

# Public Education and Outreach Plan



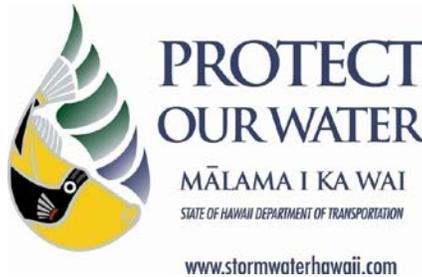
State of Hawaii, Department of Transportation  
Highways Division, Oahu District  
SWMPP, February 2022

This page intentionally left blank.

STATE OF HAWAII, DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION, OAHU DISTRICT

# STORM WATER MANAGEMENT PROGRAM PUBLIC EDUCATION AND OUTREACH PLAN

MS4 NPDES Permit No. HI S000001



State of Hawaii, Department of Transportation  
Highways Division, Oahu District  
727 Kakoi Street, Honolulu, Hawaii 96819

February 2022  
Version: Final

# Record of Revision

Revision No.	Revision Date	Description	Sections Affected
Original Document	February 2022	Original	N/A



# TABLE OF CONTENTS

LIST OF APPENDICES .....	<i>iii</i>
LIST OF TABLES .....	<i>iv</i>
LIST OF ACRONYMS AND ABBREVIATIONS .....	<i>v</i>
SECTION 1 INTRODUCTION .....	1
SECTION 2 GOALS .....	3
SECTION 3 TARGETED GROUPS .....	5
SECTION 4 PUBLIC EDUCATION AND OUTREACH IMPLEMENTATION .....	7
4.1 Community Outreach .....	7
4.1.1 Events .....	7
4.1.2 Industrial and Commercial Facilities Outreach .....	7
4.2 Public Involvement .....	8
4.2.1 Adopt-A-Highway Program .....	8
4.2.2 Public Review and Comment .....	9
4.3 Partnerships .....	9
4.3.1 Government and Non-Profit Organizations .....	9
4.4 Collateral Materials .....	10
4.4.1 Brochures .....	11
4.4.2 Promotional Items .....	13
4.5 School Programs .....	13
4.5.1 Sticker Book Distribution .....	14
4.5.2 School Presentations .....	14
4.5.3 Hawaii Storm Patrol Remote Learning Module .....	15
4.5.4 High School Outreach .....	15
4.5.5 Teacher Tote Bags .....	16

4.6	Media Outreach .....	16
4.6.1	Media Relations .....	16
4.6.2	Websites .....	16
4.6.3	Social Media .....	17
4.6.4	Advertising .....	17
<b>SECTION 5</b>	<b>PUBLIC OUTREACH ROAD MAP .....</b>	<b>19</b>
<b>SECTION 6</b>	<b>MEASUREMENT OF EFFECTIVENESS .....</b>	<b>23</b>
6.1	Program Effectiveness Strategy .....	23
6.2	Surveys .....	23

## LIST OF APPENDICES

APPENDIX

TITLE

Appendix A    Public Awareness Survey

## LIST OF TABLES

<u>TABLE</u>	<u>TITLE</u>	<u>PAGE</u>
Table 1	Targeted Groups and Desired Behaviors .....	5
Table 2	Brochures and Booklets Developed and Distributed to Targeted Groups .....	11
Table 3	Public Outreach Road Map .....	19

## LIST OF ACRONYMS AND ABBREVIATIONS

BMP	Best Management Practice
City SWQ	City and County of Honolulu, Department of Facility Maintenance, Storm Water Quality Division
DOH	State of Hawaii, Department of Health
DOT-HWYS	State of Hawaii, Department of Transportation, Highways Division, Oahu District
MS4	Municipal Separate Storm Sewer System
NPDES	National Pollutant Discharge Elimination System
PSA	Public Service Announcement
SWMPP	Storm Water Management Program Plan
TMDL	Total Maximum Daily Load

This page intentionally left blank.

## 1. INTRODUCTION

---

The State of Hawaii, Department of Health (DOH) issued the State of Hawaii, Department of Transportation, Highways Division, Oahu District (DOT-HWYS) the Municipal Separate Storm Sewer System (MS4) National Pollutant Discharge Elimination System (NPDES) Permit No. HI S000001 (hereinafter MS4 NPDES Permit), which became effective on September 1, 2020, and will expire at midnight August 31, 2025. The permit authorizes the discharge of storm water runoff and certain non-storm water discharges from the DOT-HWYS MS4 and into state waters in and around the Island of Oahu, Hawaii. In accordance with the MS4 NPDES Permit, DOT-HWYS is required to include a written public education plan in its *Storm Water Management Program Plan (SWMPP)* describing how DOT-HWYS intends to reach its targeted audiences and comply with MS4 NPDES Permit Part D.1.a.

Storm water source pollution comes from many diffuse sources and adversely impacts aquatic habitats and marine life, poses public health risks, and negatively impacts Hawaii's economy and way of life, which rely heavily on pristine water quality. As storm water runoff moves over the ground, the flow picks up pollutants generated by a variety of human activities, such as littering, applying pesticides, fertilizing our lawns, and improperly disposing of waste. While most of our individual actions have a small effect on water quality, collectively human behaviors have a significant impact. As such, addressing storm water pollution must be a community effort.

As an essential component of the *SWMPP*, this *Public Education and Outreach Plan* details the current strategy of DOT-HWYS to create awareness about the impacts of storm water pollution and the steps that may be taken to protect and preserve Hawaii's environment.

This page intentionally left blank.

## 2. GOALS

---

The public education and outreach goals for this permit term are as follows:

- Effect measurable changes in the public's attitude, knowledge, and awareness.
- Educate the public on best management practices (BMP) implementation.
- Promote pollutant load reduction through a watershed-based approach.
- Utilize public education and outreach to promote changes in discharge and receiving water quality.
- Satisfy the requirements of the MS4 NPDES Permit No. HI S000001.

This page intentionally left blank.

### 3. TARGETED GROUPS

The targeted groups that DOT-HWYS will address during the permit term and their respective desired behaviors are shown in Table 1.

Table 1. Targeted Groups and Desired Behaviors.

Targeted Group	Desired Behaviors
Homeowners, School Children, and General Public	<ul style="list-style-type: none"> <li>▪ Understand the basic concepts of storm water.</li> <li>▪ Reduce the amount of trash, litter, pesticides, and fertilizers in the DOT-HWYS MS4.</li> </ul>
DOT-HWYS Employees	<ul style="list-style-type: none"> <li>▪ Comply with and understand the regulatory requirements of the MS4 NPDES Permit No. HI S000001.</li> <li>▪ Reduce the discharge of pollutants to the DOT-HWYS MS4.</li> </ul>
DOT-HWYS Consultants	<ul style="list-style-type: none"> <li>▪ Comply with and understand the regulatory requirements of the MS4 NPDES Permit No. HI S000001.</li> <li>▪ Implement BMPs to reduce the discharge of pollutants to the DOT-HWYS MS4</li> <li>▪ Understand the current design criteria, specifically as it applies to low impact development techniques.</li> </ul>
Construction Industry	<ul style="list-style-type: none"> <li>▪ Comply with and understand the regulatory requirements of MS4 NPDES Permit No. HI S000001.</li> <li>▪ Comply with and understand the regulatory requirements of the NPDES Permit (General or Individual), as applicable.</li> <li>▪ Implement BMPs in accordance with Site-Specific BMP Plan and/or Storm Water Pollution Control Plan.</li> <li>▪ Minimize the discharge of pollutants to the DOT-HWYS MS4.</li> </ul>

Targeted Group	Desired Behaviors
DOT-HWYS Permit Applicants	<ul style="list-style-type: none"> <li>▪ Comply with and understand the regulatory requirements of the MS4 NPDES Permit No. HI S000001.</li> <li>▪ Implement BMPs in accordance with Site-Specific BMP Plan and/or Storm Water Pollution Control Plan.</li> <li>▪ Minimize the discharge of pollutants to the DOT-HWYS MS4.</li> <li>▪ Understand the current design criteria, as it specifically applies to low impact development techniques.</li> </ul>
Industrial Facilities	<ul style="list-style-type: none"> <li>▪ Comply with and understand the regulatory requirements of the NPDES Permit (General or Individual), as applicable.</li> <li>▪ Implement and maintain BMPs in accordance with Storm Water Pollution Control Plans, as applicable.</li> <li>▪ Minimize the discharge of pollutants to the DOT-HWYS MS4.</li> </ul>
Commercial Businesses	<ul style="list-style-type: none"> <li>▪ Understand the basic concepts of storm water.</li> <li>▪ Minimize the discharge of pollutants to the DOT-HWYS MS4.</li> </ul>
Government Agencies	<ul style="list-style-type: none"> <li>▪ Increase collaboration among government agencies.</li> <li>▪ Minimize the discharge of pollutants to the DOT-HWYS MS4.</li> </ul>
Other MS4 Permittees	<ul style="list-style-type: none"> <li>▪ Increase collaboration among MS4 Permittees.</li> </ul>

## 4. PUBLIC EDUCATION AND OUTREACH IMPLEMENTATION

---

Educational and outreach tools and tactics are types of BMPs that may be implemented to achieve the desired behaviors from the target groups in Table 1 above. The implementation schedule for each tool is provided in Section 5.0, Table 3 Public Outreach Road Map.

### 4.1 COMMUNITY OUTREACH

Community outreach activities provide great opportunities for hands-on learning experiences, and are a fun and educational tool to reach a variety of target groups. When the community is actively involved in an event, participants are more likely to commit to engaging in sustainable activities at their workplace, their home, and in the community.

DOT-HWYS aims to reach targeted groups through community outreach efforts in a watershed-based approach, targeting selected watersheds in coordination with the Monitoring Program.

#### 4.1.1 Events

Environment-related events are held across Oahu by various organizations throughout the year. Participation at past events has proven to be effective in delivering the Program's message, and increase storm water awareness and education. By targeting events hosted in total maximum daily load (TMDL) watersheds, DOT-HWYS can engage the audiences most likely to have a direct impact on their ability to meet waste load allocation reduction requirements in high-priority watersheds.

DOT-HWYS will continue seeking opportunities to participate in special events in TMDL watersheds, such as beach cleanups. Typical event activities include an interactive storm water model; games such as a prize wheel or Plinko board; a survey; and the distribution of educational materials.

DOT-HWYS will work with the Monitoring Program during identification of new events to reach targeted audiences in high-priority watersheds (e.g., Keehi Watershed).

#### 4.1.2 Industrial and Commercial Facilities Outreach

Industrial and commercial facilities are key members of the community and many of these facilities are located along the DOT-HWYS rights-of-way, either physically connecting to or contributing surface flow into the DOT-HWYS MS4. Storm water flowing

from industrial and commercial facilities is a potential source of pollutants, and therefore, outreach that specifically targets the unique activities of these facilities is critical.

The Industrial and Commercial Program uses the *Prioritized Area Plan for Industrial and Commercial Facility and Activity Inspections* to prioritize inspections by the highest priority TMDL watersheds. Outreach activities for industrial and commercial facilities include regular inspections, issuance of warning letters for potential violations, a storm water awareness survey, and distribution of industry-specific brochures aimed at encouraging businesses to adopt good housekeeping practices. More information on the Industrial and Commercial Activities Discharge Management Program is provided in the *SWMPP* Chapter 10 Industrial and Commercial Program Activities Discharge Management Program.

## **4.2 PUBLIC INVOLVEMENT**

While community outreach event BMPs are effective in building awareness, public involvement programs provide an opportunity for continual interaction and public service by community volunteers. Through this continual interaction with the public, these programs aim to increase awareness and knowledge in the community, which in turn leads to an increase in program effectiveness.

### **4.2.1 Adopt-A-Highway Program**

The ongoing Adopt-A-Highway (AAH) Program administered by DOT-HWYS is a public service campaign that encourages participation from the community to maintain a litter-free section of the state highways by “adopting” a section for two years. It is an effective way for environmentally concerned citizens to contribute to a cleaner environment. By clearing trash and debris from roadsides, participants help to prevent pollutants from entering into storm drains, streams, and coastal waters. The AAH Program has been instrumental in reducing the number of pollutants that accumulate along state routes. DOT-HWYS sets an annual goal for 100 volunteer groups to participate in the AAH Program on Oahu.

To honor the volunteer participants and promote the AAH Program, DOT-HWYS will recognize and award a quarterly AAH Champion for their exceptional efforts. The Champion will be selected based on their length of commitment and the consistency of their cleaning activities along their adopted highway segment. Photos and a brief story on each of AAH Champion will be posted on the Storm Water Hawaii website, as well as on the quarterly eNewsletter, Facebook, Instagram, and Twitter social media accounts.

## **4.2.2 Public Review and Comment**

DOT-HWYS will continue to provide the public with the opportunity to review and comment on various plans as required by MS4 NPDES Permit No. HI S000001. Plans will be made available on the DOT-HWYS website, [www.stormwaterhawaii.com/resources/plans](http://www.stormwaterhawaii.com/resources/plans), for a minimum of 30 calendar days. DOT-HWYS will respond to all comments received within the review period and provide both comments and responses to DOH with its submittal of the final plan.

Upon completion of the *SWMPP*, DOT-HWYS will make the plan available on the Storm Water Hawaii website and at public locations. In addition, a public meeting will be held to solicit comments about the *SWMPP* or any element of the program.

## **4.3 PARTNERSHIPS**

Interagency and public-private partnerships offer many opportunities to reach a wider audience. These partnerships with like-minded corporations and organizations are essential to reach audiences in a variety of venues at multiple levels of understanding.

### **4.3.1 Government and Non-Profit Organizations**

DOT-HWYS is committed to their current partnerships with the State of Hawaii, Department of Transportation, Airports Division; State of Hawaii, Department of Transportation, Harbors Division; State of Hawaii, Department of Transportation, Highways Division, Maui District; City and County of Honolulu, Department of Facility Maintenance, Storm Water Quality Division (hereinafter City SWQ); the Waikiki Aquarium; and Sea Life Park; and welcomes future partnerships with other agencies.

DOT-HWYS collaborates with the Airports Division, Harbors Division, and Highways Division Maui District to provide annual training opportunities and cross-promotion for events and on social media.

The City SWQ operates under an MS4 NPDES Permit also, and shares similar key messages and target audiences. Past collaborations include cost-sharing on public outreach events and development of educational material. DOT-HWYS additionally developed a flier which is annually updated to include detailed information on the City and County of Honolulu's household hazardous waste collection program. The flier is distributed at various outreach events and is available on the DOT-HWYS website, [www.stormwaterhawaii.com](http://www.stormwaterhawaii.com). DOT-HWYS plans to continue to build upon this relationship and to seek additional ways to complement each other's programs.

The Waikiki Aquarium has been a key partner in facilitating community outreach events, including the annual Mauka to Makai Earth Day event. As an organization whose mission is to inspire and promote understanding, appreciation, and conservation of Pacific marine life, the Waikiki Aquarium is a strong supporter of the storm water program. DOT-HWYS also partners with Sea Life Park, participating in various events and maintaining a permanent storm water pollution educational display in the park.

DOT-HWYS will continue to maintain current partnerships and seek to build strategic partnerships with like-minded organizations to increase the public's awareness and understanding of storm water related issues.

#### **4.4 COLLATERAL MATERIALS**

Collateral materials are an effective tool for public outreach, as it puts a lasting impression into the hands of the community and select target audiences. Branding is a crucial element of collateral material and provides a visual identity for the DOT-HWYS and storm water messages. In addition to collateral materials, all of the DOT-HWYS baseyards are branded with a "Protect Our Water" sign.

DOT-HWYS launched a secondary brand, "Trash Free Hawaii" for use on collateral materials with a focus on trash reduction. The "Storm Water Hawaii" and "Trash Free Hawaii" branded items are distributed at public outreach events and through various other means.

*Trash Free Hawaii Rainworks Logo*



#### 4.4.1 Brochures

Brochures are an efficient way to present and explain DOT-HWYS storm water messages as they can be developed for and distributed to specific target groups and watersheds. DOT-HWYS continues to distribute informational brochures that include BMPs for a range of audiences including homeowners, business, and school children as described in Table 2.

Table 2. Brochures and Booklets Developed and Distributed to Targeted Groups.

Brochure / Booklet	Description	Targeted Audience
Adopt-A-Highway Brochure	General information on the Adopt-A-Highway program and details on how one can volunteer. Brochures are distributed at outreach events and are available on the DOT-HWYS website, <a href="http://www.stormwaterhawaii.com">www.stormwaterhawaii.com</a> .	<ul style="list-style-type: none"> <li>▪ General Public</li> <li>▪ Commercial Businesses</li> </ul>
Commercial Business Brochure	Provides information on connection permits and the inspection process performed by DOT-HWYS. Brochures cards are distributed at outreach events and are available on the DOT-HWYS website, <a href="http://www.stormwaterhawaii.com">www.stormwaterhawaii.com</a> .	<ul style="list-style-type: none"> <li>▪ Commercial Businesses</li> <li>▪ Industrial Facilities</li> </ul>
Hawaii Storm Patrol Activity Book	Activities include a maze, a crossword puzzle, and pages to color. In doing the activities, children learn how storm water pollution affects our environment. Activity books are distributed at outreach events and are available on the DOT-HWYS website, <a href="http://www.stormwaterhawaii.com">www.stormwaterhawaii.com</a> .	<ul style="list-style-type: none"> <li>▪ General Public</li> <li>▪ School Children</li> </ul>
Household Hazardous Waste Flyer	Details information collected from the City and County of Honolulu’s household hazardous waste collection program which is updated annually. Fliers are distributed at outreach events and are available on the DOT-HWYS website, <a href="http://www.stormwaterhawaii.com">www.stormwaterhawaii.com</a> .	<ul style="list-style-type: none"> <li>▪ Homeowners</li> <li>▪ General Public</li> </ul>
Landscaping Brochure	Landscaping and agricultural tips on how to conserve water and on the proper disposal of grass clippings, leaves, and other green waste. Brochures	<ul style="list-style-type: none"> <li>▪ Homeowners</li> <li>▪ General Public</li> </ul>

Brochure / Booklet	Description	Targeted Audience
	are distributed at outreach events and are available on the DOT-HWYS website, <a href="http://www.stormwaterhawaii.com">www.stormwaterhawaii.com</a> .	
Permit Holders Guide Rack Card	General information on types of temporary and post-construction BMPs and describes when post-construction BMPs are required. Rack cards are available on the DOT-HWYS website, <a href="http://www.stormwaterhawaii.com">www.stormwaterhawaii.com</a> .	<ul style="list-style-type: none"> <li>▪ DOT-HWYS Consultants</li> <li>▪ Construction Industry</li> </ul>
Residential Guide Brochure	General information on actions to do in the garage, around the house, in the garden, and when improving your home to reduce storm water pollution. Brochures cards are distributed at outreach events and are available on the DOT-HWYS website, <a href="http://www.stormwaterhawaii.com">www.stormwaterhawaii.com</a> .	<ul style="list-style-type: none"> <li>▪ Homeowners</li> <li>▪ General Public</li> </ul>
Restaurant and Food Industry Rack Card	Informs employees on how restaurants contribute to storm water pollution and describes various BMPs that can be implemented. Rack cards are distributed during inspections and are available on the DOT-HWYS website, <a href="http://www.stormwaterhawaii.com">www.stormwaterhawaii.com</a> .	<ul style="list-style-type: none"> <li>▪ Commercial Businesses</li> </ul>
Retail Gas Stations and Auto Facilities Rack Card	Guidance on how retail gas stations and auto maintenance facilities can reduce the amount of pollution that results from their operations. Rack cards are distributed during inspections and are available on the DOT-HWYS website, <a href="http://www.stormwaterhawaii.com">www.stormwaterhawaii.com</a> .	<ul style="list-style-type: none"> <li>▪ Commercial Businesses</li> </ul>
Storm Water Brochure	General information on storm water and includes actions that the public can do to improve water quality. Brochures are distributed at outreach events and are available on the DOT-HWYS website, <a href="http://www.stormwaterhawaii.com">www.stormwaterhawaii.com</a> .	<ul style="list-style-type: none"> <li>▪ General Public</li> </ul>

Brochure / Booklet	Description	Targeted Audience
Trash Free Hawaii Brochure	General information on the Trash Free Hawaii campaign, including information about recycling, bulky item pickup, and ways individuals can help. Brochures are distributed at outreach events and are available on the DOT-HWYS website, <a href="http://www.stormwaterhawaii.com">www.stormwaterhawaii.com</a> .	<ul style="list-style-type: none"> <li>▪ General Public</li> </ul>

**4.4.2. Promotional Items**

Branded promotional items make great takeaways for public events, presentations, and training workshops. These items are successful in cultivating and maintaining public awareness of the storm water program. When the community uses or displays DOT-HWYS promotional items, they show others that the public is actively engaged in the cause, thereby helping to create social norms and encouraging others to get involved. The promotional items that were distributed in the past or may be distributed in the future are either branded with the “Protect Our Water” logo or the “Trash Free Hawaii” logo, as follows.

- Hard Hat Stickers
- Notebooks
- Magnets
- Pens
- Stainless Steel Water Bottles
- Stickers
- Reusable Tote Bags
- Window Decals

**4.5 SCHOOL PROGRAMS**

DOT-HWYS has a mutually beneficial partnership with the State of Hawaii, Department of Education. Elementary schools are an essential channel through which DOT-HWYS is able to successfully reach school children. School-aged children are the best subjects to influence long-term change in the way individuals and communities think about storm water, in part because they are able to take home the lessons learned in the classroom to share with their parents, guardians, and family friends.

DOT-HWYS will continue to work with elementary schools across Oahu and will consider expanding the public outreach efforts to older students as well.

#### **4.5.1 Sticker Book Distribution**

In addition to visiting schools in person and sharing materials remotely, DOT-HWYS developed a “Hawaii Storm Patrol” sticker book for first graders. This sticker book includes basic information about storm water, storm drains, and household chemicals. The sticker book contains stickers that can be placed over items in the workbook to “cover up” activities that are detrimental to water quality. DOT-HWYS developed an instructor’s guide that complements the sticker book and assists instructors in navigating their students through the book’s activities.

DOT-HWYS will continue to annually deliver the sticker books to all first-grade students on the island of Oahu.

#### **4.5.2 School Presentations**

As part of the Public Education and Outreach Program, DOT-HWYS actively engages elementary school students through school presentations. This storm water presentation includes a PowerPoint presentation, a “Find the Storm Water Pollutants” worksheet, and a hands-on demonstration with a storm water inlet model.

DOT-HWYS aims to deliver five presentations per school year, with a focus on reaching schools in high-priority watersheds. Schedule presentations are posted on the [www.stormwaterhawaii.com](http://www.stormwaterhawaii.com) calendar.



*Hawaii Storm Patrol Remote Learning Module Video Player*

### 4.5.3 Hawaii Storm Patrol Remote Learning Module

DOT-HWYS launched a remote learning module aimed at third-grade students and their instructors in November 2020. The module is available on the Hawaii Storm Patrol Page of the [www.stormwaterhawaii.com](http://www.stormwaterhawaii.com) website. The learning module consists of four animated videos that help students learn how Hawaii’s storm drains work, how various types of pollution can enter storm drains, how this impacts our ocean, and how to help protect our water. Each video is followed by a five-question quiz to ensure students are learning and processing the information. An instructor’s guide containing background information and follow-up activities is also available on the website.

DOT-HWYS aims to reach schools across Oahu with this remote learning module.

### 4.5.4 High School Outreach

In addition to elementary age students, DOT-HWYS plans to expand public education and outreach efforts to include high school students. High school students directly benefit from public outreach efforts because they are in the process of selecting a possible path for their future. Students interested in storm water and the environment may become the next storm water pollution prevention leaders for Oahu.

DOT-HWYS plans to implement targeted outreach to high school students in Fiscal Year 2024.

#### **4.5.5 Teacher Tote Bags**

DOT-HWYS developed a Teacher Tote Bag that provides materials for teachers to develop a storm water lesson plan. With the Teacher Tote Bags, DOT-HWYS is able to educate a larger target audience without having to physically be in the classroom. Items provided in the Teacher Tote Bag may include the following.

- Activity Books
- Brochures
- Storm Water Quiz
- Pencils
- Stickers
- Instructor's Guide

### **4.6 MEDIA OUTREACH**

Outreach through various media formats is both a cost-effective and an efficient way to deliver the “Protect Our Water” and “Trash Free Hawaii” messages to the public. Opportunities for media coverage include Public Service Announcements (PSAs), social media posts, blog posts to the Storm Water Hawaii and Trash Free Hawaii websites, and press releases for public outreach events or new campaigns. Outreach through various media sources allows DOT-HWYS to better target audiences in high-priority watersheds.

#### **4.6.1 Media Relations**

The news media reaches a large population of Oahu and is a great resource for conducting watershed-based outreach to both targeted and broad audiences. DOT-HWYS will continue to work with news media to publicize events and new and continuing outreach efforts.

#### **4.6.2 Websites**

The Storm Water Hawaii website was first launched in March 2007 and was fully redesigned in November 2020. The website's URL is [www.stormwaterhawaii.com](http://www.stormwaterhawaii.com) and it includes information about the SWMP and its various programs. The website contains information about household hazardous waste awareness, upcoming public outreach events, training activities, and outreach materials. Blog posts are uploaded to the website each month, and resources for contractors and design consultants are updated regularly. A keiki section on the Hawaii Storm Patrol page features the program mascot “Malama” to provide general awareness about storm water and offers specific ways that kids and their

families can help reduce storm water pollution. The keiki section also features a digital Hawaii Storm Patrol booklet, the remote learning module, and other learning activities.

A website contact link provides the opportunity for the public to submit a comment, make a complaint, or report a violation.

The Trash Free Hawaii website was completed and launched in September 2017. The website's URL is [www.trashfreehawaii.com](http://www.trashfreehawaii.com) and it details how DOT-HWYS is reducing trash on Oahu and provides tips on how individuals can reduce their trash generation. Trash reduction tips for individuals and businesses are available on the website, and blog posts are added monthly. PSAs developed by DOT-HWYS are also available on the Trash Free Hawaii website.

Both websites are embedded with Google analytics to track statistics including the number of pageviews, pages viewed per session, and bounce rate.

### **4.6.3 Social Media**

Social media continues to be one of the most powerful marketing tools available for public outreach. It offers the potential to connect directly with a wide demographic in an efficient and cost-effective manner. Social media allows for an ongoing conversation with audiences that demand immediate information relevant to them and their interests. Through social media avenues, DOT-HWYS is able to diversify its demographic reach by addressing teenagers as well as young adults. Currently, DOT-HWYS utilizes Facebook, Instagram, Twitter, and YouTube as a multifaceted approach to engage the public through social media.

DOT-HWYS developed a strategic eNewsletter campaign to keep target groups informed of storm water news, events, and to share pollution prevention tips. The eNewsletters are particularly efficient in that they can reach a large audience at a low cost. Furthermore, with eNewsletters, DOT-HWYS can extend beyond building brand awareness by providing more detailed information about specific storm water projects. The public can sign up for the eNewsletter at outreach events, as well as through the Storm Water Hawaii website.

### **4.6.4 Advertising**

Advertising is an effective way to reach the passive audience. By placing advertisements in mediums where the audience is likely to encounter it, DOT-HWYS can generate increased awareness. PSAs are a constructive way to use television or radio airtime to raise public awareness about storm water. DOT-HWYS has two television ready PSAs in

stock and will continue to explore both paid and free options to air the PSAs with plans to run the PSAs on a biannual basis.

DOT-HWYS also utilizes Facebook advertising as a means to generate traffic to its website and social media sites. Facebook advertising has proven to be beneficial for DOT-HWYS, and is currently used for both the Facebook and Instagram accounts.

## 5. PUBLIC OUTREACH ROAD MAP

---

This Public Outreach Road Map is a proposed plan designed to maintain existing programs while implementing new programs in a systematic manner that maximizes the impact of the overall Storm Water Management Program. The proposed Public Outreach Road Map of targeted public involvement activities that DOT-HWYS will conduct for each fiscal year is provided in Table 3.

**Table 3. Public Outreach Road Map.**

Fiscal Year	Targeted Activities	Anticipated Frequencies
<b>2022</b>	▪ Continue to attend community events	▪ Ten events per year
	▪ Continue to conduct school visitations	▪ Five visitation per school year
	▪ Continue to distribute remote learning module	▪ Continuous distribution
	▪ Continue to distribute Hawaii Storm Patrol sticker books	▪ Annual distribution
	▪ Continue to distribute eNewsletter	▪ Quarterly distribution
	▪ Run PSAs	▪ Every other year
	▪ Develop Public Education and Outreach Plan	
	▪ Redevelop brochures	
<b>2023</b>	▪ Continue to attend community events	▪ Ten events per year
	▪ Continue to conduct school visitations	▪ Five visitation per school year
	▪ Continue to distribute remote learning module	▪ Continuous distribution
	▪ Continue to distribute Hawaii Storm Patrol sticker books	▪ Annual distribution
	▪ Continue to distribute eNewsletter	▪ Quarterly distribution

Fiscal Year	Targeted Activities	Anticipated Frequencies
	▪ Submit <i>Public Education and Outreach Plan</i>	
	▪ Update Trash Free Hawaii website	
	▪ Develop High School Public Education Program	
2024	▪ Continue to attend community events	▪ Ten events per year
	▪ Continue to conduct school visitations	▪ Five visitation per school year
	▪ Continue to distribute remote learning module	▪ Continuous distribution
	▪ Continue to distribute Hawaii Storm Patrol sticker books	▪ Annual distribution
	▪ Continue to distribute eNewsletter	▪ Quarterly distribution
	▪ Run PSAs	▪ Every other year
	▪ Implement High School Public Education Program	
	▪ Develop public education campaign in high-priority watershed	
2025	▪ Continue to attend community events	▪ Ten events per year
	▪ Continue to conduct school visitations	▪ Five visitation per school year
	▪ Continue to distribute remote learning module	▪ Continuous distribution
	▪ Continue to distribute Hawaii Storm Patrol sticker books	▪ Annual distribution
	▪ Continue to distribute eNewsletter	▪ Quarterly distribution
	▪ Implement public education campaign in high-priority watershed	

Fiscal Year	Targeted Activities	Anticipated Frequencies
	<ul style="list-style-type: none"> <li>▪ Implement study for targeted campaign in a high-priority watershed</li> </ul>	
2026	<ul style="list-style-type: none"> <li>▪ Continue to attend community events</li> </ul>	<ul style="list-style-type: none"> <li>▪ Ten events per year</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Continue to conduct school visitations</li> </ul>	<ul style="list-style-type: none"> <li>▪ Five visitation per school year</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Continue to distribute remote learning module</li> </ul>	<ul style="list-style-type: none"> <li>▪ Continuous distribution</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Continue to distribute Hawaii Storm Patrol sticker books</li> </ul>	<ul style="list-style-type: none"> <li>▪ Annual distribution</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Continue to distribute eNewsletter</li> </ul>	<ul style="list-style-type: none"> <li>▪ Quarterly distribution</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Run PSAs</li> </ul>	<ul style="list-style-type: none"> <li>▪ Every other year</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Implement targeted campaign in a high-priority watershed</li> </ul>	

This page intentionally left blank.

## 6. MEASUREMENT OF EFFECTIVENESS

---

Measuring the effectiveness of public outreach activities provides a feedback mechanism for the continual improvement of the Public Education and Outreach Program.

The DOT-HWYS utilizes two tools to assess effectiveness of the Public Education and Outreach Program, as follows.

### 6.1 PROGRAM EFFECTIVENESS STRATEGY

The *Program Effectiveness Strategy* reflects DOT-HWYS evolution from a compliance-based approach to one in which effectiveness is measured through program BMP enhancements. Each component of the *Public Education and Outreach Plan* is assigned an Outcome Level that assesses the effectiveness of the Storm Water Management Program implementation. The *Program Effectiveness Strategy* is provided in *SWMPP* Appendix A.3.

### 6.2 SURVEYS

DOT-HWYS conducts surveys to comprehensively measure and evaluate the progress of the Public Education and Outreach Program. Behavior and storm water knowledge are measured and compared with previous surveys to assess the effectiveness of program activities. Surveys are conducted at public events throughout the year and collected online through the Storm Water Hawaii website.

Annually, the surveys are analyzed on the basis of knowledge, perception, awareness, and behavior. DOT-HWYS compares the survey results among watersheds to determine whether more resources should be allocated to educate residents in high-priority and TMDL watersheds. The Public Awareness Survey is provided in Appendix A.

This page intentionally left blank.

# Appendix A

## Storm Water Awareness Survey

This page intentionally left blank.

# STORM WATER MANAGEMENT PROGRAM

## PUBLIC AWARENESS SURVEY

The purpose of this survey is to evaluate the progress of the State of Hawaii Department of Transportation, Highways Division, Oahu District's public education program. Our goal is to raise awareness and educate the public regarding storm water and water quality issues. Please provide constructive feedback so that we can best provide for the community.

- **Hawaii Resident:** Yes / No
- **If yes, what is the zip code of your residence?:**  
\_\_\_\_\_
- **Age (circle one):**
  - a. Under 18
  - b. 18 – 24
  - c. 25 – 34
  - d. 35 -64
  - e. 65 and over
- **For more information, please provide your email address:** \_\_\_\_\_
  
- **What is storm water? (check one):**
  - Excess water from overwatering your lawn
  - Water from rainfall that runs off roads and other surfaces and eventually leads to the ocean
  - Water that has been used for industrial processes and contains waste products
  - Ocean water that evaporates into the clouds, eventually causing rain
  - Water beneath the Earth's surface that supplies wells and springs
- **In Hawaii, is storm water treated before it enters the ocean?:**  
Yes / No (circle one)
- **The best way to clean up an oil spill on a driveway is to scrub it with detergent and hose it off into the gutter:**  
True / False (circle one)
- **Landscaping your yard can help reduce storm water runoff:**  
True / False (circle one)

- **It is okay to place wastewater or water containing soaps, paint, cleaning products, or grease and oil into streets or storm drains:**  
True / False (circle one)
- **Which of the following are good practices? (check all that apply)**
  - Dump waste in storm drains
  - Prevent grass clippings from going on to the street
  - Dispose of all household chemicals properly
  - Sweep your driveway clean
  - Hose down your driveway
  - Pick up after your pet
- **Are you familiar with any of the following? (check all that apply):**
  - "No dumping, drains to ocean" placards at storm drains
  - Adopt-a-Highway cleanups
  - Storm Water Hawaii website
  - Trash Free Hawaii website
  - Hawaii Storm Patrol activity book
  - "Stick It To Storm Water" Restaurant Placemats
  - Storm Water Hawaii Facebook, Instagram, and Twitter
  - Public Service Announcements (TV commercials, Consolidated Theatres pre-show, Hawaiian Airlines in-flight entertainment, etc.)
- **What do you see as the underlying cause(s) of pollution in our oceans? (check all that apply):**
  - Lack of education
  - Cost to prevent and maintain
  - Apathy and/or Laziness
  - Lack of enforcement
  - Other: \_\_\_\_\_
- **After learning about our Storm Water Management Program, are you more inclined to change your lifestyle habits to promote a cleaner, greener Hawaii?**  
Yes / No (circle one)

**MAHALO FOR YOUR PARTICIPATION!**

