

Chapter 4

PUBLIC EDUCATION PROGRAM

I. Introduction

Urban runoff pollution is caused by a variety of sources and actions including our everyday activities. Projects and routine maintenance done around the house and yard can contribute pollutants to the storm drain system if preventative measures are not taken. For example, over-using fertilizers and pesticides, or using them before it rains, can cause these chemicals to run off into the streets and gutter. Home auto care must be done with adequate secondary containment to prevent automotive fluids from leaking or spilling onto the pavement, where they will be washed into the storm drain the next time it rains. Waste motor oil and radiator must also be disposed of properly instead of being dumped into the nearest storm drain. Home painting and remodeling can also contribute pollutants to the storm drain. For example, paintbrushes should never be rinsed in the street gutters and unused paints should be recycled at the local household hazardous waste facility. Even the most basic household activities, such as putting the garbage out, can cause litter and debris to clog storm drains if the garbage can lids are not secured properly!

It is during these everyday activities that, for the most part, pollution prevention can be easy—especially if people are educated about the issues and taught how to make small changes in the way they do things. The City is currently implementing a Public Education Program. The purpose of the program is to educate the local community about the impacts of urban runoff pollution and to let residents know what steps they can take to reduce non-storm water discharges.

The Public Education Program objectives are as follows:

- Increase public awareness on urban runoff pollution issues.
- Educate the community about specific sources of pollutants and what people can do to reduce them.
- Foster participation through community-based projects or volunteer activities focused on pollution prevention.
- Decrease the amount of illegal dumping and polluted urban runoff that is discharged into the storm drain system.

This chapter focuses on the City’s education and outreach efforts to the residential community and general public. The outreach programs for commercial, industrial, construction, and development sectors are addressed in their respective chapters of the Storm Water Management Program (SWMP).

II. Pollutants of Concern and Target Audience

EPA guidance documents recommend that a public education program inform residents about the steps they can take to reduce storm water pollution such as the proper disposal of motor oil and garden chemicals. Other pollutants of concern commonly associated with residential practices include soap and detergents from car washing, paint and masonry products from home remodeling, and pesticides and fertilizers from garden and lawn care. The EPA recommends that the program be tailored to target specific audiences and communities that are locally appropriate. Additionally, EPA recommends that some educational materials and outreach focus on specific types of commercial and industrial businesses that are likely to have significant storm water impacts.

The target audiences are primarily the general public, which includes city residents, local government bodies, local businesses, and elementary school classes. The business audience includes local facility owners, managers, and employees, and business associations and trade organizations.

III. Program Elements and Best Management Practices

The City first determined which elements comprised the Public Education Program and then selected the most appropriate Best Management Practices (BMPs) in order to address the issues and pollutants of concern described above.

The Public Education Program includes the following elements:

- ❖ Development of Education and Outreach Efforts
- ❖ Education and Outreach Efforts
 - Pollution Prevention Messages
 - Storm Drain Inlet Stenciling
 - Public Events
 - Outreach Information for Residents
 - Outreach Information for Businesses
 - Clean Ocean Business Program
 - Monterey Bay Area Green Business Program
 - O'Neill Sea Odyssey Education Program
 - Pesticide Management Education Program (Our Water Our World)
 - Coastal Clean-Up Day
 - Earth Day Santa Cruz
 - Earth Vision Environmental Film Festival

- Volunteer Monitoring Programs-First Flush
- Public Education on the Restoration and Protection of Riparian and Wetland Areas
- SWMP List of Interested Parties
- City of Santa Cruz Website:
 - Environmental Compliance Section
 - Environmental Programs Section
 - City's Storm Water Management Plan (SWMP)
- ❖ Assessment of the Public Education Program
- ❖ Potential Future Programs

The program elements are described in more detail in the sections below. The selected BMPs are listed and described under each program element.

Development of Education and Outreach Efforts

The planning and development of education and outreach efforts, including pollution prevention messages and outreach materials, is an extensive project that will be ongoing and somewhat fluid in nature. The City will evaluate which types of educational programs are the most feasible and effective. Bi-lingual approaches will also be considered such as the publication of certain informational brochures in Spanish. The planning process involves several steps and many issues need to be taken into consideration such as:

- Which urban runoff issues should be targeted? Which issues are the most important and which are the easiest to resolve?
- Who should the education and outreach efforts be directed to? For example, the City might want to target homeowners, “do-it-yourselfer” auto repair residents, gardeners, kids, and teachers.
- What should the pollution prevention messages be?
- How should the City get the pollution prevention messages out? For example, how will outreach materials be distributed and how frequently? Should there be any seasonal timing?
- What education and outreach efforts can be conducted jointly with other programs, such as recycling?
- What education and outreach efforts can be conducted jointly with other agencies, such as the County of Santa Cruz or nearby cities?
- Sufficient funds and staff time available for each specific education and outreach effort.

The sections below and in Table PE-1 describe the City's efforts to distribute pollution prevention messages, create awareness, and disseminate information about storm water pollution issues. The City will work to develop new education and outreach efforts as appropriate.

Education and Outreach Efforts

The purpose of outreach and education efforts is to increase community awareness on urban runoff pollution and to discourage the amount of non-storm water discharges into the storm drain system. The City has already developed and planned a variety of efforts and programs that are described below. The City is continually working on different methods to distribute outreach materials and reach the various sectors of the community.

Pollution Prevention Messages

In 2002, the City began developing basic messages in order to help people understand that the storm drain and sanitary sewer are separate systems, and that storm drains flow directly to the nearest water body untreated. Also, the City is trying to convey the message that pollution prevention can be easy. Many people don't realize that even common household practices can result in pollutant discharges to the storm drain and that, with just a little care, these discharges can be prevented. To date, the City's pollution prevention messages include:

- “Only Rain Down the Drain”
- “Storm drains flow directly to local creeks, the San Lorenzo River, and into Monterey Bay without receiving any type of treatment”
- “Pollution Prevention Can Be Easy-most of the time it only involves making small changes in the way you do things around the house and in your yard.”

Storm Drain Inlet Stenciling

In the late 1990s and early 2000, the City applied thermoplastic stencils with the message “No Dumping, Flows to Bay” (with a fish image) on the storm drain inlets in the City's high use commercial areas, which are primarily within the “downtown” area. Stenciled inlets serve to both educate the public that the storm drains flow directly to Monterey Bay without treatment and to help prevent illegal discharges and dumping. In the Santa Cruz downtown area, the storm drain inlets flow to the San Lorenzo River and thus it is important to keep pollutants from being dumped into any downtown inlets as the River is listed for sediments, pathogens, and nutrients.

Thus, the City will take measures to replace worn stencils and to apply new stencils to storm drain inlets that were not done during the initial stenciling program. The new stencils may be applied either by the thermoplastic process or by painting. Additional stenciling (in exceedance of the measurable goals) will be done if additional funds are available.

BMP #PE-1: Replace Worn Stencils or Apply New Stencils to Storm Drain Inlets

Public Events

The City will continue to have booths or tables at local public events in order to conduct outreach and provide educational materials to the public. Events in the past have included the Public Works Week demonstration at the downtown farmers market in May, “Clean Water Day”

held at the Main Beach in August, and the “Shark Festival” which was held on the Municipal Wharf in September. Since some of these events have been discontinued, staff has recently participated in Earth Day Santa Cruz and Coastal Clean-up Day.

At these events, staff hands out brochures with pollution prevention information and answers questions from the people who stop by. Posters, such as the poster entitled “Storm Drains Lead Straight to the Ocean,” sponsored by the Monterey Bay National Marine Sanctuary, are also given away. The City’s list of annually recognized “Clean Ocean Businesses” (vehicle repair shops) is also provided. At Earth Day 2008, there were also recycling “games” for kids and prizes made out of recycled materials. Promoting recycling also helps protect water quality. For example, kids and adults both learn how to properly dispose of items which keeps waste out of both the landfill and our waterways.

In the future, City staff will participate in appropriate public events as they occur with a minimum of two events per year. Currently, City staff is committed to having a booth or table at the annual Earth Day Santa Cruz and Coastal Clean-up Day events although in future years other events may be attended in lieu of these due to staff availability or other factors including which events are the most appropriate and effective for program outreach and education.

BMP #PE-2: Participate in Public Events

Outreach Information for Residents

1. Informational Brochures:

The City identified specific sources of urban runoff pollution from everyday home activities that can be easily addressed through educational efforts. In 2002, the City developed and published three brochures of pollution prevention tips on how residents can reduce pollution from these home activities. The three brochures for residents are the following:

- ❖ Home Maintenance, Painting and Repair,
- ❖ Garden, Pool and Spa Maintenance, and
- ❖ Vehicle Repair and Washing

The brochures also include a telephone number for residents to call either for more information or to report spills and dumping incidents. Since all City residents are targeted, the brochures are given out at public events and are available at City buildings, such as the public libraries. Initially, Public Works Engineering staff distributed 500 copies of each brochure to the public library. Currently and in the future, staff will periodically check the main library and restock each of the three brochures when they are running low. The brochures are also available at the Public Works counter and are restocked as needed. In addition, the brochures are posted on the City’s website. Samples of the three brochures are included in Attachments #13-15.

BMP# PE-3: Distribute Informational Brochures for Residents

2. Door Hangers:

Door hangers are used when an illegal storm water discharge is investigated by an Environmental Compliance Inspector and determined to come from a private residence. If the resident is not home at the time, a door hanger is left on their doorknob. In addition to identifying the illegal discharge, the door hanger provides information to the resident on what causes storm water pollution and explains that storm drains flow directly to the nearest water body without any treatment. The door hangers were developed in 1999 and will continue to be used by the Environmental Compliance Inspectors. A sample door hanger is included in Attachment 6.

BMP# PE-4: Utilize Door Hangers As Needed By Environmental Compliance Inspectors

Outreach Information for Businesses

1. BMP Brochures:

The City has also developed brochures with both mandatory and recommended Best Management Practices (BMPs) for business owners and employees of local industry and commercial businesses.

In 1999, the City developed BMPs for Food Service Facilities. The BMP brochure was also translated into Spanish in order to ensure that Spanish speaking employees could review the brochure and become familiar with the BMPs. The City recently modified the BMP brochure for Food Service Facilities in 2003 to incorporate the new Phase II regulations prohibiting the discharge of wastewater from pressure washing, steam cleaning, and hand scrubbing to the storm drain system. The new brochure was immediately posted on the City's website, in both English and Spanish, and both versions were distributed during the subsequent round of annual Food Service Facility inspections. The current BMP brochures for Food Service Facilities, in English and Spanish, are included in Attachments 20 and 21 respectively.

The City began developing BMPs for Vehicle Service Facilities in 2000 and 2001 in anticipation of implementing a program for these facilities. In May 2003, the BMP brochure was also translated into Spanish in order to ensure that Spanish speaking employees could review the brochure and become familiar with the BMPs. Each year during the annual site inspections, the BMP brochure in both in English and Spanish is made available by the Environmental Compliance Inspectors who carry copies along with them to each site inspection. Both brochures are posted on the City's website.

BMP brochures will be distributed at all new food and vehicle service facilities during the initial site visit by the Environmental Compliance Inspectors. In addition, once during the 5-year Storm Water Permit period, brochures will be distributed at all food and vehicle service facilities either during the annual site visits by the Environmental Compliance Inspectors or by mail.

The BMP for Retail and Commercial Businesses was developed in December 2002 and is distributed as needed to owners or managers of retail and commercial sites where a violation or illegal discharge has been reported.

In 2003, the City has developed mandatory Best Management Practices for construction work. In December 2003, a BMP brochure,, entitled “Best Management Practices for Construction Work” was published. The City distributes the brochure to contractors and homeowners when they apply for a construction/building permit. A copy of the BMP brochure is included in Attachment 9.

In June 2003, two BMP handouts were developed and published for construction work specifically for “Painting” and “Masonry and Concrete Work.” These handouts, comprised of BMPs excerpted from the BMP brochure for construction work, was created so that the Environmental Compliance Inspectors could have a one-page summary of BMPs that could be handed out while in the field and an illegal discharge related to either of these activities was noticed or reported to them. The handout for painting work was republished July 18, 2003. Copies of these handouts BMP brochure are included in Attachment 10-11.

In 2003, in accordance with the General Permit, the City developed post-construction BMPs by incorporating the design standards contained in Attachment #4 into the City’s mandatory “Best Management Practices (BMPs) for Development and Remodeling Projects.” In January 2004, the City’s mandatory “BMPs for Development and Remodeling Projects” were developed into a brochure for easy distribution to contractors, architects, developers, home owners and any other permit applicants for development and redevelopment projects. The BMPs were then revised in June 2004 and again in March 2007. A copy of the current BMP brochure is included is Attachment 12. Please refer to Chapter 6 for information regarding the distribution of the “Best Management Practices (BMPs) for Development and Remodeling Projects.”

These outreach material are discussed in further detail in their respective sections of the SWMP and are included in the Attachments.

BMP #PE-5: Distribute Informational Brochures for Businesses

2. Articles in Local Newsletters:

In the past, the City has run articles on storm water issues in local newsletters for both the general public and for businesses. For example, the City’s Municipal Utilities newsletter, the *SCMU Review*, is published twice a year and mailed to each household in the utilities district, which includes the entire City and portions of the County. (SCMU stands for Santa Cruz Municipal Utilities). In October 2002, the Public Works Department ran an article entitled “BEACH POSTINGS-What Can You Do To Prevent Them?” The article, which was almost an entire page of the four-page newsletter, stated that currently the reason for most beach postings and closures is not industrial pollution but pollution coming from our own everyday activities. The article explained the difference between the sanitary sewer and storm drain systems and why it is important not to discharge chemicals, such as motor oil, soap, and excess fertilizers and pesticides, outside. The article also included a list of pollution prevention tips for home activities such as:

- Clean up after your pets

- When washing your car, make sure the soapy water goes onto lawn or dirt, or take your car to a carwash where the water is recycled or discharged to the treatment plant
- Use drip pans and absorbent materials to catch drips and leaks when working on your car at home
- Never apply fertilizers, pesticides, or herbicides before it rains
- Never rinse paint brushes, masonry tools, mixing trays, or containers at the curb or in a storm drain
- Dispose of carpet cleaning and window washing wastewater via an indoor drain
- Don't dump your RV's gray water or holding tank into the street, gutter, or storm drain.

The City has also conducted outreach to the business community by running informational pieces in the Chamber of Commerce and the Downtown Association newsletters. In fall 2002, the City provided an article for publication in both newsletters on the upcoming new storm water regulations regarding sidewalk cleaning. Specifically, the City wanted to make local retail and commercial businesses aware that if pressure washing or steam cleaning equipment, or hand scrubbing is used to clean sidewalks and other outdoor areas the discharge of wastewater to the storm drain system is prohibited as of March 10, 2003. The City wanted to get the message out well in advance of the March 2003 deadline so that businesses would have a chance to adjust their sidewalk and other outdoor cleaning practices, or to modify their contracts with cleaning services.

In addition, the City has discussed with both organizations the possibility of having additional articles and including informational flyers on storm water regulations and related issues in each of their newsletters. Both organizations were receptive to the idea so the City intends to utilize this avenue in the future whenever significant issues come up that relate to local businesses.

Clean Ocean Business Program

The City is currently conducting, and will continue to conduct, an incentive program, for vehicle service facilities, named the Clean Ocean Business (COB) Program. This program began in 2000 and is also described in the chapter on the Commercial Facilities Program. There are approximately 110 vehicle service facilities in the City limits. Annual site inspections will continue to be at each facility for dual purposes: 1) to evaluate compliance with regulations and 2) to determine if the facility qualifies for the annual COB recognition. Facilities that are in compliance with the City's BMPs, the storm water ordinance, and sanitary sewer ordinance are recognized.

Annual recognition includes quarter to full-page size advertising in local newspapers/entertainment guides a minimum of once per year. The ads, which began in 2001, list the name of each facility recognized as a Clean Ocean Business and explains that these businesses have taken extra measures to protect the environment. This advertising serves, not only to benefit the businesses being recognized, but also to educate the reader. Additional advertising, particularly in the local newspapers, will be conducted as the budget permits

because increased advertising is additional motivation for the shop owners to achieve the COB recognition. The advertising also serves to familiarize the public about the program and, hopefully, will stimulate people to ask their own auto shop if it is a Clean Ocean Business.

Annually, each recognized business is also given two 6-inch, brightly colored decals that are inscribed with “Clean Ocean Business,” the current year, and the City’s logo. The decals are designed to be highly visible to customers from a distance so, for example, they can be posted on the shop window or wall. Also, businesses can display each annual decal (the background color is changed from year to year) in a row or all together to show customers that they have a “track record” at implementing pollution prevention practices. A sample of the decal is included in Attachment #7.

In 2004, the City is expanding its Clean Ocean Business program to include Food Service Facilities. There are approximately 300 food service facilities in the City limits. In 2003, the annual site inspections conducted at each facility were used to evaluate compliance and determine recognition for the 2004 calendar year. As with the Vehicle Service Facilities, annual site inspections will continue to be conducted at each facility for dual purposes: 1) to evaluate compliance with regulations and 2) to determine if the facility qualifies for the annual COB recognition. In 2007, the City raised the COB minimum standards to include the requirement that a business must not use polystyrene “to-go” containers in order to qualify as a COB in future years. This was done in order to reduce the amount of non-recyclable material that is deposited in the City’s landfill; to help reduce litter and blight on our beaches; and to help minimize aquatic pollution from these materials which tend to break into smaller and smaller pieces and do not readily biodegrade.

BMP #PE-6: Implement the Clean Ocean Business Program

Co-sponsored or Supported Programs with Other Agencies and Local Non-Profit Organizations

The City co-sponsors and/or supports a variety of programs and public events with other public agencies, such as the County of Santa Cruz, and local non-profit organizations. The City supports these programs and events in order to further or broaden our storm water education efforts, and to support the work by other local groups on a particular or specific issue of storm water pollution. The programs or events co-sponsored or supported by the City are briefly described below.

Monterey Bay Area Green Business Program

The City has participated in the Monterey Bay Area Green Business Program (MBGB) since December 2006. The MBGB is a free incentive program for business to become Green Certified. City staff is available to provide technical assistance to each business in order to achieve the program goals. Each business must meet the program’s minimum standards in addition to being in compliance with all local, state, and federal regulations. The four main program areas are pollution prevention-which includes storm water pollution, water conservation, energy conservation, and reuse and recycling.

In the City, each business receives a minimum of 4 site visits to evaluate the business' compliance with the program minimum standards in each of these four main areas and provide technical assistance. The City sends the following to each applying business: a specialist from the Environmental Compliance Division to assess their storm water and sanitary sewer pollution prevention practices; a specialist from the Water Conservation Division to assess water conservation, and a specialist from the Refuse and Recycling Division to assess the business reuse and recycling practices. The energy conservation portions of the audits are done by staff from a local environmental group, Ecology Action, through their Right Lights grant funded program. If a business has not achieved all the minimum standards at the time of each audit, then staff will conduct follow-up with the business which may include additional site visits.

The City typically begins the Green Business certification (audit) process at a rate of 3 applying businesses per month except for the months of December, January, July and August which are broken up by holidays, the City winter closure period and staff vacations. Thus, in January, July and August, staff will begin the certification process at a rate of 2 businesses per month. Staff will not commence any new applicant audits in December since this is generally not a good time to visit most businesses due to the holidays. Thus, the City will begin the certification (audit) process for 30 businesses per year.

On average, it takes a business between 2 to 6 months to complete the Green Business certification process. Unfortunately, not all businesses that start the certification process actually complete it and become a *Certified Green Business*. However, between December 2006 and July 31, 2008, the City certified 31 Green Businesses.

The City's participation in the MBGB also includes financial support for the Green Business promotional program, which includes newspaper and yellow pages print ads, TV ads, and radio spots. Wherever possible in the advertising, the names of the certified Green Businesses are included. For example, currently a full page Green Business Program ad runs once a month in one of the local newspapers. Every other month this ad lists every Green Business in the Santa Cruz County area. City certified Green Businesses are also listed on the City's website and on the Monterey Bay Green Business website. Thus, this program serves not only to educate local businesses about pollution prevention and resource conservation, but it also increases public awareness on these topics.

BMP #PE-7: Partner and Co-Sponsor the Monterey Bay Area Green Business Program

O'Neill Sea Odyssey Education Program

The O'Neill Sea Odyssey is a non-profit organization that provides a "hands-on" marine and watershed educational program to school groups between fourth and sixth grade. The program consists of a three-hour class conducted both at the as needed when illegal discharge suspected but resident not home Center and aboard a 65-foot catamaran. Students are taught about marine life, ecology, and other related topics. The program emphasizes the human influence on the ocean and marine life, and teaches about storm water pollution and its impact on the environment. O'Neill Sea Odyssey also provides an educational packet to the schoolteachers so that the kids learn about marine ecology in their own classroom in advance of their half-day at

the Center. O'Neill Sea Odyssey also requests that the class conduct some type of community service related to the environment in exchange for participating in the program (schools are not charged a fee).

For many kids, this is their first experience on a boat and a great way for them to receive an unforgettable, close-up lesson on the marine environment and the effects of water pollution. Beginning in 2003, the City has provided annual storm water funds to sponsor local school classes in the O'Neill Sea Odyssey Education Program. The City contributes annual funding from the storm water budget to pay for approximately 10 City of Santa Cruz school classes, which is equivalent to approximately 300 children, to take the three-hour class during the school year. The funds are used towards the storm water education portion of each class, which includes a watershed demonstration and a session called "ocean impacts lessons."

BMP #PE-8: Support for O'Neill Sea Odyssey Education Program

Pesticide Management Education Program-Our Water Our World Program

This regional partnership program is led by Ecology Action and the co-sponsors include the City of Santa Cruz, the County of Santa Cruz, the City of Watsonville, the Monterey Storm Water Education Alliance, the City of Salinas, and the Salinas Valley Solid Waste Authority. The program was also funded by a grant from the California Integrated Waste Management Board.

The Regional Our Water Our World Program focuses on reducing residential pesticide, fertilizer and garden chemical use by offering Integrated Pest Management (IPM) solutions to home gardeners. The Our Water Our World program promotes IPM and the use of less-toxic pesticides in many garden and hardware stores in both the Santa Cruz and Monterey areas. Within the City of Santa Cruz limits, there are two garden centers/stores and both participate in the program.

The program works with participating retail stores to raise public awareness about using alternatives to hazardous pesticide, herbicides, and fertilizers in order to address the water quality problems associated with these types of home products. The program trains store employees to communicate IPM information to customers. The program also provides each participating store with free less-toxic pest management fact sheets for customers, product shelf talkers and displays. Budget allowing, the program also conducts in-store tabling events for store customers and workshops. Prior to the in-store events, an ad is run in one of the local newspapers announcing the event, which also provides outreach to the public and advertisement for both the event and the participating store. The program also has an IPM information hotline number (to the Ecology Action IPM program specialist) for residents to call for advice on less-toxic pest management. The Our Water Our World logo is displayed on the fact sheets and in the advertising for in-store events.

BMP #PE-9: Partner and Co-Sponsor of Our Water Our World Program

Coastal Clean-Up Day

The City is a local co-sponsor of Coastal Clean-Up Day that occurs along the California Coast each year in mid-September. In Santa Cruz County, the local event organizer is Save Our Shores in partnership with the California Coastal Commission. The City contributes to this highly visible event because it publicizes the issues of litter and marine/river pollution and it also draws in the general public. It is an event that residents of all ages, including students and families, can participate in. In addition, volunteers collect many pounds of trash, cigarette butts, and recyclables from our beaches and waterways each year. Typically on Coastal Clean-Up Day, clean ups are scheduled at least two local beaches within the city limits and at one location along the San Lorenzo River. In 2007 and 2008, Save Our Shores also coordinated kayak and SCUBA clean ups at the Santa Cruz Municipal Wharf.

The event's local results, including the types and amounts of trash collected, are tabulated by Save Our Shores and added to the state-wide totals tallied by the Coastal Commission and other event partners. The Coastal Clean-Up Day results are then released to the public and the press immediately after the event.

BMP #PE-10: Co-Sponsor of Coastal Clean-up Day

Earth Day Santa Cruz

In April 2008, the City was one of the organizers and co-sponsors of Earth Day Santa Cruz 2008. The event was organized by a partnership of local agencies and non-profits including the City, the County of Santa Cruz, Ecology Action, and Save Our Shores. Local corporate sponsors were secured to fund and advertise the event, in addition to funding provided by the City and County of Santa Cruz. The Earth Day event, which had not been held in Santa Cruz for some years, was re-established to highlight current environmental issues, including water pollution and conservation, to the general public. In 2008, a visible downtown Santa Cruz location was chosen to attract families, foot traffic, and the general population. The event showcased kids' activities while also disseminating adult environmental outreach. It also showcased environmental goals such as zero waste, alternative transportation, and solar power.

City staff had several booths at the event including one designated for storm water outreach, Green Business Program advertising, and Waste Reduction/Recycling. The City will participate in future Earth Day events (if located within the City limits) unless, as previously mentioned, staff attends a different environmental event in lieu of this one due to staff availability or other factors including which event is the most appropriate and effective for program outreach and education.

BMP #PE-11: Co-Sponsor and/ or Participate in Earth Day Santa Cruz

Earth Vision Environmental Film Festival

Since 2007, the City has contributed funds towards the local Earth Vision Environmental Film Festival. This annual film festival showcases amateur films on environmental topics at two local venues over a four day period. Each year, the film topics include ocean and river pollution,

marine ecology, habitat and species decline, and other environmentally related issues. The City will support future Film Festival events as the festival contributes to increasing public interest and education on these issues.

BMP #PE-12: Support for Earth Vision Environmental Film Festival

Volunteer Monitoring Programs-First Flush

First Flush is an annual region-wide volunteer monitoring event coordinated by the Monterey Bay Sanctuary Citizen Watershed Monitoring Network and implemented in the Santa Cruz area by the Coastal Watershed Council. First Flush is conducted simultaneously, during the first major rainstorm of the rainy season, at participating cities throughout the Monterey Bay area. Resident volunteers collect storm water samples, which are then sent to a laboratory for analyses. The volunteers receive training in sample collection prior to the First Flush event. The findings of the First Flush event are released to the news media and are generally published by all the major newspapers. First Flush offers a snapshot view of the amount of pollutants that are released to our storm drains and Monterey Bay during the first major rainstorm of the winter. The publicity surrounding First Flush increases public awareness on storm water pollution and educates them on the fact that, just because pollutants are not necessarily seen, they can remain on the ground until they are flushed into the storm drain system and ocean by a major rainfall.

Since 2002, the City has sponsored the annual First Flush events. Each year, the Coastal Watershed Council recruits local volunteers and conducts training on sample collection in early fall. Sampling is conducted at four sites within the City during the season's first rainstorm. In the last few years of the program, dry weather monitoring (in September) was added in order to provide a "before" picture as a data comparison to the first rainfall pollutant concentrations. The Monterey Bay Sanctuary Citizen Watershed Monitoring Network, in conjunction with the Coastal Watershed Council, produces the final reports. The City will sponsor First Flush in future years.

BMP #PE-13: Co-Sponsor First Flush

Public Education on the Restoration and Protection of Riparian and Wetland Areas

The City-Wide Creeks and Wetlands Management Plan (*Management Plan*), which is described in Chapter 6: Post Construction Storm Water Management Program, included a habitat enhancement and restoration component. One of the major goals of this component is to restore and manage native riparian and wetland habitats so they provide suitable and sustainable habitat for native plant and animal species, and require little maintenance in the long-term. Several other goals for the project involve minimizing maintenance efforts and minimizing opportunities for the establishment of invasive, non-native plant species.

Significant opportunities exist to improve, enhance, and manage riparian and wetland resources within the City's watercourses and wetlands. Improvements to these resources will benefit the overall biodiversity of the City, conserve native plant communities, protect and manage rare species and their habitat, contribute to improved water quality in the watercourses, and

contribute to the aesthetic resources of the City. These opportunities are present throughout the City's watercourses and wetlands; actions will vary depending on the vegetation type and its location in the City. With the exception of actions required as part of a development permit, most restoration and enhancement actions will require the participation of willing landowners.

Landowners should be encouraged to preserve and manage native habitats on their properties. The City is working to establish an incentive program to encourage landowner participation in restoring and enhancing riparian and wetland resources. One option is for the City to collaborate with the Santa Cruz Resource Conservation District (RCD) or other watershed groups to identify potential partnerships for restoration projects. These groups may also be able to assist the City in sponsoring public workshops on restoration planning and techniques.

The *Management Plan* recommends that the City, in conjunction with other agencies or non-profit groups, provide information to landowners and residents on ways to restore and enhance riparian habitats and wetlands. Thus, as detailed in Chapter 6, the City will develop education materials such as a brochure or one-day workshops to educate residents on specific actions such as:

- How to remove non-native invasive plant species;
- How to install and maintain native landscaping, including habitat restoration;
- How to control erosion and repair eroded stream banks;
- How to encourage wildlife into your backyard; and
- How to decrease non-point source pollution.

BMP PE #14: Develop and Implement an Education Program Addressing the Restoration and Protection of Riparian and Wetland Areas

SWMP List of Interested Parties

The City has already begun development of a SWMP List of Interested Parties. Prior to the July 25, 2008 submittal of the SWMP, Revision #3, the City send an email notice to those on the list notifying them of our submittal and requesting comments on the SWMP. The City will continue to add names to this electronic list in order to educate the public and interested parties on the SWMP latest developments and public meetings.

BMP #PE-15: Continue Development of the SWMP List of Interested Parties and Use It for Notification of SWMP Developments and Public Meetings

City of Santa Cruz Website

1. Environmental Compliance Section:

In March 2002, the City added web pages, entitled "Environmental Compliance," to the City web site. These new web pages detail the Public Works Environmental Compliance programs, which focus on reducing the amount of pollutants and harmful substances that are discharged to

both the sanitary sewer and storm water system. The new web pages enable business owners and residents to review regulatory and pollution prevention information on-line. The site also serves as a resource to other agencies and the general public interested in our Environmental Compliance programs. The site includes informative pages on the following topics:

- Frequently Asked Questions
- How to Report Spills, Dumping Incidents and Back-ups
- Vehicle Service Facilities recognized as Clean Ocean Businesses
- Residential Programs and Information
- Who Needs a Permit?
- Retail and Commercial Business Programs
- Food Service Facility Program
- Vehicle Service Facility Program
- Industrial Waste Discharge Program
- Liquid Waste Haulers Program

In addition, the *Environmental Compliance* home page also includes links to educational materials published by the City, such as BMPs for businesses and pollution prevention guidelines for residents. There are also direct links to the City's Sewer Use and Storm Water Ordinances, and a link to the web sites of other related agencies.

2. Environmental Programs Section:

The City developed an Environmental Programs Section on the City of Santa Cruz Website in September 2003 in order to have a web page that provides the viewer with a complete overview of all the City's environmentally related programs. The page consists of a brief description of each program and a link to that program's web pages.

3. Storm Water Management Plan (SWMP):

The City posted the first submittal of the Storm Water Management Plan (SWMP) on the City of Santa Cruz Website in April 2003, the second submittal in April 2004 and the third in July 2008. The City will post subsequent drafts of the SWMP and the final SWMP, once it is approved by the RWQCB, so that the SWMP may be readily viewed by the public, stakeholders, and other agencies.

BMP #PE-16: Maintain Environmental Programs and Environmental Compliance Web Pages, and post the City's Draft and Final Storm Water Management Plan (SWMP) on the City's Website

Assessment of the Public Education Program

The City will continue to assess the Public Education Program in order to improve and expand it as necessary to implement an effective storm water outreach and education program. In addition, other measures to improve program effectiveness as directed by the RWQCB will be implemented as described below:

Community-Based Social Marketing Strategies

The City will assess community-based social marketing strategies and incorporate them into the Public Education Program where appropriate. According to the RWQCB, “community-based social marketing is based upon research in the social sciences that demonstrates that behavior changes is most effectively achieved through initiatives delivered at the community level which focus on removing barriers to an activity while simultaneously enhancing the activities benefits.” The City will thus consider the techniques of community-based social marketing when implementing and assessing the Public Education Program and developing future new programs.

BMP #PE-17: Assess Community-Based Social Marketing Strategies and Incorporate Them Where Appropriate

Surveys to Assess Program Effectiveness

The City will conduct surveys to assess the effectiveness of the Program’s education efforts. As part of this measure, a baseline evaluation survey will be conducted in Year 4 and an evaluation survey will be repeated every 5 years thereafter.

BMP #PE-18: Conduct Surveys to Assess the Effectiveness of the Education Effort. Conduct A Baseline Evaluation Survey in Year 4 and Conduct an Evaluation Survey Every 5 Years Thereafter.

Potential Future Programs

The City will implement additional programs in the future as needed and as indicated in the section above resulting from assessments of program effectiveness, community-based social marketing strategies, and surveys. The City is also interested in implementing any other appropriate programs that can be conducted region-wide with the County of Santa Cruz or neighboring cities.

IV. Program Implementation

City Personnel

The Public Works Department will conduct the public education efforts. Both Public Works Engineering and Environmental Compliance staff are currently conducting the education and outreach efforts. Table 4-1 below itemizes each BMP and the responsible department/division:

Implementation Timetable and Measurable Goals

The City has established a timetable for implementation of the Public Education Program. Measurable goals will be used to assess the City’s efforts to reduce urban runoff pollution and to evaluate the success of the BMPs each year. A list of the BMPS, measurable goals, and the implementation schedule are detailed in Table 4-1 below:

Table 4-1

BMPs, Measurable Goals, and Implementation Schedule

BMP #	BMPs	Measurable Goals	Responsible Dept. or Division	Implementation Schedule
	Education and Outreach Efforts			
PE-1	Replace Worn Stencils or Apply New Stencils to Storm Drain Inlets	24 stencils replaced or newly applied annually	Public Works: Engineering Public Works: Streets	Year 1-5
PE-2	Participate in Public Events	2 public events per year	Public Works: Engineering Public Works: Environmental Compliance	Year 1-5
PE-3	Distribute Informational Brochures for Residents	Distribute 200 brochures per year	Public Works: Engineering Public Works: Environmental Compliance	Year 1-5
PE-4	Utilize Door Hangers As Needed By Environmental Compliance Inspectors	Distribute door hanger at 100% of residences when responding to a complaint and the resident is not home	Public Works: Environmental Compliance	Year 1-5
PE-5	Distribute BMP Brochures for Businesses	1. Distribute brochures at 100% of new food and vehicle service facilities during the initial site visit by the Environmental Compliance Inspector. 2. Distribute brochures at 100% of food and vehicle service facilities once during the 5 year Permit period either	Public Works: Environmental Compliance	Year 1-5

BMP #	BMPs	Measurable Goals	Responsible Dept. or Division	Implementation Schedule
		during the annual site visit by the Environmental Compliance Inspector or by mail.		
PE-6	Implement the Clean Ocean Business Program	1. Annual inspections of 100% of food and vehicle service facilities 2. Annual recognition for Clean Ocean Businesses	Public Works: Environmental Compliance	Year 1-5
PE-7	Partner and Co-sponsor of the Monterey Bay Area Green Business Program	Initiate the Green Business certification (audit) process for 30 business applicants per year	Public Works: Engineering Refuse & Recycling Environmental Compliance Water: Water Conservation	Year 1-5
PE-8	Support for O'Neill Sea Odyssey Education Program	Annual support for 10 school classes or 300 students per year	Public Works: Engineering	Year 1-5
PE-9	Partner and Co-sponsor the Regional Pesticide Management Education Program- <i>Our Water Our World Program</i>	1. In-store staff training at the 2 local participating stores 2. Restocking individual pest management flyers at the 2 stores	Public Works: Engineering	Year 1-5
PE-10	Co-sponsor Coastal Clean-Up Day	Sponsorship of the event in Santa County at the Platinum level	Public Works: Engineering	Year 1-5
PE-11	Co-Sponsor & Participate in Earth Day Santa Cruz	2,000 people attending event	Public Works: Engineering	Year 1-5
PE-12	Support for Earth Vision Environmental Film Festival	300 people attending the event	Public Works: Engineering	Year 1-5
PE-13	Co-sponsor First Flush	1. 15 volunteers conducting the monitoring 2. Annual report prepared by the Monterey Bay Sanctuary Citizen	Public Works: Environmental Compliance	Year 1-5

BMP #	BMPs	Measurable Goals	Responsible Dept. or Division	Implementation Schedule
		Watershed Monitoring Network.		
	Education and Outreach for Restoration and Protection of Riparian Areas			
PE-14	Develop and Implement an Education Program Addressing the Restoration and Protection of Riparian and Wetland Areas	1. Complete development of program plan 2. Implementation of educational measures, i.e. hold workshops, distribute brochures	Planning Public Works: Engineering	Year 4 Year 5
PE-15	Continue Development of the SWMP List of Interested Parties and Use It for Notification of SWMP Developments and Public Meetings	1. Add 100% of those requesting to be placed on list 2. Annual notifications	Public Works: Engineering	Year 1-5
PE-16	Maintain Environmental Programs and Environmental Compliance Web Pages, and post the City's Draft and Final Storm Water Management Program (SWMP) on the City's Website	1. Environmental Compliance Web Pages 2. Environmental Programs Web Pages 3. SWMP Posted on City Web Site	Public Works: Environmental Compliance Public Works: Engineering	Year 1-5
	Assessment of the Public Education Program			
PE-17	Assess Community-Based Social Marketing Strategies and Incorporate Them Where Appropriate	Incorporation of at least 1 new public education method	Public Works: Engineering	Year 5

BMP #	BMPs	Measurable Goals	Responsible Dept. or Division	Implementation Schedule
PE-18	Conduct Surveys to Assess the Effectiveness of the Education Efforts. Conduct a Baseline Evaluation Survey in Year 4 and Conduct an Evaluation Survey Every 5 Years Thereafter.	Survey results that provide feedback on Program effectiveness and indicate areas that need improvement or change	Public Works: Engineering	Year 4 and every 5 years after that

Table 4-1: Responsible Department or Division Contact Information

Public Works Department: Engineering
Associate Civil Engineer, (831) 420-5428

Public Works Department: Environmental Compliance Office, Wastewater/Pretreatment Division
Laboratory/Environmental Compliance Manager, (831) 420-6045

Planning Department: Current Planning
Principal Planner, (831) 420-5100

V. Program Documentation and Reporting

The City will maintain records to document program implementation and annual progress. The City will report the results of the program in the annual SWMP report to the Regional Water Quality Control Board. The report will include information and a summary of the progress made relative to the measurable goals.