



Water Conservation Coordination Plan: Implementation Plan

2013 - 2018

Introduction

The Water Conservation Coordination Program (WCCP) is a cooperative effort of the LOTT Clean Water Alliance and the water utilities of its three partner Cities – Lacey, Olympia, and Tumwater – to plan and offer indoor water conservation programs that reduce wastewater flows to LOTT treatment facilities. The original flow reduction program began in 1996. As of August 2012, over 1,000,000 gallons per day have been conserved as a result of this regional conservation program.

It is the intent of LOTT and its partners to continue the cooperative Water Conservation Coordination Plan, as additional water conservation and flow reduction benefits LOTT, its partners, its communities, and the environment. This Water Conservation Coordination Plan has been developed to guide the program for the planning period 2013-2018. It was developed by the Water Conservation Coordinating Committee (WC3), made up of representatives from each of the three partner Cities' water utilities and LOTT, with assistance from HDR. It was developed with input and review from the LOTT Technical Sub-Committee (TSC) and LOTT Board of Directors.

Members of the Water Conservation Coordinating Committee during development of this Plan included:

City of Lacey	Erin Keith
	Cynthia Taylor
City of Olympia	Erin Conine
	Linda Ayala
City of Tumwater	Tim Wilson
LOTT Clean Water Alliance	Lisa Dennis-Perez

Program Implementation

The Water Conservation Coordination Program is implemented by the Water Conservation Coordinating Committee (WC3), with assistance from additional water utility staff of the partner Cities. Oversight is provided by the LOTT Technical Sub-Committee (TSC). Implementation of the Water Conservation Coordination Program is made possible through an Interlocal Agreement between the LOTT Clean Water Alliance and the Cities of Lacey, Olympia and Tumwater and Thurston County, included here as Appendix A.

Policy Statements

The Program is guided by a list of Policy Statements, endorsed by the LOTT Board of Directors. The list of policy statements follows:

1. Consistent with its Wastewater Resource Management Plan and public values expressed during the planning process, the LOTT Clean Water Alliance will continue to provide financial and staff support for projects that help maximize use of existing LOTT facilities by reducing wastewater flows and maximize benefits to the environment by conserving water.
2. The LOTT Clean Water Alliance will pursue cost-effective flow reduction measures as part of a strategy to postpone the need to develop new treatment capacity.

3. LOTT's Water Conservation Coordination Plan should be based on a water conservation goal that is moderately aggressive and reasonably achievable within the planning period.
4. The LOTT Partner water utilities will continue to assume lead responsibility for implementation of water conservation projects and should work together with LOTT through participation in the Water Conservation Coordinating Committee (WC3).
5. The LOTT Technical Sub-Committee (TSC) will provide oversight for the Water Conservation Coordination Program and make program recommendations to the LOTT Board of Directors.
6. An annual budget for water conservation projects will be established as part of the annual LOTT Capital Improvements Plan (CIP) and Capital Budget process, while retaining flexibility for the Board to consider funding support for special projects as they are identified. On occasion, large-scale industrial, commercial and institutional (ICI) or other projects may need to be considered outside the annual budget amount to maintain implementation of the on-going program and address special ICI or other projects.
7. Participants in LOTT Water Conservation Program projects must be LOTT sewer service customers with accounts in good standing.
8. Water Conservation Program budgeting and implementation recommendations will be developed using a set of criteria designed to help evaluate and prioritize potential and on-going projects. First and foremost, the set of criteria will include the requirement that all implemented projects must be cost-effective when compared to the estimated cost of building a gallon of new treatment capacity.
9. The LOTT Water Conservation Program shall be managed with flexibility to allow for adjustments in light of new and emerging water saving technologies, alternative delivery methods, results of past and on-going project evaluations, and other factors that affect progress toward the water conservation goal. These factors will be used to develop annual work plans and budget requests.

Flow Reduction Goal

The goal of the Water Conservation Coordination Program for the planning period is to reduce wastewater flows by at least 175,000 gallons per day (gpd), and ideally by 250,000 gpd. This flow reduction goal applies to the planning period 2013-2018. It is in addition to the 1,000,000 gpd reduction achieved through the Water Conservation Coordination Program prior to 2013. During 2013, the Water Conservation Coordination Program operated under an amendment to the Interlocal Agreement for the previous planning period, allowing time to pilot a new flat-rate rebate program for high-efficiency toilets and to update this plan. Flow reduction achieved during 2013 will apply toward the flow reduction goal for this planning period.

This flow reduction goal was approved by the LOTT Board of Directors as part of an update to LOTT's organizational Performance Plan in 2013. The flow reduction goal is significantly lower than that of the previous planning period, recognizing that the program has been in place for over 15 years and much of the easily-achieved water savings has been addressed. Participation rates for many of the incentive programs have been declining in recent years. Many of the customers interested in retrofits have participated in the program, and many of the highest volume water users have also completed retrofit projects. While there is still opportunity for substantial water savings, projects that reduce flows by appreciable volumes are becoming

more difficult to identify and involve higher costs than previous efforts. Scaling back on the flow reduction goal for these reasons is consistent with the practices of other utilities with similar conservation programs.

Development of the Program Work Plan

As described in the Policy Statements, the LOTT Water Conservation Program must be managed with flexibility in order to adjust to new and emerging water saving technologies and delivery methods, assist partner jurisdictions in complying with new regulations related to water use efficiency, and to incorporate results of project evaluation in terms of cost, participation, and water savings. This document provides a general work plan for the planning period 2013-2018 as a guide for program implementation. This work plan will be supplemented with development of more detailed annual work plans, as described later.

The general work plan includes a variety of flow reduction projects, many of which have been implemented in some form through the WCCP in the past. Criteria used to select projects for implementation includes:

1. Cost-effectiveness – all projects must be cost-effective (estimated per gallon cost to implement the project should be equal to or less than the cost of building a gallon of new treatment capacity, currently \$22.71 per gallon).
2. Relative cost-effectiveness – each project has a degree of cost-effectiveness. How do they compare in terms of one being more cost-effective than another? LOTT should strive to achieve the greatest public benefit for the lowest cost.
3. Potential flow reduction and water savings – emphasis should be placed on projects or customers that represent the greatest volume of potential water savings/flow reduction.
4. Likelihood of success – emphasis should be placed on projects most likely to succeed. Likelihood of success may depend upon:
 - a. use of proven technologies;
 - b. customer satisfaction, including satisfaction with equipment, ease of participation, benefits re: financial savings and improved image;
 - c. ease of implementation, including whether or not the project is established, staffing requirements, expertise needed, logistical complexity.
5. Retrofits or replacements – emphasis should be placed on projects that encourage early retirement of less efficient equipment through retrofit or replacement with equipment that meets or exceeds current plumbing code standards.
6. Beyond code or current standards – projects that encourage use of fixtures and equipment that are more efficient than current standards or plumbing codes provide increased potential for long-term flow reduction and water savings.
7. Technology vs. behavioral change – projects that assure installation and use of equipment or technology that result in immediate flow reductions and water savings are preferred to projects that focus on behavioral change, because the behavior change and associated flow reduction is not guaranteed. For example, single-flush high-efficiency toilets are preferred over dual-flush toilets because the water savings are guaranteed, rather than dependent upon a change in behavior (choosing a lower volume flush). As another example, program dollars are directed to hard fixes like installation of high-efficiency toilets, which result in immediate flow reduction, rather than installation of smart meters or sub-meters, which may

or may not draw attention to water use patterns and inspire customers to change their behaviors and use less water.

8. Broad participation – projects that are available to and used by many customers demonstrate program benefit to ratepayers and foster a sense of fairness and overall community benefit.
9. Value as demonstration/model projects – projects that offer opportunities for the public to view and test water saving technologies and learn about the economic benefits of conservation can have an exponential effect on participation in related projects.

Categories of Customer

LOTT sewer customers fall into one of several categories: single-family residential, multi-family residential, and industrial/commercial/institutional. Projects and incentives differ based on the customer category. These categories are also important in terms of establishing base assumptions regarding water use, which are used to calculate estimated flow reductions. For the purposes of this Plan, the following categories and assumptions apply:

Single-family (SF): the category applies to single-family homes and duplex units. In general, these homes are assumed to have 2.3 people per household. This is based on the average number of people per household for the urban areas of Lacey, Olympia, and Tumwater as listed in the 2012 Thurston Regional Planning Council's Annual Profile.

Multi-family (MF): this category applies to tri-plex, four-plex, condominiums, and apartment buildings with multiple units. Multi-family units are assumed to support an average of 1.7 people per household, based on 75% of the single-family average.

Industrial/commercial/institutional (ICI): this category applies to all industries, commercial businesses, and institutions like schools, hospitals, and colleges.

Work Plan Project Descriptions

The general work plan involves implementation of the following flow reduction programs within the planning period. The descriptions provide an overview of each project, including estimated water savings, cost-effectiveness, implementation guidelines, and how implementation is expected to change over the course of the planning period.

WashWise Rebates (SF, MF, & ICI)

This project provides rebates for the purchase and installation of resource-efficient washing machines. The current flat rate rebate provided for washing machines through this program is \$50 per household/machine.

Water-Saving Assumptions

Conventional residential clothes washers installed since 1990 use about 43 gallons per load. Today's high-efficiency washers use anywhere from 9 to 21 gallons per load. Using an average of 16 gallons per load and an assumption of 1.07 loads per day (Vickers 2001), an average household can save about 29 gallons of water per day, or over 10,500 gallons per year.

Cost-Effectiveness

A rebate level of \$50 per qualifying washing machine has proven to be an effective incentive, with consistent participation in recent years. It also makes this project extremely cost-effective, at \$1.72 per gallon, well under the current cost-effectiveness threshold of \$22.71.

Implementation Guidelines

1. This rebate applies to the purchase and installation of residential-style clothes washers, regardless of the customer category. Single-family residential customers, multi-family customers, and industrial, commercial, and institutional customers are eligible.
2. Eligibility of washing machines is determined using the list developed and updated by the Consortium for Energy Efficiency (CEE). CEE is a nonprofit public-benefits corporation promoting the manufacture and purchase of resource-efficient projects through incentive and promotional programs.
3. Customers must apply for the rebate within 6 months of the date of purchase.
4. Rebates for washing machines installed at rental properties are also eligible for rebate. The rebate will be provided to the property owner or the renter, whoever purchases the qualifying machine, as long as it is installed at a property served by LOTT.
5. Rented or rent-to-own appliances are not eligible for rebate.
6. In general, only one rebate per household will be provided. Exceptions are possible if the customer can identify a compelling need for more than one washing machine at the property or within the household.
7. In general, rebates will not be provided at the same property more frequently than once every 5 years. Clothes washers are expected to function relatively trouble-free for a minimum of 5 years, and certainly most last much longer. However, exceptions will be granted for replacement of faulty appliances, loss of appliances through divorce or separation, etc.
8. Coin-operated washing machines for multi-family shared laundry facilities are also eligible for the standard WashWise rebate. Such facilities are eligible to receive rebates for each water-efficient machine purchased and installed in the facility.
9. Large-capacity, commercial grade washing machines, such as those used in laundromats and hotel/motels may be eligible for higher rebates through the WaterSmart rebate project for industrial, commercial, and institutional customers.

Process for Participation

To receive a rebate, customers submit the following to LOTT: a completed rebate application; a copy of their city water/sewer bill; and a copy of their purchase receipt with store name, date purchased, brand purchased, model number, purchase price, and proof of payment. LOTT staff confirm eligibility and issue rebate checks for rebate requests that meet eligibility requirements. LOTT staff occasionally need to contact the partner water utility to confirm customer status, if a customer does not include a copy of their bill. In cases where there are questions as to customer status and installation location, partner utility staff may be asked to confirm installation prior to final processing of the rebate request.

Project Implementation Plan

LOTT has been offering WashWise washing machine rebates at various levels since the start of the flow reduction program in 1997. The current rebate level of \$50 per machine has resulted in steady participation over the last several years. As an established project, WashWise rebates are relatively easy to manage. For these reasons, project implementation is not expected to change significantly during the planning period.

There are, however, several factors which may lead to re-evaluation and project adjustment in coming years. First, more research is needed to determine if the current rebate level is

adequate to provide incentive for the early retirement of older, very inefficient washing machines. It may be beneficial to offer a higher rebate level to customers who can document that their existing machines fall into that category. Second, water-efficiency standards for washing machines are expected to become more stringent in 2015. Third, technologies are constantly evolving, and appliances are becoming more and more water-efficient. The rebate incentive may eventually become obsolete if the marketplace shifts to offering exclusively water-efficient models. Alternatively, if technology continues to exceed water-efficiency standards, it may be beneficial to adjust the structure of the rebates to incentivize the purchase of the most efficient models on the market. For example, LOTT may eventually provide tiered rebates that vary based on water-efficiency, or rebate only the most efficient models.

Water Saving Kits (SF & MF)

Water Saving Kits for residential kitchen and bathroom fixtures are provided by LOTT to the partner utilities for distribution to single-family and multi-family customers. Current plumbing code requires that kitchen and lavatory faucets in residential settings use no more than 2.2 gallons per minute and that showerheads use no more than 2.5 gallons per minute. However, faucets, aerators, and showerheads are available in the marketplace in a wide variety of flow rates, ranging from the maximum to volumes well below current plumbing codes. Conversely, many older faucets and showerheads use much higher volumes of water than currently mandated. It is also common practice to remove aerators/flow restrictors to create higher pressure faucets and showerheads that use much higher volumes of water than mandated.

LOTT's water saving kits provide fixtures that use less water than the current plumbing code standards without compromising function. The volume for each component of the water-saving kits changes occasionally in response to customer feedback and improved technologies.

LOTT's current kit includes:

- Kitchen faucet aerator – 2.2 gpm
- Lavatory faucet aerator – 0.5 gpm
- Showerhead – 2.0 gpm
- Leak detection tablets
- Plumber's installation tape
- Installation instructions

Water Saving Assumptions

Given the wide range of use volumes for fixtures currently in use in residential settings, quantifying water savings from installation of water saving kit components is a challenge. Flow reduction for households where water saving kits are installed is estimated as 7.85 gallons per capita per day, and 18.06 gallons per household (2.3 people per household – TRPC Profile 2012; as an average of the number of people per household in Lacey, Olympia, Tumwater):

- Kitchen faucet = 0.75 gallons per capita per day
 - Replacing a 2.5 gpm aerator with a 2.2 aerator; 2.5 minutes of use
- Lavatory faucet = 3.0 gallons per capita per day
 - Replacing a 2.5 gpm aerator with a 0.5 gpm aerator; 1.5 minutes of use
- Showerhead = 4.1 gallons per capita per day
 - Replacing a 2.5 gpm showerhead with 2.0 gpm showerhead; 8.2 minutes of use
- Leak detection tablets = 0.0 gallons per capita per day
 - An estimated 25% of toilets in U.S. homes are estimated to leak, with leaks ranging from several gallons to over 100 gallons each day. Due to the difficulty of accurately estimating the occurrence of leaks, frequency of corrective actions, and the volume of each corrected leak, savings from leak detection tablets is not included in the total estimated savings from water saving kits.

Cost-Effectiveness

Water saving kits currently cost less than \$5.00 each. Each household is eligible to receive up to three water saving kits, based on the number of bathrooms in their home. For that reason, cost-effectiveness for this project is conservatively estimated as \$0.77 per gallon.

Implementation Guidelines

1. Kits are provided primarily to residential single-family and multi-family customers, although kit components may also be provided to industrial, commercial, and institutional customers with applicable fixtures.
2. LOTT kits are provided only to customers served by the LOTT sewer system. City utility customers served by on-site septic systems are not eligible for LOTT-funded kits. However, partner city utilities routinely provide city utility-funded water saving kits to their septic customers.
3. Each household is eligible to receive up to three water saving kits, based on the number of bathrooms in their home.

Process for Participation

Customers obtain the kits by contacting their respective city water utility. Each partner utility has a slightly different method for distributing kits and tracking customer participation. However, each partner is responsible for annual reporting to LOTT regarding the number of kits distributed and the number of households served through the project.

Project Implementation Plan

This established project provides significant wastewater flow reduction and will be continued during the planning period. However, several options for increasing participation and tailoring kit components to each household, including the use of alternative delivery methods, may be explored.

High-Efficiency Toilet (HET) Projects

High-efficiency toilets offer water savings in many applications, across all customer categories. Toilets installed prior to 1994 do not meet current water use standards, using between 3.5 and 5 gallons per flush. Even at current standards, conventional toilets use 1.6 gallons per flush, about 20% more than high-efficiency toilets. In either case, replacing these toilets with high-efficiency models provides substantial water savings.

During the previous planning period, LOTT implemented a variety of incentives for installation of high-efficiency toilets, depending on the customer category, number of toilets being replaced, and the flush volume of the toilets being replaced. Project implementation became unduly complicated and onerous, not only for LOTT and city utility staff, but also for the customers. The intent for the 2013-2018 planning period is to simplify implementation, reducing the number of different projects and clarifying implementation guidelines. Three HET projects will be offered, providing incentive for toilet replacements across all customer categories:

1. HET Rebates
2. Free Toilets for Multi-Family Customers
3. WaterSmart Technology Rebate Program

The applicable project will depend on the category of customer, water usage of existing fixture(s), and in some cases, the number of toilets to be replaced and the customer's preference for implementation. Table 1 summarizes the applicable project type for various customer categories and scenarios.

Table 1: Applicable Toilet Projects per Customer Category and Scenario

Program	Customer Category		
	Single Family Residential	Multi-Family Residential	Industrial/Commercial/ Institutional
Replace 1.6 gpf or greater toilet	HET Rebates (\$100)	HET Rebates (\$100)	HET Rebates (\$100)
Substitute for 1.6 gpf toilet in new construction	HET Rebates (\$100)	HET Rebates (\$100)	HET Rebates (\$100)
Replace 3.5 gpf or greater toilet	HET Rebates (\$100)	Free Toilets	HET Rebates (\$100) Or WaterSmart Rebates (Up to 75% Installed Costs)

HET Rebates

This is a flat rate rebate project that provides a uniform rebate (currently \$100 per fixture) for the purchase and installation of qualifying high-efficiency toilets, regardless of customer category and the flush volume of toilets to be replaced. This rebate applies to:

1. Single-family residential customers replacing toilets with flush volumes of 1.6 gpf or greater
2. Multifamily customers replacing 1.6 gpf toilets
3. Industrial/commercial/institutional (ICI) customers replacing 1.6 gpf or greater toilets (ICI customers replacing older toilets that use 3.5 gpf or greater may elect to use this rebate program or apply for funding under the WaterSmart program).
4. New construction or remodels for residential or ICI customers choosing to install HETs rather than standard 1.6 fixtures (also applies to builders/developers of residential or ICI developments). This is also referred to as the better-than-code program.

Water Saving Assumptions

Water-savings for installation of high-efficiency toilets varies depending on the flush volume of the fixtures being replaced, flush volume of the new fixtures, number of people using the fixture, and frequency of use. Because of these variable factors, it is not possible to calculate exact water savings for each program participant. The following standard assumptions are applied to the various customer categories to estimate water-savings associated with installation of HETs:

1. Single-family residential: Installation of HETs is estimated to reduce flows by 34 gpd when replacing older, 3.5 gpf toilets and by about 11 gpd when replacing 1.6 gpf toilets, based on these assumptions:
 - a. 5.1 flushes per day per person (Vickers)
 - b. 2.3 persons per household (TRPC Profile 2012 based on the averages for the urban areas of Lacey, Olympia, and Tumwater)
 - c. 4.0 gpf for older, 3.5 gpf toilets (Vickers)
 - d. 2.0 gpf for existing 1.6 gpf toilets based on staff and plumbing contractor experience measuring 1.6 gpf toilets with actual flush volumes that average 2.0 gpf and reports from many customers with early generation 1.6 gpf toilets that double flushing is required due to performance issues.
 - e. 1.1 gpf per new fixture - this is a conservative figure based on range of flush volumes of HETs (0.8 gpf – 1.28 gpf)

- f. Because of past success replacing older, 3.5 gpf toilets through LOTT's various incentive programs, it is assumed that participation will involve replacement of more 1.6 gpf toilets (approximately 75%, compared with only 25% for 3.5 gpf toilets).
2. Multi-family: Installation of HETs is estimated to reduce flows by an average of 7.8 gpd when replacing 1.6 gpf toilets
 - a. 5.1 flushes per day per person
 - b. 1.7 persons per household
 - c. 1.1 gpf per new fixture - this is a conservative figure based on range of flush volumes of HETs (0.8 gpf – 1.28 gpf)
3. Industrial/commercial/institutional: Installation of HETs is estimated to reduce flows by an average of 45 gpd when replacing older, 3.5 gpf toilets and by an average of 14 gpd when replacing 1.6 gpf toilets
 - a. For older toilets, this is based on the 2001 Commercial, Industrial, Institutional Ultra Low Flow Toilet Savings Study by the California Urban Water Conservation Council (CUWCC) which identified a range of savings between 16-57 gpd for the installation of 1.6 gpf toilets. At an overall average of 37 gpd, adding 21% in savings to account for the use of high-efficiency toilets that average 1.1 gpf would result in an average savings of 45 gpd
 - b. For 1.6 gpf toilets, there are no known studies or reference materials that provide estimates for water savings associated with replacement of 1.6 gpf toilets with HETs in general ICI settings. For that reason, the percentage difference in water savings in residential settings between replacement of 1.6 gpf toilets and 3.5 gpf toilets was applied to ICI settings to establish the estimated flow reduction.
 - i. $11 \text{ gpd}/34 \text{ gpd} = 0.31$ or 31%
 - ii. $0.31 * 45 \text{ gpd} = 14 \text{ gpd}$
4. New construction or remodels for:
 - a. Single-family residential settings: Installation of HETs instead of 1.6 gpf at-code toilets is estimated to reduce flows by an average of 11 gpd (see assumptions under 1. Single-family residential above).
 - b. Multi-family residential settings: Installation of HETs instead of 1.6 gpf at-code toilets is estimated to reduce flows by an average of 7.8 gpd (see assumptions under 2. Multi-family residential above).
 - c. Commercial settings: Installation of HETs instead of 1.6 gpf toilets is estimated to reduce flows by an average of 14 gpd (see assumptions under 3b. above).

Cost-Effectiveness

Based on the standard water-saving assumptions above, cost-effectiveness varies for each of the customer classes and various flush volumes of fixtures that are being replaced:

1. Single-family residential:
 - a. \$2.94/gallon when replacing 3.5 gpf or greater toilets
 - b. \$9.09/gallon when replacing 1.6 gpf toilets
2. Multi-family:
 - a. \$12.82/gallon when replacing 1.6 gpf toilets
3. Industrial/commercial/institutional:
 - a. \$2.22/gallon when replacing older, 3.5 gpf toilets
 - b. \$7.14/gallon when replacing 1.6 gpf toilets
4. New construction or remodels for:
 - a. Single-family residential settings: \$9.09/gallon
 - b. Multi-family residential settings: \$12.82/gallon
 - c. Commercial settings: \$7.14/gallon

Implementation Guidelines

1. Rebates will only be provided for purchase of qualifying high-efficiency toilets. Qualifying criteria currently include:
 - a. Toilet must have a flush volume of 1.28 gpf or less
 - b. Toilet must score a minimum of 750 grams on MaP performance testing
 - c. Toilets that employ a dual flush technology are not eligible for rebate
 - d. Only complete toilet fixtures are eligible for rebate. Equipment intended to retrofit an existing toilet fixture is not eligible for rebate.
2. Single-family customers are eligible for a maximum of 3 rebates per household, based on the number of fixtures in the home.
3. Customers must apply for the rebate within 6 months of the date of purchase.
4. HETs installed at rental properties are also eligible for rebate. The rebate will be provided to the property owner or the renter, whoever purchases the qualifying toilet, as long as it is installed at a property served by LOTT sewer service, and its installation is approved by the property owner.
5. Rebates will not be provided for HETs intended to replace other HETs. Rebates will not be provided for locations where LOTT incentives for HETs have previously been received.

Process for Participation

To receive a rebate, customers must purchase qualifying high-efficiency toilets that meet the criteria listed above. A pre-approved list of toilets is maintained by LOTT and provided as a starting point for customers, although there are other qualifying toilets that are not included on the pre-approved list. Customers are free to choose any qualifying toilet. Customers must submit the following to LOTT: a completed rebate application; a copy of their city water/sewer bill; and a copy of their purchase receipt with store name, date purchased, brand purchased, model number, purchase price, and proof of payment. LOTT staff confirm eligibility and issue rebate checks for rebate requests that meet eligibility requirements. LOTT staff occasionally need to contact the partner water utility to confirm customer status, if a customer does not include a copy of their bill. In cases where there are questions as to customer status and installation location, partner utility staff may be asked to confirm installation prior to final processing of the rebate request.

Free Toilets for Multi-Family Customers

This program provides free high-efficiency toilets to qualifying multi-family customers, who plan to replace older toilets with flush volumes of 3.5 gpf or more.

Water Saving Assumptions

Water-savings for installation of high-efficiency toilets varies depending on a number of factors. The following standard assumptions are applied to the multi-family customers that are served through this direct install project:

1. Multi-family: Installation of HETs is estimated to reduce flows by an average of 25 gpd when replacing 3.5 or greater gpf toilets
 - a. 5.1 flushes per day per person
 - b. 1.7 persons per household
 - c. 1.1 gpf per new fixture - this is based on the flush volumes of the two fixtures currently offered through this program
 - d. 4.0 gpf for fixtures being replaced

Cost-Effectiveness

Assuming a cost of nearly \$275 per high-efficiency fixture, cost-effectiveness of this project is \$11.00/gallon when replacing 3.5 or greater gpf toilets. The actual cost of the fixtures varies slightly from year to year and is dependent upon bid results from fixture suppliers.

Implementation Guidelines

1. This incentive applies only to projects that replace older toilets with flush volumes of 3.5 gpf or greater.
2. LOTT includes 2-3 toilet models in the program at any one time. These toilets are chosen based on performance testing, reliability, availability of fixtures and replacement parts, customer satisfaction, and price.
3. Participating customers can choose from the pre-approved HET models, depending on their renter's needs, space constraints, and maintenance preferences. Substitutions for pre-approved models are made only for extenuating circumstances, and only in cases where the substitution can be made at a similar price point and performance level. Substitutions are rare and are made at the discretion of the WC3. Extenuating circumstances do not include color or exterior style preference. Extenuating circumstances may include structural constraints, such as a non-standard 10" rough-in.
4. Multi-family property owners are responsible for installation of provided fixtures. This may be accomplished by hiring a plumbing contractor or through labor of their in-house maintenance personnel. The property owner is also responsible for proper disposal of removed fixtures. Toilets must be installed within six months of receipt.

Process for Participation

Through this project, LOTT covers the cost of HET fixtures and the property owner is responsible for ensuring that the fixtures are installed at their own expense. Customers may also elect to have water-efficient faucet aerators and showerheads provided by LOTT and installed at the time of HET installation. Eligible customers are self-identified as a result of marketing efforts. LOTT solicits bids from plumbing fixture vendors/wholesalers and selects one to provide HETs under this project. The WC3 serves as the selection committee to choose the vendor/wholesaler.

Interested multi-family property owners submit a Participation Agreement that outlines terms and conditions of participation. This is submitted to the partner city staff, who confirm eligibility and then forward the Participation Agreement to LOTT. Once approved, LOTT provides the customer with a Letter of Approval that stipulates the number of toilets to be provided and instructions for coordination with the vendor/wholesaler for fixture delivery. The customer arranges with the vendor/wholesaler for delivery, which may be incremental to allow for installation over time. After installations are complete, city staff may contact the customer and/or complete site inspections to confirm installations have occurred and gauge the customer's level of satisfaction with the fixtures and the project in general.

WaterSmart Technology Rebate Program

This rebate project applies to industrial/commercial/institutional customers replacing or retrofitting fixtures or equipment to reduce flows and conserve water. This project is discussed in greater detail in the next section. It is mentioned here because it may be used to provide incentives for industrial/commercial/institutional customers that plan to replace more older, 3.5 or greater gpf toilets with HET models.

Water Saving Assumptions

Water-savings for installation of high-efficiency toilets varies depending on a number of factors, including the type of business, which has significant bearing on water use patterns. The following standard assumptions are applied to industrial/commercial/institutional customers overall to estimate water-savings associated with installation of HETs:

1. Industrial/commercial/institutional: Installation of HETs is estimated to reduce flows by an average of 45 gpd when replacing older, 3.5 gpf toilets

- a. Based on average savings of 37 gpd (CUWCC 2001 study), plus 21% additional savings from use of 1.1 gpf HET

Cost-Effectiveness

Cost-effectiveness of toilet replacements under the WaterSmart project vary considerably, based on the cost of replacement and water use patterns of the particular business. For these reasons, cost-effectiveness is determined on a case-by-case basis for each project. However, if water use data is not readily available, cost-effectiveness for industrial/commercial/institutional customers can be based on the general water use assumptions included above, as compared to the estimated project cost for the proposed project.

Implementation Guidelines

1. This incentive is intended for the replacement of older toilets with flush volumes of 3.5 or greater.
2. This incentive is intended for the installation of high-efficiency toilets that use 1.28 gpf or less.
3. Dual flush toilets are not eligible for WaterSmart rebates.
4. In cases where conditions do not favor the use of HETs (i.e. flat sewer lines), 1.6 gpf models may be considered for the rebate, as long as it is determined that the project meets the eligibility and cost-effectiveness requirements of the WaterSmart program.
5. The cost of motion sensors is not eligible for rebate under the WaterSmart program. If the customer chooses to install HETs with motion sensor technology, they must cover the cost for that technology above and beyond the cost of standard HET fixtures.
6. More details on how to implement the WaterSmart Program are included in the next section.

Project Implementation Plan

These three HET projects are expected to be offered throughout the planning period. However, an evaluation of the HET projects will be conducted by WC3 periodically throughout the planning period to determine if changes need to be made to increase participation, address funding challenges, or improve program efficiencies. In particular, the multi-family HET replacement program will be evaluated annually and adjusted as needed to improve participation rates.

WaterSmart Technology Rebates

This project currently includes rebates of up to 75% to industrial, commercial, or institutional customers for retrofitted or installed cost of systems, appliances, equipment, or fixtures that reduce wastewater flows. WaterSmart rebates are generally provided at a percentage of the Total Project Cost, based on LOTT's cost-effectiveness threshold. Total Project Cost generally applies to the costs associated with both the purchase and the installation of water-saving equipment and fixtures. Example equipment and fixtures that fall under this project include: air-cooled ice machines, clean-in-place systems, in-house water reuse systems, water-efficient cooling systems, commercial dishwashers, and older toilets and urinals. The maximum rebate percentage for WaterSmart projects is 75% of Total Project Cost.

Water-Savings Assumptions

WaterSmart projects vary greatly depending on the type of equipment to be replaced or retrofitted and the associated water use patterns. Water savings must be calculated for each proposed project on a case-by-case basis.

Cost-effectiveness

Again, WaterSmart projects vary greatly in their water savings potential and their project costs. Each proposed project must be evaluated for cost-effectiveness on a case-by-case basis, comparing the eligible rebate amount to the estimated water savings to calculate the estimated cost per gallon of water saved and comparing that figure to LOTT's cost-effectiveness threshold to determine eligibility.

Implementation Guidelines

1. WaterSmart rebate levels for each project are determined on a case-by-case basis to ensure the project meets the cost-effectiveness criteria. Rebate levels may be adjusted below 75% to meet the cost-effectiveness criteria.
2. WaterSmart rebate levels are not dependent on the payback period for the customer's share of the project cost. While it makes good fiscal sense for a customer to complete retrofit projects with short payback periods, it is not a guarantee that the project will be completed without the maximum rebate assistance. Most businesses are consumed with tasks more directly related to running their everyday business and may not have the time, money, or inclination to follow-through with retrofit projects with the full rebate incentive, regardless of the length of their payback period.
3. Projects replacing fixtures or equipment not meeting the plumbing code standards, such as numerous 3.5 gpf toilets and 1.5 gpf urinals, fall under the WaterSmart designation. Projects that replace fixtures or equipment that currently meets the plumbing code standards fall under the Better-than-Code designation.
4. Projects that occur as part of major remodeling or demolition may not qualify for WaterSmart funding. Major renovations trigger a requirement from the local community development/plan review department to bring all fixtures up to plumbing code standards. If the improvements in efficiency are mandated as part of the renovations, they are not eligible for WaterSmart funding. However, they may still be eligible for Better-than-Code funding, described below. In cases where the type of the work to be done is not clear, LOTT will rely on the respective jurisdiction to determine whether the project qualifies as a retrofit/remodel or as a renovation that would trigger mandatory improvements to code.
5. WaterSmart projects that include automated sensors for toilets, urinals, and faucets are not eligible for consideration as part of the Total Project Cost, as their contribution to flow reduction is highly variable. For projects that incorporate the use of sensors, the eligible Total Project Cost is calculated using the cost of equivalent manual fixtures, with the actual "added" cost of the sensors borne entirely by the customer.
6. Dual flush toilets are not eligible for WaterSmart rebates.
7. In general, costs associated with full faucet replacement are not eligible for funding under WaterSmart, as long as water savings can be achieved solely by the replacement of aerators. Exceptions may be made on a case-by-case basis, due to site specific conditions. For example, older faucets and/or a large variety of different faucets precludes effective water savings by installation of aerators alone and in those cases, faucet replacement may be eligible if it is deemed cost-effective.
8. Proposals for retrofits to equipment or fixtures must be accompanied by supportable assumptions and/or documentation regarding expected performance and flow reduction to be eligible for rebate. Retrofits to toilets, flush valves, and urinals are generally not eligible for rebate due to uncertainties associated with their performance, reliability, and flow reduction.
9. Non-fixture and non-installation costs associated with a project may be considered as part of the total project cost if those costs would not have been incurred otherwise. For example, if removal of an old urinal requires tile repair, costs for that repair are included in the project cost.
10. Standard, water-efficient faucet aerators and showerheads may be provided to customers participating in the WaterSmart program free of charge for installation in association with an approved project, if deemed cost-effective by the WC3.

11. In some cases, remodel, renovation, and/or change-of-business projects include negotiations to reduce the Capacity Development Charges (CDC) paid to LOTT for the treatment capacity anticipated by the business's wastewater discharge volume. If the CDC has been reduced based on anticipated flow reduction resulting from the installation of better-than-code equipment or fixtures, the project costs for the installation of those equipment or fixtures are not eligible for rebate under this project
12. WaterSmart rebates up to \$50,000 can be approved by the LOTT Executive Director for immediate processing. Awards over \$50,000 must be reviewed by TSC who makes a recommendation to the LOTT Board of Directors for their approval. In most cases, rebates estimated to exceed \$50,000 are presented to the TSC and the LOTT Board for pre-approval.
13. Large rebates may be considered outside the approved annual Water Conservation Coordination Program budget amount to allow for continued implementation of other water conservation projects. Such projects are reviewed on a case-by-case basis through the TSC and the Board.

Process for Participation

Interested customers complete a rebate application describing the proposed project, with estimates of total cost and water savings. Partner utility staff provide technical assistance to the customers and often assist in developing water savings estimates. The WaterSmart application is then reviewed by partner utility staff and LOTT staff to determine eligibility and the appropriate rebate level. Once approved, LOTT provides the customer with a Letter of Intent that stipulates the amount of the rebate, the estimated water-savings, and the documentation required for rebate processing. The customer then completes the project, submitting invoices and work orders to the partner utility. Partner utility staff inspect the new equipment, confirm installation (by taking photographs), and submit the invoices and work orders, along with a memo detailing inspection results and recommendations for the rebate award to LOTT staff for processing. The rebate is provided directly to the customer.

Project Implementation Plan

WaterSmart rebates will continue to be offered to industrial/commercial/institutional customers throughout the planning period, customized to each cost-effective project. Specific types of retrofit projects may be promoted to targeted customer types in order to encourage participation. Potential targeted campaigns include:

- ice machines for restaurants and cafeterias
- cooling systems for office buildings
- showerheads, clothes washers, and other equipment for fitness centers
- water-efficient fixtures and equipment for assisted living and retirement centers

These potential targeted campaigns will be explored further, along with opportunities to leverage marketing assistance from vendors of water-efficient fixtures and equipment. One or more targeted WaterSmart campaigns may be implemented during the planning period.

Better-than-Code Rebates

The Better-than-Code program provides rebates to all customer classes for the installation of high-efficiency fixtures and/or equipment to replace equipment that already meets current plumbing code standards. These rebates may apply to existing buildings, remodels of existing buildings, and new construction. Better-than-code rebates apply to three scenarios:

- Toilets – a flat rebate is provided for the replacement of at-code toilets with high-efficiency models or the purchase and installation of high-efficiency toilets instead of at-code fixtures. The current rebate amount is \$100 per toilet, as described under the HET Rebate section beginning on page 10.

- Urinals – a flat rate rebate is provided for the replacement of at-code urinals with high-efficiency models or the purchase and installation of high-efficiency urinals instead of at-code fixtures. The current rebate amount is \$125 per urinal.
- Other equipment – this customized rebate amount is determined based on a percentage of the difference in cost between better-than-code equipment and standard, at-code equivalent equipment, and the potential water savings. The project must meet LOTT's cost-effectiveness threshold. Projects are currently eligible for rebates up to 75% of total project costs.

Water Savings Assumptions

1. Toilets --
 - a. Residential settings: Installation of HETs instead of 1.6 gpf at-code toilets is estimated to reduce flows by an average of 11 gpd, based on the following assumptions:
 - i. 5.1 flushes per day per person (Vickers)
 - ii. 2.3 persons per household (TRPC Profile 2012 based on the averages for the urban areas of Lacey, Olympia, and Tumwater)
 - iii. 1.1 gpf per new fixture - this is a conservative figure based on range of flush volumes of HETs (0.8 gpf – 1.28 gpf)
 - b. Commercial settings: Installation of HETs instead of 1.6 gpf toilets is estimated to reduce flows by an average of 14 gpd, based on:
 - i. A conservative estimate of 31% of the savings from replacing older toilets. The percentage was determined from comparisons to residential replacements of 1.6 gpf vs. 3.5 gpf toilets.
2. Urinals – the flow reduction for replacement of an at-code urinal with a high-efficiency urinal (HEU) is estimated to be about 26 gpd, based on the following assumptions:
 - a. Eligible high-efficiency fixtures use a maximum of 0.125 gpf.
 - b. HEUs are used to replace urinals that currently flush 1.0 gpf or more, or be installed in place of an at-code fixture that would have used 1.0 gpf.
 - c. 30 flushes per day, based on the federal estimate of 15 people per fixture and 2 uses per person per day.
3. Other equipment – the flow reduction for other equipment is determined on a case-by-case basis, comparing the difference in water use between the at-code and better-than-code equipment. Equipment specifications detailing water use for both at-code and better-than-code equipment usually form the basis for this determination.

Cost-Effectiveness

- Toilets – the cost-effectiveness for replacing or substituting high-efficiency toilets for at-code toilets is:
 - Residential settings: \$9.09/gallon
 - Commercial settings: \$7.14/gallon
- Urinals – the average cost difference between a code fixture and a high-efficiency fixture is estimated to be approximately \$130. A flat rate rebate of \$125 results in a cost-effectiveness of \$4.76, well below LOTT's cost-effectiveness threshold.
- Other equipment – cost-effectiveness is determined by comparing the rebate amount to the estimated water savings, using LOTT's cost-effectiveness threshold to determine the rebate level at which the project is cost-effective, if any.

Implementation Guidelines

1. For toilets:
 - a. See the HET Rebate section beginning on page 10.

2. For urinals:
 - a. high-efficiency urinals must use no more than 0.125 gpf
 - b. when replacing at-code fixtures, each HEU is rebated at \$125 per fixture
 - c. In rare cases in which a urinal that uses 0.5 gpf is to be replaced, the rebate is \$75 per fixture.
3. For other equipment:
 - a. Projects are eligible for up to 75% of the total project cost, but in no circumstances can the rebate amount exceed the cost difference between better-than-code and at-code equipment.
 - b. The rebate amount is based upon total project cost. The total project cost includes the cost difference between better-than-code and at-code equipment and may or may not include installation costs. Installation costs are excluded if those costs would be incurred regardless, as is the case with new construction or major renovations. Installation costs are included if they would not otherwise have been incurred, as in the case of elective equipment replacements.
4. In general:
 - a. New construction projects represent new fixtures, equipment, and flows to the LOTT system. They are required to install fixtures that, at a minimum, meet current plumbing code standards for water use. Therefore, only new construction projects that include installation of fixtures or equipment that perform better-than-code are eligible for rebate.
 - b. Costs associated with full faucet replacement are not eligible for funding under better-than-code, as long as water savings can be achieved solely by the replacement of aerators. Exceptions may be made on a case-by-case basis, due to site specific conditions. For example, older faucets and/or a large variety of different faucets precludes effective water savings by installation of aerators alone and in those cases, faucet replacement may be eligible if it is deemed cost-effective.
 - c. Proposals for retrofits to equipment or fixtures must be accompanied by supportable assumptions and/or documentation regarding expected performance and flow reduction to be eligible for rebate.
 - d. To ensure the rebate amount does not exceed the additional costs incurred to purchase better-than-code fixtures in new construction projects, the customer may be required to provide cost information for equivalent at-code fixtures that could have been considered for the project. Over time, LOTT will develop a reference list of at-code fixture costs for use in evaluating future projects. However, some additional information gathering will likely be required of customers with projects that involve non-standard fixtures or equipment in order to establish comparative at-code costs.
 - e. In some cases, new construction or remodel projects include negotiations to reduce the Capacity Development Charges (CDC) paid to LOTT for the treatment capacity anticipated by the business's wastewater discharge volume. If the CDC has been reduced based on anticipated flow reduction resulting from the installation of better-than-code equipment or fixtures, the project costs for the installation of those equipment or fixtures are not eligible for rebate under this project.

Process for Participation

For these scenarios, customers fill out an application. Partner utility staff often provide technical assistance to customers to estimate water savings and to complete paperwork.

- For toilet and urinal projects, customers must include a completed rebate application; a copy of their city water/sewer bill; and a copy of their purchase receipt with store name, date purchased, brand purchased, model number, purchase price, and proof of

payment. The model information is used to verify that the new fixture(s) is high-efficiency.

- For projects involving equipment other than urinals, each project is reviewed and pre-approved on a case-by-case basis using a process similar to WaterSmart rebates. The application is reviewed by partner utility staff and LOTT staff to determine eligibility and the appropriate rebate level. Once approved, LOTT provides the customer with a Letter of Intent that stipulates the amount of the rebate, the estimated water-savings, and the documentation required for rebate processing. The customer then completes the project, submitting invoices and work orders to the partner utility. Partner utility staff inspect the new equipment, confirm installation (by taking photographs), and submit the invoices and work orders, along with a memo detailing inspection results and recommendations for the rebate award to LOTT staff for processing.

Project Implementation Plan

During the planning period, active marketing of this rebate project is anticipated to raise awareness and increase participation. Opportunity exists to coordinate with partner community development departments and the private development community to ensure that remodels and new development exceeds water-efficiency standards and codes.

Promotional/Educational Efforts

Consumer education can play a significant role in water conservation and wastewater flow reduction. While the Water Conservation Coordination Program provides a variety of opportunities for LOTT customers to participate in water saving projects, others may be encouraged to save water through simple efforts to inform consumerism. For example, the water utility in Tampa, Florida has developed a list of flappers that work best with various toilet brands and models, encouraging consumers to purchase replacement flappers best matched for their particular fixtures. Similarly, customers shopping for a replacement toilet fixture, washing machine or dishwasher may not be aware of independent evaluations of toilet performance and water use efficiency. Seattle Public Utilities' FlushStar list of water-efficient toilets is one such list that serves as a model for assisting customers in making informed purchases. Making these consumer education materials available to the public through the LOTT website is a relatively simple task that will be pursued early in the planning period.

In addition to LOTT's website, the WET Science Center provides an opportunity to educate visitors and encourage water-saving behaviors. The WET Center currently features several interactive displays related to water conservation, including:

- a mock toilet that offers a variety of water-saving tips with each flush;
- a mock kitchen and laundry area with additional tips;
- a humorous interactive video that features a fictional family and compares their current water-wasting activities to water-saving alternatives, highlighting the potential water savings in various rooms of their home.

The WET Center sees thousands of visitors each year and will continue help spread messages about water conservation and flow reduction. Additional displays related to water conservation will be developed during the planning period.

Opportunities for Collaborative Projects

Opportunities for collaboration with other partners may emerge over the planning period. In the past, LOTT has partnered with Puget Sound Energy on water conservation projects that also

offer energy conservation benefits. In some cases, such as the Pre-Rinse Sprayhead project completed in 2006, cost-sharing of project costs may result in a cost-effective project. In other cases, such as the WashWise Rebates, incentives may be provided by both LOTT and PSE, to maximize incentives for consumers and boost participation. In those instances, joint promotion of the incentives may be worthwhile. Local groups such as Thurston Energy and the Green Business committee of the Thurston Chamber of Commerce may provide opportunities to promote LOTT's water conservation incentives. Agency-led audits of industrial, commercial, and institutional customers, through LOTT's Pretreatment Program, Thurston County's Hazardous Waste Program, and/or the Washington State Department of Ecology's Technical Resources for Engineering Efficiency (TREE) Program, may also yield opportunities to share information and/or promote incentive programs. These types of opportunities will be explored during the planning period.

As Yet To Be Identified Projects

Within the six year planning period, promising new technologies or alternative delivery methods in addition to those described above may be identified. Flexibility is a key component of the Water Conservation Coordination Plan. This general program work plan and the projects listed here provide a framework for program implementation. Other projects may warrant further evaluation during the planning period. Certainly, the schedule and the projects of particular focus may change over time as we evaluate our efforts and learn more about water conservation and wastewater flow reduction opportunities.

A Word about Volume-Based Rates

Volume-based rates are often suggested as a means of incentivizing water conservation. Volume-based rates are not addressed as part of this Water Conservation Coordination Plan because they are not generally effective at influencing non-discretionary water use, such as the indoor water uses related to wastewater, and because of the significant logistical issues associated with a shift to volume-based rates. The question of volume-based wastewater rates is one that the LOTT Board of Directors reviews periodically and it is possible that the Board will review that issue during the planning period, however, any decisions related to rate structure changes will be made outside the scope of this plan.

General Program Work Plan

This general work plan provides a framework for implementation of the Water Conservation Coordination Program for the planning period 2013-2018. It is essential that this work plan be treated only as a general guide to implementation.

Table 2 includes an overview of the projects to be implemented within the planning period, as well as a sense of when these projects may reach various stages of implementation. Stages of implementation and their associated dates may change over time as more is learned about these potential, on-going, and yet-to-be-identified projects.

Table 2. General Work Plan for 2013-2018 Planning Period

Program Element	2013	2014	2015	2016	2017	2018
WashWise Rebates (SF, MF & ICI)	On-going	Re-Evaluate	TBD	TBD	TBD	TBD
Water Saving Kits (SF & MF)	On-going	On-going	Re-Evaluate	TBD	TBD	TBD
HET Rebates (SF, MF & ICI)	On-going	On-going	On-going	On-going	Re-evaluate	TBD
Free HETs (MF)	On-going	On-going	Re-Evaluate	TBD	TBD	TBD
Better-than-Code Rebates (SF, MF & ICI)	On-going	On-going	Re-Evaluate	TBD	TBD	TBD
WaterSmart Rebates (ICI)	On-going	On-going	On-going	On-going	On-going	On-going
<i>Toilet Project</i>	On-going	On-going	On-going	On-going	On-going	On-going
<i>Standard Projects</i>	On-going	On-going	On-going	On-going	On-going	On-going
<i>Targeted Campaign 1</i>	--	Planning	Implement	Implement	--	--
<i>Targeted Campaign 2</i>	--	--	Planning	Implement	Implement	--

Development of Annual Work Plans

As detailed in the Interlocal Agreement, annual work plans will be developed for each year within the planning period. These annual work plans may deviate from the overall program work plan as changing conditions, technologies, and program results are considered in an effort to maximize effectiveness of the program and progress toward the flow reduction goal.

Development of the annual work plans allows for program adjustment as needed to:

- meet the overall flow reduction goal,
- incorporate results of past and on-going projects,
- respond to new opportunities for flow reduction not previously identified,
- respond to changing marketplace/consumer interests and behaviors,
- meet changing water use efficiency rules, and
- match anticipated funding levels and staffing resources.

The WC3 is tasked with developing the annual work plans by July prior to each year in the planning period. Each annual work plan will include a tentative schedule detailing tasks and estimated costs associated with each task or project. The work plan for 2014 follows. The budget for this work plan was approved by the LOTT Board of Directors at their Business Meeting on November 13, 2013, as part of the overall 2014 Budget and Capital Improvements Plan process.

Table 3: 2014 Annual Work Plan

Project/Task	Month												Cost
	1	2	3	4	5	6	7	8	9	10	11	12	
WashWise Rebates	X	X	X	X	X	X	X	X	X	X	X	X	\$ 25,000
Water Saving Kits	X	X	X	X	X	X	X	X	X	X	X	X	\$ 2,500
WaterSmart Rebates	X	X	X	X	X	X	X	X	X	X	X	X	\$ 150,000
<i>Choose target industry sector</i>			X	X	X								
<i>Identify related vendors/associations</i>						X	X	X					
<i>Develop targeted marketing materials</i>						X	X	X	X	X	X		
<i>Implement targeted campaign</i>										X	X	X	
Toilets – HET Rebates	X	X	X	X	X	X	X	X	X	X	X	X	\$ 200,000
<i>Promote to builders/developers</i>				X	X	X	X	X	X	X	X	X	
Toilets – Free Toilets for MF	X	X	X	X	X	X	X	X	X	X	X	X	\$ 230,000
Toilets – WaterSmart Rebates	X	X	X	X	X	X	X	X	X	X	X	X	\$ 25,000
Better-than Code Rebates	X	X	X	X	X	X	X	X	X	X	X	X	\$ 25,000
Consumer Education Materials													\$ 0
<i>Identify and Adapt Consumer Resources</i>						X	X	X					
<i>Add content and links to website</i>									X	X	X		
Printing Promotional Materials	X						X					X	\$ 2,000
2014 Total													\$ 659,500