has received a Home Water Report on a bi-monthly basis. As of May 2015, all 5,165 participants in the WaterSmart program will have received three personalized home water reports (unless they have opted-out, moved out, or have a data anomaly in their meter read). While most of these reports are mailed, 16% are emailed and WaterSmart and Benicia have tracked a very impressive 71% average email open rate. Based on surveying other water agencies, WaterSmart has found that approximately 90% of residents recall receiving Home Water Reports (print or email) and would like to continue to receive these reports. Only 4 residents of Benicia have requested to not receive these reports.

Under the current contract, participating residents will receive another three bi-monthly Home Water Reports through November 2015. Maintaining this program is critical to 'locking-in' and increasing the water savings that will be achieved after the first year. This assertion has been documented by economists Hunt Alcott and Todd Rogers and published by the National Bureau of Economic Research (NBER Working Paper No. 18492).

In addition to Home Water Reports, Benicia has been employing WaterSmart's utility-facing software known as the Utility Dashboard. Benicia staff has used the Utility Dashboard to resolve customer service calls regarding water use and provided the City Council with graphical representations of residents' water consumption.

19. Identify similar projects or programs in the community and how the proposed Project/Program differs from them.

Pacific Gas and Electric Company sends Home Energy Reports to some electric customers in the City of Benicia. This program, provided by a vendor named Opower, provides Benicia residents with comparisons of their electric use to similar households and achieves cost effective reductions in electricity use. PG&E's program is exclusive to electricity efficiency and does not address water efficiency.

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PART C – PROJECT/PROGRAM ORGANIZATION DISCUSSION (continued)

20. REQUIRED ATTACHMENTS: Please verify and check off confirmation indicating that the following required items are attached to the original application.

Do not leave any blank – if an item is not applicable, indicate by "N/A"

Item #	Description	Submitted (verification by City staff)
1	IRS Letter of Tax Exempt Status	N/A
2	Organization's total budget for the current year	N/A
3	Copy of most recent audit or financial statement	N/A
4	Names and addresses of Board of Directors	Attached
5	List of paid principal staff and positions	Attached
6	Job descriptions for principal staff and personnel *to be paid partially or in full with grant funding.*	N/A
7	Copy of resolution or board meeting minutes indicating organization's support of the project application.	N/A
8	If a partnership, or involving any collaboration with other group or entity, letters of commitment from each organization indicating degree of participation and a budget showing each organization's financial responsibility to the proposed Project/Program.	Attached

THANK YOU!

Attachment 1 (Question 20, Item #4)

Names and Address of Board of Directors

City of Benicia
City Council Members
250 East L Street
Benicia, CA 94510

Elizabeth Patterson, Mayor
Tom Campbell, Vice Mayor
Alan Schwartzman, Councilmember
Mark Hughes, Councilmember
Christina Strawbridge, Councilmember

Attachment 2 (Question 20, Item #5)

List of paid principal staff and positions

City of Benicia

Public Works Department Staff

Graham Wadsworth, P.E., Public Works Director
Dan Jackson, Water Quality Supervisor
Carrie Wenslawski, Management Analyst
Dave Wenslawski, Water Quality Technician
Lisa Kemmer, Administrative Secretary

Finance Department Staff

Mary O'Reiley, Sr. Account Clerk
Deana Castaneda, Account Clerk II
Rowena Grivett, Accounting Technician

Attachment 3 (Question 20, Item #8)

WaterSmart Proposal
Dated May 14, 2015

WaterSmart SOFTWARE

20 California Street, Suite 200
San Francisco, CA 94111

415.366.8622
WaterSmartSoftware.com

May 14, 2015

Graham Wadsworth
City of Benicia
250 East L. St.
Benicia, CA 94510

Mr. Wadsworth,

The City of Benicia (Benicia) and WaterSmart Software (WaterSmart) have entered into discussions about renewing the existing engagement and conservation program that has been in place since October of 2014.

WaterSmart Software is the leading behavioral water efficiency solution provider, helping water utilities educate and engage their customers to save water and money. WaterSmart offers a turnkey, cloud-based engagement, analytics, and water efficiency solution that has been proven to double customer satisfaction, triple program participation and increase water-use efficiency by 5%.

WaterSmart's cost-effective behavioral water efficiency solutions help residents build better water use habits through social comparisons that help them understand not just how much water they use but how that use compares to other similar homes. WaterSmart is currently providing engagement services and tracking water use in over 1.8 million homes via partnerships with 36 water utilities in California, Colorado, Utah, and Texas.

We look forward to ongoing discussions and hope to build a meaningful and long-lasting working relationship with the City of Benicia.

Sincerely,

David Sheridan
Regional Sales Manager
WaterSmart Software

WaterSmart Software's Primary Solutions:

Home Water Reports (HWRs): The primary outbound communication component that WaterSmart uses to engage utility customers. HWRs provide residential customers with a water score, a social norm-based ranking of water consumption compared to other homes with similar attributes, household specific water saving recommendations and other programmatic or promotional messages that coincide with the program design and objectives.

Web and Mobile Customer Portal (Portal): An interactive and personalized online data portal that reveals tailored and actionable guidance on exactly how to save water allowing each household to more deeply engage with the utility. The Portal is branded for your utility and provides all your residential customers detailed information on their water score, water savings recommendations, consumption history, disaggregated water use estimates, real-time consumption details and leak notifications and a water savings plan interface. The Customer Web Portal is also optimized for use on mobile devices.

Utility Analytics Dashboard: A web-based data-analytics platform designed specifically to support the utility's efforts to analyze water consumption behaviors, engagement and program participation. One-click reporting allows utility staff to quickly and efficiently view program performance, customer segmentation and geospatial analytics, rebate program participation, leak and high-use alerts and more. The utility dashboard also features a full suite of Customer Relationship Management tools that dramatically reduce staff time in responding to customer inquiries around high bills, conservation program applications, and other standard requests.

WaterSmart Software Proposal for Benicia, CA

Program Expansion: Addition of 1,750 Residential Accounts to Home Water Report Recipient Group

Type of Accounts: Single Family Residential (SFR)

AMI data: No

Welcome Letter: Provides program overview and customer portal registration instructions

- Sent to 1,750 residential accounts

Customer Insight Surveys:

- Link to digital Customer Insight Survey included in Welcome Letter

Home Water Reports (HWRs):

- Delivered to up to 6,750 residential accounts
- Annual Report Volume: Six (6)
- Control Group: A randomized selection of approximately 1,200 residential accounts that will not receive any outbound communications to allow for statistically significant comparison of water-use efficiency, engagement, and customer satisfaction levels. For more details, please refer to Appendix D, WaterSmart M&V Program Design.

Customer Portal:

- Customer Portal: Access for all 8,325 utility accounts

Utility Analytics Dashboard:

- Utility Dashboard: Analytics for all 8,325 utility accounts

M&V Program Design: WaterSmart will provide reporting of program performance and results throughout the outbound engagement program period. For more details, please refer to Appendix D.

Program Term: 1 year

Pricing

Item Summary	Fee	Payment Due
One Year Program Cost	$ 69,889	Upon Contract Signing

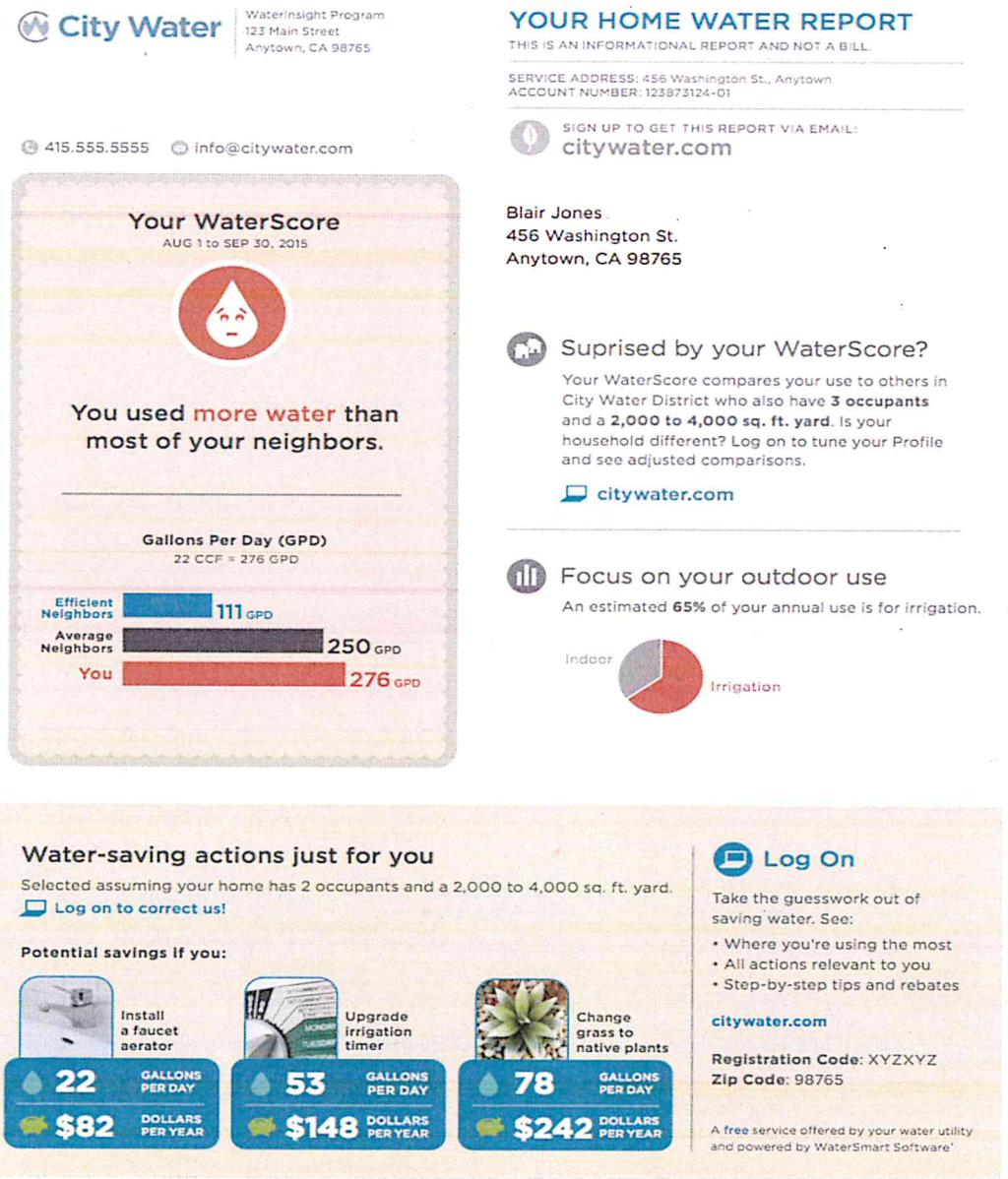
*Prices Valid Until July 31st 2015

Appendix A:
Program Components

Home Water Report:

Personalized reports sent to households that use social norms-based messaging to persuade customers to engage in water-saving behaviors. Reports are optimized for viewing on mobile devices.

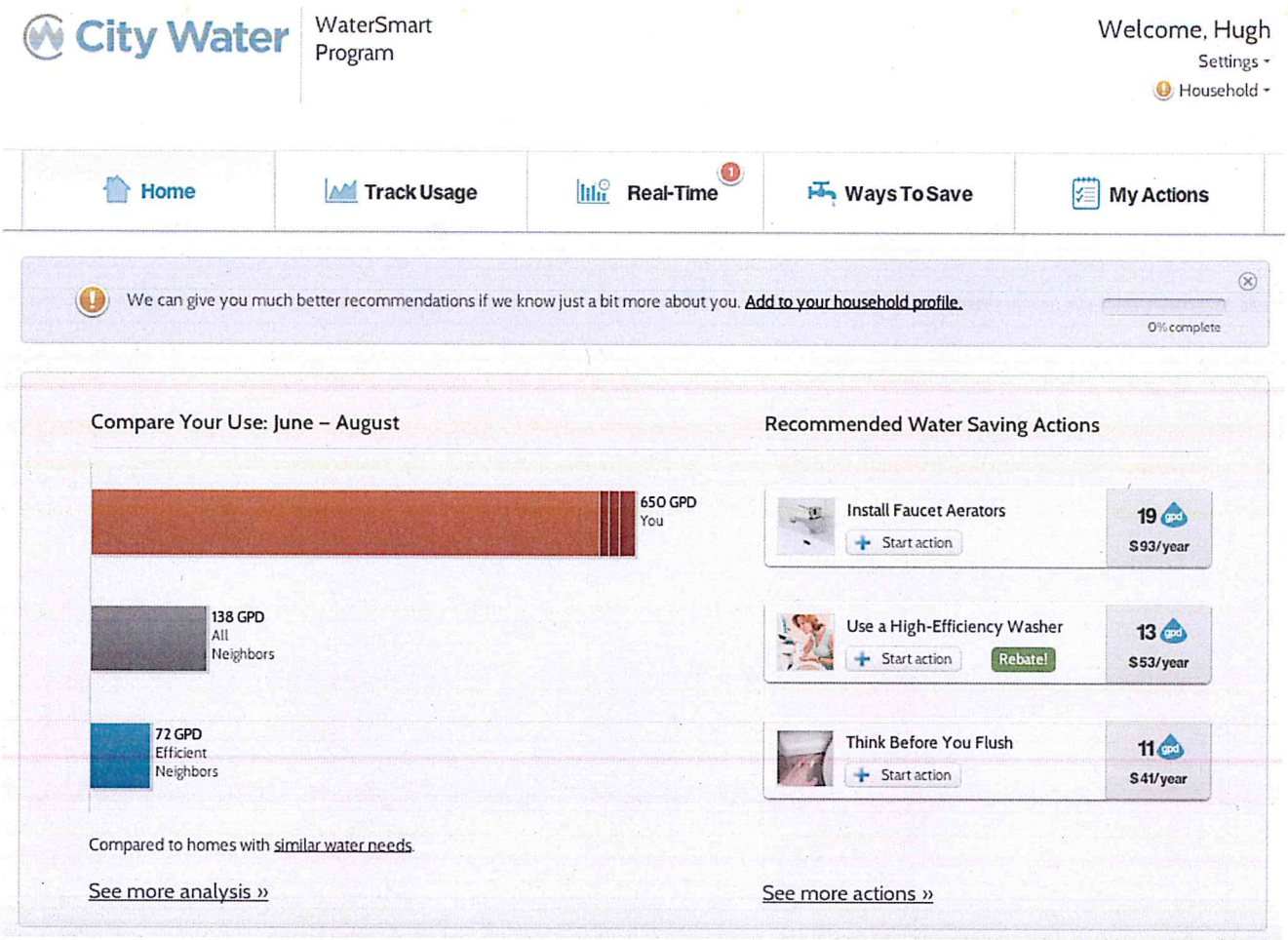
Figure 1: Screenshot of Home Water Report



Customer Portal:

A web-based, interactive and personalized online data portal that reveals tailored and actionable guidance on exactly how to save water allowing each household to more deeply engage with Sandy. The Customer Web Portal is optimized for use on mobile devices.

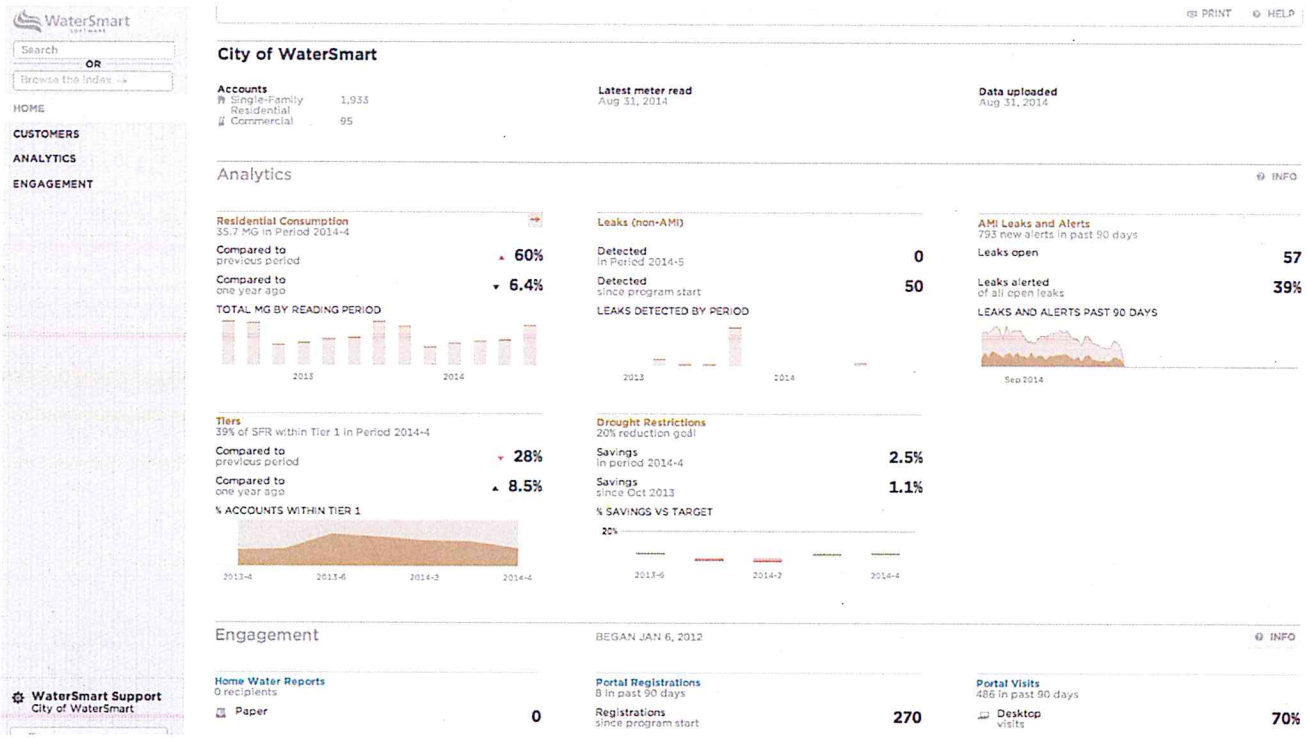
Figure 2: Screenshot of Customer Portal



Utility Analytics Dashboard:

A web-based data-analytics platform designed specifically to support Sandy's efforts to view water consumption behaviors, track leaks and leak alerts and analyze engagement and program participation of the community.

Figure 3: Screenshot of Utility Analytics Dashboard



Appendix B:
Data Specifications & Transfer Protocols

WaterSmart will work with Sandy to provide file specifications that maximize the ease of data extraction on Sandy's behalf and optimize the process of data integration on WaterSmart's behalf. Note: detailed data field specifications are highlighted in a separate document.

In general, WaterSmart will require two files, one that describes residences and accounts ("the **Residence File"**) and another that details consumption history and billing amounts (the "**Consumption File"**). In the **Residence File**, WaterSmart will request such fields as, but not limited to:

- Account Number
- Account Sequence Number
- Property APN, where available
- Meter Size
- Service Address
- Billing Address
- Customer Name
- Customer Email, where available

In the **Consumption File**, WaterSmart will request, for at least the last two years, but ideally for five to ten years in the past, such fields as, but not limited to:

- Account Number
- Account Sequence Number
- Meter I.D. (serial number)
- Current Meter Read
- Previous Meter Read
- Days in Billing Cycle
- Consumption
- Bill and water allocation details as mutually agreed

The above list of fields is intended to serve as an example. During the project kickoff process, WaterSmart and Sandy will work together to discuss the ramifications of the presence or absence of data in the feeds.

WaterSmart will provide Sandy with a private, password-protected FTP destination for regular delivery of the data. This secure FTP site will be hosted on WaterSmart's server infrastructure.

Appendix C:
Customer Confidentiality & Data Security

WaterSmart will not share personally identifiable customer information or customer-specific water use information with any third party without prior consent from Sandy.

Data transferred to WaterSmart from Sandy will be stored in a database dedicated to Sandy and its WaterSmart project. The data will not be comingled with the data provided by any other entity; provided, however, that certain anonymous data may be copied and consolidated with data provided by one or more other entities for the research and product development purposes subject to the terms of the Agreement.

WaterSmart will continue to enact standard controls, policies, and procedures to ensure the security of Sandy's data and customer provided information, including but not limited to choosing a reputable cloud-server vendor with appropriate physical security of server infrastructure, secure public-private key-based login to all WaterSmart server infrastructure, password authentication on all Web site interaction, and audit logging.

Appendix D:
WaterSmart Measurement & Verification Program Design

For all programs that include outbound, opt-out engagement through Home Water Reports delivery, WaterSmart reports changes in consumption for the experimental/treatment of Home Water Report recipients versus a randomized control group selected from Utility's entire population of residential households. After three HWRs have been sent, WaterSmart will prepare an efficiency study that details the change in water usage for the experimental versus control group, and load those results into the Utility Analytics Dashboard. This evaluation is performed with a Fixed-Effects regression model using the consumption data for each household in the experimental and control groups.

Attachment 4

Abstract from Article in October 2014 American Economic Review "The Short-Run and Long-Run Effects of Behavioral Interventions: Experimental Evidence from Energy Conservation"

American Economic Review: Vol. 104 No. 10 (October 2014)

The Short-Run and Long-Run Effects of Behavioral Interventions: Experimental Evidence from Energy Conservation

Article Citation

Allcott, Hunt, and Todd Rogers. 2014. "The Short-Run and Long-Run Effects of Behavioral Interventions: Experimental Evidence from Energy Conservation." *American Economic Review*, 104(10): 3003-37.

DOI: 10.1257/aer.104.10.3003

Abstract

We document three remarkable features of the Opower program, in which social comparison-based home energy reports are repeatedly mailed to more than six million households nationwide. First, initial reports cause high-frequency "action and backsliding," but these cycles attenuate over time. Second, if reports are discontinued after two years, effects are relatively persistent, decaying at 10-20 percent per year. Third, consumers are slow to habituate: they continue to respond to repeated treatment even after two years. We show that the previous conservative assumptions about post-intervention persistence had dramatically understated cost effectiveness and illustrate how empirical estimates can optimize program design.

Article Full-Text Access

Full-text Article

Additional Materials

Download Data Set (55.85 KB) | Online Appendix (250.43 KB) | Author Disclosure Statement (6.93 KB)

Authors

Allcott, Hunt (NYU)
Rogers, Todd (Harvard U)

JEL Classifications

D12: Consumer Economics: Empirical Analysis
D83: Search; Learning; Information and Knowledge; Communication; Belief
L94: Electric Utilities
Q41: Energy: Demand and Supply; Prices