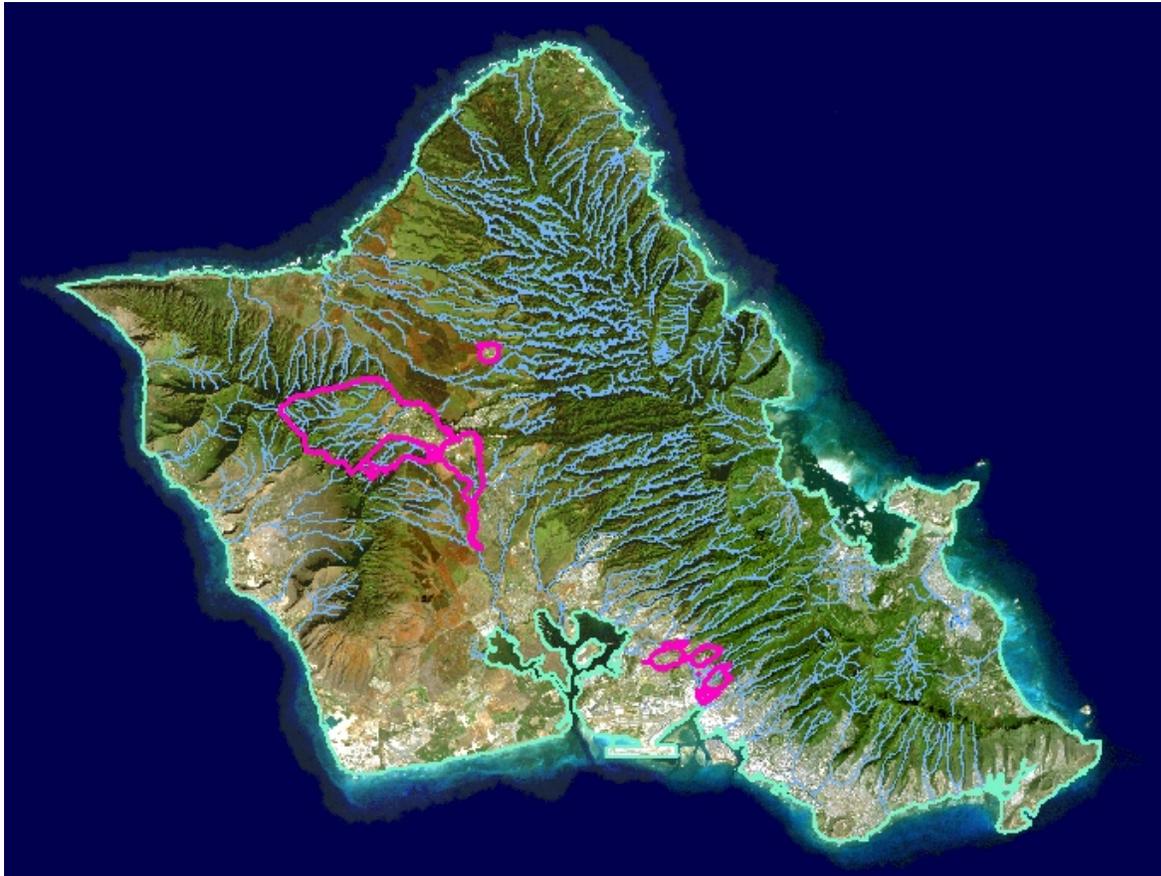


**CALENDAR YEAR 2014 ANNUAL REPORT
FOR U.S. ARMY GARRISON-HAWAII
STORM WATER MANAGEMENT PLAN
NPDES PERMIT NO. HI S000090**

**Schofield Barracks, Wheeler Army Airfield, Fort Shafter, Helemano Military Reservation,
Aliamanu Military Reservation, Tripler Army Medical Center**



Prepared By:

DPW Environmental Compliance Branch

Public Comment Version, January 2015

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List of Acronyms

AHFH.....	Army Hawaii Family Housing
AMR.....	Aliamanu Military Reservation
BMP.....	Best Management Practice
CS.....	Construction Site Runoff Control
CY.....	Calendar Year
DMR.....	Discharge Monitoring Report
DoD.....	Department of Defense
DPW.....	Directorate of Public Works
ECATTS.....	Environmental Compliance Assessment Training and Tracking System
ECO.....	Environmental Compliance Officer
EPA.....	Environmental Protection Agency
EQCC.....	Environmental Quality Control Committee
FS.....	Fort Shafter
GIS.....	Geographic Information System
HMR.....	Helemano Military Reservation
HMMS.....	Hazardous Material Management System
ID.....	Illicit Discharge Detection and Elimination
IPC.....	Island Palm Communities LLC
LID.....	Low Impact Development
MS4.....	Municipal Separate Storm Sewer System
MTV2.....	Military Channel TV2
NEPA.....	National Environmental Policy Act
NOI.....	Notice of Intent
NPDES.....	National Pollution Discharge Elimination System
PC.....	Post-Construction Runoff Control
PE.....	Public Education and Outreach
PI.....	Public Involvement
PP.....	Pollution Prevention
PSA.....	Public Service Announcement
QA/QC.....	Quality Assurance/Quality Control
R-1.....	Disinfected Tertiary Treated Effluent
SB.....	Schofield Barracks
SDOH.....	State Department of Health
SPCC.....	Spill Prevention Control and Countermeasure
SWMP.....	Storm Water Management Plan
SWPCP.....	Storm Water Pollution Control Plan
TAMC.....	Tripler Army Medical Center
TMDL.....	Total Maximum Daily Load
USAG-HI.....	U.S. Army Garrison-Hawaii
WAAF.....	Wheeler Army Airfield

Summary

The following “Calendar Year 2014 Annual Report for U.S. Army Garrison-Hawaii Storm Water Management Plan,” Permit Number HI S000090, fulfills the annual reporting requirements of the National Pollutant Discharge Elimination System (NPDES) Permit, issued by the Hawaii State Department of Health (SDOH). The Annual Report includes details of compliance efforts to meet permit conditions; an assessment of the program goals and accomplishments that includes responsibility, schedule, reporting, and record keeping requirements for program activities to meet minimum control measures; modifications to the program’s goals; a summary of storm water related activities planned for the following calendar year; major modifications made to the storm sewer system; and storm water monitoring results. Several areas of the program were identified that need improvement and modifications to comply with the permit. The Army has updated policies and procedures to improve the effectiveness of the Storm Water Management Program which are documented in this report.

For the purposes of this report, USAG-HI refers to the locations that comprise the permitted municipal separate storm sewer system (MS4): Schofield Barracks, Wheeler Army Airfield, Fort Shafter, Helemano Military Reservation, Aliamanu Military Reservation, and Tripler Army Medical Center. The Storm Water Management Plan (SWMP) was available for review and public comment from January 2015 through Feb 2015. Army personnel, their dependents, and civilian employees participated in developing, implementing, and reviewing the USAG-HI’s SWMP.

1. Status of Compliance with Conditions of Permit

USAG-HI is achieving some of the goals associated with its NPDES Permit Number HI S000090; however, several areas need improvement and are presented in Table 1. This Annual Report documents the efforts being made to improve deficient areas and maintain the sections that are successful. Discharge monitoring reports for calendar year (CY) 2014 are included as part of this submission in Tab 7.

2. Installation Information

NPDES Permit Number HI 1121431 was issued on January 18, 2002 and expired August 31, 2006. A renewal application was submitted at that time and an NPDES Permit to discharge storm water associated with industrial activities and certain non-storm water discharges from USAG-HI's MS4 was granted February 7, 2007 (NPDES Permit Number: HI S000090). The permit expired August 31, 2011 and was administratively extended until a new permit could be issued by SDOH. The SDOH issued a new permit to USAG-HI on April 7, 2014. The permit requires a new SWMP to be prepared, submitted, and implemented by October 2015. The USAG-HI will prepare the document with relevant changes to meet the requirements of the new permit.

The USAG-HI NPDES Permit covers six locations: Schofield Barracks, Wheeler Army Airfield, Fort Shafter, Helemano Military Reservation, Aliamanu Military Reservation and Tripler Army Medical Center. The permit requires USAG-HI to submit an SWMP, also known as the Annual Report.

Geography

The total acreage within the six installation boundaries is approximately 13,635 acres.

Schofield Barracks (SB) consists of 10,133 acres. See Figure 1. The cantonment area for SB is considerably less at 1,849 acres. All figures show the installation boundary in pink with the storm drain system (red) and streams (blue). The stream layer was obtained from the Hawaii State Geographic Information System (GIS) Program web site (<http://www.hawaii.gov/dbedt/GIS/>).

The majority of SB drains into Kaukonahua Stream. Kaukonahua Stream flows northward through the towns of Waialua and Haleiwa and eventually merges with Poamoho Stream. The streams turn into Kiikii Stream and drain into Waialua Bay. The southwest corner of SB and its southern property line drains into tributaries of Waikele Stream. Waikele Stream flows southward through the towns of Mililani and Waipahu and eventually drains into the West Loch of Pearl Harbor.

In 2005, approximately 1,292 acres were purchased on the southern boundary of SB. The additional land is being used for both training lands and military facilities. The Stryker Brigade Combat Team motor pool was constructed on a portion of the purchased land. The current size of land acquired on the southern boundary of SB is 1,402 acres.

Wheeler Army Airfield (WAAF) consists of 1,764 acres. See Figure 2. The majority of this installation drains into Waikele Stream.

Fort Shafter (FS) consists of 577 acres. All of FS and FS Flats drain into the two tributaries of Moanalua Stream, which pass through the installation. The tributaries within the FS installation are normally dry. See Figure 3.

Helemano Military Reservation (HMR) consists of approximately 282 acres. See Figure 4. The northern portion of HMR drains into tributaries of Paukauila Stream. However, the majority of the HMR area drains into a large sedimentation basin on the southwest corner of the installation.

Aliamanu Military Reservation (AMR) consists of approximately 520 acres. See Figure 5. The majority of family housing within the crater drains into a Y-shaped storm drain channel, which connects to a tunnel through the south of the military reservation. Storm water flows through the tunnel down the slopes of Aliamanu Crater and into Salt Lake. The northeast portion of AMR is outside the crater and the area drains north towards Halawa Stream.

In 2003, the Army acquired the use of approximately 69 acres owned by the Coast Guard. Ownership of the parcel has since been transferred to the Army. Island Palm Communities LLC (IPC), formerly Army Hawaii Family Housing (AHFH), is a public private venture between Lend Lease LLC and the U.S. Army. IPC is responsible to construct new family housing within the parcel, and the Army is responsible to maintain the utilities and respond to spills until each utility is privatized.

Tripler Army Medical Center (TAMC) consists of approximately 359 acres. See Figure 6. The TAMC storm drains are located to the north, south and west of the installation boundaries. The western portion of TAMC eventually connects to the City and County of Honolulu storm drain system. The northern and southern portions of TAMC drain to tributaries of Moanalua Stream.

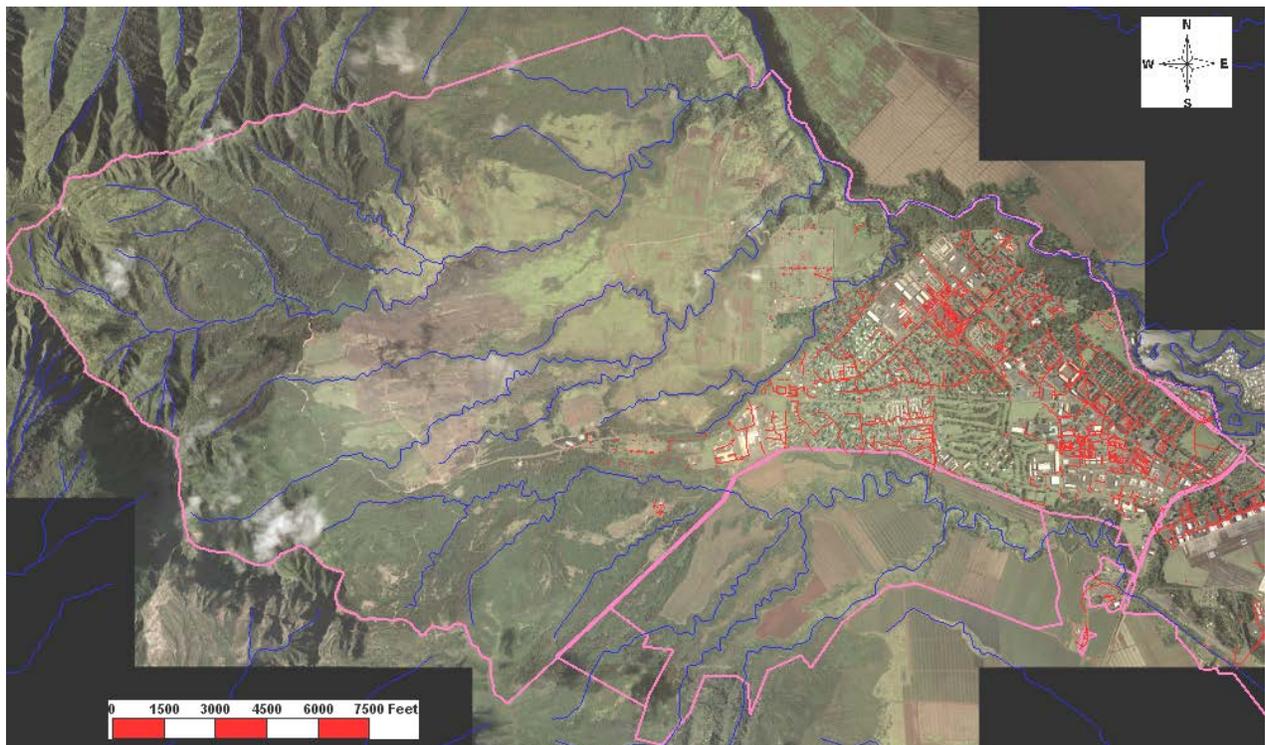


Figure 1: Schofield Barracks Vicinity Map. Installation boundary (pink) with the State of Hawaii stream system (blue) and storm drain system (red) shown.

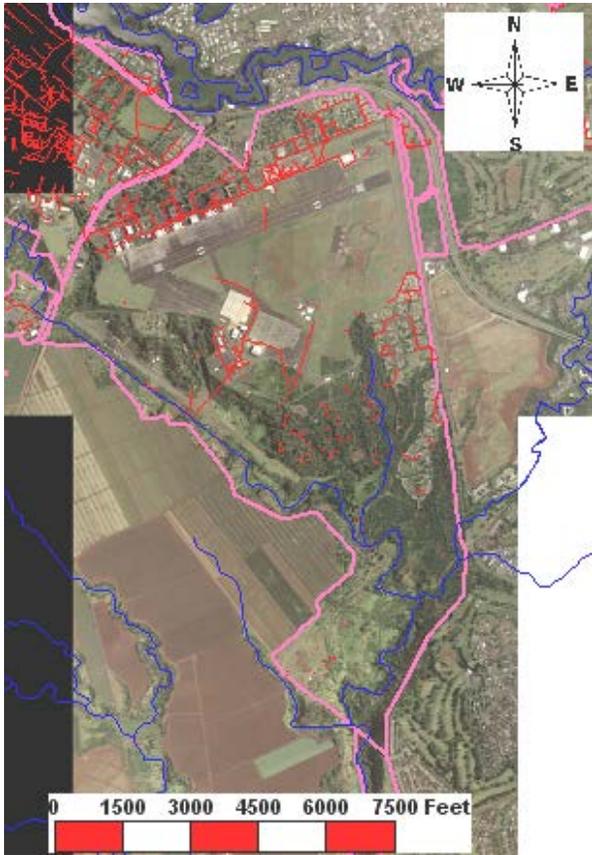


Figure 2: Wheeler Army Airfield Vicinity Map. Installation boundary (pink) with the State of Hawaii stream system (blue) and storm drain system (red) shown.

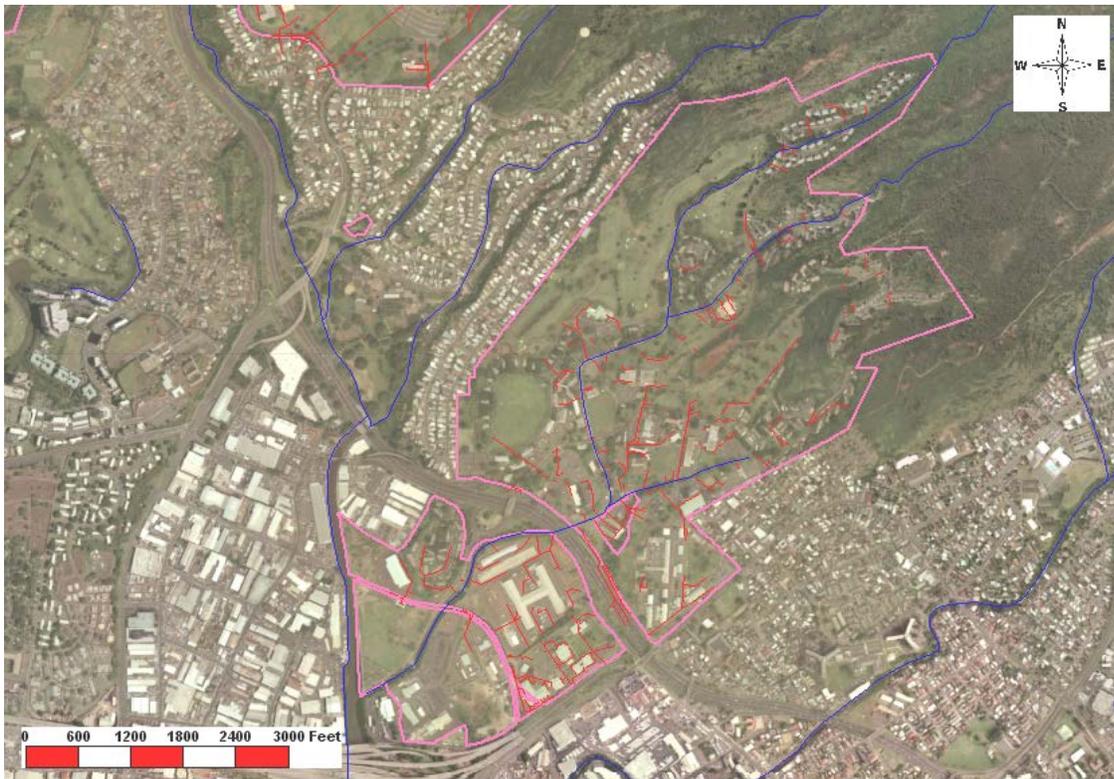


Figure 3: Fort Shafter Vicinity Map. Installation boundary (pink) with the State of Hawaii stream system (blue) and storm drain system (red) shown.



Figure 4: Helemano Military Reservation Vicinity Map. Installation boundary (pink) with the State of Hawaii stream system (blue) and storm drain system (red) shown.

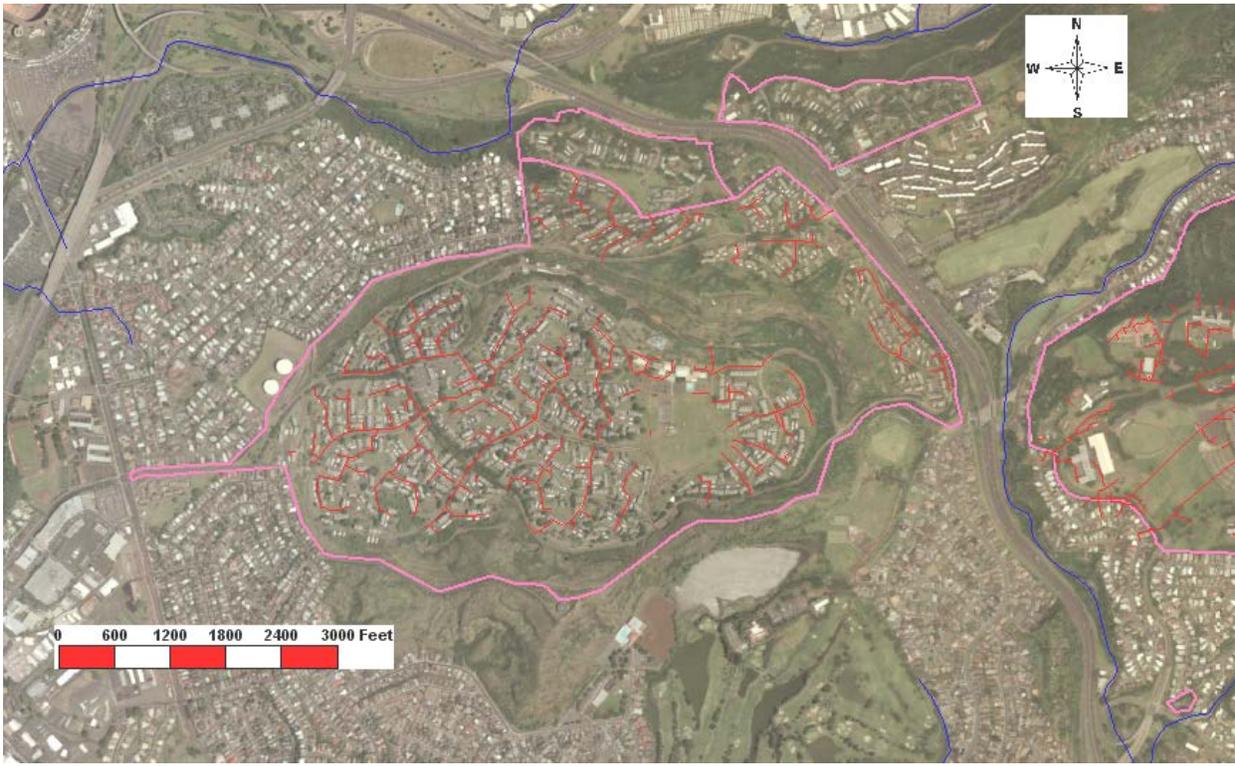


Figure 5: Aliamanu Military Reservation Vicinity Map. Installation boundary (pink) with the State of Hawaii stream system (blue) and storm drain system (red) shown.

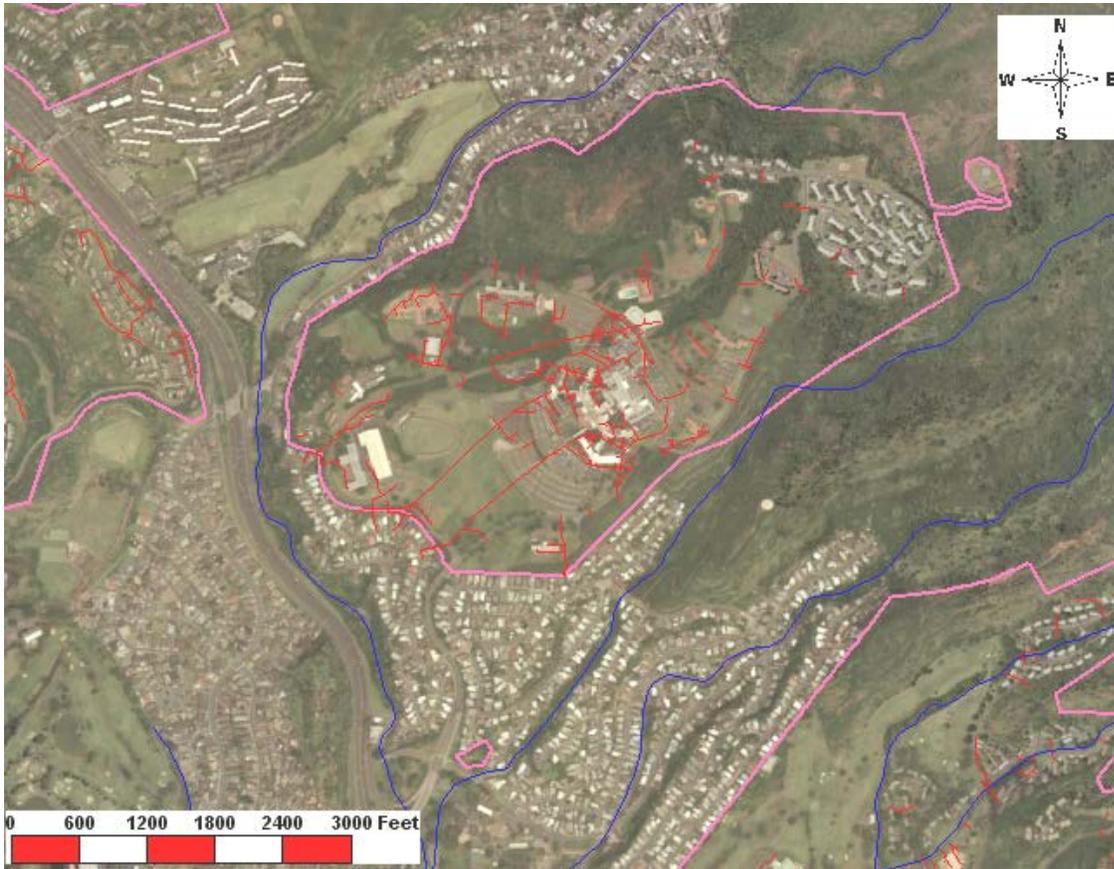


Figure 6: Tripler Army Medical Center Vicinity Map. Installation boundary (pink) with the State of Hawaii stream system (blue) and storm drain system (red) shown.

3. Assessment of the Storm Water Management Program

Table 1 summarizes USAG-HI's proposed Best Management Practice (BMP) activities to comply with the minimum control measures outlined in the NPDES Permit. Supporting BMP information, including BMP descriptions, measurable goals, responsible party, and implementation schedule are included in Section 3. If the BMP is highlighted in red, the Directorate of Public Works (DPW) needs to improve the BMP to comply with permit. If the BMP is highlighted in yellow, DPW chose not to implement the BMP and instead modified the BMP. If the BMP is highlighted in green, DPW was able to successfully implement the BMP.

Table 1. Summary of Minimum Control Measures

	CY 09	CY 10	CY 11	CY 12	CY 13	CY14
Public Education and Outreach						
PE-1: Army Personnel Storm Water Pollution Prevention Education						
PE-2: Public Service Announcements/Slides						
PE-3: DPW Staff and Other Agency Storm Water Pollution Prevention Education						
PE-4: Web-based Training for Service Contractors and Construction Contractors				Modified		Removed in 2012
Public Involvement						
PI-1: Storm Drain Stenciling or Marker						
PI-2: Education of Installation School Students		Modified				
PI-3: Public Involvement Project		Modified				
PI-4: Public Review of the SWMP		Added				
Illicit Discharge Detection and Elimination						
ID-1: Detect and Investigate Illicit Discharges						
ID-2: List of Non-Storm Water Discharges						
Construction Site Runoff Control						
CS-1: Adoption and Phase-in of City's BMP Manual for Construction Sites						
CS-2: Review of Storm Water BMP Construction Drawing and Specifications						
CS-3: Construction Site Inspections						
Post-Construction Runoff Control						
PC-1: Adoption and Phase-in of Post-Construction Storm Water Management Requirements		Modified				
PC-2: Review of Civil Design, Plans, and Specifications						
PC-3: Provide Funding for the Design & Construction of a Post-Construction Storm Water Management Demonstration Project	Removed	Modified				

Pollution Prevention					
PP-1: Develop Storm Water Database/GIS					
PP-2: Develop Street Sweeping Program					
PP-3: Develop a List of Potential Storm Water Pollutants for each Facility					
PP-4: Develop Spill Prevention and Response Procedures					
PP-5: Develop Policy for Reduction in Pesticide and Herbicide Application.					
PP-6: Develop Policy for Reduction in Fertilizer Application on Golf Courses.					
PP-7: Perform Facility Inspections					
PP-8: Develop Storm Water Monitoring Plan					
PP-9: Develop and Implement a Maintenance Program					

The following BMP activities will be continued by DPW to comply with the NPDES permit requirements. As part of the annual reporting process, the BMPs will be evaluated to ensure appropriateness and effectiveness of each BMP and to seek funding within USAG-HI.

3.1. Public Education and Outreach (PE)

The NPDES permit requires USAG-HI to develop and implement a public education program to distribute materials to Army personnel and dependents emphasizing the following:

- Impact of storm water discharges on water bodies
- Hazards associated with illicit discharges
- Measures Army personnel and dependents can take to reduce pollutants in storm water runoff, including, but not limited to, minimizing fertilizer application and practicing proper storage and disposal of chemicals and wastes.

In order to achieve the above objectives, the following BMPs are proposed:

- PE-1: Army Personnel Storm Water Pollution Prevention Education
- PE-2: Public Service Announcements/Slides
- PE-3: DPW Staff and Other Agency Storm Water Pollution Prevention Education
- PE-4: Web-based Training for Service Contractors and Construction Contractors

3.1.1. PE-1: Army Personnel Storm Water Pollution Prevention Education

3.1.1.1. BMP Description: DPW conducts regular Environmental Compliance Officer (ECO) training for military, civilian, and contract personnel that work on USAG-HI facilities. The ECO course trains selected personnel for ECO duties that include management requirements to ensure environmental protection and includes the following topics: storm water BMPs, illicit discharge prevention and proper storage and disposal of hazardous materials. The existing program conceptually is to “train the trainer,” and ECO responsibilities include providing quarterly training to their co-workers on environmental compliance topics.

ECO training is required when there is a change in personnel. The ECO is required to complete a 24-hour certification course and subsequent 8-hour refresher certification course once annually. ECO training is provided from battalion level to company level personnel.

During CY 2014, the 24-hour ECO course, 8-hour ECO refresher course, and Senior Leaders course had over 350 attendees. The ECO course description is provided as Tab 1-1, a selection of training material is provided as Tab 1-2, and the ECO inspection checklist section related to storm water pollution prevention BMPs is provided as Tab 1-3.

3.1.1.2. 2014 Goals. DPW proposed no change to the existing ECO training practice. As regulations or requirements change, the curriculum will be revised accordingly. Success of this BMP goal would be measured by subsequent ECO inspection results. DPW proposed to maintain the Clean Water Program webpage on the sustainability website that will be updated when regulations change and/or new permits, plans, and resources are available. DPW proposed to disseminate pollution prevention brochures and educational material at USAG-HI's 2014 Earth Day Celebration or similar events. DPW proposed to create additional education materials detailing pollution prevention BMPs related to installation activities. DPW proposed to continue to participate in Environmental Quality Control Committee (EQCC) meetings and the fuel handler course as requested.

3.1.1.3. 2014 Activities. ECO training course materials were updated and slides related to storm water management BMPs and pollution prevention were included in training courses.

DPW maintained the Clean Water Program webpage on the sustainability website (<http://www.garrison.hawaii.army.mil/sustainability/CleanWater.aspx>) which includes pollution prevention training information, permit required policy documents, and public education resources.

USAG-HI's 2014 Earth Day Festival was held on April 19 at a large field on SB. DPW Clean Water Program staff handed out a brochure to soldiers, their families, and the general community to educate them about the installation storm water program (see Tab 1-4).

DPW SPCC Program staff created a fuel operations slide presentation to describe installation fueling requirements and spill prevention and response BMPs, provided as Tab 1-5. The slides were presented at the fuel handler courses conducted on January 7, February 5, May 14, July 22, August 18, and October 20.

DPW continued to participate in the EQCC which updates Army personnel on pollution prevention and storm water management related topics. The EQCC is attended by military and civilian personnel, major tenants, and the Garrison Commander.

3.1.1.4. 2015 Goals. DPW proposes no change to the existing ECO training practice. As regulations or requirements change, the curriculum will be revised accordingly. Success of this BMP goal will be measured by subsequent ECO inspection results. DPW proposes to maintain the Clean Water Program webpage on the sustainability website that will be updated when regulations change and/or new permits, plans, and resources are available. DPW proposes to disseminate pollution prevention brochures and educational material at USAG-HI's 2015 Earth Day Celebration or similar events. DPW proposes to create additional education materials

detailing pollution prevention BMPs related to installation activities. DPW proposes to continue to participate in EQCC meetings and the fuel handler course as requested.

3.1.1.5. Responsibility. DPW is responsible for providing ECO training with input from subject matter experts on storm water and spill prevention, control, and countermeasures. DPW shall maintain the USAG-HI sustainability website. DPW shall create and disseminate public education material related to pollution prevention BMPs. DPW shall continue to participate in EQCC meetings and the fuel handler course as requested.

3.1.1.6. Schedule. DPW will conduct monthly ECO training and update the curriculum as needed. DPW will update the Clean Water Program webpage as needed. DPW will participate in EQCC meetings and the fuel handler courses.

3.1.1.7. Reporting and Record Keeping. DPW ECO Chief Inspector maintains the ECO course offering, course roster and dates of attendance. DPW Clean Water Program maintains records of public education related activities and resources.

3.1.2 PE-2: Public Service Announcements/Slides

3.1.2.1. BMP Description. DPW may provide public service announcements (PSAs) for storm water management related topics on the military channel (MTV2). MTV2 reaches all USAG-HI installations. The target audience is military personnel and dependents that live and/or work on post.

3.1.2.2. 2014 Goals. DPW proposed to modify and conduct a public survey to continue to measure whether Army personnel and dependents are aware of storm water runoff and pollution prevention related issues and how best to communicate pollution prevention awareness messages. DPW proposed to continue to participate in technical conferences on storm water related topics and to communicate lessons learned.

3.1.2.3. 2014 Activities. No PSAs were aired on MTV2 and a public survey was not conducted during the year due to a staff shortage.

DPW Environmental staff attended technical seminars at StormCon on August 5-7 and at the State Department of Transportation annual construction BMP training on November 20.

3.1.2.4. 2015 Goals. DPW proposes to create and conduct a public survey to continue to measure whether Army personnel and dependents are aware of storm water runoff and pollution prevention related issues and how best to communicate pollution prevention awareness messages.

3.1.2.5. Responsibility. It will be the responsibility of the DPW Clean Water Program Manager to ensure the public survey is conducted and results are used to improve public education and outreach goals.

3.1.2.6. Schedule. The public survey will be conducted during outreach events during the year. Survey results will be tabulated and used to further public education objectives.

3.1.2.7. Reporting and Record Keeping. Public survey results data will be maintained by the DPW Clean Water Program Manager.

3.1.3. PE-3: DPW Staff and Other Agency Storm Water Pollution Prevention Education

3.1.3.1. BMP Description: DPW Clean Water Program determined that DPW staff and construction contractors working on USAG-HI installations need to be familiar with NPDES permit requirements for storm water management and pollution prevention.

3.1.3.2. 2014 Goals. DPW proposed to continue to provide construction permit compliance, erosion and sediment control, and post-construction storm water management training as needed and to track training by IPC for construction contractors and operations and maintenance staff.

3.1.3.3. 2014 Activities. The following training was accomplished:

During construction site inspection visits, DPW Clean Water Program staff conducted a training presentation aimed at educating the construction contractors on the USAG-HI MS4 permit and its requirements, construction permit compliance, and erosion and sediment control and pollution prevention BMPs. The presentation is provided as Tab 1-6.

On September 23, DPW Environmental staff hosted a slide presentation on Low Impact Development (LID) that was also attended by Master Planning and Engineering Divisions. The presentation trained DPW staff on MS4 permit requirements, post-construction best management practices, LID goals and requirements, Army and EPA guidance regarding LID, and application of an Army LID planning tool. The presentation is provided as Tab 1-7.

DPW personnel including the Director, Deputy Director, Division chiefs and representatives from the Corps of Engineers and IPC met with SDOH staff on January 27 to discuss the Notice of Apparent Violation (NAV). SDOH staff presented a slide show educating attendees about Clean Water Act requirements and the importance of complying with regulations in order to help protect and preserve Hawaii's streams and water resources. The attendance sheet is provided as Tab 1-8.

DPW Operations and Maintenance Division (OMD) personnel attended ECO training that included pollution prevention education. Also, DPW Environmental staff met multiple times with OMD supervisors to communicate the requirement that storm drain infrastructure, including post-construction BMPs, must be properly maintained.

IPC contractor training included the provision of information on construction BMPs to contractors during the Lend Lease LLC monthly Owners' Meetings, and site-specific production meetings. Also BMP training was re-enforced via toolbox talks, weekly QC inspections, and associated reports to Environmental Point of Contact. IPC Operations and Maintenance personnel training included environmental management and pollution prevention BMPs, pest management practices, spill response, yard care practices, fleet vehicle washing practices, and good housekeeping practices.

IPC Operations and Maintenance personnel training included environmental management and pollution prevention, spill response, yard care practices including watering, fleet vehicle washing practices, and good housekeeping practices. This also included resident education outreach.

3.1.3.4. 2015 Goals. DPW proposes to continue to provide construction permit compliance, erosion and sediment control, and post-construction storm water management training as needed, to provide training on MS4 permit requirements to DPW staff, and to track training by IPC for construction contractors and operations and maintenance staff.

3.1.3.5. Responsibility. It will be the responsibility of the DPW Clean Water Program Manager to evaluate and adjust the type and frequency of training provided to the various DPW Divisions and contractors working on USAG-HI installations.

3.1.3.6. Schedule. DPW proposes to participate in meetings, conferences, and training events and to assess the type and frequency of training provided to various DPW Divisions and contractors working on USAG-HI installations throughout CY 2015.

3.1.3.7. Reporting and Record Keeping. Records will be maintained as training is conducted.

3.1.4. PE-4: Web-based Training for Service Contractors and Construction Contractors

3.1.4.1. BMP Description: DPW proposed to implement web-based training for environmental compliance with the goal of providing cost-free environmental compliance training to field managers. The initial target audiences were service contractors and construction contractors performing work on USAG-HI installations. The BMP has since been removed since USAG-HI ceased funding the web-based training contract. The training information was uploaded to the USAG-HI Sustainability and Environmental Management website as a resource for construction contractors; however it has not been accessible due to the Army Network Enterprise Technology Command restricting DPW web publishing privileges. DPW will conduct training as needed and will ensure construction contractors are providing training in compliance with the projects' NPDES permits during scheduled construction inspections.

3.1.4.2. 2014 Goals. DPW proposed to continue to maintain training information on the USAG-HI Sustainability and Environmental Management website as a resource for construction contractors and to conduct training as needed. Construction inspection results from CY 2013 would inform the development of additional training resources and success will be measured in subsequent inspections. DPW would ensure that contractor training in accordance with NPDES permits for construction activity is conducted through regular, quarterly construction inspections.

3.1.4.3. 2014 Activities. The web-based training has not been accessible due to the Army Network Enterprise Technology Command restricting DPW web publishing privileges. Army Corps of Engineers contractors and subcontractors working on USAG-HI construction projects will be responsible to provide site-specific training for their construction staff as required by their NPDES permits.

3.1.4.4. 2015 Goals. USAG-HI will attempt to resolve the issue with the Army Network Enterprise Technology Command in order to make training accessible on the USAG-HI Sustainability and Environmental Management website as a resource for construction contractors. DPW will continue to conduct oversight training as needed during construction site inspection visits. Construction inspection results from CY 2014 will guide the development of additional training resources and success will be measured in subsequent inspections. DPW will ensure that

contractor training in accordance with NPDES permits for construction activity is conducted through regular, quarterly construction inspections.

3.1.4.5. Responsibility. It will be the responsibility of the DPW Clean Water Program Manager to ensure that training in accordance with NPDES permits for construction activity is completed.

3.1.4.6. Schedule. DPW proposes to continue to provide oversight training as needed and to ensure that training in accordance with NPDES permits for construction activity is completed.

3.1.4.7. Reporting and Record Keeping. The DPW Clean Water Program Manager will retain records of training through construction site inspection reports.

3.2. Public Involvement (PI)

The MS4 permit requires USAG-HI to include Army personnel and dependents in developing, implementing, and reviewing the Storm Water Management Program.

In order to achieve the above objectives, the following BMPs are proposed:

- PI-1: Storm Drain Stenciling
- PI-2: Education of Elementary and Middle School Students
- PI-3: Public Involvement Project
- PI-4: Public Review of the SWMP

3.2.1. PI-1: Storm Drain Stenciling/Marker

3.2.1.1 BMP Description. Stencil storm drain inlets or install semi-permanent storm drain markers at curb inlets on USAG-HI installations to educate on pollution prevention.

3.2.1.2. 2014 Goals. DPW proposed to continue to conduct site visits and utilize quarterly ECO inspections to identify the need for additional storm drain markers. DPW proposed to conduct a storm drain marker event to educate Army personnel and dependents on pollution prevention.

3.2.1.3. 2014 Activities. DPW Clean Water staff placed approximately fifty (50) new storm drain markers at high visibility areas on HMR and SB. A storm drain marker event was not conducted this year due to a staff shortage and a need to prioritize efforts related to the Notice of Apparent Violation and new MS4 permit submittal deadlines.

3.2.1.4. 2015 Goals. DPW proposes to continue to conduct site visits to identify the need for additional storm drain markers and to place a minimum of fifty (50) new storm drain markers in industrial and commercial areas and areas with pedestrian traffic.

3.2.1.5. Responsibility. It will be the responsibility of the DPW Clean Water Program Manager to ensure a minimum of fifty (50) new storm drain markers are placed in industrial and commercial areas and areas with pedestrian traffic.

3.2.1.6. Schedule. As new storm drains are constructed, new drain inlets will be imprinted with the “Dump No Waste, Goes To Ocean” drain markers as required in the standard construction

specifications and construction drawings. Additionally, DPW staff will place new storm drain markers in priority areas as time permits.

3.2.1.7. Reporting and Record Keeping. The DPW Clean Water Program Manager shall maintain a record of the number of new storm drain markers placed per year.

3.2.2. PI-2: Education of Installation School Students

3.2.2.1. BMP Description. Develop an annual storm water education program with the elementary and middle schools located on FS, WAAF, and SB.

3.2.2.2. 2014 Goals. DPW proposed to present the lesson plan and rainwater harvesting worksheet to additional elementary and middle school classes and to assist with tours of the outdoor classroom. DPW proposed to present to other community groups upon request.

3.2.2.3. 2014 Activities. Due to a staff shortage, the lesson plan was not presented to elementary or middle school classes, and no other presentations to community groups occurred.

3.2.2.4. 2015 Goals. DPW proposes to present a lesson plan on storm water pollution prevention to elementary and/or middle school classes as staff become available.

3.2.2.5. Responsibility. It will be the responsibility of the DPW Clean Water Program Manager to plan and oversee classroom presentations and educational events for local community groups.

3.2.2.6. Schedule. DPW proposes to plan and schedule classroom presentations as staff become available.

3.2.2.7. Reporting and Record Keeping. The DPW Clean Water Program Manager shall maintain records of classroom presentations and outreach events.

3.2.3. PI-3: Public Involvement Project

3.2.3.1. BMP Description. Develop an annual public involvement project to involve Army personnel and dependents in storm water management and pollution prevention activities.

3.2.3.2. 2014 Goals. DPW proposed to develop and assist with funding a public involvement project and to continue to work with IPC and Lend Lease staff to collaborate on an opening ceremony for the Shafter Elementary School outdoor classroom project and placing permanent signage at the Elementary School outdoor classroom projects.

3.2.3.3. 2014 Activities. Due to a staff shortage, a public involvement project was not planned. DPW had began work on draft signage for the Elementary School outdoor classroom projects, as provided in Tab 2-1, but the signs were not placed.

3.2.3.4. 2015 Goals. DPW proposes to plan a public involvement project as staff becomes available.

3.2.3.5. Responsibility. It will be the responsibility of the DPW Clean Water Program Manager to oversee the planning of the public involvement project.

3.2.3.6. Schedule. The public involvement project will be planned as staff becomes available.

3.2.3.7. Reporting and Record Keeping. The DPW Clean Water Program Manager will maintain a record of public involvement project plans and activities.

PI-4: Public Review of the SWMP

3.2.4.1. BMP Description. Include Army personnel and dependents in reviewing the SWMP.

3.2.4.2. 2014 Goals. DPW proposed to continue to include Army personnel and dependents and civilian personnel in reviewing the SWMP.

3.2.4.3. 2014 Activities. As required by the new MS4 permit, DPW Clean Water Program staff made the Plan for Requiring Low Impact Development in the Standards available for public review and comment on the DPW Clean Water Program webpage from October 20, 2014 through November 20, 2014. Outreach for the comment period was made through the USAG-HI Weekly Bulletin that is delivered to major commands, tenant and service organizations, and other federal offices; forwarded to the Hawaii Army Weekly newspaper staff for publication; and posted on the garrison calendar, Twitter, and Facebook.

DPW Clean Water Program staff made a draft of the Annual Report available for public review and comment on the DPW Clean Water Program webpage from January 26, 2015 through February 13, 2015. Outreach for the comment period was made through the USAG-HI Weekly Bulletin that is delivered to major commands, tenant and service organizations, and other federal offices; forwarded to the Hawaii Army Weekly newspaper staff for publication; and posted on the garrison calendar, Twitter, and Facebook.

3.2.4.4. 2015 Goals. DPW proposes to continue to include Army personnel and dependents and civilian personnel in reviewing the SWMP.

3.2.4.5. Responsibility. It will be the responsibility of the DPW Clean Water Program Manager to include Army personnel and dependents in reviewing the SWMP.

3.2.4.6. Schedule. DPW shall publish a draft Annual Report available for public comment for a minimum of three weeks of comment period. DPW will communicate the need for Army personnel and dependents and civilian personnel to provide feedback on the SWMP throughout the year as needed.

3.2.4.7. Reporting and Record Keeping. The DPW Clean Water Program Manager will maintain a record of public comments.

3.3. Illicit Discharge Detection and Elimination (ID)

The NPDES permit requires USAG-HI to develop, implement, and enforce a program to detect and eliminate illicit discharges that, at a minimum, includes the following:

- Establishment of installation-wide instructions, directive, or other regulatory mechanism, including enforcement procedures and actions, that prohibit non-storm water discharges into the USAG-HI MS4
- Procedures to detect and eliminate illicit discharges
- Compilation of a list of non-storm water discharges or flows specified in part A.3 of the NPDES permit that are considered to be significant contributors of pollutants to the MS4 and measures to be taken to prevent these discharges, or reduce the amount of pollutants in these discharges

The following BMPs are proposed to meet the objectives of the illicit discharge detection and elimination control measure:

- ID-1: Detect and investigate illicit discharges
- ID-2: Develop a list of non-storm water discharges

3.3.1. ID-1: Detect and Investigate Illicit Discharges

3.3.1.1. BMP Description. Perform dry weather outlet inspections as a method to detect illicit discharges. DPW has used its existing GIS to identify the number of storm water outlets that ultimately discharge to streams. Existing DPW maps identify approximately 450 discharge points and/or outfalls, including both industrial and residential areas.

3.3.1.2. 2014 Goals. DPW proposed to complete the mitigation measures identified in the illicit discharge survey. Additional outlet inspections would be performed as part of the IDDE program. DPW proposed to update the “Enforcement Procedures and Actions for the Illicit Discharge Detection Elimination Program” policy document as needed.

3.3.1.3. 2014 Activities. In March 2014, DPW Clean Water Program staff developed a document on “Procedures to Detect and Eliminate Illicit Discharges.” The document lays out USAG-HI’s standard operating procedures for detecting and eliminating illicit discharges, as shown in Tab 3-1.

DPW funded an illicit discharge survey that was conducted from July 7 through July 17 by a contractor. DPW received an initial draft report for the illicit discharge survey after field work was completed. Of the 225 outfalls inspected, only one had shown signs of illicit discharge or potential illicit discharge and was investigated by DPW Clean Water Program staff to identify a possible source. DPW staff investigated the outfall and upstream of the outfall where an oil sheen was observed in parking stalls, likely due to resident or maintenance vehicle leaks; however, no single obvious source was identified and staff will monitor the situation as needed. Some of the other survey findings were allowable non-storm water discharges per the permit such as landscape irrigation. Other incidents were related to operations and maintenance issues such as broken or buried outfalls. DPW is in the process of taking inventory of its storm drain infrastructure and will fund the correction of broken outfalls through operations and maintenance work orders or contracts.

Apart from the survey, a few illicit discharge or potential illicit discharge incidents occurred during the year and were also investigated by DPW Clean Water Program staff. Each incident

was tracked in an illicit discharge database, and the investigation results including findings, responses, and resolutions are shown in Tab 3-2.

3.3.1.4. 2015 Goals. DPW proposes to fund the contractor-performed annual illicit discharge survey and to conduct follow up investigations as needed. Additional outlet inspections will be performed as part of the IDDE program. DPW proposes to update the “Enforcement Procedures and Actions for the Illicit Discharge Detection Elimination Program” policy document.

3.3.1.5. Responsibility. The DPW Clean Water Program Manager is responsible to continue to fund contract support of this activity. It is the responsibility of garrison personnel and tenants to prevent and correct illicit discharges with assistance from DPW as needed.

3.3.1.6. Schedule. Outfall inspections will be conducted and documented throughout the year. DPW will advise and assist garrison personnel and tenants in order to correct any issues of non-compliance per USAG-HI policy documents.

3.3.1.7. Reporting and Record Keeping. Outfall inspection records are maintained by the DPW Clean Water Program Manager.

3.3.2. ID-2: List of Non-Storm Water Discharges

3.3.2.1. BMP Description. The USAG-HI NPDES permit requires the permittee to develop a list of potential sources of non-storm water discharges.

3.3.2.2. 2014 Goals. DPW proposed to continue to maintain a list of potential sources of non-storm water discharges and mitigation BMPs and to develop public education materials and events to communicate required BMPs.

3.3.2.3. 2014 Activities. DPW funded an illicit discharge detection survey to perform outfall inspections which helped to identify potential sources of non-storm water discharges. DPW maintained a list of non-storm water discharges and mitigation BMPs, provided as Tab 3-3.

3.3.2.4. 2015 Goals. DPW proposes to continue to maintain a list of potential sources of non-storm water discharges and mitigation BMPs and to communicate requirements to garrison personnel as needed.

3.3.2.5. Responsibility. The DPW Clean Water Program Manager will be responsible for maintaining a list of potential sources of non-storm water discharges and mitigation BMPs.

3.3.2.6. Schedule. DPW will continue to maintain and update as needed a list of potential sources of non-storm water discharges and mitigation BMPs.

3.3.2.7. Reporting and Record Keeping. The list of potential sources of non-storm water discharges and mitigation BMPs will be maintained by the DPW Clean Water Program Manager.

3.4. Construction Site Runoff Control (CS)

The NPDES permit requires USAG-HI to develop, implement, and enforce a program to reduce pollutants in storm water runoff from construction activities disturbing one (1) acre or more, including construction activities less than one (1) acre that are part of a larger common plan of development or sale that would disturb one (1) acre or more, that, at a minimum, includes the following:

- Establishment of installation-wide instructions, directive, or other regulatory mechanism, including enforcement procedures and actions, that require erosion and sediment controls
- Requirements for construction site operators to implement appropriate erosion and sediment control BMPs
- Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality
- Procedures for site plan review, which incorporate consideration of potential water quality impacts
- Procedures for receipt and consideration of information submitted by the public
- Procedures for site inspection and enforcement of control measures

To meet the objective of the construction site runoff control program, the following BMPs are proposed:

- CS-1: Adoption and Phase in of City's Storm Water Design Guidance
- CS-2: Review of Storm Water Pollution Prevention Plans (SWPPPs) and accompanying BMP Construction Drawings
- CS-3: Conduct Construction Site Inspections and Follow-ups

3.4.1. CS-1: Adoption and Phase-in of City's BMP Manual for Construction Sites

3.4.1.1. BMP Description. The U.S. Army has a variety of design and construction standards and guidelines, however USAG-HI uses existing design and construction standards issued by the City and County of Honolulu for projects in Hawaii.

3.4.1.2. 2014 Goals. DPW proposed to adopt updated City and County of Honolulu standards and specifications once available. DPW proposed to update the USAG-HI "Enforcement Procedures and Actions for Construction Storm Water Management," continue to maintain and update contractor training resources through the USAG-HI Sustainability and Environmental Management Website, participate in planning charrettes and pre-construction meetings, conduct quarterly construction site visits, and perform project review to verify compliance.

3.4.1.3. 2014 Activities. In CY 2014, DPW requested that construction contractors use the following City and County of Honolulu manuals in their design and construction and grading plans, erosion and sediment control plans and specifications:

- *Storm Water Best Management Practice Manual: Construction*, prepared by the Department of Environmental Services City and County of Honolulu, November 2011

- *Rules Relating to Erosion Control Standards and Guidelines*, prepared by the Department of Planning and Permitting City and County of Honolulu, December 2012

DPW verified compliance through project review and quarterly construction site inspections.

As part of developing the new SWMP, DPW is in the process of revising the USAG-HI “Enforcement Procedures and Actions for Construction Storm Water Management.”

3.4.1.4. 2015 Goals. DPW proposes to adopt updated City and County of Honolulu standards and specifications as needed. DPW proposes to update the USAG-HI “Enforcement Procedures and Actions for Construction Storm Water Management” as needed, continue to maintain and update contractor training resources through the USAG-HI Sustainability and Environmental Management Website, participate in planning charrettes and pre-construction meetings, and conduct quarterly construction site visits. Project reviews by DPW and consultant project staff, e.g. the Army Corps of Engineers and IPC engineers, will be performed to verify compliance.

3.4.1.5. Responsibility. The DPW Clean Water Program Manager will ensure the latest BMP design standards are communicated to DPW personnel and consultants producing design plans, oversee construction site inspections, and retain inspection records and documentation of any corrective measures. Project review to confirm compliance with City BMP standards will be the responsibility of DPW and consultant project staff, e.g. the Army Corps of Engineers and IPC engineers.

3.4.1.6. Schedule. Review current City and County of Honolulu standards and specifications as needed and communicate updates to DPW, Army Corps of Engineers, IPC engineers and contractors, and privatized utility owners. Attend planning charrettes and pre-construction meetings, continue oversight of construction site inspections, and participate in project review.

3.4.1.7. Reporting and Record Keeping. Copies of the latest standards and specifications will be retained and provided on the Clean Water Program webpage. Records of inspections and project review comments shall be retained by the DPW Clean Water Program Manager.

3.4.2. CS-2: Review of Storm Water BMP Construction Drawings and Specifications

3.4.2.1. BMP Description. Participate in the review process for civil design, plans, and specifications related to site drainage, storm water infrastructure, and BMPs. Modify specifications as needed.

3.4.2.2. 2014 Goals. DPW proposed to continue to review and track project comments, conduct site visits, and attend project charrettes and pre-construction meetings as needed.

3.4.2.3. 2014 Activities. Over 110 projects were reviewed including Records of Environmental Consideration and design and construction plans and specifications. The focus of these reviews was on NPDES permit compliance, erosion and sediment control BMPs, and post-construction storm water management. A project review checklist is provided in Tab 4-1. Site visits were conducted as needed and DPW Clean Water Program staff attended pre-construction meetings as necessary to provide comments on NPDES compliance and requirements.

3.4.2.4. 2015 Goals. DPW proposes to continue to review and track project comments, conduct site visits, and attend project charrettes and pre-construction meetings as needed.

3.4.2.5. Responsibility. It is the responsibility of the DPW Clean Water Program Manager to provide oversight review of project plans and specifications with regards to NPDES permit compliance, erosion and sediment control BMPs, and post-construction storm water management requirements and to maintain records of project review comments. Project review to verify storm water BMPs will be the responsibility of DPW Engineering Division and consultant project staff, e.g. the Army Corps of Engineers and IPC engineers.

3.4.2.6. Schedule. DPW will continue to perform reviews of project drawings and specifications as plans are developed.

3.4.2.7. Reporting and Record Keeping. Storm water environmental compliance-related project review comments are maintained by the DPW Clean Water Program Manager.

3.4.3. CS-3: Construction Site Runoff Control (CS)

The NPDES permit requires USAG-HI to develop, implement, and enforce a program to reduce pollutants in storm water runoff from construction activities disturbing one (1) acre or more, including construction activities less than one (1) acre that are part of a larger common plan of development or sale that would disturb one (1) acre or more, that, at a minimum, includes the following:

- Establishment of installation-wide instructions, directive, or other regulatory mechanism, including enforcement procedures and actions, that require erosion and sediment controls
- Requirements for construction site operators to implement appropriate erosion and sediment control BMPs
- Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality
- Procedures for site plan review, which incorporate consideration of potential water quality impacts
- Procedures for receipt and consideration of information submitted by the public
- Procedures for site inspection and enforcement of control measures

3.4.3.1. BMP Description. Establish procedures for construction site inspections and correction of issues of non-compliance, conduct pre-construction BMP inspections, quarterly project inspections, follow-up inspections and random wet weather inspections as needed.

3.4.3.2. 2014 Goals. DPW proposed to continue quarterly construction site inspections to ensure compliance with NPDES permit requirements to prevent sediment-laden runoff from leaving construction sites. DPW proposed to communicate and educate on the most frequent findings of deficiency and to measure success through subsequent inspections.

3.4.3.3. 2014 Activities. During CY 2014, a total of 55 construction site inspections and follow-up inspections were conducted, scheduled per construction site on a quarterly basis and tracked through a spreadsheet, provided as Tab 4-2. Construction site inspections were conducted by an EnviroCert International, Inc. Certified Erosion, Sediment and Storm Water Inspector (CESSWI,

Certification #4104) or other qualified DPW Clean Water Program staff familiar with the specific project SWPPP or other erosion and sediment control documents.

Deficiencies were photographed and recorded in the DPW construction inspection report checklist, as well as communicated to the contractor and to the Army Corps of Engineers representative on-site upon completion of the inspection. Within 48 hours of the inspection (normal working days), DPW emailed a copy of the inspection report with attached photographs (see Tab 4-3) to the contractors and courtesy copied the Army Corps of Engineers Project Manager(s) and the DPW Clean Water Program Manager. The contractor was allowed up to 14 calendar days to provide documentation and photographs of corrective action for any findings of non-compliance. Follow-up inspections occurred if corrections were not fully addressed, delayed response from the contractor was received, or in instances of excessive non-compliance issues.

During CY 2014, DPW Clean Water Branch reviewed and commented on 10 Storm Water Pollution Prevention Plans (SWPPPs) and supporting documents. Documents were reviewed to verify compliance with Hawaii Administrative Rule (HAR), Chapter 11-55, Appendix C and NPDES permit requirements. To assist in the review process, a plan review checklist was used (provided in Tab 4-4) to evaluate the documents and provide comments on any deficiencies detected. A tracking system was implemented to ensure all comments identified during the review process were properly addressed. Letters of Authorization (LOA) to discharge storm water runoff to the Army's storm drain system during construction were not issued until DPW determined project SWPPPs were complete and acceptable. Additionally, written approval to discharge hydrotesting waters to the Army's storm drain system during construction was only provided if specific conditions were met. A tracking system was used to maintain project LOAs and hydrotesting approvals.

A qualified DPW Clean Water Branch inspector conducted BMP inspections of new projects after storm water controls were installed and prior to initiating earth-disturbing activities. Sites were inspected to verify BMPs have been properly installed and in the correct locations per SWPPP document specifications. Additionally, if applicable, the inspector identified and addressed any site conditions having the potential for erosion and sediment runoff, including other pollutant discharges which may occur as a result of the project's construction activities. A preliminary BMP site inspection checklist was used to verify inspection elements, provided as Tab 4-5.

During wet weather conditions, DPW Clean Water Branch staff conducted 9 random observations to better understand site run-off characteristics, ensure BMPs were functional, and to verify discharges are not occurring. Photographs were taken and submitted to the contractor and the Army Corps of Engineers Project Manager(s) if a deficiency was observed. The contractors responded immediately, and all issues were resolved. Inspection documentation was filed using the Clean Water Program database.

When a project was declared "complete" prior to the NPDES Permit Notice of Cessation (NOC) form being filed electronically with the DOH, DPW Clean Water Branch conducted inspections to verify all construction activities have permanently ceased, the site has been stabilized and equipment was removed off-site. A NOC inspection checklist (provided as Tab 4-6) was used to verify project completeness. DPW Clean Water Branch retained and maintains copies of all NOC confirmation submittals.

3.4.3.4. 2015 Goals. DPW proposes to continue quarterly construction site inspections until the new Storm Water Management Plan (SWMP) is submitted to the DOH. When submitted, all NPDES permit covered construction projects will be inspected at least monthly. DPW will follow its revised “Reporting and Corrective Procedures for Construction Storm Water Inspections,” provided as Tab 4-7. These written procedures outline DPW’s proposed corrective/ reporting actions and follow-up policies when a project is not in full compliance with the NPDES permit requirements. Procedures include reporting all critical noncompliance instances to DOH. In addition, DPW Clean Water Branch proposes to develop and implement an “Enforcement Response Plan for Construction Storm Water Inspections.” This document will include written procedures for enforcement actions and penalties for those in non-compliance with NPDES Permit requirements.

DPW proposes to continue to review SWPPPs and other pollution prevention documents prior to issuing written authorization to discharge storm water runoff to the Army’s storm drain system during construction. DPW proposes to continue to require written approval to discharge hydrotesting water into the Army’s MS4.

Prior to the initiation of ground-disturbing activities at any site, except for activities associated with the installation of BMPs at any site, a qualified DPW inspector who is familiar with the project SWPPP will continue to inspect the site to verify BMPs have been installed in compliance with the DPW approved sediment and erosion control document. Additionally, the inspector will verify good housekeeping practices are being used. The inspector will also continue to identify any site conditions having the potential for erosion and sediment runoff, including other pollutant discharges which may occur as a result of the project’s construction activity.

An improved database will be developed to enhance construction inspection tracking. DPW will ensure compliance with NPDES permit requirements to prevent sediment-laden runoff from leaving construction sites. DPW proposes to communicate and educate on the most frequent findings of deficiency and to measure success through subsequent inspections.

3.4.3.5. Responsibility. DPW Clean Water Program Manager is responsible to provide oversight of construction site inspections and to follow up on any issues of non-compliance. On-site project personnel, e.g. the Army Corps of Engineers, IPC engineers, and their contractors or subcontractors, are responsible to perform regular inspections and immediately correct deficiencies as required by their NPDES permits and State and federal regulations.

3.4.3.6. Schedule. Quarterly construction site inspections will be conducted by DPW Clean Water Program staff prior to submittal of the SWMP. In April 2015, DPW’s “Enforcement Response Plan for Construction Storm Water Inspections,” will be complete and implemented. SWPPP review is ongoing and will occur as documents are submitted to DPW Clean Water Program. An improved database to track construction projects greater than one acre will be developed and implemented upon submittal of the SWMP.

3.4.3.7. Reporting and Record Keeping. The DPW Clean Water Program Manager will maintain records of inspection dates, reports, and corrective actions for five years.

3.5. Post-Construction Runoff Control (PC)

Develop, implement, and enforce a program to reduce pollutants in storm water runoff from new development and redevelopment projects that disturb one (1) acre or more, including construction activities less than one (1) acre that are part of a larger common plan of development or sale that would disturb one (1) acre or more, that, at a minimum, includes the following:

- Establishment of installation-wide instructions, directive, or other regulatory mechanism, including enforcement procedures and actions that address post-construction runoff from new development and redevelopment projects
- Structural and/or non-structural BMPs appropriate for each installation to minimize water quality impacts and attempt to maintain pre-development runoff conditions
- Procedures for long-term operations and maintenance of BMPs

To meet the objective for the post-construction runoff control measure, the following BMPs are proposed:

- PC-1: Adoption and Phase-in of Post-Construction Storm Water Management Requirements
- PC-2: Review of Civil Design Plans and Specifications
- PC-3: Provide Funding for the Design & Construction of a Post-Construction Storm Water Management Demonstration Project

3.5.1. PC-1: Adoption and Phase-in of Post-Construction Storm Water Management Requirements

3.5.1.1. BMP Description. USAG-HI will adopt federal, state, and local post-construction storm water management requirements (whichever is most stringent) in order to minimize water quality impacts and attempt to maintain pre-development runoff conditions for new construction and redevelopment projects.

3.5.1.2. 2014 Goals. DPW proposed to continue to work with DPW Engineering and Construction, Operations and Maintenance, and Master Planning Divisions, the Army Corps of Engineers, IPC, and privatized utility owners on incorporating federal post-construction storm water management requirements into project request for proposals and specifications. DPW proposed to maintain records of all post-construction BMPs installed and maintained. DPW proposed to oversee the execution of the contract for the LID BMP calculator tool and an LID Retrofit Analysis Study for FS.

3.5.1.3. 2014 Activities. Through National Environmental Policy Act (NEPA) processes including the USAG-HI Record of Environmental Consideration (REC) process and project review process, DPW Clean Water Program staff provided guidance on implementing federal post-construction storm water management requirements. DPW Clean Water Program staff also participated in project meetings with DPW Engineering Division and the Army Corps of Engineers to discuss requirements for post-construction storm water management.

A general inventory for permanent post-construction BMPs is being maintained in an Excel spreadsheet by Clean Water Program staff. The intent of the spreadsheet is to track what

permanent post-construction BMPs are installed so the information can be used by DPW Operations and Maintenance, Business Operations, and Master Planning (Real Estate Branch) Divisions for inclusion in a proper Asset Management System. The current inventory is provided in Tab 5-1.

DPW Business Operations Division (Contracting Branch) has begun research on establishing a maintenance contract for permanent post-construction BMPs. DPW has very limited experience with operation and maintenance of permanent post-construction BMPs.

DPW Clean Water Program oversaw a contract for development of an Army LID planning tool and performance of an LID Retrofit Analysis Study for FS. In September, project contractors conducted a slide presentation which trained DPW Planning and Engineering Divisions on the application of the Army LID planning tool as well as MS4 permit requirements, post-construction best management practices, and LID goals and requirements. The presentation is provided as Tab 1-7. The LID Retrofit Analysis Study for FS identified LID retrofit opportunities for future annual work plan projects to be considered for funding in future fiscal years.

3.5.1.4. 2015 Goals. DPW proposes to continue to work with DPW Master Planning, Engineering and Construction, and Operations and Maintenance Divisions, the Army Corps of Engineers, IPC, and privatized utility owners on incorporating federal post-construction storm water management requirements into project planning, design, construction, and operations and maintenance practices. DPW proposes to maintain records of installed permanent post-construction BMPs. DPW proposes to initiate development of an Asset Management System to properly track installation and maintenance of permanent post-construction BMPs.

3.5.1.5. Responsibility. The DPW Clean Water Program Manager is responsible to provide guidance to the various agencies on implementing MS4 permit and federal post-construction storm water management requirements. DPW is responsible for tracking the installation of post-construction BMPs and ensuring that operations and maintenance plans are followed to keep the BMPs in proper working order.

3.5.1.6. Schedule. DPW will participate in meetings with the various agencies, track the installation of post-construction BMPs, and maintain post-construction BMP operations and maintenance records.

3.5.1.7. Reporting and Record Keeping. The DPW Clean Water Program Manager is responsible for maintaining records related to post-construction storm water management. Updated information will be included in the annual report.

3.5.2. PC-2: Review of Civil Design Plans and Specifications

3.5.2.1. BMP Description. Participate in the review process for civil design plans and specifications to provide comments on post-construction storm water management requirements, BMP design, and operations and maintenance specifications.

3.5.2.2. 2014 Goals. DPW proposed to continue to review civil design plans and specifications to ensure compliance with post-construction storm water management requirements.

3.5.2.3. 2014 Activities. DPW Clean Water Program reviewed over 30 civil design plans and/or specifications and provided comments related to post-construction storm water management regulatory requirements as needed.

3.5.2.4. 2015 Goals. DPW proposes to continue to review civil design plans and specifications to ensure compliance with post-construction storm water management requirements.

3.5.2.5. Responsibility. The DPW Clean Water Program Manager is responsible for ensuring the review of civil design plans and specifications to provide comments on post-construction storm water management regulatory requirements. DPW Engineering Division is responsible for reviewing civil design plans and specifications to provide comments on BMP design. DPW Operations and Maintenance Division is responsible for reviewing civil design plans and specifications to provide comments on operations and maintenance requirements.

3.5.2.6. Schedule. Civil design plans and specifications will be reviewed throughout the year.

3.5.2.7. Reporting and Record Keeping. Clean Water Program project review comments are maintained by the DPW Clean Water Program Manager; the date that comments are submitted to the project designers is maintained by the DPW NEPA Coordinator.

3.5.3. PC-3: Provide Funding for the Design & Construction of a Post-Construction Storm Water Management Demonstration Project

3.5.3.1. BMP Description. Develop a project to demonstrate post-construction storm water management techniques to achieve water quality benefits and to provide an opportunity for public education.

3.5.3.2. 2014 Goals. DPW proposed to collaborate with Lend Lease to continue to develop and assist with funding permanent signage for the Elementary School outdoor classroom projects to educate on pollution prevention and LID and to collaborate with Lend Lease on an opening ceremony for the Shafter Elementary School outdoor classroom project.

DPW proposed to fund additional public display signage and/or publish project description reports to be posted on the Clean Water Program webpage for new construction projects that involve innovative post-construction storm water management techniques.

DPW proposed to identify areas in need of erosion control BMPs and to generate retrofit projects to be included in the annual work plan.

3.5.3.3. 2014 Activities. DPW had began work on draft signage for the Elementary School outdoor classroom projects, as provided in Tab 2-1, but the signs were not placed.

Some areas on SB have been identified as having exposed soil and needing erosion control BMPs. DPW is in the process of determining proper mitigation plans using available resources.

3.5.3.4. 2015 Goals. DPW proposes to continue to identify areas in need of erosion control BMPs and to generate retrofit projects to be included in the annual work plan.

3.5.3.5. Responsibility. It will be the responsibility of the DPW Clean Water Program Manager to oversee and procure funding for the post-construction storm water management demonstration project, identify areas that need erosion control BMPs, and input retrofit projects in the annual work plan.

3.5.3.6. Schedule. Demonstration project planning and identification of erosion control retrofits will take place throughout the year.

3.5.3.7. Reporting and Record Keeping. The DPW Clean Water Program Manager will retain records of demonstration projects, areas identified as needing erosion control, and retrofit projects submitted for inclusion in the annual work plan.

3.6. Pollution Prevention (PP)

The NPDES permit requires USAG-HI to develop, implement, and enforce a Storm Water Pollution Control Plan (SWPCP) that has the ultimate goal of preventing or reducing pollutant runoff and, at a minimum, includes the following:

- Establishment of installation-wide instructions, directive, or other regulatory mechanism, including enforcement procedures and actions that require activities to comply with the SWPCP and prevent the discharge of pollutants into the Permittee's small MS4
- Storm water system map, showing the location of all outfalls and names and location of all State waters that receive discharges from those outfalls
- List of all industrial activities, as defined in 40 CFR Sections 122.26(b)(14)(i) through 122.26(b)(14)(ix) and 122.26(b)(14)(i) including their Standard Industrial Classification (SIC) Codes
- Potential storm water pollutants and their sources for each type of facility/activity
- Site-specific BMPs, good housekeeping procedures, and pollutant control procedures for the operations and maintenance of each type of facility/activity whose storm water discharges into the Permittee's separate storm sewer system and/or directly enters receiving State waters
- Spill prevention and response procedures
- Pesticide, herbicide, and fertilizer application procedures
- Procedures to conduct inspections of industrial facilities at least once per calendar year.
- Training for military personnel, civilian workers, contractors, and other individuals associated with the facility to ensure familiarity with the operations and maintenance program

The permit also requires the development and implementation of a storm water monitoring plan that, at a minimum, includes the following:

- Description of sampling locations, including justification for site selection
- Sampling location map
- Monitoring parameters
- Preservation techniques
- Sample holding time
- Testing method and method detection limit for each parameter

- Quality Assurance/Quality Control (QA/QC) measures
- Procedures for measuring rainfall depth, duration, location, and storm event return time
- Format for reporting monitoring results

Lastly, the permit requires the development and implementation of a storm sewer infrastructure maintenance program that, at a minimum, includes the following:

- Annual inspections of debris basins performed October 1st of each year
- Annual inspections of storm drainage lines, inlets, catch basins, and flood control structures at least once per calendar year
- Maintenance and clearing of debris basins, storm drainage lines, inlets, catch basins, and flood control structures as necessary
- Documentation of inspections and maintenance

To meet the objective for the pollution prevention and good housekeeping measures the following BMPs are proposed:

- PP-1: Develop Storm Water Database/GIS
- PP-2: Develop Street Sweeping Program
- PP-3: Develop a List of Potential Storm Water Pollutants for Each Facility
- PP-4: Develop a Spill Prevention and Response Procedures
- PP-5: Develop Policy for Reduction in Pesticide and Herbicide Application
- PP-6: Develop Policy for Reduction in Fertilizer Application
- PP-7: Perform Facility Inspections
- PP-8: Develop Storm Water Monitoring Plan
- PP-9: Develop and Implement a Maintenance Program

3.6.1. PP-1: Develop Storm Water Database/GIS

3.6.1.1. BMP Description. Develop storm water database/GIS to keep track of the BMPs described in the Annual Report.

3.6.1.2. 2014 Goals. DPW proposed to continue coordination with the DPW GIS office to ensure storm sewer infrastructure information is being updated. The DPW Clean Water Program will continue tracking constructed permanent post-construction BMPs on a GIS layer.

3.6.1.3. 2014 Activities. A DPW GIS staff member updated the storm sewer infrastructure in GIS as as-builts were provided. However, DPW lost its sole GIS staff member around mid-year, and updated GIS shapefiles were not available. DPW Clean Water Program staff maintained a geodatabase to display storm sewer infrastructure as of December 2013 and to track permit compliance activities.

DPW has funded and is in the process of executing a contract to update the storm sewer GIS layers and perform a current assessment of storm sewer infrastructure. Currently, the contractor has completed surveys of WAAF and SB and is in the process of surveying and compiling data for FS, AMR, HMR, and TAMC. When the assessment is completed, the GIS data will be provided to the DPW GIS office for use in updating the storm sewer infrastructure inventory.

3.6.1.4. 2015 Goals. DPW proposes to hire replacement GIS staff to update the storm sewer infrastructure inventory. The DPW Clean Water Program will continue tracking constructed permanent post-construction BMPs on a GIS layer.

3.6.1.5. Responsibility. It is the responsibility of the DPW Engineering Division and the DPW GIS office to ensure that updated storm sewer infrastructure information is available. The DPW Clean Water Program Manager is responsible to track constructed permanent post-construction BMPs and other permit compliance activities as needed.

3.6.1.6. Schedule. The DPW GIS office updates the storm sewer infrastructure in GIS as as-builts are available and in periodically provides updated GIS shapefiles. Storm water BMP data is tracked throughout the year.

3.6.1.7. Reporting and Record Keeping. As-built and storm sewer infrastructure GIS data will be maintained by the DPW Engineering Division and the DPW GIS office. DPW Clean Water Program staff will maintain a geodatabase to track constructed permanent post-construction BMPs and other permit compliance activities as needed.

3.6.2. PP-2: Develop a Street Sweeping Program

3.6.2.1. BMP Description. The existing street sweeping program is accomplished by DPW Operations and Maintenance Division staff.

3.6.2.2. 2014 Goals. DPW proposed no change to the previous goal for the BMP, recommending to continue the existing frequency and location of street sweeping activities. See Figures 7 and 8 below for diagrams of the street sweeping program at SB, WAAF, and FS.

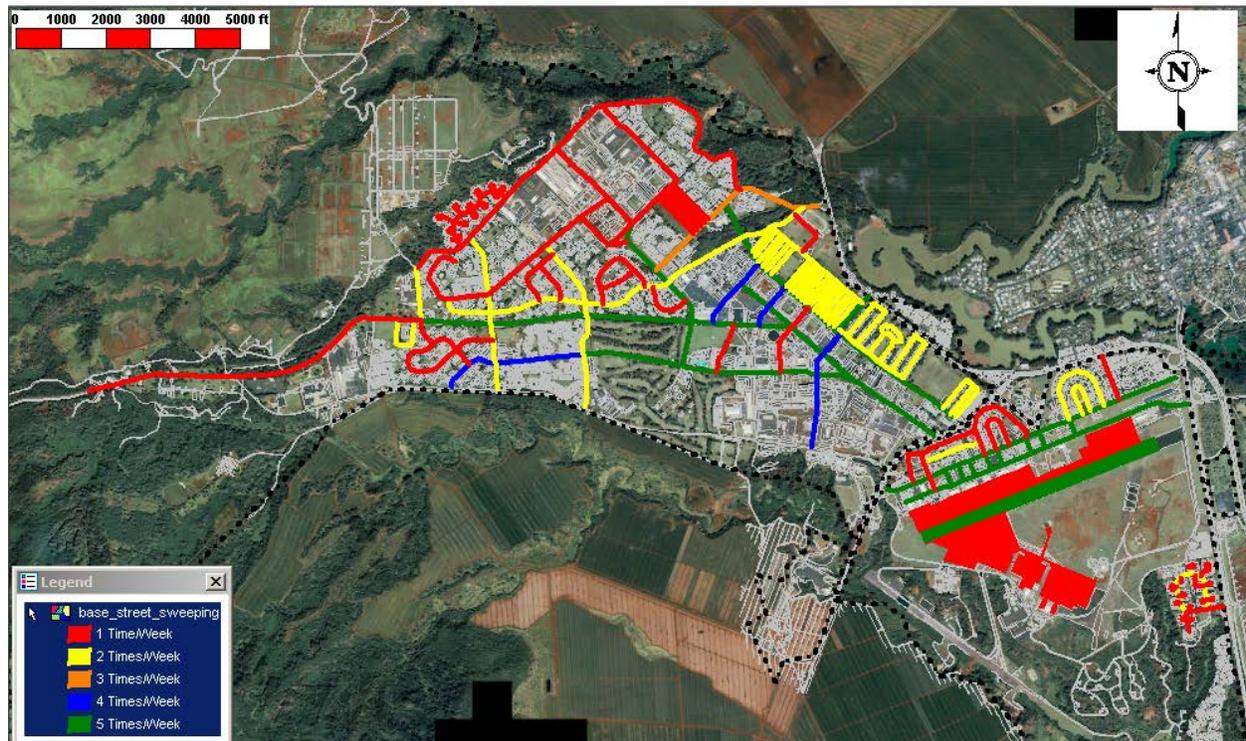


Figure 7. Map of street cleaning frequency per week for Schofield Barracks and Wheeler Army Airfield.

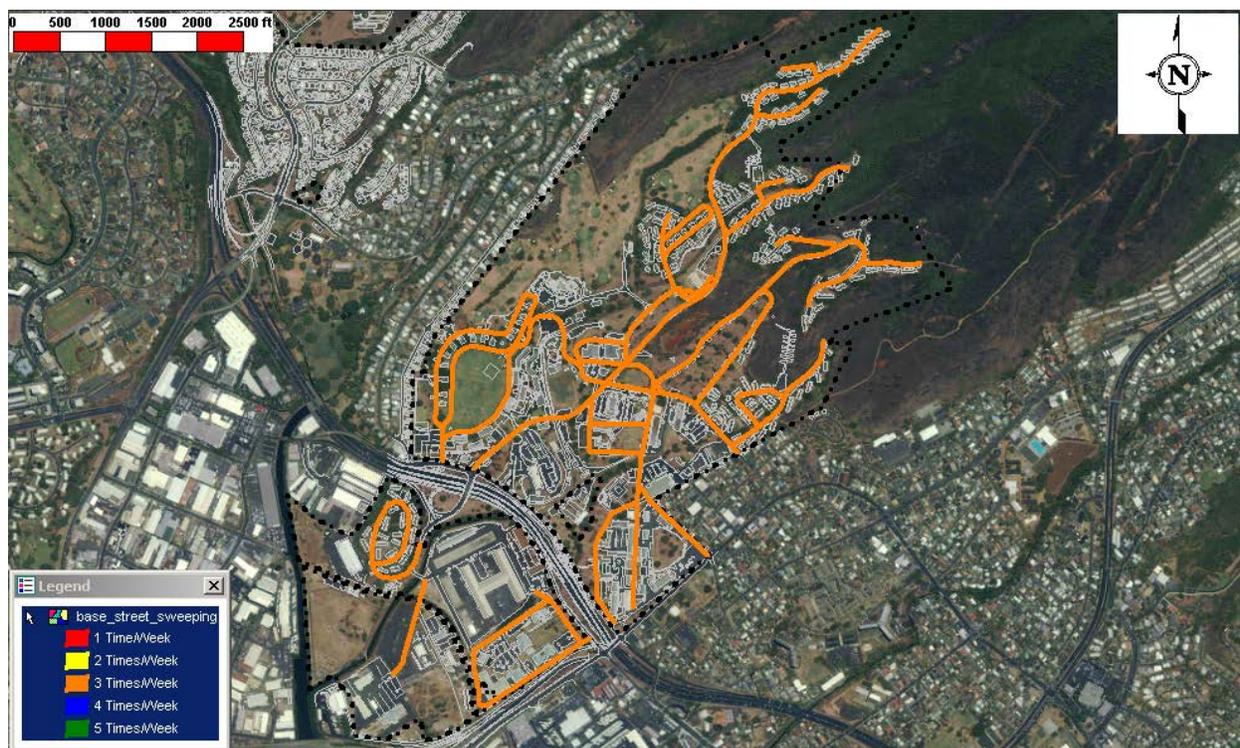


Figure 8. Map of street cleaning frequency per week for Fort Shafter.

3.6.2.3. 2014 Activities. Street sweeping was performed by DPW Operations and Maintenance Division staff.

3.6.2.4. 2015 Goals. There are no proposed changes for this BMP.

3.6.2.5. Responsibility. It is the responsibility of the DPW Operations and Maintenance Division to perform scheduled street sweeping and provide records of street sweeping to the DPW Clean Water Program Manager.

3.6.2.6. Schedule. Weekly cleaning frequency varies from once per week to five times per week. The frequency is primarily due to the amount of trees, the maturity of trees, and the amount of debris generated. The airfield is cleaned five times per week. The intent is to remove foreign objects from the airfield.

3.6.2.7. Reporting and Record Keeping. Currently the DPW Operations and Maintenance Division keeps track of what streets are cleaned and at what frequency.

3.6.3. PP-3: Develop a List of Potential Storm Water Pollutants for Each Facility

3.6.3.1. BMP Description. Develop a material list, per facility, that could potentially harm the environment if introduced into the storm sewer system. USAG-HI previously received a Notice of Violation regarding its storage of hazardous materials. In 1996, USAG-HI implemented the Hazardous Substance Management System for the purpose of tracking hazardous material usage from cradle to grave.

USAG-HI has prepared a Storm Water Pollution Control Plan (SWPCP) that includes site-specific facility plans with a description of potential storm water pollutants, site-specific BMPs, good housekeeping procedures, and pollutant control procedures for operations and maintenance.

3.6.3.2. 2014 Goals. DPW proposed to continue to conduct quarterly inspections of industrial facilities to track potential storm water pollutants for each facility.

3.6.3.3. 2014 Activities. DPW performed quarterly inspections of industrial facilities. DPW utilized the Hazardous Material Management System (HMMS), a web-based hazardous material tracking tool, to track hazardous material storage, use, and disposal. The products are tracked using a bar code system, which improves accountability.

DPW maintained the USAG-HI SWPCP which includes site-specific plans listing potential storm water pollutants for industrial facilities.

3.6.3.4. 2015 Goals. DPW proposes to continue quarterly inspections of industrial facilities to track potential storm water pollutants for each facility.

3.6.3.5. Responsibility. It is the responsibility of the DPW Environmental Hazardous Waste Program Manager to oversee quarterly inspections of industrial facilities to determine what products are being stored and to ensure the HMMS is updated as needed. It is the responsibility of the DPW Clean Water Program Manager to oversee storm water pollution control inspections of industrial facilities and to ensure the SWPCP is updated as needed.

3.6.3.6. Schedule. DPW Environmental Hazardous Waste Program staff will perform quarterly inspections of industrial facilities and update the HMMS as needed. DPW Clean Water Program staff will perform storm water pollution control inspections of industrial facilities and update the SWPCP as needed.

3.6.3.7. Reporting and Record Keeping. The information stored in the HMMS is used for the annual Emergency Planning and Community Right-to-Know Act reporting. Records are retained by the DPW Environmental Office and USAG-HI Directorate of Logistics. The DPW Clean Water Program Manager retains records of storm water pollution control inspections of industrial facilities and updates to the SWPCP.

3.6.4. PP-4: Develop Spill Prevention and Response Procedures

3.6.4.1. BMP Description. USAG-HI shall implement its Spill Prevention, Control, and Countermeasures (SPCC) Plan and comply with federal SPCC regulations and update the SPCC Plan as needed.

USAG-HI has prepared a SPCC Plan. The plan describes responsibilities, spill prevention procedures, spill control and response procedures, and notification and training requirements. Currently, contract personnel are available to assist with spill response on USAG-HI installations. Additionally, USAG-HI's goal is to significantly reduce (to zero) the number of reportable spills.

3.6.4.2. 2014 Goals. DPW proposed to conduct a spill training exercise in 2014 for DPW Environmental staff and to participate in the annual USAG-HI disaster preparedness event to

continue to train and prepare key personnel in SPCC Plan requirements and spill response. DPW proposed to continue to implement the SPCC Plan, update the SPCC Plan, and fund corrective actions as needed.

3.6.4.3. 2014 Activities. DPW conducted an annual spill response exercise in July 2014 in conjunction with the USAG-HI hurricane exercise. The annual spill exercise report is provided in Tab 6-1. An update of the SPCC Plan is in progress and is anticipated to be completed in early 2015.

3.6.4.4. 2015 Goals. DPW proposes to conduct a spill training exercise in 2015 for DPW Environmental staff and to participate in the annual USAG-HI disaster preparedness event to continue to train and prepare key personnel in SPCC Plan requirements and spill response. DPW proposes to continue to implement the SPCC Plan, update the SPCC Plan, and fund corrective actions as needed.

3.6.4.5. Responsibility. It will be the responsibility of the DPW SPCC Program Manager to implement and update the SPCC Plan.

3.6.4.6. Schedule. The SPCC Plan is implemented on an ongoing basis and will be updated as necessary.

3.6.4.7. Reporting and Record Keeping. The DPW SPCC Program Manager maintains a record of SPCC Plan documents, updates, and corrective actions. The DPW Clean Water Program Manager has access to SPCC information.

3.6.5. PP-5: Develop Policy for Reduction in Pesticide and Herbicide Application

3.6.5.1. BMP Description. The Department of Defense (DoD) defines pesticides to include insecticides, fungicides, and herbicides. The DoD Measures of Merit (MoM) was implemented to reduce pesticide applications to DoD property to support better environmental stewardship and sustainability. The goal of the MoM is to decrease pesticide applications by 50% based from fiscal year 1993 levels. USAG-HI accomplished this reduction by fiscal year 2000. In September 2013, the DoD Measures of Merit were revised to maintain usage based upon the average of fiscal years 2007 thru 2009 pesticide usage, thus maintaining a 52% reduction from the original 1993 baseline.

3.6.5.2. 2014 Goals. DPW proposed to hire a replacement staff entomologist to continue to monitor pesticide and herbicide usage on USAG-HI installations.

3.6.5.3. 2014 Activities. DPW hired an entomologist who came onboard in November. The new DPW entomologist has begun to track the use of pesticides to achieve the DoD Measures of Merit. Table 2 shows the total pounds of active ingredients of pesticides applied each fiscal year. Pesticide usage was reported as 5,382 lbs. ai for FY14.

Table 2. Pesticide Use by Fiscal Year

FISCAL YEAR	TOTAL PESTICIDE USE [total lb - active ingredient]	PERCENTAGE REDUCTION [%]
1993	11,687	0%
1994	8,156	30%
1995	8,927	24%
1996	6,625	43%
1997	6,003	49%
1998	4,001	66%
1999	3,984	66%
2000	4,417	62%
2001	4,253	64%
2002	5,225	55%
2003	8,078	31%
2004	11,480	2%
2005	10,596	9%
2006	9,756	17%
2007	8,626	26%
2008	7,619	35%
2009	6,247	47%
2010	5,922	49%
2011	8,634	26%
2012	4,671	60%
2013	5,382	54%
2014	5,382	54%

The high use of pesticide in fiscal year's 2003, 2004, and 2005 was primarily due to the herbicide application for unexploded ordnance clearance. Herbicide application was required to dry out the vegetation in order to clear the training area by burning the vegetation. Clearing of the existing vegetation was required to provide a visible and open area for ordinance clearing. These numbers will continue to be higher than the reduction goal due to increased herbicide use for combating invasive weeds. Other methods of reduction will be explored to lower pesticide usage for pesticides other than herbicides where appropriate.

3.6.5.4. 2015 Goals. The DPW entomologist will continue to monitor pesticide and herbicide usage on USAG-HI installations.

3.6.5.5. Responsibility. The DPW entomologist tracks pesticide application and achievement towards DoD Measures of Merit.

3.6.5.6. Schedule. The DPW entomologist will track pesticide application throughout the year and will supply annual reporting data for the Annual Report.

3.6.5.7. Reporting and Record Keeping. The DPW Clean Water Program Manager will ensure pesticide use data provided by the DPW entomologist is recorded in the Annual Report.

3.6.6. PP-6: Develop Policy for Reduction in Fertilizer Application

3.6.6.1. BMP Description. Develop a policy for the tracking and application of fertilizers. The majority of fertilizer usage occurs on USAG-HI golf courses.

3.6.6.2. 2014 Goals. DPW proposed no change to the BMP and no additional plans to further reduce fertilizer use since we are below published norms.

3.6.6.3. 2014 Activities. DPW tracked fertilizer usage, as provided in Table 3. Fertilizer usage was reported as 12,504 lbs. N for FY14 quarters 1-3 (estimated annual usage is 12,504 lbs. N).

Table 3. Fertilizer Use by Calendar Year

Calendar Year	Total Acreage (acres)	Total N Applied (lbs)	Application Rate (lbs N per 1000 sf)
2003	310	49,260	3.7
2004	310	20,052	1.5
2005	200	18,625	2.2
2006	200	17,746	2.1
2007	200	11,420	1.3
2008	200	10,472	1.2
2009	200	12,330	1.4
2010	200	8,601	1.0
2011	206	13,004	1.4
2012	206	13,480	1.5
2013	206	11,644	1.3
2014	206	12,504	1.4

3.6.6.4. 2015 Goals. DPW proposes no change to the BMP and no additional plans to further reduce fertilizer use since numbers are below published norms.

3.6.6.5. Responsibility. The DPW entomologist tracks fertilizer application on USAG-HI installations.

3.6.6.6. Schedule. The DPW entomologist will track fertilizer application throughout the year and will supply annual reporting data for the Annual Report.

3.6.6.7. Reporting and Record Keeping. The DPW Clean Water Program Manager will ensure fertilizer use data provided by the DPW entomologist is recorded in the Annual Report.

3.6.7. PP-7: Perform Facility Inspections

3.6.7.1. BMP Description. Facilities are inspected quarterly by DPW Hazardous Waste Program staff inspectors. The inspection evaluates the facility on its industrial activities: hazardous material handling and storage, pollution prevention, good housekeeping practices, and storm water-specific pollution prevention BMPs. The inspection checklist section related to storm water pollution prevention BMPs is provided as Tab 1-3.

Each facility inspection is scored and evaluated for deficiencies. Inspection results are presented at the quarterly EQCC meeting, which includes the Garrison Commander and his staff. Because of this visibility, the facility operators are encouraged to pass inspections. There are several “starred” checklist items that must be passed or the facility operators fail the entire inspection.

3.6.7.2. 2014 Goals. DPW’s intent was to continue to reduce the number of deficiencies identified during industrial facility inspections. This would be accomplished through tracking inspection results and modifying the ECO training course material as needed. DPW Clean Water Program staff would regularly inspect facilities not currently inspected by the DPW Hazardous Waste Program staff.

3.6.7.3. 2014 Activities. DPW Hazardous Waste Program staff inspectors uploaded inspection reports to a database for tracking inspections and corrective actions. DPW Hazardous Waste Program staff inspectors conducted inspections quarterly on the fiscal year calendar, and results for USAG-HI industrial facilities were presented at quarterly EQCC meetings.

As shown in inspection results, civilian and contractor-managed industrial facilities demonstrated a high level of compliance implementing required BMPs. This is likely due to the constantly updated and improved ECO training curriculum and the fact that civilian and contracted facility operators or ECOs have a low turnover rate. Military unit industrial facilities had less consistent performance likely due to the high turnover rate of unit ECOs and tenants.

3.6.7.4. 2015 Goals. The intent is to continue to reduce the number of deficiencies identified during industrial facility inspections. This will be accomplished through tracking inspection results and modifying the ECO training course material as needed. DPW Clean Water Program staff will inspect facilities not currently inspected by the DPW Hazardous Waste Program staff.

3.6.7.5. Responsibility. DPW Hazardous Waste Program staff inspectors perform facility inspections and report their results to the Garrison Commander on a quarterly basis. The DPW Hazardous Waste Program provides regular ECO training. The DPW Clean Water Program Manager will analyze inspection results and recommend updates to ECO training material. DPW Clean Water Program staff will inspect facilities not currently inspected by the DPW Hazardous Waste Program staff.

3.6.7.6. Schedule. Inspections are performed on a quarterly basis by DPW Hazardous Waste Program staff. Inspection results will be reviewed throughout the year, and ECO training material will be updated as needed.

3.6.7.7. Reporting and Record Keeping. Inspection records are maintained by the DPW Hazardous Waste Program and DPW Clean Water Program.

3.6.8. PP-8: Develop Storm Water Monitoring Plan

3.6.8.1. BMP Description. If required, modify the existing storm water monitoring plan to account for current conditions. Modify the test type, if necessary, to account for pollutants associated with industrial activities.

3.6.8.2. 2014 Goals. DPW proposed to continue to implement the storm water monitoring plan and fund the collection of water quality sampling data as required.

3.6.8.3. 2014 Activities. Storm water monitoring was performed by Element Environmental, LLC under a service contract. Water quality samples for 2014 were obtained from five sites on SB, WAAF, HMR, FS, and AMR as described in the USAG-HI Storm Water Monitoring Plan. The Discharge Monitoring Reports (DMR) are provided in Tab 7. There was no discharge from the Rock Quarry and a zero discharge DMR for the quarry will be submitted with the Annual Report.

3.6.8.4. 2015 Goals. DPW proposes to continue to implement the storm water monitoring plan and fund the collection of water quality sampling data as required.

3.6.8.5. Responsibility. It is the responsibility of the DPW Clean Water Program Manager to determine if water quality limits are exceeded, to identify possible sources, and to make corrections as needed.

3.6.8.6. Schedule. Storm water monitoring will be accomplished according to the storm water monitoring plan.

3.6.8.7. Reporting and Record Keeping. DMRs are submitted to SDOH in the Annual Report.

3.6.9. PP-9: Develop and Implement a Maintenance Program

3.6.9.1. BMP Description. Develop and implement a maintenance program that includes annual inspections of debris basins, annual inspections of storm sewer system, maintenance and clearing of debris, and documentation of inspections and maintenance.

3.6.9.2. 2014 Goals. DPW proposed to continue to fund the development and implementation of the maintenance program.

3.6.9.3. 2014 Activities. Standard operating orders are on file for DPW Operations and Maintenance Division personnel to inspect and maintain the storm sewer system in an operational status and in accordance with the NPDES permit. Due to lack of sufficient manpower, the DPW Operations and Maintenance Division performs inspections and maintenance on an as-needed or emergency basis or after higher priority actions have been completed. Work completed typically includes inspecting manholes, cutting vegetation in swales, or removing leaves and debris from swales and ditches. DPW Operations and Maintenance Division staff also check flood prone areas prior to the rainy season.

3.6.9.4. 2015 Goals. DPW proposes to continue to improve the development and implementation of the maintenance program.

3.6.9.5. Responsibility. It is the responsibility of the DPW Operations and Maintenance Division to fund and perform regular inspection and maintenance of the storm sewer system. DPW Business Operations Division is responsible to assist DPW Operations and Maintenance Division with tracking inspections and maintenance and updating maintenance plans. The DPW

Clean Water Program Manager will communicate permit requirements for inspection and maintenance to the other DPW Divisions and will collect data from them as needed.

3.6.9.6. Schedule. Inspections, cleaning, and maintenance of the storm sewer system will be performed throughout the year.

3.6.9.7. Reporting and Record Keeping. Annual inspection reports and maintenance records are maintained by the DPW Operations and Maintenance Division and DPW Business Operations Division.

4. Modifications Made to the SWMP in CY 2014

4.1. In CY 2012, DPW discontinued funding of the ECATTS program and so PE-4: Web-based Training for Service Contractors and Construction Contractors was removed. Educational material from the ECATTS program was initially made available as a resource on the USAG-HI Sustainability and Environmental Management website; however, the web-based training has not been accessible due to the Army Network Enterprise Technology Command restricting DPW web publishing privileges.

5. Storm Water Monitoring Results

5.1. See Tab 7 for DMRs.

6. Summary of Storm Water Activities Planned for CY 2015

6.1. Table 4 describes DPW Clean Water Program activities planned for CY 2015.

Table 4. Planned Activities for CY 15

Activity	Date/Location	Cost/ Funding Programmed
Earth Day 2015	April/SB and FS	Low cost/Yes
Storm Water Quality Survey	April/SB and FS	Low cost/Yes
Presentation to Installation Schools	Variable/SB, WAAF and FS	Low cost/Yes
Public Involvement/Post-Construction Storm Water Management Demonstration Project	Variable/SB and FS	Low cost/Yes
Public Review of SWMP	January/All USAG-HI installations	Low cost/Yes
Dry Weather Outfall Inspections	Variable/All USAG-HI installations	Low cost/Yes
Illicit Discharge Detection Survey	Variable/All USAG-HI installations	Low cost/Yes
Update Storm Sewer Geodatabase	Variable/All USAG-HI	High cost/Yes
Update/Implement SWPCP recommendations	Variable/All USAG-HI installations	As needed/Yes
Implement SPCC recommendations	Variable/All USAG-HI installations	As needed/Yes

Update ECO Training	Variable/DPW Environmental	As needed/Yes
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7. Major Modifications Made to the Storm Sewer System

7.1 The major modifications that were made to the storm sewer system were primarily from new construction of housing units and projects for military barracks, maintenance, or training facilities as shown in Tab 4-3.

8. Summary

USAG-HI is striving to be a good steward of the environment and will continue to balance its core functions while promoting environmental protection and sustainable land management practices. Several areas of the Storm Water Management Plan were identified that need improvement and modifications to comply with the NPDES MS4 Permit. The Army will address all the issues and concerns in the new Storm Water Management Plan which will be prepared this calendar year to comply with new permit requirements.

Please share your comments with us. Click on the "Submit" button below to email us. Thank you.