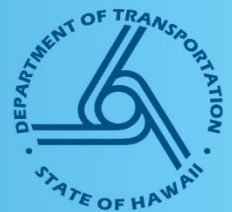# 1 | Overview of the Stormwater Management Plan

1 | OVERVIEW OF THE STORMWATER MANAGEMENT PLAN

The State of Hawaii, Department of Transportation, Highways Maui District and the State of Hawaii, Department of Transportation, Harbors, Kahului Harbor (collectively hereinafter Maui District) were issued the Municipal Separate Storm Sewer System (MS4) National Pollutant Discharge Elimination System (NPDES) Permit No. HI 22KG717. The MS4 NPDES Permit authorizes Maui District to discharge stormwater runoff and certain non-stormwater runoff discharges from its MS4 network into State Waters. The MS4 NPDES Permit becomes effective in 2022, and will expire in 2027.

Maui District owns and operates its highways and harbor, including an MS4 network, within the central, urbanized area of Maui that serves a population of approximately 55,000 (*Source:* US Census 2010), and spans approximately 20 miles as shown in Figure 1-1.

Figure 1-1. Kahului-Paia urbanized area spans approximately 20 miles on the Island of Maui.

The *Stormwater Management Plan (SWMP)* was developed to address the requirements of the MS4 NPDES Permit and reduce, to the maximum extent practicable (MEP), the discharge of pollutants to and from the MS4 to protect Maui's waters.

The overview of the *SWMP* introduces the program organizational structure of Maui District, provides the purpose and structure of the *SWMP,* and presents an overview of the Maui District's Asset Management System (AMS).

1.1   PROGRAM ORGANIZATION

Maui District administers the *Stormwater Management Plan*. The organizational structure of Maui District identifies the primary support for implementation and oversight of each program element (Appendix 1.1). For this stormwater program, Maui District is comprised of the State of Hawaii, Department of Transportation Highways Maui District (HWY-M otherwise known as DOT Highways Maui District), which is responsible for managing and overseeing the operations of the highway network; and the State of Hawaii, Department of Transportation, Harbors, Kahului Harbor (HAR), which is responsible for managing and overseeing the operations at Kahului Harbor.

Maui District administers this *SWMP* with the support of staff in the Construction, Maintenance, and Design Sections, together with the SWMP Consultant and service contractors, to ensure effective and efficient implementation.

1.2   MISSION AND VISION STATEMENTS

Maui District's *Mission* is to support the management of Maui's highways and harbor with the commitment to safeguard the environment and protect the health and safety of our employees, residents, visitors, and communities. This vision drives the implementation of the stormwater program and its goals.

Maui District's *Vision* is a safe and healthy environment achieved through collaboration and partnership with public, private, and community stakeholders, including but not limited to: Maui District staff, residents, visitors, other MS4 Permittees, regulators, contractors, engineers, businesses, non-profit organizations, and the general public.

1.3   PURPOSE AND STRUCTURE OF THE SWMP

This *SWMP* describes the stormwater program elements for each minimum control measure, activity, and best management practice (BMP) that Maui District plans to implement during the MS4 NPDES Permit term to reduce, to the MEP, the discharge of pollutants to and from the MS4; comply with the MS4 NPDES Permit; satisfy the appropriate requirements of the Clean Water Act (CWA); and meet the goals of the Maui District Mission and Vision Statements. The *SWMP* chapters are organized by program elements, as follows:

1 | Overview of the Stormwater Management Plan
2 | Public Education and Outreach & Public Involvement/Participation Programs
3 | Illicit Discharge Detection and Elimination Program
4 | Construction Site Runoff Control Program
5 | Post-Construction Stormwater Management in New Development and Redevelopment Program
6 | Pollution Prevention and Good Housekeeping Program

Each *SWMP* chapter opens with a brief introduction including program element objectives, followed by a list of BMPs or activities implemented by the program element. A table in each chapter provides the MS4 NPDES Permit requirements pertaining to that program element and associated *SWMP* section(s) in which the permit requirement is addressed.

Each chapter closes with a section that identifies how Maui District will measure effectiveness for each program element. The purpose of this section is to establish metrics for each BMP and outline how Maui District will ensure, monitor, and assess the effectiveness of BMP implementation.

1.4 ASSET MANAGEMENT SYSTEM

Maui District inventories and monitors MS4 assets and activities through its AMS, IBM's Maximo Asset Management platform (Maximo). Maximo is utilized to store assets and records, track task performance, schedule preventive maintenance and site inspections, generate work orders, create inspection and summary reports, and deliver program analytics. Maximo is the primary program management tool for planning and compliance monitoring. Key features of Maximo are:

- Generates automatic reports for inclusion into the Annual Report.
- Sends automatic email notifications and reminders ahead of compliance deadlines.
- Integrates with ArcGIS applications for mobile inspections.

The geographic information system (GIS) web-based application hosted on Esri's ArcGIS platform, which is linked to Maximo, is utilized to identify and display the MS4 network inventory. All assets can be explored online or via mobile devices in an interactive map application (AMS Viewer).

Maximo currently contains the following modules, each of which is dedicated to a program element or activity.

- Adopt-A-Highway
- Complaints
- Construction Projects
- Debris Control: Culverts and Pipes, Manholes and Inlets, Open Channels, and Street Sweeping
- Education Events
- Industrial and Commercial (IC)/Illicit Discharge Detection and Elimination (IDDE)
- Maintenance Facilities Baseyards
- Post-Construction BMPs

- Permits
- Research

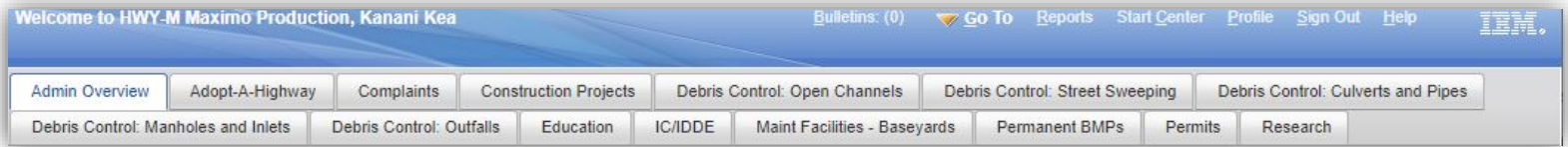The Maximo Start Center for SWMP program modules is shown in Figure 1-2.

Figure 1-2. Maximo Start Center provides easy access to the stormwater program modules.