



Marin County Stormwater Pollution Prevention Program

2012-2013 Annual Report



BELVEDERE CORTE MADERA COUNTY OF MARIN FAIRFAX LARKSPUR MILL VALLEY NOVATO
ROSS SAN ANSELMO SAN RAFAEL SAUSALITO TIBURON

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MCSTOPPP is administered by Marin County Flood Control and Water Conservation District with assistance from County of Marin. Marin General Services Authority provides budgetary oversight.

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Cover photos (clockwise from top): The Marin Headlands (Bigstock™ stock photo); San Rafael's Cigarette Eater Meter unveiling (photo credit: Terri Fashing); Fourth Grade Students from Tam Valley school using MCSTOPPP workbook (photo credit: Betsy Chatton); volunteers compare their finds at Coastal Cleanup Day (photo credit: Kirk Schroeder).

Larry Walker Associates, Inc. provided technical, regulatory, and report preparation assistance.

If you are a person with a disability and require materials in alternative formats, call 415-473-4381 (Voice) or CRS 711 or email disabilityaccess@marincounty.org

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Acronyms and Abbreviations

ACOE	Army Corps of Engineers
ADA	Americans with Disabilities Act
ASBS	Areas of Special Biological Significance
ASC	Agency Staff Committee
BASMAA	Bay Area Stormwater Management Agencies Association
BCPUD	Bolinas Community Public Utility District
BMP	Best Management Practice
CAC	Citizens' Advisory Committee
CalRecycle	Department of Resources Recycling and Recovery
CASQA	California Stormwater Quality Association
CCNB	Conservation Corps North Bay
CGP	General Stormwater Permit for Construction Activities
CMSA	Central Marin Sanitation Agency
CPESC	Certified Professional in Erosion and Sediment Control
CUPA	Certified Unified Programs Agency
DPR	California Department of Pesticide Regulation
DPW	Department of Public Works
EHS	Environmental Health Services
FOG	Fats, Oil and Grease
GIS	Geographical Information System
IRWM	Integrated Regional Water Management
IPM	Integrated Pest Management
LID	Low Impact Development
MCSTOPPP	Marin County Stormwater Pollution Prevention Program
MMWD	Marin Municipal Water District
MNSSSA	Marin, Napa, Sonoma, and Solano Stormwater Association
MS4	Municipal Separate Storm Sewer System
NBWA	North Bay Watershed Association
NPDES	National Pollutant Discharge Elimination System
OPP	Oil Payment Program
OWOW	Our Water – Our World
PBCS	Point Blue Conservation Science
QSD	Qualified Stormwater Pollution Prevention Plan Developer
QSP	Qualified Stormwater Pollution Prevention Plan Practitioner
RBRA	Richardson Bay Regional Agency
Regional Water Board	San Francisco Bay Regional Water Quality Control Board

RMP	Regional Monitoring Program
RVSD	Ross Valley Sanitary District
SASM	Sewerage Agency of Southern Marin
SEP	Supplementary Environmental Project
SFEI	San Francisco Estuary Institute
SMART	Sonoma-Marín Area Rail Transit
SMARTS	Stormwater Multi-Applications and Report Tracking System
State Water Board	State Water Resources Control Board
STRAW	Student and Teachers Restoring a Watershed
SWMP	Storm Water Management Plan

Chapter 1. Let's Preserve and Enhance Marin County's Watersheds

OVERVIEW OF THE 2012-2013 ANNUAL REPORT

This Marin County Stormwater Pollution Prevention Program (MCSTOPPP) Annual Report describes activities conducted by the County of Marin (County) and Marin's cities and towns. MCSTOPPP is a Joint Exercise of Powers agency funded by the County and Marin's 11 municipalities and administered by the Marin County Flood Control and Water Conservation District. The report covers both countywide program and local program activities and is organized as follows:

- *Chapter 2. Local Government Leads the Way* covers administration, organization, staffing, and financing of the countywide program.
- *Chapter 3. Caring for Our Creeks* describes the heart of MCSTOPPP: keeping streets and storm drains clean, stopping illegal dumping, stabilizing creek banks, and setting a good pollution prevention example in all municipal operations.
- *Chapter 4. Building and Renewing* provides information on how the County's municipalities comply with construction and post-construction requirements of the Phase II Permit.
- *Chapter 5. Educating Ourselves at Work* documents outreach to businesses to ensure they operate in a way that keeps pollutants away from storm drains, creeks the Bay, and the ocean.
- *Chapter 6. Educating Ourselves at Home and School* details MCSTOPPP's extensive efforts to engage, involve, and educate Marin residents in protecting local creeks.
- *Chapter 7. Water Quality Planning and Monitoring* describes how MCSTOPPP is planning ahead to ensure Marin municipalities remain in compliance with stormwater quality regulations.
- *Supplements A-L* document local pollution prevention accomplishments beyond routine activities by each of the County's 12 municipalities.
- *Supplement M* summarizes each agency's progress meeting performance standards.

ABOUT THE MARIN COUNTY STORMWATER POLLUTION PREVENTION PROGRAM (MCSTOPPP)

MCSTOPPP is a joint effort of the County of Marin and Marin's 11 cities and towns. The countywide program was formed in 1993 to protect and enhance water quality in creeks and wetlands by preventing stormwater pollution, preserving beneficial uses of local waterways and complying with state and federal regulations.

MCSTOPPP comprises local stormwater pollution prevention efforts by the County and each municipality, as well as by the countywide program. The Marin General Services Authority provides programmatic and budgetary oversight. Budgets are approved by the County's Board

of Supervisors. MCSTOPPP has developed a creek-focused approach to stormwater pollution prevention by integrating habitat restoration, school-based education, volunteer projects, and public education with public works maintenance and code enforcement.

In a 1991 update to its Basin Plan, the San Francisco Bay Regional Water Quality Control Board (hereafter Regional Water Board) mandated Marin’s municipalities pursue a “baseline” program to prevent increases in urban runoff pollutants. In 2003, the State Water Resources Control Board (hereafter State Water Board) required small municipal storm drainage systems, including those in Marin, to be regulated under a statewide National Pollutant Discharge Elimination System (NPDES) Phase II Small Municipal Separate Storm Sewer Systems (MS4s) General Permit (Order No. 2003-005 DWQ) (first term Phase II Permit). The MCSTOPPP Action Plan 2010 is the approved Storm Water Management Plan (SWMP). Each municipality complies with the first term Phase II Permit by implementing Action Plan 2010 through a local stormwater program and through the collaborative efforts of MCSTOPPP.

The first term Phase II Permit expired in 2008 and was administratively extended until a revised Phase II Permit was adopted by the State Water Board. The second term Phase II Permit (Order No. 2013-0001-DWQ) (Phase II Permit) was adopted in February 2013 and became effective July 1, 2013.

This 2012-2013 Annual Report is being submitted in accordance with the requirements of the first term Phase II Permit. This is the final Annual Report under the first term Phase II Permit.

MAJOR MCSTOPPP ACCOMPLISHMENTS, 2003-2013

MCSTOPPP is a unique, creek-focused stormwater program. The core premises of the program created 20 years ago were carried over into the permit-based stormwater program mandated in 2003. MCSTOPPP blended a focus on creeks with the performance-based requirements of the first term Phase II Permit. This focus is realized through six major program elements:

- Local Government Leads the Way
- Caring for Our Creeks and Waterways
- Building and Renewing
- Educating Ourselves at Work
- Educating Ourselves at Home and School
- Protecting the Future

Action Plans, originally created in 1993 and subsequently updated, provide a structure for the stormwater program that integrates the federal- and state-mandated municipal stormwater programs with locally popular efforts to preserve and enhance creek and wetland habitat. The program structure was designed to be accessible to the community, and it guides the program without the typical regulatory jargon. A few key accomplishments were selected to

**MCSTOPPP Program
Core Premises**

Prioritize pollution prevention measures in watersheds based on an assessment of controllable factors

Involve the community in the assessment of creeks as the focal point to raise awareness and change behavior

highlight the success of MCSTOPPP as a locally directed stormwater management program.

Local Government Leads the Way Accomplishments

- Creation and ongoing management and funding of MCSTOPPP to leverage local resources and create a consistent and collaborative stormwater program.
- Participation in regional and state-wide efforts to leverage resources, including: North Bay Watershed Association (NBWA), Marin, Napa, Sonoma, and Solano Stormwater Association (MNSSSA), Bay Area Stormwater Management Agencies Association (BASMAA), and California Stormwater Quality Association (CASQA).
- Creation of a Citizens' Advisory Committee (CAC) to guide and assist the program.

Caring for Our Creeks and Waterways Accomplishments

- Coordination with the Marin County Watershed Program to integrate flood protection, environmental restoration, infiltration, and water quality protection.
- Support of restoration and water quality projects for numerous creeks and watersheds in Marin.
- Continuation of street sweeping and storm drain cleaning programs that, since 2003-2004, have removed approximately 72,000 cubic yards of debris and sediment, an annual average of 8,000 cubic yards that would have otherwise washed into local creeks.
- Support of the Student and Teachers Restoring a Watershed (STRAW) program that involved over 6,800 students in watershed restoration projects throughout Marin County.

Building and Renewing Accomplishments

- Development of standard best management practice (BMP) guidelines and inspection checklists for small construction projects.
- Inspection of all construction sites with erosion and sediment controls following each major storm event.

Selection of the Creek and Watersheds Restoration Efforts Supported by MCSTOPPP

Arroyo Corte Madera Watershed

Arroyo Creek

Barnabe Creek

Corte Madera

Coyote Creek

Fairfax Creek

Kent Canyon Creek

Kittle Creek

Lagunitas Watershed

Larsen Creek

Las Gallinas Watershed

Manor Creek

Miller Creek

Novato Creek

Pacheco Creek

Rush Creek

Saltworks Canal

San Anselmo Creek

San Geronimo Creek

Sleepy Hollow Creek

Vineyard Creek

Woodacre Creek

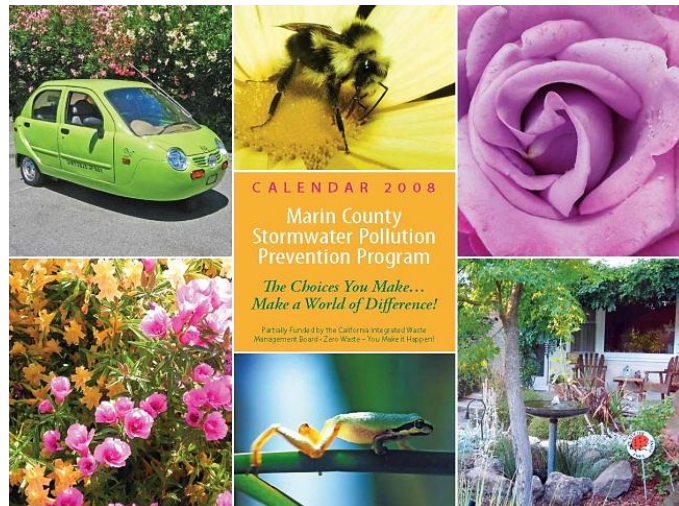
- Development of the *Stormwater Quality Manual for Development in Marin County* to provide low impact development (LID) design guidelines and assistance for applicants through the process of submittals and reviews.

Educating Ourselves at Work Accomplishments

- Incorporation of stormwater issues into multipurpose business inspection programs to control pollutants.
- Development of outreach materials, including letters, brochures, posters, and a website, to provide stormwater information to business owners.
- Qualification of more than 180 Bay-Friendly Landscape Professionals through a 20-hour Landscape Maintenance Training and Qualification Program held by MCSTOPPP and Marin Municipal Water District since 2008.
- Training of municipal staff on conducting stormwater business inspections.

Educating Ourselves at Home and School Accomplishments

- Development of a strong outreach program focuses on community water quality priorities, most notably less toxic pest control in gardens and landscaping.
- Distribution of over 161,000 wall calendars with monthly watershed themes.
- Participation in regional advertising and media relations campaign to leverage resources and provide consistent region-wide stormwater messaging.
- Involvement of volunteers at all levels of the program, including participants in restorations and cleanups, master gardeners, and citizen advisors.



Protecting the Future/Water Quality Monitoring and Water Quality Planning Accomplishments

- Design of outreach and BMPs that targets pollutants impairing local waters (pathogens and pesticides)
 - Horse Keeper Workshops and various informational items on BMPs for manure management.
 - Pet waste bag dispensers and waste receptacles at dog parks.

- Educating staff of local businesses (e.g., home improvement centers) about less toxic alternatives through the Our Water – Our World (OWOW) program materials.
- Sponsoring research of the ecological health of creeks through ten years of studying benthic macroinvertebrates in Marin creeks.
- Participation in TMDL development public processes.

Over the last 10 years, MCSTOPPP has created an integrated stormwater program where the elements support each other and focus on water quality priorities of the community. In the next five years, MCSTOPPP will build on this successful foundation to modify the program to align with revised regulatory requirements.

Notable Public Less Toxic Pest Control Outreach

Eco-Friendly Garden Tour

Our Water – Our World Website and Materials

Bay-Friendly Landscape series for gardener and landscape professionals

Marin Home & Garden EXPO

PERFORMANCE STANDARDS ARE VERIFIABLE POLLUTION PREVENTION GOALS

Performance standards incorporate specific BMPs that municipalities implement. At the end of each fiscal year, each municipality completes a MCSTOPPP performance standard matrix noting whether each performance standard was implemented, and, if not, a plan and schedule for full implementation is developed. The MCSTOPPP performance standards are listed in **Table 1-1**, along with their corresponding Annual Report chapter.

Table 1-1. Performance Standards

Performance Standard	Annual Report Chapter
Municipal Maintenance	
● Street Sweeping	3
● Storm Drain Facilities	3
● Operations and Maintenance of Stormwater Pump Stations	N/A, See matrix
● Litter Control	3
● Corporation Yards	N/A, See matrix
● Road Repair & Maintenance	N/A, See matrix
Illicit Discharge Controls	3
New Development, Redevelopment, and Construction Site Controls	4
Industrial and Commercial Discharge Controls	5
Public Information and Participation	3, 6

Completed matrices for 2012-2013 are presented in **Supplement M**. Certification statements, provided within **Supplement M**, attest to the accuracy of the completed matrices.

FUNDING STORMWATER POLLUTION PREVENTION PROGRAMS

Marin municipalities supported ongoing improvements in countywide and local stormwater quality programs during 2012-2013 with existing funding.

By partnering with others, MCSTOPPP was able to sponsor a variety of programs and workshops, including the Marin Home & Garden EXPO, the Bay-Friendly Landscape Maintenance Training and Qualification Program series for professionals, a stormwater pollution prevention presentation to Marin Municipal Water District (MMWD) staff, and the 2013 MCSTOPPP Wall Calendar.

As in previous years, MCSTOPPP designed and printed nearly 28,000 wall calendars and distributed them to residents and businesses throughout the County. Each month included an oil and filter recycling message and either a stormwater pollution prevention, water conservation, habitat enhancement, or San Francisco Bay water quality protection message. Partner agencies were the MMWD and the consortium known as Marin County Wastewater Treatment Agencies; each provided content for one month and contributed about 12% of the total non-labor calendar costs. The Marin Independent Journal distributed about 22,000 calendars to a broad audience at no charge to MCSTOPPP, and funds from Department of Resources Recycling and Recovery (CalRecycle) Oil Payment Program (OPP) paid for 25% of the calendar. MCSTOPPP's member agencies funded the remaining calendar costs.

In addition, the County of Marin's local stormwater program, in partnership with Marin County Parks and the National Park Service Point Reyes National Seashore, continued implementing a \$1.4 million Prop 84 grant from the State Water Board to reduce pollution runoff into the Duxbury Reef and the Point Reyes Headlands Areas of Special Biological Significance (ASBS). Efforts conducted as a result of this funding are described in Chapter 7 (Water Quality Planning and Monitoring).

The MCSTOPPP 2012-2013 Budget, the proposed MCSTOPPP 2013-2014 Budget, and the revised MCSTOPPP 2013-2014 Budget are included as **Appendices A-1** through **A-3**.

Chapter 2. Local Government Leads the Way

JOINT FUNDING AND OVERSIGHT ARE KEY TO COUNTYWIDE PROGRAM EFFECTIVENESS

The County of Marin and Marin's 11 cities and towns fund MCSTOPPP's countywide activities. MCSTOPPP's countywide staff includes a three-quarter time program manager, an outreach coordinator, and a part time engineering technician. They are assisted by County staff. In addition to countywide activities, the staff provides technical and outreach resources and reporting assistance to local municipal staff.

At Agency Staff Committee (ASC) meetings (bimonthly in 2012; monthly in 2013), MCSTOPPP staff and local staff report on their activities, discuss challenges and solutions, and strategize and prioritize their ongoing work. Caltrans and the Regional Water Board are represented at these meetings at least annually. MCSTOPPP staff regularly updates the Marin Public Works Association on stormwater permit compliance issues. This association comprises the public works directors of each Marin municipality.

MCSTOPPP's Citizen Advisory Committee (CAC) was created in 1997 and meets quarterly to discuss issues related to development and construction, small businesses, local government, the community, and the environment. The CAC reviews annual work plans and budgets, acts as a community liaison, and is a sounding board for new ideas.

MCSTOPPP PARTICIPATES IN STORMWATER POLLUTION PREVENTION STATEWIDE

MCSTOPPP participates in and helps fund regional efforts to protect water quality, as described below.

Bay Area Stormwater Management Agencies Association

BASMAA comprises Bay Area municipal stormwater NPDES permittees. Members implement regional projects designed to understand and/or improve the quality of stormwater runoff to the San Francisco Bay, promote regional consistency and facilitate efficient use of public resources. MCSTOPPP staff attended BASMAA Executive Board and Public Information/Participation meetings in order to track and participate in regional efforts that benefit Marin's stormwater program. MCSTOPPP contributed \$12743 to BASMAA in 2012-2013.

Regional Monitoring Program for Trace Substances

The Regional Water Board mandated the Regional Monitoring Program (RMP) in 1992. The RMP funds the San Francisco Estuary Institute (SFEI) to monitor pollutant concentrations in Bay water, sediments, fish, and shellfish. The RMP publishes an annual report, *Pulse of the Estuary*.¹ Marin's 12 municipalities continue to contribute funds to the RMP through MCSTOPPP. In 2012-

¹ The 2011 Pulse of the Estuary is available here: <http://www.sfei.org/rmp/pulse>. The 2012 RMP Update is available here: http://www.sfei.org/sites/default/files/2012%20RMP%20Update%20FINAL%20web_0.pdf.

2013, MCSTOPPP contributed \$56,305 to the RMP. In addition, the MCSTOPPP Program Manager attended the RMP Annual meeting in October 2012.²

The RMP has produced an extensive dataset on contaminants in the Bay. Monitoring performed in the RMP examines spatial patterns and long-term trends in contamination. This is accomplished by sampling water, sediment, bivalves, bird eggs, and fish, and by evaluating toxic effects on sensitive organisms and chemical loading to the Bay. The Program combines RMP data with data from other sources to provide a thorough assessment of chemical contamination in the Bay.

North Bay Watershed Association

NBWA includes various Marin, Napa, and Sonoma municipalities, water, sanitary, and flood control districts, and non-profit organizations interested in watershed health. NBWA facilitates partnerships across political boundaries that promote stewardship of North San Pablo Bay watersheds. MCSTOPPP contributed \$5,800 to NBWA in 2012-2013 and the County of Marin's local stormwater program contributed \$27,196. The Marin County Flood Control and Water Conservation District contributed \$10,000 to NBWA. MCSTOPPP staff actively participate and often take a leadership role on NBWA's Water Quality Technical Committee.

NBWA's 2012-2013 accomplishments included the following:

- Approved \$30,000 for development of a new Phase II Permit provision E.12 (Post-Construction Stormwater Management) guidance manual for Marin, Napa, Sonoma, and Solano Counties;
- Held a forum for the North Bay on April 18, 2013, on Stormwater and Wastewater Regulations-Costs of Compliance at a cost of \$5,000;
- Provided \$50,000 to Point Reyes Bird Observatory (PRBO) Conservation Science for a project that looks at conditions in Eastern Marin and the Petaluma drainage with respect to adapting to sea level rise;³
- Funded a *Handbook for Estimating Economic Benefits of Environmental Projects* (completed December 2012) (\$20,000). The handbook⁴ identifies approaches to monetizing benefits, including LID projects; and
- Provided \$5,000 in funds to the Marin County Fish and Wildlife Committee in 2013. This money funded the following projects:
 - Mill Valley StreamKeepers: \$700 for a newsletter
 - Point Blue Conservation Science's (formerly Point Reyes Bird Observatory) STRAW project: \$3,000 for tools
 - Marin Audubon: \$1,300 for signs

² <http://www.sfei.org/node/4103>

³ http://www.nbwatershed.org/uploads/prez/AdaptingtoSeaLevelRise_NorthBayShoreline.pdf

⁴ See http://nbwatershed.org/library/NBWA_Handbook_2012-1221.pdf and <http://nbwatershed.org/uploads/prez/NBWA-ECONorthwest%20Jan.%204,%202013.pdf>

California Stormwater Quality Association

MCSTOPPP is a member of CASQA, a statewide organization of municipal, industrial, and construction stormwater NPDES permittees. During 2012-2013, MCSTOPPP staff played an active role in monthly conference calls of CASQA's Phase II subcommittee as well as workgroups that provided constructive and detailed comments on the draft, second term Phase II Permit. The MCSTOPPP Program Manager attended and participated in training at the annual CASQA conference held in November 2012, at which updates on the draft, second term Phase II Permit were provided by State Water Board permit writers.

Marin, Napa, Sonoma, and Solano Stormwater Association

MCSTOPPP is part of the MNSSSA, an informal group of North Bay Phase II municipal stormwater programs that meets to share information and work jointly on projects of mutual interest. During 2012-2013, MCSTOPPP staff attended meetings to discuss the draft, second term Phase II Permit, regional monitoring, and other potential regional partnerships efforts. MCSTOPPP staff played a central role in representing MNSSSA at NBWA technical committee meetings and led the effort to request funds from NBWA to develop the new Phase II Permit provision E.12 Post Construction Guidance Manual. The manual will assist all MNSSSA municipal stormwater programs and the North Bay's development community, with implementing the new Phase II Permit requirements. MNSSSA participants plan to continue collaborating on Phase II Permit compliance projects 2013-2014 and into the future.

Chapter 3. Caring for Our Creeks and Waterway

A CREEK-CENTERED APPROACH TO WATER QUALITY PROTECTION



Through the My Earth Day Marin Coalition, MCSTOPPP continued to partner with the City of San Rafael Volunteer Program, San Rafael Clean, the Marin County Parks and Open Space and Public Works Departments, Marin County Community Development Agency, Marin Municipal Water District, and the Center for Volunteer and Nonprofit Leadership of Marin to implement and promote Earth Day 2013 service projects, including beach and creek cleanups. The Coalition continued to publicize their website that they developed in 2011

(www.myearthdaymarin.org), sent out press releases, and conducted outreach to public schools to promote 23 volunteer trash cleanup sites throughout the County (**Appendix C-1**). More information is provided in the *Marin County Parks and Landscape Volunteers September 2012 Report* (**Appendix C-2**).

Most service projects were held on the morning of April 20, 2013, to commemorate Earth Day. MCSTOPPP staff attended the City of Novato's 2013 Clean and Green Day celebration and distributed stormwater pollution prevention literature to attendees. Marin County Parks and MCSTOPPP staff worked with a County volunteer to update the website. The website provides a list and a map of service projects that volunteers can sign up for and participate in on Earth Day.

MCSTOPPP staff performed co-captain duties with Marin County Parks and Marin Conservation League/City of Novato at two sites on Coastal Cleanup Day on September 15, 2012:

- Corte Madera Creek at Hal Brown Park (Greenbrae)
- Novato Creek/Warner Creek (Novato)

Volunteers	1,600
Pounds of Trash	19,000
Pounds of Recyclables	2,000

For each municipality, a summary of trash and debris removal activities (**Table 3-1**), as well as a summary of Creek Restoration and Maintenance Projects (**Table 3-2**), is provided.

Table 3-1: Trash and Debris Removal in 2012-2013

Municipality	Activity
City of Belvedere	<ol style="list-style-type: none"> 1. Each year on Coastal Cleanup Day in September, volunteers clean up a section of public shoreline along the San Rafael Avenue Seawall (Richardson Bay). City Public Works crews pick up the debris collected by volunteers and dispose of it in the dumpster at the city's corporation yard. The quantity of collected material is documented. 2. Monthly and following storm events, Public Works staff perform litter patrol along public roadways and sections of shoreline to pick up trash.
Town of Corte Madera	<ol style="list-style-type: none"> 1. Department of Public Works walks the High and Low Canals and the Cay Passage outfall weekly. All center medians are walked and cleaned weekly. All debris found is immediately removed and disposed of properly. 2. In addition, the Town began a program to clean Shorebird Marsh more frequently after noticing an unusual amount of trash blowing into it from the Village Shopping Center.
County of Marin	<ol style="list-style-type: none"> 1. Marin County Department of Public Works Roads staff and Flood Control Creek Maintenance staff routinely remove trash from roads and creeks that are owned or maintained by the County or the Marin County Flood Control and Water Conservation District. 2. Marin County Parks volunteer program coordinated multiple projects: <ul style="list-style-type: none"> • Volunteers conducted monthly beach cleanups at Agate Beach, adjacent the Duxbury Reef Area of Special Biological Significance. • Community volunteers, staff from a local business, and members of Congregation Rodef Sholom conducted ongoing litter pick-up and invasive species removal for the Mill Valley Bike Path that runs along Coyote Creek and Bothin Marsh. • Court-assigned volunteers regularly picked up litter at McInnis Park. • A partnership was developed with Save the Bay to conduct a monthly cleanup and restoration program at Creekside Park. Each program averaged 20 volunteers for three hours. Activities included sheet mulching, native planting, and removal of Harding grass and Bermuda grass (<i>Cynodon dactylon</i>), a non-native plant. • A partnership was developed with Save the Bay to conduct a monthly cleanup and restoration program at Creekside Park. Each program averaged 20 volunteers for three hours. Activities included sheet mulching, native planting, and removal of Harding grass and Bermuda grass (<i>Cynodon dactylon</i>), a non-native plant. 3. Marin County Parks had volunteers remove trash and invasive plants during Coastal Cleanup Day and Earth Day. Coastal Cleanup Day volunteers, including students from local schools such as Miller Creek Middle School, worked at five different sites. Earth Day volunteers worked at various beach, creek, and park locations.
County of Marin	<ol style="list-style-type: none"> 4. Marin County Parks worked with students from Marin Waldorf School for three days weeding, sheet mulching and planting along tributary creeks of Stafford Lake.

Table 3-1: Trash and Debris Removal in 2012-2013

Municipality	Activity
Town of Fairfax	<ol style="list-style-type: none"> 1. Town coordinated creek cleanups with Fairfax Volunteers. 2. Town has combination trash and recycling containers placed throughout its commercial district and in its parks. The trash containers are emptied daily Monday-Friday, and the recycling containers are emptied once a week. 3. Littering on the streets is minimal and is picked up by street sweeping efforts. Parks and other Town properties have the most uncontained litter. Public Works staff monitors and cleans these areas as needed, on a daily basis Monday-Friday.
City of Larkspur	<ol style="list-style-type: none"> 1. City staff remove trash in public areas of Larkspur Creek and the north side Corte Madera Creek. Marin Rowing Club stockpiles debris collected from the creek and stores it near their boat dock for Larkspur Public Works to haul away. Vegetation is maintained by pulling non-native and carefully maintaining and protecting native vegetation. 2. City also performs work in conjunction with Friends of Corte Madera Creek to remove invasive <i>Spartina</i> species (cordgrass).
City of Mill Valley	<ol style="list-style-type: none"> 1. The Sewerage Agency of Southern Marin (SASM, part of the City of Mill Valley) started a trash pick-up program. SASM staff walk the perimeter of their property once a week; this helps keep the nearby creek and the bay clean. 2. Mill Valley Little League sent a strong letter to families instructing them to take responsibility for the batting cage trash and numerous baseballs that have been thrown into a tidal creek area adjacent to the corporation yard. 3. Parks and Public Works supervisors have increased litter removal to every 3 months in city-owned and highly used public areas to include the Depot, areas downtown, Lomita (behind Whole Foods), and the Frontage Rd. 4. The City held another very successful Mill Valley Beautification Day on Earth Day. This year Strawberry Point, Old Mill, and Mill Valley Middle School organized their own cleanup event to coincide with the City's event. The Cub Scouts cleaned up Boyle Park with over 15 volunteers, and the Bloomathon group had 10 volunteers who removed litter on the Miller Avenue median from Tamalpais High School to the Mill Valley Lumber Yard. The Mill Valley Streamkeepers cleaned up the Park Terrace area along the creek and the Mill Valley Chamber of Commerce organized a downtown cleaning group that swept streets, picked up litter, and pulled weeds.
City of Novato	<ol style="list-style-type: none"> 1. Annual creek inspections are conducted in July and August. The City successfully utilized the Conservation Corps North Bay (CCNB) to pick up trash and manage vegetation. CCNB picked up approximately 5 cubic yards of trash and furniture in Pacheco Creek. 2. In addition, Novato uses local volunteers for trash pick-up in local creeks, and also uses volunteers for Novato Clean and Green Day in April (Earth Day).

Table 3-1: Trash and Debris Removal in 2012-2013

Municipality	Activity
Town of Ross	<ol style="list-style-type: none"> 1. Staff initiated a program with the Ross School, a K-8 school in Ross, to educate students about cleaning creeks, beaches, the watershed, storm drains, and about protecting creeks and wetlands. 2. In October 2012, the Superintendent of Public Works took two 7th grade classes on a local creek walk and taught the kids about the stormwater program and creek stewardship. 3. On March 12, 2013, the Superintendent of Public Works and staff worked with 4th and 8th graders to pick up litter and remove invasive species on a small creek behind Ross School. 4. On March 19, 2013, the Superintendent of Public Works and staff worked with the same classes to do more invasive plant removal and plant willow cuttings. The Town is working with an adjacent neighbor to water and establish the willows.
Town of San Anselmo	<ol style="list-style-type: none"> 1. Staff member Gerhard Epke is an active board member of Friends of Corte Madera Creek Watershed; he volunteered as coordinator for Coastal Cleanup Day at Larkspur Landing. 2. During routine maintenance, the Town staff and Conservation Corps North Bay crews remove trash from the creek.
City of San Rafael	<ol style="list-style-type: none"> 1. San Rafael conducts monthly cleanup projects with volunteers through the Parks Division on at least one Saturday each month from March-October (except July) and conducts litter cleanup near creeks and the Bay. 2. San Rafael implemented two creek maintenance projects with Boy Scouts, the Center for Volunteer and Non-Profit Leadership Flex program, and others for invasive plant removal. Trash and invasive species (e.g., broom, acacia, fennel, sweet pea) were removed from Mahon Creek, and trash was removed from Gallinas Creek. 3. San Rafael partnered with Gallinas Creek Watershed, MCSTOPPP, Marin County Parks and others to remove invasive species and litter for Earth Day, Cesar Chavez Day, Coastal Cleanup Day, Make a Difference Day and others. Each event involved coordination of dozens of volunteers. Overall, a few hundred volunteers participated in these and other Parks volunteer days this past year.
City of Sausalito	<ol style="list-style-type: none"> 1. The Sausalito Parks and Recreation Department supports events organized in the city for Earth Day. 2. The City performed a waste characterization study, and the Sausalito Sustainability Commission prepared recommendations for further action. 3. Sausalito collaborated with the Friends of Willow Creek for the Willow Creek Cleanup Event.
Town of Tiburon	<ol style="list-style-type: none"> 1. Tiburon Public Works staff assisted with litter and trash pick-up on Coastal Cleanup Day and Earth Day. 2. The Town Installed trash receptacles at all Open Space trailheads.

Table 3-2. Creek Restoration and Municipal Maintenance Projects 2012-2013 (Capital Improvement Projects)

Municipality	Project	Project Type	Description	Project Status
City of Belvedere	None	N/A	N/A	N/A
Town of Corte Madera	Golden Hind Storm Drain Pump Station & Improvements near Cay Passage and Tradewind Passage, Project #09-001	Flood Control	Installation of a pump station and storm drains to eliminate flooding due to tidal action.	N/A
Town of Corte Madera	San Clemente Drive/Paradise Drive Trunk Sewer Improvements, Project #11-201	Flood Control	This project will improve the trunk sewer segments directly upstream from the Paradise Pump Station and from the manhole adjacent to Paradise Market to golden Hind Passage.	N/A
Town of Corte Madera	Seawolf Pump Station	Flood Control	This project replaces the mechanical and electrical components at the pump station.	N/A
Town of Corte Madera	Marina Village Flood Control Project	Flood Control	Provides flood control improvements consisting of storm drain lines and stormwater pump station.	N/A
County of Marin	Agate Beach Parking Lot adjacent to Duxbury Reef ASBS	Stormwater Treatment	Replace impervious parking lot with pervious pavement, and stormwater infiltration chambers. Install check dams in adjacent vegetated swale and relocate portable toilets away from creek bank. Runoff from lot and creek water flow to Duxbury Reef ASBS.	Active

Table 3-2. Creek Restoration and Municipal Maintenance Projects 2012-2013 (Capital Improvement Projects)

Municipality	Project	Project Type	Description	Project Status
County of Marin	Boyle Park Restoration	Restoration	Restore riparian corridor on a tributary to Warner Creek within Boyle Park. Project will improve creek water quality in the Richardson Bay Watershed.	Active
County of Marin	Corte Madera Creek Army Corps of Engineers (ACOE) Project	Flood Control	Complete the original ACOE flood control project (construct Unit 4, retrofit Unit 2, and install maintenance facilities).	Active
County of Marin	Corte Madera Creek Multi-Use Path	Engineering	Perform maintenance paving of three sections of multi-use path near Corte Madera Creek.	Complete
County of Marin	Coyote Creek Sediment Removal Project	Flood Control	Remove accumulated sediment to ensure channel and creek pass intended design flow.	Active
County of Marin	CSA 29 Paradise Cay Maintenance Dredge	Flood Control	Perform maintenance dredging project that includes the north and south areas of Paradise Cay for recreational boating use to minus 7 feet within waterways and to minus 8 feet in the two entry channels.	Active
County of Marin	Detention Basin Feasibility Study	Flood Control	Contract with engineering consultant to study the feasibility of constructing detention basins in flood zone 9 to reduce flood damage from high-flow, infrequent events (Q100).	Complete

Table 3-2. Creek Restoration and Municipal Maintenance Projects 2012-2013 (Capital Improvement Projects)

Municipality	Project	Project Type	Description	Project Status
County of Marin	Dredging options & feasibility - Corte Madera Creek	Flood Control	Contract with engineering consultant to determine a dredging prism for Corte Madera Creek that is consistent with the level of flood protection existing in the flood zone.	Complete
County of Marin	Easkoot Creek Sediment Basin and Sediment Removal at Bridges	Integrated Flood Control	Construct a sediment basin behind the Parkside Café and continued sediment removal at the bridges over Easkoot Creek.	Active
County of Marin	Evergreen Avenue Street and Sidewalk Improvements	Engineering	Construct sidewalk, curb and gutter, and roadway repaving.	Complete
County of Marin	La Pasada Interceptor Drain Improvement Project	Flood Control	Clean and improve an existing stormwater pipe discharging into Las Gallinas Creek. In order to prevent accumulation of sediment, slip-line with smaller smoother pipe, extend out to creek thalweg, and replace tide valve at the end.	Active
County of Marin	Larsen Creek Fish Passage Restoration	Fish Passage	Design fishway to be built within and below the box culvert under Sir Francis Drake Blvd. on Larsen Creek.	Active
County of Marin	Las Gallinas Watershed Program	Integrated Flood Control	Provide a framework to integrate flood protection and environmental restoration with public and private partners to protect and enhance watersheds into Gallinas and Miller Creeks.	Active
County of Marin	Lefty Gomez Detention Basin	Flood Control	Flood Protection Detention Basin	Active
County of Marin	Loma Alta Detention Basin	Flood Control	Flood Protection Detention Basin	Active

Table 3-2. Creek Restoration and Municipal Maintenance Projects 2012-2013 (Capital Improvement Projects)

Municipality	Project	Project Type	Description	Project Status
County of Marin	Manzanita Connector Pathway	Engineering	Construct a multi-use path between Shoreline Highway and Tennessee Valley Path.	Active
County of Marin	Marin Center Auditorium Parking Lot	Engineering	Complete improvements to parking lot and sidewalk to include ADA compliance.	Complete
County of Marin	Memorial Park Detention Basin	Flood Control	Flood Protection Detention Basin	Active
County of Marin	Mill Valley-Sausalito Multi-Use Path	Engineering	Resurface and potentially implement enhancements to the Mill Valley-Sausalito Multi-Use Path.	Active
County of Marin	Novato Creek - Routine Maintenance Dredging Project – “NWAA CREEK”	Flood Control	Routine dredging is performed approximately once every 4 years in the lower reaches of Novato Creek, Warner Creek, and Arroyo Avichi to maintain channel cross-sectional area required to pass design flow and maintain flood protection.	Active
County of Marin	Novato Watershed Program	Integrated Flood Control	Provides a framework to integrate flood protection and environmental restoration with public and private partners to protect and enhance watersheds into Novato Creek.	Active
County of Marin	Paradise Park Seawall Replacement	Engineering	Replace existing seawall.	Active

Table 3-2. Creek Restoration and Municipal Maintenance Projects 2012-2013 (Capital Improvement Projects)

Municipality	Project	Project Type	Description	Project Status
County of Marin	Phoenix Lake Integrated Regional Water Management (IRWM) Retrofit	Flood Control	Retrofit existing water supply reservoir to add storm water detention function during 1% Annual Chance Flood (100 Year Event). Project will improve water quality, increase water supply, improve downstream habitat, and enhance public access and recreation.	Active
County of Marin	Pump Station No. 2 Rehabilitation	Flood Control	Improve the level of flood protection by increasing the capacity and reliability of the existing pump station, which is nearing the end of its design life.	On Hold
County of Marin	San Geronimo Creek Fish Passage Restoration	Fish Passage	Design a baffle system within the existing box culvert combined with a rocky ramp and a series of step pools created by large woody debris downstream of the culvert. The project will repair severely failing stream banks and provide fishery habitat in 200 feet of channel.	On Hold
County of Marin	Seminary Drive Stormwater Pump Station	Flood Control	Construct a pump station to alleviate flooding on Redwood Highway Frontage Road near the northbound Highway 101 Seminary off ramps.	Completed
County of Marin	Sir Francis Drake Rehab Project	Roadway Rehabilitation	Rehabilitate five miles of deteriorating roadway and improve the performance of nearly 60 culverts through sliplining.	Active

Table 3-2. Creek Restoration and Municipal Maintenance Projects 2012-2013 (Capital Improvement Projects)

Municipality	Project	Project Type	Description	Project Status
County of Marin	Southern Marin Watershed Program	Integrated Flood Control	Provides a framework to integrate flood protection and environmental restoration with public and private partners to protect and enhance watersheds into Richardson Bay.	Active
County of Marin	Stinson Watershed Program	Integrated Flood Control	Provides a framework to integrate flood protection and environmental restoration with public and private partners to protect and enhance watersheds into Easkoot Creek.	Active
County of Marin	Tennessee Valley Pathway	Engineering	Construct asphalt path and raised wooden boardwalk along Coyote Creek from Marin Avenue to the Mill Valley-Sausalito Path.	Active
County of Marin	Vineyard Creek Improvements	Flood Control	Replace Center Road culvert and improve channel to increase cross-sectional area, stabilize banks and creek bed, and improve habitat.	Active
County of Marin	West Creek Flood Wall	Flood Control	Construct flood barrier to prevent damage to properties due to flooding of West Creek.	Active
Town of Fairfax	Fair-Anselm 733 Center Blvd.	Restoration	Stream Bank Restoration	Permits Issued
Town of Fairfax	Pastori Bridge	Drainage Improvement, Restoration	Stream Bank Restoration and Outfall Pipe	Permits Issued
City of Larkspur	Doherty Drive Improvement Project	Roadway Rehabilitation	Road reconstruction, multi-use pathway, and drainage improvements.	Complete
City of Mill Valley	Cascade Drive Pedestrian Bridge	Flood Control, Engineering	Sewer line and bridge replacement.	Under Review

Table 3-2. Creek Restoration and Municipal Maintenance Projects 2012-2013 (Capital Improvement Projects)

Municipality	Project	Project Type	Description	Project Status
City of Mill Valley	Arroyo Corte Madera del Presidio Flood Study	Flood Control	Identifies projects to combat flooding.	N/A
City of Mill Valley	Boyle Park creek restoration	Restoration	Restore channel, floodplain and riparian corridor in Warner Creek tributary.	Project will be completed by October 2013
City of Mill Valley	Bayfront Pier and Habitat Restoration project	Restoration	Reconstruct recreational bay access pier that was damaged in the 2005 storms. Pier will be Americans with Disabilities Act (ADA) compliant and provide a controlled access point to help to prevent destruction of sensitive tidal habitat. Plan includes replanting with native vegetation.	Project is in preliminary engineering phase
City of Novato	Rush Creek Drainage (00-015)	Flood Control	Replace track side ditch with box drainage culvert. Staff is working with Sonoma-Marín Area Rail Transit (SMART) to have the work included in their upcoming project for track replacement, which includes other drainage work adjacent to their tracks and in their right-of-way.	SMART securing permits required for work
City of Novato	Olive Ave. Improvements (97-001)	Roadway Rehabilitation, Flood Control	Roadway widening and replacement of roadside drainage ditch with storm drain.	No permit activity to date – currently in design.
City of Novato	Grant Ave. Bridge at Novato Creek (09-003)	Engineering	Widen existing roadway bridge to include bike lanes and sidewalk, and install scour counter-measures on the banks of Novato Creek in the vicinity of the bridge.	Department of Fish and Game and ACOE permits probably required, environmental work underway

Table 3-2. Creek Restoration and Municipal Maintenance Projects 2012-2013 (Capital Improvement Projects)

Municipality	Project	Project Type	Description	Project Status
Town of Ross	Parking lot behind Town Hall	Parking Lot Stabilization	Sheetpile wall project	Design complete. No permits required.
Town of Ross	Creek Bank near Lagunitas Bridge	Restoration	Install a permanent drip watering system for established willow trees on the creek bank following the Lagunitas Bridge replacement project. Plant two 48" boxed redwood trees at top of bank above the willow trees.	Complete. No permits required.
Town of San Anselmo	Sorich Park trails/switchbacks	Engineering	Built trails/switchbacks in Sorich Park to reduce erosion and increase safety.	Initiated and implemented by Town Open Space Committee
Town of San Anselmo	Oak Avenue Neighborhood	Stormwater Treatment	Install trash rack on an ephemeral creek and repair curbs and gutters to reduce erosion.	Complete
City of San Rafael	None	N/A	N/A	N/A
City of Sausalito	None	N/A	N/A	N/A
Town of Tiburon	None	N/A	N/A	N/A

STREET SWEEPING, STORM DRAIN INLET CLEANING, AND VISUAL OUTFALL MONITORING

Marin municipalities swept more than 26,300 curb-miles and removed more than 7,200 cubic yards of debris from gutters and storm drains. Totals for each municipality are provided in the Street Sweeping and Catch Basin Cleaning Report (**Appendix C-3**).

Minimum required frequencies of street sweeping, storm drain cleaning, and visual monitoring are summarized in **Table 3-3**. Downtown areas may be swept more frequently, and sweeping of all streets may be doubled during leaf season. Many municipalities monitor catch basin accumulations more frequently during rains.

Municipal staff performed all required visual outfall monitoring in order to detect and stop dry-weather non-stormwater discharges, identify maintenance needs, and detect erosion problems.

Table 3-3: Street Sweeping, Storm Drain Inlet Cleaning, and Visual Outfall Monitoring

Municipality	Street Sweeping			Storm Drain Cleaning			Visual Outfall Monitoring	
	Residential	Commercial	Industrial	Residential	Commercial	Industrial	Sites	Frequency
Belvedere	Weekly	Weekly	-	Annually	-	-	5	Monthly
Corte Madera	Weekly	Weekly	Weekly	Annually	Annually	Annually	33	Monthly
Fairfax	Monthly	Weekly	-	As needed	As needed	-	2	Twice Annually
Larkspur	Monthly	Monthly	Weekly	Annually	Annually	Annually	53	Annually
County	Annually	2x/year	-	As needed ¹	As needed ¹	-	56	Annually
Mill Valley	Monthly	4x/month	-	Annually	Annually	Annually	10	Monthly
Novato	Ea. 6 weeks	Weekly	Monthly	Annually	Annually	Annually	18	Annually
Ross	Weekly	Weekly	-	As needed	As needed	-	10	Monthly
San Anselmo	1-2x/month	1-2x/month	-	Annually	Annually	-	5	Monthly
San Rafael	Ea. 6 weeks	2x/week	2x/month	Annually	Annually	Annually	14	Monthly
Sausalito	Monthly	3x/week	Monthly	Annually	Annually	Annually	36	Annually
Tiburon	Weekly	Weekly	-	Annually	Annually	Annually	31	3-4x/year

Note:

1. The County contracted Marin Sanitary Service to sweep most of the unincorporated areas in East Marin. This improves sweeping efforts and better enables County staff to focus on other priority maintenance issues. The County purchased a new vacor truck in 2012 and now conducts routine maintenance and responds to complaints for catch basins and culverts year around. Roads crews target priority areas including Marin City, Tam Valley, Santa Venetia, Bel Marin Keys and the Seminary/Ricardo area of Strawberry.

MUNICIPALITIES RESPOND TO NON-STORMWATER DISCHARGE COMPLAINTS

Municipal stormwater staff enforce local urban runoff pollution prevention ordinances by responding to non-stormwater discharge complaints and complaints of dumped materials found near or in storm drains or creeks. Complaints are filed by residents and other community members who see dumped materials or witness non-stormwater illicit discharges in progress and report these incidents to local police or public works departments.

A total of 150 illicit discharges were reported in 2012-2013. The types of materials found this year, and the number of times each was found, are shown in **Figure 3-1**.

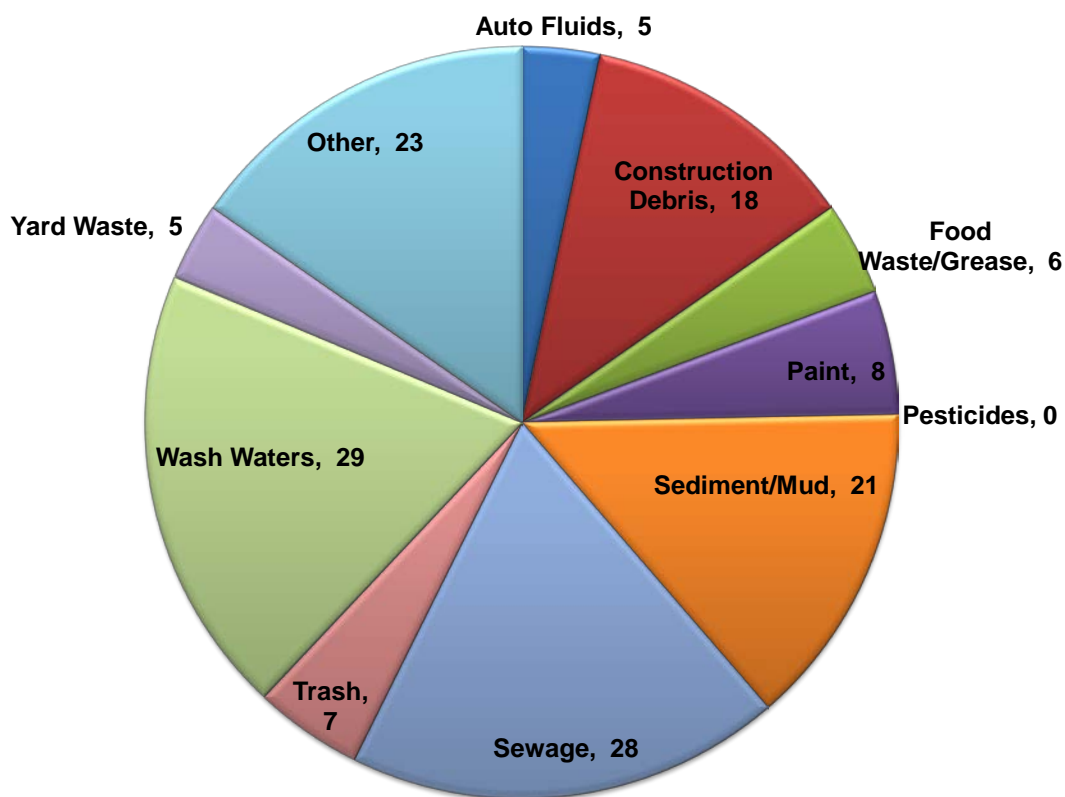


Figure 3-1. Number of Illicit Discharges Reported in 2012-2013, by Material Type

Municipal staff issued 48 Verbal or Written Warnings, seven Warnings with Abatement Notices, two Formal Violations with Citations, two Bills to Reimburse Cleanup, and one Cease/Desist Order. No legal action was taken.

In 2012-2013, staff distributed educational materials in response to more than 38 incidents. When it is impossible to identify the responsible party, municipal staff often distribute educational materials to businesses and residents in the area.

Some specific examples of Illicit Discharge Detection and Elimination implementation accomplishments are included below:

- Maintenance in Corte Madera encompasses a methodical program of smoke tests/dye tests throughout the District. Staff begins on the east side and progresses to the west side of the District. It is estimated that 2/3 of the District can be tested annually. The goal is to seal a known and finite section of the District, both District lines and private laterals, in order to introduce smoke into the sealed system, thus exposing any leaks. The District then takes appropriate action. Dye tests follow a similar process but are more closely targeted to a specific location. Cameras are employed extensively for locating and identifying areas of concern.
- In coordination with the Central Marin Sanitation Agency (CMSA), Corte Madera has a hotline (800-SAV-R-Bay) for residents and businesses to report illicit discharges for follow up, inspection, and appropriate referral or enforcement actions.
- At the request of Santa Venetia Sanitary District, the County of Marin's local stormwater program completed and provided a detailed storm drain map of the greater Santa Venetia area so the Sanitary District could add it to the map books in each of their trucks. The map will be used in the event of a spill.
- The Marin County local stormwater program provided storm drain marker kits, assistance, and directions to students from the Green Team at Manor Elementary School stenciling in the Oak Manor area of Fairfax. MCSTOPPP purchased the storm drain markers with OPP funds.
- As follow-up to illicit discharge incidents, Marin County local stormwater program staff provided guidance and outreach materials to promote water quality and reduce the impacts to watershed health, sent violation letters when appropriate, required cleanup and remediation where needed, and worked with other local and outside agencies as necessary to achieve compliance on the violations. The outreach performed for Marin County consists of outreach materials developed by the Countywide MCSTOPPP program and verbal communication with the violator both at the time of the initial inspection and the subsequent follow-up inspections for sites requiring cleanup and remediation. Where applicable, most violators receive the handout *Pollution Prevention, It's Part of the Plan* (English and/or Spanish), which has information outlining most discharge types. Additionally, outreach materials for specific discharge types are included. For example, *Take Pride in Your Ride* is distributed for auto fluids discharges, and *Caring for our Creeks is like Caring for our Carpets* is distributed for carpet cleaning discharges.
- San Anselmo is implementing a storm drain labeling community service program for Drake High School students.
- In March 2013, San Rafael Staff received a report from a local business that two automotive repair shops were washing oils from automotive repairs into the storm drain. Staff investigated and found some oil staining on the pavement in front of the

shops but no contaminants in the storm drain. Staff discussed the need for improved housekeeping with both shop owners.

- In April 2013, an anonymous report was received that a commercial car wash in San Rafael was discharging green liquid into the gutter fronting the business. Staff investigated and found car wash soap in the gutter and issued a warning citation to the manager. As a result, the property owner closed the car wash, submitted a plan of correction to the City of San Rafael, and made the necessary improvements to the system to prevent soap from leaving car wash area.
- After receiving illicit discharge complaints, City of Sausalito stormwater staff actively addressed non-stormwater discharges from local businesses by meeting with staff from several restaurants to discuss prior BMPs for cleaning floor mats. City staff reported that restaurant staff were very receptive to the outreach that focused on eliminating illegal non-stormwater discharges to Richardson Bay.
- City of Sausalito staff also reported that the city required a pool owner to install a pump that will prevent backwash from entering the storm drain, and they required changes to the pool's drainage system that directs overflow to the sanitary sewer.

STUDENTS AND TEACHERS RESTORING MARIN'S WATERSHEDS

MCSTOPPP partners with Point Blue Conservation Science's (PBCS - formerly Point Reyes Bird Observatory) Students and Teachers Restoring A Watershed (STRAW) project, as well as participating teachers, students, parents, and volunteers, to implement watershed education and riparian restoration projects. PBCS funds the STRAW-MCSTOPPP restoration projects with grant funding and funding from MCSTOPPP (\$10,000 in 2012-2013). STRAW faculty organize the in-class presentations, and STRAW restoration staff organize restoration days, perform maintenance and site monitoring, and procure most of the supplies and plants needed to conduct the restorations. MCSTOPPP staff conduct photo-monitoring at the riparian restoration sites and assist with the in-class presentations and the hands-on riparian restoration education on restoration days.

In 2012-2013, MCSTOPPP staff joined STRAW faculty (retired teachers and naturalists) to give 35 in-class presentations on stormwater pollution prevention and riparian restoration. The presentations prepared 859 students for their restoration days and connected riparian restoration to stormwater pollution prevention and creek habitat protection. The MCSTOPPP/STRAW in-class presentation focused on helping students understand that they all live in a watershed by teaching them about the anatomy of the watershed and how neighborhood storm drain networks drain directly to a creek or bay. The presentation described the types of pollutants that can get into a storm drain and how pollutants diminish aquatic habitat. In addition, students learned about the importance of pollution-free riparian habitat for native and endangered species and what they can do to prevent stormwater pollution.

Highlights from the 2012-2013 MCSTOPPP/STRAW Collaboration Report include the following:

- Miller Creek Watershed:** MCSTOPPP and STRAW staff worked with 630 students from Miller Creek Middle School over three days at the Marinwood Park site. Students removed approximately 19 cubic yards of invasive species, planted 88 native riparian plants, and seeded 2,200 square feet with native grasses. Eight teachers and eight volunteers assisted.



- San Rafael Watershed:** At Pickleweed Park, 90 students and three teachers from Bahia Vista Elementary School were joined by 11 parents and 10 volunteers to complete a day of restoration along the tidal wetlands. The students removed 12 cubic yards of non-native vegetation. The students then planted 165 native wetland plants.

- Arroyo Corte Madera del Presidio Watershed:** Students performed restorations and maintenance over two days at Three Wells in Cascade Park. At the Three Wells site, 136 students from Marin Horizon, Park Elementary, and Old Mill Elementary were



accompanied by seven teachers, 56 parents, and five volunteers. They helped to remove approximately 9 cubic yards of invasive species. They also planted 66 native riparian plants and seeded 550 square feet with native grasses.

A summary of the 2012-2013 Restoration Project totals are provided in **Table 3-4**.

Table 3-4: MCSTOPPP-STRAW Restoration Project Totals 2012-2013

Item	Total Number
Restoration sites	3
Restoration days	6
Schools	4
Teachers	18
Students	859
Parents	67
Volunteers	23
Square feet pulled and/or planted	32,838
Riparian native plants planted	319
Square feet seeded with native grasses	2,750
Cubic yards of non-native plants removed	40

Chapter 4. Building and Renewing

MUNICIPALITIES CONTINUE TO COMPLY WITH CONSTRUCTION SITE MANAGEMENT REQUIREMENTS

In 2012-2013, Marin's municipalities implemented construction site performance standards described in Action Plan 2010. For specific projects, county, city, and town staff ensure that impervious area is minimized, pollutant sources are controlled, and, where required, that stormwater treatment facilities are incorporated. In addition, local building officials and public works staff inspect construction sites to ensure erosion is controlled and sediment and other pollutants are contained.

Projects that are part of a development disturbing an acre or more are regulated by a statewide General Stormwater Permit for Construction Activities (CGP).⁵ Marin municipalities require builders of these projects to show they have notified the State Water Board they intend to comply with the CGP. A summary of construction projects disturbing one acre or more is provided in **Table 4-1**. A complete list of new development projects requiring post-construction BMPs for all Marin municipalities is provided within **Appendix D-1**.

Table 4-1. Construction Projects Disturbing One Acre or More

Municipality	Project Name	Location	Acreage
City of Larkspur	Rose Garden	279 Doherty Drive, Larkspur, CA 94939	16.9
City of Novato	Rudnick Estates	Plum Street at Zandra Place & Sherwood Place	7.8
City of Novato	Hanna Ranch Mixed Use	End of Rowland Blvd. at Vintage Ave.	3.1
City of Novato	Canyon Green Homes	Hill Rd. at Canyon	4.5
City of San Rafael	33 North	33 San Pablo Ave	1.9
City of San Rafael	Target	125 Shoreline Pkwy	15
City of San Rafael	Untermann Land Division	190 El Camino	1
City of San Rafael	Grading of MMWD's Corporation Yard		1.3
Town of Tiburon	110 Gilmartin Drive	110 Gilmartin Drive	3.1
Town of Tiburon	Ned's Way Facility	Dairy Knoll (formally the 600 Ned's Way)	2
Town of Tiburon	Lyford Drive Parking Lot	Tiburon Blvd. at Lyford Drive	1.5

⁵ NPDES General Permit for Storm Water Discharges Associated with Construction And Land Disturbance Activities Order No. 2010-0014-DWQ, NPDES NO. CAS000002

Some Marin municipalities, such as the City of Mill Valley, prohibit grading during the wet season. All municipalities require builders of projects with potential to cause significant erosion to prepare and implement effective erosion and sediment control plans if they plan any wet-season construction activity.

For smaller projects, municipalities attach erosion control information on either an 8½" x 11" sheet (MCSTOPPP Minimum Erosion/Sediment Control Measures for Small Construction Projects) or a full-sized plan sheet to the project's building, grading, or encroachment permits.

Municipalities conduct timely seasonal outreach to contractors to help ensure compliance with erosion control requirements. For example, the County sends a notice requiring project proponents to install erosion and sediment control BMPs and to "button-up" sites (i.e., prepare them for winter rains) by October 15th. Municipalities also monitor construction sites to ensure construction materials are stored under cover or tarps and that excess concrete, paint, and other wastes are not washed into storm drains. To aid in these inspections, some municipal agencies use the Inspection Checklist for Construction Stormwater Controls prepared by MCSTOPPP.

In addition, municipal and county construction site inspectors attend trainings as needed either annually or biennially. MCSTOPPP offered Construction Site Management training in May 2011 and will hold a Construction Site Stormwater Management and BMP Installation workshop on October 2, 2013. The workshop will be held at the College of Marin Indian Valley campus and will include a field demonstration component, as well as pre- and post-workshop tests to measure workshop effectiveness. The workshop will cover the second term Phase II Permit requirements.

LOW IMPACT DEVELOPMENT DRAINAGE DESIGN FEATURED IN 2012-2013

Marin municipalities continue to adapt their development review procedures to incorporate LID design and MCSTOPPP's Guidance for Applicants manual is recommended or required for some projects. Notable 2012-2013 LID projects include the following:

- The County of Marin's Agate Beach County Park Parking Lot Project will involve active replacement of impervious parking lot with pervious pavement, as well as stormwater infiltration chambers. Check dams will be installed in an adjacent vegetated swale. This project will improve the quality of stormwater that flows to the Duxbury Reef Area of Special Biological Significance.
- The Marin Center Auditorium Parking Lot Project (completed) included directing runoff from all new impervious surfaces to correctly sized bioretention facilities per Attachment 4 of the first term Phase II Permit.
- A Civic Center Administrative Office Building planned for the City of Novato includes a permeable parking area, bioretention planters, and bioswale ditches per Attachment 4 of the first term Phase II Permit.
- Three new development projects in the City of Novato include LID measures.

- The City of San Rafael required LID measures to treat and control stormwater runoff on three projects as part of their compliance with Attachment 4. Designs include bioretention facilities and bioswales.
- The City of Sausalito's Harrison Park Improvements project included the installation of a pervious concrete accessible path to the renovated playground.
- In the City of San Anselmo, stormwater retention was incorporated into many projects, including the San Francisco Theological Seminary's Master Plan.
- The City of Tiburon's Dairy Knoll Recreation Center, a 4,800 square foot recreation center, includes subgrade storm drain system with rock outfall and detention pond.

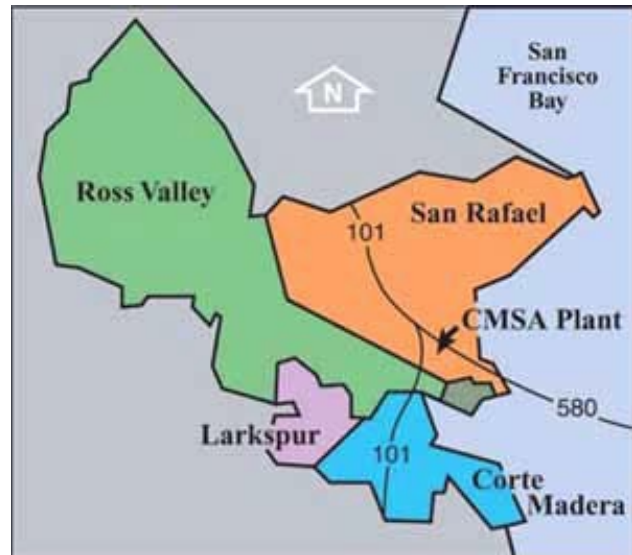
MCSTOPPP PLANS FOR EFFECTIVE IMPLEMENTATION OF NEW PHASE II PERMIT POST CONSTRUCTION REQUIREMENTS

In Fiscal Year 2012-2013, MCSTOPPP staff began critical planning that will help Marin's municipalities effectively implement section E.12 (Post Construction Stormwater Management Program) of the new Phase II Permit. MCSTOPPP staff prepared an NBWA funding proposal to update MCSTOPPP's existing manual, *Stormwater Quality Manual for Development Projects in Marin County, a Low Impact Development Approach*, to incorporate the new E.12 requirements. Through the NBWA Water Quality Technical Committee, MCSTOPPP invited MNSSSA partners to take part in the NBWA proposal and the project. The NBWA Board approved the proposal to hire Dan Cloak Environmental Consulting to update the manual and to create four county-specific tailored manuals for each North Bay county. The project will fund up to three training workshops for municipal staff and development professionals who work in the North Bay. The project will improve implementation of LID design in order to achieve all of the associated benefits (e.g., evapotranspiration, infiltration, stormwater treatment, water conservation, cost-effective permit compliance, green infrastructure).

Chapter 5. Educating Ourselves at Work

MCSTOPPP COUNTYWIDE STORMWATER INSPECTION PROGRAM

Business inspections were conducted in multiple jurisdictions by inspectors from Marin County Environmental Health Services (EHS), CMSA and Marin County Certified Unified Program Agency (CUPA). A number of municipal fire departments also look for stormwater-related issues during routine business inspections, and in some cases, local municipal stormwater staff conduct additional inspections based on complaints, referrals or knowledge of their commercial areas. If necessary, the local stormwater coordinator can bring enforcement action under the local stormwater ordinance.



Central Marin Sanitation Agency's service area includes many of Marin's commercial areas.

The following inspections were conducted in 2012-2013:

- EHS inspected 1,536 food-handling facilities, 547 commercial swimming pools, and 688 housing facilities throughout Marin's municipalities (**Appendix E-1**). Inspectors referred two stormwater-related issues to local stormwater coordinators through the MCSTOPPP program.
 - EHS reported to County of Marin stormwater staff that wash water from mat washing was being discharged to the street. The violation was identified during a routine restaurant inspection. The EHS inspector discussed proper BMPs with restaurant staff and explained that all wash water must go only to inside drains. The County of Marin local stormwater coordinator conducted follow-up outreach with educational materials.
 - EHS reported to County of Marin stormwater staff that paint was discharged behind an apartment complex. The violation was observed during a routine apartment complex inspection. An inspection letter with compliance requirements was sent by EHS and a Notice of Violation with immediate remediation requirements was issued by CUPA. Local stormwater staff was notified and helped monitor the removal of paint and contaminated soil by the property owner's contractor and provided outreach and education materials to the property managers and maintenance staff.
- CMSA inspects significant commercial and industrial facilities, including automotive facilities, dealerships and repair shops, and commercial car wash facilities within its

service area (**Appendix E-2**). Of the 210 stormwater inspections conducted, one citation and three referrals were issued. Two referrals were for businesses in San Rafael, and one referral was for a business in Corte Madera.

- The CMSA Fats, Oil and Grease (FOG) Program includes inspections of grease recycle bins at food service establishments. The objective of the program is to reduce clogging of sanitary sewers and overflows to storm drains. In 2012-2013, CMSA conducted 416 inspections of food service establishments.
- CUPA inspects all sites where regulated quantities of hazardous materials are stored (**Appendix E-3**). Actual or potential stormwater discharges found during these inspections that cannot be addressed by the inspector are reported to the local municipal stormwater coordinator. In response to the referral, the coordinator investigates and works with the business owner to correct any problems. CUPA inspectors also check for proximity of storm drains to garage bay doors and recommend that contingency plans be in place in case of spills. Local Fire Departments or Districts also refer stormwater issues observed during routine inspections to local coordinators in unincorporated Marin County, Mill Valley, Ross, San Anselmo and Fairfax.
 - City of San Rafael received one report from CUPA in Fiscal Year (FY) 12-13 that a Marin Sanitary Waste Disposal truck with a broken hydraulic hose discharged hydraulic oil onto the street, drainage ditch and onto private property. CUPA reported that Marin Sanitary staff responded with a hazardous waste crew and properly removed all contaminants.
- Marin's urban corridor along Highway 101 is largely residential. Small local service business such as auto repair shops, restaurants, and nurseries are the most significant potential sources of stormwater pollutants. In 2012-2013, 626 businesses in Corte Madera and 519 businesses in Tiburon received self-inspection forms with annual business license renewal notices. In addition, Larkspur automatically issues self-inspection forms online with business license renewals. The *Self-Inspection Checklist for Business Owners* is provided as **Appendix E-4**.

EDUCATION FOR BUSINESSES AND INSPECTORS

Inspectors may hand out available outreach materials⁶ with BMP guidance. Examples of materials available on the MCSTOPPP website are for various target audiences are provided in **Table 5-1**. MCSTOPPP may refer businesses to other resources, such as information and materials available on the BASMAA, CASQA, and California Coastal Commission websites.

⁶ All materials and links to other resources are available at <http://www.marincounty.org/depts/pw/divisions/mcstoppp/business> or by calling MCSTOPPP at 415-473-3202.

Table 5-1: Examples of Stormwater Outreach Materials Available for Businesses

Target Audience	Title	Publisher
Apartment Managers	What Apartment Managers Need to Know About Sewers & Storm Drains	MCSTOPPP
Industrial/ Commercial Businesses	Business Self Inspection Checklist	MCSTOPPP
Industrial/ Commercial Businesses	Pollution Prevention: It's Part of the Plan	MCSTOPPP
Carpet Cleaners	Caring for our Creeks is like Caring for our Carpets!	MCSTOPPP
Food Handling Facilities	Stormwater Pollution Prevention for Restaurants and Food Handling Facilities	MCSTOPPP
Landscapers and Nurseries	Retail Nurseries: Best Management Practices for Protecting Local Waterways	MCSTOPPP
Painters	Painting Contractors BMP brochure	MCSTOPPP
Service Stations and Repair Shops	Preventing Pollution for Gas Stations and Related Businesses	MCSTOPPP
Swimming Pool and Spa Cleaners	Pollution Prevention for Swimming Pool, Spa and Fountain Maintenance	MCSTOPPP

In addition, MCSTOPPP actively works to educate business owners and staff regarding stormwater pollution prevention and stormwater-related issues. Business education efforts in 2012-2013 included the following:

- With financial support from MMWD and the Bay-Friendly Coalition’s Prop 84 grant, MCSTOPPP co-sponsored its Sixth Annual Bay-Friendly Landscaping Maintenance Training and Qualification Program, held at the Marin County Office of Education. During one of the classes held over the seven-week series, MCSTOPPP’s manager gave a presentation to attendees on Marin’s stormwater ordinances, how to prevent stormwater pollution (BMPs for landscapers), and LID. Bay-Friendly graduates, including 27 from 2013, are listed on the Bay-Friendly Coalition website,⁷ as well as in MCSTOPPP calendars and on the MCSTOPPP website. MCSTOPPP does not plan to offer the series again in 2013-2014. Instead, MCSTOPPP will investigate a collaborative option for offering the program in the



⁷ <http://www.bayfriendlycoalition.org/QPdirectory.php>

North Bay, potentially rotating responsibility for offering the training between Marin, Napa, Solano, and Sonoma Counties.

- A Vendor's Night Out was held at Sloat Garden Center in Kentfield on February 19, 2013, with 125 people in attendance. Integrated Pest Management (IPM) Advocate Anne Rogers and Our Water Our World (OWOW) consultant Annie Joseph hosted information tables and responded to questions. MCSTOPPP provided 50 Go Native guides, 40 Growing Gardens from Garbage, 150 OWOW Pocket Guides, 60 Ten Most Wanted brochures and 60 MCSTOPPP brochures for use at Sloat's Vendor's Night Out.



- Between October 2012 and June 2013, eight in-store employee trainings were held for Our Water - Our World (OWOW) partner stores on how to help customers make informed decisions when purchasing pest control products for their home or garden. The agenda for all trainings includes responding to employee questions, providing assistance in identifying beneficial insects, and learning about the latest problem insects/solutions. This is part of the OWOW program in Marin in which 15 nursery and hardware stores are participating. MCSTOPPP provided a large poster-size laminated Good Bugs/Bad Bugs poster for use by IPM Advocates in trainings.
- On February 12, 2013, 50 key employees of Home Depot stores in the North Bay—including employees and management from the Marin store—were trained in the OWOW partnership program to strengthen relationship with the stores and personnel.
- The IPM Advocate Report was released on May 8, 2013. When store managers were asked if IPM Advocates influenced the type of pest management products their store will sell next year, 67% said they will increase shelf or display space for green (i.e., less toxic) products. Seventy-seven percent of store managers surveyed reported greater sales of less toxic products from 2011 to 2012, even with a depressed economy, and over 96% of the managers say their employees now have more confidence when identifying pest problems.
- MCSTOPPP developed a fact sheet on BMPs for nurseries and proactively mailed it in June 2013 to eight nurseries in the Richardson Bay Watershed, 17 in the San Francisco Bay Watershed and three in West Marin. The fact sheet encouraged BMPs that will prevent non-stormwater discharges. This effort was part of MCSTOPPP's efforts to comply with the Richardson Bay Pathogen Total Maximum Daily Load (TMDL) because nurseries were identified by City of San Diego as potential contributors to pathogen indicators found in stormwater.

ENFORCEMENT ACTIONS

When required, agencies act to ensure businesses comply with local ordinances. In 2012-2013, no enforcement actions were taken against commercial or industrial businesses by the Local Programs. However, CMSA issued one citation.

In response to referrals, the Local Programs take actions to enforce their local urban runoff pollution prevention ordinance. For example, the Town of Corte Madera took action in 2012-2013 and has developed a standard follow up approach, described below:

- CSMA referred one business to Corte Madera staff. The Town mandates that the responsible party mitigate all negative effects of the illicit discharge. When the responsible party is identified, Corte Madera DPW staff determines the appropriate course of action with a timeline for compliance, and staff informs the responsible party. To the extent that the responsible party fails to meet the required course of action and/or timeline set by DPW, the stormwater coordinator will task staff with timely completion of the mitigation. DPW will then invoice the responsible party. In all cases of illicit discharges, the responsible party, as well as property owners in the neighborhood, may be counseled on stormwater pollution prevention. The counseling provided by staff may take a variety of forms; however, all discussions will include certain fundamental elements: 1) a clear and concise statement by staff to the responsible party as to what he/she did in order to create an illicit discharge; 2) how and why the event has a deleterious effect on people, animals; and the environment; 3) what is the most effective course of action to lessen or mitigate the adverse effects of the illicit discharge; and 4) a determination by staff whether the seriousness of the event warrants the issuance of a Notice to Abate Pollution. Follow-up action includes, but is not limited to, staff monitoring for compliance in the subject neighborhood along with placing door hangers at homes. DPW insists upon an adherence to compliance with the Clean Water Act. In the event that the responsible party is unidentified or cannot be located, DPW staff assumes all responsibility for cleanup.

Chapter 6. Educating Ourselves at Home and at School

REACHING OUT TO THE NEXT GENERATION

MCSTOPPP continues to support school-based education and outreach programs. Efforts in 2012-2013 included the following:

- **Publication Distribution:** MCSTOPPP provided 60 activity guides and 32 each of coloring books, Pest or Pal booklets, Pet Waste bookmarks, and Kid's Guide to Backyard Bugs to Strawberry School. A total of 85 copies of the Pest or Pal booklet were provided to the School Garden Coordinator at Tam Valley School. Materials were also provided to the Tam Valley Community Center.
- **Car Wash Kits:** MCSTOPPP continued to work with local high schools (primarily Sir Francis Drake High School and San Rafael High School) in providing them with car wash kits for their car wash fundraisers. Kits were given to both schools. MCSTOPPP actively worked with staff from Sir Francis Drake High School to ensure that the kit is used properly to keep wash water from entering the storm drain. Sir Francis Drake High School staff made adjustments to their protocols as needed in order to properly use the car wash kit. MCSTOPPP will continue to communicate with staff from both high schools in FY 13-14 in order to encourage effective car wash kit use.
- **Ladybug Mascot:** The Ladybug mascot costume was loaned to the Mill Valley Children's Garden at Edna Maguire School for the release of 45,000 ladybugs. This event taught students about IPM and about how ladybugs can control aphids in place of toxic pesticides.
- **Diorama:** MCSTOPPP's diorama, which illustrates how stormwater carries pollutants from land to creeks and the Bay, was used by MCSTOPPP staff for Wetlands Days held on June 18 and 19, 2013. This annual two-day event is sponsored by the Sewage Agency of Southern Marin. This year 300 third-graders (14 classes) from four schools in Mill Valley attended Wetland Days. Classes rotated through seven stations where students learned about stormwater pollution prevention, wastewater, and wildlife. MCSTOPPP also distributed class sets of Activity Guides to all teachers for use by students.



- **School Presentations:** MCSTOPPP, in coordination with PBCS’s STRAW program, provided classroom presentations on riparian restoration and stormwater and creek pollution prevention to approximately 35 classes, preparing 859 students for their restoration days. Each presentation focuses on positive actions students can take to prevent stormwater pollution and highlights the connection between creeks and storm drains. MCSTOPPP staff also participated in six hands-on riparian restoration days with students.

REACHING THE GENERAL PUBLIC

During 2012-2013, MCSTOPPP continued its successful programs to reduce homeowners’ use of toxic pesticides in the home and garden.

- **Our Water - Our World:** MCSTOPPP continues to be part of the OWOW program. Efforts in 2012-2013 included the following:
 - MCSTOPPP ordered 7,300 fact sheets and shelf talkers for the OWOW program. Through participation in BASMAA, MCSTOPPP continued regional advertising of the program in Bay Nature Magazine and supporting retail stores through offering staff trainings.
 - Worked with BASMAA, Ann Joseph Consulting, and University of California’s IPM Program in supporting the IPM Advocates who are interning at retail stores, including two in Marin.
 - IPM Advocate Anne Rogers provided staff support to the OWOW booth at the NorCal Trade Show on February 14, 2013.
 - During April-May 2013, MCSTOPPP staff, IPM advocates, and a MCSTOPPP consultant (Debi Tidd) refreshed product labels and fact sheets at 15 participating OWOW stores.
 - In May-June 2013, to promote the OWOW program, MCSTOPPP placed four ads in the Marin Independent Journal, including an online advertisement; an ad in the Commuter Times; and an ad in FLOURISH Magazine, a new magazine distributed by the Marin Independent Journal. All ads promoted the OWOW logo and tag and included names and phone numbers of all the OWOW partner stores located in Marin (**Appendix F-1**).
 - Four in-store “end-cap” product displays were developed for select OWOW stores,



including Sloat's on Miller Avenue, Marin Ace, The Home Depot, and Goodman's Building Supply. A banner was also provided at The Home Depot. MCSTOPPP provided a poster for an end cap display at Goodman's Building Supply, as well as two separate Plexiglas® containers that the garden supply manager attached to shelves near the pool supplies and weeds sections. In addition, MCSTOPPP staff visited all the stores, after store set-ups were conducted, and provided the new Rat and Mouse Fact Sheet.

- Five informational tables were developed for select OWOW stores. IPM Advocate Anne Rogers hosted four information tables for the public: two at Sloat's on Miller Avenue on May 4 and May 26, 2013, and two at Marin Ace on May 19 and June 15, 2013. Debi Tidd hosted an information table at OSH on June 8, 2013.
- **MCSTOPPP 2013 Wall Calendar**: MCSTOPPP designed and printed 28,000 wall calendars and distributed them to residents and businesses throughout the County. Each month included an oil and filter recycling message and either a stormwater pollution prevention, water conservation, habitat enhancement, or San Francisco Bay water quality protection message. The Marin Independent Journal distributed about 22,000 calendars to Marin residents as an insert in their newspaper. Calendars were also distributed through local libraries and municipalities.

Surveys were included in each calendar and by June 30, 2013, 466 surveys were returned. Of those Marin residents who responded, 54% indicated that this was the first time they received the MCSTOPPP educational calendar. Sixty-seven percent stated that they learned something from reading the calendar that will influence them to protect creeks, bays or oceans in this calendar or

a prior year and 28% said the calendar reinforced what they already knew. When asked if they saw the OWOW logo when shopping for pest management products, 43% said they do not shop for pesticides, 17% said they had seen the OWOW logo, and 41% said they had never seen the logo while shopping. This could mean that for those respondents who will shop for pesticides in the future, the MCSTOPPP calendar may have raised awareness that will encourage the purchase of less toxic pest management alternative.



Other survey results revealed that 56% of respondents did not know that discharging pool or spa water to the storm drain could harm fish in creeks. Ninety-two percent of respondents indicated that they already knew that rain washes pollutants into the storm drain system where it goes directly to creeks, bays or the ocean. Additional calendar survey results are as follows:

- 65% indicated they take their car to a car wash when it needs a wash
 - 11% said they wash their car in a location where wash water drains to a vegetated area
 - 18% said they wash their car in the street or driveway but used very little water and avoided having the wash water flow to the storm drain
 - 6% said they wash their car the street with soap and water entering a storm drain
 - 91% said that when washing their car they use trigger nozzles to conserve water and reduce runoff
 - 52% said they knew local ordinances required residents and businesses to manage landscape irrigation properly in order to reduce or prevent runoff
- **Marin Home & Garden EXPO:**
MCSTOPPP purchased booth space and recruited six Bay-Friendly Landscape professionals to volunteer (three hours each) with MCSTOPPP staff at the Marin Home & Garden EXPO. MCSTOPPP staff and the Bay-Friendly Landscape volunteers focused on less toxic alternatives to managing pests in the home, water conservation, native plants, and Bay-Friendly gardening, among other topics. In return, the Bay-Friendly Landscape professionals received two hours of continuing education credits needed to maintain their Bay-Friendly Landscape qualification. MCSTOPPP also took out a full page advertisement in the official Home & Garden Program Guide that was distributed through the Pacific Sun prior to the event, as well as on the days of the event. The advertisement listed more than 80 landscaping companies working in Marin with Bay-Friendly graduate employees (**Appendix F-1**).





- **Marin EcoFair:** MCSTOPPP staff participated in the Marin EcoFair, a community event to inspire a healthy and sustainable Marin. This year's event was held at Lagoon Park in San Rafael. MCSTOPPP staff engaged the attendees by distributing ladybug chocolates and a game for children to win prizes. A variety of stormwater pollution prevention brochures were distributed. Information on the EcoFair can be found at <http://ecofairmarin.org/>.

- **CalRecycle Oil Payment Program:** OPP funds helped MCSTOPPP conduct a variety of projects in 2012-2013, including the following:
 - Funded a contract with Marin Recycling to collect used oil and filters from the public.
 - Funded 25% of the MCSTOPPP 2013 Wall Calendar.
 - Provided presentations at English as a Second Language classes on how and why to recycle used oil (**Appendix F-2**).
 - Hired a consultant to visit and inspect used oil collection facilities and to distribute brochures with information on BMPs.
 - Purchased storage unit, absorbent bilge pillows and sheets, used oil containers, and educational material for implementing a program to reduce oil spills/leaks from boaters in Richardson Bay and Tomales Bay. This program will be launched in FY 13-14 by the Marin County Hazardous and Solid Waste Management Joint Powers Authority.
 - Worked with designer (Laura Lovett by Design) and printer (P & B Productions) to produce the 2013 MCSTOPPP wall calendars. A total of 28,000 calendars were printed, with most of the distribution occurring through the Marin Independent Journal. Project funders also included MCSTOPPP, Marin Municipal Water District, and the Marin County Wastewater Treatment Agencies.
 - MCSTOPPP's consultant (C2Alternatives) continued to work with Promotores Verdes, a group of community members, educators, community leaders, health providers and local government representatives (**Appendix F-2**). Participants work to inform themselves on environmental issues so that they can promote awareness in their communities. In Fiscal Year 2012-2013, the Promotores Verdes conducted outreach/ education on recycling used oil and filters and on stormwater pollution prevention and attended three monthly meetings to focus on these topics. In addition, the Promotores Verdes participated in the Canal Health and Safety Day on October 7, 2012, where they operated the Used Oil

and Filter Recycling Plinko Game. The game requires participants to answer a question in specific categories, including used oil and filter recycling. Outreach was conducted mainly in Spanish. As people waited in line to play, there was an opportunity to talk with them about pollution prevention. In addition, MCSTOPPP's consultant (C2 Alternatives) conducted a survey at the Canal Health and Safety Day and found that 75% of respondents indicated they change their own oil and more than half were able to say where they took it for recycling.

- Purchased storm drain markers that are installed by local stormwater programs.
- Purchased four half-page ads in the Marin Independent Journal encouraging and educating the public on used oil and filter recycling.
- Purchased 41 radio advertisements in Spanish on La Raza Radio, 11 mentions in "traffic reads," and an internet link to the MCSTOPPP Oil Recycling brochure in Spanish on La Raza's online promotional site (April 17 – May 12, 2013).
- Purchased 18 Spanish radio announcements on ESPN to take place during pre- and post-game programs for the Giants vs. the A's games (May 27 – 31, 2013).

In 2012-2013, MCSTOPPP staff also conducted other outreach efforts, which are detailed below:

- **Website:** The MCSTOPPP website⁸ was redesigned and has been integrated into the County of Marin's new website. MCSTOPPP staff continued to update and improve the website after it was moved.

San Rafael Cigarette Eater Meter: MCSTOPPP staff reviewed text, commented and provided funds to support the Cigarette Eater Meter that was unveiled at the downtown San Rafael Farmers' Market on May 30, 2013 (**Appendix F-3**). The meter was a new, but temporary public art installation in downtown San Rafael designed to keep cigarette butts off the street and out of creeks and the Bay. The Meter is the result of a collaborative effort involving volunteers, a local business, local artists, and public agencies, including MCSTOPPP. Thanks to Bellam Self Storage and Boxes and an anonymous donor, two cents will be donated to St. Vincent DePaul Society for every cigarette butt that is placed in the meter. This will amount to \$2,000 when 100,000 butts are



⁸ <http://www.marincounty.org/depts/pw/divisions/mcstoppp>

collected. The public art piece will remain in City Plaza for several months before moving to another location in FY 13-14.

- **MCSTOPPP Van:** The MCSTOPPP van exterior design was rehabilitated to include the current MCSTOPPP telephone number. The van is beautifully wrapped with images and messages about protecting creeks in Marin.



- **Regional Cooperation:** MCSTOPPP assisted Ross Valley Flood Protection and Watershed Program in developing their second Annual Report to be distributed to the public. In addition, MCSTOPPP assisted with developing the Ross Valley Annual Report/ Newsletter. MCSTOPPP is a member of the BASMAA and is part of the Regional Outreach Campaign. Through BASMAA's Media Relations, staff reviewed and commented on a variety of pitches. The 2012-2013 pitches addressed such issues as pesticides, plastic bags, and burning of gift wrap. BASMAA submits an Annual Report to the Regional Water Board documenting OWOW activities, among other efforts.
- **Publication Distribution:** MCSTOPPP responds to numerous requests for publications throughout the year. For example, MCSTOPPP:
 - Supplied 40 copies of *The Ten Most Wanted* brochure to Inverness Garden Club.
 - Sent a stack of pet waste brochures to Friends of the San Rafael Library, Fairfax Library and MMWD for distribution.
 - Provided 20 *Garden from Garbage*, 100 *Go Native*, 50 coloring books, 25 *Pest or Pal*, and 50 *Free Resources* brochures for talks at the San Rafael Chamber of Commerce and the Tam Valley Community Center by a local creek group.
 - Provided copies of *Growing Gardens from Garbage*, *Go Native*, *Healthy Home & Garden*, *The 10 Most Wanted*, *Free Resource Guide*, *Pocket Guides*, and activity books for distribution by the Master Gardeners at the Marin Farmers Markets. Staff at Novato Market took Spanish coloring books as well.

- Provided 50 copies of *Growing Gardens from Garbage* for talks by Linda J. Novy and Associates on composting and soil health given at Sloat Garden Centers.

In 2012-2013, MCSTOPPP created or revised the following publications:

- *Creek Care: A Guide for Marin Residents*
- *Go Native! Using Native Plants for Your Yard, Patio, and Creek*
- *Prevent Pollution: Pick it Up!* (Pet Waste bookmark)
- *Fish-Friendly Guide for Marin Residents.*
- *For Retail Nurseries: Best Management Practices for Protecting Local Waterways*
- *Slow it. Spread it. Sink it! Eco-Friendly Solutions for Managing Rainwater on Your Property* (Draft provided on MCSTOPPP website)
- Began work with BASMAA to have *The Ten Most Wanted* translated into Spanish

Chapter 7. Water Quality Planning and Monitoring

MCSTOPPP PARTICIPATING IN WATER QUALITY INITIATIVES

The Regional Water Board approved the following Total Maximum Daily Loads (TMDLs) and Basin Plan Amendments for waterbodies in Marin:

- Richardson Bay Pathogen TMDL⁹
- Tomales Bay Mercury TMDL¹⁰
- Tomales Bay Pathogen TMDL¹¹
- Diazinon and Pesticide-Related Toxicity in Urban Creeks TMDL¹²
- Walker Creek Mercury TMDL¹³

This report focuses on implementation of the two Pathogen TMDLs and the Pesticide-Related Toxicity TMDL.

Tomales Bay Pathogen TMDL

The Regional Water Board adopted a Pathogen TMDL for the Tomales Bay Watershed. In response to the Tomales Bay Pathogen TMDL, MCSTOPPP's countywide program and the Marin County local stormwater program focus efforts in the Tomales Bay Watershed to reduce pathogens in stormwater runoff.

MCSTOPPP and Marin County Outreach

When requested, MCSTOPPP assists horse facility owners by providing information regarding BMPs that should be implemented to address non-stormwater discharges from their properties in Marin County. County local stormwater program staff and MCSTOPPP continued to direct horse facility owners to guidance documents on good horse facility management practices in 2012-2013. The MCSTOPPP website¹⁴ offers many reference documents for horse owners. MCSTOPPP distributes printed outreach materials upon request and in response to illicit discharge complaints. Examples of such materials are highlighted below:

- **Assessment of Best Management Practices for Equestrian Facilities in the Tomales Bay Watershed** – 2005 report on BMPs at 18 equestrian facilities within the Tomales Bay

⁹ http://www.waterboards.ca.gov/rwqcb2/water_issues/programs/TMDLs/richardsonbaypathogens.shtml

¹⁰ http://www.waterboards.ca.gov/rwqcb2/water_issues/programs/TMDLs/TomalesBayHgTMDL.shtml

¹¹ http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/TMDLs/tomalesbaypathogenstmdl.shtml

¹² http://www.waterboards.ca.gov/rwqcb2/water_issues/programs/TMDLs/urbancrksdiazinontmdl.shtml

¹³ http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/TMDLs/walkermercurytml.shtml

¹⁴ <http://www.marincounty.org/depts/pw/divisions/mcstoppp/horses>

Watershed in Marin County. Assessments were designed to detect the level of actual or potential pollutant sources from horse facilities.

- **Horse Owners' Guide to Water Quality Protection** – Conservation practices for horse owners.
- **Horse Keeping: A Guide to Land Management for Clean Water** – This large format manual contains over 100 pages, with color photographs and diagrams showing conservation practices, evaluating potential sources of contamination, and demonstrating management measures.
- **Horse Manure Management: A Guide for Bay Area Horse Keepers** – Conservation practices and on-site manure management.
- **Manure Management Practices of 30 Horse Ranches in Marin County** – 2002 study on manure management practices at 30 horse facilities in Marin County.

County of Marin Ordinance Enforcement

In 2012-2013, Marin County local stormwater program staff investigated complaints at two horse facilities in unincorporated Marin County; however, the program received no complaints regarding horse facilities in the Tomales Bay Watershed. When complaints are received, they are usually in relation to manure management. In such cases, local stormwater program staff visits the site, discusses potential BMPs with the property owners, and directs them to the MCSTOPPP website to review the education and outreach materials regarding appropriate horse facility BMPs.

Richardson Bay Pathogen TMDL

Richardson Bay exceeds fecal coliform bacteria water quality objectives for the beneficial uses of shellfish harvesting and water contact recreation (swimming and fishing). The Richardson Bay Pathogen TMDL Implementation Plan focuses on sanitary sewer overflows and other sources of fecal coliform that can potentially enter stormwater runoff. Other agencies also address fecal coliform bacteria potentially originating from houseboats and vessels (e.g., sailboats or motorboats).

Stormwater Runoff Implementation Measures

Through MCSTOPPP, the City of Belvedere, the County of Marin, the City of Mill Valley, the City of Sausalito, and the Town of Tiburon have updated their respective stormwater management plans (through MCSTOPPP Annual Reports) to include specific measures to reduce pathogen loading. Recent MCSTOPPP Annual Reports are available on the MCSTOPPP website.¹⁵

The specific TMDL implementation measures include additional education and outreach by MCSTOPPP and maintenance of existing pet waste dispensers by individual municipal stormwater programs.

¹⁵ <http://www.marincounty.org/depts/pw/divisions/mcstoppp>

MCSTOPPP 2012-2013 Implementation Actions

In 2012-2013, MCSTOPPP implemented numerous efforts to educate the public regarding sources of pathogens in stormwater runoff, as described below:

1. MCSTOPPP encouraged local municipalities to ensure there are sufficient pet waste bag dispensers and receptacles at entrances to dog parks.
2. MCSTOPPP continued outreach to pet owners through the 2013 MCSTOPPP Wall Calendar (partially funded by the California Department of Resources Recycling and Recovery [CalRecycle through OPP Cycle 2 funds]).¹⁶
3. In 2012-2013, MCSTOPPP initiated a focused program improvement to provide stormwater pollution prevention posters to food service facilities within the Richardson Bay Watershed during the County Environmental Health Services routine restaurant inspections. MCSTOPPP staff determined that this will be a more effective approach to improving implementation of stormwater BMPs. General outreach to restaurant owners is available through the MCSTOPPP website.¹⁷
4. In 2012-2013, MCSTOPPP coordinated with municipal parks and recreation departments and the Marin County Parks and Open Space District to determine if staff/Rangers can distribute MCSTOPPP literature to people they see walking dogs. MCSTOPPP accomplished this task in early 2012-2013. Revised the *Prevent Pollution: Pick it Up!* pet waste bookmarks¹⁸ were provided to the following municipalities for distribution: Belvedere (200), Tiburon (150), and Mill Valley (100). Park rangers will carry them in their trucks and distribute as necessary. County Open Space Rangers also distribute them.
5. MCSTOPPP finalized a publication on Nursery BMPs and mailed it to eight nurseries in the Richardson Bay Watershed, 17 in the San Francisco Bay Watershed, and three in West Marin. For nurseries located within the Richardson Bay Watershed, MCSTOPPP included a short letter that invites nursery employees to assist municipalities to prevent stormwater pollution by avoiding over-irrigation. These documents are included as **Appendix G-1**.
6. MCSTOPPP continues to address over-irrigation and runoff in the Bay-Friendly Landscaping series for the Professional Landscaper and through various MCSTOPPP outreach publications available on its website¹⁹ and by request.
7. MCSTOPPP contributed to a portion of the 2012-2013 water quality testing described in the TMDL and conducted by the Richardson Bay Regional Agency (RBRA). RBRA

¹⁶ <http://www.marincounty.org/depts/pw/divisions/mcstoppp/residents/~media/Files/Departments/PW/mcstoppp/calendars/2013.pdf>

¹⁷ http://www.mcstoppp.org/acrobat/Rest_English%20Poster%20Final%202009.pdf

¹⁸ <http://www.marincounty.org/depts/pw/divisions/mcstoppp/residents/~media/Files/Departments/PW/mcstoppp/residents/PickItUp-11-12.pdf>

¹⁹ <http://www.marincounty.org/depts/pw/divisions/mcstoppp>

conducted water quality testing for pathogen indicators. A total of 14 sites were sampled and tested. RBRA invoiced MCSTOPPP for a portion of the labor and laboratory costs at four RBRA sampling sites located near stormwater outfalls. RBRA submitted these monitoring results to the Regional Water Board in 2012-2013 (**Appendix G-2**).

Local Program Implementation Actions

In 2012-2013, the Local Programs for the City of Belvedere, the County of Marin, the City of Mill Valley, the City of Sausalito, and the Town of Tiburon implemented numerous efforts to educate the public regarding sources of pathogens in stormwater runoff, as described below:

City of Belvedere

- The City maintained City-owned pet waste bag dispensers. The City provided approximately 14,000 bags to residents in fiscal year 2012-2013.
- The City also continued to work to reduce the frequency of sanitary sewer overflows by requiring inspections of residential sewer laterals at the time of sale.

County of Marin

- The Marin County Parks and Open Space District maintained garbage receptacles along the County-maintained Mill Valley-Sausalito Multi-purpose path through Bothin Marsh Open Space Reserve.
- The local stormwater program collaborated with the Marin County Flood Control and Water Conservation District to improve storm drain network and outfall maps within the Richardson Bay Watershed.
- Local Program staff inspected 135 storm drains within the Richardson Bay Watershed and added or replaced 90 “No Dumping” storm drain markers.

City of Mill Valley

- City staff determined that they have reached the optimal level of distribution for dog waste bags and will continue to maintain existing dispensers.
- The City extended the City’s Cash for Sewers program, which promotes the repair of private laterals for qualifying residences through grants or financial assistance.

City of Sausalito

- The City continued to collaborate with Richardson Bay Regional Authority on outreach to boat and marina owners.
- The City maintained existing pet waste bag dispensers owned by the City of Sausalito.
- The City provided additional pet waste dispensers for privately maintained areas. These dispensers are maintained by private citizens.

- The City aggressively enforced its local sanitary sewer ordinance, which requires the inspection and rehabilitation of sanitary sewer laterals at point of sale and at major remodels (>\$50,000 in value) (Sewer Lateral Inspections program). A total of 3,106 feet of private sanitary sewer laterals were replaced or rehabilitated in 2012-2013. In addition to the private work, the City replaced or rehabilitated 538 feet of public sewer pipe and installed and/or replaced four rodding inlets. The work is expected to reduce pathogen loadings in Richardson Bay, improve Sewage Treatment Plant operations during storm events, and reduce the likelihood of sanitary sewer overflows and resulting risk to human health. The City provided 45 grants to homeowners to the repair of their sewer laterals in the report period totaling \$72,947.12. The program provides individual property owners up to \$1,000 to offset repair/rehabilitation expenses.

Town of Tiburon

- Town staff determined that they have reached the optimal level of distribution for dog waste bags and will continue to maintain existing dispensers. Staff maintains at least 26 dispensers in the town.

Diazinon and Pesticide-Related Toxicity in Urban Creeks TMDL

MCSTOPPP continues efforts to reduce detections of the priority pollutant diazinon and other pesticides through its comprehensive public education and outreach activities designed to reduce pesticide use. In addition, MCSTOPPP and local program staff report complaints from the public related to pesticide use to the County's Agricultural Commissioner. The Agricultural Commissioner implements a countywide Pesticide Use Enforcement program.²⁰

MCSTOPPP 2012-2013 Implementation Actions

MCSTOPPP implemented the Pesticide Reduction Strategy throughout 2012-2013. These efforts are discussed in Chapter 5 (Educating Ourselves at Work) and Chapter 6 (Educating Ourselves at Home and School). In addition, MCSTOPPP began a planning effort necessary to comply with the new monitoring requirements included in Attachment G of the second term Phase II Permit. MCSTOPPP held discussions with both the MCSTOPPP ASC and MNSSSA agencies that are subject to the TMDL monitoring requirements. These agencies plan to meet with Regional and State Water Board staff in 2013-2014 to discuss and plan for this TMDL monitoring. The monitoring in Marin will be conducted by the MCSTOPPP on behalf of all 12 Phase II Permittees. MCSTOPPP is exploring several options to develop a cost-effective, collaborative monitoring program that provides meaningful water quality information. MCSTOPPP is exploring collaboration with the municipal agencies in the County of Sonoma and options to coordinate with regional and statewide monitoring.

²⁰ <http://www.marincounty.org/depts/ag/pesticides>

Local Program Implementation Actions

In 2012-2013, the all Local Programs implemented numerous efforts to reduce or eliminate municipal pesticide use and educate the public regarding sources of pesticides in stormwater runoff, as described below:

City of Belvedere

- The City continued to implement the ordinance restricting the use of pesticides on City owned parcels and right-of-ways and did not use pesticides in 2012-2013.
- Information regarding pesticide use and effects on the environment has been communicated periodically through the weekly City E-news and bi-annual hard copy newsletter.

Town of Corte Madera

- In 2012-2013, the Town reduced the use of pesticides/herbicides by 64%. Corte Madera employees do not use pesticides. All contractors are required to adhere to this IPM policy and are monitored by DPW to ensure compliance.
- With assistance from resident groups, the Town developed a Least Toxic IPM policy that calls for greatly reducing dependence on chemical products to control pests. Under this policy the follow actions are being pursued:
 - Eliminate or greatly reduce the use of pesticides at all Town facilities (Town Hall, Recreation Center, Fire Stations, Corporation Yard, Flood Control Stations, Parks, road shoulders and medians).
 - Hire contractors that employ least toxic methods.
 - Devise and implement a strategy for regular monitoring of plants.
 - Employ biological controls at the first sign of infestation.
 - Use mechanical controls to remove pests from plants.
 - Landscape rehabilitation projects include practices to reduce weeds and pests such as placement of physical barriers (landscape fabric), ground cover, mulch, and use of plants less attractive to pests, and irrigation is converted to drip systems.
 - Mechanically remove weeds with hot foam, torches, hand pulling, and weed whips.

Creating Medians Unfriendly to Weeds

Along Old Redwood Highway the unplanted margins between the curb and the plants created a haven for weeds in the center median. The Town of Corte Madera reduced weeds without herbicides by trimming the plants to allow the tops to overhang the margins depriving the weeds of needed sunlight.

- The Town's IPM abatement specialist developed a comprehensive plan to address pest control issues before they become a problem, such as better housekeeping (no garbage), sealing cracks, removing pest habitat, sealing electrical switches (heat attracts ants), trapping queen yellow jackets in the spring to prevent nesting.

County of Marin

- All County staff that use pesticides follow the guidelines of California Department of Pesticide Regulation (DPR) and the County's IPM Ordinance.
- Each year the County of Marin employees who have Pesticide Applicator's Certificates are trained on the safe handling of pesticides and are also trained on the county's IPM Ordinance. The training includes guidance regarding application near water and on saturated soils and the possibility of run off. Also discussed is the proper disposal and management of pesticides used. In addition to in house training, the Qualified Applicators and the Pest Control Advisors attend required continuing education classes each year which are focused on IPM and non-pesticide best management practices. There is also routine contact with the Dept. of Agriculture, Weights and Measures and IPM training. The Pest Control Advisor's recommendation also includes language on care of application near water and a site map for each application to describe where applications are to be made.
- Marin County Parks rarely makes applications near waterways and takes all necessary precautions to avoid any contamination to water sources. The County only uses Caution-rated materials and is using Organic Materials Review Institute products where appropriate.
- In accordance with the County's IPM Ordinance and Policy, Marin County Parks uses IPM practices to continually work to reduce the use and the amount of material applied to all of the lands that it maintains. As part of the County's IPM program the number and types of chemicals used and areas applied have been limited by the use of such practices as applying sheet mulch to reduce further applications, regularly releasing predatory insects to reduce pest insect populations inside the Civic Center, and modifying individual sites cultural practices with IPM in mind to plan for less pesticide use. Only caution rated materials are applied and there has been an 80% reduction in applied materials from the County's 1997 baseline usage.
- The County of Marin passed ordinance 3521 on July 21, 2009, amending County Code 23.19 which updated the IPM Ordinance. Marin County Parks is currently working in the areas that they routinely make applications to reach the benchmark limits set forth in the new policy.
- Marin County Parks has on-going IPM Ordinance and Policy reviews and updates. They distribute outreach information during the County Fair and with outside contractors and the College of Marin advisory group.

- In accordance with the County’s IPM Ordinance and Policy, Marin County Parks uses IPM practices to continually work to reduce the use and the amount of material applied to all of the lands that it maintains. As part of the County’s IPM program the number and types of chemicals used and areas applied have been limited by the use of such practices as applying sheet mulch to reduce further applications, regularly releasing predatory insects to reduce pest insect populations inside the Civic Center, and modifying individual sites cultural practices with IPM in mind to plan for less pesticide use. Only caution rated materials are applied and there has been a greater than 80% reduction in applied materials from the County’s 1997 baseline usage.
- Stormwater program 2012-2013 accomplishments related to municipal use of pesticides include:
 - The McInnis Golf Center came under the IPM Ordinance and Policy in May of 2012. While there was a learning curve on just how strict the County of Marin IPM regulations are, they have hired new personnel and are on their way to becoming an example for other golf courses in the area. They have been pesticide free since January 2013.
 - The new public safety building for the County, at the Marin Commons site, is now fully on board and is being maintained organically
 - Public Works Department have greatly reduced their chemical use managing pests within County structures and primarily used low toxicity products only within secure bait stations out of reach of the general public.
 - County Parks turf areas, picnic sites and playgrounds are maintained without chemicals.
 - 132 sites currently fall under the County of Marin IPM Ordinance and Policy. Over 100 of those sites are maintained without chemical products.
 - Marin County Parks staff worked with the DPR to produce a short video of the County of Marin’s outstanding IPM program.²¹

Town of Fairfax

- Fairfax has a local ordinance banning the use of pesticides for Town staff, hired contractors, and residents. The Town (including contractors hired to work on Town public projects) did not use pesticides in 2012-2013.

²¹ <http://www.co.marin.ca.us/depts/PK/main/IPM/ipmprogramhome.cfm> or <http://www.youtube.com/watch?v=6tBEaBA9Prg>

City of Larkspur

- The City continued to minimize use of pesticides on high-traffic medians. A contractor is used only when the City—very sparingly—needs to apply herbicides or pesticides in a targeted, specific manner.
- Weeding by hand is a less toxic pesticide alternative that will be implemented in the future in order to minimize pesticide impacts.

City of Mill Valley

- Annual training was conducted regarding safe use of and spill contamination of pesticides. Staff were also trained on the effects and ways to handle potential drift when applying pesticides.
- The City did not increase or otherwise change its use of pesticides during 2012-2013.

City of Novato

- All applicators are State Certified and attend qualified classes and training to keep their licenses current.
- The City continues to reduce its overall chemical usage. The City only uses herbicides and continues to reduce herbicide usage by using wood chip mulch to abate weeds.

Town of Ross

- The Town does not use pesticides; however, the Superintendent of Public Works has a DPR Pesticide Applicators certificate and is up-to-date on training requirements.
- As a less toxic pesticide alternative, the Town contractor uses traps for rat control in Town buildings.
- The Town recommends that homeowners use IPM practices.

Town of San Anselmo

- An ordinance is in place restricting the use of pesticides on City-owned parcels and rights-of-way.

City of San Rafael

- In accordance with the IPM policy, the City has taken several actions over the past six years to dramatically reduce the use of pesticides in parks, right of ways and public spaces.
 - Only two pesticides are approved for use and the City has reduced the use of those pesticides by 70 percent since 2007.
 - The City only uses Caution rated products and continues to use alternative methods of weed control such as sheet mulching, weed torching, and mechanical removal. The City's policy prohibits the use of any herbicide around

playgrounds, picnic areas, and certain public buildings. The City has also discontinued the use of herbicides on all City property with bay frontage.

- The City does not use insecticides or fungicides in its maintenance program.
- The City plans to expand the use of sheet mulching using both City staff and volunteers in the coming year to further reduce the use of herbicides as well as using FIFRA exempt materials.
- All Public Works employees with a Pest Control Advisors License, or a Qualified Applicator's License, or a Qualified Applicator's Certificate, obtain continuing education hours that are pre-approved by the Department of Pesticide Regulation. All required continuing education hours are obtained during the two-year period that the license is valid in order to renew it.
- All Public Works employees that are involved in the handling or application of pesticides receive internal training covering safe handling, storage, and usage, and disposal of all products and materials utilized by the department.

City of Sausalito

- The City used no pesticides in 2012-2013.
- All Landscape Workers have Pest Applicators Certification as administered through the California Department of Agriculture. The training module includes principles regarding lawful handling, disposal, and use minimization.

Town of Tiburon

- The Town of Tiburon is in the process of adopting an IPM policy and ordinance, as part of the new Phase II permit requirements.
- The Town of Tiburon continues to use less and less amounts of pesticides to abate weed growth. At this time, the Town only uses Round Up, Oxediazon, Rodeo, and Produce as part of the weed abatement program. Where possible, maintenance staff installs weed cloth and uses approximately mulch to prevent weed establishment in medians, parks and town maintained landscape areas.
- Two staff members with Qualified Applicators Certificates, continue to attend training seminars to find new and more efficient ways to use and reduce pesticide usage.

PROTECTING DUXBURY REEF

The County's compliance efforts with the State Water Board's Ocean Plan prohibition of discharges to designated ASBS focused on three main areas: implementation of structural BMPs, water quality monitoring, and compliance planning.

A grant-funded project to reduce potential stormwater runoff to Duxbury Reef ASBS from County facilities will be implemented during the summer of 2013. The project will include replacing the parking lot at Beach County Park with pervious pavement and stormwater infiltration structures and relocating the portable toilets away from the stream. The County conducted pre-construction water quality monitoring of the parking lot runoff during the 2012-13 winter that will be used to evaluate the effectiveness of the structural BMP implementation. Parking lot construction will begin in July 2013.

The County also joined the Central Coast ASBS Regional Monitoring Program to satisfy the monitoring requirements of the Special Protections Core Discharge Monitoring Program and the Ocean Receiving Water Monitoring Program. The regional monitoring group hired a contractor and developed a Monitoring Plan and Quality Assurance Project Plan that is awaiting State Water Board approval. Monitoring of designated outfalls and ocean receiving waters will begin during the 2013-14 winter season.

MCSTOPPP assisted the County with outreach to residents and visitors on the Bolinas Mesa through the MCSTOPPP 2013 Wall Calendar by dedicating the month of December to protecting the Duxbury Reef Area of Special Biological Significance. MCSTOPPP provided the Bolinas Community Public Utility District (BCPUD) with 100 copies of the calendar and BCPUD helped to distribute the calendars.

Finally, the County began to develop the ASBS Compliance Plan that will be integrated into the County's Storm Water Management Plan to address the State Water Board specific requirements of and restrictions to discharges to the Duxbury Reef ASBS.



SUPPLEMENTS A – L

City of Belvedere	A-1
Town of Corte Madera	B-1
County of Marin (unincorporated area)	C-1
Town of Fairfax	D-1
City of Larkspur	E-1
City of Mill Valley	F-1
City of Novato	G-1
Town of Ross	H-1
Town of San Anselmo	I-1
City of San Rafael	J-1
City of Sausalito	K-1
Town of Tiburon	L-1

Stormwater Pollution Prevention in the **City of Belvedere**

BACKGROUND

The City of Belvedere, population 2,068 (2010 Census), occupies about one square mile on the Tiburon peninsula. The community comprises three areas: Belvedere Island, a portion of Corinthian Island, and the Lagoon, which is situated between the two islands.

The City was incorporated in 1896, and grew as an exclusive residential community near the railroad and ferry terminus in adjacent Tiburon. Following World War II, portions of the Lagoon were filled for tract homes and a golf course, which was subsequently developed for additional residences.

Hilly and lush, Belvedere Island has narrow roads with no curbs or gutters. Streets and private lots drain through pipes and culverts to Richardson Bay or to the privately owned Lagoon.

Streets in the Lagoon area have curbs and gutters. The Lagoon typically functions as a detention basin and a recreation area to residents on the Lagoon; water flowing into the Lagoon is discharged after settling and during a low tide. City staff works with Lagoon property owners to keep pollution from entering the body of water.



Belvedere occupies about one square mile on the Tiburon peninsula.

STORMWATER POLLUTION PREVENTION PROGRAM ORGANIZATION

City of Belvedere's Stormwater Staff	
Activity	Responsible Person(s)
Stormwater Coordinator Municipal Maintenance Public Information and Participation	Scott Derdenger Public Works Manager (415) 435-3838 Sderdenger@cityofbelvedere.org
Capital Improvement Projects/Drainage	Moe Engineering Inc., City Engineer (Contract)
Illicit Discharge Detection and Elimination/ Outfall Monitoring	Gerhard Laufer, Public Works Supervisor
Construction Inspection	Eric Banvard, Building Official
Planning Dept. Contact, Development Approvals	Irene Borba, City Planner
Other: Overall Responsible	Mary Neilan, City Manager

Scott Derdenger, Public Works Manager, coordinates the City's program and participates in MCSTOPPP's bimonthly (and sometimes monthly) Agency Staff Committee meetings. City stormwater staff and their respective responsibilities are listed in the table to the left. Belvedere's stormwater pollution prevention program is funded by the City's General Fund.

FEATURED ACCOMPLISHMENTS IN 2012-2013

The City of Belvedere accomplished several stormwater pollution prevention program goals during the reporting period that are highlighted below. Overall implementation of the City's stormwater program is detailed in the MCSTOPPP Annual Report.

- **2012-2013 Staff Training:** The City conducted in-house Illicit Discharge training for a total of four Public Works staff.
- **Creek/Beach Cleanups, Trash Abatement, and Other Coordination with Local Volunteers:** During Coastal Cleanup Day in September 2012, volunteers cleaned up a section of public shoreline along San Rafael Avenue Seawall (Richardson Bay). City Public Works crews picked up the debris that was collected by volunteers and disposed of it in the dumpster at the City corporation yard. These efforts resulted in the removal of nearly five cubic yards of material and debris collected from the shoreline.
- **Corporation Yard:** City crews performed weekly sweeping of the impervious surfaces of the yard. Crews covered the open dumpster with a special tarp before and during rain events.
- **Road Repair and Maintenance:** Road repairs during 2012-2013 were limited to patching. Contractors were provided with education information for asphalt work. City staff performed site inspections during work and required compliance with the BMPs.
- **Capital Projects:** Two deteriorated metal culverts under a roadway were replaced.
- **Business Inspections and Outreach Activities:** City staff visited the local nursery and automotive repair facility to discuss stormwater pollution prevention.
- **Public Involvement and Participation:** The City maintained the level of public outreach with less staffing. Residents were educated about pesticide use and the effects on the environment through the weekly City E-news, News Flashes, and bi-annual hard copy newsletter. In addition, the City developed a newsletter article on Illicit Discharges.

PRIORITIES FOR 2013-2014

The 2013-2014 priorities identified by the City of Belvedere are listed below. Additional 2013-2014 priorities for MCSTOPPP and each local stormwater pollution prevention program will focus on optimizing the programs to effectively and efficiently meet the Year 1 requirements of the second term Phase II Permit.

- **2013-2014 Staff Training:** The City has requested that the Contract City Engineer become a certified Qualified Stormwater Pollution Prevention Plan (SWPPP) Practitioner (QSP).
- **Street and Storm Drain Maintenance and Outfall Monitoring:** Continue to provide the same level of stormwater pollution prevention as in previous years, although additional unfunded mandates have increased.
- **Municipal Use of Pesticides:** Continue to implement the ordinance restricting the use of pesticides on City owned parcels and right-of-ways.
- **Creek Cleaning, Maintenance, and Enhancement:** Continue to inspect and document condition of the creek.

- Creek/Beach Cleanups, Trash Abatement, and Other Coordination with Local Volunteers: Provide public outreach at the local park regarding dog waste pick-up and proper disposal.
- Illicit Discharge and Creek Violation Complaint Response: Respond to and resolve every report of illicit discharge in the City.
- Construction: Perform pre, during and post inspections of all construction sites.
- Public Involvement and Participation: Continue to publish articles in City Newsletters.

Stormwater Pollution Prevention in the **Town of Corte Madera**

BACKGROUND

Corte Madera is located in central Marin County and has approximately 9,377 residents (2012 estimate). The Highway 101 corridor divides the town into east and west sections. The town is bordered on the east by San Francisco Bay and by hilly terrain on the west. It borders the Cities of Larkspur and Mill Valley.

Corte Madera was part of the Corte Madera del Presidio land grant given to John Reed in 1836. Reed established a mill in neighboring Mill Valley and produced lumber used to build San Francisco's Presidio. After most redwoods were harvested, the local economy shifted to farming and cattle ranching. The area became a summer retreat for San Franciscans, and many summer homes became permanent homes after the 1906 quake. The Town was incorporated in 1916.



Corte Madera is centrally located and is bisected by the Highway 101 corridor

In later years, as concern over the perception of expanding commercial development occurred, the Corte Madera Ecological Reserve was created.

STORMWATER POLLUTION PREVENTION PROGRAM ORGANIZATION

Corte Madera's Stormwater Staff	
Activity	Responsible Person(s)
Stormwater Coordinator Municipal Maintenance Illicit Discharge Detection and Elimination/Outfall Monitoring Commercial/Industrial Inspections/Outreach Public Information and Participation	Kevin Kramer Director of Field Maintenance & Operations Public Works/SD # 2 415-927-5057 kkramer@ci.corte-madera.ca.us
Capital Improvement Projects/Drainage	Barry Hogue, Director of Public Works
Construction Inspection	David Keane, Engineer
Planning Dept. Contact Development Approvals	Dan Bell, Director of Planning
Other: Engineer	David Bracken, Town Engineer

Stormwater Coordinator Kevin Kramer directs the Town's stormwater pollution prevention activities. He is also the Superintendent of Sanitary District #2, so activities related to both agencies regarding stormwater pollution prevention are closely coordinated. Town stormwater staff and their respective responsibilities are listed in the table to the left.

FEATURED ACCOMPLISHMENTS IN 2012-2013

The Town of Corte Madera accomplished several stormwater pollution prevention program goals during the reporting period that are highlighted below. Overall implementation of the Town's stormwater program is detailed in the MCSTOPPP Annual Report.

- **2012-2013 Staff Training:** All maintenance workers participate in a daily safety discussion and monthly hands on training classes. Some of the stormwater topics

covered in 2012-2013 included: Street Sweeper Operation and Illicit Discharges; Spill Mitigation: Prevention, Response and Cleanup; Emergency Spill Response and Hazmat Spills; Storm Patrol: Preventative Maintenance; Vactor Operation for Sanitary Sewer Overflows; Response to Illicit Discharges; Municipal Maintenance: Corporation Yard Cleanliness; and Pest Management. Between three and ten staff members attended each training session, with a total of 74 staff receiving training in 2012-2013.

- Street and Storm Drain Maintenance and Outfall Monitoring: At Marina Village, the Town rebuilt Pump #3, repaired discharge pipes, and installed cathodic protection. A new 60" aluminum gate was installed at High Canal. The Town repaired 150 feet of storm drain line and installed two inline check valves and two catch basins to address curb ponding issues at Baja Court. At Crescent Road, the Town raised a catch basin and graded the roadway to increase the amount of rainwater captured. At Marina Village/Big G and San Clemente Pump Stations, the Town cleaned wet wells and cleared sediments that had accumulated in the front pumps. All pump stations are equipped with at least one bar screen to trap debris so that it can be removed. Some stations have two screens rather than just one. Wet wells are cleaned yearly with the sediment and debris being disposed of appropriately.
- Creek Cleaning, Maintenance, and Enhancement: Department of Public Works (DPW) monitors Shorebird Marsh, Shorebird overflow parking lot, the Shorebird Overlook, Marina Village, Lagoon A, Lagoon 1, Marquart Lagoon, San Clemente Pump Station and Gate, Edgewater Lagoon, Pixley Lagoon, and Corte Madera and San Clemente Creeks. Water quality tests for the presence of fecal coliform, dissolved oxygen, and turbidity are performed twice weekly throughout the spring and summer at Lagoon 1, Marquart Lagoon, High Canal, and Corte Madera Creek. Marina Village is tested for salinity in the spring. The results of this test determine when Bay water will be added to the retention pond.
- Litter Control: The Town Began a program to clean Shorebird Marsh more frequently after noticing an unusual amount of trash blowing into it from the Village Shopping Center. In addition, the Town continues to have great success with our trash abatement program that captures trash prior to entering Corte Madera Ecological Reserve.
- Corporation Yards: The Town ordered a new debris box from Marin Valley Refuse that does not leak, installed drain filters, added two more spill containment pallets, and recycled approximately 100 +/- gallons of hazardous materials.
- Illicit Discharge and Creek Violation Complaint Response: In coordination with CMSA, the Town implements the 800-SAV-R-Bay hotline for residents and businesses to report illicit discharges for follow up, inspection, and appropriate referral or enforcement actions
- Business Inspections and Outreach Activities: In cooperation with CMSA, each business is educated on any stormwater concerns during routine inspections. CMSA staff are on contract with the Town of Corte Madera for additional assistance when needed. The

Town continues to participate in the MCSTOPPP Public Education and Outreach Program to educate businesses throughout the calendar year.

- Public Involvement and Participation: DPW staff has, with greater frequency, engaged homeowners and contractors regarding everything from broken sprinklers allowing chlorinated water to enter the storm drain system to dumping dirt and gravel onto the street. The Town continues to participate in the MCSTOPPP Public Education and Outreach Program to educate residents, school children, and businesses throughout the calendar year.

PRIORITIES FOR 2013-2014

The 2013-2014 priorities identified by the Town of Corte Madera are listed below. Additional 2013-2014 priorities for MCSTOPPP and each local stormwater pollution prevention program will focus on optimizing the programs to effectively and efficiently meet the Year 1 requirements of the second term Phase II Permit.

- 2013-2014 Staff Training: Reinforce the training provided in 2012-2013.
- Street and Storm Drain Maintenance and Outfall Monitoring: The Town plans to add cathodic protection to pumps at High Canal; repair a pump at High Canal; repair/replace approximately 2000 feet of sanitary line; and increase outfall inspections.
- Municipal Use of Pesticides: Continue to explore ways to reduce the use of pesticides/herbicides in the Town.
- Creek/Beach Cleanups, Trash Abatement, and Other Coordination with Local Volunteers: Continue to support all organizations and agencies, such as Bay Keeper and California Department of Fish and Wildlife, which help keep our creeks, coastline, and water clean.
- Litter Control: Train new crew members to operate sweeper and continue to reinforce the training provided in 2012-2013.
- Illicit Discharge and Creek Violation Complaint Response: Continue to monitor storm drain outfalls, and educate the residents and business owners on stormwater pollution prevention.
- New and Redevelopment Projects (Post-Construction): Distribute MCSTOPPP's document, Guidance for Applicants: Stormwater Quality Manual for Development Projects in Marin County, a Low Impact Development Approach.
- Business Inspections and Outreach Activities: Continue inspection program and award-winning Public Education and Outreach Program.
- Public Involvement and Participation: Continue educate the public (residents and schools) on stormwater pollution prevention through local and statewide award-winning outreach program.

Stormwater Pollution Prevention in the County of Marin

BACKGROUND

Covering about 430 square miles, unincorporated Marin County includes suburban communities such as Kentfield, Greenbrae, Marin City and Strawberry, and rural towns such as Woodacre, Bolinas and Pt. Reyes Station. In 2011, the estimated population was 68,257. Marin's aquatic ecosystems include salt, brackish, and freshwater wetlands and over 1,000 miles of creeks. Protected species include steelhead, coho salmon, red-legged frog, California freshwater shrimp, clapper rail, salt marsh harvest mouse, and many plants.

The Marin Countywide General Plan update was adopted November 6, 2007. The updated Plan includes policies that restrict development in Stream Conservation Areas and that support preservation of Marin's watersheds.



Unincorporated County includes urban areas and over 400 square miles of rural lands.

STORMWATER POLLUTION PREVENTION PROGRAM ORGANIZATION

Howard Bunce and Terri Fashing coordinate the County's program with support from the Countywide program and staff from County departments. County stormwater staff and their respective responsibilities are listed in the table below.

County Stormwater Staff	
Activity	Responsible Person(s)
Stormwater Coordinator Public Information and Participation Commercial/Industrial Inspections/Outreach (Follow-Up)	Howard Bunce, Engineering Tech. III 415-473-3748 hbunce@marincounty.org Terri Fashing, Stormwater Program Administrator 415-473-6583 tfashing@marincounty.org
Municipal Maintenance	Craig Parmley Road Maintenance Superintendent
Capital Improvement Projects/Drainage	Ernest Klock, Principal Civil Engineer/DPW Engineering Pat Echols, Principal Civil Engineer/DPW Capital Improvement Jack Curley, Capital Planning & Project Manager DPW FC and Water Resources
Illicit Discharge Detection and Elimination/Outfall Monitoring	Howard Bunce
Construction Inspection Development Approvals	Berenice Davidson, Senior Engineer, DPW
Planning Dept. Contact	Rachel Warner, Environmental Planning Coordinator
Commercial/Industrial Inspections/Outreach	Scott Alber, Fire Marshall/Fire Director Rebecca Ng, Deputy Director Environmental Health Services Steve Devine, Waste Management Program Manager
Other: Watershed Program Manager	Liz Lewis, Watershed Program Manager

The County's program has benefited from being a part of the Marin County Flood Control and Water Conservation District (District). The stormwater program assisted the District in field tasks, such as fish relocation and temperature monitoring, while the District implements vegetation management, debris removal, and some restoration activities in 26.5 creek miles. In FY 2013-2014 County stormwater staff will be managed by the County's DPW Waste Management Division. This change will provide benefits to the stormwater program such as enhanced coordination with the Marin Hazardous and Solid Waste Joint Powers Authority, the Countywide Zero Waste Program, and CUPA. Stormwater staff will continue to coordinate with and benefit from the efforts of the District.

In addition, County DPW Land Development Division staff review proposed development project plans to assure consistency with the Phase II permit and the County's urban runoff and drainage setback ordinances. DPW road maintenance staff sweep streets, clean catch basins, and implement Stormwater Pollution Prevention Plans (SWPPPs) at the County's two corporation yards.

FEATURED ACCOMPLISHMENTS IN 2012-2013

The County of Marin accomplished several stormwater pollution prevention program goals during the reporting period that are highlighted below. Overall implementation of the County's stormwater program is detailed in the MCSTOPPP Annual Report.

- **2012-2013 Staff Training:** Some of the stormwater topics covered in 2012-2013 included: Environmental compliance; stream networks, LiDAR, H&H Modeling; erosion and sediment control BMPs inspection and implementation; water quality monitoring design; mapping tools for decision making; stormwater pollution prevention and creek maintenance; flood fight methods for levees and emergency erosion control; environmental analysis and restoration; environmental compliance monitoring; citizen science and environmental assessment; water resources, water quality, and habitat and floodplain protection; and, watershed restoration. A total of 72 staff were trained with between one and 20 staff members attending each training listed.
- **Street and Storm Drain Maintenance and Outfall Monitoring:** The County contracted Marin Sanitary Service to sweep most of the unincorporated areas in East Marin. This improves sweeping efforts and better enables County staff to focus on other priority maintenance issues. The County purchased a new vacuum truck in 2012 and now conducts routine maintenance and responds to complaints for catch basins and culverts year around. Road crews target priority areas including Marin City, Tam Valley, Santa Venetia, Bel Marin Keys and the Seminary/Ricardo area of Strawberry. In addition, the Marin County Flood Control and Water Conservation District purchased a Trimble GPS unit with greater accuracy and improved satellite signal reception in steep and heavily wooded terrain. The new equipment will help the County collect data in areas where it is difficult to obtain a signal. Stormwater staff continued collecting data in the field to fill storm drain network data gaps and completed detailed mapping in the community of Santa Venetia.

- Creek Cleaning, Maintenance, and Enhancement: The Marin County Flood Control and Water Conservation District continues to centralize its stream maintenance and facilities maintenance into the Routine Maintenance Activities (RMA) program and pursues all required permits for the maintenance work. The District maintains 37 miles of stream channels, several basins, and numerous flood control facilities to ensure flood conveyance, the proper functioning of flood control facilities, and access to streams, channels, and facilities. The RMA describes five types of routine maintenance activities: Vegetation management, sediment and debris removal, erosion control, maintenance and repair of flood control structures, and levee maintenance. To minimize impacts to water quality, wildlife and native habitat, the RMA program specifies appropriate general and activity-specific conditions, and sensitive species-specific Avoidance and Minimization Measures (AMMs) to be employed. The document incorporates by reference existing Best Management Practices (BMPs) from BASMAA, CDFG, FishNet4C, and the Federal Emergency Management Agency (FEMA). In addition, the Marin County Flood Control and Water Conservation District contracted Conservation Corps North Bay to continue maintaining a total of 1,820 native plants that were installed in 2009 and 2010 along Vineyard Creek as the final stage of the Vineyard Creek Flood Control project. The Conservation Corps North Bay also provides ongoing weed management and invasive species removal. This work is paid for with Flood Control Zone 1 funds.
- Watershed Program staff participate in the leadership and technical committees of the [North Bay Watershed Association](#) to discuss water quality issues of common interest, explore ways to work collaboratively on water resources projects of regional concern, and share information about projects, regulations, and technical issues.

**Native Plants Maintained
along Vineyard Creek in
2012-2012**

American Dogwood
 Bearberry
 Big Leaf Maple
 Blue Blossom
 Blue Elderberry
 Box Elder
 California Blackberry
 California Buckeye
 California Gooseberry
 California Grape
 Coast Live Oak
 Coast Sagebrush
 Coffeeberry
 Creambush
 Madrone
 Pink Flowering Current
 Snowberry
 Sticky Monkey Flower
 Toyon
 Valley Oak
 Vine Honeysuckle
 White Alder, Coyote Brush
 Whiteroot Sedge
 Wild Rose

- Watershed Program staff participate in the Bay Area Integrated Regional Water Management Plan, coordinating and technical committees coordinating across nine counties to improve water supply reliability, protect water quality, manage flood protection, maintain public health standards, protect habitat and watershed resources, and enhance the overall health of the bay.
- Open Space Management: The Marin County Open Space District (MCOSD) continues to maintain sites with culverts or drop inlets at the open space/subdivision interface, and they have a set creek maintenance program using training and BMPs from Pacific Watershed Associates. MCOSD also continued their FishNet 4C Fishery Restoration Projects that addresses problem road and trail erosion sites. These sediment reduction projects reduced sediment loading into San Geronimo Creek.
- Public Involvement and Participation: The County of Marin conducts effective public outreach when responding to illicit discharge complaints. County staff distribute MCSTOPPP materials and provide guidance on how to comply with the local stormwater ordinance. The County also provided storm drain markers, assistance, and directions to students. The students applied the markers, which bear a "no dumping, drains to creek" message, to storm drains in their neighborhoods. County staff inspected storm drains in areas of Tam Valley and Strawberry and added or replaced storm drain markers as needed. In addition, a news release was provided by the Marin County Hazardous & Solid Waste Management Joint Powers Authority (JPA), City of San Rafael Fire Department, and the Marin County Fire Department promoting a free recycling and disposal of Household Hazardous Waste (HHW) day (Toxic Away Day!) for Marin County residents.

PRIORITIES FOR 2013-2014

The 2013-2014 priorities identified by the County of Marin are listed below. Additional 2013-2014 priorities for MCSTOPPP and each local stormwater pollution prevention program will focus on optimizing the programs to effectively and efficiently meet the Year 1 requirements of the second term Phase II Permit.

- 2013-2014 Staff Training: Identify staff who should attend MCSTOPPP's planned construction site management training and planned MCSTOPPP workshops on the new post-construction stormwater management program requirements in Provision E.12 of the second term Phase II permit. County stormwater staff will also attend MCSTOPPP's monthly meetings.
- Street and Storm Drain Maintenance and Outfall Monitoring: Assist MCSTOPPP with the outfall assessment and dry weather outfall water quality monitoring project.
- Municipal Use of Pesticides: Marin County Parks will:
 - Continue monitoring pesticide use, implementing BMPs, and applying reduced risk pesticides, where possible. Implement mechanical removal procedures and organic products when proven effective.

- Continue providing outreach to other agencies and advancing the use of IPM practices and ecological resource protection.
- Implement the site-specific plans for the McInnis Golf Center and the County-owned Gness Field Airport.
- Potentially increase staff to expand IPM monitoring and field work.
- Continue conducting research that will lead to sustainable IPM practices and informed decision making.
- Creek Cleaning, Maintenance, and Enhancement: Continue implementing the creek maintenance program.
- New and Redevelopment Projects (Post-Construction): Continue implementing Attachment 4 of the first term Phase II permit. Provide input to MCSTOPPP on manuals and other work products that will be developed to assist with second term Phase II permit compliance.
- Construction: Continue improving the effectiveness of construction site BMPs through contractor and staff education and, when necessary, through enforcement.
- Public Involvement and Participation: Provide input to MCSTOPPP on the new Public Outreach Strategy that will be developed under the second term Phase II Permit.

Stormwater Pollution Prevention in the **Town of Fairfax**

BACKGROUND

Fairfax has a population of approximately 7,534 (2012 estimate) and encompasses approximately 1,400 acres. It is named for Lord Charles Snowden Fairfax, tenth Baron of Cameron, Scotland. The British Crown granted Lord Fairfax land which is now Virginia. Fairfax came to California with gold fever and was elected a Marin County Supervisor in 1865.

Fairfax tracts were subdivided in the 1900s through the 1920s, in reach of a commute to San Francisco via electric train and ferry. Construction of Alpine Dam in 1917 brought an influx of Italian immigrants. The Town was a location for silent films. It was incorporated in 1931.

Fairfax occupies the uppermost reach of the Ross Valley, and its residential neighborhoods extend into the surrounding hills.

Fairfax Creek and other tributaries to San Anselmo Creek flow through the town. Most drainage is natural creek channels and culverts.

Most building permits are for residential remodels. There are occasional small infill projects subject to discretionary review.



Fairfax is at the upper end of the Ross Valley

STORMWATER POLLUTION PREVENTION PROGRAM ORGANIZATION

Fairfax's Stormwater Staff	
Activity	Responsible Person(s)
Stormwater Coordinator Municipal Maintenance Capital Improvement Projects/Drainage Illicit Discharge Detection and Elimination/Outfall Monitoring Construction Inspection	Mark Lockaby Public Works Manager 415-458-2370 mlockaby@townoffairfax.org
Planning Dept. Contact Development Approvals	Jim Moore, Planning Director/Planning
Commercial/Industrial Inspections/Outreach	Ross Valley Fire Marshal
Public Information and Participation	Maria Baird, Community Resources Coordinator

Fairfax's Stormwater Pollution Prevention Program is managed by Public Works Manager Mark Lockaby. All public works engineering, including FEMA-funded work, is done under contract. The Town contracts with Marin Sanitary Service to sweep downtown areas weekly and residential neighborhoods monthly. Drainage flow rates for new residences must not exceed pre-project rates; this usually requires

that some type of detention be installed on-site. Grading is prohibited from October 1 through April 31 unless an engineered erosion control plan is approved by the Town Engineer.

City stormwater staff and their respective responsibilities are listed in the table above.

FEATURED ACCOMPLISHMENTS IN 2012-2013

The Town of Fairfax accomplished several stormwater pollution prevention program goals during the reporting period that are highlighted below. Overall implementation of the Town's stormwater program is detailed in the MCSTOPPP Annual Report.

- 2012-2013 Staff Training: One staff person attended a training offered by MCSTOPPP on June 6, 2013, regarding completion of the second term Phase II Permit Notice of Intent.
- Creek Cleaning, Maintenance, and Enhancement: Town staff responded to requests to remove items from the creeks.
- Creek/Beach Cleanups, Trash Abatement, and Other Coordination with Local Volunteers: The Town coordinated creek cleanup with Fairfax Volunteers.
- Road Repair and Maintenance: The Town worked to get all of its paving equipment in good working condition so that smaller paving projects can be completed in-house.
- Development Policy: Fairfax updated its General Plan with several components to prioritize water quality issues.

PRIORITIES FOR 2013-2014

The 2013-2014 priorities identified by the Town of Fairfax are listed below. Additional 2013-2014 priorities for MCSTOPPP and each local stormwater pollution prevention program will focus on optimizing the programs to effectively and efficiently meet the Year 1 requirements of the second term Phase II Permit.

- Street and Storm Drain Maintenance and Outfall Monitoring: Work with the County to begin conducting dry weather outfall assessments, mapping, and dry weather flow water quality testing.
- Municipal Use of Pesticides: Continue the ban on the use of pesticides.
- Creek Cleaning, Maintenance, and Enhancement: Support County-funded work by the North Bay Conservation Corps for the maintenance of creeks in the Town.
- Creek/Beach Cleanups, Trash Abatement, and Other Coordination with Local Volunteers: Continue working with volunteers to remove trash from the creeks.
- Illicit Discharge and Creek Violation Complaint Response: Continue to make responses to illicit discharges and creek violations a priority.
- New and Redevelopment Projects (Post-Construction): Send staff to MCSTOPPP kick-off meeting on updating the existing MCSTOPPP Guidance for Applicants (Low Impact Development Manual) and on the new requirements in Provision E.12, Post Construction Stormwater Management.
- Construction: Continue to discourage wintertime grading. Continue to require stormwater pollution prevention plans where any excavation is planned.

Stormwater Pollution Prevention in the **City of Larkspur**

BACKGROUND

Incorporated in 1908, Larkspur has approximately 12,099 residents (2012 estimate) and covers 3.3 square miles near the confluence of Corte Madera Creek with San Pablo Bay. There are some hilly neighborhoods, but much of the City is low-lying.

The City is bisected by US 101. To the east, the Larkspur Landing area includes a ferry terminal with service to San Francisco and a shopping center. The City's downtown and Madrone Canyon residential area are west of the highway.

Larkspur was laid out as a bedroom community in 1887 by developer O.W. Wright, who mistook the lupine growing on local hillsides for larkspur. The City's downtown includes classic commercial architecture from the 1890s to the 1930s and is listed on the National Register of Historic Places.



Larkspur lies at the mouth of Corte Madera Creek.

STORMWATER POLLUTION PREVENTION PROGRAM ORGANIZATION

Larkspur's Stormwater Staff	
Activity	Responsible Person(s)
Stormwater Coordinator Commercial/Industrial Inspections/Outreach	Mike Myers, Superintendent of Public Works 415-927-5017 mmyers@larkspurcityhall.org Scott Metcho, GIS Tech./DPW smetcho@cityoflarkspur.org
Municipal Maintenance	Mike Myers Steve Pappas, Field Supervisor
Capital Improvement Projects/Drainage Construction Inspection	Mary Grace Houlihan, Public Works Director/City Engineer
Illicit Discharge Detection and Elimination/Outfall Monitoring	Mike Myers Scott Metcho Steve Pappas
Planning Dept. Contact Development Approvals	Neal Toft, Planner
Public Information and Participation	Mike Myers Scott Metcho Nathalie Bamatter, Permit Tech.

Larkspur's Stormwater Pollution Prevention Program is coordinated by Mike Myers, Superintendent of Public Works, who also manages and performs maintenance of city infrastructure and facilities. City stormwater staff and their respective responsibilities are listed in the table to the left.

Street sweeping is contracted for once per month from February through September and twice per month in winter. The main streets and industrial areas are swept weekly. The same contractor performs catch basin box culvert cleaning. The City also performs storm drain inspections.

City Engineer Mary Grace Houlihan responds to problems with erosion and sedimentation control or construction-related pollution incidents. Nathalie Bamatter hands out construction-phase BMP materials with building permits.

FEATURED ACCOMPLISHMENTS IN 2012-2013

The City of Larkspur accomplished several stormwater pollution prevention program goals during the reporting period that are highlighted below. Overall implementation of the City's stormwater program is detailed in the MCSTOPPP Annual Report.

- **Street and Storm Drain Maintenance and Outfall Monitoring:** The City started using a Geographical Information System (GIS) for tracking outfall maintenance. By moving from paper to digital format, the City will more efficiently manage its assets.
- **Creek Cleaning, Maintenance, and Enhancement:** Larkspur followed BMPs and removed trash in public areas of Larkspur Creek and the north side Corte Madera Creek. In addition, the City maintained vegetation by pulling non-native vegetation and carefully maintaining and protecting native vegetation.
- **Business Inspections and Outreach Activities:** The City inspected a variety of restaurants in Larkspur to ensure grease traps were used. In addition, outdoor storage areas and outdoor washing areas were inspected to ensure that stormwater pollution prevention BMPs are in place. All businesses were in compliance with our Standard Facility Inspection Report Form. Larkspur also conducted mailings to businesses with self-inspection forms and a cover letter informing them of the importance of minimizing stormwater pollution.

PRIORITIES FOR 2013-2014

The 2013-2014 priorities identified by the City of Larkspur are listed below. Additional 2013-2014 priorities for MCSTOPPP and each local stormwater pollution prevention program will focus on optimizing the programs to effectively and efficiently meet the Year 1 requirements of the second term Phase II Permit.

- **2013-2014 Staff Training:** One staff member will seek Certified Professional in Erosion and Sediment Control (CPESC) status.
- **Street and Storm Drain Maintenance and Outfall Monitoring:** Continue field verification of stormwater drainage pipes and establish a Stormwater Master Plan for the City.
- **Creek Cleaning, Maintenance, and Enhancement:** Hire contract labor for cleaning along Remillard Park and the waterfront.
- **Illicit Discharge and Creek Violation Complaint Response:** Continue to make responses to illicit discharges and creek violations a priority.
- **Public Involvement and Participation:** Rejuvenate stormwater pollution prevention storm drain marking throughout the City.

Stormwater Pollution Prevention in the **City of Mill Valley**

BACKGROUND

Mill Valley has a population of approximately 14,159 (2012 estimate) and covers an area of approximately five square miles. Located at the foot of Mount Tamalpais, the City has an active and charming downtown commercial district amidst quiet tree-lined neighborhoods.

Mill Valley is traversed by Old Mill Creek, Reed Creek, Arroyo Corte Madera Del Presidio Creek, Warner Creek, and Sutton Manor Creek. Small numbers of Steelhead trout inhabit the Arroyo Corte Madera del Presidio and Old Mill Creek.

Most of the City’s remaining buildable lots are on steep slopes with difficult access. The City’s review requires extensive mitigation of drainage and other environmental considerations.



Mill Valley extends from Richardson Bay to Mt. Tamalpais.

STORMWATER POLLUTION PREVENTION PROGRAM ORGANIZATION

Mill Valley’s Stormwater Staff	
Activity	Responsible Person(s)
Stormwater Coordinator	Jill Barnes, Public Works Director/City Engineer 415-388-4033 jbarnes@cityofmillvalley.org
Municipal Maintenance	Robert Zadnik, Public Works Supervisor
Capital Improvement Projects/Drainage	Bianca Gomez, Associate Engineer
Illicit Discharge Detection and Elimination/Outfall Monitoring	Denise Andrews, Operations Manager
Construction Inspection	Julie McClure, Engineering Technician Kirk Lindgren, Senior Building Inspector Tony Martinez, Building Inspector
Planning Dept. Contact	Mike Moore, Planning Director
Development Approvals	Tim McSorley/ Cecilia Zamora
Commercial/Industrial Inspections/Outreach Public Information and Participation	Julie McClure

The Stormwater Pollution Prevention Program, in the DPW, is funded by an annual parcel fee. City stormwater staff and their respective responsibilities are listed in the table to the left.

The City’s Engineer and Engineering Technician, along with the Police and Fire Departments, have authority to issue administrative citations to enforce City ordinances, including creek protection measures and the stormwater pollution prevention ordinance.

A pre-construction meeting is held for every project subject to design review. Pollution prevention and

erosion and sediment control BMPs specific to a project are discussed at this meeting.

Each fall the Engineering Technician visits all construction sites requiring erosion and sediment control, to confirm that materials are on site and ready for use and that appropriate measures are in place before the winter storm season.

FEATURED ACCOMPLISHMENTS IN 2012-2013

The City of Mill Valley accomplished several stormwater pollution prevention program goals during the reporting period that are highlighted below. Overall implementation of the City's stormwater program is detailed in the MCSTOPPP Annual Report.

- **2012-2013 Staff Training:** Annual training was conducted regarding safe use of and spill containment of pesticides. Staff were also trained on the effects and ways to handle potential drift when applying pesticides. Between one and three staff members attended each training session, for a total of nine staff receiving training in 2012-2013.
- **Street and Storm Drain Maintenance and Outfall Monitoring:** The City repaired storm pipes various locations and surveyed the "drains to bay" medallions and created a database. In addition, the City began using soy-based material for emulsion.
- **Creek Cleaning, Maintenance, and Enhancement:** The City coordinated with the CCNB to clean 79 cubic yards of non-native vegetation and remove trash from Arroyo Corte Madera del Presidio, Ryan, and Sutton Manor creeks. CCNB field crews receive training on how to protect, enhance and restore creek habitats during routine creek maintenance activities.
- **Corporation Yards:** The City improved a drain line in the corporation yard to connect to the SASM plant instead of draining to the bay. In addition, it used a soy-based degreaser for cleaning equipment.
- **Road Repair and Maintenance:** The City is using a soy-based emulsion for potholing and trench restoration and experimenting with "greener" products for cold patching.
- **Capital Projects:** The City began the Boyle Park creek restoration project and repaired numerous City-maintained deteriorated storm pipes.
- **Illicit Discharge and Creek Violation Complaint Response:** The City shared relevant stormwater brochures with new restaurants and emphasized at Capital Improvement Project pre-construction meetings that only clean stormwater may be discharged to the City's gutters and storm drains. **Business Inspections and Outreach Activities:** The City educated new restaurant business owners and distributed non-toxic pest management brochures to a local nursery.
- **Public Involvement and Participation:** Four elementary school classes and one Boy Scout Troop toured Public Works and were educated about stormwater and sewers. In addition, the City held its Annual Mill Valley Beautification Day and Wetland Days at SASM.

PRIORITIES FOR 2013-2014

The 2013-2014 priorities identified by the City of Mill Valley are listed below. Additional 2013-2014 priorities for MCSTOPPP and each local stormwater pollution prevention program will focus on optimizing the programs to effectively and efficiently meet the Year 1 requirements of the second term Phase II Permit.

- 2013-2014 Staff Training: Train new staff regarding the second term Phase II Permit requirements. In addition, Maintenance Shop and Public Works crew plan to attend Stormwater training courses next year.
- Street and Storm Drain Maintenance and Outfall Monitoring: Complete database for outfalls and storm drains. Find high-quality, green-based product for cold patch asphalt.
- Municipal Use of Pesticides: Continue policy of only using pesticides as a last resort.
- Creek Cleaning, Maintenance, and Enhancement: Conduct a large cleaning project in the open concrete channel on Miller Avenue to include use of a fossil filter to remove pollutants. Complete Boyle Park creek restoration project.
- Litter Control: Initiate a program to increase the public's awareness of the problem of cigarette butt litter. Increase litter pickup in the city lot on Miller Avenue behind Balboa Café.
- Capital Projects: Complete Bayfront Pier project and improve outdoor storage containers in the corporation yard.
- Illicit Discharge and Creek Violation Complaint Response: Work with new staff on current illicit discharge and/or creek violations response policies. Complete storm drain and outfall database.
- Development Policy: Complete adoption of new General Plan. Continue to promote our Green Building code which includes practices that promote energy and water efficiency which reduces runoff into our storm drains.
- New and Redevelopment Projects (Post-Construction): Train new staff regarding the second term Phase II Permit requirements.
- Construction: Continue to consider more modern methods of drainage treatment rather than piping water directly to the city storm system. Educate the contractors regarding their responsibility to maintain erosion and sediment control all year, not just during the rainy season.
- Business Inspections and Outreach Activities: Add more stormwater brochures at the Chamber of Commerce. Continue to educate new businesses about Best Management Practices
- Public Involvement and Participation: Continue outreach to school children. Increase distribution of MCSTOPPP brochures to local nurseries and restaurants.

Stormwater Pollution Prevention in the **City of Novato**

BACKGROUND

Novato covers 28 square miles and has a population of nearly 53,301 (2012 estimate). Elevations vary from Mt. Burdell at 1,558 feet to 18 feet in the City’s downtown. Rainfall averages approximately 27.5 inches per year. Novato has a rural atmosphere largely because of its low population density and the high amount of open space and parks. Commercial areas host a mix of corporate headquarters, state-of-the art technology companies, and retail centers.

Novato’s creeks include Novato Creek, Rush Creek and Pacheco Creek. Novato Creek flows from west to east and encompasses a drainage basin of approximately 44 square miles. Numerous streams flow into Novato Creek, including Warner, Arroyo Avichi and Arroyo San Jose creeks. Rush Creek flows eastward from Highway 101 to the Petaluma River north of the City limits.



Novato is Marin County’s northernmost city.

Stafford Lake, a reservoir and headwater for Novato Creek, is approximately 11 miles upstream from San Pablo Bay. The reservoir, which was established in 1951, stores water for domestic use and reduces flooding along Novato Creek. San Pablo Bay borders the eastern edge of Novato and the shoreline extends for approximately seven miles. The Petaluma River and its marshlands border the north-east boundaries of Novato, where the river empties into San Pablo Bay.

STORMWATER POLLUTION PREVENTION PROGRAM ORGANIZATION

Novato’s Stormwater Staff	
Activity	Responsible Person(s)
Stormwater Coordinator Development Approvals Commercial/Industrial Inspections/Outreach Public Information and Participation	Andrew Poster, Director of Public Works/City Engineer 415-899-8963 aposter@novato.org
Municipal Maintenance	Gloria Morgan, Public Works Admin Clerk Dave Meyers, Maintenance Superintendent
Capital Improvement Projects/Drainage Construction Inspection	Julian Skinner, Senior Civil Engineer
Illicit Discharge Detection and Elimination/Outfall Monitoring	Joe Stene, Street Supervisor
Planning Dept. Contact	Alan Lazure, Principal Planner Elizabeth Dunn, Planning Manager

City stormwater staff and their respective responsibilities are listed in the table to the left.

The City’s stormwater program, including all MCSTOPPP activities, is funded by property tax revenues. Review and approval of private development projects for stormwater compliance is funded through permit fees and is coordinated among Planning and Engineering staff.

FEATURED ACCOMPLISHMENTS IN 2012-2013

The City of Novato accomplished several stormwater pollution prevention program goals during the reporting period that are highlighted below. Overall implementation of the City's stormwater program is detailed in the MCSTOPPP Annual Report.

- **2012-2013 Staff Training:** Four staff received Certified Stormwater Inspector training. As needed, tailgate meetings were held with street crew (4-5 attending, on average) to review the scope of work and safety issues prior to work commencement.
- **Street and Storm Drain Maintenance and Outfall Monitoring:** The City completed inspection of all outfalls in the 14 creeks of Novato.
- **Municipal Use of Pesticides:** All applicators are State Certified and attend qualified classes and training to keep their licenses current.
- **Creek Cleaning, Maintenance, and Enhancement:** The City coordinated with the Conservation Corp North Bay to pick up trash and manage vegetation.
- **Creek/Beach Cleanups, Trash Abatement, and Other Coordination with Local Volunteers:** Conservation Corp picked up approximately 5 cubic yards of trash and furniture in Pacheco Creek.
- **New and Redevelopment Projects (Post-Construction):** MCSTOPPP's *Guidance for Applicants: Stormwater Quality Manual for Development Projects in Marin County, a Low Impact Development Approach* is provided, by reference to the website, to project applicants beginning as early as the Technical Advisory Committee Meetings and when applicants first submit proposed design plans.
- **Public Involvement and Participation:** The City provided access to brochures and literature at the main office.

PRIORITIES FOR 2013-2014

The 2013-2014 priorities identified by the City of Novato are listed below. Additional 2013-2014 priorities for MCSTOPPP and each local stormwater pollution prevention program will focus on optimizing the programs to effectively and efficiently meet the Year 1 requirements of the second term Phase II Permit.

- **2013-2014 Staff Training:** Continue to train engineering, planning, and maintenance staff in workshops/training to enhance the knowledge of staff and to ensure that the City is utilizing the most applicable procedures to protecting water quality and to comply with the second term Phase II Permit.
- **Street and Storm Drain Maintenance and Outfall Monitoring:** Complete inspection of all outfalls with limited personnel.
- **Creek/Beach Cleanups, Trash Abatement, and Other Coordination with Local Volunteers:** Coordinate with CCNB to clean 14 creeks, spill ways, retention ponds,

basins, and seasonal ditches that are described in the Fish and Wildlife Permit (26 locations).

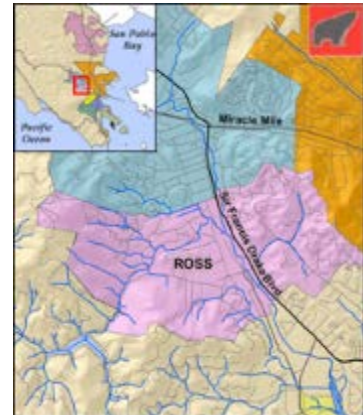
- Illicit Discharge and Creek Violation Complaint Response: Respond to all complaints and follow up according to existing stormwater permit requirements and City of Novato Code (Urban Runoff Pollution Prevention).

Stormwater Pollution Prevention in the **Town of Ross**

BACKGROUND

The Town of Ross is the second-smallest Marin community, with 1.6 square miles and slightly more than 800 residential parcels. The Town has 2,415 residents (2010 Census). Land use is primarily residential with a small commercial area, public grade school and private high school, residential care center for adults with developmental disabilities, and open space. New development in the town is primarily residential; there is little new development and few vacant, developable parcels.

The Town has mainly open watercourses draining to Corte Madera and Ross Creek, particularly in the upper reaches of the watershed. Some reaches are channelized and in culverts. The endangered Central California Coast steelhead inhabits Ross Creek.



Ross occupies 1.6 square miles in the heart of Marin's city-centered corridor.

STORMWATER POLLUTION PREVENTION PROGRAM ORGANIZATION

Ross's Stormwater Staff	
Activity	Responsible Person(s)
Stormwater Coordinator Municipal Maintenance Illicit Discharge Detection and Elimination/Outfall Monitoring	Robert Maccario, Superintendent of Public Works 415-453-1453 ext. 163 RMaccario@townofross.org
Capital Improvement Projects/Drainage Commercial/Industrial Inspections/Outreach	Rob Braulik, Town Manager
Construction Inspection	Ross Building Services, Contract Building Inspector
Planning Dept. Contact Development Approvals	Elise Semonian, Senior Planner
Public Information and Participation	Rob Braulik Robert Maccario

Ross's stormwater program is funded through the general fund. Special drainage projects are funded by a drainage fee of 1% of the project valuation on building permits. The program is a combined effort among the Town's building, public works, and planning departments.

The Town does not have an integrated pest management ordinance; however, Public Works Superintendent Robert Maccario

has over 30 years of experience as a licensed landscape contractor, maintains a pesticide applicator certificate, and is a member of the International Society of Arboriculture, a Sonoma/Marin Qualified Water Efficient Landscaper and a certified water auditor. The Town General Plan calls for adoption of an integrated pest management ordinance. The Town does not use pesticides.

The Town has mapped its storm drains and outfalls on GIS and is currently improving this system. The public works superintendent and his assistant know the location of all outfalls, connecting drainage and where they originate. They inspect and clean ditches and catch basins during all rain events.

Town stormwater staff and their respective responsibilities are listed in the table above.

FEATURED ACCOMPLISHMENTS IN 2012-2013

The Town of Ross accomplished several stormwater pollution prevention program goals during the reporting period that are highlighted below. Overall implementation of the Town's stormwater program is detailed in the MCSTOPPP Annual Report.

- **2012-2013 Staff Training:** Staff attended a training regarding the Department of Pesticide Regulation's Laws and Regulations and Integrated Pest Management (IPM), as well as a seminar on carbon sequestration. In addition, staff attended MCSTOPPP meetings to remain informed regarding the second term Phase II Permit requirements.
- **Street and Storm Drain Maintenance and Outfall Monitoring:** Staff has worked to keep the weekly street sweeping in our budget during difficult economic times. Staff drives all streets continually during rain events cleaning catch basins and storm drains.
- **Creek Cleaning, Maintenance, and Enhancement:** The Town used the Marin Project Coordination process for its projects and promoted it to architects, contractors and citizens with construction projects near waterways. The Town maintains the sections of creeks it owns and requires residents to maintain creeks and waterways passing over or under private property. In addition, Ross has an annual tree-planting budget and worked to restore its street tree canopy as older trees are removed because of age, Sudden Oak Death, and Dutch Elm disease. Town staff cleans most of the storm drains, catch basins, culverts and open ditches by hand.
- **Creek/Beach Cleanups, Trash Abatement, and Other Coordination with Local Volunteers:** Staff initiated a program with the Ross School, a K-8 school in Ross to educate students about cleanup of creeks/beaches and watershed, storm drains and protection of creeks and wetlands.
- **Corporation Yards:** The Town kept the dumpster area clean by hand sweeping instead of washing down the area, and debris boxes were covered with a tarp to keep birds from removing the litter and scattering it.
- **Road Repair and Maintenance:** The Town worked closely with contractors to ensure they use proper BMPs. Contractors manually sweep or use a street sweeper to clean off the project areas instead of using a power blower. A culvert on Morrison Road was slip-lined using an expanding PVC liner, instead of digging it up to replace it. The pipe will carry more water than before because of less friction loss, and the Town did not have to dig up the roadway.
- **Development Policy:** The Town completed work on update of Construction completion ordinance (CPO) and the new Encroachment Permit Ordinance (EPO).
- **Business Inspections and Outreach Activities:** The Ross Valley Fire Department (RVFD) completes business inspections as part of annual fire inspection process. The Town is primarily residential and has very few businesses. The Town sends BMP information to all residents and the limited business community each year via email.

- **Public Involvement and Participation:** The Town continued to use Town email distribution list to provide BMP information to the community on a regular basis. An email is sent prior to the rainy season. The Town continually worked with contractors and others to keep them informed about BMPs. The Town also provides Council and public updates about the stormwater program and new practices and procedures.

PRIORITIES FOR 2013-2014

The 2013-2014 priorities identified by the Town of Ross are listed below. Additional 2013-2014 priorities for MCSTOPPP and each local stormwater pollution prevention program will focus on optimizing the programs to effectively and efficiently meet the Year 1 requirements of the second term Phase II Permit.

- **2013-2014 Staff Training:** Train staff on IPM program implementation.
- **Street and Storm Drain Maintenance and Outfall Monitoring:** Continue to keep the Council and citizens informed on the importance of weekly street sweeping to ensure annual funding. Continue rain event drainage cleaning. This entails cleaning catch basins before the anticipated winter rainy season.
- **Municipal Use of Pesticides:** Adopt IPM Ordinance or Policy.
- **Creek Cleaning, Maintenance, and Enhancement:** Continue using Marin Project Coordination process for Town projects and promoting it to citizens. Conduct voluntary riparian corridor improvements and native tree planting along Corte Madera creek next to Town Hall.
- **Creek/Beach Cleanups, Trash Abatement, and Other Coordination with Local Volunteers:** Continue working with Ross school science teachers in their creek science programs and teaching local kids about the importance of creeks.
- **Capital Projects:** Complete sheetpile wall project to stabilize parking lot area behind Town Hall next to Corte Madera Creek and design of Winship Bridge replacement. Subject to Caltrans approval, implement maintenance improvements on four bridges.
- **Illicit Discharge and Creek Violation Complaint Response:** Continue to enforce BMP programs and practices with contractors and others to ensure there are no illicit discharges.
- **Development Policy:** Develop and adopt Encroachment Permit Ordinance. Improve follow-up process to ensure homeowners make all necessary stormwater runoff improvements in response to comments noted by the Superintendent of Public Works on resale inspection reports.
- **New and Redevelopment Projects (Post-Construction):** Continue to have staff from all departments involved in the building projects and resale inspections.
- **Construction:** Continue weekly staff coordination meetings regarding all open projects in planning and construction phases.

- Public Involvement and Participation: Continue existing program and work with MCCSTOPPP staff and other agencies to explore additional methods to provide outreach to the public.

Stormwater Pollution Prevention in the **Town of San Anselmo**

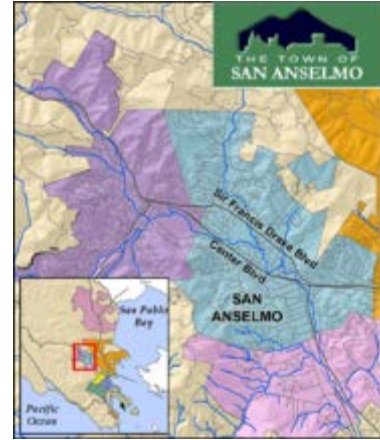
BACKGROUND

San Anselmo has approximately 12,491 residents (2012 estimate) and encompasses approximately 2.7 square miles. Its name came from the Punta de Quintin land grant, which marked this valley as the Canada del Anselmo, or Valley of Anselm, referring to an Indian who was buried in the area.

San Anselmo was incorporated in 1907, around the same time Marin’s electric train system extended to the area. It was a silent film capital in the early 1900s. Commuters could take the train to Sausalito and then the ferry to San Francisco in about an hour. The system was closed following construction of the Golden Gate Bridge.

Drainages to the east, west, and north converge in and around the Town’s low-lying downtown area. Most creek reaches are privately owned. Steelhead salmon can sometimes be seen in urbanized San Anselmo Creek. San Anselmo experienced serious flood damages in 1925, 1940, 1963, 1982, and most recently on New Year’s Eve 2005. In addition to downtown, San Anselmo includes the Red Hill Shopping Center and various small businesses along Sir Frances Drake Boulevard.

There is little developable area in the Town; however, development of subdivisions in remaining hillside areas poses concerns about erosion control and contribution to flooding.



San Anselmo is centered on the confluence of several creeks.

STORMWATER POLLUTION PREVENTION PROGRAM ORGANIZATION

San Anselmo’s Stormwater Staff	
Activity	Responsible Person(s)
Stormwater Coordinator Capital Improvement Projects/Drainage Construction Inspection Development Approvals Public Information and Participation	Sean Condry, Public Works Director 415-258-4676 scondry@townofsananselmo.org
Municipal Maintenance	Dave Craig, Public Works Road and Storm Drain System Supervisor
Illicit Discharge Detection and Elimination/Outfall Monitoring	Dave Craig / Eric Robbe, System Supervisor / Building Inspector
Planning Dept. Contact	Phil Boyle, Senior Planner
Commercial/Industrial Inspections/Outreach	Robert Bastianon, Fire Inspector, RVFD

The Public Works Department works closely with MCSTOPPP to administer the Stormwater Program. The funding for this program is 100% supported by the Town’s general fund. The Town has no stormwater fee.

The Town conducts and funds the street sweeping program. Streets are cleaned at twice per month during the winter and once per month during the rest of the year.

The Town works closely with the Ross Valley Fire Department (RVFD)

to ensure the Town's 200 businesses remain in compliance with stormwater program requirements. Stormwater violations noted by the RVFD are referred to Town staff.

City stormwater staff and their respective responsibilities are listed in the table to the left.

FEATURED ACCOMPLISHMENTS IN 2012-2013

The Town of San Anselmo accomplished several stormwater pollution prevention program goals during the reporting period that are highlighted below. Overall implementation of the Town's stormwater program is detailed in the MCSTOPPP Annual Report.

- **2012-2013 Staff Training:** One staff member attended Stormwater Inspection Certification training. In addition, staff attended MCSTOPPP meetings.
- **Creek Cleaning, Maintenance, and Enhancement:** Staff worked with County on implementing vegetation maintenance in Fall 2012. Staff conducted a stream survey in spring 2013 and wrote a report documenting maintenance needs. This work will be conducted by Conservation Corps North Bay in Fall 2013. The Town completed stream bank restoration at Lansdale Fish Passage Project. In addition, the Town received a grant for the Memorial Park Flood Detention Basin that includes many hydrologic benefits: water quality, water quantity, daylighting, and restoration of Sorich Creek.
- **Corporation Yards:** DPW Corp Yard staff maintained BMPs and recommended further stormwater improvements, especially the installation of a concrete pad below the green waste pile.
- **Road Repair and Maintenance:** Numerous road repair projects used FDR, or Full Depth Reclamation, which reuses material transport and waste from traditional off-haul and import methods.
- **Development Policy:** Public Works staff drafted a net-zero impervious surface ordinance, to follow the existing policy, which will be presented to the Town Council for adoption in the near future. In addition, the Flood Committee approved an ordinance stating that all single-family residences that add new impermeable areas are required to offset this with bioretention, detention, or other means to have no new increase in net runoff from the property due to construction. Any new homes must also include measures to have no increase in runoff from the property. The final step for implementation will be approval by the Town Council.
- **Public Involvement and Participation:** Numerous articles in the Town Manager's newsletter addressed creek care, including articles about storm preparedness, leaves in the street, and pesticide use to control weeds.

PRIORITIES FOR 2013-2014

The 2013-2014 priorities identified by the Town of San Anselmo are listed below. Additional 2013-2014 priorities for MCSTOPPP and each local stormwater pollution prevention program

will focus on optimizing the programs to effectively and efficiently meet the Year 1 requirements of the second term Phase II Permit.

- 2013-2014 Staff Training: Attend MCSTOPPP trainings on implementing new permit requirements.
- Street and Storm Drain Maintenance and Outfall Monitoring: Modify program to accommodate requirements of second term Phase II Permit. Expand creek maintenance to include sediment removal.
- Creek Cleaning, Maintenance, and Enhancement: Continue to implement existing programs and pursue Memorial Park Detention Basin with associated environmental benefits.
- Capital Projects: Install concrete pad for green waste at corporation yard.
- Development Policy: Formally adopt the net-zero stormwater runoff ordinance.
- Public Involvement and Participation: Increase DPW presence at community events such as by setting up a booth at Country Fair Day and Creekside “Q” Town Barbecue benefit.

Stormwater Pollution Prevention in the **City of San Rafael**

BACKGROUND

With 58,502 residents (2012 estimate), the City of San Rafael is Marin County’s commercial center and most populous municipality. The City occupies 17 square miles of land and 5 square miles of water and wetlands. Much of the former wetlands have been filled and developed; remaining portions are home to the endangered salt marsh harvest mouse. There are riparian areas along San Rafael, Mahon, Gallinas, and Miller Creeks. China Camp State Park and McNear’s Beach State Park are adjacent to the City.



The City of San Rafael is Marin County’s most populous municipality.

STORMWATER POLLUTION PREVENTION PROGRAM ORGANIZATION

San Rafael’s Stormwater Staff	
Activity	Responsible Person(s)
Stormwater Coordinator Construction Inspection	Diane Decicio, Senior Associate Engineer 415-485-3360 Diane.Decicio@cityofsanrafael.org
Municipal Maintenance Illicit Discharge Detection and Elimination/Outfall Monitoring	Jim Forsythe, Street Maintenance Superintendent
Capital Improvement Projects/Drainage	Kevin McGowan, Assistant Director of Public Works/City Engineer
Planning Dept. Contact	Raffi Boloyan, Senior Planner
Development Approvals	Nader Mansourian, Public Works Director
Commercial/Industrial Inspections/Outreach	Robert Cole, Central Marin Sanitation Agency
Public Information and Participation	Carla Koop, Volunteer Program Assistant

San Rafael’s stormwater program is now coordinated by a team of the DPW staff: Diane Decicio, Lead Stormwater Coordinator, Jim Forsythe, Street Maintenance Superintendent, Kevin McGowan, Assistant Public Works Director/City Engineer and Nader Mansourian, Director of Public Works. San Rafael’s Engineering Division continues to assume plan review responsibility. Public Works Street Maintenance Superintendent Jim Forsythe leads the City’s efforts to eliminate illicit discharges, to maintain the City’s extensive storm

drain system, control litter, maintain the Corporation Yard, and sweep streets. Business inspection and outreach is conducted primarily by the Central Marin Sanitation Agency under a cooperative agreement. County Environmental Health conducts stormwater business inspections at restaurants and Marin County CUPA inspectors will refer all potential storm drain or runoff concerns to Jim Forsythe.

City stormwater staff and their respective responsibilities are listed in the table to the left.

A user fee, collected through property tax bills, funds the program.

FEATURED ACCOMPLISHMENTS IN 2012-2013

The City of San Rafael accomplished several stormwater pollution prevention program goals during the reporting period that are highlighted below. Overall implementation of the City's stormwater program is detailed in the MCSTOPPP Annual Report.



- **2012-2013 Staff Training:** Staff attended a CPESC Exam Review session covering check dams, hydroseeding, erosion and sediment control, and runoff calculations. In addition, five staff attended a special MCSTOPPP meeting in San Rafael on all of the second term Phase II Permit requirements. Stormwater staff also attended MCSTOPPP Agency Staff Committee meetings regularly.
- **Creek Cleaning, Maintenance, and Enhancement and Creek/Beach Cleanups, Trash Abatement, and Other Coordination with Local Volunteers:** The City removed trash and invasive species (e.g., broom, acacia, fennel, sweet pea) from Mahon Creek and removed trash from Gallinas Creek. The City partnered with Gallinas Creek Watershed, MCSTOPPP, County Parks and others to remove invasive species and litter for Earth Day, Cesar Chavez Day, Coastal Cleanup Day, Make a Difference Day, and others. Each event involved coordination of dozens of volunteers. Overall, a few hundred volunteers participated in these and other Parks volunteer days in 2012-2013.
- **Litter Control:** The City collaborated with San Rafael Clean Coalition to install a public art/education sculpture downtown, the Cigarette Eater Meter, which was designed to raise awareness about the hazards and persistence of cigarette butt litter. This sculpture also functions as a receptacle for cigarette butts. The City distributed a press release about its efforts to abate cigarette litter and the unveiling of the Cigarette Eater Meter and garnered press coverage by the Marin Independent Journal, Pacific Sun, San Rafael News Pointer, and KTVU. MCSTOPPP provided funding for the project as well.
- **Public Involvement and Participation:** The City of San Rafael partners with Green Sangha, local schools, MCSTOPPP, Center for Volunteer and Non-Profit Leadership, Business Improvement District, Chamber of Commerce, Rotary Clubs, County Parks, Boy Scouts, Gallinas Watershed Council, local churches, various homeowners associations and many others throughout the year. The Marin Master Gardeners (MMG) maintain a Beneficial Habitat Garden at the City's Falkirk Cultural Center, with the sole focus of demonstrating sustainable gardening practices without chemicals. The garden includes rose bushes which are often grown without the use of fertilizers, fungicides, and insecticides. In the Beneficial Habitat Garden, roses thrive using IPM due to the nearby plantings which draw pollinators, insect parasitoids, insect predators, pathogens, and weed feeders. Signage in three locations includes a good bug/bad bug sign (see photo).

The garden is open to the public year-round. Throughout the year, the MMGs also hold public workshops that highlight sustainable research-based horticultural practices, including IPM. A workshop on June 9, 2013, entitled “The Benefits of Beneficials and How to Reap Them,” focused solely on IPM. In addition, the City coordinated the submission of Marin Voice editorials to the Marin Independent Journal for Earth Day. The City and three partner organizations submitted pieces, including one by the Marin County Open Space District that specifically promoted creek cleanups. The City also submitted a press release recognizing the work of City volunteers who help with Earth Day and Coastal Cleanup Day. The City also occasionally includes announcements and articles in the City Manager’s Snapshot and in the Volunteer Newsletter.

PRIORITIES FOR 2013-2014

The 2013-2014 priorities identified by the City of San Rafael are listed below. Additional 2013-2014 priorities for MCSTOPPP and each local stormwater pollution prevention program will focus on optimizing the programs to effectively and efficiently meet the Year 1 requirements of the second term Phase II Permit.

- 2013-2014 Staff Training: Provide training on Erosion and Sediment Controls for DPW, Planning, and Building Departments.
- Street and Storm Drain Maintenance and Outfall Monitoring: Install upstream trash capture devices.
- Municipal Use of Pesticides: Public Works training in reduction of pesticides.
- Creek/Beach Cleanups, Trash Abatement, and Other Coordination with Local Volunteers: Continue working with volunteer groups and enhance local creeks.
- Litter Control: Continue to engage volunteers and expand Saturday Park Service Days. Implement targeted activities to raise awareness and reduce cigarette butt litter.
- Public Involvement and Participation: Build on the success of the Cigarette Eater Meter installation in raising awareness and abating toxic litter.

Stormwater Pollution Prevention in the **City of Sausalito**

BACKGROUND

The City of Sausalito was incorporated in 1893. Located just north of the Golden Gate Bridge from San Francisco the City hosts tourists throughout the year. Sausalito has a population of 7,037 (2012 estimate). The total area is 2.2 square miles, of which 15% is under water. Sausalito has one perennial stream, Glen Creek, which is located primarily within private property. Protecting the sensitive waters of Richardson Bay is the prime objective of the City's Stormwater Pollution Prevention Program.



Sausalito is Marin's most southerly municipality.

The North Pacific Coast Railroad created a terminus at Sausalito ("little willow grove") in 1871. Train services diminished rapidly after World War II and no longer exist, though old rails can still be seen along the old route. The City's character changed dramatically with the creation of the Marinship Shipyard in the early 1940's. The yard significantly filled Richardson's Bay and created a massive industrial complex to serve the World War II war effort. Following the closure of the shipyard and sale of land and buildings, the area has transformed into a mixture of storage facilities, recreational boating marinas, light industrial (ranging from a ceramic tableware maker, landscape supplies, and auto repair businesses), office complexes serving real estate, legal, and internet services enterprises, and artist workshops. The City's hills are populated with homes, churches and hotels.

The City has about 4,300 housing units. High visibility businesses in the City serve tourist visitors, and recreational boating enthusiasts. The City also has a large number of design oriented businesses ranging from painters, graphic artists, craftsman and musicians.

STORMWATER POLLUTION PREVENTION PROGRAM ORGANIZATION

Sausalito's Stormwater Staff	
Activity	Responsible Person(s)
Stormwater Coordinator Capital Improvement Projects/Drainage Construction Inspection Public Information and Participation	Jonathon Goldman, Director of Public Works and City Engineer
Municipal Maintenance	Loren Umbertis, PW-Maintenance Div Manager Kent Basso, PW Maintenance Supervisor
Illicit Discharge Detection and Elimination/Outfall Monitoring Commercial/Industrial Inspections/Outreach	Pat Guasco, Sewer System Coordinator
Planning Dept. Contact	Heidi Scoble, Associate Planner
Development Approvals	Andrew Davidson, Staff Engineer

City stormwater staff and their respective responsibilities are listed in the table to the left.

The sewer systems coordinator conducts stormwater business inspections concurrent with sanitary source control inspections. The City Engineer and Staff Engineer recommend conditions for land development based on the City's stormwater ordinance and MCSTOPPP's *Guidance for Applicants: Stormwater Quality*

Manual for Development Projects in Marin County, a Low Impact Development Approach.

Stormwater construction inspections are conducted by Building Inspectors routinely; Engineering Division staff conducted wet weather oversight of construction sites. All staff, as necessary, responded to referrals from outside agencies.

The local program is funded through a fee collected on property tax bills.

FEATURED ACCOMPLISHMENTS IN 2012-2013

The City of Sausalito accomplished several stormwater pollution prevention program goals during the reporting period that are highlighted below. Overall implementation of the City's stormwater program is detailed in the MCSTOPPP Annual Report.

- **2012-2013 Staff Training:** Staff attended several trainings during the reporting period. Some of the stormwater topics covered in 2012-2013 included: Industrial Stormwater General Permit; SSO BMPs; Pump Station Spill Response Training; Utility Marking and Locating; Pump Station Back Up Emergency Response (EORP) Training; and NOI Training. Between two and 19 staff members attended each training, for a total of 43 staff receiving training in 2012-2013.
- **Creek Cleaning, Maintenance, and Enhancement:** Conducted annual pre-wet weather inspection cleaning. As most water courses are within private property, City maintenance efforts are focused on removing natural (tree limbs, vegetative waste, rock) and artificial obstructions that get within the creek beds that are larger than a property owner can remove on their own.
- **Creek/Beach Cleanups, Trash Abatement, and Other Coordination with Local Volunteers:** The Sausalito Parks and Recreation Department supported events organized in the City for Earth Day, including the Dunphy Park Beach Cleanup. The City continues to support the Friends of Willow Creek Group efforts to improve riparian zones and water quality.
- **Litter Control:** The City performed a waste characterization study. The Sausalito Sustainability Commission prepared recommendation for further action. A Willow Creek cleanup event was conducted on April 27, 2013 (Global Youth Service Day Creek Cleanup).
- **Corporation Yards:** A false bottom 10 yard capacity, fully sealable debris box for wastewater collection system debris off haul was procured and received in the report period. The wastewater collection system solid waste (after being collected and properly profiled) is off-hauled by the City of Sausalito solid waste hauler to an appropriately classified solid waste disposal site. The false bottom debris box is a very specialized piece of equipment, in that it allows the City to remove rock, grit and debris from the wastewater collection system and return the liquid wastewater to the wastewater collection system for treatment. The removal of collection system debris helps reduce sanitary sewer overflows.

- Road Repair and Maintenance: Sausalito developed construction plans for the repair of streets in the City. The project specifications include BMP implementation requirements. These plans will advance to construction in 2013-2014. Private construction in the Public Right of Way was required to implement BMPs during rainy season through Encroachment Permit Conditions.
- Open Space Management: The City continued efforts with open space advocates and Fire District Staff to manage invasive tree species. The City continued efforts to limit passage across non-trail areas in the Cypress Ridge Open Space thereby preserving species habitat and limiting erosion.
- New and Redevelopment Projects (Post-Construction): Continued to recommend use of *Guidance for Applicants: Stormwater Quality Manual for Development Projects in Marin County, a Low Impact Development Approach* on development proposals involving site reconstruction
- Business Inspections and Outreach Activities: Continued to coordinate with Marin Environmental Health, Marin CUPA, Southern Marin Fire Protection District and Sausalito-Marin City Sanitary District regarding business operations that may impact water quality.

PRIORITIES FOR 2013-2014

The 2013-2014 priorities identified by the City of Sausalito are listed below. Additional 2013-2014 priorities for MCSTOPPP and each local stormwater pollution prevention program will focus on optimizing the programs to effectively and efficiently meet the Year 1 requirements of the second term Phase II Permit.

- 2013-2014 Staff Training: Conduct training with regard to second term Phase II Permit requirements. Send staff to the MCSTOPPP special meeting on updating MCSTOPPP's Guidance for Applicants to incorporate the new E.12 Post-Construction requirements and to the MCSTOPPP Construction Site Management and BMP Installation Workshop. Send staff to a QSP and/or Qualified SWPPP Developer (QSD) training.
- Street and Storm Drain Maintenance and Outfall Monitoring: Adjust practices with regard to outfall monitoring to conform with second term Phase II Permit requirements. Improve coordination with Richardson's Bay Regional Authority on outfall monitoring
- Municipal Use of Pesticides: Continue to not use pesticides, to maximum extent practicable.
- Creek Cleaning, Maintenance, and Enhancement: Continue Annual pre-wet weather inspection cleaning. Revise process as warranted to comply with new permit conditions.
- Creek/Beach Cleanups, Trash Abatement, and Other Coordination with Local Volunteers: Continue collaboration with the Friends of Willow Creek.
- Litter Control: Consider implementing the Sustainability Committee Recommendations.

- Capital Projects: Continue to Implement BMPs in Project SWPPPs. Work with local advocates to scope water quality improvement projects for future consideration.
- Illicit Discharge and Creek Violation Complaint Response: Continue Coordination with MCSTOPPP, Marin CUPA, Marin Environmental Health, the Regional Board and Southern Marin Fire Protection District to respond to and address all illicit discharge incident complaints.
- New and Redevelopment Projects (Post-Construction): Continue to recommend use of *Guidance for Applicants: Stormwater Quality Manual for Development Projects in Marin County, a Low Impact Development Approach* on development proposals involving site reconstruction as may be revised to comply with new permit conditions
- Construction: Continue to inspect sites with regard to BMP/SWPPP Implementation and Maintenance.
- Business Inspections and Outreach Activities: Update processes as warranted to comply with new permit conditions. Continue to coordinate with Marin Environmental Health, Marin CUPA, Southern Marin Fire Protection District and Sausalito-Marín City Sanitary District regarding business operations that may impact water quality.

Stormwater Pollution Prevention in the **Town of Tiburon**

BACKGROUND

The Town of Tiburon, population 9,093 (2012 estimate), occupies 16 square miles—approximately five of which are dry land. The remainder is in the Bay. Once a railroad terminus, Tiburon’s downtown features many shops and restaurants. The remainder of the town is largely single-family residential, including some neighborhoods on steep hillsides.

Tiburon is home to many endangered species of plants and animals, some of which are found only on the Tiburon peninsula. Bay and wetland environments in and around Tiburon include the Romberg Tiburon Center for Environmental Studies and the Richardson Bay Audubon Sanctuary and Center. There are no year-round creeks within Town limits—only two seasonal channels established for flood control many years ago. Most development applications are for new or expanded residences. A Design Review Board considers all new buildings, additions, and exterior renovations. Development of tracts outside Town limits, but within the Town’s sphere of influence, have been a source of controversy over past decades. Construction has yet to begin on a few major projects.



Tiburon occupies most of Tiburon peninsula.

STORMWATER POLLUTION PREVENTION PROGRAM ORGANIZATION

Tiburon’s Stormwater Staff	
Activity	Responsible Person(s)
Stormwater Coordinator Public Information and Participation	Matt Swalberg, Engineering Technician
Municipal Maintenance Illicit Discharge Detection and Elimination/Outfall Monitoring	Joel Brewer Public Works Superintendent
Capital Improvement Projects/Drainage	Nick Nguyen Town Engineer
Construction Inspection	Fred Lustenberger Building Official
Planning Dept. Contact Development Approvals	Dan Watrous, Planning Manager Nick Nguyen
Commercial/Industrial Inspections/Outreach	Fred Lustenberger Joel Brewer Matt Swalberg

Matthew Swalberg is the Town’s Stormwater Coordinator, among other duties and responsibilities assigned to him. Joel Brewer, Superintendent of Public Works, supervises a crew of six employees in maintenance of streets and parks. The streets crew is responsible for inspecting, clearing and maintaining all storm drains. Town stormwater staff and their respective responsibilities are listed in the table to the left.

Tiburon’s stormwater program is funded through the Town’s General

Fund and through a stormwater impact fee of \$1/square foot of new impervious surface. All the town’s outfalls have been mapped to GIS. The town inspects all outfalls and catch basins before and after the rainy season.

The Town requires new developments to include on-site detention of stormwater to ensure peak flows from frequent storms, as well as rare large storms, are not increased. New developments include open space buffers of at least 50 feet on each side of the top of stream bank (100 feet from wetlands or if the parcel is < 5 acres). The Town requires grading be minimized and strongly discourages development on slopes exceeding 40 percent.

FEATURED ACCOMPLISHMENTS IN 2012-2013

The Town of Tiburon accomplished several stormwater pollution prevention program goals during the reporting period that are highlighted below. Overall implementation of the Town's stormwater program is detailed in the MCSTOPPP Annual Report.

- The Town adopted a Dog Walking Permit Program that applies to Town Open Space. The purpose of the program is to enhance the overall experience for all open space users and to protect the sensitive habitat areas in Tiburon. Dog walkers must obtain a permit to walk four to six dogs on specified fire roads located within Town Open Space, and no more than six dogs can be walked by one person. The permit program requires dog walkers to abide by the Town's Municipal Code regulations regarding dogs, including the requirement to properly dispose of pet waste. Signs are now posted on Town Open Space land that state "Carry Pet Waste and Remove".
- 2012-2013 Staff Training: Staff attended SMARTS training for second term Phase II Permit in Santa Rosa, as well as MCSTOPPP monthly meetings and second term Phase II Permit Meetings. In addition, approximately 8-9 staff attend biweekly Public Works staff meetings that include discussion of storm drain topics.
- Street and Storm Drain Maintenance and Outfall Monitoring: The Town completed the second year of storm drain flushing by cleaning out another 5,000 LF of storm drain line.
- Creek/Beach Cleanups, Trash Abatement, and Other Coordination with Local Volunteers: Public Works Staff assisted with litter and trash pick-up on both Coastal Cleanup Day and Earth Day.
- Litter Control: The Town installed trash receptacles at all Open Space trailheads.
- Capital Projects: The Town began the Storm Drain Repair Component of the Storm Drainage Master Plan.
- Business Inspections and Outreach Activities: The Town distributed 519 self-inspection forms with 2012 business license renewals.



- Public Involvement and Participation: Educational materials and flyers were posted at the Public Works counter and displayed in the public information rack in the Town Hall Lobby. In July 2012, an article was published in the Town's electronic newsletter, *Tib Talk*, that focused on boating protection and how boaters can protect and save the San Francisco and San Pablo Bays.

PRIORITIES FOR 2013-2014

The 2013-2014 priorities identified by the Town of Tiburon are listed below. Additional 2013-2014 priorities for MCSTOPPP and each local stormwater pollution prevention program will focus on optimizing the programs to effectively and efficiently meet the Year 1 requirements of the second term Phase II Permit.

- Street and Storm Drain Maintenance and Outfall Monitoring: Clean out the silt and debris from the 245 linear foot Trestle Glen / Tiburon Blvd concrete box culvert.
- Obtain permits to dredge the three-acre Railroad Marsh Detention Basin.
- Municipal Use of Pesticides: As required in the new Phase II Permit, develop and request Town Council adoption of Integrated Pest Management policy or ordinance by August 2014.
- 2013-2014 Staff Training: Staff may complete appropriate QSD and QSP coursework.
- Street and Storm Drain Maintenance and Outfall Monitoring: Complete a third year of storm drain flushing and repair 13 damaged storm drain lines.
- Municipal Use of Pesticides: Adopt IPM policy or ordinance to comply with Attachment G of the second term Phase II Permit.
- Capital Projects: Continue and expand repair phase to cover 13 locations.