BAWSCA Annual Water Conservation Report

FY 2011-12





BAWSCA WATER CONSERVATION PROGRAM ANNUAL REPORT FISCAL YEAR 2011-2012

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1 Introduction

The Bay Area Water Supply and Conservation Agency (BAWSCA) represents the interests of twenty-four cities and water districts, one water company, and one private university that purchase water from the San Francisco Regional Water System. A map showing the twenty-six BAWSCA member agencies is presented in Figure 1-1. Collectively the BAWSCA member agencies provide water to 1.7 million people, and over 30,000 businesses and community organizations in Alameda, Santa Clara and San Mateo counties.

BAWSCA was established as a multicounty agency authorized to "plan for and acquire supplemental water supplies, to encourage water conservation and use of recycled water on a regional basis....." (Bay Area Water Conservation Agency Act, AB2058)¹. Consistent with the legislature's intent, BAWSCA's water management objective is to ensure that there is a reliable supply of water where and when people within the BAWSCA service area need it. To this end, BAWSCA manages a Regional Water Conservation Program that is made up of several different conservation measures and is designed to support and augment the member agency and customer efforts to use water more efficiently. Water conservation is a key element of BAWSCA's water management efforts because:

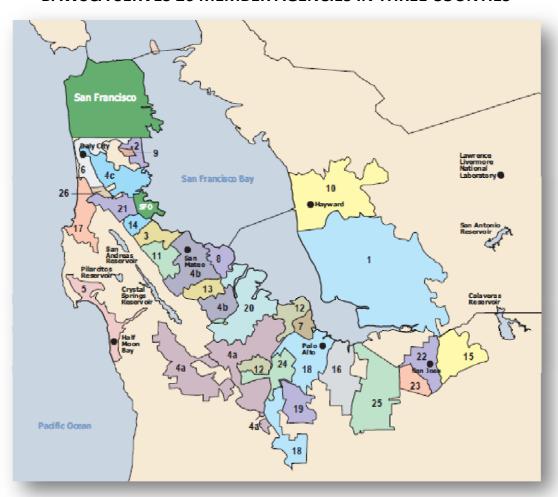
- Water conservation extends the limited supplies of water that are available to meet both current and future water needs;
- Water conservation is good public policy;
- Water conservation increases the drought reliability of the existing water system; and
- Water conservation saves money for both the agency and the customer.

In Fiscal Year (FY) 2011-12, as part of its work plan, BAWSCA implemented a Regional Water Conservation Program that was designed to be consistent with the Water Conservation Implementation Plan (WCIP; September 2009). These efforts included the administration of several regional water conservation measures, including measures designed to educate member agency customers about water-efficient landscaping and incentivize irrigated turf removal. As can be seen in Table 1-1, all 26 member agencies benefitted from the core conservation measures implemented by BAWSCA, and more than 22 different member agencies participated in one or more of the 6 subscription measures offered by BAWSCA, including rebate and large landscape audit measures.

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¹ California Water Code Section 81301(d)

FIGURE 1-1
BAWSCA SERVES 26 MEMBER AGENCIES IN THREE COUNTIES



- 1. Alameda County Water District
- 2. City of Brisbane
- 3. City of Burlingame
- 4a. CWS Bear Gulch
- 4b. CWS Mid-Peninsula
- 4c. CWS South San Francisco
- 5. Coastside County Water District
- 6. City of Daly City
- 7. City of East Palo Alto
- 8. Estero MID
- 9. Guadalupe Valley MID
- 10. City of Hayward
- 11. Town of Hillsborough
- 12. City of Menlo Park

- 13. Mid-Peninsula Water District
- 14. City of Millbrae
- 15. City of Milpitas
- 16. City of Mountain View
- 17. North Coast County Water District
- 18. City of Palo Alto
- 19. Purissima Hills Water District
- 20. City of Redwood City
- 21. City of San Bruno
- 22. San Jose Municipal Water System
- 23. City of Santa Clara
- 24. Stanford University
- 25. City of Sunnyvale
- 26. Westborough Water District

TABLE 1-1
BAWSCA AGENCIES PARTICIPATE WIDELY IN BAWSCA'S REGIONAL WATER CONSERVATION PROGRAM
FISCAL YEARS 2009-10 THROUGH 2011-12 (a) (b)

BAWSCA Co	ore Conservatio	n Programs		BAWSCA Subscription Water Conservation Program					
Landscape Education Class	WaterWise Garden On-	Public	Washing Machine	High-Efficiency	School Education: WaterWise	School Education: EarthCapades	Large Landscape	Lawn Be Gone! Landscape	
Participants	Line Tool	Outreach (c)	Rebates	Toilet Rebates	Kits	Assemblies	Audits (d)	Rebates	
V	V	V							
								X	
Х	X	X	X	X	Х	X			
Х	Х	X	Х	Х				Х	
Х	Х	Х	Х	Х	Х				
Χ	Х	Х	Х	X	Χ	X	Χ	X	
Х	Х	Х	Х	Х	Х	Х	Х	Х	
Х	Х	Х	Х	Х	Х	Х	Х	Х	
Х	Х	Х	Х	Х	Х	Х	Х	Х	
Х	Х	Х	Х	Х	Х	Х	Х		
Х	Х	Х	Х						
Х	Х	Х	Х	X	X	Х	X	X	
Х	Х	Х	Х		Х		Х		
Х	Х	Х	Х	Х	Х	X	Х		
Х	Х	Х	Х	Х	Х	Х	Х		
Х	Х	Х	Х	Х	Х	Х	Х		
Х	Х	Х	Х		Х		Х	Х	
Х	Х	Х	Х	X	Х	Х	Х	Х	
Х	Х	Х	Х	Х	Х	Х	Х	Х	
Х	Х	Х	Х						
Х	X	×			X	Х			
							X		
					X	X			
	X								
	Landscape Education Class Participants X X X X X X X X X X X X X X X X X X	Landscape Education Class ParticipantsWaterWise Garden On- Line ToolXX	Education Class WaterWise Garden On-Line Tool Public Outreach (c) X X X	Landscape Education Class Participants WaterWise Garden On- Line Tool Public Outreach (c) Washing Machine Rebates X X X X X X X <td>Landscape Education Class Participants WaterWise Garden On-Line Tool Public Outreach (c) Washing Machine Rebates High-Efficiency Toilet Rebates X</td> <td>Landscape Education Class WaterWise Garden On-Line Tool Public Outreach (c) Washing Machine Rebates High-Efficiency Toilet Rebates School Education: WaterWise Kits X</td> <td> Landscape Education Class Garden On- Line Tool Outreach (c) Outreac</td> <td> Landscape Education Class Garden On- Line Tool Clureach (c) Clureac</td>	Landscape Education Class Participants WaterWise Garden On-Line Tool Public Outreach (c) Washing Machine Rebates High-Efficiency Toilet Rebates X	Landscape Education Class WaterWise Garden On-Line Tool Public Outreach (c) Washing Machine Rebates High-Efficiency Toilet Rebates School Education: WaterWise Kits X	Landscape Education Class Garden On- Line Tool Outreach (c) Outreac	Landscape Education Class Garden On- Line Tool Clureach (c) Clureac	

- (a) Tables inlcudes an "X" if an agency has participated in a specific measure in at least one of the last three years (FY 2009-10, FY 2010-11, and/or FY 2011-12).
- (b) An absence of an "X" may not mean that agency does not participate in a measure, just that it does not participate through BAWSCA on that measure.
- (c) Includes several different programs that benefit the region, including Garden Tours, Outreach Events, and Sponshorships.
- (d) CalWater and Hillsborough Large Landcape Audit programs began with BAWSCA but were administered by the agencies in FY 2011-12.
- (e) The City of San Jose contracted with BAWSCA in FY 2011-12 to offer Water Conservation School Education Programs in Milpitas, Santa Clara and San Jose.

This report documents BAWSCA's implementation of its Regional Water Conservation Program, which includes conservation measures that are included as part of its annual work plan and that are consistent with the objectives of the WCIP (2009).

As evidenced in the data presented in the subsequent sections, participation in the BAWSCA Regional Water Conservation Program, and in the individual measures, has remained fairly consistent, with expenditures and participation slightly down in some programs and slightly up in others in FY 2011-12. BAWSCA expects that participation in key subscription programs in FY 2012-13 will benefit from BAWSCA's and its member agencies' participation in the Bay Area Proposition 84 Integrated Regional Water Management Grant (Proposition 84 Grant). BAWSCA will continue to adaptively manage the type and number of conservation measures that it offers to match the needs of its member agencies and their customers. As part of this effort, BAWSCA staff will continue to evaluate the resources needed to successfully manage and implement the Regional Water Conservation Program.

2 Overview of the BAWSCA Regional Water Conservation Program

In creating and implementing the BAWSCA Regional Water Conservation Program, BAWSCA follows several key principles:

- The BAWSCA Regional Water Conservation Program is designed to meet the specific needs and requirements of the BAWSCA agencies.
- The BAWSCA Regional Water Conservation Program must offer increased water savings at a lower cost to the agency and its customers.
- Agencies pay the costs for each conservation measure in which they participate.

BAWSCA's Regional Water Conservation Program is a two-tier program that offers a "Core Program" and a "Subscription Program":

- The <u>Core Program</u> is funded through the annual BAWSCA budget and contains those conservation measures that benefit from regional implementation and that provide regional benefit, irrespective of individual agency jurisdictions.
- The <u>Subscription Program</u> is fully funded by the individual agency that elects to participate in the measure based on their participation level and includes conservation measures whose benefits can be realized in individual water agency service areas.

The following sections summarize the Core Programs and Subscription Programs that were offered as part of the BAWSCA Regional Water Conservation Program in FY 2011-12. This summary does not reflect all of the conservation activities that occur throughout the BAWSCA service area as many of the member agencies administer additional water conservation measures independently or through another entity such as the SCVWD, see Appendix A.

2.1 Water Conservation Programs - Fiscal Year 2011-12

In FY 2011-12, BAWSCA offered the following water conservation measures as part of the Core and Subscription Programs that make up the Regional Water Conservation Program:

Core Program

- Water Efficient Landscape Education Classes
- Water-Wise Gardening in the Bay Area Landscape Educational Tool
- Native Garden Tours and Symposiums
- Support for the Adoption of Template Indoor and Outdoor Water Efficiency Ordinances

- Water Conservation Database
- Senate Bill 7x-7 Analysis and Calculation Tool
- Public Outreach

Subscription Program

- High-Efficiency Toilet (HET) Rebates
- High-Efficiency Residential Washing Machine Rebates
- Water-Wise School Education Kits and Curriculum
- EarthCapades Assemblies School Education Program
- Large Landscape Audits
- Lawn Be Gone! Turf Replacement Rebates

Each of the above water conservation measures were administered at a regional level through BAWSCA in a cost-effective and efficient manner. In addition, BAWSCA continued its efforts to, among other things:

- Conduct public outreach promoting water awareness and conservation;
- Develop and foster regional partnerships;
- Investigate alternatives to secure grants or other financial support;
- Support agency water conservation reporting and budgeting efforts;
- Provide technical support and training to the member agencies; and
- Provide analysis on specific legislation for the member agencies.

2.2 Fiscal Year 2011-12 Program Participation and Budget Overview

The following section provides a brief overview of BAWSCA's FY 2011-12 core and subscription programs as compared to historical program expenditures and participation. In general, BAWSCA has managed to continue reduce overall program expenditures while generally maintaining overall program participation among the BAWSCA agencies. However, customer expenditures, and participation, in many of the conservation programs was down in FY 2011-12. Similar declines in conservation program participation have been experienced by other water agencies throughout the region. It is unclear at this time whether the decrease in customer participation reflects the poor economy, the relatively cool, wet weather experienced in recent years, or increased market saturation. Agency participation in the available programs could increase somewhat in FY 2012-13 due to the availability of Proposition 84 grant funding. BAWSCA will continue to evaluate the effectiveness of each of its conservation program offerings as part of its regional water conservation program management.

Figure 2-1 shows level of participation by agency for select BAWSCA Regional Water Conservation Programs. Table 2-1 shows total program dollars spent by fiscal year. Figure 2-2 shows total subscription program expenditures. As can be seen, total program expenditures are down relative to expenditures in FY 2010-11 by 26%. The reduced expenditures in FY 2011-12 is attributable in part to a reduction in the per rebate cost for washing machine and toilet rebates, as well as reduced BAWSCA program administration costs. In addition, the observed decrease in customer participation in some of the programs has impacted the total program expenditures. However, the total program expenditure of \$967,075 in FY 2011-12 continues to be impressive when compared to the \$147,243 expended in FY 2001-02, which is when BAWSCA began offering regional programs.

Table 2-2, Table 2-3 and Figure 2-3 detail the level of participation in dollars spent by the member agencies in each of the core and subscription water conservation measures offered by BAWSCA on a regional basis since FY 2001-02. Table 2-2 shows a continued increase in expenditures on Landscape Education Classes as well as financial support for Native Garden Tours and Conferences and Symposiums that focus on outdoor water conservation from FY 2005-06 through FY 2011-12. Participation in these programs has continued to grow as well, as detailed in Section 3. Table 2-3 shows subscription program expenditures from FY 2001-02 through FY 2011-12. As can be seen, the Residential Washing Machine Rebate measure has the highest level of subscription program spending, totaling \$467,631 in FY 2011-12.

2.3 BAWSCA's Continued Support for Water Conservation Programs and Agency Reporting

BAWSCA agencies have expressed a continued desire to participate in the ongoing and new conservation measures that BAWSCA offers. In recognition of that interest, BAWSCA worked with the member agencies to develop a Water Conservation Implementation Plan (WCIP, 2009), which is a coordinated, regional plan for implementing water conservation throughout the BAWSCA service area. As part of its work plan, BAWSCA is actively working with the member agencies to implement the WCIP (2009).

Participation in the BAWSCA Regional Water Conservation Program assists agencies in complying with the Best Management Practices (BMPs) for Urban Water Conservation as described by the California Urban Water Conservation Council (CUWCC). Specifically, the BAWSCA Regional Water Conservation Program offers member agencies the chance to satisfy requirements of the following BMPs:

FIGURE 2-1
INCREASED AGENCY PARTICIPATION IN THE BAWSCA REGIONAL WATER CONSERVATION PROGRAMS

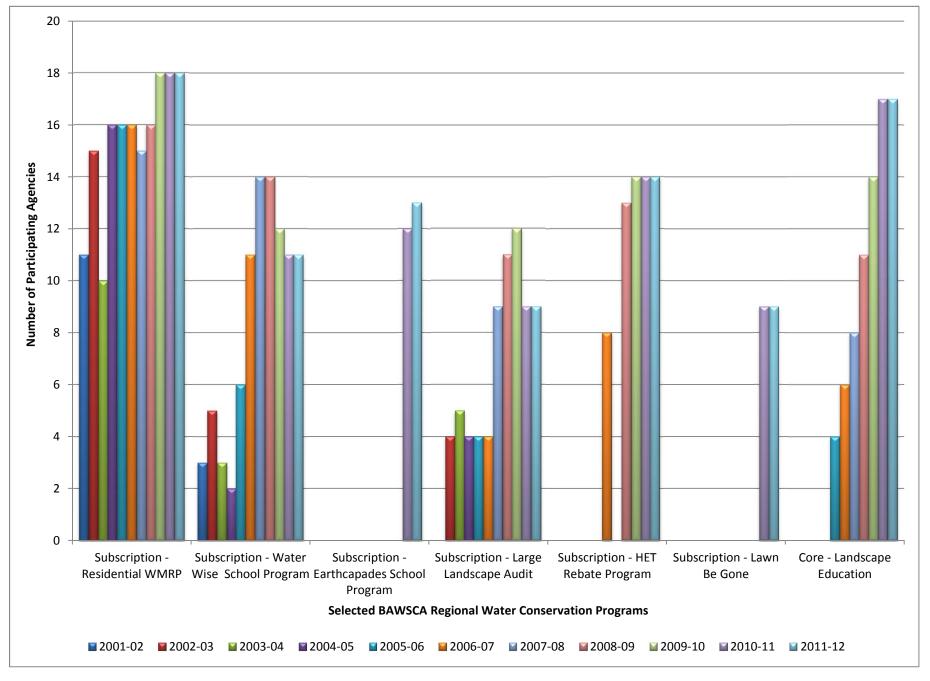


TABLE 2-1
BAWSCA WATER CONSERVATION PROGRAM BUDGETS

Fiscal Year	Budget	% Change
FY 2001-02	\$147,243	
FY 2002-03	\$435,163	196%
FY 2003-04	\$229,734	-47%
FY 2004-05	\$453,605	97%
FY 2005-06	\$485,177	7%
FY 2006-07	\$602,599	24%
FY 2007-08	\$687,063	14%
FY 2008-09	\$980,225	43%
FY 2009-10	\$1,635,110	67%
FY 2010-11	\$1,299,502	-21%
FY 2011-12	\$967,075	-26%
	Total Increase to Date	557%

FIGURE 2-2
SLIGHT DECREASE IN TOTAL BAWSCA SUBSCRIPTION PROGRAM EXPENDITURES

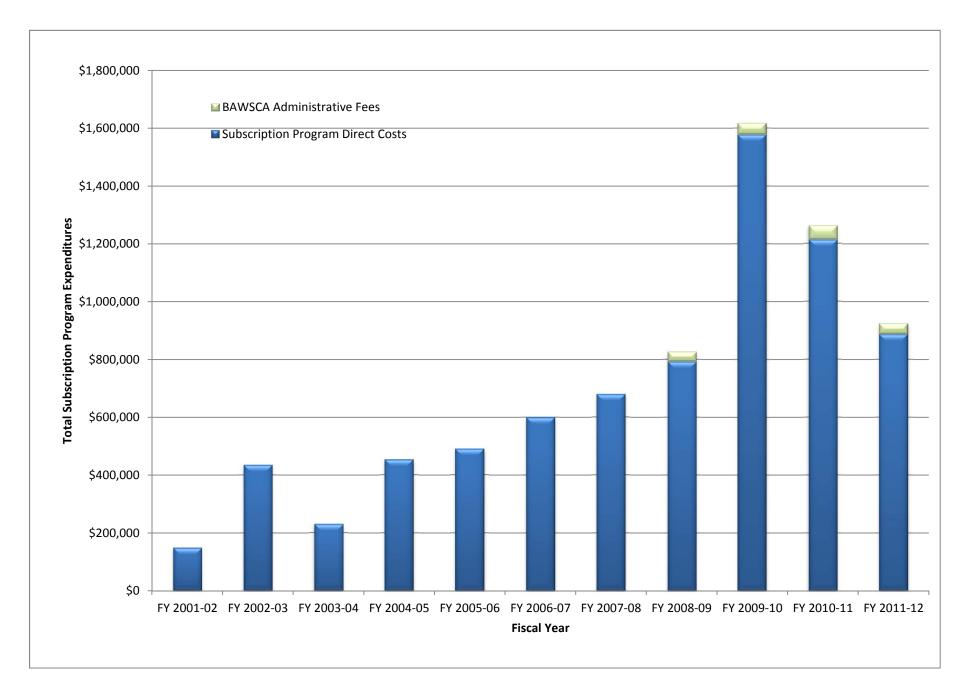


TABLE 2-2
BAWSCA CORE REGIONAL WATER CONSERVATION PROGRAM SUMMARY - FY 2011-12

	Land	scape Education (# of classes)	Classes		urs, Conferences & osiums	WaterWise Gardening Website		
Fiscal Year	Number of Number of Fiscal Year Classes Attendees Budget		Number of Agencies	Budget	Number of Agencies	Budget		
FY 2005-06 (a)	12	87	\$3,173		\$0		\$1,500	
FY 2006-07 (a)	12	110	\$3,150	all	\$3,000	all	\$13,500	
FY 2007-08 (b)	13	150	\$3,620	all	\$4,000	all		
FY 2008-09 (c), (f)	17	320	\$7,199	all	\$5,000	all	\$5,000	
FY 2009-10 (d)	41	918	\$20,059	all	\$5,814	all	\$5,100	
FY 2010-11 (e), (f)	56	1,283	\$25,780	all	\$6,500	all	\$5,000	
FY 2011-12	57	1,498	\$26,618	all	\$9,739	all	\$6,500	

- (a) In FY 2005-06 and FY 2006-07 BAWSCA partnered with member agencies to offer 4 landscape classes. However, BAWSCA also helped promote 8 additional classes that were being held by other member agencies (i.e., a total of 12 classes).
- (b) In FY 2007-08, BAWSCA co-sponsored 7 classes and co-promoted 13.
- (c) In FY 2008-09 BAWSCA co-sponsored 10 classes and co-promoted 17.
- (d) In FY 2009-10 BAWSCA co-sponsored 38 classes and co-promoted 3.
- (e) In FY 2010-11 BAWSCA co-sponsored 55 classes and co-promoted 1.
- (f) The \$5,000 per year liscensing fee for the GardenSoft software for FY 2010-11 was actually paid for in FY 2008-09 because of the terms of the Agreement.

FIGURE 2-3
CHANGING BUDGETS FOR INDIVIDUAL BAWSCA WATER CONSERVATION MEASURES

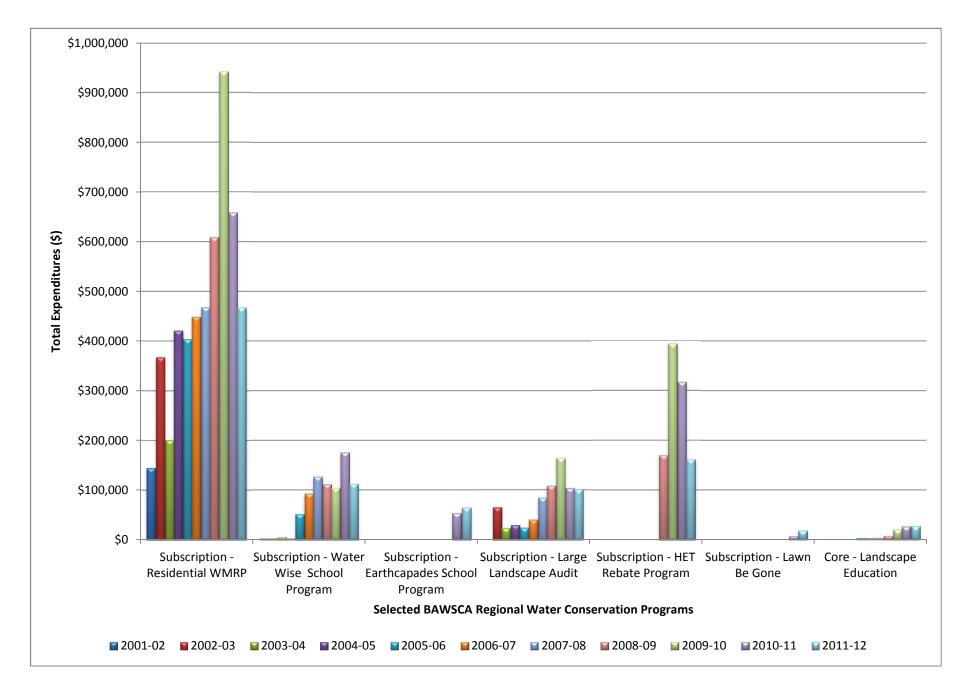


TABLE 2-3
BAWSCA REGIONAL SUBSCRIPTION WATER CONSERVATION PROGRAM SUMMARY - FY 2011-12

	Residential Washing Machine Rebates		High-Efficiency Toilet Rebates		School Education - EarthCapades Assemblies		School Education - Water Wise Kits		Large Landscape Audit		Lawn Be Gone! Landscape Rebates	
Fiscal Year	Number of Agencies	Budget	Number of Agencies	Budget	Number of Agencies	Budget	Number of Agencies	Budget	Number of Agencies	Budget	Number of Agencies	Budget
FY 2001-02	11	\$144,603		\$0		\$0	3	\$2,640		\$0		\$0
FY 2002-03	15	\$367,391		\$0		\$0	5	\$2,640	4	\$65,132		\$0
FY 2003-04	10	\$200,832		\$0		\$0	3	\$5,100	5	\$23,802		\$0
FY 2004-05	16	\$421,287		\$0		\$0	2	\$2,655	4	\$29,663		\$0
FY 2005-06	16	\$404,113		\$0		\$0	6	\$51,671	4	\$24,720		\$0
FY 2006-07	16	\$449,100		\$0		\$0	11	\$93,023	4	\$40,826		\$0
FY 2007-08	15	\$468,199		\$0		\$0	14	\$126,819	9	\$84,425		\$0
FY 2008-09	16	\$573,132	13	\$169,997		\$0	14	\$111,515	11	\$108,382		\$0
FY 2009-10	15	\$942,381	14	\$393,786		\$0	12	\$104,091	12	\$163,879		\$0
FY 2010-11	17	\$658,955	14	\$317,282	12	\$53,295	11	\$121,990	9 (a) (b)	\$103,948	9	\$6,751
FY 2011-12	18	\$467,631	14	\$161,543	13	\$64,305	8 (a)	\$112,172	9 (a) (b)	\$100,789	9	\$17,778

- (a) Cal-Water continues to offer the program, but now does it independently because it has taken the BAWSCA program state-wide in all of its districts.
- (b) Hillsborough continues to offer the program, but now offers it independently for all of its single-family residential customers.

- Foundational Education
- Programmatic Residential
- Programmatic Commercial, Industrial and Institutional
- Programmatic Landscaping

The following Chapters provide detailed information regarding BAWSCA's Regional Water Conservation Program and Measures.

3 BAWSCA Core Water Conservation Program

The following sections present detailed information on the individual conservation measures that constituted the BAWSCA Core Programs in FY 2011-12.

3.1 Water-Efficient Landscape Education Classes

In FY 2011-12, BAWSCA partnered with the member agencies to offer Water-Efficient Landscape Education Classes in Fall 2011 and Spring 2012. The BAWSCA Water-Efficient Landscape Education Classes are free to the public and are designed to introduce homeowners and landscape professionals to the concepts of sustainable landscape design, with a focus on creating beautiful, water-efficient gardens as an alternative to lawns.

BAWSCA offered its Fall 2011 series of Water-Efficient Landscape Education Classes and Hands-On Workshops from September through November 2011. A total of 26 landscape classes were held throughout the BAWSCA service area. Topics covered included a focus on the use of California native plants to create beautiful low water use and drought-tolerant gardens, as well as ways to irrigate more efficiently and replace lawn with lower water use landscaping. The total attendance for the landscaping classes that BAWSCA sponsored in Fall 2011 was approximately 729 people from 23 different agencies.

BAWSCA offered its Spring 2012 series of Water-Efficient Landscape Education Classes and Hands-On Workshops from the beginning of March 2012 through the end of May 2012. Topics covered in the Spring 2012 series included a focus on efficient irrigation and alternatives to lawns, as well as edible landscaping. BAWSCA coordinated and sponsored a total of 31 landscape classes throughout the BAWSCA service area. The total attendance for the landscaping classes that BAWSCA sponsored in Spring 2012 was approximately 769 people from 25 different agencies.

BAWSCA began offering Water-Efficient Landscape Education Classes throughout the BAWSCA region in Spring 2006. Customer interest in the classes has increased and, as a result, BAWSCA has continued to increase the number of classes throughout the region to meet customer demands. Figure 3-1 presents the number of classes that have been offered by BAWSCA, in partnership with the member agencies, over the past several years. Figure 3-2 presents the number of attendees by agency. Figure 3-3 presents a sample copy of the fliers that BAWSCA developed in FY 2011-12 to advertise for the landscape class series.

FIGURE 3-1
THE NUMBER OF LANDSCAPE CLASSES OFFERED BY BAWSCA CONTINUES TO INCREASE

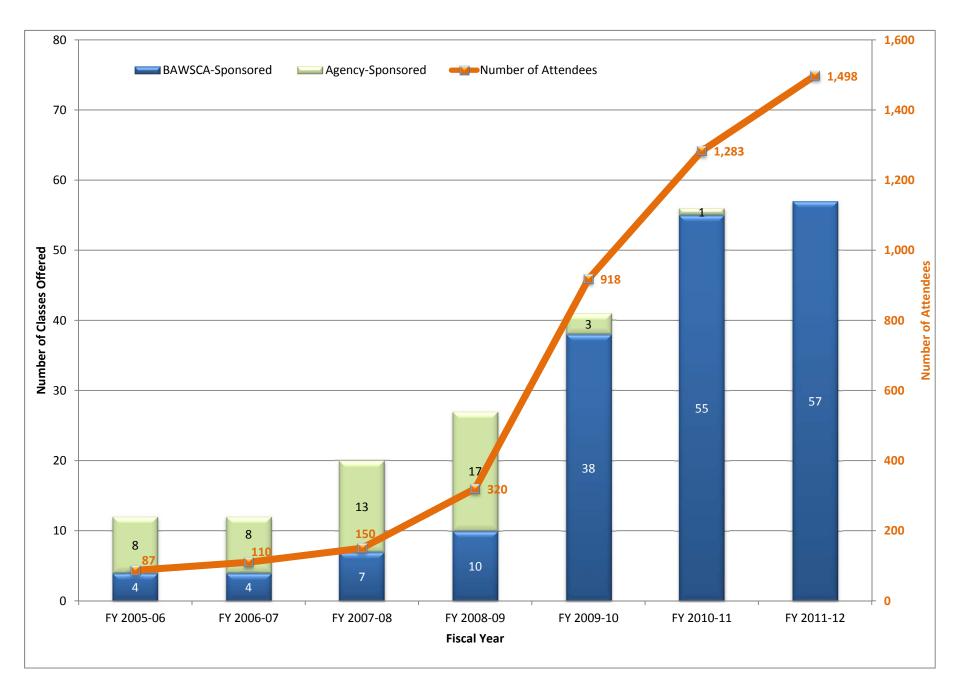


FIGURE 3-2
LANDSCAPE CLASSES ARE BROADLY ATTENDED BY BAWSCA MEMBER AGENCY CUSTOMERS

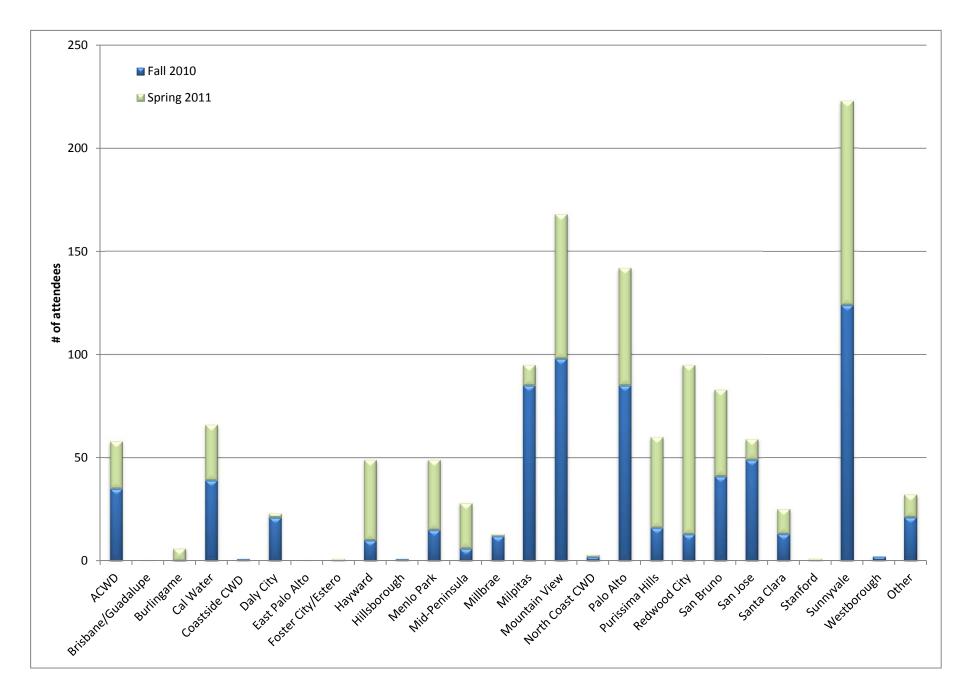


FIGURE 3-3 SAMPLE BAWSCA LANDSCAPE CLASS SERIES FLIER

Find a class near you! Call 650-349-3000 or visit www.bawsca.org



Water-Efficient Landscape Education Program

FREE Classroom Lectures and Hands-On Workshops that focus on:

- Sustainable Landscaping
 - Use of California Native and Drought Tolerant Plants
 - Understanding Water Conservation
 - Creating Healthy Soil
- Alternatives to Lawn
- Parent/Child Gardening Workshop
- Habitat Gardening
- Edible Landscaping
- Water Efficient Irrigation Practices











Classes are offered throughout the Bay Area in August - November Registration Required Call 650-349-3000

3.2 Water Wise Gardening in the Bay Area Landscape Educational Tool

In FY 2011-12, the BAWSCA agencies continued to promote the popular landscape educational tool - *Water-Wise Gardening in the Bay Area*. Initially created as a CD-ROM in FY 2006-07, the educational tool is now available on-line via BAWSCA's website so that it can be readily accessed by the public. The *Water-Wise Gardening in the Bay Area* tool contains information on how to create and maintain a beautiful, low-water-use garden and includes photographs of water-efficient gardens and provides links to the plants that compose the featured gardens. The featured gardens are primarily composed of sites in the Bay Area, specifically within the BAWSCA service area. In FY 2011-12, approximately 4,382 unique visitors, and 6,170 total visits were made to the *Water-Wise Gardening in the Bay Area* website.

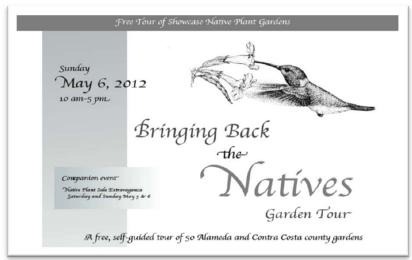
3.3 Native Garden Tours and Symposiums

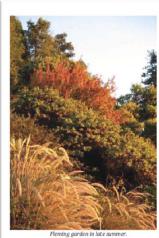
BAWSCA cosponsored three garden tours in FY 2011-12 that took place in the months of April and May 2012 (see excerpts from selected fliers in Figure 3-4). Each tour was designed to showcase homes around the Bay Area that have beautiful water conserving gardens comprised primarily of California native plants. The tours are regional, although many of gardens featured in the tours were located within the BAWSCA service area.

- The Going Native Garden Tour. The tenth annual Going Native Garden Tour took place on April 21 and 22, 2012. The 4,305 registrants who signed up for the tour made 7,754 visits to the open gardens. There were 250 volunteers participating, and serving as docents and greeters at the 58 open gardens (http://www.gngt.org/report/2012_TourReport.pdf).
- The Bringing Back the Natives Garden Tour. The eighth annual Bringing Back the
 Natives Garden Tour took place on Sunday, May 6, 2012, and showcased gardens and
 nurseries located in seventeen cities and unincorporated areas in Alameda and Contra
 Costa counties. The 6,095 registrants who signed up for the tour made visits to 41 open
 gardens and nine nurseries.
- **Bay Friendly Garden Tour.** The second annual Bay Friendly Garden Tour took place on Sunday, April 29, 2012, and showcased gardens and nurseries located in Alameda and Santa Clara counties. The over 1,300 registrants who signed up for the April 29th tour made visits to 46 open gardens.

FIGURE 3-4 SELECTED GARDEN TOURS AND SYMPOSIUM FLIERS - FY 2011-12







FOR IMMEDIATE RELEASE

Media contact information (not for publication):
Arvind Kumar, arvind.kumar@cnps.org, 408-859-1874 cell
Digital photographs downloadable from: www.gngt.org/pressroom

Growing Natives:

Inspiring & Enduring Gardens

A two-day symposium on native plant gardening & design

BAWSCA also sponsored a landscape-focused symposium in FY 2011-12, as described below:

• The California Native Plant Society's Symposium. A two-day symposium titled "Growing Natives: Inspiring & Enduring Gardens" was offered on September 17 and 18, 2011 in Lafayette and Berkeley. Designing, installing, and maintaining native plant gardens of lasting value was the theme of this symposium aimed at professionals, home gardeners, and native plant enthusiasts. The event was attended by 163 people.

3.4 Regional School Education

In FY 2011-12, BAWSCA once again teamed up with the Tuolumne River Trust (TRT) to support the TRT's water conservation outreach to elementary schools in the BAWSCA service area. The TRT's school outreach is called "That's the Tuolumne in My Tap" and includes a slideshow presentation to fourth and fifth graders about the Tuolumne river resource and water conservation. The TRT's outreach is designed to educate local students about where their water comes from and to promote an ethic of environmental stewardship. The presentation focuses on the history and special qualities of the Tuolumne River, the animals that depend on the River, and what can be done to help protect the River by conserving water. More information about the TRT's School education efforts can be seen on their website, http://www.tuolumne.org.

BAWSCA supplied the TRT with information and materials that described the local water conservation options that the TRT distributed to the students. Such materials included information about the HET and washing machine rebates, schedules for the Water-Efficient Landscape Education Classes, information about the online WaterWise gardening tool, and prizes (e.g., bracelets that encourage water conservation) for students that answered questions during the TRT presentation. In total, the TRT gave presentations to 3,071 students in 107 classrooms throughout the BAWSCA service area.

3.5 Senate Bill 7x-7 Assessment

Senate Bill 7x-7 (SB7), passed in 2009, requires that urban water retail suppliers that deliver more than 3,000 acre-feet per year (AFY) of water or serve more than 3,000 connections establish water use targets for 2015 and 2020 on a per capita basis. The intent of this legislation is to reduce average urban per capita water use state-wide by 10 percent by 2015 and 20 percent by 2020. SB7 allows urban water retail suppliers to develop and meet their targets individually or regionally. BAWSCA was specifically named in SB7 as a regional entity that could assist BAWSCA agencies in complying with SB7. In response to this legislation,

BAWSCA developed a spreadsheet tool that would allow a preliminary assessment of regional SB7 targets and estimated water savings requirements for BAWSCA agencies on an individual, sub-regional, and regional basis.

The objective of the SB7 spreadsheet tool is to allow BAWSCA and its member agencies to preliminarily assess the potential benefits of establishing and meeting SB7 water use targets on a regional or sub-regional basis. The SB7 spreadsheet tool facilitates calculation of Baseline Water Use, Current Water Use, and 2015 and 2020 water use targets for each BAWSCA member agency that is subject to SB7. It also facilitates calculation of additional water reduction requirements and water use values and targets on a regional and sub-regional basis. This information can be used by BAWSCA and its member agencies to assess the potential benefits of meeting water use targets on a regional basis or developing sub-regional group(s) that formally agree to form a regional water management group or alliance.

All BAWSCA member agencies have completed their 2010 Urban Water Management Plans. In FY 2011-12, BAWSCA updated the SB7 spreadsheet tool with updated UWMP baseline information, updated demand and conservation projections, and DWR's Method 4. On January 24, 2012, BAWSCA disseminated a revised and updated version of the SB7 spreadsheet tool. Member agencies can use the updated SB7 spreadsheet tool to more completely assess the potential benefits of pursuing compliance with SB7 individually or as part of a regional or subregional alliance in advance of preparing their 2015 UWMPs.

3.6 BAWSCA Regional Water Conservation Database

In FY 2011-12 BAWSCA worked with its consultant, Brown & Caldwell, and member agencies to deploy and populate the BAWSCA regional Water Conservation Database (WCDB). The WCDB was developed by BAWSCA, with input from the agencies, as part of BAWSCA's FY 2009-10 work plan to track agency water conservation efforts associated with implementation of the WCIP (2009).

The objectives of the WCDB are to:

- Facilitate data collection and data management to support the following activities:
 - Internal agency reporting and budgeting;
 - BAWSCA Annual Survey Report;
 - CUWCC BMP reporting; and
 - DWR UWMP and annual Public Water Supervision System (PWSS) reporting requirements.

• Streamline data collection to support tracking of water conservation activities in the region and to monitor quantifiable water savings in the BAWSCA region.

The WCDB was deployed in FY 2010-11 wherein it was configured for all agency users and the agencies were trained as to how to use the WCDB. The WCBD was also further configured to interact directly with the existing BAWSCA databases for the Regional HET Rebate, Lawn Be Gone!, and Washing Machine Rebate Programs so that agencies who participate in those measures through BAWSCA did not have to enter those data into the WCDB separately.

In FY 2011-12, BAWSCA oversaw additional modifications to the WCDB to improve the usability of the system and to add a Turf Replacement Measure Sheet. An updated version of the database was released in June 2011 for FY 2011-12 reporting. As of the date of this report, the database was further updated and two database training sessions occurred in October 2011 at which twenty-three database users from sixteen agencies were trained on the WCDB.

4 BAWSCA Subscription Water Conservation Programs

The following sections present detailed information on the individual conservation measures that constituted the BAWSCA Subscription Program in FY 2011-12.

4.1 High-Efficiency Toilet Rebates

The BAWSCA HET Rebates measure was initiated in September 2008. Prior to the BAWSCA HET Rebates measure, a very small number of BAWSCA agencies offered HET rebates to their customers. As part of the BAWSCA HET Rebates measure, the participating BAWSCA agencies offer customers up to a \$100 rebate for replacing a high-volume toilet (i.e., 3.5 gallons per flush, GPF, or more) with a toilet that uses 1.28 GPF or less.

Fourteen agencies participated in the BAWSCA HET Rebates measure in FY 2011-12. In total, the participating BAWSCA member agencies issued 1,436 rebates in FY 2011-12, for a total expenditure of \$161,543. To date, through the BAWSCA HET Rebates measure, a total of 7,009 rebates have been paid to customers within the BAWSCA service area. Additional details for measure implementation and BAWSCA agency participation are shown in Table 4-1 and Figure 4-1.

The level of customer participation in this measure represents a significant decline from activity in prior years. Similar declines have been experienced in water agencies throughout the region. It is unclear at this time whether the decrease in customer participation reflects the poor economy, the relatively cool, wet weather experienced in recent years, or market saturation. BAWSCA will continue to evaluate the effectiveness of this program.

As part of its administration of the BAWSCA HET Rebates measure for the participating member agencies, BAWSCA performed the following activities:

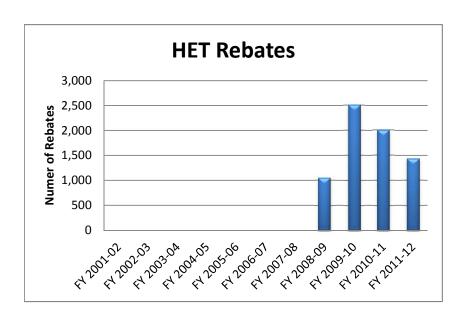
- Proposition 84 Grant Administration;
- Development and production of promotional materials;
- Advertising and outreach;
- Hosting information and application forms on the BAWSCA website;
- Receive and process rebate applications;
- Manage HET database;
- Coordinating management of rebate distribution and approvals to the participating agencies;

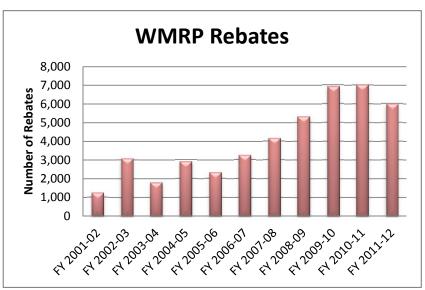
TABLE 4-1
HIGH-EFFICIENCY TOILET REBATES SUMMARY - FY 2011-12

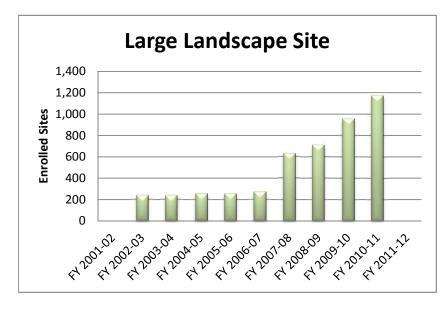
Fiscal Year	Number of Participating BAWSCA Agencies	Total Rebates Issued	Estimated Annual Water Savings (acre- feet, AF) (a)	BAWSCA Administrative Cost (b)	Program Cost (Rebates Paid to Customers) (c)	Unit Cost of Water Saved (\$/AF) (d)
FY 2008-09	13	1,053	4	\$12,047	\$157,950	\$447
FY 2009-10	14	2,515	11	\$16,536	\$377,250	\$552
FY 2010-11	14	2,005	8	\$16,532	\$300,750	\$541
FY 2011-12	14	1,436	6	\$12,271	\$149,272	\$385
Totals		7,009	30	-		

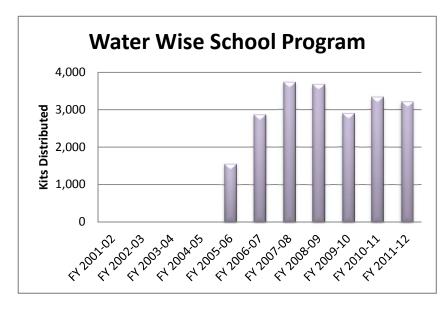
- (a) Estimated water savings based on water use differential between a 3.5 gallon per flush (gpf) toilet and a 1.28 gpf toilet. Assumes 5 flushes per toilet per day per person, 2.64 persons per household, and 2.2 toilets per household (modified from Vickers, Handbook of Water Use and Conservation, 2001). Water savings assumptions are only associated with the level of new activity documented for single year, and do not represent cummulative savings over time. Further, since this calculation is based only on single family, it likely underestimates savings because it does not account for savings at multi-family or commercial accounts.
- (b) Includes BAWSCA staff hours, database management, materials design and printing and other administrative services.
- (c) In FY 2011-12, the cost to agencies was \$100 per rebate.
- (d) Assumes a 15-year toilet life and 15 years of resultant water savings. Assumes a discount rate of 3.01% and a cost of water and wastewater of \$1146 per acre-foot each.

FIGURE 4-1
PARTICIPATION IN BAWSCA SUBSCRIPTION MEASURES









- Technical and customer support agencies and rebate applicants; and
- Track progress against Agency conservation targets.

In addition, BAWSCA and the other participating Bay Area water agencies were successful in applying for and being awarded grant funding from the State to support the water conservation programs in the Bay Area. The latest grant was awarded in August 2011 from Proposition 84. The BAWSCA share of the grant award is \$863,000, \$353,000 of which is dedicated to the BAWSCA HET Rebate measure. The funds from this grant are expected to be available in FY 2012-13.

Through BAWSCA's successful efforts to secure this grant, the BAWSCA member agencies will have access to additional funds to increase customer participation in the BAWSCA HET rebate measure and they will benefit from the increased cost-effectiveness of the measure. As can be seen in Table 4-1, the cost-effectiveness of the BAWSCA HET Rebates measure in FY 2011-12 is estimated at \$385 per AF of water saved. Thus, even in absence of the grant funds and reduced participation, this measure continues to be a cost-effective means of achieving water conservation savings in the home, especially when compared to the wholesale cost of purchasing water from the SFPUC, which was \$1,146 per AF for FY 2011-12.

4.2 High-Efficiency Residential Washing Machine Rebates

The BAWSCA High-Efficiency Residential Washing Machine Rebates measure (BAWSCA WMR) started in October 2001. In 2002, nine large Bay Area water agencies, including BAWSCA, joined forces to offer a single Bay Area Water Utility Regional Washing Machine Rebate Program (Bay Area WMRP) that collectively targeted 2.7 million residential accounts. In addition to BAWSCA, the other participants in the Bay Area WMRP include Contra Costa Water District, Zone 7 Water Agency, East Bay Municipal Utility District (EBMUD), Alameda County Water District, SCVWD, Marin Municipal Utility District, Sonoma County Water Agency, City of Davis, and beginning July 1, 2006, the SFPUC. From 2001 to 2006, Electric & Gas Industries Association (EGIA) supported the administration of the Bay Area WMRP. In 2006, BAWSCA and the other Bay Area Water Utilities contracted with Pacific Gas & Electric (PG&E) to administer and advertise the Bay Area WMRP.

In FY 2011-12, the BAWSCA WMR supported up to \$125 rebates for clothes washers with an efficiency level that met or exceeded the Consortium for Energy Efficiency (CEE) Tier 2

specifications that came into effect on January 1, 2011 (i.e., a Water Factor of at least 4.5). ² The water utilities offered either a \$50 or \$75 rebate, while PG&E offered \$50. This was down from \$175 in total rebates available during Fall 2010.

BAWSCA member agency participation in the BAWSCA WMR has been strong since BAWSCA began implementing this measure. Eighteen agencies participated in the BAWSCA WMR in FY 2011-12. In total, the participating BAWSCA member agencies issued 6,003 rebates in FY 2011-12, for a total expenditure of \$467,631. To date, through the BAWSCA WMR, a total of 44,115 rebates have been paid to customers within the BAWSCA service area. Additional details for measure implementation and BAWSCA agency participation are shown in Table 4-2 and Figure 4-1.

The decline in customer participation in this measure observed in FY 2011-12 was similar to what was experienced in water agencies throughout the region. It is unclear at this time whether the decrease in customer participation reflects the lower rebate amount, the poor economy, the relatively cool, wet weather experienced in recent years, or market saturation. BAWSCA will continue to evaluate the effectiveness of this program.

As part of its administration of the BAWSCA WRM for the participating member agencies, BAWSCA performed the following activities:

- Proposition 84 Grant Administration;
- Development and production of BAWSCA-specific promotional materials;
- Advertising and outreach;
- Hosting information on the BAWSCA website;
- Contract negotiation with PG&E;
- Coordination with other members of the Bay Area WRMP;
- Coordinating management of rebate distribution and approvals to and from PG&E and the participating agencies;
- Liaison between agencies and PG&E;
- Manage agency invoicing for rebate payment; and
- Track progress against individual agency conservation targets.

² As of January 1, 2011 the Consortium for Energy Efficiency (CEE) changed the specifications for the Tiers for washing machines. Washing machines with a water factor (WF) of 4.5 were previously designated as Tier 3. As of January 2011, those washing machines with WF of 4.0 are now Tier 3 machines, and washing machines with a WF of 3.5 are now in the "Advanced Tier". The BAWSCA WMR measure supports rebates for washing machines that are the new CEE Tier 3 and higher.

TABLE 4-2
RESIDENTIAL WASHING MACHINE REBATES SUMMARY - FY 2011-12

Program	Number of Participating BAWSCA	Total Rebates	Estimated Annual Water Savings (acre-	Program Administrator	BAWSCA Administrative	Program Cost (Rebates Paid to	Unit Cost of Water Saved
Information	Agencies	Issued	feet, AF) (a)	Cost (b)	Cost (c)	Customers) (d)	(\$/AF) (d)
FY 2001-02	11	1,244	23	\$19,308		\$125,325	\$417
FY 2002-03	15	3,091	58	\$31,192		\$336,200	\$336
FY 2003-04	10	1,805	34	\$22,433		\$178,400	\$315
FY 2004-05	16	2,914	55	\$41,913		\$379,375	\$409
FY 2005-06	16	2,332	44	\$33,484		\$404,113	\$530
FY 2006-07	16	3,254	61	\$36,300		\$449,100	\$422
FY 2007-08	15	4,162	73	\$30,015		\$468,199	\$338
FY 2008-09	16	5,339	93	\$40,356	\$21,501	\$511,275	\$322
FY 2009-10	15	6,941	122	\$69,558	\$21,448	\$851,375	\$408
FY 2010-11	17	7,030	123	\$74,525	\$23,980	\$560,450	\$391
FY 2011-12	18	6,003	105	\$66,628	\$13,898	\$387,105	\$227
Totals		44,115	791				

- (a) Estimated water savings based on water use differential between a 1990's era washing machine that uses 43 gallons/load and a present era washing machine that uses 27 gallons/load. Assumes 2.64 persons per household and 0.37 loads/person/day (Vickers, Handbook of Water Use and Conservation, 2001). Water savings assumptions are associated with the level of activity documented for single year, and do not represent cummulative savings over time.
- (b) Includes EGIA or PG&E staff hours, database management, materials design and printing and other administrative services.
- (c) Includes BAWSCA staff hours, database management, materials design and printing and other administrative services.
- (d) Cost to agencies after accounting for grant funding. In FY 2008-09, \$130,650 of grant funding was available for the Residential WMRP program. In FY 2011-12, the cost to agencies is \$50 to \$75 per rebate.
- (e) Assumes a 15-year machine life and 15 years of resultant water savings. Assumes a discount rate of 3.01% and a cost of water and wastewater of \$1146 per acre-foot each.

In addition, BAWSCA and the other participating Bay Area water agencies were successful in applying for and being awarded grant funding from the State to support the water conservation programs in the Bay Area. The latest grant was awarded in August 2011 from Proposition 84. The BAWSCA share of this grant award was \$863,000, \$360,000 of which is dedicated to the BAWSCA WMR. The funds from this grant are expected to be available in FY 2012-13.

Through BAWSCA's successful efforts to secure this grant and other grants historically, the BAWSCA member agencies have had access to additional funds to increase customer participation in the BAWSCA WMR and benefit from the overall cost-effectiveness of the BAWSCA WMR. As can be seen in Table 4-2, the cost-effectiveness of the BAWSCA WMR in FY 2011-12 is estimated at \$227 per AF of water saved. Thus, this measure continues to be a very cost-effective means of achieving water conservation savings in the home, especially when compared to the wholesale cost of purchasing water from the SFPUC, which was \$1,146 per AF for FY 2011-12.

4.3 School Education – Water Wise Kits

Since FY 2005-06, BAWSCA has contracted with Resource Action Programs to implement the Water Wise school education measure that includes in-classroom water conservation informational materials and the distribution of indoor and outdoor water conservation kits (i.e., the Water Wise Kits) to 5th grade students. Resource Action Programs works directly with the teachers and schools to provide them with this turn-key, in-classroom program and the Water Wise Kits.

The Water Wise curriculum has been designed to be easily implemented by teachers, and easily understood and taken back into the home by the students. The Water Wise Kits include water saving devices that can be installed at the student's homes (e.g., low-flow showerheads and faucet aerators) and a water audit that the students can perform with their parents. The students are provided with the motivation, information, and tools they need to perform an inhome water audit. The information and material provided to the teachers and students also includes methods that can be used to quantify the water savings as a result of installing the equipment contained in the kit and performing the recommended, water-conserving actions.

After the student performs the audit and installs the water and energy saving devices, affidavits signed by the parents are returned to the school, collected by the teacher, and forwarded to Resource Action Programs for documentation of measure implementation and the estimated water savings. Resource Action Programs then prepares a final report for distribution to the participating agencies.

Based on information provided by Resource Action Programs, participation in the Water Wise school education program in FY 2011-12 is expected to save over 85 million gallons of water over the next 10 years. In addition to helping member agencies save water, the Water Wise school education measure assists participating agencies in implementing the CUWCC Foundational Education Programs, which include Public Information and School Education, as well as the CUWCC Programmatic Best Management Practice that targets residential customers.

As stated above, FY 2005-06 was the first year that BAWSCA agencies participated in Water Wise school education measure. In FY 2011-12, 3,221 kits were distributed. To date, 21,313 students and teachers have participated in the Water Wise school education measure with an estimated total lifetime water savings of as much as 4,688 AF. See Table 4-3 and Figure 4-1.

As part of its administration of the Water Wise school education measure for the participating member agencies, BAWSCA performed the following activities:

- Development and production of BAWSCA-specific promotional materials to insert into the Water Wise kits;
- Hosting information on the BAWSCA website;
- Contract negotiation with Resource Action Programs;
- Liaison between agencies and Resource Action Programs;
- Manage agency invoicing; and
- Track progress against individual agency conservation targets.

In addition, in FY 2011-12 BAWSCA continued its efforts to work with Resource Action Programs to increase participation in, and results from, the Water Wise school education measure. As part of this effort, BAWSCA provided an incentive to the classrooms and students in the participating service areas. The incentives were provided by BAWSCA and distributed by Resource Action Programs based on the following protocols:

- A \$100 cash prize was given to the classrooms where the teachers enroll in the Water Wise school education measure and the Water Wise surveys are returned with at least an 80% response rate; and
- A gift with an up to \$5 value was given to those students that complete the Water Wise surveys that document whether they installed the water conserving-devices from the kits in their homes, complete all the homework, and/or score a greater than 80% on the final written test that is given as part of the Water Wise school education measure.

TABLE 4-3
WATER WISE SCHOOL EDUCATION SUMMARY - FY 2011-12

Fiscal Year	Number of Participating BAWSCA Agencies	Number of Participants	Estimated Annual Water Savings (gallons per kit) (a) (b)	Estimated Lifetime Savings for Kits Installed (acre-feet, AF) (a) (b)	BAWSCA Administrative Cost (c)	Program Costs (Kit Distribution)	Unit Cost of Saved Water (\$/AF) (b)
FY 2005-06	6	1,554	17,451	499		\$51,671	\$103
FY 2006-07	11	2,871	17,451	922		\$93,023	\$101
FY 2007-08	14	3,737	17,451	1,201		\$126,819	\$106
FY 2008-09	14	3,685	9,785	975		\$111,515	\$114
FY 2009-10	12	2,903	6,475	512		\$104,091	\$203
FY 2010-11 (d)	8	3,342	4,844	316	\$4,887	\$117,103	\$385
FY 2011-12 (d)	8	3,221	3,892	262	\$3,221	\$108,951	\$427
Totals		21,313	77,349	4,688			

- (a) For years prior to FY 2008-09, water savings estimated based on an assumed 60 percent installation rate and a 10 year lifetime.
- (b) For FY 2008-09 through FY 2011-12, water savings estimated based on actual reported installation rate and a 10 year lifetime. (Resource Action Reports, 2009; 2010; 2011; 2012).
- (c) Includes BAWSCA staff hours, materials design and printing and other administrative services.
- (d) Starting in 2010 water savings estimates were modified to reflect updated estimates by EPA WaterSense.

As can also be seen in Table 4-3, the cost-effectiveness of the Water Wise school education measure in FY 2011-12 is estimated at \$427 per AF of water saved. Thus, this measure continues to be very cost-effective means of achieving water conservation savings and educating students, especially when compared to the wholesale cost of purchasing water from the SFPUC, which was \$1,146 per AF for FY 2011-12.

4.4 School Education – EarthCapades Assemblies

BAWSCA school education efforts for FY 2011-12 included a school assembly program run by EarthCapades. EarthCapades performances combine age-appropriate state science standards with circus skills, juggling, music, storytelling, comedy, and audience participation to teach environmental awareness, water science and conservation. The EarthCapades assemblies are designed to include local water source and watershed education and information that the participating member agencies would like to share with the community. BAWSCA and the participating member agencies provided specific information to EarthCapades regarding the San Francisco Regional Water System and other topics (e.g., recycled water). EarthCapades integrated this information into the specific script used for assemblies conducted within the participating member agencies service areas.

In FY 2011-12, thirteen agencies sponsored 117 shows throughout the BAWCSA service area for a total expenditure of \$64,305. A total of 26,359 kids attended the assemblies from 67 different schools within the BAWSCA service area. In addition, EarthCapades performed at three non-school events for one of the member agencies: the Foster City Arts & Wine Festival, the Redwood City Streets Alive Parks Alive, and the Redwood City Pre-Mother's Day Concert). In general, the shows were very well received by the schools and agencies alike. Some quotes from surveys that were submitted by teachers after the shows are shown below:

"The kids are all very excited to go home and test their toilets for leaks. If a program can get a kid to want to do THAT, it must be very entertaining! We loved the show!" Teacher, Kathryn Hughes Elementary

"Informative, Entertaining and Engaging! A great program filled with practical information and positive changes we can all make!" Teacher, Bowditch Middle School

"Fantastic program. Our students were engaged from the moment they walked into the cafeteria, and were able to really understand the importance of water and conservation." Principal, Portola Elementary

"Loved it! This assembly totally hit on my curriculum tie in to the 5th grade science standard water cycle, and was a great introduction to the unit! The presenters were funny, patient, talented and they connected with the kids and adults." Teacher, Panorama Elementary School

"Very informative and entertaining, the performers were excellent and they really know how to connect with the audience. The students learned about Science, academic vocabulary and conservation in a fun and interactive presentation." Principal, Tyrrell School

As part of its administration of the Water Wise school education measure for the participating member agencies, BAWSCA performed the following activities:

- Hosting information on the BAWSCA website;
- Contract negotiation with EarthCapades;
- Liaison between agencies and EarthCapades;
- Manage agency invoicing; and
- Track progress against individual agency conservation targets.

4.5 Large Landscape Audits

BAWSCA first offered Large Landscape Audits to member agencies in FY 2002-03. This measure enables participating BAWSCA agencies to save water used for outdoor landscaping and to meet the requirements of the CUWCC Programmatic Best Management Practice that targets landscape customers in a cost-effective manner.

The Large Landscape Audit measure includes large landscape surveys to assess landscape watering needs and monthly distribution of landscape water budgets for selected accounts. This work is done by Waterfluence, under contract to BAWSCA. A key component of the measure implementation is the ongoing tracking of actual water use and estimated water savings at surveyed sites. Audits are offered to qualifying commercial and residential accounts.

A total of 711 sites in nine different agencies were part of the Large Landscape Audit measure in FY 2011-12, see Table 4-4 and Figure 4-1. The 2012 Waterfluence Annual Report found that the program reduced average water use by 786 acre-feet in 2011 (i.e., effectively 22% water savings). Copies of this report, and the detailed analysis, can be found at www.bawsca.org.

TABLE 4-4
LARGE LANDSCAPE AUDITS SUMMARY - FY 2011-12

Program Information	Number of Participating BAWSCA Agencies	Number of Landscaping Sites	Estimated Annual Water Savings (acre-feet, AF) (a)	BAWSCA Administrative Cost (d)	Program Cost	Unit Cost of Saved Water (\$/AF) (e)
FY 2002-03	4	240	N/A		\$65,132	N/A
FY 2003-04	5	240	299		\$23,802	\$80
FY 2004-05	4	258	212		\$29,663	\$140
FY 2005-06	5	258	520		\$24,720	\$48
FY 2006-07	6	273	543		\$23,362	\$43
FY 2007-08	9	630	602		\$84,425	\$63 - 124
FY 2008-09 (b)	11	712	435		\$108,382	\$83 - 125
FY 2009-10 (c)	12	958	1,080	\$1,776	\$162,103	\$58
FY 2010-11	9	646	632	\$1,332	\$102,764	\$82
FY 2011-12	9	711	786	\$1,332	\$99,457	\$131
Totals			5,109			

Notes:

- (a) Water savings estimated on a calendar year basis. Savings reflect the difference between reporting year's water use and pre-program annual water use.
- (b) For FY 2008-09, includes water use for the sites that have been in the program since 2004.
- (c) For FY 2009-10, includes water use for the sites that have been in the program prior to 2009.
- (d) Includes BAWSCA staff hours, materials printing and other administrative services.
- (e) For FY 2007-08 though FY 2011-12, unit cost of saved water from Landscape Program Summary Reports (2008; 2009; 2010; 2011; 2012).

As part of its administration of the BAWSCA Large Landscape Audit measure for the participating member agencies, BAWSCA performed the following activities:

- Hosting information on the BAWSCA website;
- Contract negotiation with Waterfluence;
- Liaison between agencies and Waterfluence; and
- Manage agency invoicing; and
- Track progress against individual agency conservation targets.

As can be seen in Table 4-4, the cost-effectiveness of the Large Landscape Audit measure in FY 2011-12 is conservatively estimated at \$131 per AF of water saved.³ Thus, this measure continues to be very cost effective, especially when compared to the wholesale cost of purchasing water from the SFPUC, which was \$1,146 per AF for FY 2011-12.

4.6 Lawn Be Gone! Program

BAWSCA's Lawn be Gone! water conservation measure offers a rebate to customers of \$0.50 per square foot of turf replaced for a total rebate amount of up to \$500 for single-family residential customers and up to \$3,000 for multi-family and commercial customers. The new landscape must include at least 50 percent live plant coverage, with the difference completed in permeable hardscape, and all plants must be low water use plants from the BAWSCA-Approved Plant List. Participation in this Program provides BAWSCA members a way to offer their customers an incentive, via rebates, to reduce their outdoor water use and create permanent and lasting water savings. Also, because eligible landscapes are limited to front yards and areas visible to the public, this program has an educational element (i.e., demonstrating to the wider public that low water use landscaping can be an attractive alternative to lawns).

Nine agencies participated in the BAWSCA Lawn Be Gone! measure in FY 2011-12, see Table 4-5. In total, the BAWSCA member agencies issued 16 rebates in FY 2011-12 and supported the conversion of nearly 38,000 square feet of turf grass to water-efficient landscaping. The total expenditure was approximately \$17,778.

As can also be seen in Table 4-5, the cost-effectiveness of the BAWSCA Lawn Be Gone! measure in FY 2011-12 is estimated at \$434 per AF of water saved. Thus, this measure is a cost-effective means of achieving water conservation savings, especially when compared to the wholesale cost of purchasing water from the SFPUC, which was \$1,146 per AF for FY 2011-12.

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³ The unit cost of water saved for this program varies year to year based on weather, observed water savings, the number of landscape surveys completed, and changes in program offerings and cost.

TABLE 4-5
LAWN BE GONE REBATES SUMMARY - FY 2011-12

Fiscal Year	Number of Participating BAWSCA Agencies	Total Rebates Issued	Total Square Feet Converted	Estimated Annual Water Savings (acre-feet, AF) (a)	Administrative	Program Cost (Rebates Paid to Customers) (c)	Unit Cost of Water Saved (\$/AF) (d)
FY 2010-11	9	16	17,079	0.86	\$1,734	\$5,017	
FY 2011-12	9	16	37,635	2.09	\$3,760	\$14,018	\$434
Totals	-	32	54,714	2.95	1		

Notes:

- (a) Estimated water savings based on water use differential between a turf grass (assumed to use 3.5 acre-feet per acre) and either water-efficient plantings (assumed to use 1.0 acre-feet per acre) or permeable hardscape, which is assumed to use no water.
- (c) Includes BAWSCA staff hours, database management, materials design and printing and other administrative services.
- (d) In FY 2011-12, the cost to agencies is \$0.50 per square foot up to \$500 for single-family account and up to \$3,000 for multi-family or commercial, industrial or institutional accounts.
- (e) Assumes a 15-year project life and 15 years of resultant water savings. Assumes a discount rate of 3.01% and a cost of water of \$1146 per acre-foot.

As part of its administration of the BAWSCA Lawn be Gone! measure for the participating member agencies, BAWSCA performed the following activities:

- Proposition 84 Grant Administration;
- Development and production of BAWSCA-specific promotional materials;
- Development of the BAWSCA-Approved Plant list, which includes over 1,600 plants and denotes whether they are appropriate for the Coast, Peninsula or East Bay climates, as well as their water demand.;
- Advertising and outreach;
- Hosting information on the BAWSCA website;
- Coordinating management of rebate distribution and approvals to and from customers and the participating agencies; and
- Track progress against individual agency conservation targets.

In addition, BAWSCA and the other participating Bay Area water agencies were successful in applying for and being awarded grant funding from the State to support the water conservation programs in the Bay Area. The latest grant was awarded in August 2011 from Proposition 84. The BAWSCA share of this grant award was \$863,000, \$150,000 of which is dedicated to the BAWSCA Lawn Be Gone! measure. The funds from this grant are expected to be available in FY 2012-13. Participation in this program is expected to increase upon availability of Proposition 84 grant funds.

5 BAWSCA Public Outreach and Regional Partnerships

The following sections summarize some of the additional public outreach and partnership activities that BAWSCA pursued in FY 2011-12 to support and promote the Regional Water Conservation Program.

5.1 Silicon Valley Water Conservation Awards

In FY 2008-09, BAWSCA joined with the Tuolumne River Trust, Clean Water Action, Sustainable San Mateo, Sustainable Silicon Valley, Joint Venture Silicon Valley, SCVWD and others to form the Silicon Valley Water Conservation Award Coalition (http://www.waterawards.org/). The purpose of the Silicon Valley Water Conservation Award Coalition is to recognize those organizations, agencies, businesses and individuals whose programs and leadership have advanced water conservation in Silicon Valley (i.e., San Mateo County, Santa Clara County and portions of Alameda County). Award categories include Large Business, Small Business, Government Agency, Education, Greenscape Management, and Organization. Estero Municipal Improvement District, a BAWSCA member, was among the 2012 award recipients for its efforts in implementing a multi-pronged water conservation program aimed increasing customer awareness of outdoor water efficiency and decreasing outdoor water use.

5.2 Water Conservation Showcase

Over the last several years, BAWSCA has formed close and productive partnerships with other water utilities and organizations in the Bay Area. For example, BAWSCA is a Founding Partner and sponsor the Annual Water Conservation Showcase, which is put on by PG&E, the United States Green Building Council, and EBMUD. The Water Conservation Showcase is a one-day event that presents cutting edge water-conserving strategies through expert-led presentations and exhibits. The Water Conservation Showcase is designed to encourage cross industry dialogue, and brings together government agencies, private and non-profit organizations, and consumers. An estimated 650 people attended the event in 2012.

5.3 Public Outreach

BAWSCA attended and was a featured speaker at several events in FY 2011-12 with the purpose of educating the public and others about BAWSCA, the Regional Water System, BAWSCA's water supply strategy, and water conservation opportunities. These events and forums, hosted by several entities and/or organizations, included but were not limited to:

- American Water Works Associations Semi-Annual Conference;
- San Mateo County Climate Action Group;
- City of Palo Alto Facility Managers Group; and
- San Mateo County Leadership Group.

In all cases, BAWSCA was approached by the above entities and asked to present, host a booth, or sponsor an event. In each case BAWSCA evaluated how the purpose and message of the event aligned with BAWSCA outreach objectives and the audience that BAWSCA would be able to target. BAWSCA then made the decision to allocate its limited resources in the most effective way possible to reach a specific target audience with a specific message.

6 BAWSCA Water Conservation - Current Activities

BAWSCA is currently implementing specific components of the WCIP (2009) and investigation potential evolution of its water conservation offerings, as described below.

Lawn Be Gone

In order to increase participation in the Lawn Be Gone Measure, agencies are considering the following for FY 2013-14:

- Increasing the rebate amount to \$0.75/sq.ft;
- Increasing the total maximum rebate amount to \$1000 for residential single family customers;
- Providing rebates for single family backyard conversions; and
- Requiring customers to participate in an indoor water audit as part of the program.

In addition, the agencies have expressed an interested in reimbursing BAWSCA for the development of some sample landscape design templates that customers could use to help them envision their landscape conversions and get customers started in the conversion process. BAWSCA will connect with a few of the landscape designers that we work with on the landscape class series to get quotes from them for a few design templates (e.g., coastal, urban, suburban) that will be posted on the BAWSCA website and accessible to all agencies and their customers.

Home Water Use Report Pilot Project

At the request of member agencies, BAWSCA is considering whether to pilot a new subscription water conservation program that would provide information to water customers, including their water use, how it compares to their neighbors' use, and options for reducing their use. Specifically, BAWSCA is examining companies that provide a turnkey service to develop and implement home water use reports. The program would be designed to increase water conservation with visually compelling, dynamically generated reports, or other similar behavior modification tools, for residential customers. The goal is to increase customer awareness of their individual and family water use, how it compares to peers, and to inform them of ways they can reduce water consumption and save money. Based on programs in other areas, reports for customers can be available in print, by email, and by online inquiry. The choice of format used could be at the discretion of the participating member agency. Such systems have demonstrated water savings of up to 5%. An RFP issued in March 2013 would permit selection of a vendor in April and initiation of a pilot program in July.

Regional Water Demand and Conservation Estimates

BAWSCA is currently developing a Long-Term Reliable Water Supply Strategy (Strategy) which is designed to quantify the water needs of the BAWSCA region and identify and implement projects to meet that need. In order to effectively quantify the water supply need, BAWSCA needs to have a reliable means to quantify the water demands and conservation potential for each individual BAWSCA member agency and for the BAWSCA service area.

BAWSCA would like to replicate past success in developing transparent, defensible, and uniform demand and conservation projections that can successfully be used to support regional planning efforts (e.g., the Strategy) and individual agency work (e.g., 2015 Urban Water Management Plans). Specifically, for each individual agency, BAWSCA seeks to use a common methodology, model, and baseline for the demand projections and a common methodology and model to estimate water conservation savings.

BAWSCA issued a Request for Proposals in Fall 2012 for the Development of Regional Water Demand and Conservation Projections. BAWSCA is seeking a uniform water demand and conservation projection method that:

- Creates regionally-consistent demand and conservation projections the model(s) used for projections should include similar types of inputs and outputs in formats that can be easily aggregated to the regional level;
- Provides enough flexibility that each agency model accurately reflects the characteristics of that agency;
- Provides a basis for identifying promising local and regional water conservation measures and programs;
- Supports local and regional water supply planning and project decision making;
- Provides strong support for local and regional project environmental documents;
- Supports local and regional grant applications; and
- Supports agencies and BAWSCA to meet State and other regulations for water supply and conservation planning and reporting (e.g., for the 2015 Urban Water Management Plans).

BAWSCA plans to select a consultant and begin work on the development of the demand and conservation projections in Spring 2013.

Water Conservation Database

During FY 2009-10, BAWSCA worked with the member agencies to develop the Regional WCDB. The WCDB was deployed in FY 2010-11 and was the primary tool that the Agencies used to

submit data for the BAWSCA Annual Survey, among other things. During FY 2010-11 BAWSCA worked with the consultant to make extensive changes to the initial version of the WCDB to improve the product. Version 2 of the WCDB was released for utilization during FY 2011-12. BAWSCA conducted agency trainings on WCDB V2 and supported the agencies in entering in their FY 2010-11 data. BAWSCA continues to support improvements in reporting and agencies' effort in entering data into the database.

7 BAWSCA Water Conservation Programs for Fiscal Year 2012-13

For FY 2012-13, BAWSCA is planning continue to offer the same measures that were offered in FY 2011-12, but with goals to accelerate measure visibility and participation, to the extent requested by the agencies and supported by agency budgets. Specifically, BAWSCA is proposing to offer the following water conservation measures in FY 2012-13:

Core Programs

- Water Efficient Landscape Education Classes & Workshops;
- Water-Wise Gardening in the Bay Area Landscape Educational Tool;
- Native Garden Tours and Symposium; and
- Regional Partnerships.

Subscription Programs

- High-Efficiency Toilet Rebates;
- High-Efficiency Residential Washing Machine Rebates;
- School Education (Indoor and Outdoor WaterWise Kits);
- School Education (EarthCapades Assemblies);
- Large Landscape Audits;
- Lawn Be Gone!; and
- Home Water Use Report Pilot Project (new).

BAWSCA will continue to support expansion of the existing Core and Subscription Programs though increased public outreach and regional partnerships. BAWSCA will also work with the agencies on the ongoing implementation of the WCDB and the development of the Long-Term Reliable Water Supply Strategy. As part of all of the above efforts, BAWSCA staff will continue to evaluate the resources needed to successfully manage and implement the Regional Water Conservation Program and related activities.

