

CHAPTER 4

PUBLIC EDUCATION AND OUTREACH



Chapter 4.0 – Public Education and Outreach

Education and outreach are key components of a successful storm water program. This Public Education and Outreach Plan cuts across the compliance issues and is embedded in many of the MS4 permit requirements. This section describes the City’s plans to educate businesses, residents and targeted groups on minimizing impacts on the municipal separate storm sewer system (MS4).



Outreach workshop

The following excerpt is from the permit describing the requirements for the Public Education and Outreach efforts:

“D.1.a Public Education and Outreach

Within one (1) year of the effective date of this permit, the Permittee shall develop, submit, and implement a comprehensive education and involvement program for decision-makers, industrial and commercial businesses, construction operators, homeowners, university students, and school children, and the general public. The SWMP shall include a written public education plan for how the Permittee will reach all targeted audiences and implement the permit requirements described below.

(1) Targeted Groups. The Permittee shall address the following targeted groups in the public education plan, and shall describe outreach activities and anticipated frequencies that each activity will be conducted over the permit term:

- *Construction industry*
- *Industrial facilities covered by the NPDES permit program*
- *Visitor industry such as hotels, condominiums, and restaurants in Waikiki*
- *Commercial businesses such as automobile repair and maintenance, retail gasoline outlets, and restaurants*
- *Businesses involved in fire sprinkler testing, fire department training, and exterior building washing operations*
- *Any other source that the Permittee determines may contribute a significant pollutant load to its MS4”*

4.1 Targeted Groups

As stated in the permit, the City will reach out to targeted groups that include:

- Construction Industry
- Industrial Facilities
- Visitor Industry
 - Restaurants
 - Hotels
 - Condominiums
- Commercial Businesses
 - Auto repair shops
 - Gas Stations
- Businesses involved in fire sprinkler testing, fire department training and exterior building washing operations
- Any other source that the Permittee determines may contribute a significant pollutant load to its MS4

Outreach and educational programs such as workshops, speaking opportunities, brochures, trade shows and expos, and training are some of the activities that will be pursued. As appropriate education and outreach activities are identified the calendar on the City's website will be updated. Depending on the results of these activities and feedback from the targeted groups, the outreach efforts may or may not change over time.

Inspections of industrial facilities are performed by the City to investigate compliance with BMP procedures. If a violation is evident, the City will issue a letter of warning to the industrial site manager then conduct a follow-up visit to see if the problem was fixed. If the problem is not resolved, the City will issue an informational notice of violation (NOV) that may include an administrative fine (\$1,000 minimum). Brochures will also be left with the facility.

The City will also work with the private facilities owners to determine other opportunities for educating these businesses on existing regulations, enforcement procedures and BMP activities that will reduce pollutants into the MS4s. Workshops, seminars, conferences and training material are some of the means that can be used for educational outreach efforts.

Field screening will continue to be conducted to monitor businesses that have a high potential of illicit discharges. Violators will be contacted and appropriate measures will be conducted to report illegal and illicit discharges. Fact sheets and brochures will be prepared and distributed to private facility owners.

Outreach efforts will also be conducted based on the results of the annual survey or identified from complaints received. When these types of polluters are identified, outreach efforts will target these groups.

4.2 General Public

Public education and outreach to the general public performs a vital role in storm water management. The two principal goals are to raise awareness and effect behavior change.

The following citation is from the permit and identifies what the City requirements are for the outreach to the general public.

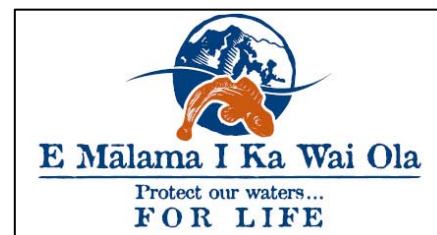
“D.1.a.(2) General Public. The Permittee shall include in the public education plan the following activities, with anticipated frequencies that each activity will be conducted over the permit term:

- *Public Service Announcements (PSAs)*
- *Adopt-A-Stream Program*
- *School programs*
- *Distribution of brochures*
- *Participation in special events (e.g., Clean-A-Reef) and exhibits*
- *Website*
- *Pesticides, herbicides, and fertilizer use program”*

As stated in the permit requirements the following programs are already in place to educate the general public:

- “E Malama I Ka Wai Ola or Protect Our Waters ... For Life” brand logo
- Reorganized website
- Adopt-A-Block Program
- Adopt-A-Stream Program
- Education/Outreach in Schools
- Alternative information sources, including key chains, bumper stickers, refrigerator magnets, water tattoos, rack cards with pollution tips
- Train the Trainer Workshop educating teacher and the public
- Storm Drain Stenciling
- Earth Day Activities (April)
- Make a Difference Month Activities (October)

The logo, E Malama I Ka Wai Ola or Protect Our Waters ... For Life, is the brand campaign that incorporates the ahupua`a concept of managing water as it flows from the mountain to the sea. The logo also captures the movement of o`opu, the City’s environmental mascot and biological indicator of a healthy stream.



New logo

Programs such as the Adopt-A-Block, Adopt-A-Stream, and Storm Drain Stenciling listed above are being done in various schools and

communities. The number of volunteers that participate in these events has increased significantly over the past two years.

The City has reorganized their website for storm water materials to not only educate the public and target groups, but also ensure greater involvement and compliance with the Storm Water Management Plan. The City has developed partnerships that make it easier for people to volunteer and get involved using the online contact information and calendar of events (<http://www.cleanwaterhonolulu.com/storm/calendar>). This calendar identifies specific dates and locations of public education and outreach activities. As new events are identified and determined, the calendar will be updated accordingly.

The website also includes the following:

- NPDES permit requirements
- Regulatory forms and fact sheets with best management practices (BMPs) on spill prevention and good housekeeping that are available to download
- Glossary
- News
- Media library with TV and radio public service announcements.

The City has also launched a public service announcement (PSA) contest with the schools. The PSA will be judged and awards given to the top three finalists. These PSAs will be aired on local television stations.

Messages on trash and used motor oil for City-wide public outreach, including advertisements with KHON2 TV, KCCN and KHUI radio, and the Victoria Ward movie theaters were also used in the community based outreach strategy. The community based public relations component focused on grass roots outreach using posters, flyers and student produced public service announcement (PSAs) for schools, organizations, associations and other community groups.

**BE AN EVERYDAY
ENVIRONMENTAL
HERO**



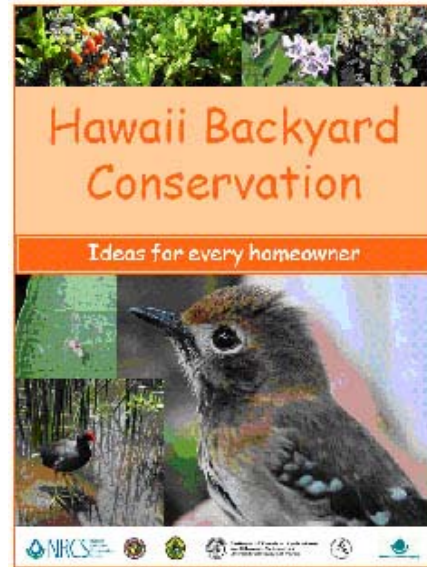
*Everyday
Environmental
Hero Logo*

Other PSAs sponsored by the City are aired on the major television and radio stations. Advertisements are also printed in the local newspapers and magazines. Posters were also placed on the City's 525 buses.

An "Everyday Environmental Hero" campaign will begin in 2007. The "Everyday Environmental Hero" is the citizen who plays a role with specific actions that help reduce polluted runoff. This campaign will award businesses or individuals with a certificate honoring them for being conscientious environmental stewards. The certificates will be signed by the Mayor and presented at special events planned by the City. The Environmental Hero campaign will include all aspects of the media and will be aired on television and radio. An article about each environmental hero and the contributions made to prevent pollution will be printed in the local newspapers.

One example of a multi-agency cooperative project was the “Hawaii Backyard Conservation” booklet done with the U.S. Department of Agriculture Natural Resources Conservation Service (NRCS), U.S. Department of Agriculture Forest Service, City and County of Honolulu Department of Environmental Services Storm Water Quality Branch, Honolulu Board of Water Supply (BWS), Hawaii Department of Transportation Highways Division Oahu District and the University of Hawaii at Manoa College of Tropical Agriculture and Human Resources. Backyard conservation practices outlined in this booklet are easy and most are inexpensive to perform. Activities can be done by individuals and families, and many practices can be applied to community gardens, schools and other public places. The booklet was distributed at the 29th Annual Better Home and Garden Show and the City’s Earth Month Teen Video and Photo Contest Kickoff. This booklet can be found at:

www.cleanwaterhonolulu.com.



Backyard Conservation Booklet

The two major “anchor” events occur in April and October. April is designated “Earth Month” and October is designated “Make a Difference.” These two “anchor” events coincide with the dry (May to October) and wet (November to May) seasons and launch the cleanup efforts of the streams, education about the watersheds, tree planting, graffiti removal and other cleanup efforts in various neighborhoods. The program combined City supported cleanup efforts with education about the watershed and its impact on the quality of major receiving waters. Some, such as Kapakahi Stream in Waipahu, includes partnerships with Campbell High School, Hawaii Department of Land and Natural Resources Division of Forestry and Wildlife, Hawaii Nature Center, and the Oahu Resource Conservation and Development, Inc., as well as military, youth organizations, church groups, civic organizations and businesses in combined cleanups, storm drain stenciling, and distribution of educational materials, tree planting and educational exhibits. The City Storm Water Quality Branch provided trash bags, gloves and T-shirts with the new logo; and the City Department of Transportation Services provided paints and brushes for graffiti removal at City Bus Stops.

“Outreach in Action” was the theme of the October 2006 Earth Month Campaign. Partnerships with the U.S. Army Corps of Engineers and the Hawaii Department of Land and Natural Resources along with 25 other government entities and non-government organizations, including the Ala Wai Watershed Association, Malama O Manoa, Waikiki Aquarium, Hawaii Nature Center, Makiki Stream Stewards, and the Oahu Invasive Species Committee fulfilled public education and outreach requirements in the Ala Wai

Watershed. This outreach combines cleanup efforts with education about the watershed and its impact on the quality of major receiving waters. Volunteers participated in hands-on environmental projects such as removing litter from streets and streams, mulching, planting and restoring trails.



Teachers remove mangrove seedlings from Kapakahi Stream

Cleanups in other priority areas such as Waipahu, Ewa Beach and Nanakuli were coordinated with Hawaii Department of Land and Natural Resources Forestry and Wildlife, Oahu Resource Conservation and Development, U.S. Geological Survey, Waipahu High School, Campbell High School, Kapolei High School, Nanakuli High and Intermediate School, Nanaikapono Elementary, Waihona O Ka Naauao Charter School, Boys and Girls Club, Weed and Seed, YMCA, Lions Club, Nani `O Waianae, local businesses, churches, scouts and others.

“Be a Good Neighbor” school assemblies were conducted at elementary schools throughout the island. These 45-minute assemblies are sponsored by the City and are free of charge to schools. City Storm Water Staff, working with teachers, inform students with an easy to understand storm water message, using watershed maps, illustrations, photos and observations to explain the difference between the sewer and storm water systems; linking the storm drain system, urban environment and water pollution by looking down into the catch basin and observing what is inside; and predicting the potential causes of pollution and impact of different types of water pollution on aquatic animals. Teachers encourage their students to pass on the storm water and recycling message to family and friends in the school and at home. Hands-on activities such as stenciling storm drains, removing litter along sidewalks, and distributing educational materials to nearby business owners challenge students to take personal action in their community to minimize their opala (rubbish).

Middle and High School Wetlands or Watershed Field Day are half day multi-disciplinary watershed field days, and include water sampling and registration in the City’s Adopt-A-Block or Adopt-A-Stream programs. Schools are encouraged to participate in City sponsored Earth Month and Make A Difference Month cleanups. An online calendar is available at www.cleanwaterhonolulu.com. Cooperating agencies have included the U.S. Army Corps of Engineers, Hawaii Department of Health Clean Water Branch, Hawaii Nature Center, Natural Systems, Hawaii Department of Land and Natural Resources Division of Forestry



Endangered Hawaiian Stilt at Pouhala Marsh

and Wildlife, Division of Aquatic Resources, Oahu Invasive Species Committee, U.S. Geological Survey, U.S. Department of Agriculture Natural Resources Conservation Service, Oahu RC&D, Hawaii Nature Conservancy, Honolulu Board of Water Supply, University of Hawaii at Manoa Department of Urban and Regional Planning and School of Earth Science and Technology.



Teachers & citizens work with City Engineer on water quality sampling

The City has also implemented the “Train The Trainer Teacher Outreach Workshop.” The City partnered with the Hawaii Department of Health and U.S. Army Corps of Engineers on the annual half day workshop in February 2006 and again in 2007, inviting teachers registered in the Good Neighbor School Assembly Program, Watershed Field Day, Adopt-A-Block or Adopt-A-Stream Programs. The purpose of the workshop is to inform and build support for the storm water program, while

encouraging teachers to take the storm water message into the classroom before and after assemblies and field days. The workshop provides a toolkit for teachers to use throughout the year to reinforce and expand the storm water message.

4.3 Annual Survey

The City’s requirement for the Annual Survey in the permit is quoted below:

“D.1.a.(3) Annual Survey. The Permittee shall evaluate the progress of the public education program by conducting an annual survey of Oahu residents to measure both behavior and knowledge relating to storm water. The results of the survey, with a comparison to past surveys, shall be summarized in the Annual Report.”

The City uses phone surveys to measure program effectiveness and to help plan public education/outreach. The phone survey include structured and open-ended questions for residents island-wide as well as in priority areas, which for this permit include Waipahu, Ewa Beach, and Nanakuli. The phone surveys are designed to measure residents’ awareness, perceptions and behaviors related to polluted storm water runoff and specific pollutants, including green waste, car washing and used motor oil in and around the home. Survey results are compared to findings from prior years to measure public awareness and observed behavior changes.

4.4 Public Involvement and Participation

The SWMP will be reviewed by a Technical Advisory Committee that includes members of the various City organizations. This technical advisory committee was established to identify any recommendations, procedures or processes that may impact their day to day operations. The SWMP needs to provide directions that are attainable and implementable by these organizations.

The requirement in the permit is as follows:

“D.1.b. Public Involvement/Participation

The Permittee shall include the public in developing, reviewing, and implementing the SWMP. The draft SWMP shall be made available to the public on the City Website and at local offices. An informational meeting shall be scheduled and announced prior to finalizing the SWMP to solicit comments and answer questions from the public. Other activities to involve the public might include organizing a citizen advisory group to solicit ongoing input from the public about changes to the SWMP and specific SWMP-related projects, or organizing water quality-focused clean-up events to educate the public about storm water impacts from highways.

At the prefinal stage of the development of the SWMP the City will post the document on their website and have hard copies available for viewing at various City facilities. A public formational meeting will also be held after the prefinal SWMP has been posted and distributed. The informational meeting will be published in the local newspaper announcing the availability of the document and the locations where the SWMP can be found. The website will have a means for the public to provide comments. Written comments via email or U.S. mail service will also be solicited via the website or City facilities housing the hard copy documents. The SWMP will be revised to include applicable comments or suggestions made by the public. All comments received will be responded to and included in the final SWMP.

Figure 4-1 illustrates the permit requirement for Public Education and Outreach and Public Involvement and Participation; and the organization responsible for the tasks.

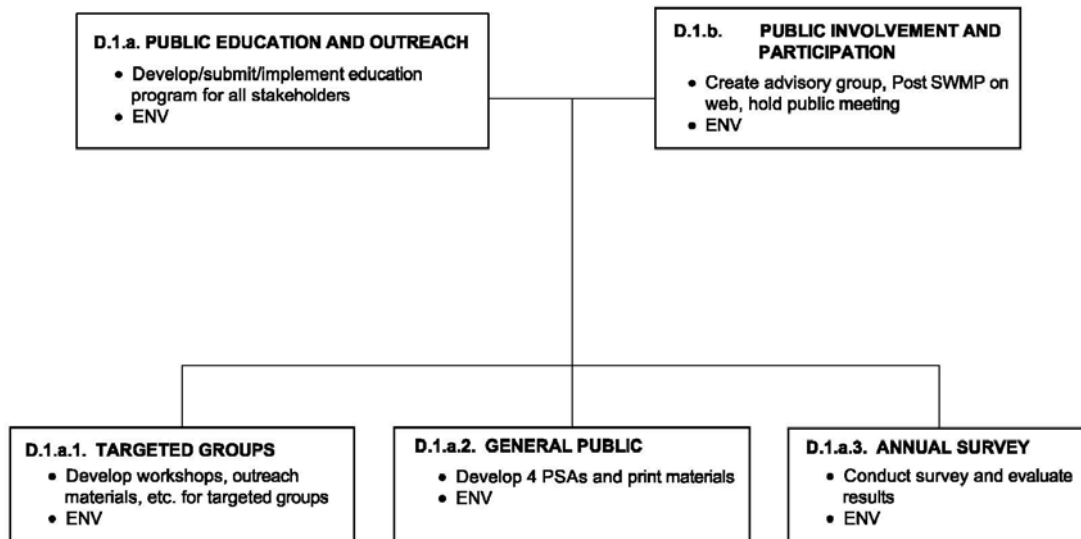


FIGURE 4-1
 Responsible Agency
 Public Education and Outreach
 and Public Involvement and Participation