



CONTRA COSTA  
CLEAN WATER  
PROGRAM

Thomas E. Dalziel  
Program Manager

September 15, 2014

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Ms. Pamela Creedon, Executive Officer  
California Regional Water Quality Control Board  
Central Valley Region  
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Dear Mr. Wolfe and Ms. Creedon:

Enclosed is the Contra Costa Clean Water Program's (CCCWP's) *Fiscal Year 2013-2014 Annual Report, Volume I: Group Activities*. This report documents activities conducted collectively by Contra Costa Permittees in accordance with National Pollutant Discharge Elimination System (NPDES) Permit No. CAS612008 (Orders R2-2009-0074 and R2-2011-0083) issued by the San Francisco Bay Regional Water Quality Control Board (Water Board), and NPDES Permit No. CA0083313 (Order R5-2010-0102) issued by the Central Valley Water Board. This submittal includes by reference the following reports submitted separately by the Bay Area Stormwater Management Agencies Association (BASMAA) on behalf of Contra Costa Permittees:

- "Annual Reporting for FY 2013-2014, Regional Supplement for Training and Outreach"
- "Preventing Urban Pesticide Pollution in Stormwater", CASQA Pesticides Subcommittee Annual Report 2013-2014

With the approval and direction from each duly authorized representative of each Permittee, I have been authorized to submit and certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

255 Glacier Drive, Martinez, CA 94553-4825 • Tel: (925) 313-2360 Fax: (925) 313-2301 • Website: [www.cccleanwater.org](http://www.cccleanwater.org)

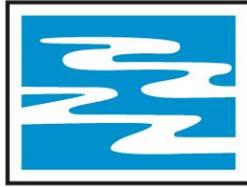
Program Participants: Antioch, Brentwood, Clayton, Concord, Danville, El Cerrito, Hercules, Lafayette, Martinez, Moraga, Oakley, Orinda, Pinole, Pittsburg, Pleasant Hill, Richmond, San Pablo, San Ramon, Walnut Creek, Contra Costa County and Contra Costa County Flood Control & Water Conservation District

Also provided with this submittal are the *Fiscal Year 2013-2014 Individual Municipal Annual Reports* compiled and referred to as "Volume II". The FY 2013-2014 Municipal Annual Report for the City of Antioch and the City of Clayton are not included with this submittal. Additional time is necessary for completion of these two reports, which will be submitted separately no later than September 30 and November 17, 2014, respectively.

Sincerely,



Thomas E. Dalziel  
Program Manager  
Contra Costa Clean Water Program



CONTRA COSTA  
**CLEAN WATER**  
PROGRAM

**FISCAL YEAR 2013-2014  
ANNUAL REPORT**

**VOLUME 1:  
GROUP ACTIVITIES**

**VOLUME 1  
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## VOLUME 1

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	1.3	Program Subcommittee Participation and Attendance Rosters
	1.4	Report of Waste Discharge, Application for Reissuance of Municipal Regional Stormwater NPDES Permit, Order R2-2011-0083 Amending Order R2-2009-0074, NPDES Permit No. CAS612008
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## VOLUME 1 – List of Acronyms

<b><u>Acronym</u></b>	<b><u>Term</u></b>
ARD	America Recycle Day
BASMAA	Bay Area Stormwater Management Agencies Association
BFL	Bay-Friendly Landscape and Gardening Coalition
BIP	Business Inspection Plan
BMP	Best Management Practice
BPP	Brake Pad Partnership
CASQA	California Stormwater Quality Association
CCC	Contra Costa County
CCCAC	Contra Costa County Agricultural Commissioner
CCCWP	Contra Costa Clean Water Program
CCRs	California Code of Regulations
CCWF	Contra Costa Watershed Forum
CCCSD	Central Contra Costa Sanitary District
CGP	Construction General Permit
CHP	California Highway Patrol
CPSC	California Product Stewardship Council
CWSGP	Community Watershed Stewardship Grant Program
DC	Development Committee
DDSD	Delta Diablo Sanitation District
DPR	Department of Pesticide Regulation
EPR	Extended Producer Responsibility
ERP	Enforcement Response Plan
FY	Fiscal Year
GBP	Green Business Program
GIS	Geographic Information System
HHW	Household Hazardous Waste
HM	Hydromodification Management
HMP	Hydrograph Modification Management Plan
IDDE	Illicit Discharge Detection and Elimination
IMP	Integrated Monitoring Plan
IMPs	Integrated Management Practices
IMR	Integrated Monitoring Report
IPM	Integrated Pest Management
LID	Low Impact Development
MOC	Municipal Operations Committee
MRP	Municipal Regional Permit
MS4	Municipal Separate Storm Sewer System
NOV	Notice of Violation
NPDES	National Pollutant Discharge Elimination System
OPP	Oil Payment Program

<b><u>Acronym</u></b>	<b><u>Term</u></b>
OWOW	Our Water, Our World
PAPA	Pesticide Applicators Professional Association
PBDEs	Polybrominated Diphenyl Ethers
PCBs	Polychlorinated Biphenyls
PCO	Pest Control Operator
PIP	Public Information/Participation Committee
POC	Pollutants of Concern
POTW	Publicly Owned Treatment Works
RMC	Regional Monitoring Coalition
ROWD	Report of Waste Discharge
SOPs	Standard Operating Procedures
SWPPP	Stormwater Pollution Prevention Plan
TMA	Trash Management Area
TWP	The Watershed Project
TMDL	Total Maximum Daily Load
WCCIWMA	West Contra Costa Integrated Waste Management Authority
WCWD	West County Wastewater District

## SECTION 1 – INTRODUCTION

### Introduction

The Contra Costa Clean Water Program (CCCWP) comprises Contra Costa County (CCC), its 19 incorporated cities/towns<sup>1</sup>, and the Contra Costa County Flood Control & Water Conservation District (District). These 21 public agencies are collectively referred to as “Permittees”. The Permittees are submitting their CCCWP Fiscal Year (FY) 2013-2014 Annual Report to the San Francisco Bay and Central Valley Regional Water Quality Control Boards (Water Boards) as required by the Joint Municipal National Pollutant Discharge Elimination System (NPDES) Permits (see “Municipal Stormwater Permits” discussed further on Page 1-2). The report documents permit compliance activities conducted during the previous FY (July 1, 2013 to June 30, 2014), and consists of the following:

- ❖ **Volume I – Group Activities Annual Report:** This Volume I report documents permit compliance activities conducted collectively as a group by all 21 Permittees.
- ❖ **Volume II – Individual Municipal Annual Reports:** Volume II is a compilation of the Permittees’ Individual Municipal Annual Reports, which document compliance activities conducted within each agency’s jurisdiction.
- ❖ **BASMAA Regional/CASQA Statewide Supplemental Reports:** These reports document compliance activities conducted regionally (Bay Area-wide) in coordination with the Bay Area Stormwater Management Agencies Association (BASMAA)<sup>2</sup> and statewide in coordination with the California Stormwater Quality

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<sup>1</sup> Cities of Antioch, Brentwood, Clayton, Concord, El Cerrito, Hercules, Lafayette, Martinez, Oakley, Orinda, Pinole, Pittsburg, Pleasant Hill, Richmond, San Pablo, San Ramon, and Walnut Creek, and Towns of Danville and Moraga.

<sup>2</sup> BASMAA is a consortium of municipal stormwater programs representing over 90 agencies, including 79 cities and 6 counties. BASMAA was started by local governments in the Bay Area to share information and combine resources to develop products and programs that would be more cost-effective if done regionally. In FY 2008-2009, BASMAA reorganized as a 501(c)(3) non-profit organization. This allows BASMAA to enter into contracts and seek grant funds on behalf of its members. BASMAA is focused on regional challenges and opportunities to improving the quality of stormwater that flows to our local creeks, San Francisco Bay and Delta, and the Ocean.

Association (CASQA)<sup>3</sup>. On behalf of the CCCWP Permittees, BASMAA submitted separately the following regional/statewide supplemental reports directly to the San Francisco Bay Water Board<sup>4</sup>:

1. *BASMAA Annual Reporting for FY 2013-2014, Regional Supplement for Training and Outreach*; and
2. *CASQA Pesticides Subcommittee Annual Report 2013-2014, Preventing Urban Pesticide Pollution in Stormwater*.

## **Municipal Stormwater Permits**

The San Francisco Bay Water Board issued a *Municipal Regional Stormwater NPDES Permit* to 76 Phase I<sup>5</sup> municipalities within the San Francisco Bay Region on October 14, 2009 (NPDES Permit No. CAS612008, Order No. R2-2009-0074). This permit was amended on November 30, 2011 (NPDES Permit No. CAS612008, Order No. R2-2011-0083). The October 2009 permit and its November 2011 amendment are hereinafter referred to as the "Municipal Regional Permit" or "MRP". The MRP excludes the cities of Antioch, Brentwood, and Oakley, and the eastern portions of Contra Costa County and Contra Costa County Flood Control & Water Conservation District. These agencies and agency areas are within the jurisdiction of the Central Valley Water Board, and were issued a separate Joint Municipal NPDES Permit titled "East Contra Costa Municipal Storm Water Permit" (East County Permit) on September 23, 2010 (NPDES Permit No. CAS083313, Order No. R5-2010-0102). Most provisions of this permit are substantively identical to those in the MRP. Unless specified otherwise, hereinafter all group activities reported below will reference activities conducted by all CCCWP Permittees in

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<sup>3</sup> Formed in 1989 as the California Stormwater Quality Task Force, the SWQTF was a quasi-governmental organization, which advised the State Water Resources Control Board on matters related to developing stormwater regulations - more specifically, it was intended to help California comply with the municipal and industrial National Pollutant Discharge Elimination System (NPDES) stormwater mandates of the federal Clean Water Act. The Task Force officially became CASQA in September 2002, when its formal 501 (c)(3) non-profit organization status was approved.

<sup>4</sup> CCCWP submitted these reports directly to the Central Valley Water Board.

<sup>5</sup> Phase I regulations were promulgated in 1990 and requires medium and large cities or certain counties with populations of 100,000 or more to obtain NPDES permit coverage for their stormwater discharges.

accordance with the MRP. Copies of both permits can be downloaded from the CCCWP website at: <http://www.cccleanwater.org/permits.html>. The MRP is in effect for five years ending on November 30, 2014. The East County Permit is in effect through September 1, 2015.

MRP Permittees include all Phase I Municipal Stormwater Programs<sup>6</sup> in the San Francisco Bay Region. Each Permittee is individually responsible for complying with the permit mandates; however, the MRP allows and encourages Permittees to collaborate in the design, development, and/or implementation of certain mandates collectively (countywide, region-wide and/or statewide). Activities conducted collectively are referred to as “group activities” and are documented in this Volume I report and in the supplemental reports noted on Page 1-2.

## **CCCWP Overview**

### Program Agreement

The CCCWP Permittees operate under a “Program Agreement”, which was first entered into in 1991 and has been updated several times since. The roles and responsibilities of CCCWP staff and the 21 Permittees are outlined in the Program Agreement (2010-2025).

### Program Staffing

Staff to the CCCWP is provided by Contra Costa County. During the first half of FY 2013-2014, CCCWP staff consisted of three (3) full-time employees and one (1) part-time employee. An additional full-time employee was hired in February 2014. CCCWP

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<sup>6</sup> Phase I Municipal Stormwater Programs include: 17 public agencies comprising the Alameda Countywide Clean Water Program (ACCWP); 21 public agencies comprising the CCCWP; 15 public agencies comprising the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP); 22 public agencies comprising the San Mateo Countywide Stormwater Pollution Prevention Program (STOPPP); the cities of Fairfield and Suisun City comprising the Fairfield-Suisun Urban Runoff Management Program (FSURMP); and, the City of Vallejo and the Vallejo Sanitation and Flood Control District.

staffing has yet to return to pre-2010 levels, when there were five (5) full-time employees and one (1) part-time employee. The reduction in CCCWP staffing has been the result of attrition; however, due to the global financial crisis of 2007-2008, the state budgetary crisis from 2009 to 2012, the defeat of the CCCWP's 2012 Community Clean Water Initiative, and the ever-increasing stormwater permit mandates, CCCWP Permittees have elected to maintain reduced staffing levels and eliminate certain tasks previously conducted as a group (e.g., coordinating and implementing countywide public education and outreach activities). Temporary staff support has been provided, when needed, by consultants/contractors. See Attachment 1.1 for a listing of consultants/contractors retained in FY 2013-2014. Despite the passage of Proposition 30 in 2012 and a steadily improving economy, Permittees' stormwater programs continue to struggle, as dedicated stormwater compliance funding remains fixed, while stormwater permit compliance costs, particularly related to local implementation of trash load reduction mandates and the water quality monitoring and pilot projects mandated for priority pollutants (i.e., mercury and PCBs), have increased significantly. See "Funding Issues" on Page 1-5 for further information on existing dedicated stormwater program funding and funding constraints.

### Organizational Structure

The Management Committee, which consists of one designated representative from each of the 21 Permittees, is the decision-making body of the CCCWP and provides direction to CCCWP staff and committees. The Management Committee meets monthly, and directs and monitors the implementation of all group activities. Five (5) subcommittees review, research, and make recommendations to the Management Committee. CCCWP staff and designated municipal representatives represent the CCCWP on similar BASMAA subcommittees, which are focused on the implementation of tasks and projects conducted regionally. Attachment 1.2 outlines the CCCWP's organizational structure. Attachment 1.3 shows CCCWP Permittees' participation and attendance on the CCCWP's Management Committee and its subcommittees. In

accordance with the Program Agreement, designated Permittee representatives are required to attend at least 80% of the CCCWP's regularly scheduled meetings.

The Program Agreement allows the Management Committee to establish Ad Hoc workgroups for a temporary period, as needed, for the purposes of reviewing, researching and making recommendations to the Management Committee or a subcommittee on specific permit compliance matters. In FY 2013-2014, two Ad Hoc workgroups were established:

- Ad Hoc Trash Workgroup – In October 2013, the Management Committee approved formation of an Ad Hoc Trash Workgroup for the review and development of guidance, and discussion of obstacles, challenges, and lessons learned, related to Permittees' development of their Long-Term Trash Load Reduction Plans. This Workgroup met monthly, and at times bimonthly, during most of FY 2013-2014. Following the submittal of Permittees' Long-Term Trash Load Reduction Plans in February 2014, and near completion of BASMAA's FY 2013-2014 Trash Load Reduction Annual Reporting form Section C.10, the Management Committee agreed to merge the Ad Hoc Trash Workgroup back into the Municipal Operations Committee effective July 1, 2014.
- Ad Hoc GIS Workgroup – In June 2014, an Ad Hoc Geographic Information System (GIS) Workgroup was established to review and research potential needs, costs, benefits and possible methods for developing and managing a CCCWP GIS. The CCCWP seeks to identify ways to more effectively and efficiently organize, compile, analyze, evaluate, and present stormwater data and information. This Workgroup met for the first time on June 16, 2014. A recommendation from this Workgroup is anticipated in late 2014.

### Funding Issues

Most CCCWP Permittees' stormwater pollution prevention activities are funded by a stormwater utility assessment. The assessments were authorized in 1993 and range from \$25 to \$45 a year for a single-family home, depending on the municipality. Assessments for properties are based on estimates of stormwater runoff based on impervious area. The cities of Richmond and Brentwood do not have a stormwater utility assessment. In those municipalities, stormwater pollution prevention activities are funded by other revenues, including the General Fund. In addition, most Permittees that have the assessment for stormwater pollution prevention supplement those revenues from other sources.

Revenues from the assessments are collected by the Contra Costa County Tax Collector with the property tax bill. The Contra Costa County Flood Control & Water Conservation District is responsible for the administration and disbursement of the assessment revenues, which total about \$14 million per year. The assessment revenue may only be used for NPDES program activities including, but not limited to, construction of pollution control improvements and drainage system maintenance. About 80% of these revenues are transferred to the local jurisdiction from which they originated. Remaining revenues fund the countywide CCCWP. Each Permittee's contribution to the CCCWP is apportioned by population. Having no assessment for stormwater, the cities of Richmond and Brentwood's contributions to the CCCWP come from other revenues.

The CCCWP assists the Permittees in compliance with the Municipal Stormwater Permits (discussed previously) by providing guidance and staff training, and by implementing a variety of other activities, including public education and outreach and water-quality monitoring, which can be more cost-effectively implemented as a "group activity." The CCCWP's FY 2013-2014 budget was \$2,838,985 and is available on the CCCWP's website at: [http://www.cccleanwater.org/wp-content/uploads/2013/01/Website-FY-13\\_14-Adopted-Budget.pdf](http://www.cccleanwater.org/wp-content/uploads/2013/01/Website-FY-13_14-Adopted-Budget.pdf).

Within this budget, the CCCWP pays dues, on behalf of the Permittees, to BASMAA, to the San Francisco Bay Regional Monitoring Program for Trace Substances, and to CASQA. These groups provide monitoring and research activities that are mandated under the NPDES permits, and/or provide representation, guidance and staff training at the regional and state levels.

Permittees' authority to raise taxes or fees to pay for governmental activities has been sharply constrained by voter initiatives. CCCWP Permittees' stormwater assessment rate has a maximum limit authorized in 1993; all municipalities that have assessments reached that limit in 2009, when the MRP was issued by the San Francisco Bay Water Board.

Also since 1993, each successive Municipal Stormwater Permit has added additional and more stringent requirements that are more expensive to implement. A 2011 study showed that, for most CCCWP Permittees, the costs of implementing the current permits will considerably exceed available revenues. Most Permittees are unable to shift General Fund revenues to pay for stormwater pollution prevention, as those limited funds may already be inadequate, now or in the future, to pay for other services, such as police and fire protection.

Water Board staff and members are aware that funding constraints make it extremely challenging for the Permittees to implement all the requirements of their current permits. Based on 20 years of experience implementing their municipal stormwater pollution-prevention programs, Permittees' staffs have proposed to prioritize actions that have proven most beneficial to water quality, and have asked that permit requirements that are less beneficial be eliminated or reduced. However, the Permittees ultimately have no authority over permit conditions, and cannot guarantee that permit conditions are reasonable or implementable, or that the prescribed actions are effective or worthwhile. Those decisions rest entirely with the Water Boards, which generally approve the recommendations of their staff.

In FY 2011-2012, the CCCWP conducted a countywide Proposition 218-compliant property-related-fee ballot measure, titled “2012 Community Clean Water Initiative”. The initiative, which would have generated approximately \$8.7 million beginning in FY 2012-2013, was the culmination of more than six years of planning and analysis. The proposed Clean Water fee was based on the cost of clean water and pollution control services and facilities needed to improve water quality and comply with federal and state mandates (i.e., the MRP). The ballot measure failed to achieve the necessary votes (i.e., more than half of those voting) by property owners in Contra Costa County. Election results were as follows:

- Mailed Ballots - 339,586
- Received Valid Ballots - 100,768
- "Yes" Ballots - 40,924 (40.6%)
- "No" Ballots - 59,844 (59.4%)
- Invalid Ballots - 1,355

In the absence of new revenues for stormwater pollution prevention, CCCWP Permittees are exploring ways to improve cost recovery or to assign costs for controlling certain pollutant sources that originate on private property. They are also seeking community partners for trash cleanup, and aim to integrate stormwater treatment retrofits into some future transportation projects. The success of these innovative efforts, and whether they will enable municipalities to maintain compliance, remains to be seen.

CCCWP Permittees stretch available money and resources to provide municipal services. These services include public safety, flood protection, libraries, parks, and recreation. The municipalities are also committed to preventing stormwater pollution, protecting local waterways, and preserving local environmental quality. They balance this commitment with a parallel commitment to comply with Water Board Orders where the means exist to do so. This balance is becoming increasingly more difficult as

revenues for stormwater quality protection have been level since 2009—while compliance costs continue to increase.

The federal and state mandates for Permittees to retrofit drainage and transportation infrastructure to control discharges of trash and other pollutants of concern into and from their municipal storm drain systems, and to conduct comprehensive water quality monitoring programs, including various studies and pilot projects, will require an increased and significant investment of public funds. With the defeat of the 2012 Community Clean Water Initiative and the anticipated reissuance of the MRP in 2015, CCCWP Permittees collectively and individually began a review focused on how they can more efficiently and effectively keep trash, pesticides, mercury, PCBs and other pollutants out of our local creeks, the Delta and the Bay. Details of this review are provided below.

### **Reissuance of the MRP – Report of Waste Discharge (ROWD)**

MRP Provision C.19 states:

*“This Order expires on November 30, 2014, five years from the effective date of this Order. The Permittees must file a Report of Waste Discharge in accordance with Title 23, California Code of Regulations, not later than 180 days in advance of such date as application for reissuance of waste discharge requirements.”*

Following the defeat of the 2012 Community Clean Water Initiative in June 2012, and in anticipation of the expiration and reissuance of the MRP in November 2014, CCCWP Permittees began in September 2012 a systematic review of permit reissuance priorities, issues and needed improvements. Out of this effort, the Permittees developed the following guiding principles from which recommendations for reissuance of the MRP were developed:

1. Establish permit priorities focused on actions that will improve water quality.
2. Identify and prioritize actions that integrate multiple benefits.
3. Phase tasks as necessary consistent with funding constraints and opportunities.
4. Reorganize presentation of permit provisions and rewrite language where necessary to reduce ambiguity.
5. Identify and eliminate outdated or completed tasks, and reduce and eliminate “less beneficial tasks” in the current permit, including burdensome and ineffective data collection and reporting requirements.
6. Offset new programs or initiatives with equivalent reductions in effort elsewhere in the MRP.

Based on these guiding principles, the Permittees’ highest priority concerns and recommendations for MRP reissuance are the provisions related to New Development and Redevelopment, Water Quality Monitoring, Pesticide Toxicity Control, Trash Load Reduction, Pollutants of Concern (POC), and Annual Reporting. Specific recommendations for each of the above provisions are detailed in Attachment 1.4 titled “*Report of Waste Discharge, Application for Reissuance of Municipal Regional Stormwater NPDES Permit, Order R2-2011-0083 Amending Order R2-2009-0074, NPDES Permit No. CAS612008*” (ROWD), which was submitted to the San Francisco Bay Water Board in accordance with Provision C.19 (see above) on June 2, 2014. The recommendations in the ROWD for the priority topics mentioned above are provided below:

### New Development (Provision C.3)

Thousands of Low Impact Development (LID)<sup>7</sup> facilities will be constructed in the coming years under the MRP permit mandate. These facilities will be distributed

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<sup>7</sup> LID is a stormwater management strategy aimed at maintaining or restoring the natural hydrologic functions of a site. LID design detains, treats, and infiltrates runoff by minimizing impervious area, using pervious pavements and green roofs, dispersing runoff to landscaped areas, and routing runoff to rain gardens, cisterns, swales, and other small-scale facilities distributed throughout the site.

throughout the urban landscape, effectively disconnecting substantial portions of overall impervious area from creeks and the Bay. The Permittees seek to facilitate the effective, sustainable, long-term operation and maintenance of these LID facilities in the following ways:

1. Emphasizing design and construction of robust, low-maintenance facilities, recognizing that bioretention<sup>8</sup> is the most effective and sustainable method of LID treatment for most development projects.
2. Updating hydromodification<sup>9</sup> and treatment criteria so that both can be addressed through integrated LID landscape features and LID facilities.
3. Shifting the strategy for maintenance toward engaging the public to help ensure that LID facilities are not removed or their operation undermined by alterations.
4. Strategically setting project-size thresholds and requirements to optimize the amount of new or replaced impervious area draining to sustainable LID features and facilities, while considering limitations in municipal resources.
5. Making minor adjustments to the allowance for on-site non-LID treatment on “special projects” as defined in the current MRP.
6. Making it easier to use off-site LID treatment in the relatively rare cases where that option is more cost-effective and environmentally beneficial.
7. Reducing the time and effort currently devoted to producing Water Board submittals and preparing data for Water Board staff review, and redirect Permittee staff resources to enhancing implementation of LID on new developments.

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<sup>8</sup> Bioretention is the practice of capturing runoff within a matrix of soil and plant roots. Following capture, the runoff is evapotranspirated or infiltrated to surround and underlying soils. During frequent or intense runoff events, the soil-and-plant-root matrix may be saturated, in which case excess runoff may be discharged to an underdrain.

<sup>9</sup> Hydromodification can be any activity that increases the velocity and volume (flow rate), and often the timing, of runoff. Such activities include development of impervious surfaces (i.e., asphalt, concrete, rooftops, etc...).

These objectives, and the technical justification for each, will be addressed in a forthcoming “white paper” to be produced by BASMAA in cooperation with Water Board staff in November 2014.

With regard to applying new development provisions to streets and roads projects, the Permittees seek to maintain the current definitions and thresholds, while pursuing—in cooperation with the Water Board and other state and regional agencies—a long-term strategy for green infrastructure retrofits (i.e., integrating water-quality features into existing and new transportation and drainage projects where feasible).

#### Monitoring Activities (Provisions C.8, C.11, and C.12)

Three types of monitoring are currently being conducted by CCCWP: (1) creek status monitoring; (2) POC loads monitoring; and (3) pilot studies and projects to monitor BMP effectiveness.

Creek status monitoring requires collection of bioassessment data and other parameters at creek locations throughout the Bay Area, in collaboration with other programs. In Contra Costa County, bioassessment data has been collected annually since 2001. Essentially every watershed in the County has been characterized by bioassessment. Reports of bioassessment and other monitoring studies conducted by CCCWP are listed in Table 3 of Attachment 1.4.

The creek status monitoring studies produced by CCCWP in the last 13 years tell a convincing story that creek health is generally much poorer in highly modified channels and within highly urbanized watersheds. This is consistent with the findings of Schueler and others (2009), which is that urbanization and the degree of imperviousness are directly related to creek health.

Since every watershed in the County has been characterized, CCCWP Permittees do not see the value in continued bioassessment monitoring. CCCWP proposes to reduce

and focus creek status monitoring required in the reissued MRP. Resources saved could be applied to implementing actual projects to improve water quality, as opposed to continued monitoring that would generate data that confirm lessons already learned.

Total Maximum Daily Load (TMDL)<sup>10</sup> monitoring for POCs, such as mercury and PCBs, addresses base-of-watershed tributary monitoring. It would take decades to detect change in response to upstream water quality improvement projects by this monitoring approach. A key lesson learned during the current MRP is that in order to show progress in attaining load reduction goals set by TMDLs, the point of monitoring needs to be moved closer to the known source areas. Resources currently allocated for tributary monitoring should be reallocated in FY 2014-2015 to support a reconnaissance approach to identifying “high-opportunity” areas for PCB load reductions. Following the reconnaissance activities proposed during FY 2014–2015, resources saved by eliminating tributary monitoring could potentially be applied to support projects (e.g., green infrastructure retrofits) that reduce PCB loads.

Focused effectiveness monitoring of BMPs may have value. The balance of financial resources should be focused on actual planning, design, construction, and operation of water quality improvement projects. Monitoring to generate new information that has regional or statewide benefits should be carried out, to the extent possible, with grant-supported funds.

#### Pesticides Toxicity Control (Provision C.9)

Source control is the preferred approach to reduce pesticide-caused toxicity. This is a demonstrated success story for organophosphates such as diazinon and chlorpyrifos, and is the proposed approach for new pesticides that have emerged to replace organophosphates. In the 1990s and early 2000s, diazinon was routinely detected in receiving waters at concentrations high enough to cause toxicity to water fleas. Due to

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<sup>10</sup> A TMDL is a calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards, and an allocation of that load among the various sources of that pollutant.

the efforts of the CCCWP in collaboration with BASMAA and CASQA, sales of diazinon for urban uses were eliminated by the end of 2004, and consequently, diazinon and associated diazinon toxicity to water fleas is no longer observed in Bay Area urban creeks. Pyrethroid pesticides have replaced diazinon as residential use pesticides. As noted in the CCCWP *Integrated Monitoring Report* (this report is discussed in further detail on Page 1-22 under “Highlights of Group Activities for FY 2013-2014”) submitted to the Water Boards on March 15, 2014, pyrethroids are suspected to be the cause of observed toxicity to amphipods. Based on lessons learned with diazinon, source control through product re-registration is the most effective and efficient approach to addressing impacts from pyrethroids and other consumer-use pesticides.

#### Trash Reduction (Provision C.10)

Provision C.10 in the 2009 MRP requires the Permittees to implement control measures and other actions to reduce trash loads from Municipal Separate Storm Sewers (MS4s) by 40% by July 1, 2014, 70% by 2017, and 100% by 2022. Further, the Permittees are required to install full trash-capture devices to treat runoff from an area equivalent to 30% of Retail/Wholesale Land that drains to MS4s within their jurisdictions, and to conduct annual cleanups of designated “hot spots.” As required, the Permittees submitted Short-Term Trash Load Reduction Plans and a Baseline Trash Load and Trash Load Reduction Tracking Method in February 2012, and also submitted Long-Term Trash Load Reduction Plans in February 2014.

The Permittees are implementing control measures and actions to reduce trash. However, their ability to demonstrate compliance, and to select activities that contribute toward compliance, has been hindered by the following factors:

1. Trash loading rates cannot be measured with sufficient precision to determine whether the 40% or 70% reductions have been achieved. Further, trash loading rates at any particular location vary by orders of magnitude due to wind and other

factors. Like all stormwater pollutant loading, trash loading is variable and episodic by nature.

2. The baseline for determining attainment of 40% and 70% trash reductions should consider pre-MRP conditions, to be fair to communities that have established robust trash control programs prior to adoption of the MRP.
3. It is not possible to distinguish trash conveyed by the MS4 from trash conveyed to the receiving water by wind or direct dumping, including by homeless encampments. Further, in many jurisdictions, creeks flow into storm drains and then into creeks again, blurring the distinction between trash in the MS4 and trash in the receiving water.
4. Mechanical “full-trash capture” devices work in some locations, but not in areas where runoff carries vegetative matter (as in areas with trees or that drain open space), or in areas with limited hydraulic head. Further, these devices are susceptible to clogging and bypass during storms.

The Permittees have worked closely with Water Board staff to address these factors and to develop effective ways to reduce trash and demonstrate compliance. The results of this collaboration are reflected in the Long-Term Trash Load Reduction Plans submitted in February 2014. The plans delineate areas where trash generation is thought to be relatively very high, high, medium, or low; delineate trash management areas; and, identify actions to be implemented in each trash management area, as well as jurisdiction-wide actions.

For the reissued MRP, the Permittees seek to implement their Long-Term Trash Load Reduction Plans, including the flexibility to update and revise those plans based on changing sources, conditions, and available resources. In particular, the Permittees seek to apply their limited resources to reduce trash and enhance local environmental quality, rather than having their priorities driven by problematic regulatory definitions and one-size-fits-all requirements.

The Permittees identify the final goal of the trash reduction effort as “no adverse impact on beneficial uses due to trash”, and will continue to work with Water Board staff to develop methods to measure the effectiveness of their trash reduction efforts and to characterize impacts to receiving waters.

#### Pollutants of Concern (Provisions C.11, C.12, C.13, and C.14)

Current regulatory drivers, such as the PCB and mercury TMDLs, are compelling CCCWP and other Bay Area stormwater programs to evaluate implementing robust water quality improvement plans at the watershed scale. CCCWP has worked with other Bay Area stormwater programs and Water Board staff on an approach for developing robust water quality improvement plans.

The first step in the approach is to produce a GIS analysis of land use by jurisdiction. PCB loads can be estimated based on land use; high PCB concentrations are typically found in older urban (pre-1980) and, in particular, old industrial areas. Within old industrial areas, high-opportunity areas may be identified where controllable sources of PCB-contaminated sediments need to be managed at the parcel scale. High-opportunity areas are identified by following up the GIS / desktop analysis with driving and walking surveys, followed by reconnaissance monitoring. Details of this approach are described in Part C of CCCWP’s *Integrated Monitoring Report*.

High-opportunity areas located on private lands will be addressed through enforcement or referral to the appropriate regulatory agency. Attainment of TMDL goals through control of PCB discharges from high-opportunity areas alone is not possible. Rather, water quality improvement plans implemented over large (e.g., up to 300,000 acres) areas of older urban development lands in the Bay Area will be necessary to achieve the 90% PCB load reduction goals established for urban stormwater by the PCB TMDL.

Treatment of stormwater discharges of such large land areas over the short-term is beyond the reasonable and foreseeable means of municipalities. CCCWP is working with other Bay Area programs to define and implement a region-wide Green Infrastructure planning approach that would assist municipalities in the implementation of LID and other green infrastructure techniques to treat stormwater in areas where and when streets, roads and drainage improvement projects are being designed. This process would be carried-out over the next several decades. The priority for implementing such projects is in older urban areas, particularly old industrial areas.

A current grant-funded project being executed by the San Francisco Estuary Institute is developing GIS tools to identify opportunity areas where green infrastructure retrofits may be located. Another new grant pursuit by BASMAA member agencies would overlay the land use analysis with the opportunity areas to prioritize where green infrastructure would provide the greatest benefit. Concurrent with that analysis, constraints (e.g., deed restrictions, easements, underground utilities) need to be identified for the most attractive locations.

For a Green Infrastructure approach to be successful, long-term and dedicated funding sources must be identified. Transportation funds cannot typically be used for water quality improvement. As noted above, the CCCWP's 2012 Community Clean Water Initiative to generate revenues for stormwater quality protection was rejected by voters. CCCWP is committed to working with BASMAA member agencies, Water Board staff, and other stakeholders to recruit and retain professional support to lobby regional, state and federal agencies for the creation of new revenue programs and mechanisms to support Green Infrastructure and stormwater treatment retrofits.

#### Annual Reporting (Provisions C.2-C.15)

The current MRP, issued in 2009, included a then-new approach to compliance reporting. The new approach was created in response to two sets of concerns.

1. The first concern was the ineffectiveness of the largely narrative reporting required by the pre-MRP countywide Phase I municipal permits. Permittees found preparing narrative descriptions of Program activities burdensome. The topics and questions specified in the permit were difficult to address in a meaningful way, particularly with regard to assessing the effectiveness of mandated activities. Water Board staff found the narrative descriptions difficult to read, absorb, and comment upon, as evidenced by the lack of timely response or comment on the Permittees' Annual Reports.
2. The second concern was the need to balance flexibility and accountability in the permit provisions. This balance was an agreed-upon goal for Water Board members, the public, and Permittees alike.

The 2009 reporting requirements included the following new features:

1. MRP Provision C.16 specifies a region-wide Annual Reporting format, prepared collectively by the Permittees and reviewed and approved by Water Board staff.
2. The format is tabular and prompts quantitative entries and brief narrative descriptions related to implementation of each permit provision.
3. Individual permit provisions include detailed reporting requirements, in some cases specifying the format and content of tables to be completed.
4. Reporting requirements are supplemented by record retention requirements; these requirements also specify the format and content of tables which must be submitted to Water Board staff upon request.

The prescriptive reporting requirements are tied to the MRP's prescriptive approach to implementation. For example, MRP Provisions C.2 (Municipal Operations), C.4 (Industrial and Commercial Site Controls), C.5 (Illicit Discharge Detection and Elimination), C.6 (Construction Site Control) specify actions to be taken. During development of the MRP in 2006-2009, Water Board staff characterized these as "no

regrets” actions because they are presumed to be established and low cost. These provisions also specify in detail in the contents of each a “database or equivalent tabular format” in which the records of each inspection, follow-up inspection, or enforcement action are to be kept. The same approach applies to Provision C.3 (New Development Controls) with regard to inspections to verify the operation and maintenance of stormwater treatment facilities.

The prescriptive reporting and record-keeping requirements have produced frustrating inefficiencies. This is not surprising, given that the formats were adopted in the permit without testing or experience, and apply to 76 Permittees of varying size and characteristics.

Worse, during the MRP term the Water Board’s Executive Officer has issued Notices of Violation (NOVs) to some Permittees who have tried to adapt the prescriptive record-keeping formats to make them more usable. For example, one Permittee received an NOV because Permittee staff maintained inspection data on multiple sheets in an Excel workbook file, rather than keeping all the data on a single sheet.

During the MRP term, Permittees efforts to respond to audits, inquiries, and notices—including correspondence and meetings with Water Board staff—which relate only to record keeping and reporting, and not to implementation, consumed hundreds of hours of staff time within Contra Costa municipalities alone. This is in addition to the effort required to maintain records precisely in the manner specified by the permit. The combined effort of report preparation and audit response has substantially impacted Permittees’ abilities to meet the demanding implementation requirements of the Permit.

To summarize the results of this 4-year experience: While the MRP’s prescriptive approach to implementation facilitates accountability, the prescriptive reporting and recordkeeping requirements have hindered overall Program effectiveness.

In hindsight, many of the prescriptive reporting and recordkeeping requirements reflect questionable assumptions regarding effective Program implementation. For example, Provisions C.4 and C.6 related to business inspections and construction site inspections, respectively, emphasize that municipal Permittees should create and implement Enforcement Response Plans that inspectors would use to address violations of stormwater requirements. Reporting requirements emphasize recording inspections and following up on violations found during inspections. In fact, effective implementation of stormwater controls on private businesses and construction sites depends on an adept integration of surveillance, observation, and communication. Enforcement—that is, issuing violations—is not always necessary or productive. In cases where a contractor or business operator is a “bad actor,” the activity that produces actual or potential non-stormwater discharges often also is in violation of other requirements or codes (for example, unpermitted construction or health and safety violations). In these cases, it is typically more effective for a stormwater coordinator to allow other authorities and agencies to enforce changes which will also address the actual or potential discharge. Therefore, the review of violations issued, or the municipalities’ record in taking compliance action in follow-up to violations, is an ineffective means to monitor or evaluate Program effectiveness.

Based on over 20 years’ experience implementing municipal stormwater NPDES requirements in Contra Costa County and its 19 cities and towns, CCCWP Permittees believe:

1. Water Board oversight is important to ensure consistent ongoing compliance and a level playing field among municipalities.
2. Much of the current reporting and records-retention effort is not helping Water Board staff to assess local implementation.
3. The prescriptive reporting requirements are “less beneficial tasks” and should be revised or eliminated so that Permittees can focus on more beneficial tasks under the reissued MRP.

A few simple indicators can be developed and used to assess whether a municipality is implementing a particular permit provision adequately; these indicators, along with directly relevant reportable information, should form the basis for reporting and for audits.

It is possible for Permittees and Water Board staff to develop and agree on indicators to be used in the reissued MRP and to also agree on a process to continuously improve those indicators during the term of the reissued MRP.

The Permittees believe Water Board oversight is most needed and best used to ensure all Permittees are engaged and have directed management attention to mandated tasks (a “level playing field”), rather than micromanaging the specifics of how Permittees implement that task. Correspondingly, the suggested indicator approach is best used to determine whether a municipal program meets a basic, “no regrets” level of implementation, rather than to assess more subtle differences in the level of implementation.

As an example, the annual reporting requirement for Provision C.6 could be reduced to:

1. Number of sites requiring Erosion and Sediment Control plans;
2. Number of these sites subject to the statewide Construction General Permit;
3. Number of sites where enforcement action (written notice of violation) was required; and
4. Narrative summary of inspection activity, general level of compliance, enforcement action taken, problems encountered and how resolved.

Such a report provides indicators of (1) the general level of construction activity; (2) whether the municipality is achieving compliance without the need for enforcement action, and (3) the municipality’s ability to respond to compliance problems, if any, by taking enforcement action. This level of annual reporting detail would allow Water Board staff to readily distinguish municipalities that actively pursue adequate pollution

prevention and erosion/sedimentation controls on construction sites vs. those that have an inactive or failing construction inspection program.

The essence of an effective local stormwater construction inspection program is the inspectors' capabilities and diligence in observing construction sites and in communicating with contractors regarding BMP requirements. Water Board staff can best oversee this process by conducting joint inspections, from time to time, with Permittee inspectors. We believe Water Board staff could conduct a sufficient number of joint inspections annually if they redirected the effort and hours they currently devote to review of records, "paper audits", and enforcement actions related solely to recordkeeping and reporting.

#### Recommendations for MRP Reissuance

In addition to the highest-priority provisions presented above, Table 4 in Attachment 1.4 outlines the Permittees' recommendations for revisions to the MRP. The table identifies provisions that have worked well to achieve the permit goals and those that have been ineffective, too costly to warrant the expense, or impractical to implement.

#### **Highlights of Group Activities for FY 2013-2014**

Provided below is a review of critical milestones, or highlights, achieved during FY 2013-2014. Further details of these achievements and others not summarized below, can be found in Sections 2-15 in this Volume I report.

#### Integrated Monitoring Report

Provision C.8.g.v. states in part:

*"No later than March 15, 2014, Permittees shall prepare and submit an Integrated Monitoring Report through the regional collaborative monitoring*

*effort on behalf of all participating Permittees, or on a countywide basis on behalf of participating Permittees, so that all monitoring conducted during the Permit term is reported.”*

The CCCWP, in coordination with the Regional Monitoring Coalition (RMC)<sup>11</sup>, uploaded the *Integrated Monitoring Report* (IMR) to the San Francisco Bay Water Board’s FTP site on Monday, March 17, 2014. A brief description of the IMR follows:

- **IMR, Part A: Water Years 2012 and 2013** - Part A of the IMR summarizes the findings of water quality monitoring conducted in accordance with Provision C.8 of the MRP, including creek status monitoring and pollutants of concern tributary loads monitoring.
- **IMR, Part B: PCB and Mercury Loads Avoided and Reduced via Stormwater Control Measures** – Part B of the IMR provides the results and findings of pilot study control measure implementation and effectiveness evaluations conducted or ongoing to reduce PCBs and mercury loads in urban stormwater runoff.
- **IMR, Part C: Pollutants of Concern Implementation Plan** – Part C summarizes the proposed implementation approach to reduce mercury and PCBs loads in urban stormwater discharges based upon lessons learned about PCB controls implemented and evaluated throughout the Bay Area through the RMC project during the first term of the MRP.

In summary, the water quality monitoring findings reported in IMR Part A, B and C lead the CCCWP to conclude that substantial project work is needed to address existing regulatory drivers. The recommendations in the IMR, which are integrated and consistent with the MRP reissuance recommendations in the ROWD (discussed previously), are intended to help better prioritize how CCCWP funds are used to study and improve water quality. An important lesson learned from all water quality

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<sup>11</sup> The RMC is a consortium of MRP-regulated municipalities who have committed to collaboration and cooperation in the implementation of the Monitoring and Pollutant of Concern (POC)-related provisions. This collaboration ensures consistency in monitoring means and methods as well as economies of scale in implementation. As reported in the FY 2009-2010 Annual Report, all 21 Contra Costa municipalities affirmed their participation in the RMC.

monitoring conducted to date, including that conducted from the first five years of the MRP, is that significant public and private funding is needed for actual green infrastructure/water quality improvement projects; and, further expenditure of limited funding on more studies are not likely to change that finding.

### CCCWP's LID-Based Approach to New and Redevelopment Projects

During 2013-2014, the CCCWP continued to develop and implement the Program's LID-based approach to stormwater controls for new development and redevelopment projects. CCCWP staff and consultants assisted municipal staff and land development professionals to apply the principles and criteria in the CCCWP's *Stormwater C.3 Guidebook*. The 6<sup>th</sup> Edition of the *Guidebook*, published in early 2012, incorporates CCCWP Permittees' years of experience implementing LID. The *Guidebook* has been referenced and emulated by stormwater programs throughout California.

Three notable highlights in the continued implementation of the CCCWP's LID-based approach to stormwater management include, but are not limited to:

- Completing and submitting the IMP Monitoring Report completing CCCWP's HMP Model Calibration and Validation Plan;
- Completing and submitting an April 1, 2014 proposal, as required by MRP Attachment C, containing options for implementing hydromodification management requirements in the reissued MRP; and
- Initiating preparation of a BASMAA "White Paper" to provide technical support for C.3 Provisions in the reissued MRP.

A summary of each is provided below:

**IMP Monitoring Report** - The IMP Monitoring Report concluded a process, launched in 2006, to validate the effectiveness of Integrated Management Practices (IMPs), including bioretention, that are promoted in CCCWP's *Stormwater C.3 Guidebook*. The

project included monitoring, through two rainy seasons, of three IMPs at an office development in Pittsburg and two IMPs at a townhouse development in Walnut Creek.

The IMP Monitoring Report was submitted with the 2012-2013 Annual Report and is available on the CCCWP website at [http://www.cccleanwater.org/Publications/HMP/HMPModelCalibrationandVerificationReport\\_2013-09-04.pdf](http://www.cccleanwater.org/Publications/HMP/HMPModelCalibrationandVerificationReport_2013-09-04.pdf). As of this writing, Water Board staff has provided no response to the report.

**Proposal for Implementing Hydromodification Management Requirements in the Reissued MRP** - In accordance with a requirement in MRP Attachment C, the CCCWP prepared and submitted, on April 1, 2014, a proposal for hydromodification management requirements in the next MRP, scheduled to be reissued in 2015.

Due in part to the success of CCCWP's approach to hydromodification management, there is consensus among MRP Permittees throughout the San Francisco Bay region that the reissued MRP should make the CCCWP IMPs and IMP design criteria available to development project proponents in other counties as well. Therefore, the purpose of the specified proposal has been subsumed by a larger regional discussion currently underway. A "White Paper" (discussed below) will address technical and policy issues related to hydromodification management, including the integration of these requirements with LID requirements.

**C.3 "White Paper"** - CCCWP's Development Committee is uniquely qualified to provide an experienced perspective on the MRP C.3 requirements. In 2003-2004, CCCWP Permittees made a commitment to implementing LID to achieve C.3 compliance. Some current staff from CCCWP Permittees has been involved in implementing LID on new development projects for the entire decade since.

During this time, Permittee staff has noted many aspects of the C.3 Provisions that are at odds with LID principles, with actual experience with implementing LID, with the

operating characteristics of LID facilities, and with municipal development review policies and procedures. Unfortunately, there is a tendency for San Francisco Bay Water Board permit writers to depend heavily on existing permit language (in the current permit, or in permits adopted in other Regions), on regulatory trends, and on speculation, rather than in-the-field experience of those implementing Permit requirements.

During late 2013, the CCCWP Development Committee encouraged CCCWP staff and consultants to pursue a wider reconsideration and rewrite of the C.3 Provisions. The concept of a White Paper grew from this initiative. The idea was proposed to San Francisco Bay Water Board staff in a January 7, 2014, BASMAA Development Committee meeting, and was positively received, particularly with regard to the potential for documenting technical justifications for New Development provisions that reflect Bay Area experience. BASMAA subsequently agreed to fund and oversee a project to prepare the White Paper, which is currently in process.

Further details on the activities summarized above, and the following additional activities listed below are provided in Section 3 of this Volume I report.

- A review of C.3 issues that have arisen during implementation of the MRP, which assisted in development of recommendations for reissuance of the MRP scheduled for 2015;
- Sponsoring a training workshop for land development professionals on LID planning, design, and construction;
- Participating in preparation and review of BASMAA's *Infiltration and Harvesting/Reuse Criteria Implementation Status Report*; and,
- Participating in preparation and review of BASMAA's *Green Streets Status Report*.

### CCCWP Pesticide Reduction Advertising Campaigns

The CCCWP built on the pesticides outreach foundational research collected in FY 2012-2013 to plan and implement three distinct campaigns tailored around the regional differences within Contra Costa County. This three-pronged, strategic approach is summarized below:

1. Buy Less Toxic: “Petstircides” - The “Petstircides” campaign was launched in fall 2013 and promotes the use of less-toxic alternatives for pesticides and herbicides. In early 2014, two pilot phases were conducted to determine which tactics are best suited to reach West and South Contra Costa target audiences. Pilot Phase 1 consisted of partnering with five stores in West and South County and placing the information in the stores. In Phase 2, tablings were conducted at those same stores and a few additional stores.

In an effort to leverage the specific product recommendations that Our Water Our World (OWOW) has developed, the initial pilot focused on partnering with stores with existing OWOW materials. The goal in so doing was to pair the Petstircides marketing with the OWOW infrastructure.

The second pilot phase utilized tablings (conducted both at OWOW and non-OWOW stores). Tablings consisted of placing campaign materials on display, distributing flyers to customers, and conducting surveys. The goals of the tablings were to promote the campaign message, collect surveys from participants who were exposed to the campaign, and test the effectiveness of conducting in-person outreach in promoting the campaign message.

2. Try Non Toxic: MyGreenGarden.org Website - Residents of Central, East, and West County all expressed an interest in so-called “home remedies” during the focus groups conducted in FY 2012-2013. In FY 2013-2014, CCCWP created a website entitled, *My Green Garden*, in an effort to encourage Contra Costa residents to share tips and tricks for organic gardening without jumping directly to the use of toxic pesticides and chemicals. Through the website [www.mygreengarden.org](http://www.mygreengarden.org), the program

strives to build a sense of community through a Yelp-type model of content produced by the end user.

3. Hire Eco Certified: Pesticides Linger - The Pesticides Linger campaign targets and encourages South, East and Central Contra Costa residents, who currently outsource their pest control, to consider hiring an eco-certified pest control operator (PCO) who practices environmentally-sound pest management practices. The campaign is designed to address the most common motivators and barriers to hiring an eco-certified PCO.

Details of these three Pesticide Reduction Advertising Campaigns and the other public information and outreach activities conducted as a group in FY 2014-2015 are provided in Section 7 in this Volume I report.

### Development and Implementation of Long-Term Trash Load Reduction Plans

CCCWP Permittees developed and submitted their Long-Term Trash Load Reduction Plans (Long-Term Plans) on February 1, 2014. This marked an important milestone in Permittees' ongoing efforts to ultimately reduce trash from their stormwater discharges to a point of "no adverse impacts" to water bodies by 2022. Beginning in 2010, MRP Permittees began a collaborative approach to establish stormwater trash generation rates that could serve as the baseline by which future progress towards trash reduction goals could be evaluated.

In FY 2012-2013, working collaboratively with San Francisco Bay Water Board staff, BASMAA refined its methodology for establishing baseline stormwater trash generation rates<sup>12</sup>. The baseline trash generation rates were then applied to land areas using GIS. Land areas were then grouped into four categories (i.e., very high, high, moderate and low) based on trash generation rate, and assigned corresponding colors that were

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<sup>12</sup> Details on the methodology used to develop stormwater trash generation rates are available in BASMAA's June 20, 2014 report titled "*San Francisco Bay Area Stormwater Trash Generation Rates – Final Technical Report*" June 20, 2014. Copies of this report will be made available upon request.

subsequently illustrated on trash generation maps. These maps and generation rate categories were then reviewed and refined by Permittees to ensure that modeled trash generation rates were correctly assigned to parcels or groups of parcels. Where appropriate, Permittees refined the generation rate categories based on their current knowledge of trash generation and problem areas within their jurisdictional boundaries and on-land visual assessments. The resulting maps were submitted by Permittees in their FY 2012-2013 Annual Reports. In addition to these maps, Permittees agreed to show, in their FY 2012-2013 Annual Reports, progress toward development of their Long-Term Plans due during FY 2013-2014. This included, if available, draft maps of Trash Management Areas (TMAs) and the locations and tributary area of full-trash-capture devices, and a preliminary summary of control measures Permittees intended to implement in specific TMAs.

As reported above, each Permittee completed and submitted their Long-Term Plan on February 1, 2014. The individual Long-Term Plans describe control measures and best management practices that are being implemented and the level of implementation, and additional control measures and best management practices that will be implemented and/or an increased level of implementation designed to attain a 70% trash load reduction from their MS4s by July 1, 2017, and 100% by 2022. The Long-Term Plans reflect the CCCWP Permittees' common approach to trash load reduction.

This approach was developed in two stages. In the first stage, CCCWP staff and staff from some CCCWP Permittees participated with San Francisco Bay Water Board staff in a regional process, coordinated through BASMAA. The process extended from late 2012 through mid-2013 and produced consensus on an 8-step framework to guide development of the Long-Term Plans:

1. Identify very high, high, moderate, and low trash generation areas, based on land use and other geographic data, local knowledge, and field verification.
2. Attempt to identify sources in very high, high and moderate trash generation areas to assist in focusing control measures.

3. Prioritize areas and problems/types.
4. Identify options (tools) for dealing with prioritized areas/problems.
5. Define success/goals and measurement type.
6. Select and implement tools.
7. Evaluate success.
8. Modify as needed.

With this framework in place on a regional basis, CCCWP Permittees proceeded with the second stage, which was to develop practical and workable methods to implement each step. In particular, the CCCWP Permittees sought to implement guidance from the San Francisco Bay Water Board; expressed publicly at the November 13, 2013 and December 11, 2013 Board workshops, and also communicated through San Francisco Bay Water Board staff, that trash load reduction efforts include methods to assess effectiveness and to adjust and redirect efforts according to local outcomes.

The results of this second stage are reflected in the individual Permittee's Long-Term Plans. In particular, the plans show the following:

- **Local Staff Engagement:** The CCCWP Permittees' Long-Term Plans emphasize the use of local knowledge—drawn from long-term experience and supplemented by recent surveys of local streets and water bodies, to identify areas of trash accumulation and likely sources. The Long-Term Plans also tap local staff knowledge of their community's resources and social dynamics and incorporate creative and innovative methods of addressing trash problems.
- **Organization of Trash Reduction Efforts by Trash Management Area:** Each Permittee's Long-Term Plan breaks down the jurisdiction-wide effort into individual plans for each Trash Management Area (TMA). This carries through the consensus to focus local efforts on specific areas and problems where trash loading is most severe and where reduction efforts can have the most effect. Each Permittee's Long-Term Plan explains how TMAs were delineated, and why.

Individual trash reduction plans for each TMA include methods to evaluate the effectiveness of measures implemented within that TMA.

- **Emphasis on Low Impact Development (LID):** For the past decade, CCCWP Permittees have led the region in implementation of LID, in both private developments and in retrofitting public infrastructure. CCCWP Permittees envision that some years from now, through implementation of LID requirements for new developments and redevelopments and through incorporation of bioretention in the reconfiguration of public streets and right-of-way, a substantial portion of the urban landscape will include LID. LID is very effective at preventing transmission of trash to and through MS4s, while also greatly reducing stormwater loads of mercury, PCBs, and other pollutants of concern. LID facilities are more sustainable and more likely to be maintained than underground full-trash-capture devices, and have ancillary benefits as well. Accordingly, CCCWP Permittees have included existing LID facilities in their Long-Term Plan.
- **Emphasis on Continuous Improvement.** The CCCWP Permittees' Long-Term Plans demonstrate that each Permittee has used local resources to identify the location and nature of trash problems within their jurisdiction, has identified ways to apply current local resources to reducing and eliminating the problems, has identified means to evaluate progress toward that goal, and has mechanisms in place to adjust the plan in response to changing sources and locations of trash, changing local resources, and the effectiveness of management measures.

Further details regarding Permittees implementation of their Long-Term Plans are within the Individual Municipal Annual Reports compiled in Volume II of this report. Additional information on other ongoing efforts being conducted by CCCWP Permittees as a group to address problematic trash sources and high trash generating areas is provided in Section 10 of this Volume I report.

## Group Program Activities for FY 2013-2014

In addition to the highlighted activities and programs summarized above, CCCWP Permittees collectively conducted a broad range of other activities and programs designed to reduce or eliminate the discharge of pollutants into and from municipal storm drain systems. This Volume I report documents the other activities conducted or coordinated collectively as follows:

Program Component	Section
<b>Municipal Operations</b> – Controls to reduce non-stormwater discharges and polluted stormwater to storm drains and watercourses during operation, inspection, and routine repair and maintenance activities of municipal facilities and infrastructure.	2
<b>Industrial and Commercial Site Controls</b> – Inspections and enforcement of stormwater regulations at businesses to prevent pollutant exposure and discharges into the municipal storm drain systems.	4
<b>Illicit Discharge Detection and Elimination</b> – Surveillance, spill and complaint response, control of mobile sources, and enforcement and case follow-up.	5
<b>Construction Site Controls</b> – Inspections and enforcement of stormwater regulations at construction sites to prevent pollutant discharges into the municipal storm drain systems.	6
<b>Pesticide Toxicity Control</b> – Actions to prevent impairment of urban streams by pesticide-related toxicity, including implementation of Integrated Pest Management (IPM), outreach and training to municipal employees and pest control operators, and outreach to consumers on less-toxic methods of pest prevention and control.	9

## **SECTION 2 – PROVISION C.2 MUNICIPAL OPERATIONS**

### **Introduction**

CCCWP staff, consultants and municipal staff participate on the Municipal Operations Committee (MOC), which assists in the review and preparation of guidance and training for municipal staff for Provisions C.2 (Municipal Operations), C.4 (Industrial Commercial Site Controls), C.5 (Illicit Discharge Detection and Elimination), C.9 (Pesticide Toxicity Control), C.10 (Trash Load Reduction), and C.15 (Exempted and Conditionally Exempted Discharges). CCCWP staff and designated representatives of the MOC also participate in the Bay Area Stormwater Management Agencies Association (BASMAA) MOC, which coordinates related regional activities. This section of the Annual Report will focus on municipal operation activities (Provision C.2). Reporting related to Provisions C.4, C.5, C.9, C.10 and C.15 are covered in the following sections of this Annual Report.

In FY 2013-2014, Steven Spedowski (City of San Ramon) and Joanne Le (City of Richmond) served as Chair and Vice Chair, respectively, of the CCCWP MOC. The MOC met in July and October 2013, and January and April 2014. The BASMAA MOC did not meeting during FY 2013-2014, although some actions were initiated and discussed via e-mail.

Rinta Perkins (City of Walnut Creek), Lynne Scarpa (City of Richmond), Dan Cloak (CCCWP consultant) and Beth Baldwin (CCCWP staff) represented the CCCWP at the BASMAA Trash Subcommittee (an offshoot of the BASMAA MOC) and the MRP Trash Steering Committee in FY 2013-2014. Work undertaken on these committees is discussed in Section C.10.

A listing of Contra Costa municipal representatives on the CCCWP MOC is included in Attachment 1.3. Summary minutes of these meetings are available in the FY 2013-

2014 Management Committee agenda packets provided on the CCCWP website at <http://www.cccleanwater.org/meetings/>.

## **Accomplishments**

### *Sponsored Bay-Friendly Training for Municipal Staff and Contracted Employees*

The CCCWP sponsored a Bay-Friendly Training & Qualification for Maintaining Landscapes training for municipal staff, contracted employees, and landscaping professionals. The training was held in Richmond, CA on March 11, 18, and 25. Please refer to Section 9 for additional information regarding the Bay-Friendly Landscape and Gardening Coalition (BFL).

### *Arranged for Guest Speakers to Present at the CCCWP MOC*

Devra Lewis, Hazardous Materials Specialist with the Contra Costa Health Services Department, gave a presentation to MOC members and described the Department's Hazardous Materials Programs. She gave an overview of the procedures used to respond to emergency calls throughout the County, and discussed the services Hazardous Materials Programs provide to municipalities.

Beth Slate, Weights & Measures Inspector III with the Contra Costa Department of Agriculture, presented information on the Department's enforcement program, and provided an update on the July 2012 pyrethroid regulations.

### *BMPs for Mobile Cleaning Operations*

For many years, BASMAA has maintained and implemented a training and certification program for mobile surface cleaners. Contra Costa Permittees hire BASMAA-certified mobile surface cleaners—or use their own trained staff—for surface pavement washing of public facilities. Permittees also require private businesses to implement the BMPs in

BASMAA's Mobile Surface Cleaner Program. BASMAA's mobile surface cleaner training and certification program is consistent with Provision C.2.b., "Sidewalk/Plaza Maintenance and Pavement Washing".

Since its inception, BASMAA's surface cleaning certification program addressed the cleaning of pavement (e.g., parking lots, plazas, and sidewalks). With review and input from the CCCWP and other Stormwater Programs, BASMAA is expanding its mobile surface cleaner program to include additional mobile operations such as carpet cleaners, mobile auto detailers and auto body workers, mobile pet cleaners, mobile food providers, and other mobile businesses in accordance with Provision C.5.d. "Control of Mobile Sources". Please refer to Section 5 for further details on the expansion of BASMAA's Mobile Surface Cleaner Program.

### **FY 2014-2015 Planned Activities**

In FY 2014-2015, the CCCWP MOC will continue to review and provide assistance to municipal maintenance and operations staff, where necessary, to ensure consistent and effective BMPs are implemented during the operation, inspection, and routine repair and maintenance activities of municipal facilities and infrastructure. This includes, but is not limited to: graffiti removal; implementation of Corporation Yard Stormwater Pollution Prevention Plans (SWPPPs); municipal stormwater pump station inspection, operation, maintenance, and monitoring; implementation of appropriate BMPs during road, parking lot and bridge repair and maintenance work; and, complying with the reporting requirements in Provision C.2.

The CCCWP MOC will also be assisting in the identification and development of priority municipal operation BMPs for implementation in the reissued Municipal Regional Permit, scheduled for adoption in 2015.

## SECTION 3 – C.3 NEW DEVELOPMENT AND REDEVELOPMENT

### Introduction

During 2013-2014, the CCCWP continued to develop and implement the Program's Low Impact Development (LID)-based approach to stormwater controls for new development and redevelopment projects. CCCWP staff and consultants assisted municipal staff and land development professionals to apply the principles and criteria in the CCCWP's *Stormwater C.3 Guidebook*. The 6<sup>th</sup> Edition of the *Guidebook*, published in early 2012, incorporates Contra Costa Permittees' years of experience implementing LID. The *Guidebook* has been referenced and emulated by stormwater programs throughout California.

CCCWP staff and consultants, at the direction of the Development and Management Committees, prepared the following submittals to the San Francisco Bay Water Board, as required by the MRP:

- IMP Monitoring Report (September 2013)
- Proposal for implementing hydromodification management requirements in MRP 2.0 (April 2014)

The CCCWP's Development Committee discussed extensively the particulars of potential changes to Provision C.3 in the anticipated reissuance of the MRP scheduled for 2015. These discussions included participation in developing BASMAA's *Infiltration and Harvesting/Reuse Criteria Implementation Status Report* and BASMAA's *Green Streets Status Report*, as well as various handouts and presentations related to the MRP 2.0 process.

The CCCWP FY 2013-2014 C.3 Work Plan was guided by the following objectives:

- Facilitate member agencies' compliance with MRP Provision C.3;

- Facilitate implementation of permanent controls on new developments in Contra Costa County;
- Organize and implement all required C.3 group activities and submittals;
- Integrate MRP requirements and BASMAA MRP submittals into existing training and guidance;
- Negotiate permit requirements and interpretations that protect water quality and are implementable and cost-effective;
- Continuously improve Program outreach and guidance on development controls; and,
- Continue CCCWP's regional and statewide role as an exemplar and leader in implementation of development controls.

### **Review of FY 2013-2014 Accomplishments**

The CCCWP's Development Committee, assisted by staff and consultants, facilitated Permittees' implementation of MRP Provision C.3 requirements and provided direction to CCCWP staff and consultants. The Development Committee was chaired by David Swartz (Contra Costa County) until the Committee's September 2013 meeting. Phil Hoffmeister (City of Antioch) was Chair for the remainder of the fiscal year. Staff from Antioch, Brentwood, Clayton, Concord, Contra Costa County, Danville, Martinez, Oakley, Orinda, Pittsburg, Richmond, San Ramon, and Walnut Creek actively participated in the Committee.

The CCCWP's 2013-2014 accomplishments included:

- Providing perspective on C.3 issues that have arisen during implementation of the MRP, which assisted in development of recommendations for reissuance of the MRP in 2015;
- Sponsoring a half-day training for land development professionals on LID planning, design, and construction;

- Completing and submitting the IMP Monitoring Report completing CCCWP's HMP Model Calibration and Validation Plan;
- Completing and submitting an April 1, 2014 proposal, as required by MRP Attachment C, containing options for implementing hydromodification management requirements in the reissued MRP;
- Participating in preparation and review of BASMAA's *Infiltration and Harvesting/Reuse Criteria Implementation Status Report*;
- Participating in preparation and review of BASMAA's *Green Streets Status Report*; and,
- Initiating preparation of a BASMAA "White Paper" to provide technical support for C.3 Provisions in the reissued MRP.

Additional detail on each of these major accomplishments follows:

#### Communicating Perspective on C.3 Issues

In September 2013, the Development Committee received and discussed a presentation on "MRP Reissuance: Strategy, Process and Schedule." The presentation noted the major MRP C.3 issues pending at the time:

- Implementation of LID on existing streets related to street reconstruction or widening;
- Feasibility/infeasibility criteria for infiltration and harvesting/reuse; and,
- Integration of LID and hydromodification management criteria.

The presentation also noted other C.3 issues, including thresholds for regulated projects and reporting requirements.

In December 2013, the Development Committee discussed ideas on policies to promote more consistent incorporation of LID site design measures into developments that are smaller than the Regulated Projects threshold.

Beginning with a discussion in the Development Committee, the CCCWP developed a position that bioretention facilities should be considered full-trash-capture devices per compliance with the requirements of Provision C.10. This view was carried forward into Contra Costa Permittees' strategy for C.10 compliance and regional-level discussions of C.10 compliance requirements.

In reviewing the scope and draft table of contents for a C.3 "White Paper" to be prepared by BASMAA to support development of the reissued MRP (see below), the Development Committee emphasized the need for a "de minimis" exemption for small amounts of impervious area that can't be directed to treatment facilities. The group also discussed the feasibility of entering C.3 information into a regional database as a substitute for current reporting requirements; it was agreed this database could be a preferred alternative.

### Training for Land Development Professionals

CCCWP staff observed that several Permittees needed assistance in helping applicants' engineers understand design procedures and techniques for implementing the *Stormwater C.3 Guidebook*. In response, the Development Committee requested that a free half-day workshop be provided for land development professionals. Development Committee members suggested the following topics be covered in the workshop:

- Whether to use fewer, larger bioretention facilities or more, smaller facilities;
- Use of bioretention as augmentation to flood control storage;
- Use of flow diverters;
- Required piping, use of pumps;
- Operation and maintenance requirements;
- Concerns about slope stability and depth to groundwater; and,
- Determining HMP requirements on partially developed sites.

The workshop was held June 12, 2014, at the City of Walnut Creek's Shadelands Civic Arts Center. Workshop evaluations showed a high level of participant engagement and satisfaction. There were over 100 participants, a slight majority of whom were land development professionals. Of those, most were engineers from firms that prepare land development submittals for municipal review. San Francisco Bay Water Board staff was invited to attend with one person registered but not attending.

During question-and-answer sessions, and in the evaluations, participants expressed interest in further development of design guidance for bioretention, particularly with regard to landscaping treatments. In a post-workshop discussion, Development Committee members noted the efficacy of not allowing an application to be deemed complete until the C.3 compliance design is fully reflected in landscape plans, the soils report, and the site plan. This is especially important as sites are developed for more intensive uses, and the ability to locate bioretention in landscaped areas becomes more constrained. For example, structural and foundation engineers need to anticipate when bioretention will be located next to buildings and adjust foundation designs accordingly.

### IMP Monitoring Report

The IMP Monitoring Report concluded a process, launched in 2006, to validate the effectiveness of Integrated Management Practices (IMPs), including bioretention, that are promoted in CCCWP's *Stormwater C.3 Guidebook*. The project included monitoring, through two rainy seasons, of three IMPs at an office development in Pittsburg and two IMPs at a townhouse development in Walnut Creek.

The IMP Monitoring Report was submitted with the 2012-2013 Annual Report and is available on the CCCWP website at [http://www.cccleanwater.org/Publications/HMP/HMPModelCalibrationandVerificationReport\\_2013-09-04.pdf](http://www.cccleanwater.org/Publications/HMP/HMPModelCalibrationandVerificationReport_2013-09-04.pdf). As of this writing, Water Board staff has provided no response to the report.

## Proposal for Implementing Hydromodification Management Requirements in the Reissued MRP

In accordance with a requirement in MRP Attachment C, the CCCWP prepared and submitted, on April 1, 2014, a proposal for hydromodification management requirements in the next MRP scheduled to be reissued in 2015.

Due in part to the success of Contra Costa's approach to hydromodification management, there is consensus among MRP permittees throughout the San Francisco Bay region that the reissued MRP should make the Contra Costa IMPs and IMP design criteria available to development project proponents in other counties as well. Therefore, the purpose of the specified proposal has been subsumed by a larger regional discussion currently underway. A "White Paper" (discussed below) will address technical and policy issues related to hydromodification management, including the integration of these requirements with LID requirements.

### BASMAA's *Infiltration and Harvesting/Reuse Criteria Implementation Status Report*

The Development Committee reviewed and recommended approval of a draft of BASMAA's *Infiltration and Harvesting/Reuse Criteria Implementation Status Report* in October 2013. Following approval by the CCCWP Management Committee and BASMAA, CCCWP communicated the report's recommendations to the Permittees:

1. Recognize the use of bioretention facilities incorporating the raised-underdrain design as an equivalently acceptable LID option.
2. Adopt procedures that require applicants to first minimize runoff using site design measures and runoff reduction measures, such as those described in MRP Provisions C.3.c.i.(2)(a), and then use infiltration, harvesting/use, and/or bioretention facilities that meet the hydraulic sizing requirements of Provision C.3.d. to manage runoff from remaining Drainage Management Areas.

3. Prepare a regional compilation of references and resources for harvesting/use, and make this available to applicants for development approvals issued by the Permittees.
4. Review existing Permittee guidance for runoff reduction features and bioretention, and also review current implementation of that guidance, and make any changes or improvements needed to ensure facilities are consistently constructed to design criteria.

As of this writing, Water Board staff has provided no response to the report.

#### BASMAA's Green Streets Status Report

David Swartz, CCCWP Development Committee Chair, assisted BASMAA's consultant to obtain data from municipalities for inclusion in the Green Streets Status Report. In accordance with MRP Provision C.3.b.iii.(3), two Green Streets projects in Contra Costa County and were documented in detail in the report:

- San Pablo Avenue Green Spine Project (Richmond); and,
- El Cerrito Green Streets Project (2 locations in El Cerrito)

Three additional Contra Costa projects were also listed in the report:

- Nevin Avenue Improvements Green Streets Project (Richmond);
- PG&E Station at South 1<sup>st</sup> Street and Cutting Boulevard (Richmond); and,
- San Pablo Avenue Green Spine Project (2 locations in El Cerrito and 2 locations in San Pablo).

CCCWP's Development Committee and consultants reviewed drafts of the report and provided comments. BASMAA submitted the report on December 1, 2013, and received comments on the report from Water Board staff on June 19, 2014.

### C.3 “White Paper”

CCCWP’s Development Committee is uniquely qualified to provide an experienced perspective on the MRP C.3 requirements. In 2003-2004, CCCWP Permittees’ made a commitment to implementing LID to achieve C.3 compliance. Some current staff from Contra Costa Permittees has been involved in implementing LID on new development projects for the entire decade since.

During this time, Permittee staff has noted many aspects of the C.3 Provisions that are at odds with LID principles, with actual experience with implementing LID, with the operating characteristics of LID facilities, and with municipal development review policies and procedures. Unfortunately, there is a tendency for San Francisco Bay Water Board permit writers to depend heavily on existing permit language (in the current permit, or in permits adopted in other Regions), on regulatory trends, and on speculation, rather than in-the-field experience of those implementing Permit requirements.

During late 2013, the CCCWP Development Committee encouraged CCCWP staff and consultants to pursue a wider reconsideration and rewrite of the C.3 Provisions. The concept of a White Paper grew from this initiative. The idea was proposed to San Francisco Bay Water Board staff in a January 7, 2014, BASMAA Development Committee meeting, and was positively received, particularly with regard to the potential for documenting technical justifications for New Development provisions that reflect Bay Area experience. BASMAA subsequently agreed to fund and oversee a project to prepare the White Paper, which is currently in process.

In addition to the major accomplishments described above, CCCWP staff and consultants also:

- Assisted municipal staff through discussions in CCCWP Development Committee meetings, and assisted municipal staff and land development professionals with C.3 compliance on specific projects;
- Tracked regulatory activity related to stormwater new development requirements throughout California and the US; and,
- Facilitated Permittee preparation of the March 15, 2014 Special Projects reports required by Provision C.3.e., and compiled and submitted the reports.

### **FY 2014-2015 Planned Activities**

The FY 2014-2015 work plan is the same as in the previous year.

## **SECTION 4 – PROVISION C.4 INDUSTRIAL AND COMMERCIAL SITE CONTROLS**

### **Introduction**

During FY 2013-2014, CCCWP municipalities implemented their business inspection programs as follows:

- Antioch, Clayton, Concord, Danville, El Cerrito, Hercules, Lafayette, Martinez, Moraga, Orinda, Pittsburg, Pleasant Hill, San Ramon, and Walnut Creek contract for industrial commercial inspection services with local sanitary district inspectors (or Publicly Owned Treatment Works (POTW) inspectors). This institutional arrangement of using local POTW inspectors to conduct municipal stormwater inspections was initiated soon after the CCCWP was issued its first Joint Municipal NPDES Permit in 1993. This arrangement has been praised by San Francisco Bay Water Board staff, and has served as a model for other municipalities throughout California. Business inspections conducted by POTW inspectors are referred to in this Annual Report collectively as the “Group Inspection Program”. The CCCWP provides administrative support to the Group Inspection Program. This includes management of the contracts, agreements, invoices and reporting; and, assistance in review and development of annual inspection lists, plans, and goals.
- Brentwood, Oakley, Pinole and Contra Costa County currently conduct their own business inspection programs.
- Richmond and San Pablo use a combination approach to their business inspection program. The cities conduct their own inspections but also contract with the POTWs to perform a certain number of inspections. San Pablo joined in this contracted inspection program in the last quarter of this fiscal year and intends to continue with the Group Inspection Program for at least the first half of FY 2014-2015.

## Accomplishments

During FY 2013-2014, CCCWP staff and the CCCWP's MOC assisted Permittees with implementation of Provision C.4 by:

1. Administering the CCCWP's Group Inspection Program, and reviewing and updating the model Business Inspection Plan (BIP) and model Enforcement Response Plan (ERP) to support Permittees' business inspection and enforcement response programs;
2. Hosting an Industrial Commercial Stormwater Inspector Training Workshop;
3. Supporting and participating in the Contra Costa Green Business Program; and,
4. Providing outreach to the business community.

The following is a detailed account of each activity listed above:

### Administering the CCCWP's Group Inspection Program, and Providing Guidance for Municipal Business Inspection and Enforcement Response Plans

CCCWP staff administers and manages the various inspection agreements for the Group Inspection Program involving the sixteen (16) municipalities, three local POTWs (Central Contra Costa Sanitary District (CCCSD), Delta Diablo Sanitary District (DDSD), and West County Wastewater District (WCWD)), and the Contra Costa County Flood Control & Water Conservation District. Administration of the Group Inspection Program includes coordinating the review of amendments and revisions to the inspection agreements when necessary; receipt and payment of invoices by the POTWs on behalf of the 16 municipalities; assistance to the Permittees and POTW staff in developing inspection goals; ensuring MRP compliance concerns are integrated into business inspections (e.g., identification and proper management of pollutants of concern, such as PCBs); training of inspectors to promote consistent inspection services countywide; and, field support to inspectors and municipal staff when needed. CCCWP staff meets with the participating municipalities and POTW staff annually to assess the services

provided, to set inspection goals for the upcoming fiscal year, to distribute documentation needed for preparation of municipal annual reports; and, to review any special issues or enforcement problems that have occurred.

In FY 2013-2014, CCCWP staff continued its review of the model BIP and ERP initiated in the last quarter of FY 2012-2013. The revisions were reviewed by MOC members. The plans were not finalized in anticipation of any comments that may need to be incorporated based on the findings of San Francisco Bay Water Board staff's review of the FY 2012-2013 Municipal Annual Reports, and the May 2014 audit of the City of Richmond's C.5 program.

In FY 2014-2015, CCCWP will finalize the model plans and present them to Management Committee.

#### Stormwater Inspector Training Workshop

The CCCWP hosted a Commercial/Industrial Stormwater Inspection Training Workshop on May 8, 2014 at the Brentwood Community Center in the City of Brentwood. The focus of the workshop was on violations and enforcement. Presentations included a panel discussion on what constitutes a stormwater violation, building a strong enforcement case, and mapping the municipal storm sewer system, which is an important component to a municipality's Illicit Discharge Detection and Elimination Program.

The workshop also included a site visit and tour of the Streets of Brentwood. The tour included a review of the stormwater pollution prevention methods applied to the shopping center's food service, parking areas, and surrounding grounds. Workshop participants increased their knowledge of using bioretention as means to reduce litter to the Municipal Separate Storm Sewer System (MS4), and viewed the cleaning of a hydrodynamic separator.

The workshop was well attended and received. The workshop agenda and presentation materials are available on the CCCWP website at <http://www.cccleanwater.org/workshops-and-conferences/>.

### Green Business Program

During FY 2013-2014, the CCCWP provided \$6,000 to support the Green Business Program (GBP). The CCCWP is the second largest contributing Partner to the GBP in Contra Costa County. The GBP is designed to publicly recognize private businesses and public agencies that take extra steps, beyond baseline compliance with environmental regulations, to prevent pollution and save resources (e.g., conserve water and energy, reduce waste through reuse and recycling, prevent stormwater pollution through good housekeeping practices, etc.). This program encourages and facilitates business managers and inspectors to strengthen and sustain the quality of the environment in Contra Costa County through a collaborative partnership.

Since inception, 548 businesses have been certified as Green Businesses in Contra Costa County. There are 328 currently certified businesses, including 18 new businesses that were certified in FY 2013-2014 as well as 14 businesses that are in the process of becoming recertified. The types of businesses being certified are diverse and include business offices, auto repair shops, landscapers, printers, restaurants, grocery and hardware stores, and home remodelers.

Municipal stormwater and POTW inspectors assist the GBP by encouraging business to become Green Business candidates. CCCWP staff serves on the GBP's "Partners Committee" and actively engages in development of the Green Business checklist (i.e., the stormwater pollution prevention section that each business needs to complete before becoming certified as a Green Business).

### Providing Outreach and Resources to Businesses

With CCCWP MOC input and direction, CCCWP staff develops and/or updates a variety of business outreach materials, including BMP brochures and posters, a website, and a telephone hotline. Stormwater inspectors promote these resources during their inspections.

During FY 2013-2014, CCCWP staff finalized an updated Food Service Facilities poster containing stormwater pollution prevention BMPs for restaurant employees. CCCWP staff arranged for printing of the Food Service Facilities poster (English-only version) and distributed posters to municipalities. CCCWP staff also arranged for this poster to be translated into Spanish. The Spanish version will be released to Permittees in the first quarter of FY 2014-2015. It is anticipated that this poster will also be translated into Mandarin and made available to Permittees in FY 2014-2015.

Throughout the fiscal year, CCCWP staff responds to businesses requesting copies of such outreach materials. Business owners use the CCCWP website to find information on stormwater pollution prevention practices and how they can make their stormwater inspections as easy as possible at <http://www.cccleanwater.org/business/>. Businesses also use the CCCWP's 1-800-No-Dumping hotline to report illegal dumping in their area to help their business communities prosper from a cleaner environment for their customers. A growing awareness of stormwater BMPs has stemmed from use of these resources. Many direct discharges of pollution have been eliminated by educating businesses in proper stormwater BMPs.

### **FY 2014-2015 Planned Activities**

For over 16 years, the CCCWP and local POTWs have consistently maintained a strong Group Inspection Program. Many of the MRP requirements were already part of Permittees' existing business inspection programs. To promote continuous improvement of the municipal inspection programs, the CCCWP MOC established as planned goals for FY 2014-2015 the following activities:

- Conduct an annual training workshop for industrial commercial stormwater inspectors;
- Conduct a special half-day workshop for industrial commercial stormwater inspectors and Contra Costa Permittees on the recently adopted NPDES General Permit for Storm Water Discharges Associated with Industrial Activities;
- Finalize the model BIP and ERP;
- Complete development of the Food Service facility poster in Spanish and Mandarin, and identify other outreach material needs;
- Provide training on POC source identification and management;
- Prepare guidance for updating the inventory of businesses to inspect;
- Maintain the CCCWP's 1-800-No-Dumping telephone hotline and website for businesses; and
- Continue to participate in, and support, the GBP.

## **SECTION 5 – PROVISION C.5 ILLICIT DISCHARGE DETECTION AND ELIMINATION**

### **Introduction**

The majority of MRP requirements related to Illicit Discharge Detection and Elimination (IDDE) are being addressed directly by Permittees. The CCCWP MOC oversees IDDE group activities.

### **Accomplishments**

The following IDDE group activities were initiated or ongoing during FY 2013-2014:

1. Manage the 1-800-No-Dumping Hotline and Hazmat Incident Reports;
2. Expansion of BASMAA's Mobile Surface Cleaner Program;
3. Continued promotion and offering of stormwater pollution prevention car washing kits for charity car washing events; and
4. Provided support to the City of Richmond during audit of its IDDE Program by San Francisco Bay Water Board staff in May 2014.

Provided below is a brief summary of each activity listed above:

#### **1-800-NO-DUMPING Hotline and Hazmat Incident Reports**

The CCCWP continues to operate the 1-800-NO-DUMPING hotline. The hotline is used by the public to report illegal dumping and to obtain stormwater information. All hotline calls are referred to the appropriate municipality for follow-up and, if necessary, enforcement. Calls have been logged since FY 2004-2005. Calls to the hotline are combined with calls that come directly to municipalities and Contra Costa County Hazardous Materials (Hazmat) Division, and are tracked and documented annually in the Municipal Annual Reports. CCCWP staff tracks the 1-800-NO-DUMPING calls

separately.

Of the 260 hotline calls the CCCWP received during FY 2013-2014, the overwhelming majority were to report an illegal dumping incident. This number represents a 26% increase in the number of calls from FY 2012-2013. The most common dumped materials reported in these calls included garbage, sofas, mattresses, and other furniture. Other reported dumped materials included building/construction debris, electronics (i.e., TV, stereos, computer, etc.), tires, household goods and other debris. Each Permittee uses the information from the hotline to identify problem areas that need to be addressed.

The CCCWP continues to collaborate with the Contra Costa County Hazmat Division. Hazmat's countywide 24-hour spill response is a vital component of Permittees' IDDE programs. Each month, the CCCWP disseminates the Hazmat spill response or "Incident Reports" to Permittees. These reports inform each Permittee of Hazmat incident responses within their jurisdiction. Permittees use this information to track the type and locations of spills and dumping incidents, and to conduct appropriate follow-up. More information on each Permittee's IDDE program is provided in the individual Municipal Annual Reports compiled in Volume II of this report.

#### Expansion of BASMAA's Mobile Surface Cleaner Program

BASMAA's Mobile Surface Cleaner Program is a training and certification program for mobile surface cleaners (also discussed in Section 2). This effort will be completed prior to the MRP's expiration date of November 30, 2014. For additional details, see BASMAA's "*MRP Regional Supplement: Training and Outreach Annual Reporting for Fiscal Year 2013-2014.*"

#### Charity Car Wash Kits

During FY 2007-2008, the CCCWP created a charity car wash pilot campaign to assist charity car wash sponsors to avoid illegal discharges of wash water to storm drains. The charity car washing campaign included the creation of a brochure and several car washing kits each containing: one (1) submersible pump; one (1) 50' electrical extension cord; one (1) 3' X 4' rubber mat; one (1) 50' garden hose; one (1) metal spray nozzle; three (3) collapsible safety cones, and tape. The brochure instructs charity car wash organizers how to conduct a car washing event without discharging wash water into the storm drain system. The brochure instructs organizations to: 1) contact the CCCWP; 2) make sure that charity car washes are legal within their municipality; and, 3) use the car washing kit in accordance with the instructions provided. In FY 2013-2014, six organizations requested and successfully used the CCCWP's charity car wash kits. The kits were used a total of nine times. The CCCWP will continue to promote and track the use of these charity car wash kits in FY 2014-2015.

#### Audit Support to Municipalities

CCCWP provided support to the City of Richmond when its IDDE Program (C.5) was being audit by San Francisco Bay Water Board staff. CCCWP staff reviewed and commented upon the City of Richmond's ERP Plan and suggested tasks to prepare for the audit, such as conducting a mock spill response exercise. CCCWP staff was present during the site visit portion of the audit, and provided comments in response to questions asked by Water Board staff.

#### **FY 2014-2015 Planned Activities**

The CCCWP will continue to support the 1-800-No-Dumping hotline and distribution of the Contra Costa County Hazmat Division's incident response reports to the Permittees. CCCWP will continue to provide input and support for BASMAA's expanded mobile surface cleaners program. In addition, CCCWP will be creating a countywide inventory of mobile cleaning businesses, and sending letters to these businesses on an annual

basis. The letters will include appropriate outreach materials and refer them to BASMAA's website and its Training and Certification Program.

The CCCWP's MOC will continue to review and assist in the development of guidance and training, as may be requested, to help improve Permittee IDDE programs.

## **SECTION 6 – PROVISION C.6 CONSTRUCTION SITE CONTROLS**

### **Introduction**

To assist permittees to comply with MRP Provision C.6.f.ii., CCCWP sponsors training for permittee construction inspection staff biannually. The Development Committee accepted a CCCWP staff recommendation that Sandy Mathews, of Larry Walker Associates, provide the training. The training was held at the City of Walnut Creek's Shadelands Art Center on the morning of April 10, 2014. The Development Committee emphasized the following topics that should be covered or emphasized during the training:

- Use of narrative descriptions in reporting (extent of narrative description required, how to prepare a concise and useful narrative).
- Dry-weather inspections; understanding the inspection and reporting requirements.
- MRP Provision C.6 vs. Construction General Permit (CGP) and in particular, ensuring compliance with Provision C.6 reporting requirements on sites subject to the MRP.
- Enforcing the CGP; following up with the Qualified SWPPP Practitioner if measures are not adequate, and monthly sign-offs of SWPPPs.

In a post-mortem discussion, Committee members agreed that the training covered the subject thoroughly, and that the presentation was well-tailored to MRP requirements. Committee members especially appreciated the interactive discussions (for example, showing photos and asking how the inspector should respond to the condition shown).

In the October 2013 meeting, the Development Committee discussed how to respond to Water Board staff requests (made to individual municipalities) for lists of active construction sites.

At the April 2014 meeting, the Development Committee discussed Water Board staff's proposal to reduce the threshold for inspections from one acre to 10,000 square feet of site disturbance.

In the June 2014 meeting, the Development Committee discussed the utility of Enforcement Response Plans (and escalating enforcement generally) when enforcing construction site controls. It was noted that for projects subject to the Construction General Permit, a discussion with the contractor's Qualified SWPPP Practitioner (QSP) nearly always results in quick compliance. For smaller projects, if the contractor does not respond to an informal notice or warning, copying Water Board staff on a Notice of Violation, and shutting down construction activity, are the *de facto* enforcement steps in at least one municipality.

## **SECTION 7 – PROVISION C.7 PUBLIC INFORMATION AND OUTREACH**

### **Introduction**

The CCCWP Public Information/Participation (PIP) Committee, with assistance from CCCWP staff and consultants, is responsible for development of materials and products, information dissemination, marketing and public outreach in accordance with the MRP. Most of the public information and outreach requirements in the MRP are contained in Provision C.7; however, additional outreach activities are required or encouraged in other MRP provisions. The PIP Committee works to identify and coordinate these public information and outreach mandates conducted as a group, or conducted regionally through BASMAA's Public Information/Participation Committee. Attachments 1.2 and 1.3 provide a list of CCCWP representatives to BASMAA's PIP Committee and participation and attendance at CCCWP PIP Committee meetings, respectively. In FY 2013-2014, Julie Haas-Wajdowicz, City of Antioch, and Dan Jordan, Contra Costa County Flood Control & Water Conservation District, served as Chair and Vice-Chair, respectively, of the CCCWP PIP Committee.

The CCCWP's public information and outreach budget for FY 2013-2014 was \$250,000. This was supplemented by the CalRecycle Oil Payment Program (OPP-4) Grant totaling approximately \$74,400 for a combined budget of approximately \$324,400.

In FY 2013-2014, the CCCWP continued to improve its website including the addition of a resource library. The website is used to help educate residents, community organizations, watershed stakeholders, businesses, schools, and the general public about the CCCWP's programs and activities, stormwater quality requirements, pollution prevention practices, and water quality-related community events.

The CCCWP, through BASMAA, provided regional media relations outreach. CCCWP representatives also participated in BASMAA's PIP meetings and outreach efforts. CCCWP representatives continued participation in the Regional Behavior Change Campaign, supporting the efforts to come up with a regional brand. By January 2014, this effort was abandoned as it became apparent that the group, as a whole, could not find consensus in a branding strategy. For further details of the CCCWP's outreach

activities implemented regionally, see *BASMAA's "Annual Reporting for FY 2013-2014 Regional Supplement for Training and Outreach"*.

The remainder of this section documents public education and outreach activities conducted collectively in Contra Costa County.

## **Accomplishments**

### C.7.b – Pesticide Reduction Advertising Campaigns

The CCCWP built on the pesticides outreach foundational research collected in FY 2012-2013 in order to plan three distinct campaigns tailored around the regional differences within Contra Costa County. In FY 2013-2014, the CCCWP focused on creating and beginning the implementation of the three-pronged approach to the CCCWP pesticide outreach. The three major strategies are briefly described here.

#### 4. Buy Less Toxic: Petstircides

The Petstircides campaign was launched in the fall of 2013 to promote the use of less-toxic alternatives for pesticides and herbicides. In early 2014, two pilot phases were conducted to determine which tactics are best suited to reach West and South Contra Costa target audiences. Pilot Phase 1 consisted of partnering with five stores in West and South Counties and placing the information in the stores. In Phase 2, tablings were conducted at those same stores.

In an effort to leverage the specific product recommendations that Our Water Our World (OWOW) has developed, the initial pilot focused on partnering with stores with existing OWOW materials. The goal in so doing was to pair the Petstircides marketing with the OWOW infrastructure.

The second pilot phase utilized tablings (conducted both at OWOW and non-OWOW stores.) The tablings consisted of placing campaign materials on display, distributing flyers to customers, and conducting surveys. The goals of the tablings were to promote the campaign message, collect surveys from

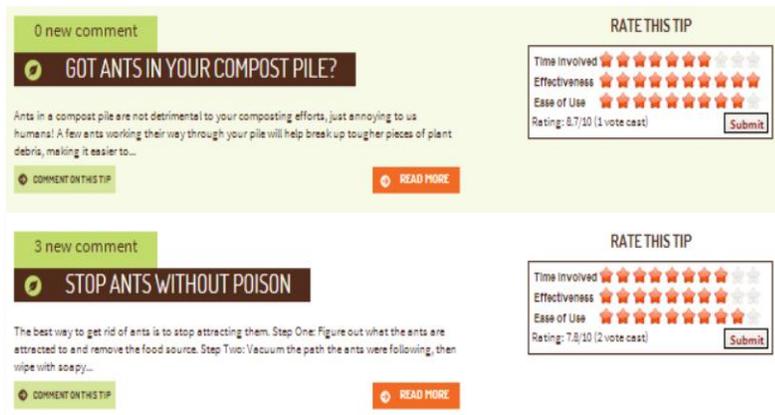
participants who were exposed to the campaign, and test the effectiveness of conducting in-person outreach in promoting the campaign message.



##### 5. Try Non Toxic: MyGreenGarden.org Website

Residents of Central, East, and West County all expressed an interest in so-called "home remedies" during the focus groups conducted in FY 2012-2013. In FY 2013-2014, CCCWP created a website entitled, *My Green Garden*, in an effort to encourage Contra Costa residents to share tips and tricks for organic gardening without jumping directly to the use of toxic pesticides and chemicals. Through the website [www.mygreengarden.org](http://www.mygreengarden.org), the program strives to build a sense of community through a Yelp-type model of content produced by the end user.

Through a series of iterations, this modern and visually appealing website was developed. The website is fully responsive, meaning the website template automatically adjusts to fit a range of display resolutions, allowing it to be viewed on traditional PC, tablet, Pay Per Click, and mobile (e.g. smartphone) devices.



## 6. Hire Eco Certified: Pesticides Linger

The Pesticides Linger campaign encourages Contra Costa residents, who currently outsource their pest control, to consider hiring an eco-certified pest control operator (PCO) who practices environmentally-sound pest management practices. The campaign is designed to address the specific barriers and motivators of the Contra Costa community, established through the FY 2012-2013 strategic plan.

The campaign focuses on residents in Contra Costa's South, East and Central areas of the county, as these areas were found in the foundational research to be most likely to hire PCOs. The campaign strategy seeks to address the most common motivators and barriers to hiring an eco-certified PCO.

The goal for FY 2013-2014 was to plan and design the Pesticides Linger campaign and launch a pilot of Phase I digital activation. The pilot program aimed to:

- Identify the audience by demographics and interests; and,
- Track our audience's behavior and engagement in the campaign.

To accomplish this, CCCWP performed the following activities:

- Planned a pilot program that could be expanded easily and efficiently in the following fiscal year;
- Developed the creative artwork for the Pesticides Linger campaign, including messaging and two versions of artwork;
- Built an interactive, responsive webpage for the campaign and integrated it on [www.cccleanwater.org](http://www.cccleanwater.org). The URL for the campaign is [www.cccleanwater.org/pesticideslinger](http://www.cccleanwater.org/pesticideslinger);
- Created a digital advertising strategy for Google and Facebook that would test two versions of the Pesticides Linger ad;
- Launched a visual and text only advertising campaign on Google; and,
- Tracked performance, analyzed the results, and made any necessary adjustments to the strategy.

The pilot digital advertising campaign ran on Google from June 20-29, 2014, using the following two images:



The CCCWP simultaneously launched a text-only advertising campaign with the following text advertisements:

Side ad

Pesticides Linger  
[www.cccleanwater.org/](http://www.cccleanwater.org/)  
 Hire eco-certified pest control here!

Top ad

Pesticides Linger  
[www.cccleanwater.org/](http://www.cccleanwater.org/)  
 Hire eco-certified pest control here!

**A**

Side ad

Pesticides Linger  
[www.cccleanwater.org/](http://www.cccleanwater.org/)  
 Need pest control? Protect your family, hire eco-certified.

Top ad

Pesticides Linger  
[www.cccleanwater.org/](http://www.cccleanwater.org/)  
 Need pest control? Protect your family, hire eco-certified.

**B**

Side ad

Pesticides Linger  
[www.cccleanwater.org/](http://www.cccleanwater.org/)  
 Protect your kids & pets. Hire eco-certified pest control.

Top ad

Pesticides Linger - Protect your kids & pets.  
[www.cccleanwater.org/](http://www.cccleanwater.org/)  
 Hire eco-certified pest control.

**C**

For further details on the CCCWP’s ongoing Pesticide Reduction Advertising Campaigns, see Attachment 7.1, 7.2, and 7.3 of this Volume 1 report.

**Section C.7.c – Media Relations – Use of Free Media**

The CCCWP participated in BASMAA’s regional efforts in conducting six media pitches during FY 2013-2014. For further details regarding these media pitches, see BASMAA’s “Annual Reporting for FY 2013-2014 Regional Supplement for Training and Outreach”.

**C.7.d – Stormwater Point of Contact**

The CCCWP’s website provides a “Municipality Contact List” (i.e., each Permittee’s stormwater point of contact including the stormwater representative’s phone number and e-mail, and a link to the Permittee’s website) under the “Resources” table at: <http://www.cccleanwater.org/municipality-contact-list/>. CCCWP staff updates the

“Municipality Contacts List page when notified of a change by a Permittee representative. The CCCWP website is also accessible from the “Links” page on the BASMAA website at <http://www.basmaa.org/>.

In addition, the CCCWP provides a “1-800-No Dumping” hotline where people can call and report illegal dumping, and to obtain stormwater information. Calls regarding illegal dumping are forwarded to the appropriate Permittee for follow-up as appropriate. Further details regarding these calls are provided in Section 5 of this Volume I report.

#### C.7.e – Public Outreach Events

CCCWP Permittees conducted several public outreach events, watershed stewardship collaborative efforts, and citizen involvement events as a group in order to reach a broad spectrum of the community with both general and specific stormwater runoff pollution prevention messages. Two specific public outreach events conducted countywide are detailed below.

- **Bringing Back the Natives Garden Tour** - CCCWP Permittees sponsored the Tenth Annual Bringing Back the Natives Garden Tour, which took place on Sunday, May 4, 2014, showcasing 41 gardens located in 22 cities and unincorporated areas of Alameda and Contra Costa counties. For summary information and a detailed report about the Bringing Back the Natives Garden Tour, see Attachment 7-4 of this Volume 1 report.
- **Our Water Our World** – As in past years, CCCWP Permittees partnered with the OWOW Program to help raise awareness of the connection between pesticide use and water quality, and to provide information to consumers at the point-of-purchase about Integrated Pest Management (IPM) and less-toxic alternatives that do not cause water quality problems. Twenty-two stores participated. Over 97 store staff were provided formal trainings, with more than 48 additional staff trained in-aisle during informal, mentoring visits. Eighteen outreach/tabling events were held in stores reaching over 400 people. There was participation in nine additional outreach/community events reaching over 4,200 people. For more information, see Section 9 of this Volume 1 report.

### C.7.f – Watershed Stewardship Collaborative Events

Below is a summary of several watershed stewardship collaborative events supported and/or conducted collectively by CCCWP Permittees in FY 2013-2014 to encourage and support watershed awareness and stewardship activities.

- **Pesticide Applicators Professional Association** – During FY 2013-2014, CCCWP Permittees promoted a Pesticide Applicators Professional Association (PAPA) training held in Walnut Creek during August 2013. For additional information, see Section 9 of this Volume 1 report.
- **California Products Stewardship Council (CPSC)** – CCCWP Permittees continued to support CPSC through its annual membership fees. As a member of CPSC, the CCCWP is part of a network of local governments, non-government organizations, businesses, and individuals supporting policies and projects where producers share in the responsibility for managing problem products at end of life. Product stewardship creates incentives for producers to “design it green and take it back,” thereby reducing the environmental impact of product waste. By diverting products from the waste stream, resources are conserved, demand for landfills is ultimately reduced, and the potential for waste products to end up in local creeks, the Delta and bay is reduced. For more details regarding CPSC activities and accomplishments, see Section 10 of this Volume 1 report.
- **Green Business Program (GBP)** – CCCWP has annually provided staff support and financial assistance to the GBP to help with its outreach activities to the business community, including the certification and recertification of Green businesses. CCCWP continues to be a major contributor to the GBP. Strategic meetings are held quarterly. For more details on the GBP, see Section 4 of this Volume 1 report.
- **Contra Costa Watershed Forum (CCWF)** – CCCWP staff attends and participates in CCWF meetings, an open committee of some 50 organizations, including state and local agencies, local non-profit environmental and education organizations, community volunteer groups, and private citizens. The CCWF operates on the premise that actions in a watershed are inter-related and that

broad participation and cooperation is needed to affect change. CCWF members work together in an effort to find common approaches to making water resources healthy, functional, attractive and safe community assets.

The CCWF impacts the community, environment, and decision makers in Contra Costa. Concerned with urban, suburban, and rural areas in the San Francisco Bay Delta area, the CCWF facilitates local agency and citizen collaboration, fosters innovative strategies for stewardship and protection of watershed resources, and encourages regional capacity building in Contra Costa and neighboring areas.

- **CCCWP Community Calendar** – CCCWP Permittees promote watershed-related community events, activities and volunteer opportunities on the CCCWP Community Calendar webpage at [www.cccleanwater.org/community-calendar/](http://www.cccleanwater.org/community-calendar/). A secondary goal in maintaining the Community Calendar is to increase traffic to, and use of, the CCCWP website and its information resources to increase awareness of stormwater quality and pollution prevention practices.
- **Community Car Wash Kits** – As reported in Section 5 of this Volume I report, the CCCWP provides community car wash kits to various groups and organizations for charity/fund raising car washing events. The kit allows a group to hold a charity/fund raising car wash event while also teaching them how to protect local creeks and become better stewards of their watershed.

#### C.7.g – Citizen Involvement Events

CCCWP Permittees collectively supported the following citizen involvement events in FY 2013-2014.

- **Community Watershed Stewardship Grant Program (CWSGP)** – For the third year, CCCWP Permittees' and Contra Costa County Watershed Program partnered with The Watershed Project (TWP) to administer the CWSGP. The goal of the CWSGP is to benefit Contra Costa County watershed groups, environmental nonprofit organizations, and grassroots organizations in their efforts to prevent water pollution and help restore the health of local watersheds

and creeks around the County. A total of \$100,000 in grant funds were awarded to seven different organizations implementing nine separate projects (see Attachment 7-5 for the list of organizations and projects).

#### C.7.h – School Age Children

**Oil Payment Program (OPP-4) Grant/Mr. Funnelhead** – The OPP strives to reach across all age groups, but places particular emphasis on youth, because they are the most forceful environmental stewards. CCCWP staff believes nothing will motivate an adult to change behavior more than being corrected by a child.

Several CCCWP Permittees provided their allocation of Oil Payment Program (OPP) grant funds to the CCCWP for implementation of an ongoing countywide comprehensive effort in FY 2013-2014.

There are several components of the OPP: certifying and recertifying used-oil recycling centers throughout the County; providing an educational program targeted to elementary schools throughout the County; providing outreach at public events countywide; providing programming to educate and entertain people about the importance of recycling used motor; and, outreach through a cable advertising component. A “Mr. Funnelhead” website exists as an additional outreach tool at [www.funnelhead.com/](http://www.funnelhead.com/). A summary of OPP activities are reported below.

- **Used Oil Collection Center Certification** - A total of nine new oil collection centers were certified and three oil collection centers did not recertify resulting in a net gain of six oil collection centers. There are now a total of 131 certified oil collection sites.
- **Mr. Funnelhead** - Matt Bolender is CCCWP’s OPP-4 Grant consultant, using the “Mr. Funnelhead” character to provide educational outreach.

The Mr. Funnelhead program exceeded the contract amount of 24 events by conducting 29 events. This was done in part by the increased desire for having the Mr. Funnelhead character at events as well as the added use of the new biosphere model. This year, the Mr. Funnelhead School Education Program

visited 16 schools, educating 4,650 students about the importance of used oil and filter recycling. These appearances continue to have a long-lasting effect on the children who recount their experience years later when they see Mr. Funnelhead at community events.

Twenty (20) schools were scheduled for the program in FY 2013-2014. As a free program to all schools in Contra Costa County, it is difficult to ensure schools stay with the scheduled performance dates. Because of several cancellations and due to subsequent scheduling conflicts with the actors, fewer shows were performed. In FY 2014-2015, the Mr. Funnelhead School Education Program will be started earlier in the school year allowing more time for scheduling with the goal of conducting a minimum of 20 shows.

A popular draw at the shows is a Watershed Diorama used to educate children about stormwater pollution and proper disposal of used oil and oil filters.

This fiscal year, there was a focus for the Mr. Funnelhead program to find a more user-friendly costume that kept the overall look of the Mr. Funnelhead character, but also was cooler and more comfortable to wear. In October 2013, the new costume was designed using the Mr. Funnelhead logo as a framework for the prototype. By April 2014, the new costume was finished and tested for use. Rather than using foam as in previous costumes, the new costume uses blown air into a sealed body. Air is blown by batteries into the sealed body causing it to inflate and create the Mr. Funnelhead shape. It has now been used at several public events and received great reviews from patrons. The air costume is much softer and hug-friendly compared to the hard canvas painted exterior of the older costumes.

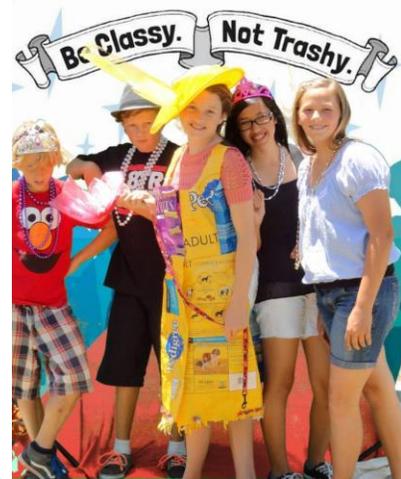


Mr. Funnelhead also holds an annual art contest where children incorporate Mr. Funnelhead into their own message about recycling used oil. Prizes are given to the top three artists with the winners appearing in a Mr. Funnelhead Oil Buster Public Service Announcement, which airs on premium cable television.

**“Be Classy Not Trashy”** - The CCCWP’s youth outreach activities for the fiscal year centered on our continued use of green screens and user-generated photographic content. Large green screen components are set up at an event, and then attendees are invited to get their pictures taken in front of the green screen. Because most people,



particularly those between the ages of 12 through 18, are aware of how green screen technology works, they are eager to have their picture taken and the backdrop transposed.



The CCCWP has continued with the youthful

concept of “Be Classy Not Trashy” to play with the idea of people posing in front of clean environments rather than trashy ones. Not only does this provide an opportunity to begin talking with picture subjects regarding trash issues, it provides municipalities

with digitally uploaded pictures of youth “doing the right thing.” These pictures are then shared across multiple platforms, most notably Facebook, in an effort to develop a perceived social norm, that is, the perception that the majority of people are participating in a clean, non-littered environment. In terms of the youth audience today, no single type of media is more important to put use to in the development of that social norm than social media.

While the majority of the Permittees are still learning how to use the green screen technology and how to best use it with their events, it has been used at many events including the “Antioch Relay for Life,” Earth Day events, elementary school picnics, the Contra Costa County Fair, and Moraga’s Community Faire.

In terms of value extending beyond the numeric achievements of the pictures being taken, shared on Facebook, and shared again by the participants, research has indicated that messages are much more effective in sticking when they are delivered by members of the audience’s peer group rather than by an official entity or company. Thus, there is confidence in saying that not only will this Youth Outreach protocol achieve results with the people who attend the events and interact with the green screen, but with their networks and ultimately, the greater Contra Costa community.

**CCCWP Watershed Diorama** – The CCCWP’s Watershed Diorama is used by stakeholder organizations and municipalities for youth-education programs and various public outreach events. The Watershed Diorama shows how rain becomes stormwater runoff, which can then pick up and carry dirt, garbage, and any other pollutants into storm drainage systems, which flow untreated to local creeks, the Delta, and the Bay. In FY 2013-2014, the diorama was used 13 times as follows:

## Watershed Diorama Use Tracking Sheet

Use Dates	Representing	Target/Event
7/5/13	Used Oil Recycling Program and Mr. Funnelhead	School Event
7/4/13	City of El Cerrito	July 4th celebration
9/29/13	Contra Costa Resource Conservation District	Lafayette Creek Day
12/6/13 & 12/12/13	New Leaf Sustainable Living Collaborative	K-5 elementary classroom presentations
1/10/14 & 1/17/14	New Leaf Sustainable Living Collaborative	K-5 elementary classroom presentations
4/19/14	Town of Danville	Earth Day 2014
5/2/14 & 5/9/14	Resource Conservation District	Ag Days
5/10/14	Town of Moraga	Community Faire
5/20/14	City of Brentwood	Public Works Week
5/21/14	City of Oakley	Public Works Week
6/24/14-7/11/14	Friends of Marsh Creek	Friends of Marsh Creek event

### **FY 2014-2015 Planned Activities**

Planned CCCWP public education and outreach activities for FY 2014-2015 include:

- Continued implementation of Contra Costa County Pesticide Reduction Advertising Campaigns (i.e., Buy Less Toxic; Peststicides; Try Non Toxic: My Green Garden Website; and, Hire Eco-Certified: Pesticides Linger);
- Reaching out to youth with the watershed protection message through the “Be Class Not Trashy” campaign; and,

- Continued enhancement to the CCCWP's Facebook page and website with current and valuable information.

## **SECTION 8 – PROVISION C.8 WATER QUALITY MONITORING**

Reporting on implementation of the Provision C.8 Water Quality Monitoring requirements was provided in the *Integrated Monitoring Report, Water Years 2012 and 2013: Part A* (IMR) submitted to the Water Boards on March 15, 2014. Copies of this report will be made available upon request.

## **SECTION 9 – PROVISION C.9 PESTICIDES TOXICITY CONTROLS**

### **Introduction**

BASMAA and CCCWP staff, consultants and MOC members provided the following assistance to Contra Costa Permittees' efforts to reduce pesticide toxicity in local creeks during FY 2013-2014:

- Tracking and participating in pesticide regulatory initiatives;
- Promoting opportunities for training events for municipal employees and contractors on IPM and similar programs;
- Providing outreach to residents and the general public on less-toxic pesticides, and proper pesticide use and disposal; and,
- Coordinating with and reporting to the Contra Costa County Agricultural Commissioner (CCCAC) on improper pesticide use.

### **Accomplishments**

BASMAA and the CCCWP's MOC provide a forum for Permittees to share information on common issues and lessons learned related to reducing pesticide toxicity in our urban creeks. A summary review of specific topics and activities are provided in BASMAA's "*MRP Regional Supplement for Training and Outreach Annual Reporting for FY 2013-2014*". A summary review of specific topics and activities coordinated through the CCCWP are discussed below.

#### **C.9.b. - Continuous Improvement to Municipal IPM Programs**

With assistance from CCCWP staff and consultants, the Ad Hoc IPM Workgroup that was created in FY 2012-2013 continued to make progress on the work products that had not yet been completed. These products included drafting of Model Standard Operating Procedures (SOPs) and developing a template for standard IPM contracting

language. In FY 2013-2014, the Structural IPM SOP was reviewed and finalized. The Weeds IPM SOP and sample contract language were also drafted and are currently under review.

In FY 2014-2015, the Ad Hoc IPM Workgroup will draft the remaining SOPs. The Workgroup also intends to hold a workshop providing guidance on the documents they developed. Binders containing the Model IPM Policy, Model IPM Program, SOPs and accompanying Pest Notes, and sample contract language will be distributed to workshop attendees and Permittees' IPM Coordinators.

#### C.9.c. – Train Municipal Employees on IPM Practices

Bay-friendly Landscape and Gardening (BFL) Coalition – The CCCWP continues to be a major supporter of the BFL Coalition, which is an organization that provides landscape (including IPM) training and certification to public employees and private sector landscape professionals. As a member of the BFL Coalition, the CCCWP pays dues to support BFL activities and sponsors and coordinates BFL training events in Contra Costa County.

During FY 2013-2014, a three-day CCCWP-sponsored workshop entitled, “Bay-Friendly Training & Qualification for Maintaining Landscapes” workshop was held on March 11, 18, and 25 in Richmond, in coordination with the BFL. A total of 65 individuals registered for the course, and 54 completed the course. Approximately half of those who completed the course were municipal or contracted employees.

#### C.9.e – Track and Participate in Relevant Regulatory Processes

In recent fiscal years, the CCCWP, along with other BASMAA members and stormwater programs statewide, invested considerable effort in advocating for new actions by the Department of Pesticide Regulation (DPR) to reduce the amount of toxic pesticides impacting urban waterways.

The most recent efforts in this area may be found in CASQA's *Preventing Urban Pesticide Pollution in Stormwater* report that is included in CASQA's Pesticide Subcommittee FY 2013-2014 Annual Report.

#### C.9.f – Interface with Contra Costa County Agricultural Commissioner (CCCAC)

During FY 2013-2014, Beth Slate with the Contra Costa Department of Agriculture presented information at the April MOC meeting on the Department's enforcement procedures for improper pesticide usage and provided an update on the "new" pyrethroid regulations that were adopted in July 2012.

CCCWP staff also spoke with CCCAC Larry Yost regarding any improper pesticide usage reported to the CCCAC. During FY 2013-2014, there were no reports of improper pesticide usage.

#### C.9.g – Evaluate Implementation of Source Control Actions Relating to Pesticides

The actions required under this subsection were addressed in FY 2012-2013 Annual Report.

#### C.9.h.i – Public Outreach: Point of Purchase

*Our Water Our World* - The CCCWP funds and participates in the "Our Water Our World" (OWOW) Program, which provides educational outreach directly to the consumer/user at the point of purchase (i.e., in the store). The OWOW Program is implemented both regionally and locally. Further details regarding the OWOW Program implementation regionally are provided in the BASMAA's *"Annual Reporting for FY 2013-2014 Regional Supplement for Training and Outreach."*

Locally, the CCCWP distributes OWOW educational literature to schools and at community events in addition to the general public when requested. CCCWP staff promotes OWOW through its website and direct interactions with citizens, schools, and businesses. A total of 22 Contra Costa stores participated in the OWOW Program in Contra Costa County in FY 2013-2014. Four new stores will be added in Contra Costa County in FY 2014-2015. All of the new stores were Home Depot stores and were located in Brentwood, El Cerrito, Pittsburg and San Ramon. All 22 were set up with literature racks, fact sheets, and shelf talkers. Training on the OWOW Program was provided to staff from 14 key stores in FY 2013-2014.

Trainings included information on:

- The tie between pesticides, run-off and water quality;
- Identification of beneficial insects in the landscape as well as common and new pests/diseases and invasive plants;
- Techniques for managing specific pest problems;
- Tips and techniques for using/selling the less-toxic products; and
- Correct disposal of toxic materials.

Each training participant receives a packet of information and resources including background on the OWOW program and IPM techniques, information on how products work and how to read a pesticide label, laminated bug guides, a chart for identifying pest damage, pest fact sheets, *The 10 Most Wanted Bugs in Your Garden* brochure, and a list of resources and helpful websites. Stores that participated in trainings were also given a laminated poster on identifying good bugs to post in the store, laminated suggestions for rat/mouse management to post, a copy of *Landscape Pest Identification Cards*, and a laminated set of cards to help customers on identifying pests, diseases and beneficial insects.

This is the second year of a two year grant that the OWOW Program was supported, in part, by an EPA grant called “Greener Pesticides for Cleaner Waterways.” This grant

paid for IPM advocates to offer OWOW program services to a small number of stores. Two of these stores are part of the Contra Costa OWOW Program (i.e., Orchard Supply Hardware in San Ramon, and Ace Hardware in Concord). The EPA grant allowed CCCWP funding to be used toward more time spent mentoring the other Contra Costa stores in the OWOW Program with repeat visits and additional outreach events. For additional information see Attachment 9.1.

On January 23, 2014, the Our Water Our World program was recognized at an awards ceremony in Sacramento. The “2013 Integrated Pest Management Innovator Award” was given to the IPM Advocates that were trained to bring the OWOW program into stores. This award is given to individuals and/or organizations for “innovative approaches to IPM and reduced-risk pest management and their leadership roles in promoting these practices.”

#### C.9.h.iii – Public Outreach: Pest Control Operators (PCOs)

In FY 2013-2014, CCWP participated in the following outreach to residents who use or contract for structural or landscape pest control:

*Sponsored a Bay-Friendly Training & Qualification for Maintaining Landscapes workshop* - During FY 2013-2014, CCCWP sponsored a three-day Bay-Friendly Landscaping & Gardening Coalition workshop entitled, “Bay-Friendly Training & Qualification for Maintaining Landscapes.” The workshop was held on March 11, 18, and 25 in Richmond, in coordination with BFL.

*Petstircides* -- The Petstircides advertising campaign was launched in 2013 to promote the use of less-toxic alternatives for pesticides and herbicides.

*MyGreenGarden.org Website* -- Residents of Central, East, and West counties all expressed an interest in so-called “home remedies” during the focus groups in FY 2012-2013. In FY 2013-2014, CCCWP created a website entitled, *My Green Garden*, in an effort to encourage Contra Costa residents to share tips and tricks for organic gardening

less-toxic pesticides and chemicals. Through the site [www.mygreengarden.org](http://www.mygreengarden.org), the CCCWP strives to build a sense of community through a Yelp type model of content produced by the end user.

*Pesticides Linger* -- The Pesticides Linger campaign encourages Contra Costa residents, who currently outsource pest control (i.e., hire a pest control operator), to consider hiring an eco-certified pest control operator (PCO) who practices environmentally sound pest management practices. The campaign is designed to address the specific barriers and motivators of the Contra Costa community, identified in the FY 2012-2013 strategic plan.

The campaign is focusing on residents in South, East and Central areas of the county as these areas were found in foundational research to be most likely to hire PCOs. The campaign strategy seeks to address the most common motivators and barriers to hiring an eco PCO.

For further details on the Pesticides, MyGreenGarden.org Website, and Pesticides Linger ad campaigns, see Attachments 7-1, 7-2, and 7-3 of this Volume 1 report.

#### C.9.h.v – Public Outreach: Pest Control Operators (PCOs)

During FY 2013-2014, the CCCWP promoted the Pesticide Applicators Professional Association (PAPA) training workshop held in Walnut Creek in August of 2013. The CCCWP sent a letter promoting the workshop to approximately 142 pesticide applicator businesses licensed in Contra Costa, and also promoted the workshop to Permittee staff.

#### **FY 2014-2015 Planned Activities**

Planned activities for FY 2014-2015 include providing a one-day training workshop specifically aimed for municipal employees and contractors on structural IPM and landscape IPM; supporting a Bay Friendly Landscaping Certification and Training

Workshop for landscape businesses and municipal staff; continuing to support BASMAA and CCCWP's OWOW Programs; continuing to track and participate in relevant pesticide-related regulatory processes and initiatives through BASMAAA and CASQA; conducting a regional advertising campaign targeting a broad audience on reducing the impact of urban pesticide use on water quality; and, conducting half-day workshop to provide guidance on the work products created by the Ad Hoc IPM Workgroup.

## **SECTION 10 – PROVISION C.10 TRASH LOAD REDUCTION**

### **Introduction**

As reported in FY 2012-2013 Annual Report, a major shift in direction for trash load reduction and a new consensus among San Francisco Bay Water Board staff and MRP Permittees was undertaken on how trash reduction should be should be accounted for, and how to proceed toward the objective of “no visual impact” due to trash in Bay Area waterways. MRP Permittees agreed to show, in their FY 2012-2013 Annual Reports, progress toward development of long-term trash load reduction plans (Long-Term Plans). As part of this agreement, to the extent practicable, Permittees included maps delineating trash generation rates, Trash Management Areas (TMAs), and location and drainage areas of full-trash-capture devices. Submittals also included control measures that Permittees intended to implement in specific TMAs.

In FY 2013-2014, Permittees continued to build upon this new framework in development and implementation of their Long-Term Plans and in demonstrating the 40% reduction in trash loads by July 1, 2014 as required by the MRP.

### **Creation of Ad Hoc Trash Workgroup**

During FY 2013-2014, at the direction of the Management Committee, CCCWP staff created an Ad Hoc Trash Workgroup to facilitate development of Permittees’ Long-Term Plans and serve as a forum for sharing information on trash management. The Workgroup met 12 times from October 2013 through June 2014.

During these meetings, Permittees reviewed the Long-Term Plan template that CCCWP staff and consultants had created. They shared their approaches towards delineating TMAs and discussed control measures that could be implemented based on land uses and other factors. One of these control measures included C.3-compliant LID facilities such as bioretention. While BASMAA guidance had not included these facilities as a

possible control measure, CCCWP Permittees recognized their importance in reducing trash loads. With assistance from CCCWP consultants, they were able to demonstrate that these facilities have equivalent effectiveness as full-trash-capture devices.

Once the Long-Term Plans had been submitted, the Workgroup continued to meet to address implementation issues, discuss assessment methods, and provide feedback on the format for reporting on trash load reductions in Section C.10 of the FY 2013-2014 Annual Report.

CCCWP staff also participated in numerous trash management workshops and seminars. CCCWP staff attended the *Escape from Trash Mountain* session at the *State of the Estuary Conference* held in Oakland on October 29, the *Bay Area Trash Summit* held in San Jose on November 15, and the *Trash Load Reduction Workshops* held by the San Francisco Bay Water Board in Oakland on November 13 and December 11.

Information from these workshops, as well as the BASMAA Trash Subcommittee, was conveyed to the Ad Hoc Trash Workgroup and Management Committee members.

### **Development of Permittees' Long-Term Trash Load Reduction Plans**

CCCWP staff and consultants drafted a template for Permittees to use for their Long-Term Plans. The text of the template included a summary of the framework that had been agreed to by BASMAA Permittees and San Francisco Bay Water Board staff the previous year. The core of the template was the "cut-sheets" that essentially served as a mini-trash management plan for each TMA. In each cut-sheet, Permittees described the rationale used to create each TMA, discussed the dominant sources and types of trash, and provided a schedule of control measures that would be implemented to reduce trash loads. Permittees also addressed how they would measure the effectiveness of the control measures that would be implemented.

The Long-Term Plan template also included three maps that Permittees had initially created the previous summer and continued to refine and correct until submission of their plans. The first map showed the trash generation rates (low, medium, high, and very high) within the municipality's jurisdiction. The second map showed the TMAs municipal staff had delineated, and the third map provided the location and drainage area of the full-trash-capture devices.

Permittees submitted their Long-Term Plans to CCCWP staff who uploaded the plans to the San Francisco Bay Water Board's FTP site and e-mailed the plans to the Central Valley Water Board.

### **Coordinating Trash Reduction Efforts with Outside Agencies**

Most Contra Costa Permittees identified interstates, other state-owned roads, and associated entrance and exit ramps as high trash generating areas. In many instances, trash from these areas ultimately contributes to Permittees overall trash loads and yet Permittees have no authority to implement control measures on these lands. For this reason, CCCWP staff reached out to the California Department of Transportation (Caltrans) to discuss its trash reduction efforts, and identify strategies that could be undertaken to improve coordination of efforts between Permittees and Caltrans.

CCCWP staff identified that certain efforts, in particular on-land cleanups, were better addressed at the local level while other efforts, such as installation of multi-benefit stormwater treatment/retrofit projects/facilities, would be more appropriately discussed at the state level. Thus, CCCWP staff is engaging Caltrans at the local and state level.

At the local level, CCCWP staff has become a member of a litter enforcement group and participated in its meetings. The group is composed of Caltrans District 4 staff, California Highway Patrol (CHP), and MRP Permittees. It is an outgrowth of the Litter Enforcement Days, a coordinated effort between District 4 and CHP. The purpose of this group is to communicate and promote cleanup events among its members. It also

serves as a forum for sharing Caltrans and CHP initiatives, such as the streamlined permitting process for municipalities or volunteer groups wanting to conduct cleanup events on Caltrans property or wanting to participate in the Adopt-A-Highway or Adopt-A-Spot programs. CCCWP staff plans for greater involvement with this group in the coming year.

At the state level, CCCWP has regularly communicated with Caltrans staff that has been assigned to oversee the trash reduction requirements of Caltrans stormwater permit. CCCWP staff has invited Caltrans staff to participate in the CCCWP's Management Committee meetings, and have supplied Caltrans staff with technical documents pertaining to trash, such as BASMAA's *Visual On-land Trash Assessment Protocol for Stormwater*. As Caltrans further develops its trash reduction strategy, CCCWP anticipates a greater degree of engagement with this agency at the state level.

Permittees also identified commercial areas, specifically restaurants and certain retail, as potentially significant trash generating areas. These businesses are inspected for stormwater compliance on a regular basis. In Contra Costa County, four Permittees conduct these inspections internally while sixteen Permittees have contracted with one of three POTW agencies' inspectors to conduct all or a portion of these inspections. Trash management is an important component of the inspection's scope with inspectors reviewing the businesses' dumpsters, parking lots, and storm drains for compliance with trash related standards. If trash related issues are identified during the inspection, appropriate enforcement actions are taken. Permittees using POTW inspectors are provided with a copy of written enforcement actions that identifies the details of the non-compliant condition and a summary reporting the status or resolution of the enforcement actions is provided periodically. Previously, this enforcement summary did not always provide specific information on trash related issues for a particular enforcement action. Starting in FY 2014-2015, the enforcement summary will provide additional detail for any trash-related enforcement actions initiated during an inspection conducted by POTW inspectors. This additional reporting element will assist Permittees in comprehensively reporting their trash reduction efforts.

## **Preparation for Annual Report Submission**

In addition to attending the BASMAA Trash Subcommittee meetings, CCCWP staff and consultants participated in two MRP Trash Steering Committee meetings with San Francisco Bay Water Board staff. These meetings were held on March 10 and May 5 at the Water Board offices. Discussions from these meetings helped to define the format for Section C.10 in the FY 2013-2014 Annual Report.

During these meetings, CCCWP staff, Permittees, and consultants provided feedback on the general format, and advocated for allowing percent reduction from creek and shoreline cleanups. There was some debate on how to account for trash load reduction in the absence of full-trash-capture or C.3-compliant facilities. The final format that MRP Permittees and Water Board staff agreed to recognized both outcome-based results (i.e. visual observations) and, where appropriate, out-put based results (i.e., public education). Trash load reductions would primarily be accounted for through outcome-based results within the TMAs, but reductions from product bans and creek/shoreline cleanups not associated with the mandatory Trash Hot Spot clean-ups would also be credited.

### *Trash Source Control Initiatives*

*California Product Stewardship Council (CPSC)* - The CCCWP is a member of the CPSC. Its mission is to promote Extended Producer Responsibility (EPR), which is based upon shifting California's product waste management system from one focused on government-funded and ratepayer-financed waste diversion to one that relies on producer responsibility in order to reduce public costs and drive improvements in product design that promote environmental sustainability. The CPSC's position is that the producers should have the primary responsibility to establish, fund, and manage end-of-life systems for their products. The CCCWP supports the CPSC financially through membership fees equaling \$2,500 a year and through direct participation in

their associate meetings. CPSC has an impressive record of accomplishments over the last year including, but not limited to:

- Provided technical assistance to Alameda County in upholding the nation's first pharmaceutical producer responsibility ordinance, which was challenged in court but upheld. The plaintiffs have appealed, and the case is currently in the 9th Circuit Court of Appeals.
- Achieved national and statewide press coverage by being featured in the press including Capital Public Radio, National Public Radio, Good Day Sacramento, the Wall Street Journal, California Healthline, Toxic Free Talk Radio, and the Sacramento News & Review.
- Published a Sacramento News and Review insert educating the public on proper disposal of medications and needles.
- Supported the roll-out of the Paint Stewardship Program, which now has over 500 collection locations statewide. This represents a 22% increase in locations from last year. California local governments are expected to save millions annually once the program is fully implemented in 2015.
- Gained dozens of new supporters, including the Carton Council, FlameKing, City of Alameda, and Environment and Resources Consulting.
- Co-sponsored three pieces of legislation: SB 1014 (Pharmaceutical Take-Back Guidelines), AB 1893 (Sharps Container Upon Purchase), and AB 2284 (Battery take-Back).
- Partnered with local pharmacies, sanitation agencies and law enforcement to establish six sustainably funded pharmaceutical take-back sites in Sacramento and Yolo Counties and promoted the Don't Rush to Flush, Meds in the Bin We All Win! Program.
- Presented the fourth Annual Arrow Awards to recognize the efforts of companies who are leaders in product stewardship in California.
- CPSC co-sponsored four America Recycle Day (ARD) events in Los Angeles, Sacramento, Oakland, and Bakersfield.
- Published a white paper on mattresses.

- Facilitated adoption of more EPR resolutions, now totaling 137 statewide and representing 37 of the 58 counties in the State.
- Added two for-profit businesses to the CPSC board of directors to broaden their partnerships with private sector partners and chambers.

The CCCWP will continue to support and participate in the CPSC's mission and efforts in FY 2014-2015.

### **FY 2014-2015 Planned Activities**

CCCWP staff and consultants will continue to coordinate and support Contra Costa Permittees in refining their Long-Term Plans. CCCWP staff and consultants will also continue to work with San Francisco Bay Water Board staff, stakeholders and Permittees in further development and refinement of effective trash management actions and assessment methods used to demonstrate progress towards achieving trash load reduction goals.

As part of this support to Permittees, CCCWP staff will continue to engage Caltrans at the state and local level, and expand its outreach efforts to other agencies, potentially including Contra Costa Transportation Authority and school districts.

## **SECTION 11 – PROVISION C.11 MERCURY AND METHYLMERCURY CONTROL PROGRAMS**

### **Introduction**

The majority of MRP requirements related to mercury are being addressed regionally through BASMAA and the Regional Monitoring Coalition (RMC). Reporting on these elements of the MRP, for which there were deadlines in FY 2013-2014, can be found in the *IMR* submitted to the Water Boards on March 15, 2014.

During FY 2013-2014, the CCCWP continued to coordinate with Permittees and local household hazardous waste (HHW) collection facilities to implement mercury collection and recycling in accordance with Provisions C.11.a.i and C.11.a.ii. These efforts are reported below.

### **Mercury Collection and Recycling**

Provision C.11.a.i requires that: “The Permittees shall promote, facilitate, and/or participate in collection and recycling of mercury containing devices and equipment at the consumer level (e.g., thermometers, thermostats, switches, bulbs).”

The CCCWP’s Permittees collect HHW at three (3) regional facilities in the County:

- Central Contra Costa Sanitary District (CCCSD);
- Delta Diablo Sanitation District (DDSD); and,
- West Contra Costa Integrated Waste Management District (WCCIWMD).

CCCSD serves the communities of Concord, Clayton, Martinez, Pleasant Hill, Orinda, Lafayette, Moraga, Walnut Creek, Danville, San Ramon and unincorporated county. DDSD serves Pittsburg, Antioch and Bay Point. WCCIWMD serves Richmond, Pinole, El Sobrante, El Cerrito and San Pablo.

Provision C.11.a.ii requires that “The Permittees shall report on these efforts in their Annual Report, including an estimate of the mass of mercury collected.” Tables 11-1, 11-2 and 11-3 on the next page provide the estimated mercury mass collected by each HHW collection facility. The total estimated amount of mercury collected in FY 2013-2014 was 38.58 kg.

The types of data collected at each facility are slightly different as is the level of differentiation between types of mercury containing devices and the level of specificity in reporting the data. BASMAA has developed a simple, spreadsheet-based tool to estimate the mass of mercury based on the number of different types of mercury-containing devices and products collected by HHW programs. CCCWP has already started working with HHW programs in FY 2014–2015 to help develop and implement tracking programs by device, and revising the calculator so that more accurate estimates can be generated and consistently reported. References for amounts of mercury found in the bulbs and devices are detailed in the Mercury Collection Calculator which can be found at the CCCWP website at <http://www.cccleanwater.org/materials/> . These estimates fulfill provision C.11.a requiring Permittees to report an estimate of the mercury mass collected.

Using the above calculator to quantify the estimated mercury in the mercury-containing devices, in FY 2013-2014, CCCSD collected approximately 1.57 kg of mercury; 0.68 kg of mercury from fluorescent bulbs, and an additional 0.88 kg from itemized devices. DDSD and its retail partners collected a total of 36.74 kg of mercury. This is a large increase from previous years and from other County collection facilities. This can be explained by a total of 23.05 kg of elemental mercury being collected this year, in addition to the 0.31 kg of mercury from fluorescent bulbs, and an additional 13.38 kg in switches alone. WCWD collected 0.20 kg of mercury from fluorescent lights and approximately 0.08 kg of mercury from un-itemized mercury containing devices.

**Table 11-1: Summary of Mercury Mass Collected by CCCSD  
FY 2013 – 2014**

Mercury Containing Device/Equipment	Total Amount of Devices Collected	Estimated Mass of Mercury Collected (kg)
# 1: Fluorescent Lamps[1] (linear feet)	284840	0.591043
#2: CFLs[2] (each)	20442	0.091989
#3 HID Headlamps (each)	0	0
#4: Thermostats[3] (each)	104	0.416
#5: Thermostats (lbs)	0	0
#6: Thermometers (each)	693	0.42273
#7: Switches [4](each)	16	0.04592
#8 Elemental mercury	0	0
<b>Total Mass of Mercury Collected During FY 2013-2014:</b>		<b>1.567682</b>

**Table 11-2: Summary of Mercury Mass Collected by DDSD FY  
2013 – 2014**

Mercury Containing Device/Equipment	Total Amount of Devices Collected	Estimated Mass of Mercury Collected (kg)
# 1: Fluorescent Lamps[1] (linear feet)	120271	0.249562325
#2: CFLs[2] (each)	13464	0.060588
#3 HID Headlamps (each)	0	0
#4: Thermostats[3] (each)	0	0
#5: Thermostats (lbs)	0	0
#6: Thermometers (each)	0	0
#7: Switches [4](each)	4662	13.37994
#8 Elemental Mercury		23.05
<b>Total Mass of Mercury Collected During FY 2013-2014:</b>		<b>36.740090</b>

**Table 11-3 Summary of Mercury Mass Collected by WCWD  
FY 2013 – 2014**

<b>Mercury Containing Device/Equipment</b>	<b>Total Amount of Devices Collected</b>	<b>Estimated Mass of Mercury Collected (kg)</b>
#1: Fluorescent Lamps[1] (linear feet)	66559	0.138109925
#2: CFLs[2] (each)	12818	0.057681
#3 HID Headlamps (each)	569	0.002845
#4: Thermostats[3] (each)	0	0
#5: Thermostats (lbs)	0	0
#6: Thermometers (each)	0	0
#7: Switches [4](each)	15	0.08
#8 Elemental Mercury	0	0
<b>Total Mass of Mercury Collected During FY 2013-2014:</b>		<b>0.278636</b>

## **SECTION 12 – PROVISION C.12 PCB CONTROLS**

### **Introduction**

The majority of MRP requirements related to PCBs are being addressed regionally through BASMAA and the RMC, as is mentioned in Section 11. Reporting on implementation of Provision C.12 PCB Controls was provided in the IMR. Copies of those reports will be made available upon request.

### **PCB Containing Equipment Identification Training**

Provision C.12.a requires training of industrial/commercial inspectors to identify PCB-containing equipment, and to document these in inspections report, and refer them to the appropriate agencies. Training on the identification and management of PCB-containing equipment was conducted in FYs 2010-2011 and 2012-2013.

### **Managing PCB-Containing Materials and Waste**

Provision C.12.b requires pilot projects to evaluate managing PCB-Containing materials and wastes during building demolition and renovation. This provision was fulfilled by a collaborative, grant-funded project at the direction of the San Francisco Estuary Partnership. Details regarding this project are documented in the IMR submitted to the Water Boards on March 15, 2014.

## SECTION 13 – PROVISION C.13 COPPER CONTROLS

### Introduction

MRP requirements related to Copper Controls not implemented at the local-level and reported in the Individual Municipal Annual Reports (see Volume II of this Annual Report) are being addressed regionally through BASMAA.

### Vehicle Brake Pads

Provision C.13.c requires Permittees to engage in efforts to reduce the copper discharged from automobile brake pads to surface waters via urban runoff. Provision C.13.c.iii requires that the Permittees report annually on legislation development and implementation status. Permittee compliance is achieved through continued participation in a process originally initiated by the Brake Pad Partnership (BPP) that achieved the 2010 passage of Senate Bill 346, which will phase out copper and other heavy metals in brake pads over the next 15-20 years (see Table 13-1)<sup>13</sup>. Because the State of Washington passed brake pad legislation a few months before California and the Washington law is similar but different in a few key areas, the automotive brake pad-related industry is responding to both laws simultaneously, and Permittees must do likewise regarding the laws' implementation status.

**Table 13-1. Implementation Timeline for SB346 Regulation of Vehicle Brake Pads**

Year	SB 346 Key Milestones or Provisions
2011	SB 346 became effective January 1. When reformulating brake pads, manufacturers must select alternatives to copper that pose less potential hazard to public health and the environment.
2012	Target date - finalization for certification and marking criteria.

<sup>13</sup> Full text of the legislation was submitted with the FY 2010-11 Regional POC Report. The law is the Brake Friction Material Law (Health and Safety Code sections 25250.50 et seq.).

<b>2014</b>	Limits on cadmium, chromium, lead, mercury and asbestos took effect January 1. (Non-compliant pads can be sold solely for inventory depletion until 2024)  Compliance certification must be marked on pads and listed on the Internet.
<b>2018</b>	Cal- EPA Secretary appoints extension application advisory committee.
<b>2019</b>	Manufacturers may apply for extensions to the 2025 0.5% copper limit beginning January 1.
<b>2021</b>	5% copper limit takes effect January 1. (No extensions allowed, but non-compliant pads for pre-2021 vehicles may continue to be sold indefinitely)
<b>2023</b>	State Water Board & DTSC report to legislature on brake pad copper reductions and copper TMDL implementation progress. (The report can make recommendations for any additional brake pad copper controls needed to achieve TMDLs)
<b>2025</b>	0.5% copper limit takes effect January 1.
<b>2032</b>	Final end date for all light duty vehicle compliance extensions. (Non-compliant replacement pads for pre-2025 vehicles may continue to be sold indefinitely)

In FY 2013-14, Permittees continued to track and support implementation of SB 346 through participation in CASQA, which is engaged through a CASQA-funded project in the following implementation efforts:

- Legislation
- Regulations
- Marking
- Certification
- Education
- Memorandum of Understanding

### Legislation

California's car dealers sought to make a change to SB 346 (2010) in the 2013 legislative session requiring CASQA and its BPP partners to track and participate in the legislative process. Ultimately, the Governor signed AB 501 Vehicles (2013), Nazarian,

making a slight change ([see below](#)) in SB 346. The slight change allows used vehicles to be re-sold with the brake pads that were on the vehicle when it was purchased by a dealer or a private person. SB 346 technically would have required these brake pads be checked for compliance with the phase out of copper and other heavy metals, and potentially replaced. The change made by AB 501 will negligibly affect brake pad copper reduction, while eliminating an unintended task for vehicle resellers.

Health & Safety Code Section 25250.51

(b) Motor vehicle manufacturers and distributors, wholesalers, or retailers of replacement brake friction materials may continue to [sell or](#) offer for sale brake friction materials not certified as compliant with subdivision (a) solely for the purpose of depletion of inventories until December 31, 2023.

[\*\(c\) Notwithstanding subdivision \(b\), motor vehicle dealers may continue to sell or offer for sale brake friction material not certified as compliant with subdivision \(a\) if the brake friction material was installed on a vehicle before the vehicle was acquired by the dealer.\*](#)

With assistance from the lobbyist that assisted the Brake Pad Partnership, CASQA and its BPP partners were able to ensure the bill made only the very narrow change intended by its author and its sponsor, California's car dealers.

## Regulations

CASQA continued to engage in the potential development of regulations for SB 346 by the Department of Toxic Substances Control (DTSC) and also by the Washington Department of Ecology (DOE) for that state's Better Brakes Law, which is similar to SB 346 in many respects<sup>14</sup>. CASQA's engagement included tracking developments and regular check-ins with key staff at California DTSC, and at Washington DOE as needed.

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<sup>14</sup> SB 346 includes a requirement that California regulations must be consistent with those of other states concerning compliance markings and certification. Washington's brake pad law required adoption of implementing regulations by December 2012, which was ahead of DTSC's timeline for preparing regulations for SB 346. Washington Department of Ecology adopted final Better Brakes Rules in October

This year, DTSC determined that SB 346 could not be enforced unless DTSC issues regulations to clarify a few elements in the law. On June 20, 2014, DTSC announced it had prepared [informal draft regulations](#) to help implement the law that became effective January 1, 2014. The proposed regulations clarify the standards for implementing the law, including the marking of the brake pads, the analytical testing methodology, and the analytical laboratory qualifications. The regulations are also intended to provide details on the processes that DTSC will use to provide extensions to the January 1, 2025 restrictions, and approve certification requirements used by the testing certification agencies.

DTSC will be holding a series of workshops in the summer of 2014 designed to receive comments from stakeholders on the proposed informal regulations and to address potential issues before initiating the formal rulemaking process later this year. It could take up to a year after the rulemaking is formally announced for it to become effective. CASQA will continue to participate in the regulatory process – conducting reviews and analyses and preparing and delivery comments – to try to ensure the full intent and letter of SB 346 is implemented as designed.

### Marking

Both California and Washington State laws require brake friction material to be marked according to an industry standard “edge code” certifying the formulation of the material complies with the concentration limits for copper and other constituents in the laws and enabling people throughout the supply chain to identify the information contained in an edge code quickly and easily. As of January 1, 2014, the concentrations of asbestos and other non-copper constituents were to be certified as being less than limits set in the law.

Washington State law (but not California law) also requires brake packaging to be marked with a registered certification mark that is intended to certify compliance with

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2012; available at <http://www.ecy.wa.gov/programs/hwtr/betterbrakes.html>

Washington State's law. On October 2, 2013, Washington DOE issued [guidelines on marking requirements](#) under the Washington Better Brakes Law.

The industry has developed a logo for packaging ("LeafMark") with three designations:

- Level A designates compliance with requirements concerning cadmium, chromium, lead, mercury and asbestos. Level A compliance was required by January 1, 2014, in California and is required by January 2015 in Washington.
- Level B designates compliance with each of the above metals as well as copper, which must be reduced to less than 5% of material weight. Level B compliance is required by 2021.
- Level N designates compliance with the "Zero Copper" requirement, which takes effect in 2025.



### Certification

The sole independent certification organization NSF began to certify pads for compliance with the toxic metals, asbestos, and copper standards in preparation for the January 1, 2014 certification deadline (see the certification website [here](#) and certified product list [here](#)).

On December 20, 2013, an updated version of [SAE Standard J2975, Measurement of Copper and Other Elements in Brake Friction Materials](#) was approved.

DTSC assigned enforcement staff to this new program and they have been involved in

discussions with Bureau of Automotive Repair (BAR) and representatives of the Automotive Services Councils of America. DTSC cannot start enforcement until the regulations are adopted. DTSC must enforce directly—it does not have authority to delegate to others, like CUPAs (Certified Unified Program Agencies), but DTSC can accept referrals.

The industry has reported its baseline use of copper, nickel, zinc and antimony to Washington DOE (see the data summary [here](#)).

### Education

Both states have developed websites ([California](#)) ([Washington](#)) that provide an increasing amount of information and links to additional information on the requirements and their implementation. 'Completion' of the California website is pending adoption of the California regulations. DTSC has also:

- Completed guidance documents for marking, analysis, and compliance.
- Drafted various fact sheets for outreach (release pending regulation adoption).
- Coordinated and trained DTSC's Regional Assistance Officers.

DTSC also plans to provide materials to support industry's compliance education efforts. CASQA has funded a project expected to start in later 2014 to promote shifting the brake pad manufacturers' move to <0.5% copper content in advance of the statutory deadlines to facilitate achievement of copper TMDL waste load allocations.

### National Memorandum of Understanding (MOU)

In late 2013, a coalition of automotive-related industry representatives approached EPA with a proposal to develop and reach an agreement on a nationwide Memorandum of Understanding – purportedly to avoid a patchwork of laws and regulations and provide a streamlined, national approach to phasing out the use of copper and other constituents

in brake friction materials. Both Washington DOE and California DTSC were made aware of the effort in early February 2014, and CASQA was made aware in early March 2014. It appears Washington DOE and California DTSC have been consulted regularly during the negotiations since that time, while CASQA and other stakeholders have been consulted less regularly.

CASQA representatives participated in a conference call with EPA staff in early April and followed that up with a comment letter<sup>15</sup>. In the letter, CASQA, in general:

- Noted it supports and encourages EPA's interest in establishing nationwide source control (pollution prevention) solutions for stormwater pollution;
- Pointed out that numerous California agencies are relying on implementation of laws adopted to control brake pad copper content that form the foundation of their compliance with requirements for stormwater copper discharge reductions; and,
- Urged any MOU established between EPA and the vehicle industry strongly support timely, robust implementation of existing state laws.

CASQA also stated the draft MOU fell significantly short of its stated intent of consistency with adopted California and Washington state laws and regulations, despite EPA's commitment to ensure the MOU meets the most stringent provisions in the combination of the existing state laws. Consequently, CASQA also made specific recommendations to bring the language of the draft MOU as close as possible to the stated intent. Negotiations continued into the new fiscal year but it appears most of CASQA's recommendations will be accepted, and there will be additional opportunity for review and input. A final MOU is expected by the end of 2014.

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15 CASQA Comments to EPA on Proposed MOU regarding Brake Pad Copper Content (April 15, 2014)

## **SECTION 14 – PROVISION C.14 PBDE, LEGACY PESTICIDES AND SELENIUM CONTROLS**

Reporting on implementation of Provision C.14, *PBDE, Legacy Pesticides, and Selenium Controls*, was provided in the Urban Creeks Monitoring Report submitted by BASMAA on March 15, 2013. Reporting on other requirements of Provision C.14 was provided in the “*Regional Annual Report Supplement for POCs and Monitoring*” submitted by BASMAA on September 15, 2013. Copies of those reports will be made available upon request.

## **SECTION 15 – PROVISION C.15 EXEMPTED AND CONDITIONALLY EXEMPTED DISCHARGES**

### **Introduction**

As outlined in Section 2 of this Volume 1 report, the CCCWP MOC is tasked with the review, development and coordination of any countywide and/or regional tasks conducted to assist Permittees with implementation of the mandates in Provision C.15. However, due to temporary reductions in CCCWP staffing, redirection of effort in meeting the Trash Load Reduction mandates in Provision C.10, and other issues, no specific Group Program actions related to Provision C.15 were conducted in FY 2013-2014.

Though the CCCWP's MOC did not conduct any specific group activities with Provision C.15, CCCWP staff reviewed the proposed Statewide Permit for Drinking Water System Discharges for its potential impact on municipalities whose drinking water discharges are currently covered by its MS4 permit. CCCWP conveyed findings to the respective municipalities.

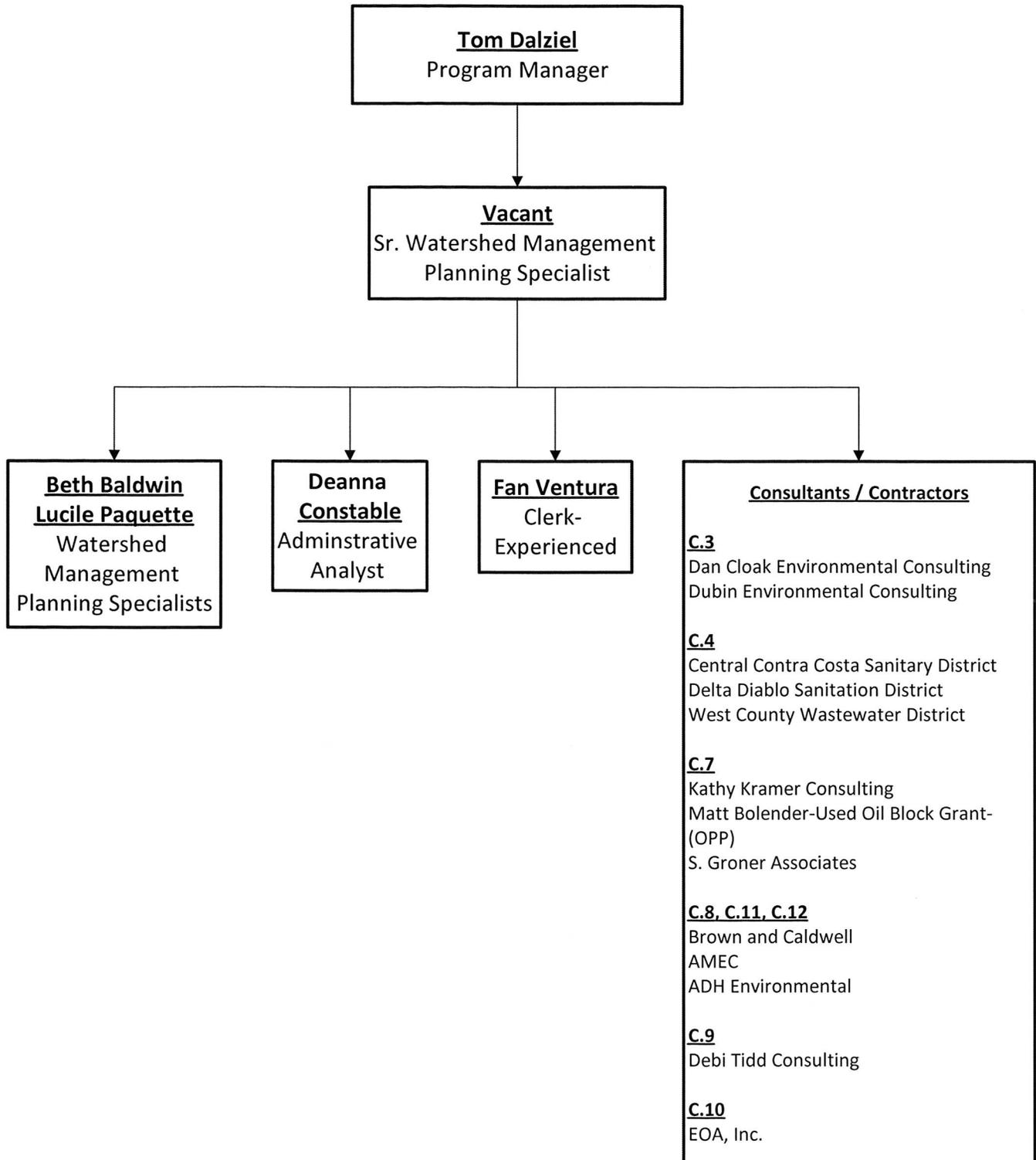
### **FY 2014-2015 Planned Activities**

In FY 2014-2015, anticipated Group Program activities related to Provision C.15 include review and input on proposed revisions to the next MRP, scheduled for release in fall 2014, and providing a forum (e.g., CCCWP MOC) for Permittees to discuss Provision C.15 implementation issues.

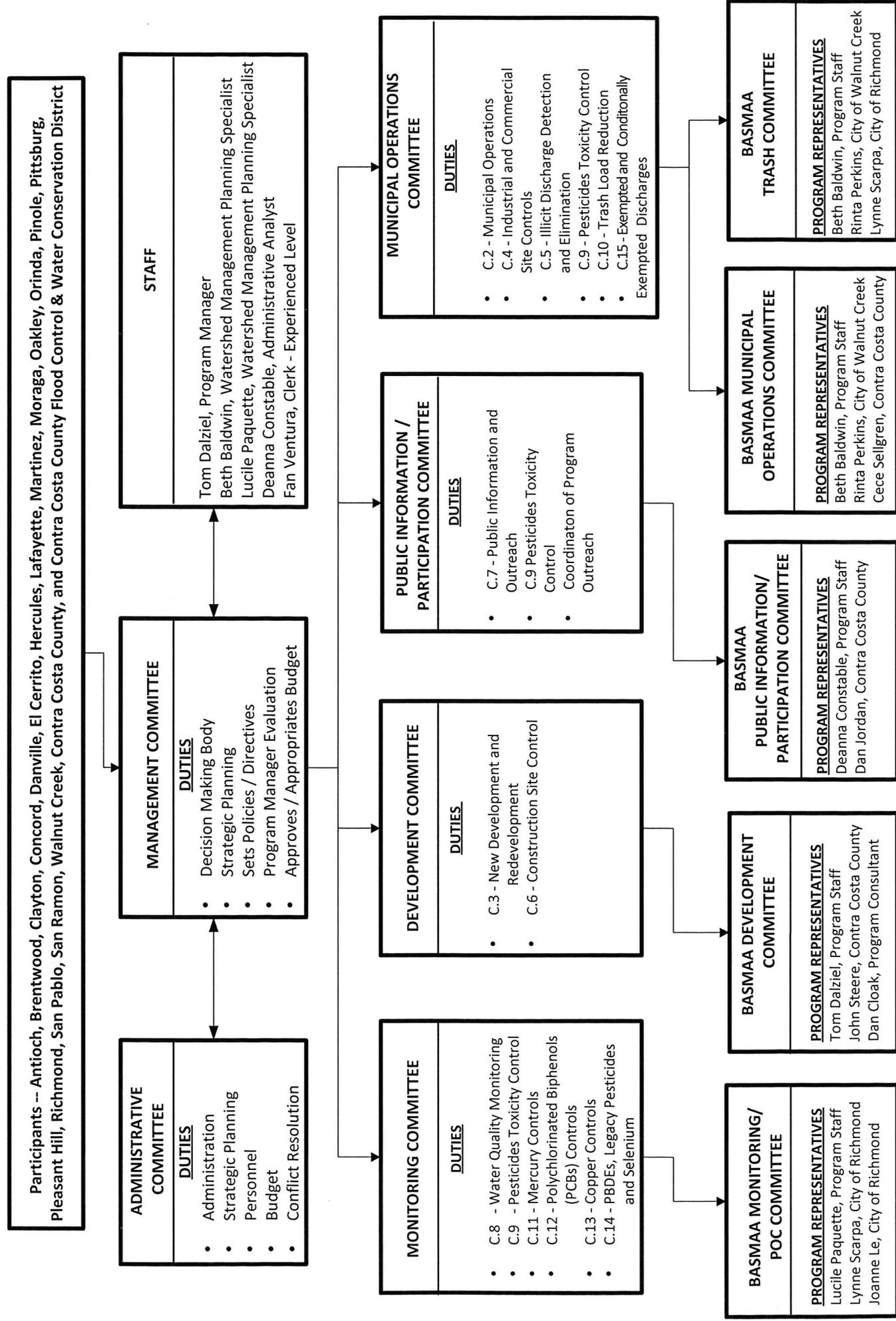
CCCWP staff will also continue to monitor the proposed Statewide Permit for Drinking Water Discharges, and inform the CCCWP MOC of any pertinent developments.

# Contra Costa Clean Water Program Management

Attachment 1.1



**CONTRA COSTA CLEAN WATER PROGRAM  
ORGANIZATIONAL STRUCTURE AND REPRESENTATION**



**ADMINISTRATIVE COMMITTEE  
FY 2013-14 ATTENDANCE ROSTER**

MUNICIPALITY	REPRESENTATIVE	JUL	AUG	SEP <sup>(3)</sup>	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN <sup>(3)</sup>	INDIV% ATT	MUNI % ATT
City of Brentwood	<b>Jeff Dowling</b>		1		1	1	1	1	1	1	1	1		90%	<b>90%</b>
	Jack Dhaliwal														
Contra Costa County	<b>Cece Sellgren</b>	1			1	1	1	1	1	1	1			80%	<b>90%</b>
	David Swartz*	1			---	---	---	---	---	---	---	---		10%	
	John Steere	---	---		---	---	1					1		20%	
CCC Flood Control District	<b>Mike Carlson</b> <sup>(2)</sup>	1	1		1		1	1	1	1		1		80%	<b>80%</b>
	David Swartz				---	---	---	---	---	---	---	---			
City of Lafayette	<b>Donna Feehan</b>	1	1		1	1		1	1	1	1	1		90%	<b>90%</b>
	Ron Lefler														
Town of Moraga	<b>Edric Kwan</b>		1		1	1			1	1	1	1		70%	<b>70%</b>
City of Pleasant Hill	<b>Rod Wui</b>	1	1		1	1		1	1	1	1	1		90%	<b>90%</b>
	Ann Page														
City of Walnut Creek	<b>Rinta Perkins</b> <sup>(1)</sup>	1	1		1	1	1	1		1	1	1		90%	<b>90%</b>
<b>NON-VOTING</b>															
Town of Danville	Chris McCann	1				1	1	1	1						
City of San Ramon	Steven Spedowski	1			1	1		1	1	1	1	1			
City of Clayton	Laura Hoffmeister					1									
<b>PROGRAM STAFF</b>															
	Tom Dalziel	x	x		x	x	x	x	x	x	x	x			
	Rob Carson*	---				x	x	---	---	---	---	---			
	Beth Baldwin	---						x	x		x	x			
	Lucile Paquette	---	---		---	---	---	---		x	x	x			
	Deanna Constable	---	---		---	---	---	x							
	Fan Ventura	x	x		x	x	x	x	x	x	x	x			

<sup>(1)</sup> Chairperson, <sup>(2)</sup> Vice-Chairperson, <sup>(3)</sup> Meeting cancelled

\*Members left the Program during the fiscal year.



**DEVELOPMENT COMMITTEE  
FY 2013-14 ATTENDANCE ROSTER**

MUNICIPALITY	REPRESENTATIVE	JUL	AUG <sup>(3)</sup>	SEP	OCT	NOV <sup>(3)</sup>	DEC	JAN <sup>(3)</sup>	FEB	MAR <sup>(3)</sup>	APR	MAY <sup>(3)</sup>	JUN	INDIV % ATT	MUNI % ATT
	Suzy Edwards												1	14%	
City of Walnut Creek	<b>Carlton Thompson</b>			1					1				1	43%	<b>86%</b>
	Michael Hawthorne	1			1		1							43%	
	Diana Walker													0%	
<b>PROGRAM STAFF</b>															
	Tom Dalziel	1					1								
	Francesca Parella	1													
	Dan Cloak	1		1	1		1		1		1		1		

(1) Chairperson, (2) Vice-Chairperson, (3) Meeting Cancelled

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**MANAGEMENT COMMITTEE  
FY 2013-14 ATTENDANCE ROSTER**

MUNICIPALITY	REPRESENTATIVE	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	MAR	APR	MAY	JUN	INDIV	MUNI
										12***	19				% ATT	% ATT
City of Antioch	<b>Phil Hoffmeister</b> <sup>(2)</sup>	1	1	1	1	1		1			1	1	1	1	83%	<b>83%</b>
	Ron Bernal														0%	
City of Brentwood	<b>Jack Dhaliwal</b>	1	1	1	1		1	1	1	1	1		1	1	83%	<b>83%</b>
	Miki Tsubota														0%	
	Dee Boskovic*					1										
	Jeff Dowling*											1				
City of Clayton	<b>Laura Hoffmeister</b>	1	1	1	1	1	1	1		1	1		1	1	83%	<b>83%</b>
City of Concord	<b>Dan Sequeira</b>	1	1	1		1		1	1		1	1	1	1	83%	<b>92%</b>
	Frank Kennedy				1										8%	
Town of Danville	<b>Chris McCann</b>	1	1	1	1	1	1	1	1	1	1	1	1	1	100%	<b>100%</b>
	Michael Stella														0%	
City of El Cerrito	Garth Schultz											1			8%	<b>100%</b>
	<b>Stephen Pree</b>	1	1	1	1	1	1	1	1		1		1	1	92%	
City of Hercules	John McGuire		1		1	1	1	---	---	---	---	---	---	---	33%	<b>67%</b>
	<b>Jose Pacheco</b>							1	1		1			1	33%	
City of Lafayette	<b>Donna Feehan</b>	1	1	1	1	1	1	1	1	1	1	1		1	92%	<b>92%</b>
	Ron Lefler														0%	
City of Martinez	<b>Khalil Yowakim</b>	1	1	1	1	1	1	1	1	1	1	1		1	92%	<b>92%</b>
	Tim Tucker														0%	
Town of Moraga	<b>Edric Kwan</b>					1	1							1	33%	<b>92%</b>
	Lawrence Tam							1							8%	
	Frank Kennedy	1	1		1				1			1	1		50%	
City of Oakley	<b>Keith Coggins</b>	1	1		1		1		1	1	1			1	58%	<b>83%</b>
	Frank Kennedy					1		1				1			25%	
City of Orinda	<b>Wendy Wellbrock</b>	1	1	1	1	1	1	1	1	1	1	1		1	92%	<b>92%</b>
	Larry Theis														0%	
	Charles Swanson														0%	
City of Pinole	<b>Dean Allison</b>		1		1			1	1				1		42%	<b>42%</b>
City of Pittsburg	<b>Jolan Longway</b>	1	1	1	1	1	1		1	1		1	1	1	83%	<b>83%</b>
	Laura Wright														0%	
City of Pleasant Hill	<b>Rod Wui</b>	1	1	1	1		1	1	1	1	1	1		1	83%	<b>83%</b>
City of Richmond	<b>Lynne Scarpa</b>	1	1	1	1	1	1	1	1		1		1	1	92%	<b>100%</b>

**MANAGEMENT COMMITTEE  
FY 2013-14 ATTENDANCE ROSTER**

MUNICIPALITY	REPRESENTATIVE	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	MAR	APR	MAY	JUN	INDIV	MUNI
										12***	19				% ATT	% ATT
	Joanne Le											1			8%	
City of San Pablo	<b>Karineh Samkian</b>	1	1		1	1	1	1	1	1	1	1			75%	<b>92%</b>
	Jen Jackson											1	1	1	33%	
City of San Ramon	<b>Steven Spedowski</b>	1	1	1	1	1	1	1	1	1	1	1	1	1	100%	<b>100%</b>
	Robin Bartlett														0%	
City of Walnut Creek	<b>Rinta Perkins</b> <sup>(1)</sup>	1	1	1	1	1	1	1	1	1	1		1		83%	<b>92%</b>
	Steve Waymire														0%	
	Carlton Thompson													1	8%	
Contra Costa County	<b>Cece Sellgren</b>	1	1	1	1	1	1	1	1	1	1	1	1		92%	<b>92%</b>
	Julie Bueren														0%	
	Mike Carlson														0%	
	Tim Jensen														0%	
Flood Control	<b>Mike Carlson</b>	1	1		1	1	1	1	1			1	1	1	83%	<b>83%</b>
	Tim Jensen														0%	
<b>PROGRAM STAFF</b>																
	Tom Dalziel	x	x	x	x	x	x	x	x	x	x	x	x	x		
	Elisa Wilfong	x	---	---	---	---	---	---	---	---	---	---	---	---		
	Rob Carson	---	x		x	x	---	---	---	---	---	---	---	---		
	Beth Baldwin	---	x	x	x	x	x	x	x		x	x	x	x		
	Lucile Paquette	---	---	---	---	---	---	---	x	x	x	x	x	x		
	Tracy Hein	x	x	x	x	---	---	---	---	---	---	---	---	---		
	Deanna Constable	---	---	---	---	---	---	x	x	x	x	x	x	x		
	Fan Ventura	x	x	x	x	x	x	x	x	x	x	x	x	x		
	Khalil Abusaba	x					x	x	x	x		x				
	Dan Cloak	x	x		x	x	x	x	x		x	x	x	x		

<sup>(1)</sup> Chairperson      <sup>(2)</sup> Vice- Chairperson

\*\*Both Primary and Alternate attended the same meeting; attendance credit goes to Primary representative.

\*\*\*Special meeting - not counted in totals.

**MONITORING COMMITTEE  
ATTENDANCE ROSTER FY 2013-14**

MUNICIPALITY	REPRESENTATIVE	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	INDIV % ATT	MUNI % ATT
City of Antioch	<b>Phil Hoffmeister<sup>(2)</sup></b>	1	1		1	1	1	1	1	1	1		1	83%	<b>83%</b>
	Julie Haas-Wajdowicz													0%	
County Flood Control	<b>Cece Sellgren<sup>(1)</sup></b>	1			1		1	1		1	1	1	1	67%	<b>83%</b>
	Mike Carlson						1		1					17%	
	Michele Mancuso					1	1		1	1				33%	
	John Steere					1								8%	
City of Pittsburg	<b>Alfredo Hurtado</b>		1	1		1	1	1	1	1		1	1	75%	<b>92%</b>
	Jolan Longway	1									1			17%	
City of Richmond	<b>Lynne Scarpa</b>		1	1	1	1	1	1	1	1			1	75%	<b>92%</b>
	Joanne Le	1									1			17%	
City of San Pablo	<b>Karineh Samkian</b>	1	1	1	1	1	1	1	1	1	1	1		92%	<b>92%</b>
	Adele Ho													0%	
	Jen Jackson									1	1			17%	
<b>NON-VOTING</b>															
City of Pinole	Dean Allison								1						
<b>PROGRAM STAFF</b>															
Elisa Wilfong**		x	---	---	---	---	---	---	---	---	---	---	---		
Rob Carson**		---	x	x	x	x	x	---	---	---	---	---	---		
Lucile Paquette		---	---	---	---	---	---	---	---	x	x	x	x		
Fan Ventura			x		x		x	x	x	x	x	x	x		
Khalil Abusaba (consultant)		x	x	x	x	x	x	x	x	x	x	x	x		
Tom Dalziel							x	x		x			x		

\*\*Employee left Program during the fiscal year.

(1) Chair (2) Vice Chair

**MUNICIPAL OPERATIONS COMMITTEE  
FY 2013-14 QUARTERLY ATTENDANCE ROSTER**

<b>MUNICIPALITY</b>	<b>REPRESENTATIVE</b>	<b>JUL</b>	<b>OCT</b>	<b>JAN</b>	<b>APR</b>	<b>INDIV % ATT</b>	<b>MUNI % ATT</b>
City of Antioch	<b>Cleveland Porter</b>	1				25%	<b>50%</b>
	Phil Hoffmeister	1		1		50%	
City of Brentwood	<b>Jeff Cowling</b>	1	1	1	1	100%	<b>100%</b>
	Kelly Martinez						
City of Concord	<b>Joe Tagliaboschi</b>	1		1		50%	<b>50%</b>
	Dan Sequeira						
Contra Costa County	<b>Pat Giles/ Margie Valdez</b>			1	1	50%	<b>75%</b>
	Michele Mancuso			1	1	50%	
	Cece Sellgren	1				25%	
City of El Cerrito	<b>Stephen Pree</b>	1	1		1	75%	<b>100%</b>
	Bill Driscoll						
	Garth Schultz			1		25%	
City of Hercules	<b>Glenn Moniz</b>	1	1	1	1	100%	<b>100%</b>
	Jeff Brown						
City of Lafayette	<b>David Terhune</b>	1	1	1	1	100%	<b>100%</b>
	Ron Lefler						
City of Pinole	<b>Kim Odom</b>	1	1	1	1	100%	<b>100%</b>
	Tim Harless	1	1			50%	
City of Pittsburg	<b>Jolan Longway</b>	1	1	1	1	100%	<b>100%</b>
	Ramona Anderson						
City of Richmond	<b>Joanne Le<sup>(2)</sup></b>	1	1	1	1	100%	<b>100%</b>
	Lynne Scarpa						
City of San Ramon	<b>Steven Spedowski<sup>(1)</sup></b>	1	1		1	75%	<b>75%</b>
	Patrick Gutierrez						
City of Walnut Creek	<b>John Johnston</b>						<b>75%</b>
	Rich Payne						
	Rinta Perkins	1				25%	
	Thomas Henry			1	1	50%	
<b>NON-VOTING</b>							
Town of Danville	Chris McCann	1			1		
<b>PROGRAM STAFF</b>							
Elisa Wilfong		X	----	----	----		
Beth Baldwin		----	X	X	X		
Fan Ventura		X	X				

(1) Chairperson, (2) Vice-Chairperson,

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(3) Meeting Cancelled

**PUBLIC INFORMATION/PARTICIPATION COMMITTEE  
FY 2013-14 ATTENDANCE ROSTER**

MUNICIPALITY	REPRESENTATIVE	JUL	AUG	SEP	OCT	NOV <sup>(3)</sup>	DEC	JAN	FEB	MAR	APR	MAY	JUN	INDIV % ATT	MUNI % ATT
City of Antioch	<b>Julie Haas-Wajdowicz</b> <sup>(1)</sup>	1	1	1	1		1	1	1	1	1		1	91%	<b>91%</b>
	Phil Hoffmeister													0%	
CCC Flood Control District	<b>Dan Jordan</b> <sup>(2)</sup>	1	1	1	1		1	1	1	1	1	1		91%	<b>100%</b>
	Cece Sellgren													0%	
	Michele Mancuso						1	1					1	27%	
City of Pittsburg	<b>Laura Wright</b>	1	1	1	1		1	1		1	1	1	1	91%	<b>91%</b>
	Jolan Longway													0%	
City of Richmond	<b>Lynne Scarpa</b>	1		1	1		1		1	1	1		1	73%	<b>82%</b>
	Joanne Le		1											9%	
City of Walnut Creek	<b>Rinta Perkins</b>	1		1	1		1		1	1		1		64%	<b>100%</b>
	Michael Hawthorne		1					1			1		1	36%	
<b>PROGRAM STAFF</b>															
	Tracy Hein*	x	x	x	x	----	----	----	----	----	----	----	----		
	Deanna Constable	----	----	----	----	----	----	x	x	x	x	x	x		
	Fan Ventura						x	x							
	Tom Dalziel				x		x	x	x	x	x	x	x		
	Rob Carson*		x												
	Beth Baldwin			x											

(1) Chairperson, (2) Vice-Chairperson, (3) Meeting Cancelled

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\*Employee left the Program during the fiscal year.



June 2, 2014

Bruce H. Wolfe, Executive Officer  
California Regional Water Quality Control Board  
San Francisco Bay Region  
1515 Clay Street, Suite 1400  
Oakland, CA 94612

**Subject: Transmittal of Report of Waste Discharge**

Dear Mr. Wolfe:

Please accept the enclosed Report of Waste Discharge submitted by the Contra Costa Clean Water Program on behalf of its Permittees in accordance with Provision C.19 in the Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit (Order R2-2009-0074, NPDES Permit No. CAS612008) issued by the San Francisco Bay Regional Water Quality Control Board on October 14, 2009.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Very truly yours,

A handwritten signature in blue ink, appearing to read "Th. E. Dalziel".

Thomas E. Dalziel  
Program Manager

Enclosure

c: Tom Mumley, SFBRWQCB, Assistant Executive Officer  
Dale Bowyer, SFBRWQCB, Senior Water Resource Control Engineer  
Selina Louie, SFBRWQCB, Water Resource Control Engineer  
Rinta Perkins, CCCWP, Management Committee Chair

---

**Report of Waste Discharge  
Application for Reissuance of Municipal Regional  
Stormwater NPDES Permit  
Order R2-2011-0083 Amending Order R2-2009-0074  
NPDES Permit No. CAS612008**

***Applicants:***

- Cities of Clayton, Concord, El Cerrito, Hercules, Lafayette, Martinez, Oakley, Orinda, Pinole, Pittsburg, Pleasant Hill, Richmond, San Pablo, San Ramon, and Walnut Creek;
- Towns of Danville and Moraga;
- Contra Costa County; and
- Contra Costa County Flood Control and Water Conservation District

***Prepared for:***

State of California, San Francisco Bay Regional Water Quality Control Board  
Oakland, California

***Submitted by:***

Contra Costa Clean Water Program

June 2014

---



## APPLICATION/REPORT OF WASTE DISCHARGE GENERAL INFORMATION FORM FOR WASTE DISCHARGE REQUIREMENTS OR NPDES PERMIT



### I. FACILITY INFORMATION

#### A. Facility:

Name: Contra Costa Clean Water Program - Municipal Separate Storm Sewer System			
Address: 255 Glacier Drive			
City: Martinez	County: Contra Costa	State: CA	Zip Code: 94553
Contact Person: c/o CCCWP, Thomas E. Dalziel		Telephone Number: (925) 313-2392	

#### B. Facility Owner:

Name: See Table 1 provided in Supplemental Information.			Owner Type (Check One)	
Address:			1. <input type="checkbox"/> Individual	2. <input type="checkbox"/> Corporation
City:	State:	Zip Code:	3. <input checked="" type="checkbox"/> Governmental Agency	4. <input type="checkbox"/> Partnership
			5. <input type="checkbox"/> Other: _____	
Contact Person:		Telephone Number:	Federal Tax ID:	

#### C. Facility Operator (The agency or business, not the person):

Name: See Table 1 provided in Supplemental Information.			Operator Type (Check One)	
Address:			1. <input type="checkbox"/> Individual	2. <input type="checkbox"/> Corporation
City:	State:	Zip Code:	3. <input checked="" type="checkbox"/> Governmental Agency	4. <input type="checkbox"/> Partnership
			5. <input type="checkbox"/> Other: _____	
Contact Person:		Telephone Number:		

#### D. Owner of the Land:

Name: See Table 1 provided in Supplemental Information.			Owner Type (Check One)	
Address:			1. <input type="checkbox"/> Individual	2. <input type="checkbox"/> Corporation
City:	State:	Zip Code:	3. <input checked="" type="checkbox"/> Governmental Agency	4. <input type="checkbox"/> Partnership
			5. <input type="checkbox"/> Other: _____	
Contact Person:		Telephone Number:		

#### E. Address Where Legal Notice May Be Served:

Address: See Table 1 provided in Supplemental Information.		
City:	State:	Zip Code:
Contact Person:	Telephone Number:	

#### F. Billing Address:

Address: See Table 1 provided in Supplemental Information		
City:	State:	Zip Code:
Contact Person:	Telephone Number:	



**APPLICATION/REPORT OF WASTE DISCHARGE  
GENERAL INFORMATION FORM FOR  
WASTE DISCHARGE REQUIREMENTS OR NPDES PERMIT**



**II. TYPE OF DISCHARGE**

Check Type of Discharge(s) Described in this Application (A or B):

- A. WASTE DISCHARGE TO LAND       B. WASTE DISCHARGE TO SURFACE WATER

**Check all that apply:**

<input type="checkbox"/> Domestic/Municipal Wastewater Treatment and Disposal	<input type="checkbox"/> Animal Waste Solids	<input type="checkbox"/> Animal or Aquacultural Wastewater
<input type="checkbox"/> Cooling Water	<input type="checkbox"/> Land Treatment Unit	<input type="checkbox"/> Biosolids/Residual
<input type="checkbox"/> Mining	<input type="checkbox"/> Dredge Material Disposal	<input type="checkbox"/> Hazardous Waste (see instructions)
<input type="checkbox"/> Waste Pile	<input type="checkbox"/> Surface Impoundment	<input type="checkbox"/> Landfill (see instructions)
<input type="checkbox"/> Wastewater Reclamation	<input type="checkbox"/> Industrial Process Wastewater	<input checked="" type="checkbox"/> Storm Water
<input type="checkbox"/> Other, please describe: _____		

**III. LOCATION OF THE FACILITY**

Describe the physical location of the facility. Contra Costa County. See Figure 1 for creeks and drainages.

<p>1. Assessor's Parcel Number(s) Facility: Discharge Point:</p>	<p>2. Latitude Facility: Discharge Point:</p>	<p>3. Longitude Facility: Discharge Point:</p>
--	---	--

**IV. REASON FOR FILING**

New Discharge or Facility       Changes in Ownership/Operator (see instructions)

Change in Design or Operation       Waste Discharge Requirements Update or NPDES Permit Reissuance

Change in Quantity/Type of Discharge       Other: \_\_\_\_\_

**V. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)**

Name of Lead Agency: San Francisco Bay Regional Water Quality Control Board

Has a public agency determined that the proposed project is exempt from CEQA?     Yes       No

If Yes, state the basis for the exemption and the name of the agency supplying the exemption on the line below.

Basis for Exemption/Agency: CEQA Statutory Exemption Class 8-regulatory actions for protection of environment.

Has a "Notice of Determination" been filed under CEQA?       Yes       No

If Yes, enclose a copy of the CEQA document, Environmental Impact Report, or Negative Declaration. If no, identify the expected type of CEQA document and expected date of completion.

Expected CEQA Documents:

<input type="checkbox"/> EIR	<input type="checkbox"/> Negative Declaration	Expected CEQA Completion Date: _____
------------------------------	---	--------------------------------------



**APPLICATION/REPORT OF WASTE DISCHARGE  
GENERAL INFORMATION FORM FOR  
WASTE DISCHARGE REQUIREMENTS OR NPDES PERMIT**



**VI. OTHER REQUIRED INFORMATION**

Please provide a COMPLETE characterization of your discharge. A complete characterization includes, but is not limited to, design and actual flows, a list of constituents and the discharge concentration of each constituent, a list of other appropriate waste discharge characteristics, a description and schematic drawing of all treatment processes, a description of any Best Management Practices (BMPs) used, and a description of disposal methods.

Also include a site map showing the location of the facility and, if you are submitting this application for an NPDES permit, identify the surface water to which you propose to discharge. Please try to limit your maps to a scale of 1:24,000 (7.5' USGS Quadrangle) or a street map, if more appropriate.

**VII. OTHER**

Attach additional sheets to explain any responses which need clarification. List attachments with titles and dates below:  
See Part VI and Part VII provided in Supplemental Information.

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You will be notified by a representative of the RWQCB within 30 days of receipt of your application. The notice will state if your application is complete or if there is additional information you must submit to complete your Application/Report of Waste Discharge, pursuant to Division 7, Section 13260 of the California Water Code.

**VIII. CERTIFICATION**

"I certify under penalty of law that this document, including all attachments and supplemental information, were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

Print Name: Thomas E. Dalziel Title: CCCWP Program Manager  
Signature: *Thomas E. Dalziel* Date: June 2, 2014

**FOR OFFICE USE ONLY**

Date Form 200 Received:	Letter to Discharger:	Fee Amount Received:	Check #:

# **Supplemental Information**

**to the Report of Waste Discharge  
Stormwater NPDES Permit Order R-2-2011-0083  
Amending Order R2-2009-0074  
NPDES Permit No. CAS612008**

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### FIGURE

Figure 1	Contra Costa Clean Water Program Site Map Showing Surface Water
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**PART I. SECTIONS A-F: FACILITY INFORMATION**

Table 1 below presents the following facility information for boxes A-F in Form 200:

- A. Facility
- B. Facility Owner
- C. Facility Operator
- D. Owner of the Land
- E. Address Where Legal Notice May Be Served
- F. Billing Address

**TABLE 1: FACILITY OWNER AND OPERATOR INFORMATION FOR THE MUNICIPAL SEPARATE STORM SEWER SYSTEM IN CONTRA COSTA COUNTY**

Facility Owner and Operator Information			Legal Notice Address Information	
Agency and Address	City Manager/ Owner	Federal Tax ID Number	Stormwater Representative (Primary)	Stormwater Representative (Alternate)
<b>City of Clayton</b> 6000 Heritage Trail Clayton, CA 94517	Gary A. Napper (925) 673-7300	94-1568979	Laura Hoffmeister Assistant to the City Manager (925) 673-7308 <a href="mailto:lhoffmeister@ci.clayton.ca.us">lhoffmeister@ci.clayton.ca.us</a>	No alternate at this time.
<b>City of Concord</b> 1950 Parkside Drive Concord, CA 94519	Valerie Barone (925) 671-3150	94-6000315	Dan Sequeira Senior Civil Engineer (925) 671-3031 <a href="mailto:daniel.sequeira@cityofconcord.org">daniel.sequeira@cityofconcord.org</a>	Frank Kennedy Stormwater Consultant (925) 932-7857 <a href="mailto:fjk@fjkennedy.com">fjk@fjkennedy.com</a>
<b>Contra Costa County</b> 651 Pine St. Martinez, CA 94553	David Twa (925) 335-1080	94-6000509	Cece Sellgren Stormwater Manager (925) 313-2296 <a href="mailto:csell@pw.cccounty.us">csell@pw.cccounty.us</a>	Julia Bueren Public Works Director (925) 313-2201 <a href="mailto:jbueren@pw.cccounty.us">jbueren@pw.cccounty.us</a>  No second alternate at this time.
<b>CCC Flood Control &amp; Water Conservation District</b> 255 Glacier Drive Martinez, CA 94553	Julia Bueren Chief Engineer (925) 313-2201	94-6000509	Mike Carlson Supervising Civil Engineer (925) 313-2321 <a href="mailto:mcarl@pw.cccounty.us">mcarl@pw.cccounty.us</a>	Tim Jensen Senior Civil Engineer (925) 313-2390 <a href="mailto:tjens@pw.cccounty.us">tjens@pw.cccounty.us</a>

**TABLE 1: FACILITY OWNER AND OPERATOR INFORMATION FOR THE MUNICIPAL SEPARATE STORM SEWER SYSTEM IN CONTRA COSTA COUNTY**

Facility Owner and Operator Information			Legal Notice Address Information	
Agency and Address	City Manager/ Owner	Federal Tax ID Number	Stormwater Representative (Primary)	Stormwater Representative (Alternate)
<b>Town of Danville</b> 510 La Gonda Way Danville, CA 94526	Joe Calabrigo (925) 314-3388	94-2834842	Chris McCann Clean Water Program Coordinator (925) 314-3342 <a href="mailto:cmccann@danville.ca.gov">cmccann@danville.ca.gov</a>	Steve Lake Development Services Director (925) 314-3319 <a href="mailto:slake@danville.ca.gov">slake@danville.ca.gov</a>  Michael Stella Senior Civil Engineer (925) 314-3316 <a href="mailto:mstella@danville.ca.gov">mstella@danville.ca.gov</a>
<b>City of El Cerrito</b> 10890 San Pablo Ave. El Cerrito, CA 94530	Scott Hanin (510) 215-4300	94-6000325	Stephen Prée Environmental Programs Manager/City Arborist (510) 215-4333 <a href="mailto:spre@ci.el-cerrito.ca.us">spre@ci.el-cerrito.ca.us</a>	
<b>City of Hercules</b> 111 Civic Drive Hercules, CA 94547	Phil Batchelor (Interim CM) (510) 799-8200	94-6027345	Jose Pacheco Assistant Civil Engineer (510) 799-8247 <a href="mailto:jpacheco@ci.hercules.ca.us">jpacheco@ci.hercules.ca.us</a>	
<b>City of Lafayette</b> 3675 Mt. Diablo Blvd. #210 Lafayette, CA 94549	Steven Falk (925) 284-1968	94-1674826	Donna Feehan Public Works Administrative Analyst (925) 256-1864 <a href="mailto:dfeehan@ci.lafayette.ca.us">dfeehan@ci.lafayette.ca.us</a>	Ron Lefler Public Works Services Manager (925) 934-3908 <a href="mailto:rlefler@ci.lafayette.ca.us">rlefler@ci.lafayette.ca.us</a>
<b>City of Martinez</b> 525 Henrietta Street Martinez, CA 94553	Anna Gwyn Simpson (925) 372-3505	94-60003670	Tim Tucker City Engineer (925) 372-3562 <a href="mailto:ttucker@cityofmartinez.org">ttucker@cityofmartinez.org</a>	Khalil Yowakim Associate Civil Engineer (925) 372-3569 <a href="mailto:kyowakim@cityofmartinez.org">kyowakim@cityofmartinez.org</a>
<b>Town of Moraga</b> 329 Rheem Blvd. Moraga, CA 94556	Jill Keimach (925) 888-7022	94-2275991	Edric Kwan Public Works Director/Town Engineer (925) 888-7025 <a href="mailto:ekwan@moraga.ca.us">ekwan@moraga.ca.us</a>	Frank Kennedy Stormwater Consultant (925) 932-7857 <a href="mailto:fjk@fjkennedy.com">fjk@fjkennedy.com</a>

**TABLE 1: FACILITY OWNER AND OPERATOR INFORMATION FOR THE MUNICIPAL SEPARATE STORM SEWER SYSTEM IN CONTRA COSTA COUNTY**

Facility Owner and Operator Information			Legal Notice Address Information	
Agency and Address	City Manager/ Owner	Federal Tax ID Number	Stormwater Representative (Primary)	Stormwater Representative (Alternate)
<b>City of Orinda</b> 22 Orinda Way Orinda, CA 94563	Janet Keeter (925) 253-4200	68-0069675	Charles Swanson Director of PW & Engineering Services (925) 253-4252 <a href="mailto:cswanson@cityoforinda.org">cswanson@cityoforinda.org</a>	Wendy Wellbrock Associate Civil Engineer (925) 253-4251 <a href="mailto:wwellbrock@cityoforinda.org">wwellbrock@cityoforinda.org</a>  Larry Theis Senior Civil Engineer (925) 253-4260 <a href="mailto:ltheis@cityoforinda.org">ltheis@cityoforinda.org</a>
<b>City of Pinole</b> 2131 Pear Street Pinole, CA 94564	Belinda Espinosa (510) 724-9000	94-6000394	Dean Allison Director of Public Works/City Engineer (510) 724-9010 <a href="mailto:dallison@ci.pinole.ca.us">dallison@ci.pinole.ca.us</a>	None
<b>City of Pittsburg</b> 65 Civic Avenue Pittsburg, CA 94565	Joe Sbranti (925) 252-4850	94-6000395	Jolan Longway Civil Engineer II (925) 252-4803 <a href="mailto:jlongway@ci.pittsburg.ca.us">jlongway@ci.pittsburg.ca.us</a>	Laura Wright Administrative Officer (925) 252-4114 <a href="mailto:lwright@ci.pittsburg.ca.us">lwright@ci.pittsburg.ca.us</a>  Keith Halvorson Assistant City Engineer (925) 252-4930 <a href="mailto:khalvorson@ci.pittsburg.ca.us">khalvorson@ci.pittsburg.ca.us</a>
<b>City of Pleasant Hill</b> 100 Gregory Lane Pleasant Hill, CA 94523	June Catalano (925) 671-5267	94-1527260	Rod Wui Sr. Civil Engineer (925) 671-5261 <a href="mailto:rwui@ci.pleasant-hill.ca.us">rwui@ci.pleasant-hill.ca.us</a>	None
<b>City of Richmond</b> 450 Civic Center Plaza Richmond, CA 94804	Bill Lindsay (510) 620-6512	94-6000403	Lynne Scarpa Environmental Manager (510) 307-8135 <a href="mailto:lynne_scarpa@ci.richmond.ca.us">lynne_scarpa@ci.richmond.ca.us</a>	Joanne Le Source Control Inspector (510) 621-1214 <a href="mailto:joanne_le@ci.richmond.ca.us">joanne_le@ci.richmond.ca.us</a>

**TABLE 1: FACILITY OWNER AND OPERATOR INFORMATION FOR THE MUNICIPAL SEPARATE STORM SEWER SYSTEM IN CONTRA COSTA COUNTY**

Facility Owner and Operator Information			Legal Notice Address Information	
Agency and Address	City Manager/ Owner	Federal Tax ID Number	Stormwater Representative (Primary)	Stormwater Representative (Alternate)
<b>City of San Pablo</b> 13831 San Pablo Avenue San Pablo, CA 94806	Matt Rodriguez (510) 215-3016	94-6000423	Karineh Samkian Environmental Programs Analyst (510) 215-3064 <a href="mailto:karinehs@sanpabloca.gov">karinehs@sanpabloca.gov</a>	Jen Jackson Environmental Programs Analyst (510) 215-3066 <a href="mailto:jenj@sanpabloca.gov">jenj@sanpabloca.gov</a>
<b>City of San Ramon</b> 2401 Crow Canyon Road San Ramon, CA 94583	Greg Rogers (925) 973-2530	94-2907633	Steven Spedowfski Senior Analyst (925) 973-2653 <a href="mailto:spedowfski@sanramon.ca.gov">spedowfski@sanramon.ca.gov</a>	Robin Bartlett Division Manager (925) 973-2683 <a href="mailto:rbartlett@sanramon.ca.gov">rbartlett@sanramon.ca.gov</a>  Maria Fierner Engineering Services Director (925) 973-2670 <a href="mailto:mfierner@sanramon.ca.gov">mfierner@sanramon.ca.gov</a>
<b>City of Walnut Creek</b> 1666 N. Main Street Walnut Creek, CA 94596	Ken Nordhoff (925) 943-5812	94-6000450	Rinta Perkins NPDES Program Manager (925) 256-3511 <a href="mailto:perkins@walnut-creek.org">perkins@walnut-creek.org</a>	Carlton Thompson Associate Engineer (925) 943-5800 <a href="mailto:cthompson@walnut-creek.org">cthompson@walnut-creek.org</a>  Steve Waymire City Engineer (925) 256-3507 <a href="mailto:waymire@walnut-creek.org">waymire@walnut-creek.org</a>

**PART II. TYPE OF DISCHARGE**

No supplement to Form 200 needed.

**PART III. LOCATION OF THE FACILITY**

No supplement to Form 200 needed.

**PART IV. REASON FOR FILING**

No supplement to Form 200 needed.

**PART V: CEQA**

No supplement to Form 200 needed.

**PART VI. OTHER REQUIRED INFORMATION**

This section addresses characterization of stormwater discharges from the Contra Costa County Municipal Separate Storm Sewer Systems (MS4s). Design and actual flows are briefly discussed, followed by a list of constituents and the characteristic discharge concentration of each constituent, a list of other appropriate waste discharge characteristics, a description of treatment processes, a description of Best Management Practices (BMPs) used, and a description of disposal methods. Figure 1 shows creeks and drainages in Contra Costa County.

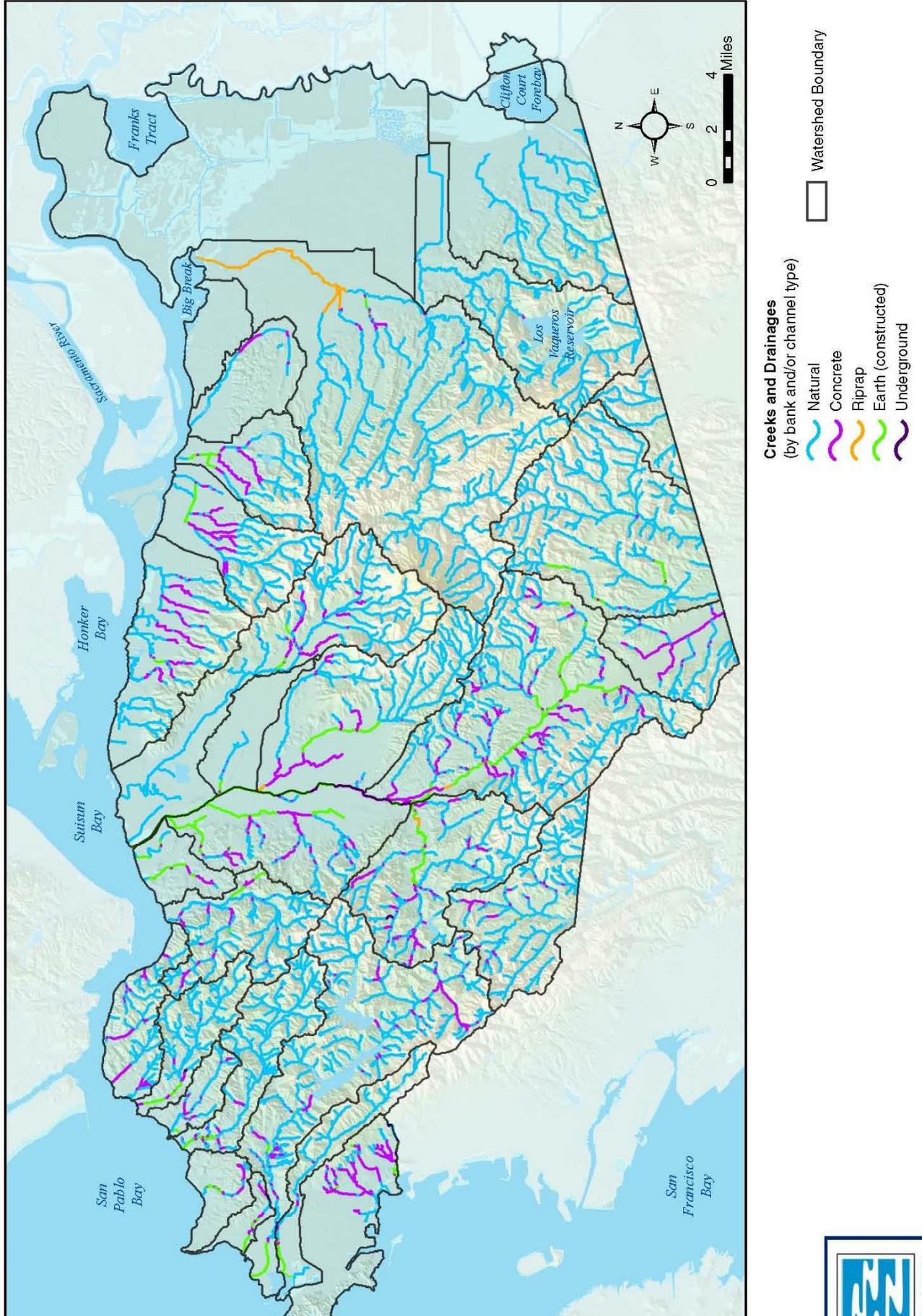


Figure 1. Contra Costa Clean Water Program Site Map Showing Surface Water



## 1.0 DESIGN AND ACTUAL FLOWS

Municipal Separate Storm Sewer Systems (MS4s) in Contra Costa County are designed to convey storm flows to surface water while minimizing flood risk to life and property. Generally, design standards address large events (i.e., 10-year events up to 100-year events, depending on the value of assets at risk). Watershed flows are modeled using the rational method, or other methods, which uses runoff coefficients to account for slope, vegetative cover, and land use. Actual flows are measured in tributary creeks using standardized flow monitoring techniques. Because of the variable nature of storm events and the multitude of conveyances, specific details on design vs. actual stormwater discharge flows are beyond the intent and scope of this Report of Waste Discharge.

## 2.0 CONSTITUENTS AND CHARACTERISTIC DISCHARGE CONCENTRATIONS

Table 2 below lists the constituents that are typically present in the MS4 discharges and the characteristic discharge concentrations.

**TABLE 2: LIST OF CONSTITUENTS AND CHARACTERISTIC CONCENTRATIONS**

Pollutant	Maximum Concentration Observed in Bay Area Urban Creeks <sup>a</sup>	Maximum Concentration Reported in Urban Stormwater	Some of the Factors Affecting Concentrations in Urban Stormwater
Suspended sediment	1,000 mg/L	100 mg/L <sup>b</sup>	Slope, vegetative cover, land use activities, peak channel velocity, erosion control BMPs, street sweeping, channel composition, local geology
Mercury	1,000 ng/L	120 ng/L <sup>c</sup>	Suspended sediment concentrations; mercury concentrations in suspended sediments, atmospheric deposition, mining legacy sources
Polychlorinated biphenyls (PCBs)	176 ng/L	100 ng/L <sup>d</sup>	Suspended sediment concentrations; PCB concentrations in suspended sediments; trackout and wind dispersion from contemporary source areas (e.g. metal recyclers); trackout or discharge from legacy source areas
Trash	See Permittees' Long Term Trash Plans	Not applicable	Proximity to high trash-generation areas, implementation of full trash capture devices or programmatic equivalent
Legacy residential use organophosphate pesticides, e.g., diazinon, chlorpyrifos	6.3 ng/L (diazinon) <sup>e</sup> 6.6 ng/L (chlorpyrifos) <sup>e</sup>	Not available	Consumer and professional use

**TABLE 2: LIST OF CONSTITUENTS AND CHARACTERISTIC CONCENTRATIONS**

<b>Pollutant</b>	<b>Maximum Concentration Observed in Bay Area Urban Creeks<sup>a</sup></b>	<b>Maximum Concentration Reported in Urban Stormwater</b>	<b>Some of the Factors Affecting Concentrations in Urban Stormwater</b>
Contemporary residential use pesticides, e.g., pyrethroids and carbaryls	254 ng/L	Not available	Consumer and professional use
Dissolved copper	20 µg/L	47 µg/L <sup>f</sup>	Untreated roadway runoff
Total selenium	1.6 µg/L	Not available	Not a significant stormwater issue for Contra Costa; seepage in certain areas of the South Bay stormwater tends to dilute selenium that may be present in groundwater
Polynuclear aromatic hydrocarbons (PAHs)	3,352 ng/L	Not available	Vehicle emissions
Polybrominated diphenyl ethers (PBDEs)	3,362 ng/L	Not available	Consumer goods with flame retardants
Oil and grease	Not measured	10 mg/L <sup>b</sup>	Untreated roadway runoff
Fecal coliform	Not measured	70,000 mpn/100 ml <sup>b</sup>	People and domestic and wild animals that live outdoors. Growth in shaded / stagnant waters. Septic leaks and sewage spills.

Table 2 Notes

- a. Bay Area urban creeks as reported by Gilbreath et al. (2014)
- b. Highest median value in stormwater discharges from different land use types as reported by Maestre et al. (2004)
- c. Maximum value in stormwater discharges as reported by CCCWP to the Central Valley Regional Water Quality Control Board (2010b)
- d. Maximum value in Los Angeles Area stormwater discharges as reported by Brown and Caldwell (2011)
- e. Supplemental monitoring information from Marsh Creek provided by CCCWP to CVRWQCB in fulfillment of requirements set forth in Order No. R5-2010-0102 (2010a)
- f. Maximum value as reported by Soller et al. (2005)

**3.0 OTHER APPROPRIATE WASTE DISCHARGE CHARACTERISTICS**

As can be seen from Table 2 above, stormwater discharges are complex mixtures of constituents present in the urban environment, both naturally and from human sources. Another

important characteristic of urban stormwater discharges is their inherently episodic nature. For this reason, comparison of constituent concentrations in stormwater discharges to water quality objectives relies on acute (short-duration) exposure assumptions.

Creek status monitoring helps assess how urban stormwater discharges may affect receiving water quality. The overall quality of water and creek health as impacted by the discharge of urban runoff has been evaluated in Contra Costa County using bioassessment. Bioassessment gives a long-term, integrative picture of watershed health that accounts for pollutants, channel modification, flows, and other factors that may be unrelated to urban runoff discharges. Table 3 summarizes bioassessment and water quality monitoring reports submitted from 2001 to present.

**TABLE 3: CCCWP BIOASSESSMENT & WATER QUALITY MONITORING REPORTS**

<b>Year</b>	<b>Reports</b>	<b>Authors</b>
2002-2011 (Annually)	Contra Costa Monitoring and Assessment Plan (CCMAP) - Rapid Bioassessment Project Reports.	Cressey, S., and C.A. Sommers, 2002 - 2006.  Eisenberg, Olivieri and Associates (EOA), 2007.  Armand Ruby Consulting, 2008-2011.
2013	Regional Urban Creeks Status Monitoring Report, Water Year 2012 (October 1, 2011–September 30, 2012). Prepared for BASMAA by EOA, Inc. on behalf of the Santa Clara Urban Runoff Pollution Prevention Program and the San Mateo Countywide Water Pollution Prevention Program and Armand Ruby Consulting on behalf of the Contra Costa Clean Water Program.	BASMAA
2014	Integrated Monitoring Report, Part A, Appendix A.1: Creek Status Monitoring Report—Regional/Probabilistic Parameters Water Years 2012 and 2013 (October 1, 2011–September 30, 2013)	Armand Ruby Consulting

### 3.1 DESCRIPTION OF TREATMENT PROCESSES

Low Impact Development (LID) and full trash capture devices are the most common treatment systems employed in Contra Costa County. Tree-box-type high flowrate biofilters and vault-based high flowrate media filters are also used on a less frequent basis. LID is required on most all regulated new and redevelopment projects per Provision C.3.

1. **Low Impact Development (LID)** infiltrates a portion of runoff flows and treats remaining runoff by slow percolation through a biologically active matrix of soil and plant roots. LID is the preferred method of stormwater quality management in Contra Costa County. Schematics and descriptions of LID designs and facilities are presented in the Contra Costa Clean Water Program's *Stormwater C.3 Guidebook*, 6<sup>th</sup> Edition (CCCWP, 2012)

2. **Full Trash Capture Devices** are design to trap all particles retained by a 5 mm mesh screen and have a design treatment capacity of not less than the peak flow rate resulting from a one-year, one-hour storm in the sub-drainage area.
3. **Tree-box-type high flowrate biofilters and vault-based high flowrate media filters** are allowable treatment systems on certain smart growth, high density, and transit-oriented developments per Provision C.3.ii.

### 3.2 BEST MANAGEMENT PRACTICES USED

Permittees of the CCCWP implement the following Best Management Practices (BMPs) to minimize pollutants in urban runoff discharges:

1. **Source Control** stops or reduces pollutant discharges by eliminating them from uses where they may be discharged into the MS4. Recent examples include ordinances banning plastic bags, which have been adopted by some Permittees to address trash reduction requirements. Re-registration by USEPA of diazinon and chlorpyrifos to limit use to registered professional applications may account for the notable absence of toxicity to water fleas reported in the CCCWP Integrated Monitoring Report, Part A, Appendix A.1 (ARC, 2014). CCCWP's current stressor source identification study is evaluating whether toxicity to amphipods is caused by current use of pyrethroids; if so, responsive actions would include promoting similar product re-registration efforts.
2. **Diversion** of urban runoff discharges into sanitary sewers. Pilot tests of diverting dry-weather and first-flush stormwater are being evaluated but are not showing promising initial results as a sustainable BMP.
3. **Prohibition** of non-stormwater discharges into the MS4 is established by ordinance in each Permittee's jurisdiction.
4. **Illicit Discharge Detection and Elimination** programs implement prohibitions by providing an active program of surveillance and response to complaints.
5. **Public Education and Outreach** communications to raise public awareness and change behaviors that can affect water quality.
6. **Inspection** of businesses and construction sites provides oversight of compliance with required guidelines for housekeeping and pollution prevention.
7. **Enforcement** provides Permittees with legal authority to correct egregious or recurrent ordinance violations.
8. **Referral** to the Water Board or other appropriate authorities where individual parcels are known or suspected to be pollutant sources and where successful enforcement is beyond the capabilities or resources of the local municipal government.

### 3.3 DESCRIPTION OF DISPOSAL METHODS

Stormwater is typically discharged either from the MS4 into creeks that flow into San Francisco Bay and the Sacramento San Joaquin River Delta, or directly into the Bay/Delta.

## PART VII. OTHER

The CCCWP implements a coordinated countywide program of water quality control within the jurisdiction of both the San Francisco Bay Regional Water Quality Control Board (Region 2) and the Central Valley Bay Regional Water Quality Control Board (Region 5). The requirements of that program in Region 2 are established by the Municipal Regional Stormwater NPDES Permit

(MRP) Order No. R2-2009-0074 and its amendment No. R2-2011-0083. Based on the experiences of implementing the provisions of the MRP, the Permittees have gained insight into its workings that are of value in the reissuance of the next MRP.

The Permittees developed the following guiding principles from which to develop reissuance recommendations:

1. Establish priorities focused on actions that will improve water quality.
2. Identify and prioritize actions that integrate multiple water quality benefits.
3. Phase tasks as necessary consistent with funding constraints.
4. Reorganize presentation of the Provisions and rewrite language where necessary to reduce ambiguity.
5. Identify and eliminate outdated or completed tasks and reduce or eliminate the “less beneficial tasks” in the current permit, including burdensome and ineffective data collection and reporting requirements.
6. Offset new programs or initiatives with equivalent reductions in effort elsewhere in the MRP.

Based on these guiding principles, the Permittees’ highest priority concerns and recommendations for MRP reissuance are the provisions on New Development, Monitoring, Pesticides Toxicity Control, Trash Load Reduction, Pollutants of Concern (POC), and Annual Reporting.

In Sections 1.0 through 7.0 below, CCCWP presents current practices, issues, priorities, and recommended updates for the highest-priority concerns.

## **1.0 NEW DEVELOPMENT (PROVISION C.3.)**

Bay Area MS4 Permittees have led California in implementing LID on new developments. This trend began with BASMAA’s development and publication of *Start at the Source: Residential Site Planning & Design Guidance Manual for Stormwater Quality Protection* (BASMAA, 1997) and *Start at the Source: Design Guidance Manual for Stormwater Quality Protection* (BASMAA, 1999).

In 2003, the Water Board adopted permit amendments that included hydraulic criteria to be used in the design of non-LID treatment facilities (e.g., extended detention basins, sand filters, and hydrodynamic separators). Contra Costa Permittees responded by adapting these criteria to the design of LID features such as bioretention, and published these design criteria in a *Stormwater C.3 Guidebook* (CCCWP, 2005). The Guidebook has since been updated five times (CCCWP, 2012).

The 2003 permit amendment also included hydromodification management requirements. Water Board staff subsequently interpreted these requirements to mandate numeric criteria to be used

in the design of (non-LID) flow-duration basins. Contra Costa Permittees responded by adapting their design criteria for LID features and facilities to provide equivalent hydromodification management effectiveness. In a 2006 permit amendment, the Water Board adopted the non-LID flow duration design criteria and required Contra Costa Permittees to conduct extensive studies to demonstrate that LID facilities could replicate the performance of (non-LID) flow duration basins.

In the 2009 MRP, the Water Board added LID criteria for stormwater treatment for new developments, while maintaining the non-LID criteria for hydromodification management and renewing the requirement that Contra Costa Permittees conduct studies to demonstrate the effectiveness of LID. The CCCWP completed these studies and submitted the results to the Water Board in 2013.

In considering the New Development provisions of a reissued MS4 permit, Contra Costa Permittees note that thousands of LID facilities will be constructed in the coming years under the MRP permit mandate. These facilities will be distributed throughout the urban landscape, effectively disconnecting substantial portions of overall impervious area from creeks and the Bay. The Permittees seek to facilitate the effective, sustainable, long-term operation and maintenance of these LID facilities in the following ways:

1. Emphasizing design and construction of robust, low-maintenance facilities, recognizing that bioretention is the most effective and sustainable method of LID treatment for most development projects.
2. Updating hydromodification and treatment criteria so that both can be addressed through integrated LID landscape features and LID facilities.
3. Shifting the strategy for maintenance toward engaging the public to help ensure that LID facilities are not removed or their operation undermined by alterations.
4. Strategically setting project-size thresholds and requirements to optimize the amount of new or replaced impervious area draining to sustainable LID features and facilities, while considering limitations in municipal resources.
5. Making minor adjustments to the allowance for on-site non-LID treatment on “special projects” as defined in the current MRP.
6. Making it easier to use of off-site LID treatment in the relatively rare cases where that option is more cost-effective and environmentally beneficial.
7. Reducing the time and effort currently devoted to producing Water Board submittals and preparing data for Water Board staff review, and redirect Permittee staff resources to enhancing implementation of LID on new developments.

These objectives, and the technical justification for each, will be addressed in a forthcoming “white paper” to be produced by BASMAA in cooperation with Water Board staff.

With regard to applying new development provisions to streets and roads projects, the Permittees seek to maintain the current definitions and thresholds, while pursuing—in cooperation with the Water Board and other state and regional agencies—a long-term strategy

for green infrastructure, i.e., integrating water-quality features into transportation and drainage projects where feasible.

## **2.0 MONITORING ACTIVITIES (PROVISIONS C.8., C.11., C.12.)**

Three types of monitoring are currently being conducted by CCCWP: (1) creek status monitoring; (2) POC loads monitoring; and (3) pilot studies and projects to monitor BMP effectiveness.

Creek status monitoring requires collection of bioassessment data and other parameters at creek locations throughout the Bay Area, in collaboration with other programs. In Contra Costa County, bioassessment data has been collected annually since 2001. Essentially every watershed in the County has been characterized by bioassessment. Reports of bioassessment and other monitoring studies conducted by CCCWP are listed in Table 3 above.

The creek status monitoring studies produced by CCCWP in the last 13 years tell a convincing story that creek health is generally much poorer in highly modified channels and within highly urbanized watersheds. This is consistent with the findings of Schueler and others (2009), which is that urbanization and the degree of imperviousness are directly related to creek health.

Since every watershed in the County has been characterized, CCCWP Permittees do not see the value in continued bioassessment monitoring. CCCWP proposes to reduce and focus Creek Status monitoring required in the reissued MRP. Resources saved could be applied to implementing projects to improve water quality, as opposed to continued monitoring that would generate data that confirm lessons already learned.

TMDL monitoring for POCs such as mercury and PCBs, addresses base-of-watershed tributary monitoring. It would take decades to detect change in response to upstream water quality improvement projects by this monitoring approach. A key lesson learned during the current MRP is that in order to show progress in attaining load reduction goals set by TMDLs, the point of monitoring needs to be moved closer to the known source areas. Resources currently allocated for tributary monitoring should be reallocated in the coming year to support a reconnaissance approach to identifying “high-opportunity” areas for PCB load reductions. Following the reconnaissance activities anticipated during Fiscal Year 2014–2015, resources saved by eliminating tributary monitoring could potentially be applied to support projects that reduce PCB loads.

Focused effectiveness monitoring of BMPs may have value. The balance of financial resources should be focused on actual planning, design, construction, and operation or water quality improvement projects. Monitoring to generate new information that has regional or statewide benefits should be carried out, to the extent possible, with grant-supported funds.

### **3.0 PESTICIDES TOXICITY CONTROL (PROVISION C.9.)**

Source control is the preferred approach to reduce pesticide-caused toxicity. This is a demonstrated success story for organophosphates such as diazinon and chlorpyrifos, and is the proposed approach for new pesticides that have emerged to replace organophosphates. In the 1990s and early 2000s, diazinon was routinely detected in receiving waters at concentrations high enough to cause toxicity to water fleas. Sales of diazinon for urban uses were eliminated by the end of 2004, and consequently, diazinon and associated diazinon toxicity to water fleas is no longer observed in Bay Area urban creeks. Pyrethroid pesticides have replaced diazinon as residential use pesticides. As noted in the 2014 CCCWP Integrated Monitoring Report, pyrethroids are suspected to be the cause of observed toxicity to amphipods. Based on lessons learned with diazinon, source control through product re-registration is the most effective and efficient approach to addressing impacts from pyrethroids and other consumer-use pesticides.

### **4.0 TRASH REDUCTION (PROVISION C.10.)**

Provision C.10 in the 2009 MRP requires the Permittees to implement control measures and other actions to reduce trash loads from MS4s by 40 percent by 2014, 70 percent by 2017, and 100 percent by 2022. Further, the Permittees are required to install full trash capture devices to treat runoff from an area equivalent to 30 percent of Retail/Wholesale Land that drains to MS4s within their jurisdictions and to conduct annual cleanups of designated “hot spots.” As required, the Permittees submitted Short-Term Trash Loading Reduction Plans and a Baseline Trash Load and Trash Load Reduction Tracking Method in February 2012, and also submitted Long-Term Trash Loading Reduction Plans in February 2014.

The Permittees are implementing control measures and actions to reduce trash. However, their ability to demonstrate compliance, and to select activities that contribute toward compliance, has been hindered by the following factors:

1. Trash loading rates cannot be measured with sufficient precision to determine whether the 40 percent or 70 percent reductions have been achieved. Further, trash loading rates at any particular location vary by orders of magnitude due to wind and other factors. Like all stormwater pollutant loading, trash loading is variable and episodic by nature.
2. The baseline for determining attainment of 40 percent and 70 percent trash reductions should consider pre-MRP conditions, to be fair to communities that have established robust trash control programs prior to adoption of the MRP.
3. It is not possible to distinguish trash conveyed by the MS4 from trash conveyed to the receiving water by wind or direct dumping, including by homeless encampments. Further, in many jurisdictions, creeks flow into storm drains and then into creeks again, blurring the distinction between trash in the MS4 and trash in the receiving water.
4. Mechanical “full-trash capture” devices work in some locations, but not in areas where runoff carries vegetative matter (as in areas with trees or that drain open space), or in areas with limited hydraulic head. Further, these devices are susceptible to clogging and bypass during storms.

The Permittees have worked closely with Water Board staff to address these factors and to develop effective ways to reduce trash and demonstrate compliance. The results of this collaboration are reflected in the Long-Term Trash Reduction Plans submitted in February 2014. The plans delineate areas where trash generation is thought to be relatively high, medium, or low; delineate trash management areas; and, identify actions to be implemented in each trash management area, as well as jurisdiction-wide actions.

For the reissued MRP, the Permittees seek to implement their Long-Term Trash Plans, including the flexibility to update and revise those plans based on changing sources, conditions, and available resources. In particular, the Permittees seek to apply their limited resources to reduce trash and enhance local environmental quality, rather than having their priorities driven by questionable regulatory definitions and one-size fits all requirements.

The Permittees identify the final goal of the trash reduction effort as “no adverse impact on beneficial uses due to trash”, and will continue to work with Water Board staff to develop methods to measure the effectiveness of their trash reduction efforts and to characterize impacts to receiving waters.

## **5.0 POLLUTANTS OF CONCERN (PROVISIONS C.11., C.12., C.13., C.14.)**

Current regulatory drivers such as the PCB and mercury TMDL are compelling CCCWP and other Bay Area stormwater programs to evaluate implementing robust water quality improvement plans at the watershed scale. CCCWP has worked with other Bay Area stormwater programs and the Water Board through the MRP Steering Committee on an approach for developing robust water quality improvement plans.

The first step in the approach is to produce a geographic information system (GIS) analysis of land use by jurisdiction. PCB loads can be estimated based on land use; high PCB concentrations are typically found in older urban and old industrial areas. Within old industrial areas, high-opportunity areas may be identified where controllable sources of PCB-contaminated sediments need to be managed at the parcel scale. High-opportunity areas are identified by following up the GIS / desktop analysis with driving and walking surveys, followed by reconnaissance monitoring. Details of this approach are described in Part C of CCCWP's Integrated Monitoring Report (CCCWP, 2014).

High-opportunity areas located on private lands will be addressed through enforcement or referral, as noted in Part VI above. Attainment of TMDL goals through control of PCB discharges from high-opportunity areas alone is not likely. Rather, water quality improvement plans implemented over large (e.g., up to 20,000 acres) areas of older urban development lands would be necessary to achieve the 90 percent PCB load reduction goals established for urban stormwater by the PCB TMDL.

Treatment of stormwater discharges of such large land areas is beyond the reasonable and foreseeable means of municipalities. CCCWP is working with other Bay Area programs through the MRP Steering Committee to define and implement a region-wide Green Streets program that would assist municipalities in the implementation of LID and other green infrastructure techniques to treat stormwater in areas where and when streets and roads improvement projects are being designed. The priority for implementing such projects is in older urban areas, particularly old industrial areas.

A current grant-funded project being executed by the San Francisco Estuary Institute is developing GIS tools to identify opportunity areas where green infrastructure retrofits may be located. Another new grant pursuit by BASMAA member agencies would overlay the land use analysis with the opportunity areas to prioritize where green infrastructure would provide the greatest benefit. Concurrent with that analysis, constraints (e.g., deed restrictions, easements, underground utilities) need to be identified for the most attractive locations.

For a Green Streets approach to be successful, funding sources must be identified. Transportation funds cannot typically be used for water quality improvement. In 2012, the CCCWP conducted a Community Clean Water Initiative to generate revenues for stormwater quality protection; voters rejected the initiative. CCCWP is working with the MRP Steering Committee to recruit and retain professional support to lobby regional, state and federal agencies for the creation of new revenue programs to support Green Streets and stormwater treatment retrofits.

## **6.0 ANNUAL REPORTING (PROVISION C.2 – C.15.)**

The compliance reporting requirements in the MRP were created as an experiment to address some long-standing dissatisfaction with reporting under the previous countywide Phase I municipal permits. As we complete a fifth annual reporting cycle, we assess the results of the experiment and look for ways to make reporting more efficient and effective.

### **6.1 CURRENT APPROACH**

The first-generation MRP (2009, amended 2011) included a then-new approach to compliance reporting. The new approach was created in response to two sets of concerns.

The first concern was the ineffectiveness of the largely narrative reporting required by the pre-MRP countywide Phase I municipal permits. Permittees found preparing narrative descriptions of Program activities burdensome. The topics and questions specified in the permit were difficult to address in a meaningful way, particularly with regard to assessing the effectiveness of mandated activities. Water Board staff found the narrative descriptions difficult to read, absorb, and comment upon, as evidenced by the lack of timely response or comment on the Permittees' Annual Reports.

The second concern was the need to balance flexibility and accountability in the permit provisions. This balance was an agreed-upon goal for Water Board members, the public, and Permittees alike.

The 2009 reporting requirements included the following new features:

1. MRP Provision C.16 specifies a region-wide Annual Reporting format, prepared collectively by the Permittees and reviewed and approved by Water Board staff.
2. The format is tabular and prompts quantitative entries and brief narrative descriptions related to implementation of each permit provision.
3. Individual permit provisions include detailed reporting requirements, in some cases specifying the format and content of tables to be completed.
4. Reporting requirements are supplemented by record retention requirements; these requirements also specify the format and content of tables which must be submitted to Water Board staff on request.

The prescriptive reporting requirements are tied to the MRP's prescriptive approach to implementation. For example, MRP Provisions C.2 (Municipal Maintenance), C.4 (Business Inspections), C.5 (Illicit Discharge Identification and Control), C.6 (Construction Inspection) specify actions to be taken. During development of the MRP in 2006-2009, Water Board staff characterized these as "no regrets" actions because they are presumed to be established and low cost. These provisions also specify in detail in the contents of each "database or equivalent tabular format" in which the records of each inspection, follow-up inspection, or enforcement action are to be kept. The same approach applies to Provision C.3 (New Development Controls) with regard to inspections to verify the operation and maintenance of stormwater treatment facilities.

The prescriptive reporting and record-keeping requirements have engendered frustrating inefficiencies. This is not surprising, given that the formats were adopted in the permit without testing or experience and apply to 76 Permittees of varying size and characteristics.

Worse, during the MRP term the Water Board's Executive Officer has issued Notices of Violation (NOVs) to Permittees who have tried to adapt the prescriptive record-keeping formats to make them more usable. For example, one Permittee received an NOV because Permittee staff maintained inspection data on multiple sheets in an Excel workbook file, rather than keeping all the data on a single sheet. There are many examples of the Executive Officer taking enforcement or corrective action over similarly picayune variations from the MRP's reporting and record-keeping requirements.

During the MRP term, Permittee effort to respond to audits, inquiries, and notices—including correspondence and meetings with Water Board staff—which relate only to record keeping and

reporting and not to implementation, consumed hundreds of hours of staff time within Contra Costa municipalities alone. This is in addition to the effort required to maintain records precisely in the manner specified by the permit. The combined effort of report preparation and audit response has substantially impacted Permittees' ability to meet the demanding implementation requirements of the Permit. It is also discouraging and bad for staff morale.

To summarize the results of this 4-year experience: While the MRP's prescriptive approach to implementation facilitates accountability, the prescriptive reporting and record-keeping requirements have hindered overall Program effectiveness.

In hindsight, many of the prescriptive reporting and record-keeping requirements reflect questionable assumptions regarding effective Program implementation. For example, Provisions C.4 and C.6 (Business Inspections and Construction Inspections, respectively) emphasize that municipal Permittees should create and implement Enforcement Response Plans that inspectors would use to address violations of stormwater requirements. Reporting requirements emphasize recording inspections and following up on violations found during inspections. In fact, effective implementation of stormwater controls on private businesses and construction sites depends on an adept integration of surveillance, observation, and communication. Enforcement—that is, issuing violations—is not always necessary or productive. In cases where a contractor or business operator is a “bad actor,” the activity that produces actual or potential non-stormwater discharges often also is in violation of other requirements or codes (for example, unpermitted construction or health and safety violations). In these cases, it is typically more effective for a stormwater coordinator to allow other authorities and agencies to enforce changes which will also address the actual or potential discharge. Therefore the review of violations issued, or the municipalities' record in taking compliance action in follow-up to violations, is an ineffective means to monitor or evaluate Program effectiveness.

## **6.2 PROPOSED APPROACH**

Based on over 20 years' experience implementing municipal stormwater NPDES requirements in Contra Costa County and its 19 cities and towns, Contra Costa Permittees believe:

1. Water Board oversight is important to ensure consistent ongoing compliance and a level playing field among municipalities.
2. Much of the current reporting and records-retention effort is not helping Water Board staff to assess local implementation.
3. The prescriptive reporting and records-retention requirements are “less beneficial tasks” and should be revised or eliminated so that Permittees can focus on more beneficial tasks under the reissued MRP.

A few simple indicators can be developed and used to assess whether a municipality is implementing a particular permit provision adequately; these indicators, along with directly relevant reportable information, should form the basis for reporting and for audits.

It is possible for Permittees and Water Board staff to develop and agree on indicators to be used in the reissued MRP and to also agree on a process to continuously improve those indicators during the term of the reissued MRP.

The Permittees believe Water Board oversight is most needed and best used to ensure all Permittees are engaged and have directed management attention to mandated tasks (a “level playing field”), rather than micromanaging the specifics of how Permittees implement that task. Correspondingly, the suggested indicator approach is best used to determine whether a municipal program meets a basic, “no regrets” level of implementation, rather than to assess more subtle differences in the level of implementation.

As an example, the annual reporting requirement for Provision C.6 could be reduced to:

1. Number of sites requiring Erosion and Sediment Control plans
2. Number of these sites subject to the statewide Construction General Permit.
3. Number of sites where enforcement action (written notice of violation) was required.
4. Narrative summary of inspection activity, general level of compliance, enforcement action taken, problems encountered and how resolved.

Such a report provides indicators of (1) the general level of construction activity; (2) whether the municipality is achieving compliance without the need for enforcement action, and (3) the municipality’s ability to respond to compliance problems, if any, by taking enforcement action. This level of annual reporting detail would allow Water Board staff to readily distinguish municipalities that actively pursue adequate pollution prevention and erosion/sedimentation controls on construction sites vs. those that have an inactive or failing construction inspection program.

The records retention requirements should be eliminated completely, as the Permittees must manage their data well enough to prepare the required annual reports anyway. The essence of an effective local stormwater construction inspection program is the inspectors’ capabilities and diligence in observing construction sites and in communicating with contractors regarding BMP requirements. Water Board staff can best oversee this process by conducting joint inspections, from time to time, with Permittee inspectors. We believe Water Board staff could conduct a sufficient number of joint inspections annually if they redirected the effort and hours they currently devote to review of records, “paper audits”, and enforcement actions related solely to record keeping and reporting.

## **7.0 SUMMARY OF RECOMMENDED REVISIONS FOR REISSUANCE OF THE MUNICIPAL REGIONAL PERMIT**

For the highest-priority provisions presented in sections 2.0 through 6.0 above, Table 4 summarizes the recommendations for revisions to the reissued MRP. The Table also presents recommendations on other permit provisions based on the Permittees' analysis of current NPDES permit provisions. The table identifies provisions that have worked well to achieve the permit goals and those that have been ineffective, too costly to warrant the expense, or impractical to implement.

**TABLE 4: CCCWP NPDES PERMIT PROVISIONS AND RECOMMENDED REVISIONS  
FOR REISSUANCE**

<b>Prov. #</b>	<b>Subject</b>	<b>Recommendation(s)</b>	<b>Rationale for Recommended Changes</b>
C.2.d.	Municipal Pump Stations	<p>1. Eliminate dry-season pump station monitoring. Require ongoing implementation of necessary mitigation measures for discharges with DO below 3 mg/L.</p> <p>2. Eliminate wet-weather inspection and data collection and reporting requirements.</p>	<p>1. Municipal pump station monitoring has been conducted for the past 5 years. Corrective measures are being implemented where necessary.</p> <p>2. Wet-weather inspections are routinely inspected to ensure proper operation of pump stations. The data collection and reporting requirements are “less beneficial” tasks. Pump station operators are trained to inspect and maintain pump stations, and to report potential water quality issues to their Stormwater Program Coordinator.</p>
C.2.f	Corporation Yards	<p>1. Eliminate the Corp Yard inspection reporting requirements.</p>	<p>1. Municipalities are implementing their Corp Yard Stormwater Pollution Prevention Plans (SWPPPs), which include routine inspections. Requiring pre-rainy season inspections, and inspection data collection and reporting are unnecessary and should be eliminated.</p>

**TABLE 4: CCCWP NPDES PERMIT PROVISIONS AND RECOMMENDED REVISIONS FOR REISSUANCE**

Prov. #	Subject	Recommendation(s)	Rationale for Recommended Changes
C.3.b.	Regulated Projects	<ol style="list-style-type: none"> <li>1. Eliminate the 50% rule requiring retrofit of existing portions of a partially developed site, OR allow non-LID treatment and limit applicability to non-residential projects.</li> <li>2. Maintain “Road Projects” requirements.</li> <li>3. Clarify applicability of small parking lots in provision C.3.b.ii.(1)(iv) (i.e., a single parking space shouldn’t lower the threshold from 10,000 to 5,000 square feet of total impervious surface).</li> <li>4. Make explicit the “de minimis” exemption for treatment of small amounts of impervious surface (for example, driveway aprons).</li> </ol>	<ol style="list-style-type: none"> <li>1. The 50% rule, as written, is too much of an economic disincentive for redevelopment projects. Providing the flexibility for non-LID treatment measures on those portions of the site not slated for redevelopment will ease the burden while still achieving water quality benefit.</li> <li>2. With regard to applying new development provisions to streets and roads projects, the Permittees seek to maintain the current definitions and thresholds, while pursuing—in cooperation with the Water Board and other regional agencies—a long-term strategy for integrating water-quality features into transportation and drainage projects where feasible (“green infrastructure”).</li> </ol>
C.3.c.	Low Impact Development (LID)	<ol style="list-style-type: none"> <li>1. Eliminate the hierarchy and feasibility tests for infiltration and harvesting and reuse; bioretention should have parity as a stormwater retention and treatment measure.</li> <li>2. Fully integrate hydromodification and LID requirements. Simplify the hydromodification criteria to make it clear how LID can be used to comply.</li> </ol>	See comments under Section 1.0 above.

**TABLE 4: CCCWP NPDES PERMIT PROVISIONS AND RECOMMENDED REVISIONS  
FOR REISSUANCE**

<b>Prov. #</b>	<b>Subject</b>	<b>Recommendation(s)</b>	<b>Rationale for Recommended Changes</b>
C.3.e.	Alternative Compliance	1. Eliminate disincentives and barriers for regional solutions and off-site treatment measures	1. Current requirements restrict the ability of municipalities to place off-site treatment solutions in areas of greatest benefit. For example, offsite treatment measures must be located in the same watershed. Current requirements also require completion of offsite measures at the time of project construction. Offsite regional solutions, which are limited in opportunity and more complex to implement, are penalized by the time requirement (i.e., an additional 10% per year penalty of runoff treatment area or pollutant loading reduction).
C.3.h.	O&M Inspections	1. Coordinate and make clear the Provision C.3.b. and C.3.h reporting tables so that it is easy to track projects from application through construction and then to the list of sites to be inspected.  2. Allow municipal approved vendors or other third parties to inspect stormwater treatment facilities and certify their condition.	See discussion under Section 1.0 above.

**TABLE 4: CCCWP NPDES PERMIT PROVISIONS AND RECOMMENDED REVISIONS  
FOR REISSUANCE**

<b>Prov. #</b>	<b>Subject</b>	<b>Recommendation(s)</b>	<b>Rationale for Recommended Changes</b>
C.4.c.	Enforcement Response Plan (ERP)	<p>1. Maintain timely corrective action requirements for violations. However, allow inspectors to exercise their best professional judgment and skills in determining the most appropriate enforcement response. Permittees recommend that an observed stormwater problem will be deemed a "violation" when one or more of the following criteria has been met:</p> <ul style="list-style-type: none"> <li>• The inspector observes an active pollutant discharge or clear evidence of a recent and significant pollutant discharge.</li> <li>• The inspector finds during a follow-up or subsequent inspection inadequate response or corrective action has occurred in response to a previous verbal warning or written warning notice.</li> <li>• The inspector determines a clear and significant potential pollutant discharge threat exists that warrants timely corrective measure(s) and follow-up.</li> </ul>	<p>1. A finding that every observed problem is a "violation" creates a disincentive for inspectors to proactively identify and communicate potential problems to site operators because it necessitates the prescriptive follow-up and documentation requirements. Not every observed problem should nor needs to be deemed a violation. Verbal warnings and written warning notices can be effective and efficient Tier 1 enforcement response tools.</p>

**TABLE 4: CCCWP NPDES PERMIT PROVISIONS AND RECOMMENDED REVISIONS  
FOR REISSUANCE**

<b>Prov. #</b>	<b>Subject</b>	<b>Recommendation(s)</b>	<b>Rationale for Recommended Changes</b>
C.4.c., C.4.d.	Reporting	1. Reduce the excessive data collection and reporting requirements (e.g., number of inspections, number of violations, percentage of sites in violation, number and percent of violations resolved in 10 working days or otherwise deemed resolved in a longer but still timely manner; frequency and types/categories of violations observed, frequency and type of enforcement conducted, summary of types of violations noted by business category, facilities that are required to have coverage under the General Industrial Permit but have not filed, and dates of trainings, training topics covered, percentage of inspectors attending training).	1. Much of the data collection and reporting requirement within these provisions is another example of “less beneficial” tasks. See also the discussion in Section 6.0 above.
C.5.e., C.5.f.	Illicit Discharge Detection and Elimination	1. Eliminate field screening, and reduce the data collection and reporting requirements.	1. Municipal maintenance inspection staff is trained to look for and report non-stormwater discharges to the municipality’s Illicit Discharge Coordinator. The prescriptive spill and discharge complaint tracking system information is overly burdensome and another example of a “less beneficial” task. See also the discussion in Section 6.0 above.
C.6.e.	Construction Site Control	1. Simplify reporting by eliminating requirements to report number and percentages of violations and enforcement actions.	1. See the discussion in Section 6.0 above.
C.7.	Public Information and Outreach	1. Consolidate requirements throughout the permit for public information and outreach into this section and cross-reference it from other sections.	1. See additional recommendations and suggested changes below.

**TABLE 4: CCCWP NPDES PERMIT PROVISIONS AND RECOMMENDED REVISIONS  
FOR REISSUANCE**

<b>Prov. #</b>	<b>Subject</b>	<b>Recommendation(s)</b>	<b>Rationale for Recommended Changes</b>
C.7.a.	Storm Inlet Marking	<ol style="list-style-type: none"> <li>1. Simplify the requirement for maintaining storm drain inlet markings.</li> <li>2. Remove language regarding new inlets.</li> </ol>	<ol style="list-style-type: none"> <li>1. Current requirement is to mark and maintain 80% of storm drains, and at least 80% of these must be inspected and maintained at least once during permit term. Tracking and reporting percentages inspected, maintained, and verified is not an effective use of limited staff resources.</li> <li>2. Provision C.3. contains language for marking new inlets.</li> </ol>

**TABLE 4: CCCWP NPDES PERMIT PROVISIONS AND RECOMMENDED REVISIONS FOR REISSUANCE**

Prov. #	Subject	Recommendation(s)	Rationale for Recommended Changes
C.7.b.	Advertising Campaigns	<p>1. Provide flexibility on how to conduct a public outreach campaign (message, audience, effectiveness assessment), which allows an appropriate emphasis on social marketing, specifically:</p> <p>a. Drop the word “Advertising” from “Advertising Campaigns”</p> <p>b. Focus reporting on outcomes to “behavior change efforts” and/or increased “cultural awareness” rather than “changes in behavior” which are difficult to achieve and measure.</p> <p>c. Allow alternatives to reaching a “broad audience”, which has been tried.</p> <p>d. Allow the ability to leverage other programs, and reach captive and active audiences.</p> <p>e. Allow flexibility in methods for assessing effectiveness.</p> <p>f. Provide the flexibility to identify and target “Hot Spots”, along with medium and low priority areas, for campaign(s) based on what the problems/issues are.</p> <p>g. Allow public campaign to incorporate a comprehensive outreach program that includes media relations, public events, watershed stewardship, etc.</p>	<p>1. “Advertising” suggests traditional media such as TV, radio, billboards, etc., which are expensive, and may not be the most effective given limited resources. The MRP could outline a general “framework” suggesting elements to include (i.e., citizen involvement, community/public events, use of free media, outreach to municipal officials, youth outreach, etc.). The approach should allow and encourage communities to determine what needs to be done, allowing efforts that address and consider local resources, issues, and characteristics of the area.</p>
C.7.c.	Media Relations – Use of Free Media	<p>1. Allow flexibility for the integration of media relations into the overall Campaign framework discussed under C.7.b. above.</p>	

**TABLE 4: CCCWP NPDES PERMIT PROVISIONS AND RECOMMENDED REVISIONS  
FOR REISSUANCE**

<b>Prov. #</b>	<b>Subject</b>	<b>Recommendation(s)</b>	<b>Rationale for Recommended Changes</b>
C.7.e.	Public Outreach Events	<ol style="list-style-type: none"> <li>1. Allow flexibility to integrate into the Campaign framework discussed under C.7.b. above.</li> <li>2. Change “pollution prevention messages shall include” to “pollution prevention messages may include”.</li> <li>3. Remove specific number of events; allow flexibility based on need and overall campaign strategy.</li> </ol>	.
C.7.f.	Watershed Stewardship Collaborative Efforts	<ol style="list-style-type: none"> <li>1. CCCWP likes that this provision is broad enough to provide flexibility.</li> <li>2. Allow flexibility to integrate this with the Campaign framework discussed under C.7.b. above.</li> </ol>	.
C.7.g.	Citizen Involvement	<ol style="list-style-type: none"> <li>1. Allow flexibility to integrate into the Campaign framework discussed under C.7.b. above.</li> </ol>	.
C.7.h.	School-Age Children Outreach	<ol style="list-style-type: none"> <li>1. This component of the provision should still exist, but Permittees should be allowed to choose how, and to what age range, the school-age outreach should be done.</li> </ol>	<p>1A. Good, but want flexibility to figure out how to do it better (e.g., library programs).</p> <p>1B. Reaching K-12 may be too broad. Allow flexibility to focus on elementary, middle, and/or high school youth.</p> <p>1C. Some municipalities have their own programs, which should be allowed.</p>
C.7.i	Outreach to Municipal Officials	<ol style="list-style-type: none"> <li>1. Retain this provision.</li> </ol>	

**TABLE 4: CCCWP NPDES PERMIT PROVISIONS AND RECOMMENDED REVISIONS FOR REISSUANCE**

<b>Prov. #</b>	<b>Subject</b>	<b>Recommendation(s)</b>	<b>Rationale for Recommended Changes</b>
C.8.	Water Quality Monitoring (General)	1. Contain the scope of Water Quality monitoring requirements for CCCWP to a budget of no more than \$150,000 per year above and beyond the existing CCCWP contribution to the San Francisco Bay RMP.	1. CCCWP has already invested in a 14-year bioassessment data set covering every watershed in the County. There needs to be demonstrable benefit for Creek Status Monitoring or other water quality monitoring required in the reissued MRP.
C.8.a.	Water Quality Monitoring – Compliance Options, Regional Collaboration	1. Continue to allow flexibility for regional collaboration and alternative monitoring and sampling designs in the reissued MRP.	1. Permittees should be allowed to decide whether regional collaboration is cost-effective based on the potential added effort and complexity of collaboration vs. the potential benefits of integrated monitoring designs and resource sharing.
C.8.b.	Water Quality Monitoring – San Francisco Estuary Receiving Water Monitoring	1. Continue to fund RMP pilot projects that support stormwater.  2. Support a RMP PCB reconnaissance special study in 2014- 2015.  3. Support a RMP special study to explore stormwater treatment alternatives at municipal pump stations.	1. Stormwater programs pay into the RMP.  2. Reconnaissance sampling to identify high-yield PCB watersheds is one of the best “dollar for data point” values available through RMP resources.  3. CCCWP would like to partner with other BASMAA members to pursue grant funding to explore stormwater treatment alternatives at pump stations. RMP commitment to monitoring would be helpful as a cost-match.

**TABLE 4: CCCWP NPDES PERMIT PROVISIONS AND RECOMMENDED REVISIONS FOR REISSUANCE**

Prov. #	Subject	Recommendation(s)	Rationale for Recommended Changes
C.8.c.	(Creek) Status Monitoring	<ol style="list-style-type: none"> <li>1. Limit bioassessment to the currently implemented taxonomic level (“SAFIT level 1.1”).</li> <li>2. Eliminate algae sampling, algae taxonomic identification, and full physical habitat assessments.</li> <li>3. Eliminate bacteria sampling.</li> <li>4. Eliminate temperature monitoring.</li> <li>5. Eliminate the requirement for a geomorphic study.</li> <li>6. Do not require additional stressor source identification studies.</li> <li>7. Increase the trigger level for residual chlorine.</li> <li>8. Require the CRAM method, not USA, for stream surveys at bioassessment sites, and eliminate the numeric requirement for stream miles surveyed.</li> </ol>	<ol style="list-style-type: none"> <li>1. The current approach is sufficient to implement the California Stream Condition Index. There is no added value to going to SAFIT level 2. CCCWP’s historic data is all based on SAFIT level 1.</li> <li>2. These protocols double the field labor cost with no demonstrable added value for decision making.</li> <li>3. This monitoring is already being done by health departments where people engage in water contact recreation.</li> <li>4. The temperature monitoring conducted so far tells us what we already know: modified channels are warmer, and Contra Costa County is a warm, arid location that supports limited cold water fisheries habitat. This monitoring has no clear nexus to discharges.</li> <li>5. CCCWP has already surpassed the intention of the Geomorphic Study requirement with the development of the Contra Costa Watershed Atlas (CDD, 2003).</li> <li>6. Resources need to be focused on existing, identified issues such as reducing pyrethroid toxicity.</li> <li>7. The existing trigger is close to the detection limit for the field methods used; a higher trigger would be more indicative of true releases of chlorinated water.</li> <li>8. Implementing CRAM at existing bioassessment sites is the current, cost-effective approach implemented by BASMAA members. CRAM is more appropriate to California streams.</li> </ol>

**TABLE 4: CCCWP NPDES PERMIT PROVISIONS AND RECOMMENDED REVISIONS FOR REISSUANCE**

Prov. #	Subject	Recommendation(s)	Rationale for Recommended Changes
C.8.e.	Pollutants of Concern and Long-term Trends Monitoring	<ol style="list-style-type: none"> <li>1. Do not require more data to support the Regional Watershed Spreadsheet Model (RWSM).</li> <li>2. Move the point of monitoring closer to sources.</li> <li>3. Focus on curb and gutter sampling to identify source areas.</li> <li>4. Only require this activity once per permit cycle.</li> </ol>	<ol style="list-style-type: none"> <li>1. The RWSM development has provided limited new insights as to where PCB source control is needed. Modeling uncertainty limits the usefulness for decision making.</li> <li>2. It is impossible to detect change through base of watershed tributary monitoring in a reasonable (i.e., less than 20 years) time frame. In contrast, monitoring close to a source area can show change soon after the source is abated.</li> <li>3. Curb and gutter sampling is a proven, cost-effective way to identify trackout sources of PCB-contaminated sediments to the MS4 system.</li> <li>4. Once per permit cycle makes sense – it takes at least four years to make progress reducing source areas, no need for higher frequency monitoring. Far better to focus resources on controlling the sources.</li> </ol>
C.9.	Pesticides Toxicity Control	<ol style="list-style-type: none"> <li>1. Eliminate the reporting requirement to show trends in quantities and types of pesticides used, as it is not directly relevant to the degree of IPM implementation or to water quality.</li> <li>2. If the reporting requirement is not eliminated then allow for alternative compliance such as submitting DPR forms.</li> </ol>	

**TABLE 4: CCCWP NPDES PERMIT PROVISIONS AND RECOMMENDED REVISIONS FOR REISSUANCE**

Prov. #	Subject	Recommendation(s)	Rationale for Recommended Changes
C.10.	Trash Load Reduction	<p>1. For the reissued MRP, the Permittees seek to implement their Long-Term Trash Plans with the flexibility to update and revise those plans based on changing sources, conditions, and available resources.</p> <p>2. Limit any expansion of full trash capture requirements and incorporate flexibility in application of full trash capture into the long-term trash plan requirements.</p> <p>3. Coordinate hot spot cleanups and assessment requirements with long-term trash plan implementation (use condition of hot spot prior to cleanup and amount of trash removed as progress indicators).</p> <p>4. Replace 100% trash load reduction goal with “no adverse impact on beneficial uses due to trash”.</p>	<p>1. In particular, the Permittees seek to apply their limited resources to reduce trash and enhance local environmental quality, rather than having their priorities driven by questionable regulatory definitions and one-size fits all requirements. Permittees will continue to work with Water Board staff to develop methods to measure the effectiveness of their trash reduction efforts and to characterize impacts to receiving waters.</p>
C.11., C.12.	Mercury Controls, Polychlorinated Biphenyls (PCBs) Controls	<p>1. These provisions are expected to incorporate requirements for new control measures based on the outcomes of studies mandated under the current MRP.</p> <p>2. POC TMDLs are appropriately a water quality priority. However, new projects and controls must be appropriately phased, targeted, and prioritized (emphasis on projects with multiple benefits).</p>	

**TABLE 4: CCCWP NPDES PERMIT PROVISIONS AND RECOMMENDED REVISIONS FOR REISSUANCE**

<b>Prov. #</b>	<b>Subject</b>	<b>Recommendation(s)</b>	<b>Rationale for Recommended Changes</b>
C.11.b.	Monitor methylmercury	1. Eliminate this requirement.	1. Duplicative - CCCWP is already conducting a methylmercury control study required under the East County permit; the study addresses LID effectiveness at reducing methylmercury in stormwater, and will assess effectiveness at LID installations in both Region 2 and Region 5 areas of the County.
C.11., C.12. c. through f.	Pilot projects to Investigate and Abate	1. Replace these requirements with a requirement to develop water quality improvement plans for identified high opportunity areas.	1. Identifying high opportunity areas such as the Santa Fe Channel in Richmond, and abating sources from those areas, are the most significant control action that needs to be addressed.
C.11.h ., C12.h.	Fate and Transport Study	1. Eliminate this requirement.	1. This has been completed as an RMP project.
C.11.i., C.12.i.	Development of a Risk Reduction Program	1. Eliminate this requirement.	1. The products from the risk reduction product have been developed and are being used by Permittees; no need to require this project again.

**TABLE 4: CCCWP NPDES PERMIT PROVISIONS AND RECOMMENDED REVISIONS FOR REISSUANCE**

<b>Prov. #</b>	<b>Subject</b>	<b>Recommendation(s)</b>	<b>Rationale for Recommended Changes</b>
C.13.	Copper Controls	<p>1. Consider incorporating current requirements for managing waste generated from cleaning and treating copper architectural features into Provisions C.3 and C.6 as appropriate.</p> <p>2. Consider incorporating requirements to manage discharges from Pools, Spas, and Fountains, into Provisions C.2 (for municipal facilities) and C.3 as appropriate.</p> <p>3. Consider incorporating requirements to ensure industrial facilities do not discharge elevated levels of copper to storm drains into Provision C.4, as appropriate.</p> <p>4. Eliminate "Vehicle Brake Pad" requirements.</p> <p>5. Transfer "Studies to Reduce Pollutant Impact Uncertainties" to RMP.</p>	<p>1 – 3. In general, copper as a POC has been well studied and managed. Suggestion is to transfer required activities to be implemented under C.2, C.3, C.4, and C.6 to simplify the permit.</p> <p>4. The vehicle brake pad reformulation has been successfully achieved via legislation; no need to keep requiring this activity in permits.</p> <p>5. This is more appropriate as an RMP special study, not a stormwater specific issue that needs to be in the permit.</p>
C.14.	Polybrominated Diphenyl Ethers (PBDE), Legacy Pesticides and Selenium	<p>1. Update this provision to reflect progress on current studies and identify further studies, if needed.</p> <p>2. If further studies are needed, have these be conducted by the RMP.</p>	
C.15.	Exempted and Conditionally Exempted Discharges	1. No change.	1. Existing BMPs are effective and are being implemented.

## GENERAL REFERENCES

- Armand Ruby Consulting (ARC) 2014. Integrated Monitoring Report, Part A, Appendix A.1: Creek Status Monitoring Report—Regional/Probabilistic Parameters Water Years 2012 and 2013 (October 1, 2011–September 30, 2013). Prepared for Contra Costa Clean Water Program.
- BASMAA, 1997. Start at the Source: Residential Site Planning & Design Guidance Manual for Stormwater Quality Protection.
- BASMAA, 1999. Start at the source: Design Guidance Manual for Stormwater Quality Protection. <http://www.scvurppp-w2k.com/pdfs/0910/StartAtTheSource.pdf>
- BASMAA, 2011. Regional Monitoring Coalition Final Creek Status and Long-Term Trends Monitoring Plan. Prepared by EOA, Inc. Oakland, Calif. 23 pp.
- BASMAA, 2013. Regional Urban Creeks Status Monitoring Report, Water Year 2012 (October 1, 2011–September 30, 2012). Prepared for BASMAA by EOA, Inc. on behalf of the Santa Clara Urban Runoff Pollution Prevention Program and the San Mateo Countywide Water Pollution Prevention Program and Armand Ruby Consulting on behalf of the Contra Costa Clean Water Program.
- BASMAA, 2014a. Creek Status Monitoring Program Quality Assurance Project Plan, Final Draft Version 2.0. Prepared for BASMAA by EOA, Inc. on behalf of the Santa Clara Urban Runoff Pollution Prevention Program and the San Mateo Countywide Water Pollution Prevention Program, Applied Marine Sciences on behalf of the Alameda Countywide Clean Water Program, and Armand Ruby Consulting on behalf of the Contra Costa Clean Water Program. 120 pp.
- BASMAA, 2014b. Creek Status Monitoring Program Standard Operating Procedures, Final Draft Version 2.0. Prepared for BASMAA by EOA, Inc. on behalf of the Santa Clara Urban Runoff Pollution Prevention Program and the San Mateo Countywide Water Pollution Prevention Program, Applied Marine Sciences on behalf of the Alameda Countywide Clean Water Program, and Armand Ruby Consulting on behalf of the Contra Costa Clean Water Program. 203 pp.
- Brown and Caldwell, 2011. Low Detection Level Study Report. Marina del Rey Harbor Toxic Pollutants TMDL. Prepared for County of Los Angeles, Department of Public Works; City of Los Angeles; City of Culver City; California Department of Transportation.
- Central Valley Regional Water Quality Control Board (Central Valley Water Board). 2010a. California Regional Water Quality Control Board, Central Valley Region, East Contra Costa County Municipal NPDES Permit, Waste Discharge Requirements Order R5-2010-0102, NPDES Permit No. CAS083313, 23 September 2010.
- Central Valley Regional Water Quality Control Board (Central Valley Water Board). 2010b. Sacramento – San Joaquin Delta Estuary TMDL for Methylmercury. Staff Report. On-line resource: [http://www.waterboards.ca.gov/centralvalley/water\\_issues/tmdl/central\\_valley\\_projects/delta\\_hg/april\\_2010\\_hg\\_tmdl\\_hearing/apr2010\\_tmdl\\_staffrpt\\_final.pdf](http://www.waterboards.ca.gov/centralvalley/water_issues/tmdl/central_valley_projects/delta_hg/april_2010_hg_tmdl_hearing/apr2010_tmdl_staffrpt_final.pdf)
- Contra Costa Clean Water Program, 2005. Stormwater C.3 Guidebook, 1<sup>st</sup> Edition, Stormwater Quality Requirements for Development Applications.

- Contra Costa Clean Water Program, 2012. Stormwater C.3 Guidebook, 6<sup>th</sup> Edition, Stormwater Quality Requirements for Development Applications. On-line resource: <http://www.cccleanwater.org/>.
- Contra Costa Clean Water Program (CCCWP), 2014. Integrated Monitoring Report, Part C. Martinez, California.
- Contra Costa Community Development Department (CDD), 2003. Contra Costa Watershed Atlas. Martinez, CA. On-line resource: <http://www.cccleanwater.org/>.
- Fetscher, A.E, Busse, L., and Ode, P.R.. 2009. Standard Operating Procedures for Collecting Stream Algae Samples and Associated Physical Habitat and Chemical Data for Ambient Bioassessments in California. California State Water Resources Control Board Surface Water Ambient Monitoring Program (SWAMP) Bioassessment SOP 002. (Updated May 2010.)
- Fetscher, A.E., Sutula, M.A., Busse, L.B., and Stein, E.D.. 2013. Condition of California Perennial, Wadeable Streams Based on Algal Indicators. Final Technical Report 2007-11. October; [http://ftp.sccwrp.org/pub/download/DOCUMENTS/TechnicalReports/781\\_CA\\_Perennial\\_Wadeable\\_Streams.pdf](http://ftp.sccwrp.org/pub/download/DOCUMENTS/TechnicalReports/781_CA_Perennial_Wadeable_Streams.pdf).
- Fetscher, A.E., R. Stancheva, J.P. Kociolek, R.G. Sheath, E.D. Stein, R.D. Mazor, P.R. Ode, L.B. Busse. 2014. Development and comparison of stream indices of biotic integrity using diatoms vs. non-diatom algae vs. a combination. *Journal of Applied Phycology* 26:433-450.
- Gilbreath, A.N., Gluchowski, D.C., Hunt, J.A., Wu, J., and McKee, L.J., 2014. Pollutants of concern (POC) loads monitoring data progress report, water year (WYs) 2012 and 2013. A technical report prepared for the Regional Monitoring Program for Water Quality in San Francisco Bay (RMP), Sources, Pathways and Loadings Workgroup (SPLWG), Small Tributaries Loading Strategy (STLS). Contribution No. 712. San Francisco Estuary Institute, Richmond, California.
- Lewicki, M., and McKee, L., 2009. Watershed specific and regional scale suspended sediment loads for Bay Area small tributaries. A technical report for the Sources Pathways and Loading Workgroup of the Regional Monitoring Program for Water Quality: SFEI Contribution #566. San Francisco Estuary Institute, Oakland, CA. 56 pp.
- Maestre, A., Pitt, R.E., Morquecho, R., 2004. Nonparametric statistical tests comparing first flush with composite samples from the NPDES Phase I municipal stormwater monitoring data. In: James, W. (Ed.), *Stormwater and Urban Systems Modeling*. CHI, Guelph, Ont.
- Ode, P.R., Kincaid, T.M., Fleming, T., and Rehn, A.C.. 2011. Ecological Condition Assessments of California's Perennial Wadeable Streams: Highlights from the Surface Water Ambient Monitoring Program's Perennial Streams Assessment (PSA) (2000-2007). A Collaboration between the State Water Resources Control Board's Non-Point Source Pollution Control Program (NPS Program), Surface Water Ambient Monitoring Program (SWAMP), California Department of Fish and Game Aquatic Bioassessment Laboratory, and the U.S. Environmental Protection Agency.
- Soller, J., Stephenson, J., Olivieri K, Downing J., and Oliveiri A. W. 2005. Evaluation of seasonal scale first flush pollutant loading and implications for urban runoff management. *Journal of Environmental Management* 76: 309-318.

San Francisco Regional Water Quality Control Board (San Francisco Bay Water Board). 2009. California Regional Water Quality Control Board San Francisco Bay Region Municipal Regional Stormwater NPDES Permit Order R2-2009-0074 NPDES Permit No. CAS612008, 14 October 2009.

Schueler, Thomas R., Lisa Fraley-McNeal, and Karen Capiella. "Is impervious cover still important? Review of recent research." *Journal of Hydrologic Engineering* 14.4 (2009): 309-315.

## Fiscal Year 2013-2014 Summary

### ***Campaign Overview***

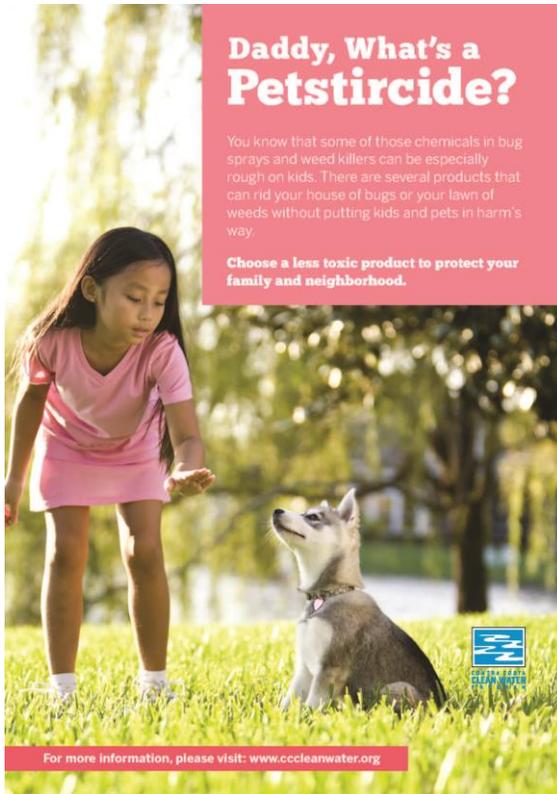
The Petstircides campaign launched in 2013 to promote the use of less toxic alternatives for pesticides and herbicides. In FY 2013-2014 we conducted two pilot phases to determine which tactics are best suited to reach West and South Contra Costa target audiences. Pilot Phase 1 consisted of partnering with five stores in West and South Counties and placing the materials, while in Phase 2 we conducted tablings at stores.

In an effort to leverage the specific product recommendations that Our Water Our World has developed, our initial pilot focused on partnering with stores with existing OWOW materials. Our goal in so doing was to pair the Petstircides marketing with the OWOW infrastructure.

The second pilot phase relied on tablings (conducted both at OWOW and non-OWOW stores.) The tablings consisted of placing campaign materials on display, distributing flyers to customers and conducting surveys. The goals of the tablings were to promote the campaign message, collect surveys from participants who were exposed to the campaign and test the effectiveness of conducting in person outreach in promoting the campaign message.

### ***Results***

- Partnered with five stores in South and West Contra Costa:
  - Urban Farmer, Richmond
  - Moraga Garden Center, Moraga
  - Orchard Nursery and Florist, Lafayette
  - Navlet's Garden Center, Danville
  - Sloat's Gardens, Danville
- Placed posters and flyers at five stores. The stores were asked to place posters in a visible place and to distribute flyers, which included a survey link, to customers;
- Implemented coupon promotion at Navlet's in Danville. Coupons offering \$2 off Terro Ant Bait were promoted in Pennysaver and sent to over 25,000 households in the Danville area;



- Conducted 3 tablings and administered surveys at the following stores:
  - 3/22/2014 Urban Farmer, Richmond
  - 5/31/2014 Orchard Supply Hardware, San Ramon
  - 6/1/2014 Moraga Garden Center, Moraga



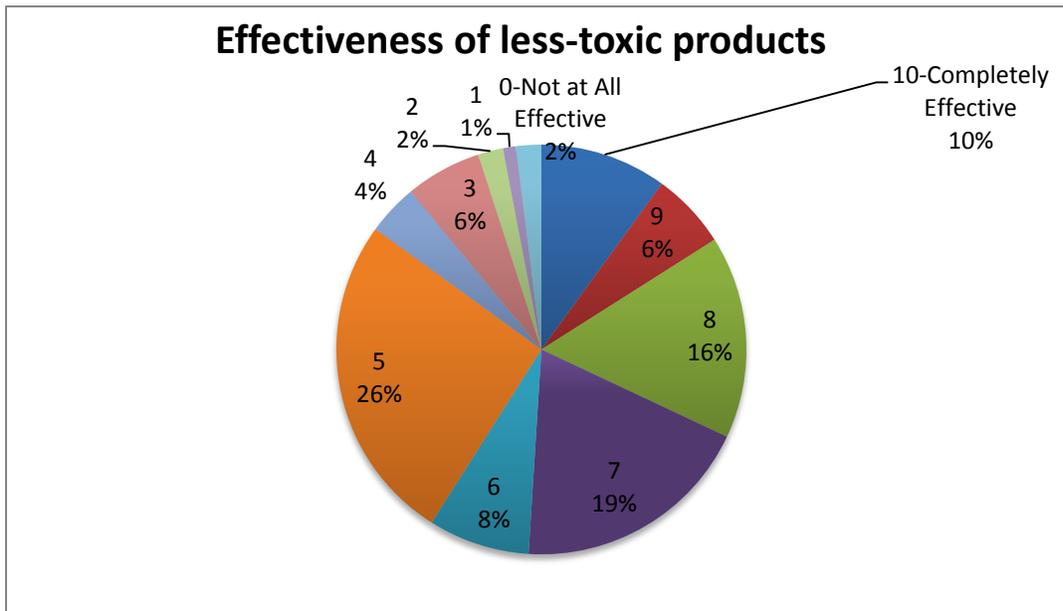
- Collected a total of 139 intercept and online surveys; and
- Distributed 1000 flyers to each store and gave out 150 flyers at events.

### Survey Findings

We collected 139 surveys, of which 111 respondents (80%) indicated that they are aware of the less toxic alternatives available for purchase. The sample size consisted of 32 (23%) females, 69 (50%) males and 10 (7%) respondents that didn't answer that question.

- *Effectiveness*

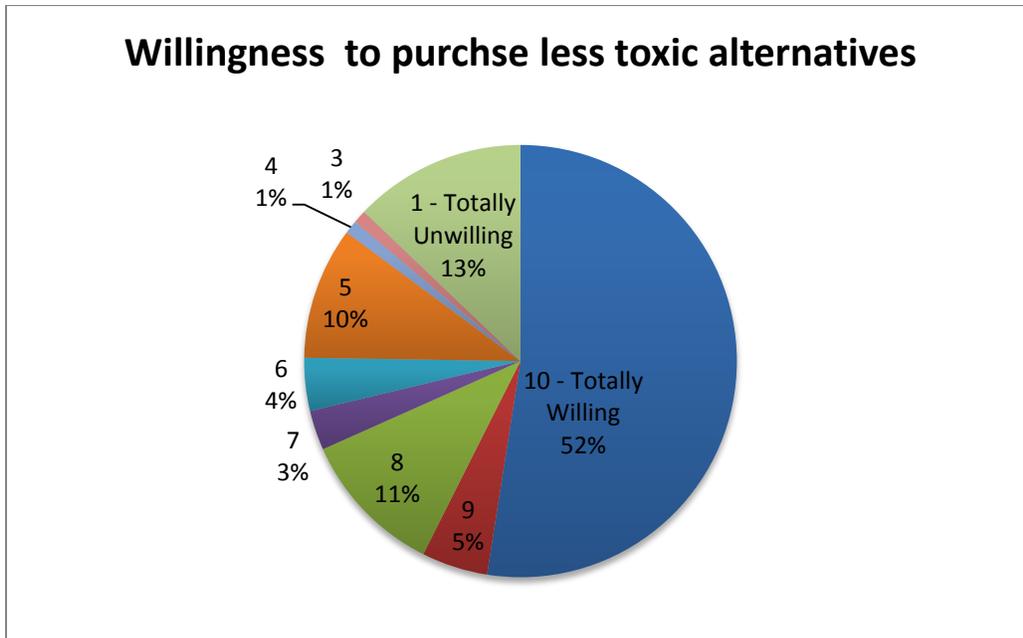
On the scale from 0-10 with 0 being "Not effective at all" and 10 being "Completely Effective", 85% (91) of respondents rated less toxic pesticides as a "5" or more and 15% (16) rated them as a "4" or less. Four people (3%) didn't rate them at all. This suggests that the majority of respondents think that less toxic products are effective. At this point we cannot compare these findings with the attitudes of residents that were not exposed to the campaign, however the attitudes towards less toxic products are pointing in the right direction.



- *Willingness to purchase less toxic products*

Those who were exposed to the campaign had a 7.7 mean willingness score which is 0.7 points higher than our goal for the campaign (7.63 mean willingness score). More than half of the respondents (53%) indicated they would be "totally willing" to purchase less toxic pesticides and herbicides while 19% indicated they would be "totally unwilling" to purchase pesticides and

herbicides. It is worth mentioning that at the time of one of the tablings, Urban Farmer was hosting a workshop and many people who were surveyed indicated they don't use any pesticides at all since they practice organic gardening. This provides some explanation for the 19% that indicated they would be "very unwilling" to use less toxic pesticides – not because they prefer regular pesticides but because they prefer natural remedies. Nevertheless, willingness score gives us a good idea of what their behavior would be if they decided to purchase a gardening product.



- *Discussing the use of less toxic products*

59% of respondents indicated that they discussed the use of less toxic products with somebody. The total reported number of people that the less toxic message was shared with is 3,668, exceeding our goal of 3,240 discussions for the entire campaign period by 13%. This suggests that people are sharing the message which is one of the goals of this campaign.



Another interesting finding was the attitude towards traditional pesticides and their effect on health. 69% of respondents indicated that traditional pesticides affect health negatively or “very negatively”, 17% responded “slightly negatively”, 10% said they do not affect health in any way and 4% responded that pesticides affect health positively or very positively.

***Suggestions for FY 2014-2015***

Following our dual pilot phase, our updated goals and tactics for wider implementation in 2014-15 are:

- Increase the number of tablings to 10;
- Increase direct outreach outside of gardening stores by participating at various community events such and farmer’s market, events around Earth Day and popular local events;
- Update the campaign materials to provide a more direct call to action to ensure the message is getting across without the assistance of store employees;
- Increase exposure to campaign message by placing shelftalkers near pesticides/herbicides isles;
- Continue to focus on peer to peer communication outcomes
- Keep ballot boxes and posters in stores – they are constant reminders of the campaign and put the issues of less toxic products on customers minds;
- Expand the campaign to more stores that sell non-toxic products, including stores without current OWOW presence;
- Provide employees with FAQ sheets to ensure that new employees are knowledgeable about our goals; and
- Explore more city advertising such as a billing insert in the trash bill. This will continue to expand our reach.

## Appendix

### Campaign Materials

#### Poster





*Pledge Flyer*

# Mommy, What's a Petstircide?

You know that some of those chemicals in bug sprays and weed killers can be especially rough on kids. There are several products that can rid your house of bugs or your lawn of weeds without putting kids and pets in harm's way.

**Choose a less toxic product to protect your family and neighborhood.**



**WIN A \$100 VISA GIFT CARD!**

Take a short survey and be entered into a raffle for a **\$100 Visa Gift Card** !





## Daddy, What's a Petstircide?

You know that some of those chemicals in bug sprays and weed killers can be especially rough on kids. There are several products that can rid your house of bugs or your lawn of weeds without putting kids and pets in harm's way.

**Choose a less toxic product to protect your family and neighborhood.**



**WIN A \$100 VISA GIFT CARD!**

**Take a short survey and be entered into  
a raffle for a \$100 Visa Gift Card !**



Flyers

# Mommy, What's a Petstircide?

You know that some of those chemicals in bug sprays and weed killers can be especially rough on kids. There are several products that can rid your house of bugs or your lawn of weeds without putting kids and pets in harm's way.

**Choose a less toxic product to protect your family and neighborhood.**



**WIN A \$100 VISA GIFT CARD!**

Go to [www.surveymonkey.com/s/CCCWP](http://www.surveymonkey.com/s/CCCWP)  
and take our short 1 minute survey.

**You will be automatically entered to win \$100 Gift Card.**

## Daddy, What's a Petstircide?

You know that some of those chemicals in bug sprays and weed killers can be especially rough on kids. There are several products that can rid your house of bugs or your lawn of weeds without putting kids and pets in harm's way.

**Choose a less toxic product to protect your family and neighborhood.**



**WIN A \$100 VISA GIFT CARD!**

Go to [www.surveymonkey.com/s/CCCWP](http://www.surveymonkey.com/s/CCCWP)  
and take our short 1 minute survey.

**You will be automatically entered to win \$100 Gift Card.**

### Pledge

## Take a survey and get a chance to win a \$100!

Fill out this tear-sheet and drop it in the box. We will email you a short survey about pesticides and herbicides and enter you into a raffle for a chance to win a **\$100 Visa gift card**.

\*Note: Valid for Contra Costa County residents only.



Email  
(Required)

Zip code

Pledge  
(Optional)

I make a personal pledge to protect my pets and family and use less toxic alternatives to pesticides and herbicides as much as possible.

For more information, please visit: [www.ccleanwater.org](http://www.ccleanwater.org)

**Materials Placed in Stores**



*Petstircides Campaign  
Annual Report FY 2013-2014*



## MY GREEN GARDEN

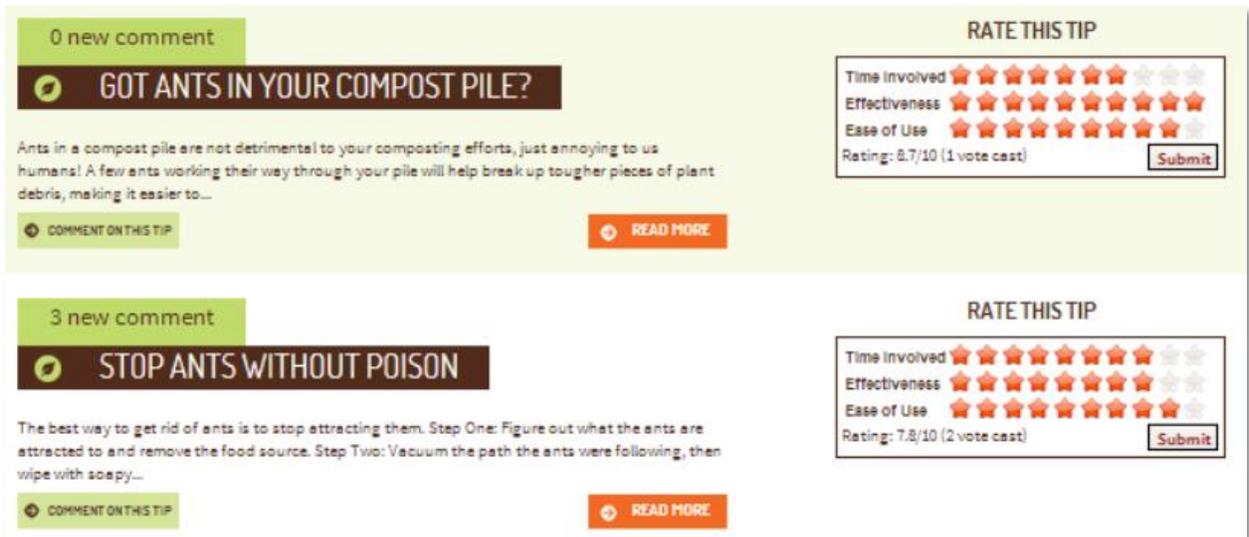
### OVERVIEW

My Green Garden is an effort to encourage Contra Costans to share tips and tricks for organic gardening without jumping directly to the use of toxic pesticides and chemicals. Through the site [www.mygreengarden.org](http://www.mygreengarden.org), the program strives to build a sense of community through a Yelp type model of content produced by the end user.

Through a series of iterations, a modern and visually appealing website was developed. The website is fully responsive, meaning the the website template automatically adjust to fit a range of display resolutions, allowing it to be viewed on traditional PC, tablet, and mobile (e.g. smartphone) devices. Below is an illustration of the “above the fold” landing page displayed on a traditional desktop PC resolution.



Users are able to view, rate, share, and comment on tips either by scrolling below the fold or visiting the “TIPS” page which is the most prominent and first button.

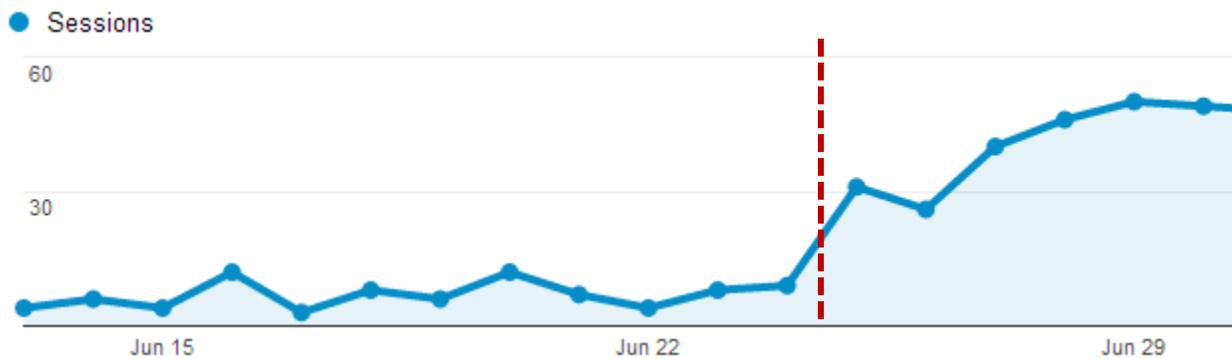


In addition, the website includes a photogallery where users may view, upload, and share photos and a “PARTNERS” page that promotes local nurseries. Partnerships with these nurseries encourage them to drive their customers to [www.mygreengarden.org](http://www.mygreengarden.org) and to provide organic gardening tips. There is also an “EVENTS” page where local workshops can be promoted. That page is temporarily hidden as there are no scheduled events at this time.

This report details the results of the My Green Garden program through FY 2013-14 and then discusses the proposed workplan for FY 2014-15.

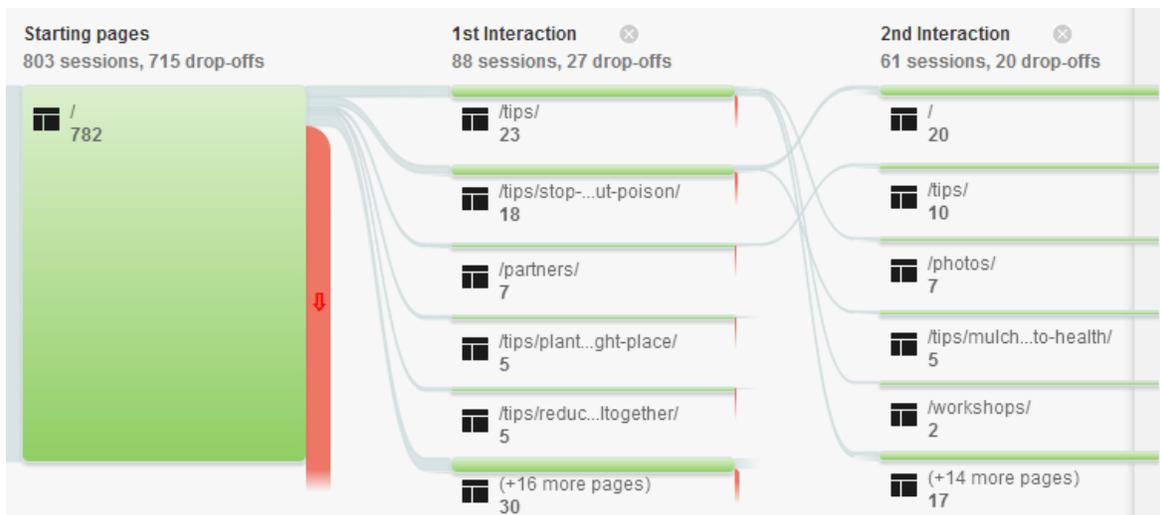
### MYGREENGARDEN FISCAL YEAR 2013-14

My Green Garden was under development for the majority of FY 2013-14 and was published on June 13. Promotion of the website began June 25 as denoted by the red line on the sessions graph below. The sessions graph shows the number of times the website was accessed and explored by a user.



The average user visited 1.4 pages during any given session. However, the number of pages visited was hugely determined by whether or not they immediately exited the website from the landing page. Of traffic driven to the landing page, 715 of 803 sessions immediately terminated or 89%. Most of these sessions had very short session durations.

For visitors who interacted with the website and visited additional pages, exit rates declined significantly. After their first interaction, only 30% of visitors exited the website. Similarly, 33% exited after their second interaction (i.e. third page view), 40% after their third, and 32% after their fourth.



During the online promotion phase, we observed that a significant portion of the traffic arriving at the website was interested in pest control and “ant pest control” specifically. As a result, we developed a new tip for ant pest control. This tip quickly became the most popular interaction off of the landing page with an average duration of 2:21. The tip received no ratings from users.

In addition to online promotion, partnerships with several nurseries are underway. Fliers promoting the website and encouraging users to consider non-toxic alternatives have been delivered to three nurseries throughout Contra Costa County and nine more are underway. These partners are highlighted on a new portion of the website titled “Partners” and linked to from all pages.

Outreach was also conducted in FY 2013-14 to partner with Kathy Kramer of Bringing Back the Natives and local gardening clubs. Additional outreach to 4H clubs, community gardens, summer camps, and potentially schools once school returns in session are planned. Each of these groups represent significant populations with existing interests in gardening, social health, and the environment.

### MYGREENGARDEN FISCAL YEAR 2014-15

Online promotion of the website will continue through FY 2014-15. As the website grows in traffic and content, online promotion becomes an increasingly cost effective driver of traffic. However, in addition to online traffic, My Green Garden will focus on developing substantive relationships with existing garden groups and attempt to transition them onto the website. This offline-to-online approach will tap into existing enthusiasm and community in Contra Costa County and attempt to showcase and share that enthusiasm with other residents while inviting them to join in.

We will continue to test and develop different strategies to promote the website. Trends during Fiscal 2014-15 have been promising, but trending flat. In order to achieve organic exponential growth, we intend to incorporate promotions or challenges into our outreach with partners to encourage them to self-promote the website and engage their larger peer network.



Finally, consistent quality control has been conducted on the website to improve the user experience/user interface (UX/UI). Ongoing iterations of the website will continue to analyze how users are interacting with the website and attempt to promote those features to deepen engagement and encourage usage and returns to the site.



## **Purpose**

The purpose of the Pesticides Linger campaign is to encourage Contra Costa residents who currently outsource their pest control to consider hiring an eco-certified pest control operator (PCO) who practices environmentally sound pest management practices (as certified by EcoWise, GreenPro or Green Shield). The campaign is designed to address the specific barriers and motivators of the Contra Costa community, established through the FY 2012-13 strategic plan.

## **Overall Campaign Strategy**

The Pesticides Linger campaign is focusing on residents in Contra Costa's South, East and Central areas of the county, as these areas were found to be most likely to hire PCOs. The campaign strategy seeks to address the most common motivators and barriers to hiring an eco PCO:

- IPM protects the health of children and pets (motivator: protect kids and pets)
- IPM is effective (barrier: IPM won't get the job done)
- Conventional PCOs don't know the real toxicity of pesticides they use (barrier: belief that pest controllers are professionals and would only use chemicals that are safe)

The campaign has two phases:

**Phase I digital activation.** This integrated online marketing phase is designed to garner interest in our message via targeted Google ads, Facebook ads and the campaign webpage ([cccleanwater.org/pesticideslinger](http://cccleanwater.org/pesticideslinger)). Our goal during this phase is to test tactics, track audience behavior and engagement in the campaign, and prompt answers to a simple question: On a scale of 1 to 5, how effective is eco pest control?

**Phase II in-person activation.** With our digital presence established, the next phase will focus on bringing our ad campaign into the physical world, via outdoor advertising and media in Contra Costa County. Our goal here is to expand the campaign profile and increase the number of residents interacting with the campaign. We will also begin comparing effectiveness reporting between people who have seen the campaign and those who have not.

## **Target Pollutants**

- Organophosphorous pesticides: chlorpyrifos, diazinon, and malathion
- Pyrethroids: bifenthrin, cyfluthrin, beta-cyfluthrin, cypermethrin, deltamethrin, esfenvalerate, lambda-cyhalothrin, permethrin, and tralomethrin
- Carbamates: carbaryl
- Fipronil

## **Fiscal Year 13-14 Summary**

### **Goals & Activities**

Our goal for Fiscal Year 13-14 was to plan and design the Pesticides Linger campaign and launch a pilot of Phase I digital activation. The pilot program aimed to

- Identify our audience by demographics and interests
- Track our audience's behavior and engagement in the campaign

To accomplish this, we performed the following activities:

- Planned a pilot program that could be expanded easily and efficiently in the following fiscal year.
- Developed the creative for the Pesticides Linger campaign, including messaging and two versions of artwork.
- Built an interactive, responsive webpage for the campaign and integrated it on [cccleanwater.org](http://cccleanwater.org).
- Created a digital advertising strategy for Google and Facebook that would A/B test two versions of the Pesticides Linger ad.
- Launched a visual and text only advertising campaign on Google.
- Tracked performance, analyzed results and made any necessary adjustments to the strategy.

### **Results**

We launched our pilot digital advertising campaign on Google from June 20-June 29, using the following two images:

Ad preview



Ad preview



We simultaneously launched a text only advertising campaign with the following text advertisements:



*Overall performance*

There are a few ways to measure the success of Google ads.

**Impressions:** the number of people who saw the ad

**Clicks:** the number of people who clicked on the ad

**CPC:** cost-per-click (the lower the number the better)

**Cost:** the total amount spent on the ad campaign

**Average position:** how close to the top of the search engine results page the ad appeared (no. 1 is best)

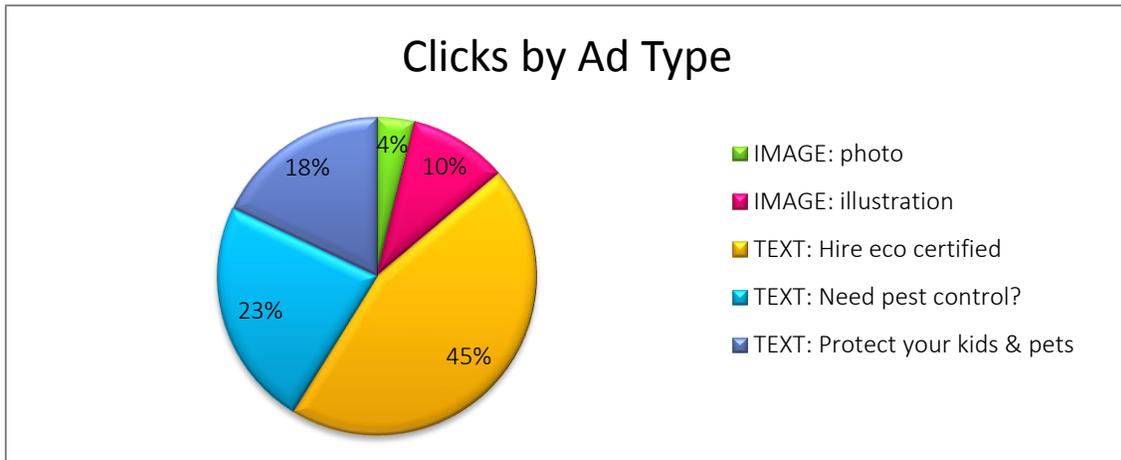
In the first 10 days of the pilot, the Pesticides Linger showed impressive results:

Impressions	Clicks	CPC	Cost	Avg. Position
407,865	1,620	0.32	521.75	1.2

*Specific ad performance*

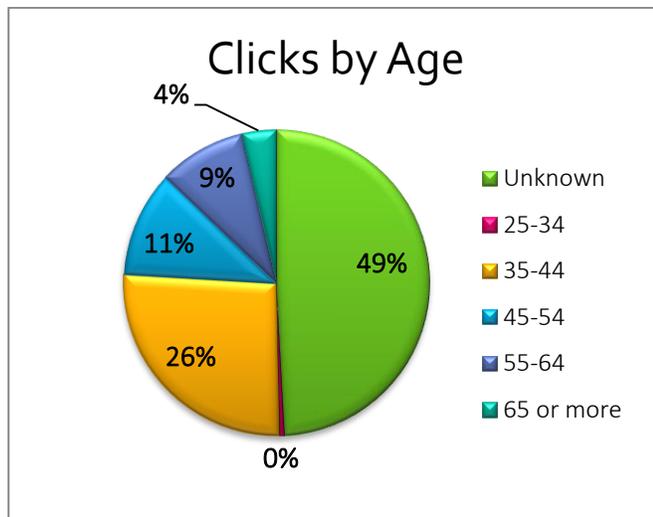
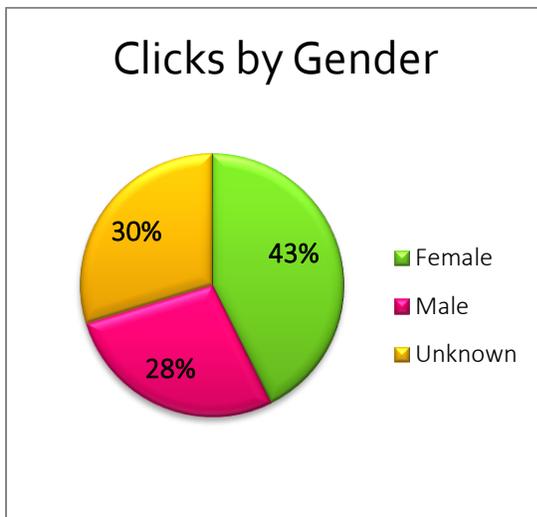
The text only ads received the greatest amounts of clicks. The most popular text was “Protect your kids & pets. Hire eco-certified pest control.”

While the image ads performed more modestly, the illustrated advertisement outperformed the photograph.



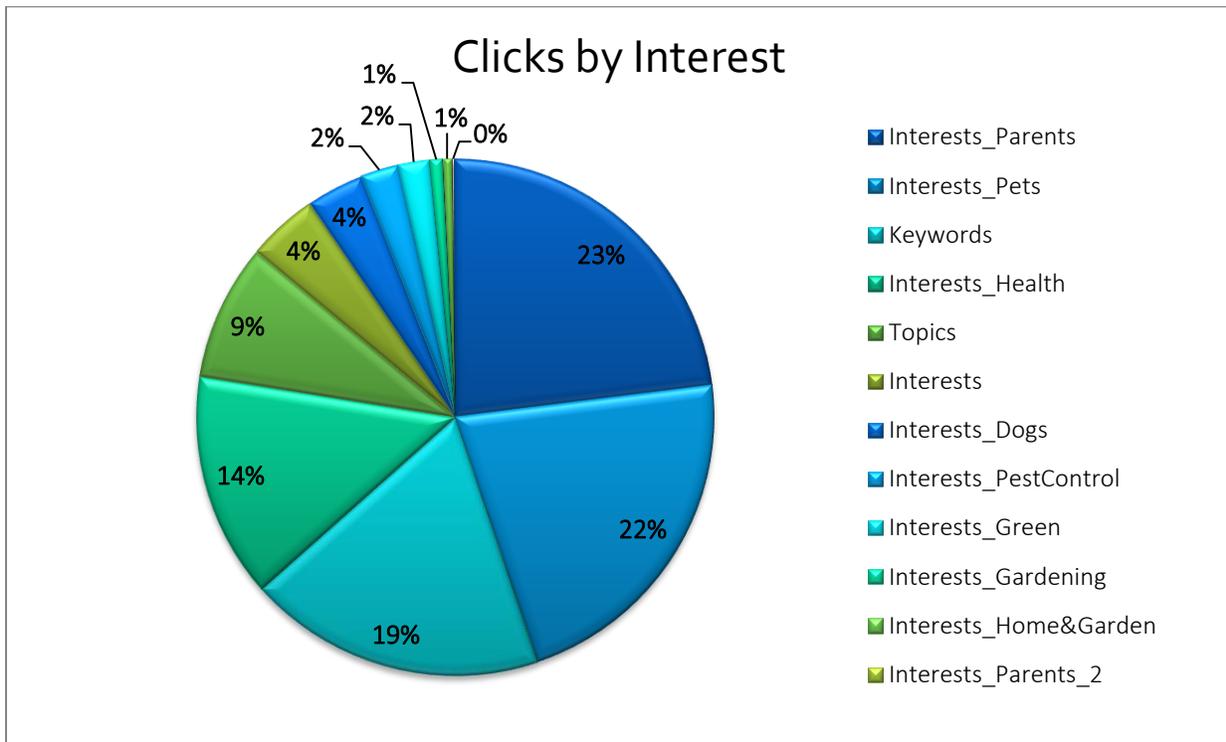
#### Audience Demographics

Google allows us to get a robust look at the demographics and personal interests of the people who clicked on our advertisements. We targeted our advertisements to reach residents of Contra Costa County’s South, East and Central areas. Looking at gender and age, the largest portion of both demographics were undeclared. However of those who could be identified, women and ages 35-44 clicked most often.



#### Audience Interests

Google ads allow us to target the advertisements to people who have particular interests. Our advertisements appealed most to parents and pet owners. Interestingly, the ads did not resonate strongly with people who are interested in the environment, gardening or home and garden. This shows that our campaign has a broad appeal. We’re not just reaching environmentally minded residents who already practice non-toxic alternatives to pest control, but are influencing a wider audience.



NOTE: Interests\_Parents\_2 directly targeted parents who were interested in education issues.

### Behavior

The vast majority of our audience—90 percent—saw and interacted with the ads via mobile devices. Of the remaining 10 percent, only 1 percent of people were using a computer. This verified our initial suspicion that the Pesticides Linger webpage needed to be built to be responsive.

There are a number of ways to assess how well a website is engaging an audience.

**Page views:** the number of time the website was viewed

**Unique page views:** the number of individual visitors who have looked at a page

**Average time per page:** average time visitors spend on the site

**New visitor page views:** the number of people who are accessing the site for the first time

**Returning visitor page views:** the number of people who came back to visit the site again

In the first 10 days of the pilot, our visitors spent nearly 5 minutes engaging with the content on the site. This shows robust engagement with our content, particularly when you consider that recent research finds the average webpage visit lasts less than 1 minute. What's more, mobile users like ours tend to spend up to 40 percent less time on websites than desktop users.

Page Views	Unique Page Views	Average time per page	New Visitor (page views)	Returning (page views)
1,564	1,229	4:43 minutes	1254	308

### **Recommendations for Fiscal Year 14-15**

With the success of the 10-day pilot, we will continue with Phase I digital activation throughout the next fiscal year. We will run a similar 10-day pilot campaign on Facebook to test ad performance on the social media platform. After analyzing the results, we will create a strategy that will allow us to reach the greatest number of people in the most cost effective manner.

After the first quarter of FY 14-15 we will implement Phase II in-person activation at a time that coincides with normal upswings in the hiring of PCOs (e.g., wet and warm weather months). This would involve running physical advertisements in our target areas of Contra Costa County and engaging with residents at in-person outreach events.

### **Deliverables for FY 14-15**

- 250 questionnaires from people who have been exposed to the Pesticides Linger campaign
- 250 questionnaires from people who have not been exposed to the campaign
- 2 million impressions (indicates how wide our message reached)
- 10,000 clicks (indicates deeper level of engagement and commitment)

### **Goals**

- Relative to the control group (people who do not participate in the program), 26% more people (in a group of campaign participants) rate eco certified pest controllers as more effective in treating pests (indicates attitudinal shift)
- A minimum of 10,000 interactions with the campaign from Contra Costa residents

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## **Final Report**

A nine-year study of water use, green waste generation, maintenance hours, and maintenance labor costs between a traditional garden and a California native plant garden was conducted by the City of Santa Monica between 2004 and 2013. The results of this study showed that the native garden uses 83% less water; generates 56% less green waste, and requires 68% less maintenance than the traditional garden.

### **Why a Native Plant Garden Tour?**

The spring 2014 Bringing Back the Natives Garden Tour was held in order to showcase pesticide-free, water-conserving gardens that reduce solid waste, provide habitat for wildlife, and contain 60% or more native plants.

The tour enlists local residents to demonstrate by example that seasoned and novice gardeners can garden with good results without the use of synthetic chemicals, and with minimal supplemental water, while providing food, shelter, and nesting areas for wildlife. The gardens on this tour show that it is possible to implement sustainable garden practices and still have beautiful places for people to relax in and enjoy. The goals of the Bringing Back the Natives Garden Tour are to motivate attendees to eliminate pesticide use, reduce water use, generate less solid waste, and provide habitat for wildlife in their own gardens.

Why California natives? Once established in the garden setting, California native plants need little or no summer water, as they survive naturally with only fall-to-spring rainfall. In addition to being water-conserving, California natives are hardy, and they do not require the use of pesticides and fertilizers, as many non-natives do. Native plants need less pruning than many non-natives, such as lawn, ivy, or cotoneaster, thus generating less green waste. Natives also provide the best habitat for birds, butterflies, beneficial insects, and other forms of wildlife.

A nine-year study of water use, green waste generation, maintenance hours, and maintenance labor costs between a traditional garden and a California native plant garden was conducted by the City of Santa Monica between 2004 and 2013. The results of this study showed that the native garden uses 83% less

water; generates 56% less green waste, and requires 68% less maintenance than the traditional garden.

Bringing Back the Natives Garden Tour gardens contain minimal or no lawn. This is of particular value since the majority of the chemicals purchased by homeowners support lawn care, and the majority of water used in home gardens is applied to lawns. According to the U.S. Fish and Wildlife Service's Division of Environmental Contaminants publication, "Homeowner's Guide to Protecting Frogs – Lawn and Garden Care," homeowners use up to ten times more chemical pesticides per acre on their lawns than farmers use on crops. In addition, half of the water used by the average household is applied to the landscape – with most of that water being applied to keep turf green.

**2014 Bringing Back the Natives Garden Tour events: Music in the Gardens; Spring Tour and Native Plant Sale Extravaganza; Fall Native Plant Sale Extravaganza; and Select Tours**

This year, to celebrate the Tenth Anniversary of the Bringing Back the Natives Garden Tour, a Music in the Gardens component was added. Sixteen musicians and singers performed at private gardens and native plant nurseries. Lutes, flutes, guitars, ukuleles, Renaissance and Baroque music, jazz, blues, swing, and a thirteen person acappella group were among the offerings.

The Bringing Back the Natives Garden Tour has now expanded its offerings to include not only the spring Tour and Native Plant Sale Extravaganza, but also a Fall Native Plant Sale Extravaganza, and series of Select Tours and workshops that are offered in both the fall and spring. These are described below.

**Tenth Annual Bringing Back the Natives Garden Tour and Native Plant Sale Extravaganza**

The Tenth Annual Bringing Back the Natives Garden Tour, which took place on Sunday, May 4, 2014, showcased forty one gardens and nurseries located in twenty-two cities and unincorporated areas in Alameda and Contra Costa counties (Alameda, Berkeley, Brentwood, Castro Valley, Clayton, Concord, El Cerrito, Fremont, Hayward, Kensington, Lafayette, Livermore, Martinez, Moraga, Oakland, Oakley, Orinda, Pinole, Pleasant Hill, Richmond, San Lorenzo, and Walnut Creek).

A variety of gardens were featured on the tour. The gardens ranged from Al Kyte's forty year old wildlife habitat to a number of gardens that had been recently installed, and from five acre lots in the hills to small front gardens in the flats. Tour gardens contained everything from local native plants to the horticulturally available suite of natives from throughout California. Forty

percent of the gardens were designed and installed by owners, and the rest were designed and installed by professionals. Almost all of the gardens were landscaped with between 75% and 100% native plants.

### **Spring Native Plant Sale Extravaganza**

In addition to the May 4, 2014 tour day, on which forty one gardens and nurseries were open for viewing, the spring Native Plant Sale Extravaganza took place throughout the week-end of May 3 and 4, 2014.

During the spring Native Plant Sale Extravaganza a number of native plant nurseries – some not normally open to the public, and others normally open only for limited hours – were open from 10:00–5:00. Bringing Back the Natives Garden Tour registrants took advantage of this opportunity to shop for unique or hard-to-find native plants that are not normally available in most nurseries. This year nine nurseries took part in the Extravaganza, and more than \$11,000 worth of natives were sold over the course of the week-end.

### **Number of registrants, volunteers, and garden visits**

The tour received overwhelming interest from the public; this year there were over 6,000 registrants. On the day of the tour walk-in registrants were accommodated at nine same-day walk-in registration sites, which were set up in Berkeley, Castro Valley, El Cerrito, Fremont, Hayward, Livermore, Martinez, Moraga, and Oakland.

This year 13,066 garden visits were made on the day of the tour. See the end of this report for a list of the number of visitors counted at each garden.

More than 150 volunteers either worked at gardens for a half-day shift on the day of the tour, or helped with tour preparation and clean-up, contributing more than 600 hours of time to the tour. The 41 hosts put in countless hours preparing for the tour, and nearly 300 hours on the day of the event.

### **Garden Talks**

More than 60 garden talks and demonstrations on a plethora of topics were given throughout the week-end of the Tour. Talk topics included how to: retain stormwater on-site; remove a lawn; design and install a drip irrigation system; design and install a Laundry to Landscape grey water system; control weeds without using herbicides; select, plant, and care for natives in general, and select natives for specific areas, such as hillsides; design a simple, low-maintenance native plant garden; attract bees; garden for birds; choose appropriate natives; design and install a native plant garden; create a low-maintenance native plant garden; maintain a native plant garden; garden on hillsides; purchase native plants; maintain a native plant garden; design and install a native garden

yourself; garden for wildlife in general, and native bees and butterflies in particular; and how to control erosion, among other topics.

### **The website**

The website contains numerous photographs of all of the gardens that have ever been on the tour (information on prior tours remains accessible on the website for future reference), extensive garden descriptions, plant lists for each garden, and some garden-specific bird, butterfly, mammal, reptile, and amphibian lists, as well as resource information on how to garden with California natives. The resource information includes contact information for landscaper designers with gardens on the tour, a list of Easy-to-Grow East Bay Natives, lists of nurseries that carry native plants, lists of reference books, "How I got started gardening with native plants" essays by a number of the host gardeners, and more.

In order to attract hosts and volunteers, and to thank them for their time, two Garden Soirees – free, private tours of native plant gardens – were held in 2014. Garden Soirees offer host gardeners and volunteers the opportunity to see tour gardens that they would otherwise miss. They also create a feeling of camaraderie between hosts and volunteers, and provide a venue for people who are both knowledgeable and passionate about gardening with natives to meet and exchange information.

### **Misc. details**

Twenty of the gardens and native plant nurseries were at least partially wheelchair accessible. Eleven of the gardens were certified by the National Wildlife Federation as Backyard Wildlife Habitat Gardens.

### **Fall Native Plant Sale Extravaganza**

In the fall of 2013 a Native Plant Sale Extravaganza was held. Over \$10,000 worth of native plants were sold at six locations. These included Ploughshares Nursery in Alameda, the U.C. Botanic Garden and Oaktown Native Plant Nursery in Berkeley, East Bay Wilds in Oakland, Annie's Annuals in Richmond, and Markham Arboretum in Concord.

### **Select Tours**

In the fall of 2013 and the spring of 2014 a series of workshops were coordinated. These included hands-on sheet-mulching workshops; a popular "How to design native gardens for color throughout the year" tour; and a tour of a large organic garden that stores 10,000 gallons of rainwater on-site, has chickens, and contains extensive native and edible garden areas.

## **Tour Partnerships**

The Bringing Back the Natives Garden Tour created partnerships with a variety of organizations that share common values – that chemical-free and water conserving gardening preserves water quality and quantity, and creates wildlife habitat. The list of major sponsors and supporters of this year’s tour includes a flood control district, two county stormwater programs, three water districts, four cities, an unincorporated area, and a private foundation. The list of tour sponsors is provided below.

### **Sponsors of the 2014 tour**

**\$15,000**

Alameda County Flood Control and Water Conservation District

**\$10,000**

Contra Costa Clean Water Program

**\$7,500**

Jiji Foundation

**\$4,000**

Contra Costa Water District

**\$2,500**

County Clean Water Program (Alameda)  
Contra Costa Watershed Program

**\$2,000**

Bay Area Water Supply and Conservation Agency  
City of Richmond  
East Bay Municipal Utility District

**\$1,600**

California Native Plant Society (East Bay Chapter)

**\$1,500**

City of El Cerrito

**\$1,000**

City of Antioch  
City of Pittsburg  
City of Walnut Creek  
Zone 7 Water Agency

**\$500**  
Alameda County Water Agency  
City of Clayton  
San Francisco Estuary Partnership

**Host Gardeners**

The gardens selected to take part in the tour are chemical-free and water-conserving landscapes that provide habitat for wildlife. Hosts were chosen because of their willingness to be on site on the day of the tour to explain first-hand the techniques they use in their gardens, and their enthusiasm for, and commitment to, educating others about how to garden in environmentally sensitive ways.

Host gardener recruitment began in the spring of 2013 for the 2014 tour. Potential candidates completed an application, and applicants who met the criteria received a site visit. Host criteria were as follows:

- Gardener must reside in Alameda or Contra Costa County.
- Gardener must use organic and/or natural techniques for pest control rather than synthetic pesticides.
- Garden must demonstrate water conservation techniques. Examples include mulches, groundcover plants, drip or soaker hose irrigation, and the use of plants that do not require excessive watering during the dry part of the growing season.
- Gardener must be a good ambassador for chemical-free, water-conserving gardening: enjoy educating the public; and have the knowledge base to employ natural gardening techniques and share this information with the public.
- Garden must provide food, shelter and nesting areas for wildlife.
- Garden must contain 60% or more California native plants.
- No invasive plants are found in the garden.

Host's gardening experience ranged from native plant novices to professional landscape designers. All of the host gardeners were good ambassadors for natural gardening techniques.

**Host Comments from the 2014 evaluations:**

- Many people asked questions about my watering regime and strategies for pest control, so this was clearly a priority for them.

- People were so excited about native plants and gardening naturally using as little water as possible. It was wonderful!
- The tour is the best way for visitors to see firsthand a variety of different native gardening styles and learn that native plant gardening is not just one thing. All the visitors I spoke with were inspired and motivated by what they learned on the tour.
- I answered many inquiries about these pesticide use reduction and water conservation. People come to learn as much as they can. It's a real teaching opportunity.

### **Volunteer Comments from the 2013 evaluations:**

- What a great organization. I believe this event inspires homeowners to try their hand at incorporating native plants in their yards, especially during this drought year. It also exposes the general public to all the beautiful native plants and how they can be just as beautiful as non-native, thirsty plants.
- I talked with many people who were looking for information about reducing or getting rid of their lawns, and selecting drought tolerant plants for their landscape.
- 
- I think there is more interest in native plants in the landscape more than ever with the onslaught of severe drought. Most people were surprised to see how colorful the gardens are and how the plants attract pollinators and birds.
- We'll be putting in a native, less-water-consuming lawn as a result of visiting Garden #15.v It was really useful to speak to the Delta Bluegrass spokesperson who was at that garden and to see a native bunchgrass lawn. My husband needed to see a native lawn to feel comfortable with the change.
- I was at a home where Roxy spoke about irrigation and using less water; the talk was well-attended and helpful!
- As a garden assistant, I was able to point out the water saving strategies that were used in the garden where I was volunteering.
- Water use was a big topic for this year's participants. Many people interested in how much water each plant needed.
- There were lots of questions about how much water was being used.
- 
- Some people were seeing a California Poppy up close for the first time, so the tour definitely helps people with no knowledge of native plants be more informed. Another woman had not heard of sheet mulching with cardboard to remove a lawn.
- Many folks left the garden at which I worked talking about how much they had enjoyed the experience. I was very impressed by the level of detail that went into the event--from the exceptional tour booklet to the pen left at my table so that I could tally anyone who didn't have a ticket! Brava!!
- I am so grateful this tour exists, as I love the native California native flora and want to encourage its use. We are home to a rare and magnificent flora; we ought to celebrate it, cultivate it, propagate it, design with it. Now that we are in the midst of this drought, this is more important than ever.
- 

### **Tour Survey and Evaluation**

Two surveys were offered to the tour’s pre-registered participants. The first was available as part of the registration process. Below are some statistics taken from this survey.

The 2013 tour attendees were highly motivated to learn new gardening techniques. When asked what they would like to learn from the tour the majority of respondents (83%) wanted to learn how to select native plants; 58% wanted to learn how to conserve water; 56% wanted to learn how to garden for wildlife; 33% percent wanted to learn how to reduce pesticide use; 33% wanted to learn how to remove their lawns; and 23% wished to learn about composting.

What do you want to learn from the tour?	2012 Responses	2013 Responses	2014 Responses
How to select native plants	72%	83%	69%
How to reduce water use	51%	58%	57%
How to garden for wildlife	51%	56%	45%
How to reduce or eliminate pesticide use	30%	33%	25%
How to replace a lawn with a garden	30%	33%	30%
How to compost	19%	23%	18%

### Evaluations

There was a return of 484 registrant evaluations, with 99% of those filling out the evaluations rated the tour “Excellent” or “Good.”

This year 64% of the registrants were repeat visitors, and 36% were attending the tour for the first time.

### Motivation and Behavior Change

When asked if the Tour inspired people about how to garden without pesticides, while using less water, 95% of those who filled out the evaluation responded that it had, and added these comments:

- Absolutely. I'm also converting my friends and family about it.
- I especially like the emphasis on attracting birds to replace pesticides.
- I got several good practical ideas to save water and avoid chemicals in the garden.

- I was so inspired I came home and became a member of the California Native Plant Society. I am talking up natives to my friends and family now!
- It's instructive and delightful to see vigorous, lovely plants thriving without all those poisons-- without paying that price (or making the community and the planet pay it)
- The Tour certainly offers the opportunity to learn how to garden without pesticides, and with less water! With background information in the brochure, talks on-site, and the variety of handouts, as well as homeowners and garden assistants so accessible. Also, it's great the way you highlight special demonstration features, such as "Netafim, a microdrip irrigation system, is used to water the garden." This further helps alert the visitor to a specific feature related about reducing water use or pesticides.
- Absolutely and then some.
- I plan to replace my small front lawn with native grass, which I learned about on the Tour.
- We were inspired by the gardens and the gardeners. Looking forward to getting started!
- I learned how to take out the front lawn with minimal labor and money; I will change it out to drought- resistant plants.
- We are currently sheet mulching our large front lawn and replacing it with drought tolerant plants thanks to inspiration from this and past years' tours. We used a designer whose work we saw on the tour. The tours this year gave us a chance to ask specific questions as well as to see what some of our plant selections will look like in a couple years. Also gave us some ideas for the backyard.

The registrant evaluations were split up into two groups – those who had attended the tour before, and those who had not. The data for Repeat Registrants and First-Time Registrants was tabulated separately. Both of these categories are discussed below.

### **Repeat Registrants**

77% of registrants who had attended a previous Bringing Back the Natives Garden Tour, and who filled out the evaluation form, said they had changed their gardening practices because of their participation in the Bringing Back the Natives Garden Tour.

The first column below shows the percentages of the repeat registrants who changed their gardening behaviors after attending the Bringing Back the Natives Garden Tour. The second column shows the percentage of repeat registrants who plan to change their gardening behaviors.

Evaluations of repeat registrants from the 2014 tour showed that after attending a prior Bringing Back the Natives Garden Tour: 19% of respondents had incorporated natives into their gardens (thereby reducing herbicide use and conserving water); 13% were encouraging wildlife with plant choices; 14% had grouped plants by water needs and incorporated drought-resistant plants into their gardens; 10% had increased the density of plantings to out-compete weeds (reducing herbicide use and conserving water); 10% were tolerating some insect damage; 8% had begun mulching; 10% had amended their soil; 8% had reduced the size of their lawn; 6% had reduced or eliminated pesticide use; 10% had installed efficient irrigation; 3% were grasscycling; 3% were composting; and 4% had reduced the amount of hardscape in their gardens.

Repeat visitors were highly motivated to make changes in their gardens. When asked what they planned to do: 38% planned to increase the density of plantings to out-compete weeds; 29% to group plants of similar water needs; 25% to install efficient irrigation; 20% to encourage wildlife; 21% to reduce the size of their lawn; 18% to incorporate native plants into their gardens; 18% to mulch; 11% to minimize hardscapes; 12% to compost; 16% to amend their soil with compost; 13% to tolerate some insect damage to plants; 8% to grasscycle; and 6% to reduce or eliminate pesticide use.

**How do you manage your garden? (This information was taken from evaluations filled out by repeat registrants.)**

ITEM	Began after participation in a previous BBTN Tour	Plan to do this
1. Reduce/eliminate insecticide/herbicide use.	9%	6%
2. Increase the density of plantings to out-compete weeds.	16%	32%
3. Encourage birds, butterflies, etc. with plant choices, food, shelter, and water.	18%	17%
4. Tolerate some insect damage to plants.	14%	8%
5. Incorporate native plants into our garden.	21%	15%
6. Group plants of similar water needs.	15%	28%
7. Incorporate drought-resistant plants into our garden.	15%	16%
8. Install efficient irrigation (such as drip, timers, soaker hoses).	8%	21%
9. Grasscycle (leave grass clippings on the lawn).	5%	6%
10. Reduce the size of our lawn.	8%	21%
11. Mulch with leaves, grass,		

wood chips, etc.	9%	13%
12. Amend soil with compost.	6%	11%
13. Minimize hardscapes (patios, decks).	6%	12%
14. Compost yard waste and kitchen scraps at home.	6%	8%

### First-time registrants

The tour was highly motivating to the first time registrants who completed the evaluation. 58% planned to incorporate native plants into their gardens; 58% of first-time registrants responded that they planned to increase the density of plants, thus helping to out-compete weeds and reduce water use; 50% of first time registrants planned to group plants by water needs; 43% planned to encourage wildlife; 42% planned to incorporate drought-resistant plants into their gardens; 32% planned to reduce the size of their lawns; 35% to install efficient irrigation; 31% planned to mulch; and 32% to amend their soils; 16% to compost kitchen scraps and yard waste; 19% planned to tolerate some insect damage; 15% planned to reduce or eliminate pesticide use; and 14% planned to reduce the amount of hardscape in their gardens.

### How do you manage your garden? (These are responses from first-time registrants.)

ITEM	Plan to
1. Reduce/eliminate insecticide/herbicide use.	16
2. Increase the density of plantings to out-compete weeds.	52
3. Encourage birds, butterflies, etc. with plant choices, food, shelter, and water.	36
4. Tolerate some insect damage to plants.	20
5. Incorporate native plants into our garden.	46
6. Group plants of similar water needs.	50
7. Incorporate drought-resistant plants into our garden.	38
8. Install efficient irrigation (such as drip, timers, soaker hoses).	30
9. Grasscycle (leave grass clippings on the	9

lawn).	
10. Reduce the size of our lawn.	37
11. Mulch with leaves, grass, wood chips, etc.	27
12. Amend soil with compost.	28
13. Minimize hardscapes (patios, decks).	12
14. Compost yard waste and kitchen scraps at home.	12

Number of visits made to each garden

	# AM visitors	# PM visitors	Total Visitors
<b>BAYSIDE CITIES</b>			
<b>Berkeley</b>			
California Native Bee Garden	134	351	485
Penny DeWind and Don Kyle			500
Elisa Mikiten	246	283	529
Glen Schneider	242	281	523
<b>Castro Valley</b>			
Sharon Horgan	104	88	192
<b>El Cerrito</b>			
Nalani and Anna Heath-Delaney	259	164	423
Nancy Warfield and David Gray	138	96	253
<b>Fremont</b>			
Kate Lipman			115
<b>Kensington</b>			
Seibi Lee and Joel Schoolnik			308
<b>Oakland</b>			
Carol Baird and Alan Harper	315	189	504
Sue Duckles and Cherie Donahue	231	286	517
Carrie Knapp	192	284	476
Holly and Joe Maffei			644
Tai Moses and Michael Kerner	199	275	474
Judy Schwartz and Rod Miller	293	316	609
<b>Pinole</b>			
Kim and Jeff Jerge	138	85	223

Jessica Kolman	94	63	157
<b>Richmond/Point Richmond</b>			
Kate Sibley	124	112	236
<b>San Lorenzo</b>			
San Lorenzo High School	100	61	161
<b>INLAND CITIES</b>			
<b>Brentwood</b>			
John and Fran Alcorn	63	39	102
<b>Clayton</b>			
Karen and Jeremy Amos	183	171	354
Kelly Marshall and Mike Weidner	196	214	410
<b>Lafayette</b>			
Ursula Bartels	254	263	517
<b>Livermore</b>			
Louann Tung	102	108	210
Janis Turner			221
<b>Martinez</b>			
Web and Sue Beadle	109	146	255
Terry Blair and Dave Smith	133	146	279
Jean Halford	180	212	392
<b>Moraga</b>			
Jennifer Becker and Dean Mayer	258	184	442
Al Kyte	272	195	467
<b>Oakley</b>			
Carolee James	51	87	138
<b>Pleasant Hill</b>			
Gaston and Ariane Habets	322	288	610
<b>Walnut Creek</b>			
Stephen Barbata and Joyce Kirstein			753
Nancy Wenninger	277	310	587
<b>TOTAL</b>	5,209	5,297	13,066

\* The number of morning and afternoon visits does not equal the number of total visits, as some gardens reported only total visits; not the breakdown.

*When planning for a year, plant corn. When planning for a decade, plant trees.*

*When planning for life, train and educate people.  
(Chinese proverb)*

**Below are comments from garden tour attendees, either taken from registrant evaluation forms, or received via e-mail.**

- This garden tour is always fabulous!
- All of the volunteers were helpful and knowledgeable.
- Thanks a million! Everything and everyone was wonderful! We had a great day!
- Very inspiring! Thank you for all the hard work that went into organizing the tour, and for the beautiful booklet.
- We really appreciate this opportunity for inspiration and learning!
- We appreciated the hosts' enthusiasm and knowledge.
- Copious kudos for yet another amazing tour!
- Excellent event. It's great that the tour includes music & talks & more opportunities to purchase plants.
- Very well run tour! Great booklet, helpful volunteers, a lovely experience in general.
- It was a wonderful experience! Thank you!
- it was fantastic!!! thank you!!
- Excellent garden tour, I tell everyone I know about it.
- Thanks for all the volunteers who make the tour possible.
- The brochure is exceptionally attractive and well planned.
- Thank you. This tour was a day well-spent. We learned a lot and got a lot of inspiration. We are planning to remove our front lawn and were looking for ideas.
- Excellent, excellent, excellent! Thank you!
- The home owners were a wealth of knowledge and very, very nice to speak with.
- Extremely well organized and great information provided. Awesome, awesome job!
- Fabulous community education about natives and water conservation. Yeah!
- Wonderfully organized, lovely gardens. Thanks so much! It's an excellent tour.
- The tour was amazing - as it is every year! Look forward to it as an annual tradition!
- It was fun to discuss projects and how the homeowners progressed with their gardens.
- Wonderful! I liked having native plants available for sale.
- The East Bay garden tour was terrific! I always learn new things and get fresh inspiration from the tour and have made many changes over the years in our gardens, thanks to you. All of your hard work and that of your volunteers is much appreciated!
- My husband and I really enjoyed the tour. People who garden are always the nicest people - they are always willing to share their knowledge. Who knew that CA natives were such a beautiful group of plants. We are in the process of landscaping our backyard and came away from the tour with lots of new ideas. See you next year!
- The tour is one of the highlights of my year; I would not miss it. Thank you so so much for organizing such a wonderful event. This really helps me get better acquainted with the plants and see how they grow in different situations.

- This tour is always well organized. I re-did my whole front yard with natives 5 years ago, inspired by one of your tours.
- I visited four gardens closest to my house--it was a lot of fun and so inspiring. I got many ideas for my garden. I liked knowing that these gorgeous gardens took years and several stages to develop--it will help me be patient with my evolving garden.
- Loved this year's tour! I plan to develop my front/back yards into a native plant oasis, hopefully, soon.
- Just let everybody who's involved with this tour know that I really, really appreciate their efforts. I learn a lot, and am inspired. Keep up the great work, and THANK YOU!!
- Great organization! The information provided in the booklet is very helpful.
- I really enjoy this tour!!!
- Thank you so much. I'm joining the California Native Plant Society today. I love this tour.
- We loved the tour and are grateful to each and every person who makes this event possible and affordable.
- I'm really encouraged that the availability of native plants and information about them is so much greater than it was 20 years ago, and that young horticulturists are coming out of school with a very different mindset, but none of that matters much if the average homeowner continues to garden as if he lived in England. Thank you for the BBTN tour. Some people will go home and take major steps and others may start with subbing out a plant or two, but I think everyone comes away with a resolve to do something more environmentally appropriate.
- Special thanks to you and your staff for making this happen each year. I love seeing less grass and more plants!! Thank you to the wonderful participants for opening their homes to us and sharing so much information. The knowledge we walk away with is invaluable!! See you next year!!!!
- Excellent organization, pleasant volunteers, interested & respectful visitors --- everyone was impressed with the plants presented, and the variety, color, and overall attractiveness of native gardens. The tour is good selling job for use of natives.
- Great job! That Garden Tour booklet was so well done and was invaluable. All the gardens were lovely.
- Special kudos for the organization of the guide, knowledgeable garden assistants, and the serious effort to show gardens in the multitude of microclimates we have in the Bay area. Really this tour is spectacular.
- Fantastically well organized, great to have the detailed booklet to choose which gardens to visit and also to help remember ideas from the tour later on as a reference. I look forward to next year and am inspired to incorporate more natives into my landscape! Thank you.
- I would like to thank everyone who so generously opened their gardens to us!
- Loved it! Plan to come back next year.
- My friends and I look forward to the tour every year!
- Beautifully done and so welcoming. I heard many comments from people who wanted to adopt more drought-tolerant methods of gardening.
- We are very grateful for the generosity of the owners and the volunteers. We have been going religiously, annually. Without the tour, we would have never known how to use native plants, compost, etc.
- Really appreciate the information in the booklet, which helps me efficiently plan my personal tour to gardens that are near my home, probably similar in climate, and have features that inspire my own ideas or plans.
- Loved it. Thank you all for all the hard work. The Tour is a valuable contribution to the community.
- THANK YOU, THANK YOU! The Bringing Back the Natives Tour is a wonderful service to the community.
- This is a very organized event with LOTS of inspiring yards to see and learn from.
- Very well organized. Wonderful selection of gardens.
- Congratulations on another stunningly well-organized and inspirational tour. I am once again impressed with all the hard work you do provide opportunities for so much learning. Thank you to all the organizers, homeowners, presenters, and volunteers.
- Thank you so much, it's a great event!

- I was SO impressed with the registration process, and particularly the EXTRAORDINARY tour booklet; the well written-descriptions enabled me to decide which gardens to tour, and the wonderful mapping system helped with logistics. Please keep this tour guide - it is FANTASTIC.
- I really learned a lot, and am looking forward to getting my garden in shape so it can be on the tour one of these years!
- Lovely event - Thank you to all the hosts and sponsors.
- We LOVE the Tour!

<b>Table 1: 2014 Community Watershed Stewardship Grants</b>				
<b>Organization</b>	<b>Project Name</b>	<b>Grant Amount</b>	<b>Grant Amount Recommended</b>	<b>% of Request</b>
Contra Costa Resource Conservation District	Alhambra Creek Watershed Council Watershed Coordinator	\$ 15,040	\$ 15,040	100%
Earth Team	Aqua Team	\$ 14,200	\$ 14,200	100%
Contra Costa Resource Conservation District	Rodeo Creek Community Watershed Stewardship Program	\$ 19,888	\$ 16,420	83%
Friends of Marsh Creek Watershed	Water Pollution Prevention of Marsh Creek Watershed and Expansion of FOCW	\$ 20,000	\$ 16,420	82%
SPAWNERS	San Pablo Creek Watershed Stewardship Program	\$ 20,000	\$ 16,420	82%
Golden Gate Audubon	Bay View Elementary Bird Friendly Bioswale Design	\$ 15,000	\$ 7,500	50%
Save Mount Diablo	Creek Restoration and Habitat Enhancement Projects in Kirker, Marsh, and Hess Creeks	\$ 10,000	\$ 5,000	50%
Bringing Back the Natives Garden Tour	Garen Tours	\$ 7,500	\$ 2,500	33%
Contra Costa Resource Conservation District	Walnut Creek Watershed part time Coordinator	\$ 19,572	\$ 6,500	33%
Lunchbox International	The Environmental Media Workshop	\$ 20,000	\$ -	0%
Clean Water Fund	Re-Think Disposable	\$ 20,000	\$ -	0%
Citizens for a Greener El Sobrante*	Rain Garden Advocacy and Education	\$ 13,200	\$ -	0%
Marine Science Institute	Discovery Voyage	\$ 6,900	\$ -	0%
El Ceritto Pre-school Cooperative	Watershed Gardens	\$ 3,050	\$ -	0%

\*Application was received after the deadline and not considered.



# Our Water - Our World



## Contra Costa County Our Water Our World Store Partnership Program Report 2013 - 2014

Report prepared by Debi Tidd



*“(Most useful part of training) “Knowing what pesticides do and what alternatives we have available to reduce water pollution.”*

From training evaluation, Home Depot, Brentwood

*“I’ve realized how much pesticides hurt our environment.”*

From training evaluation, Home Depot, Concord



*Our Water - Our World*



## PROGRAM OVERVIEW

Twenty-two stores participated in this year's partnership program. Two additional stores participated in the program (Annie's Annuals and The Urban Farmer Store) but were maintained by the City of Richmond. Four Home Depot stores were added to the contract this year in the cities of El Cerrito, San Ramon, Pittsburg and Brentwood.

Debi Tidd was the lead on the contract, with sub-contractors Steve Griffin, Suzanne Bontempo, and Annie Joseph working at some stores and events.

**Greener Pesticides for Cleaner Waterways Grant:** For a second year, the Our Water Our World Program was part of this EPA grant program. This grant covered the costs for an IPM Advocate to provide OWOW program services to selected stores. Two of these stores are part of the Contra Costa County program: Orchard Supply Hardware in San Ramon, and Ace Hardware in Concord. The bulk of the hours spent at these stores were not charged to this contract, which allowed us to spend additional hours mentoring other stores. This funding will end at the beginning of the 2014 – 2015 contract year.

**Home Depot Pilot Project Grant:** This second grant was also in place for the 2013 – 2014 contract. One of the new stores, Home Depot in San Ramon, was part of this project to provide extended services to 10 Home Depot stores in the Bay Area. As a result, the bulk of the work done at this store was not charged to this contract. In addition to the basic OWOW services, this project included identifying and training a Green Garden Specialist at each store and providing them with an enhanced training and more frequent store mentoring visits as well as sets of books and materials for identifying pests and diseases and choosing appropriate planting materials. This store will also be provided with copies of an IPM pocket guide developed specifically to highlight Home Depot products and services.

Here is an overview of the basic components of the program:

- **Program Administration:** Tasks include inventorying, ordering and picking up training materials, making copies for training packets and handouts, collating and creating training packets, preparing materials and powerpoints for store trainings, making labels for shelf talkers, researching pests & products and following up on questions and concerns from store staff, working with store management to get new stores into the program, and writing up reports.

- Store set-ups: Once the bulk of the pesticide products are received by stores and shelves have been stocked for the coming year, all less-toxic products are labeled with OWOW shelf talkers and fact sheet racks are set up.
- Store trainings: Each store is offered training for their staff with detailed information about pesticides and water pollution, identification of beneficials and pests, and understanding how to use less-toxic products and working with customers. Trainings are held in-aisle or off the floor in a training room.
- Store mentoring: On continued visits to stores we add or replace shelf talkers, refill fact sheet racks, set-up end caps and displays, talk with store staff about new products and pests, make recommendations about new products, research and answer any staff questions, and work with customers in-aisle.
- Outreach Events: Public events include tablings or classes in stores for customers, staffing an OWOW booth at related community events, and speaking about the program at public events.

#### NUMBERS AT A GLANCE

- 22 stores participating in the partnership
- 22 store set-ups with shelf talkers and fact sheet racks
- 12 store trainings provided to 14 key stores.
- 97 staff trained at formal staff trainings; 48+ additional staff trained in-aisle during informal, mentoring visits.
- 18 outreach/tabling events for stores (approximately 400+ people)
- 9 additional outreach/publicity events (4,200+ see locations and numbers in additional programs and publicity below).

#### PARTICIPATING STORES

Here is the complete roster of participating stores:

- Home Depot, 11939 San Pablo Ave., El Cerrito
- Home Depot, 2090 Meridian Park Blvd., Concord
- Home Depot, 2750 Crow Canyon Road, San Ramon
- Home Depot, 2300 N Park Blvd., Pittsburg
- Home Depot, 5631 Lone Tree Way, Brentwood
- Ace Hardware, 1530 Contra Costa Blvd., Pleasant Hill
- Ace Hardware, 3610 Pacheco Blvd., Martinez
- Ace Hardware, 4451 Clayton Rd., Concord
- Ace Hardware, 3211 Danville Blvd., Alamo
- Ace, 8900 Brentwood Blvd., Brentwood
- OSH, 1041 Market Place, San Ramon
- OSH, 2050 Monument Blvd., Concord

- OSH, 5400 Ygnacio Valley Rd., Concord
- OSH, 1440 Fitzgerald Dr., Pinole
- Navlet's Garden Center, 1555 Kirker Pass Rd., Concord
- Navlet's Garden Center, 2895 Contra Costa Blvd., Pleasant Hill
- Navlet's Garden Center, 800 Camino Ramon, Danville
- Navlet's Garden Center, 6740 Alhambra Valley Rd., Martinez
- Orchard Nursery and Florist, 4010 Mt. Diablo Blvd., Lafayette
- Moraga Garden Center, 1400 Moraga Rd., Moraga
- McDonnell Nursery, 196 Moraga Way, Orinda
- Sloat Gardens, 828 Diablo Rd., Danville

### AWARDS AND RECOGNITION

This year on January 23rd, the Our Water Our World program was recognized at an awards ceremony in Sacramento. The “2013 Integrated Pest Management Innovator Award” was given to the IPM Advocates that were trained to bring the OWOW program into stores. This award is given to individuals and/or organizations for “innovative approaches to IPM and reduced-risk pest management and their leadership roles in promoting these practices.”



IPM Innovator Award Ceremony with IPM Advocates

### PARTNERSHIPS WITH VENDORS

This year three pesticide vendors, Bayer, Kellogg and Scotts, approached us about partnering with them to create less-toxic product displays. We were able to create displays in all our Home Depot stores. The fact that these vendors acknowledge the impact of the OWOW program in promoting less-toxic products is a huge step forward for the program.



Kellogg/Bayer display in Home Depot, San Ramon



Scotts display in Home Depot, Pittsburg

## PROGRAM ASSESSMENT

There are several assessment tools built into the program to help us determine how to revise the program, which products/pests we need to promote, and how effective the program is at reaching the public.

- **Pre-Surveys:**  
Each staff member attending the training is asked to fill out a brief pre-survey form designed to collect information about general knowledge of pesticide pollution in water and how to dispose of unwanted gardening products. Comparing these results to the evaluation results helps us to determine if this information is coming across in the trainings. A summary of the survey results is included at the end of this report.
- **Evaluations:**  
Each employee is also asked to fill out an evaluation at the end of the training. These evaluations help us to determine their understanding of water quality issues and less-toxic products, how helpful the training and materials are, and what to provide more information on. The results of these evaluations can be seen at the end of this report, and were overwhelmingly positive.
- **Numbers of customers reached by tablins and special events:**  
Throughout the year, we keep track of the customers we reach at tablins, classes and events, which products/pests they ask about the most, and which products we are steering them toward as we work with them in-aisle. More information on tablins and events is included at the end of this report.
- **Sales of less-toxic products:**  
Each year we try to get sales numbers from participating stores so that we can see if there has been an increase in sales of less-toxic products. Last year we learned that OSH had a 29% increase and Home Depot had a 22% - 25% increase.

So far this year, stores have been telling us that the drought and economy have hit their sales hard, and most gardening product sales are down. However, one vendor (Bayer) was able to tell us that their less-toxic product line was only down 3%, while their more toxic products were down 10%. In addition, our San Ramon Home Depot store showed a 22% increase in Bayer's eco-friendly Natria products, the highest increase of any Bay Area store.

We will continue to try to get sales numbers, and if we are able to get these numbers by the end of the year I will forward them.



Each staff member participating in training received a resource packet that included:

- An Intro to the OWOW Store Partnership Program
- IPM Basics
- Reading a Pesticide Label
- How Less-Toxic Products Work
- Ten Tips for Water-Wise Gardening
- Applying Beneficial Nematodes
- Laminated Good Bug/Bad Bug ID Chart
- The Ten Most Wanted Bugs in Your Garden
- OWOW Resources (websites, books, and the location of Household Hazardous Waste Collection Sites in Contra Costa County)
- Additional pest management information sheets on: citrus leaf miner, dormant spraying, whitefly, giant whitefly, spider mites, and lawn grubs.

Stores that participated in trainings were also given a hand lens and a copy of *Landscape Pest Identification Cards*, a laminated set of cards to help work with customers on identifying pests, diseases and beneficials. Additional resources included a small, laminated good bug guide to post for customers, and a small laminated guide with suggestions form managing rats and mice to post in-aisle.



Training for OSH Corporate staff



Staff training at Navlet's, Martinez



Green Gardener Specialist Training for  
Home Depot Stores

## STORE MENTORING AND RETURN VISITS

Return visits stores is an essential part of the program for maintaining our relationship with the stores and keeping the materials stocked. At these visits, we replace shelf talkers and keep fact sheet racks stocked and looking neat. Some stores completely redesign their shelves during the year, and this means that we sometimes have to re-label all of the products.

In addition to replacing materials, these visits allow us to work with staff to address questions that have come up, introduce them to new products, and alert them to new or seasonal pests to be aware of. This also allows us time to informally train any new staff in-aisle. During visits we also work with customers in-aisle to provide pest management solutions and information on pesticide choices. If difficult questions come up, we will research the answers and get back to staff with answers resource materials.



Store mentoring visit, Ace, Brentwood

## STORE DISPLAYS AND ENDCAPS

Another important aspect of store mentoring is helping stores identify seasonal pest problems and to help design/set up end caps of less-toxic products. In some cases, we are able to partner with vendors to help design and label end caps of their less-toxic product lines.



Less-toxic product end cap, ACE, Brentwood



Dr. Earth end cap OSH, San Ramon

## OUTREACH EVENTS

This year we participated in 18 store-related outreach events working with about 400+ customers and members of the community. These events allow us to work with the public at the point of purchase, to help them identify and solve pest/disease problems, to advise them on less-toxic products and how to use them, and to provide a wide variety of informational materials.



Outreach/tabling event at Home Depot, Concord



Outreach/tabling event at OSH, San Ramon

## ADDITIONAL PROGRAMS AND PUBLICITY

A number of special events come up each year that allow us to publicize the OWOW Store Partnership program. Many of these events are not charged to the contract. These events help us to promote and strengthen the OWOW program in several ways. They allow us to:

- Influence the choices store managers and buyers make in placing orders for less-toxic products for their shelves.
- Promote the stores that are part of the partnership in the community for more visibility.
- Work with the public to disseminate fact sheets and information on less-toxic products.
- Provide additional information and training to store managers and staff that have not gone through a formal training.
- Network with stores that would like to become a part of the store partnership program

Here are some of the outreach events that we were able to be part of this year:

- Home Depot “Road Show” (300 participants)  
Each year Home Depot sponsors a regional event for store managers and staff, rotating groups through stations to learn about new products. We are the only non-vendor allowed to attend this event, and were able to speak with over 300 Home

Depot staff members, including staff from the Concord store already in the program, and staff from the new Contra Costa partnership stores.

- L & L Trade Show and Central Trade Show (3,000+ participants)  
These huge trade shows held each year are where many Bay Area stores order their pesticide products for the year. We were able to set up a booth with OWOW information, photos of partner stores, samples of less-toxic products and information on less-toxic products. During the shows, we were able to work with owners and managers of several of our partner store in Contra Costa to make recommendations for products that would meet the less-toxic criteria.
- Sloat Garden Center – Meet with Corporate Manager, and Attend Vendor Night (60 participants)  
Each year, we meet with the corporate management for the Sloat stores to recommend new less-toxic products to carry, and make recommendations about which products should be discontinued because of toxicity. In addition, each year Sloat offers staff from all of its stores the opportunity to meet and learn about new products at a vendor event. OWOW was the only non-vendor invited to set up a table at this event so that we could recommend specific less-toxic products. We were able to meet with the staff from the Danville store that is part of our program, as well as store management.
- Bay-Friendly Landscape Maintenance Training (110 participants)  
This series of classes provides training sustainable landscaping techniques to professional landscapers. This year, I was the IPM speaker for the program in Contra Costa and Napa counties and was able to introduce the program, give out OWOW materials and teach about IPM basics and the use of less-toxic products and management solutions.
- Contra Costa Pest Management Workshop (60 participants)  
This seminar, open to professional landscapers and the public, brought together experts on IPM to teach about less-toxic pest control. An IPM Advocate was the key-note speaker and spoke about the OWOW program.
- Contra Costa Sustainability Fair (500 participants)  
We set up an OWOW booth at this yearly fair that was organized by the Master Gardeners to educate the public by bringing together community groups that promote sustainable landscaping techniques.
- California EcoLandscape Conference (300 participants)

This conference was designed to educate professionals in ecologically responsible landscaping principles. We set up a display on OWOW and fact sheet rack and talked with participants about the program.

- Annie's Annuals Event (30 participants)

OWOW provided a speaker for a special public class on how to attract beneficials to a garden to manage pests, and how to create healthier gardens.



L&L Trade Show



Home Depot Road Show



Contra Costa Sustainability Fair



EcoLandscape Conference

## GOALS FOR THE PROGRAM

Here are last year's goals, and how we followed up on them:

- Expand our number of end caps: This year we were able to partner with pesticide vendors and set up less-toxic end caps in all of our Home Depot stores, as well as less-toxic end caps in OSH and ACE stores.
- Provide additional OWOW banners/displays: new banners were printed and displayed in stores over end caps and in-aisle.
- Additional ways to promote the OWOW program: new publicity this year included radio interviews, a blog by an IPM Advocate, and information provided at public events.

Here are some recommendations for the 2013 to 2014 program:

- Continue to pursue contacts with the Lowe's corporate office with the goal of partnering with a Contra Costa store in a pilot program
- Work with stores to develop information and/or end caps to highlight specific pest problems that are time sensitive and often mismanaged, such as dormant spraying and using nematodes to control lawn grubs.
- Revise trainings and training packet information to include new pests of special concern in the area and management/reporting methods.
- Continue to develop ways to promote the program and reinforce the 'visuals,' including the OWOW logo and shelf talkers, and banners in the pesticide aisles.

#### CLOSING

The stores in the OWOW program in Contra Costa County have a great selection of less-toxic products to offer to their customers. I enjoyed the chance to explain the program to new staff members, and everyone I spoke with was enthusiastic about the program and excited to be part of an effort to protect their community. They really appreciated the training materials, and having a chance to get answers to some of the harder questions posed by customers. Given the stores' concerns about drought and the media bringing more attention to problem pesticides and water issues, the resources and information provided by the OWOW program will be especially helpful to our partner stores in the coming year.

Debi Tidd

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### Store Training Pre-Survey Results

A total of 81 pre-surveys were returned. In some cases, questions were left blank on the forms and not all forms were turned in. Here are the results for the pre-surveys that were returned:

1. When water runs into a storm drain in the street, is it treated before it reaches a stream?

NO: 70

YES: 9

DON'T KNOW: 2

2. When water enters the sewer system from a house drain, is it treated before it reaches the Bay? (Please note that this is a hard question to answer. While the water is treated at a sewage plant, most of the toxic pesticides cannot be removed.)

NO: 42

YES: 38

DON'T KNOW: 1

3. What do you do with left-over pesticides, or pesticides you no longer want?

Recycle it: 5

Take to HHW: 34

Label it: 2

Store in cool, safe place: 5

Take to company that recycles: 2

Throw away: 3

Don't know: 5

Put in sealed container: 1

Dispose of properly: 4

Keep to reuse on other areas: 14

Take cap off, let it dry: 1

Call waste management to pick up: 1

Don't dump it: 1

4. Do you know where your local household hazardous waste facility is located?

NO: 43

YES: 38



### **Summary of 2013 IPM Store Employee Training Evaluation Forms**

A total of 84 evaluations were returned. In some cases, questions were left blank on the forms and not all forms were turned in. Here are the results for the evaluations that were returned. (Percentages are based on the number of answers received for each question.):

- The training workshop was well organized and interesting.  
Strongly Agree: 80%      Agree: 20%      Neutral:
  
- My training manual will be a useful resource in the future.  
Strongly Agree: 81%      Agree: 19%      Neutral:
  
- The information will help me recommend and sell less-toxic products.  
Strongly Agree: 77%      Agree: 23%      Neutral:
  
- The instructor was responsive to questions.  
Strongly Agree: 88%      Agree: 12%      Neutral:
  
- The level of detail was appropriate.  
Strongly Agree: 80%      Agree: 19%      Neutral: 1%
  
- Visual aids were effective.  
Strongly Agree: 82%      Agree: 15%      Neutral: 3%
  
- Written materials were effective.  
Strongly Agree: 83%      Agree: 15%      Neutral: 2%
  
- I would recommend the training to my co-workers.  
Strongly Agree: 83%      Agree: 17%      Neutral:
  
- I would like to learn more about IPM methods and IPM certification.  
Strongly Agree: 58%      Agree: 34%      Neutral: 8%

What part of the training was most useful?

- All (20)
- Insect identification beneficials and pests (15)
- Going over products (9)
- New pests (3)
- Visuals (9)
- Training packet (6)
- Controlling gophers (1)
- Mulching info (1)
- Lawn Fertilizers (1)
- Info on ants (1)
- Green pest control (1)
- Learning about different pests (2)
- Irrigation rebate info (1)
- Pest pocket guide (1)
- Trainer's personality/energy (2)
- Runoff & pesticide info (1)
- Having my questions answered/explanations (3)
- What to use in right situation (1)

What part of the training was least useful?

- Nothing/all useful (53)
- Slide show (1)
- How to get rid of lawn (1)
- No info on bed bugs (1)
- Written materials: (2)
- Q&A (1)
- Repetitive bullet points (1)
- Needed chairs (2)

Did the information change your views about pesticides? How? (Please note that the reason for some 'no' answers is that the staff member already promotes less-toxic.)

YES (59)

- Gave me ideas on control.
- Because I didn't know anything about pesticides.
- I know now to use organic even if it takes longer.
- There is always a safer method.
- I've realized how much pesticides harm our environment.
- Much more natural pesticides than I thought.
- I know more about eco-friendly control methods.

- Gave me tools to communicate with customer.
- Gave me more information on pesticides than I already had and identifying bugs.
- Would use less-toxic for sure.
- Environmental effect.
- Use more spinosad.
- I know now not to use them without discretion.
- I didn't know some were so bad for other animals.
- Keeping junk out of soil.
- I will use less toxic methods to help the environment.
- Knowing what pesticides do and what alternatives we have available to reduce water pollution.
- Using more safe pesticides.
- Made me more aware, want to do, and will personally change.
- I was unaware of the variety of pesticides. Very informative.
- Use less toxic.
- Was recommending imidacloprid for grubs – will recommend nematodes.
- Organic material is better. (5)
- Can use smaller selection for most pests.
- I did not know *Captain Jack's* is a bacteria.
- Knowing how to take on a task.
- New knowledge.
- Less is more.
- Use non-toxic.
- What the right product to use.
- Will push organic.
- Just don't like all the chemicals, especially in the bay.
- More aware. (3)
- Much more info, makes me sell healthier products.
- Raised my awareness of correct handling.
- When and how and why.
- How they are used.
- More up-to-date IPM info.
- Better informed. (2)
- Timing of spraying.
- Harmful pesticides.
- I need to look deeper into the issue.
- I'm more cautious about recommendations.
- I like that they are safer.
- I will try greener pesticides.
- I will learn to build a healthy garden instead.

- The best product for the best kill.
- Don't really use them, so gives me reason not to use them.

NO (11):

- I have always encouraged environmentally friendly products.
- Already been using IPM for years.
- Reinforced view – anti-pesticide.
- I was already a convert.
- Already IPM educated.

NEUTRAL (1)

When this training is held again, what changes do you suggest?

- None (35)
- Video learning aids (1)
- More interaction with students (1)
- Info on bed bugs (1)
- Faster pace (1)
- More hands-on (1)
- Get more Associates involved (1)
- Add composting workshop (1)
- Speak louder (1) More handouts (1)
- It was great/good class (2)
- More bug ID (1)
- More time (1)
- Repeat questions from audience (1)
- Bigger class (1)
- A way to know all the plants so can answer more questions (1)