

# ANNUAL REPORT

## General Permit for the Discharger of Storm Water from Small Municipal Separate Storm Sewer Systems (General Permit)

(See Small MS4 Annual Report Guidance for additional guidance on completing this Annual Report Form)

Check box if this is a new name, address, etc.

### A. Permittee Information

1. Permittee (Agency Name): University of California Santa Cruz ☐
2. Contact Person: Courtney Trask, Storm Water Programs Manager ☒
3. Mailing Address: 1156 High Street, PP&C ☒
4. City, State and Zip Code: Santa Cruz, CA 95064 ☐
5. Contact Phone Number: (831) 459-4520 ☒
6. WDID # 3 44MS05079
7. Have any areas been added to the MS4 due to annexation or other legal means? ☐ YES ☒ NO  
If YES

Outfall	Has map been updated?		Has SWMP been updated?		Receiving Water Name
	YES	NO	YES	NO	

8. Are you subject to the Design Standards contained in Attachment 4 of the General Permit? ☒ YES ☐ NO  
If yes, report on the implementation of the Design Standards in section D.5 of this Annual Report Form.

- B. Reporting Period** (check one): ☒ Coverage Commencement (April 3, 2009) to June 30, 2010 (Year 1)  
☐ July 1, 2010 to June 30, 2011 (Year 2)  
 (Report is due by September 15 each year) ☐ July 1, 2011 to June 30, 2012 (Year 3)  
☐ July 1, 2012 to June 30, 2013 (Year 4)  
☐ July 1, 2013 to June 30, 2014 (Year 5)

### C. Executive Summary

The University of California at Santa Cruz's Storm Water Management Program (SWMP) was prepared in response to State Water Resources Control Board Water quality Order 2003-005-DWQ for National Pollutant Discharge Elimination System (NPDES) Phase II General Permit No. CAS000004 (State General Permit). The University's SWMP is a comprehensive 5-year plan to reduce the discharge of constituents of concern to the Maximum Extent Practicable (MEP), and to identify activities or structural improvements that help improve the quality of the storm water runoff. These activities and structural improvements are referred to as Best Management Practices (BMPs). BMPs will be updated as appropriate to increase their effectiveness.

The University's SWMP was approved by the Central Coast Regional Water Quality Control Board (RWQCB) in April 2009. In December 2009 the University signed a Declaration Form to participate in the Central Coast RWQCB joint effort for developing hydromodification control criteria. Revisions were made to the SWMP to include the University's participation in the joint effort. The plan revisions were approved by the Central Coast RWQCB in March 2010.

The year 1 report is organized by Minimum Control Measures- and provides a discussion of status, proposed modifications, if any, and proposed year 2 activities for each measurable goal. The effectiveness assessment of each BMP follows guidance from the California Stormwater Quality Association (CASQA). The CASQA effectiveness measurement is represented as a gradation from activity-based to water quality-based outcomes. These gradations, shown through levels of effectiveness, are defined as:

- Level 1: Compliance with Activity-based Permit Requirements: Was the element implemented in accordance with the Storm Water Management Program?
- Level 2: Changes in Attitudes, Knowledge, & Awareness: Did the element increase the knowledge and awareness of the target audience?
- Level 3: Behavioral Change & BMP Implementation: Did the element result in behavioral change which results in implementation of recommended BMP?
- Level 4: Load Reductions: Did the element result in a decrease in pollutant loadings to the storm drain system?

Overall effectiveness of the SWMP can best be assessed near the culmination of the 5-year implementation period, once the hydromodification control criteria have been fully developed and awareness in the University Community increases. During year 1, efforts focused primarily on Outcome Level 2 (Raise Awareness) and Outcome Level 3 (Change Behavior).

## D. Minimum Control Measures

### 1. Public Education and Outreach

<i>BMP</i>	<i>Description</i>	<i>Status</i>					
		Implemented	Not Applicable	Modified	Effective	Effectiveness Unknown	Not Effective
1	Electronic Brochures and Flyers: General Storm Water Awareness and Targeted Topics	X				X	
12	Web Page	X			X		
13	Mark Storm Drains	X		X	X		
14	Access to SWMP	X			X		

### Public Education and Outreach

<b>1</b>	<b>Electronic Brochures and Flyers: General Storm Water Awareness and Targeted Topics</b>
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#### a. BMPs

##### i. General summary

To increase awareness of storm water issues and promote pollution prevention, UCSC will develop and distribute electronic brochures. Brochure topics will include: general storm water information and awareness; storm water management at construction sites; storm water management for contractors; storm water management for Food Service Facilities; and storm water management for Custodial Services.

##### ii. Status of Measurable Goals

**1.01:** A general information brochure is available by end of Permit Year 1. This goal was met in the Fall of 2006. A second brochure was added in Spring 2007.

A brochure for Construction Site Controls is available by the end of Permit Year 1.

A brochure for Food Service Facilities is available by the end of Permit Year 1.

A brochure for Custodial Services is available by the end of Permit Year 1.

The General Information, Construction Site Controls, Food Services Facilities, and Custodial Services brochures have all been completed.

**1.02:** By the end of Year 1 the 4 specified brochures are available on web page. (The general information brochure was posted in the Fall of 2006. A second general information brochure on erosion from informal paths was added in 2007.)

The 4 specified brochures are available on the web <http://cleanwater.ucsc.edu/brochure.html>

**iii. Appropriateness:** (Scale 0-9high) 9**iv. Effectiveness:** CASQA Level 2**v. Proposed Modifications:** None

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.

Brochures are available on the website

- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated.

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
1.01	EH&S: Storm Water Manager	By the end of Year 1 the 4 specified brochures are available on web page .		X	Yes	No
1.02	EH&S: Storm Water Manager	Web page updated at least quarterly with current SWMP activities (copies of brochures/flyers, annual reports, notices for upcoming activities, etc.).		X	Yes	Yes

<b>12</b>	<b>Web Page</b>
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## a. BMPs

**i. General summary**

The previous UCSC storm water web page was moved to its own domain, <http://cleanwater.ucsc.edu/>, and substantially revamped in the summer of 2006. Since then, periodic updates have occurred. As of September 2008, the website includes pages on storm water concern reporting, the SWMP, an interactive map of storm drains on Science Hill, 2 general awareness brochures, internship and volunteer opportunities and other features. As of June 2010 all year 1 brochures have been posted on the website. The intent is for the web pages to serve as the major portal for information dissemination regarding the SWMP. The web page updates are made quarterly during the permit term.

**ii. Status of Measurable Goals**

Web page was updated at least quarterly with current SWMP activities (copies of brochures/flyers, annual reports, notices for upcoming activities, etc.).

The updates to the web page were updated quarterly.

**iii. Appropriateness:** (Scale 0-9high) 9

**iv. Effectiveness: CASQA Level 2****v. Proposed Modifications: None**

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.

All updated files are kept by the Storm Water Manager.

- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated. Refer to the SWMP for the Year 2 Implementation Schedule

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
12	Storm Water Manager	Web page updated at least quarterly with current SWMP activities (copies of brochures/flyers, annual reports, notices for upcoming activities, etc.).		X	Yes	Yes

<b>13</b>	<b>Mark Storm Drains</b>
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a. BMPs

**i. General summary**

Increase storm drain visibility to help prevent contamination of storm water. In 2007, a Storm Drain Marking Team was convened. The team included representatives from Physical Plant, Colleges and University Housing Services, Transportation and Parking Services, EH&S, and PP&C-Campus Architect. The team selected markers and designated locations to be marked. Markers were installed at several locations starting in the summer of 2007. Markers will be installed at additional locations during the permit term.

**ii. Status of Measurable Goals**

**13.01:** Markers selected and marker purchase made prior to end of Permit Year 1.

This goal was met in September 2007.

**13.02:** By the end of Permit Year 3, mark 100% of storm drains located on Primary and Secondary roads.

Markers have been installed at many of the storm drains located on Primary and Grounds will be starting on Secondary roads during year 2. A master list of storm drain locations is kept on file and updated by Physical Plant Grounds Department.

**13.03:** By the end of Year 3, mark 80% of storm drains on CUHS service roads. By the end of Year 4, mark 100% of storm drains on CUHS service roads.

This year, large and critical storm drains on service roads and at dining loading docks were marked. Completed work order on file.

**13.04:** By the end of Year 3, mark 80% of storm drains in main campus parking lots. By the end of Year 4, mark 100% of all parking lots.

Markers have been installed at all parking lot storm drains.

**13.05:** By the end of Permit Year 3, mark 100% of storm drains located on Primary and Secondary roads.

By the end of Year 3, mark 80% of storm drains on CUHS service roads.

By the end of Year 4, mark 100% of storm drains on CUHS service roads.

By the end of Year 3, mark 80% of storm drains in main campus parking lots.

By the end of Year 4, mark 100% of all parking lots.

Volunteers/Interns will start identifying locations of unmarked storm drains during the fall/winter quarter 2010.

**iii. Appropriateness:** (Scale 0-9high) 9

**iv. Effectiveness:** CASQA Level 1

**v. Proposed Modifications:** BMP 13.04 which was set to be completed in Year 3 was completed in Year 1. We propose to remove this BMP as it is complete.

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.

A master list of storm drain locations is kept on file and updated by Physical Plant Grounds Department.

- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated. Refer to the SWMP for the Year 2 Implementation Schedule

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
13.01	Storm Water Manager	Markers selected and marker purchase made prior to end of Permit Year 1.		X	Yes	No
13.02	PP-Grounds	By the end of Permit Year 3, mark 100% of storm drains located on Primary and Secondary roads		X	No	Yes

13.03	CUHS-Facilities	By the end of Year 3, mark 80% of storm drains on CUHS service roads. By the end of Year 4, mark 100% of storm drains on CUHS service roads		X	No	Yes
13.04	TAPS	By the end of Year 3, mark 80% of storm drains in main campus parking lots. By the end of Year 4, mark 100% of all parking lots.	X		Yes	No
13.05	Storm Water Manager	By the end of Permit Year 3, mark 100% of storm drains located on Primary and Secondary roads. By the end of Year 3, mark 80% of storm drains on CUHS service roads. By the end of Year 4, mark 100% of storm drains on CUHS service roads. By the end of Year 3, mark 80% of storm drains in main campus parking lots. By the end of Year 4, mark 100% of all parking lots		X	No	Yes

<b>14.01</b>	<b>Access to SWMP</b>
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## a. BMPs

## i. General summary

Engage campus community in implementing SWMP. Make SWMP and annual reports available at EH&S Office, McHenry Library and on web page.

## ii. Status of Measurable Goals

SWMP available at designated locations within 30 days of RWQCB approval.

The SWMP was available at designated locations within 30 days of RWQCB approval.

## iii. Appropriateness: (Scale 0-9high) 9

## iv. Effectiveness: CASQA Level 2

## v. Proposed Modifications: None

## b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.

Memo to Government Publications, from Storm Water Manager, noting final UCSC Storm Water Management Plan was issued and requesting a copy be kept on file at Library. This memo is kept on file by

## Storm Water Manager.

- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated.

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
14.01	Storm Water Manager	Make SWMP available at EH&S Office, McHenry Library and on web page.		X	Yes	No

## 2. Public Involvement and Participation

BMP	Description	Status					
		Implemented	Not Applicable	Modified <sup>1</sup>	Effective	Effectiveness Unknown	Not Effective
15	BMP Development Team: Illicit Discharge Detection and Elimination	X			X		
16	BMP Development Team: Construction Sites	X			X		
17	BMP Development Team: New Development	X			X		
18	BMP Development Team: Food Service Facilities	X			X		
19	BMP Development Team: Parking Services	X			X		
20	BMP Development Team: Grounds Services	X			X		
23	BMP Development Team: Management Controls to Prevent Illicit Discharges	X				X	
34	BMP Development Team: Building Exterior Maintenance	X			X		
35	Storm Water Advisory Committee			X		X	
37	University Neighbors	X		X	X		
38	Site Stewardship Program	X			X		
39	Volunteers and Internships	X			X		

### Public Involvement and Participation

<b>15</b>	<b>BMP Development Team: Illicit Discharge Detection and Elimination</b>
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#### a. BMPs

##### i. General summary

Increase BMP buy-in by having affected groups develop their own BMPs. During the development of the



SWMP, EH&S communicated with many groups (via email and meetings) to develop the illicit discharge and elimination program element (BMPs: #41, 42, 43, 44, 45, 46, and 47).

**ii. Status of Measurable Goals**

BMPs selected prior to Permit Year 1.

BMP selection completed as of March 2006.

**iii. Appropriateness:** (Scale 0-9high) 9

**iv. Effectiveness:** CASQA Level 2

**vi. Proposed Modifications:** None

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.

See SWMP BMPs #41, 42, 43, 44, 45, 46, and 47

- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated.

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
15.01	Storm Water Manager	BMPs selected prior to Permit Year 1. BMP selection completed as of March 2006.		X	Yes	No

<b>16</b>	<b>BMP Development Team: Construction Sites</b>
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- a. BMPs

**i. General summary**

Increase BMP buy-in by having affected groups develop their own BMPs. During the development of the SWMP, EH&S communicated with PP&C and PP-Work Management (via email and meetings) to develop BMPs for construction sites. The team developed the following BMPs: #48, 51, 52 and 54.

**ii. Status of Measurable Goals**

BMPs selected prior to Permit Year 1.

BMP selection completed as of March 2006.

**iii. Appropriateness:** (Scale 0-9high) 9

**iv. Effectiveness:** CASQA Level 2

**v. Proposed Modifications:** None

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.

See SWMP BMPs #48, 51, 52 and 54

- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated.

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
16.01	Storm Water Manager	BMPs selected prior to Permit Year 1. BMP selection completed as of March 2006.		X	Yes	No

<b>17</b>	<b>BMP Development Team: New Development</b>
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- a. BMPs

**i. General summary**

Increase BMP buy-in by having affected groups develop their own BMPs. During the development of the SWMP, EH&S communicated with PP&C and PP-Grounds (via email and meetings) to develop the New Development Design Requirement for Storm Water Management. The team developed the following BMPs: #55, 56, 57, 58, 59 and 60.

**ii. Status of Measurable Goals**

BMPs selected prior to Permit Year 1. Initial BMP selection completed as of December 2006.

**iii. Appropriateness:** (Scale 0-9high) 9**iv. Effectiveness:** CASQA Level 2**v. Proposed Modifications:** None

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.

See SWMP BMPs: #55, 56, 57, 58, 59 and 60.

- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated.

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
17.01	Storm Water Manager	BMPs selected prior to Permit Year 1. Initial BMP selection completed as of December 2006.		X	Yes	No

<b>18</b>	<b>BMP Development Team: Food Service Facilities</b>
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## a. BMPs

## i. General summary

In order to increase BMP buy-in and to ensure the selection of appropriate and effective BMPs, a food service facilities BMP Development Team was formed. The team consisted of representatives from: EH&S, CUHS-Dining Services, CUHS-Facilities, PP-Custodial and PP-Grounds. The team had an initial meeting and follow-up email discussions. The team developed BMP #69.

## ii. Status of Measurable Goals

BMPs selected prior to Permit Year 1. BMP selection completed August 2005.

## iii. Appropriateness: (Scale 0-9high) 9

## iv. Effectiveness: CASQA Level 2

## v. Proposed Modifications: None

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.

See SWMP BMP #69

- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated.

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
18.01	Storm Water Manager	BMPs selected prior to Permit Year 1. BMP selection completed August 2005.		X	Yes	No

<b>19</b>	<b>BMP Development Team: Parking Services</b>
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## a. BMPs

**i. General summary**

Increase BMP buy-in by having affected groups develop their own BMPs. During the development of the SWMP, EH&S communicated with TAPS-Parking Services (via email and meetings) to develop BMPs for parking lots and bus stops.

**ii. Status of Measurable Goals**

BMPs selected prior to Permit Year 1.

BMP selection completed August 2005.

**iii. Appropriateness:** (Scale 0-9high) 9**iv. Effectiveness:** CASQA Level 2**v. Proposed Modifications:** None

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.
- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated.

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
19.01	Storm Water Manager	BMPs selected prior to Permit Year 1. BMP selection completed August 2005.		X	Yes	No

<b>20</b>	<b>BMP Development Team: Grounds Services</b>
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## a. BMPs

**i. General summary**

Increase BMP buy-in by having affected groups develop their own BMPs. During the development of the SWMP, EH&S communicated with PP-Grounds Services (via email and meetings) to document existing practices and, where needed, to develop BMPs for Integrated Pest Management, Turf Management, Landscape Management, Street Sweeping and Recycling. The team developed the following BMPs: #76, 77, 79 and 81.

**ii. Status of Measurable Goals**

BMPs selected prior to Permit Year 1.

Initial BMP selection completed December 2006.

**iii. Appropriateness:** (Scale 0-9high) 9

**iv. Effectiveness:** CASQA Level 2**v. Proposed Modifications:** None

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.
- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated.

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
20.01	Storm Water Manager	BMPs selected prior to Permit Year 1. Initial BMP selection completed December 2006.		X	Yes	No

<b>23</b>	<b>BMP Development Team: Management Controls to Prevent Illicit Discharges</b>
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## a. BMPs

**i. General summary**

Prevent illicit discharges from outside small contractors, outside services and lessees. For UCSC, this population is equivalent to independent businesses operating within a traditional MS4. Because this population is under contract at UCSC, it is appropriate to prohibit illicit discharges from this population by contract rather than by ordinance.

During Permit Years 1 and 2, EH&S to communicate with Purchasing and PP-Work Management and other affected departments to develop boilerplate contract language prohibiting illicit discharges to storm water (as described in BMP #43).

**ii. Status of Measurable Goals**

Boilerplate contract language adopted by the end of Permit Year 2.

EH&S worked with various Campus departments to develop draft boilerplate contract language.

**iii. Appropriateness:** (Scale 0-9high) 9**iv. Effectiveness:** CASQA Level 1**v. Proposed Modifications:** None

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.

Boilerplate language is kept on file by the Storm Water Manager.

- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated. Refer to the SWMP for the Year 2 Implementation Schedule

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
23.01	EH&S: Storm Water Manager	Boilerplate contract language adopted by the end of Permit Year 2.		X	Yes	Yes

<b>34</b>	<b>BMP Development Team: Building Exterior Maintenance</b>
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- a. BMPs

**i. General summary**

During Permit Year 1, EH&S will communicate with PP-Paint Shop, CUHS-Facilities, PP-Custodial and other affected departments to develop BMPs for exterior building maintenance. This is an effort to increase BMP buy-in by having affected groups develop their own BMPs. Generally recognized applicable BMPs will be reviewed. BMPs will be selected and an implementation plan developed by the end of Permit Year 1. This will apply to the main campus, MSC and 2300 Delaware.

**ii. Status of Measurable Goals**

Generally recognized applicable BMPs reviewed. BMPs selected and implementation plan developed by the end of Permit Year 1.

The Building Exterior Maintenance BMPs have been developed and are compiled in a memo that will be distributed to all affected departments for implementation. BMPs will also be discussed at all applicable annual trainings.

**iii. Appropriateness: (Scale 0-9high) 9**

**iv. Effectiveness: CASQA Level 1**

**v. Proposed Modifications: None**

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.

Memo is kept on file by the Storm Water Manager.

- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated.

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
34.01	Storm Water Manager	Generally recognized applicable BMPs reviewed. BMPs selected and implementation plan developed by the end of Permit Year 1.		X	Yes	No

<b>35</b>	<b>Storm Water Advisory Committee</b>
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## a. BMPs

## i. General summary

CLUMAC (Campus Land Use Management Advisory Committee) will be informed of SWMP-related activities and may offer guidance and assistance in implementing the SWMP. EH&S will make semi-annual presentations to CLUMAC on the SWMP. Interested parties may bring issues to CLUMAC for recognition and guidance.

## ii. Status of Measurable Goals

At least twice a year, SWMP issues will be included in the CLUMAC agenda.

CLUMAC did not meet this year therefore no presentations were made to the committee.

## iii. Appropriateness: (Scale 0-9high) 4

## iv. Effectiveness: CASQA Level 2

**v. Proposed Modifications:** The Campus Land Use Management Advisory Committee currently being restructured at the Campus level and therefore the following modification is suggested: The Storm Water Manager will participate in Land Use Committee meetings when storm water is an agenda item.

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.
- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
35.01	CLUMAC Committee Chair	Storm Water Manager will participate in CLUMAC meetings when storm water is an agenda item.	X		No	Yes

<b>37</b>	<b>University Neighbors</b>
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**a. BMPs****i. General summary**

As suggested for non-traditional MS4s, UCSC has developed a public participation program primarily aimed at the employee and user population within its boundaries. In order to reach this employee and user population, the UCSC public participation program includes the following:

- Employee BMP development teams, see BMPs #15-20, #23, #25 and #34;
- A storm water advisory committee see BMP #35;
- A site stewardship program see BMP #38;
- Storm water internships, see BMP #39;
- An informational web site, see BMP #12;
- Marking of storm drains, see BMP #13;
- Access to the Storm Water Management Plan, see BMP #14;
- Mechanisms for reporting illicit discharges, see BMP #45;
- Training for targeted employees in the following specific areas: construction BMPs, hydromodification, pollution prevention for food service activities, pollution prevention for outdoor maintenance activities, and pollution prevention for custodial activities, see BMPs #54, #59, #62, #69, and #85.

Some of the above measures, primarily BMPs #12, #14 and #45, are also open to the public beyond the facility fence line. In addition, UCSC regularly engages with University neighbors and the wider community. Much of that effort is led by the Office of Government and Community Relations, <http://www.ucsc.edu/administration/gcr/>. To facilitate community participation in the management of campus storm water, the Office of Government and Community Relations will record and relay storm water issues raised at public meetings to appropriate campus departments. Additionally, the Office of Government and Community Relations will provide annual SWMP report information to interested parties.

**ii. Status of Measurable Goals**

The Office of Government and Community Relations will track storm water issues raised and annually report on the number of issues and to whom they were referred. Office of Government and Community Relations will report on how many persons were sent the annual report summary and notice.

Staff from Government Relations and Community Relations attend monthly meetings of the Santa Cruz Neighbors Organization as well as many civic organizations such as Chambers of Commerce, Rotary Clubs and non-profit boards of directors. Government Relations staff also meet monthly along with UCSC staff from physical planning and construction, transportation and housing with Santa Cruz city staff regarding local issues. The Office of Government Relations monitored public meetings and inquiries and all of these interactions with the public there were no issues raised related to storm water management. Additionally, the office did not receive any phone inquiries or other comments.

**iii. Appropriateness: (Scale 0-9high) 9****iv. Effectiveness: CASQA Level 2**

- v. Proposed Modifications:** University Relations has reorganized and the unit responsible for this is now known as Government Relations. We propose to change the name of the department responsible for implementation from Office of Government and Community Relations to just Government Relations. Government Relations will coordinate closely with colleagues in Community Relations on future issues.

**b. Present results of information collected and analyzed, if any, during the reporting period, including any**



monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.

- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated. Refer to the SWMP for the Year 2 Implementation Schedule

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
37.01	Office of Government and Community Relations	The Office of Government and Community Relations will track storm water issues raised and annually report on the number of issues and to whom they were referred. Office of Government and Community Relations will report on how many persons were sent the annual report summary and notice.	X		Yes	Yes

<b>38</b>	<b>Site Stewardship Program</b>
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a. BMPs

**i. General summary**

The UCSC Site Stewardship Program is an ongoing program within the PP-Grounds department. The Site Stewardship Program organizes a team of interns and volunteers to take on ecological restoration and guardianship for sensitive natural areas within the UCSC campus. More details can be found on the web site (see hyperlink). A summary of program activities will be included in the annual report.

**ii. Status of Measurable Goals**

A minimum of 2 work days will be held each year with at least 8 participants per work day.

11/8/09 - Upper Jordan Gulch trail maintenance - 13 volunteers.

5/16/10 - Upper Jordan Gulch trail maintenance – 18 volunteers

**iii. Appropriateness:** (Scale 0-9high) 9

**iv. Effectiveness:** CASQA Level 2

**v. Proposed Modifications:** None

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.
- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated. Refer to the SWMP for the Year 2 Implementation Schedule

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
38.01	PP-Grounds	A minimum of 2 work days will be held each year with at least 8 participants per work day.		X	Yes	Yes

<b>39</b>	<b>Volunteers and Internships</b>
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a. BMPs

**i. General summary**

Involve students and possibly others in developing and implementing the SWMP with a focus on unique solutions due to their areas of interest/expertise. Recruit volunteers and student interns to assist in developing and implementing BMPs.

Potential projects: creating electronic documents; web page design; inspecting storm drain markings; clean-up events; landscape restoration; survey design, administration and analysis; and creative projects (visual or performance-based) to increase storm water awareness.

Volunteers and interns will be sought on an as-needed basis, but at least twice per year. Sources that may be used to locate volunteers and interns include: the Environmental Studies Major Internship Program, Student Career Center Internship Program, ARC Center Volunteer Connection, Student Environmental Center, and targeted classroom announcements.

**ii. Status of Measurable Goals**

Interns perform at least 200 hours per year of service for the storm water program.

Storm Water Program had two interns in winter quarter of 2009 for a total of 210 hours.

**iii. Appropriateness:** (Scale 0-9high) 9

**iv. Effectiveness:** CASQA Level 2

**v. Proposed Modifications:** None

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.

Evaluations for volunteers/interns are kept on file by the Storm Water Manager.

- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated. Refer to the SWMP for the Year 2 Implementation Schedule

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
39.01	EH&S: Storm Water Manager	Interns perform at least 200 hours per year of service for the storm water program.		X	Yes	Yes

### 3. Illicit Discharge Detection and Elimination

BMP	Description	Status					
		Implemented	Not Applicable	Modified <sup>1</sup>	Effective	Effectiveness Unknown	Not Effective
40	Water Protection Policy	X				X	
42	Management Controls to Prevent Cross Connections	X		X	X		
44	Storm Drain System Maps	X			X		
45	Illicit Discharge Reporting System	X			X		
47	Review of Non-Storm Water Discharges	X			X		

#### Illicit Discharge Detection and Elimination

<b>40</b>	<b>Water Protection Policy</b>
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#### a. BMPs

##### i. General summary

UCSC will develop and adopt a water protection policy. This policy will apply to both storm water and waste water discharges. The storm water provisions of the policy will include the discharge prohibitions described in the MS4 general permit as well as procedures for enforcement of policy provisions including penalty provisions. Appendix E: University Authority, describes the legal authority of UCSC to adopt policies and procedures regulating environmental health and safety on campus. The policy will be developed in accordance with guidelines established by the UCSC Policy Coordination Office. The policy will be drafted to include the following storm water elements:

##### 1. Definitions

2. Applicability
3. Responsibilities
4. Prohibitions for Illicit Discharges, Illicit Connections, and Non-Storm Water Discharges
5. Requirements to Implement SWMP BMPs
6. Requirement to Eliminate Illegal Discharges
7. Enforcement

## ii. Status of Measurable Goals

Water Protection Policy adopted during permit Year 1.

Draft Water Protection Policy was adopted on June 30, 2010.

**iii. Appropriateness:** (Scale 0-9high) 9

**iv. Effectiveness:** CASQA Level 1

**v. Proposed Modifications:** None

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.

Memo from Vice Chancellor Tom Vani including the draft memo was sent to the Campus Community on June 30, 2010 notifying them of the policy.

- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated. Refer to the SWMP for the Year 2 Implementation Schedule

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
40.01	EH&S: Storm Water Manager	Water Protection Policy adopted during permit Year 1.		X	Yes	No

<b>42</b>	<b>Management Controls to Prevent Cross Connections</b>
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- a. BMPs

### i. General summary

Prevent cross connections between the sanitary sewer and storm drain systems. UCSC utilizes a rigorous planning, design, construction management and commissioning process to ensure cross connections do not occur. This existing process ensures that proper connections are made for the sanitary sewer and storm drains.

It is effective and comprehensive because UCSC either performs all plumbing connections or contracts for the plumbing work. MBEST lessees may undertake minor plumbing connections only after approval by UCSC. During the design process, Physical Plant staff reviews construction plans. During construction, PP&C or PP-Work Management has oversight for all construction. See process flow chart on SWMP page 39. Additionally, new construction is subject to commissioning prior to use, as described in the hyperlink above.

**ii. Status of Measurable Goals**

**42.01:** All new plumbing work is verified either through the building commissioning process or by the PP-Plumbing Department.

All new plumbing work was verified either through the building commissioning process or by the PP&C Construction Inspectors.

**42.02:** All plumbing work associated with new construction will be permitted through the City of Marina.

MBEST had no new construction.

**iii. Appropriateness:** (Scale 0-9high) 9**iv. Effectiveness:** CASQA Level 1

**v. Proposed Modifications:** We propose to continue the verification process but to remove the PP-Plumbing Department from the process and to include the PP&C Construction Inspectors. The PP-Plumbing Department is responsible for maintenance of existing lines not the verification of proper installation. All new plumbing work will continue to be verified either through the building commissioning process or by the PP&C Construction Inspectors.

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.

Inspection reports are available for each new construction project. Reports are filed in the Physical Planning and Construction Office.

- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated. Refer to the SWMP for the Year 2 Implementation Schedule

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
42.01	PP&C	All new plumbing work is verified either through the building commissioning process or by the PP-Plumbing Department.	X		Yes	Yes
42.02	MBEST	All plumbing work associated with new construction will be permitted through the City of Marina.		X	Yes	Yes

<b>44</b>	<b>Storm Drain System Maps</b>
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## a. BMPs

## i. General summary

Storm drain system maps are intended to aid in identifying illicit discharges and targeting system maintenance and monitoring. The UCSC Main Campus, MSC, 2300 Delaware and MBEST storm drain outfall maps will be reviewed and updated to show all existing storm drain outfalls. Receiving waters shall also be identified and located.

## ii. Status of Measurable Goals

**44.01:** During Permit Year 1, the storm drain map for Main Campus is completed.

Base map is maintained and regularly updated to reflect the ongoing improvements made throughout campus

**44.02:** During Permit Year 1, the storm drain map for Main Campus is completed.

Base map is maintained and regularly updated to reflect the ongoing improvements made throughout campus.

**44.07:** Affected departments verify that maps are complete.

Physical Planning and Construction has verified that the maps of the Main Campus are complete. No capital projects were completed at subject locations

## ii. Appropriateness: (Scale 0-9high) 9

## iv. Effectiveness: CASQA Level 1

## v. Proposed Modifications: None

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.

Campus base map is on file at the Physical Planning and Construction office.

- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated. Refer to the SWMP for the Year 2 Implementation Schedule

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
44.01	PP Grounds	During Permit Year 1, the storm drain map for Main Campus is completed.		X	Yes	No

44.02	PP&C	During Permit Year 1, the storm drain map for Main Campus is completed.		X	Yes	No
44.07	PP&C	Affected departments verify that maps are complete.		X	Yes	Yes

<b>45</b>	<b>Illicit Discharge Reporting System</b>
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## a. BMPs

## i. General summary

EH&S will establish a storm water illicit discharge reporting system with the following components: a telephone number staffed during regular working hours by a trained attendant; 24-hour emergency reporting to 9-1-1; web-based reporting monitored during regular working hours by a trained attendant; written procedures for collecting reports and conducting follow-up investigations and/or corrective actions; a system for tracking all reports made and their disposition; publicizing the reporting system in outreach materials/activities. The reporting system will additionally provide for public input/complaints regarding construction site storm water.

The system will be established during Permit Year 1. In addition to directing timely and effective responses to concerns about storm water management and providing an ongoing connection to the public, the reporting system will assist in measuring the effectiveness for many of the BMPs in the SWMP and may identify areas requiring additional BMPs.

## ii. Status of Measurable Goals

**45.01:** The system will be established during Permit Year 1.

This goal was met in September 2007.

**45.02:** All components of the system are in place.  
100% of reports are investigated.

There were 3 reports made. 100% of reports were investigated. A log of reports and follow-up is kept on file by the Storm Water Manager.

**45.03:** A storm water concerns reporting notice is included in the signage at all applicable construction sites.

Campus standards detail 01.5-01 was updated in December of 2008 to include information on how to report a storm water concern. All new applicable construction projects signs were checked for conformity of PP&C requirements which among other things required the above illicit discharge reporting information

**45.04:** Publicity mechanisms are employed annually.

The illicit discharge reporting system is publicized on the clean water website at <http://cleanwater.ucsc.edu/> as well as at employee training sessions.

**45.05:** Annual review is completed and documented.

Storm Water Manager reviewed reports to the illicit discharge system and determined that all reports were handled in a timely manner and there were no repeat reports.

**ii. Appropriateness:** (Scale 0-9high) 9**iv. Effectiveness:** CASQA Level 1**v. Proposed Modifications:** None

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.
- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated. Refer to the SWMP for the Year 2 Implementation Schedule

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
45.01	EH&S: Storm Water Manager	The system will be established during Permit Year 1.		X	Yes	No
45.02	EH&S: Storm Water Manager	All components of the system are in place. 100% of reports are investigated.		X	Yes	Yes
45.03	PP&C	A storm water concerns reporting notice is included in the signage at all applicable construction sites.		X	Yes	Yes
45.04	EH&S: Storm Water Manager	Publicity mechanisms are employed annually.		X	Yes	Yes
45.05	EH&S: Storm Water Manager	Annual review is completed and documented.		X	Yes	Yes

<b>47</b>	<b>Review of Non-Storm Water Discharges</b>
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## a. BMPs

**i. General summary**

During the development of the SWMP, EH&S worked with various staff to ensure that for all facilities covered by this SWMP, the 17 categories of potential non-storm water discharges identified in General Permit section D.2.c.6. were reviewed and existing conditions were characterized. For each of the potential flows, a classification was applied: the flow is not a source of constituents of concern or detrimental to beneficial uses of water; or effective BMPs are in place to ensure such flows are not a source of constituents of concern or detrimental to beneficial uses of water; or a potential flow requiring further investigation; or UCSC does not



have these flows. The classifications applied to each type of potential flow at each facility is found in Appendix D.

Seven potential flows were identified for further investigation. These flows will be investigated and follow-up actions taken, as described in BMP #25, BMP Development Team: Investigation of Non-Storm Water Discharges.

## ii. Status of Measurable Goals

All applicable flows identified and classified. Appendix D is the completed work product for this BMP.

ii. **Appropriateness:** (Scale 0-9high) 9

iv. **Effectiveness:** CASQA Level 1

v. **Proposed Modifications:** None

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.
- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated.

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
47.01	Storm Water Manager	All applicable flows identified and classified. Appendix D is the completed work product for this BMP.		X	Yes	No

## 4. Construction Site Storm Water Control

BMP	Description	Status					
		Implemented	Not Applicable	Modified <sup>1</sup>	Effective	Effectiveness Unknown	Not Effective
48	Campus Standards Handbook and Construction Contracts for Storm Water Management	X		X	X		
51	Construction Site Inspection Procedures	X				X	

54	Construction Site Storm Water BMP Training	X			X	
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### Construction Site Storm Water Control

48	Campus Standards Handbook and Construction Contracts for Storm Water Management
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#### a. BMPs

##### i. General summary

The Campus Standards Handbook serves many of the same purposes as municipal building codes and ordinances. The Campus Standards Handbook incorporates significant language to ensure erosion and sediment controls, as well as construction site waste controls. The Campus Standards Handbook is supplemented by the UCSC Division 1 Specifications which become a part of every large (currently set to include all projects over \$100,000) construction contract.

Because all applicable construction is performed under contract with the University of California, provisions for appropriate sanctions and penalties are included in the standard construction contract documents provided by the UCOP (University of California Office of the President).

<http://www.ucop.edu/facil/fmc/facilman/volume4/part2/long/gc.pdf>. Sanctions include the ability for the University representative to stop work as provided in General Conditions Article 2.3, and the University's ability to complete any work not completed by the Contractor and to deduct costs from Contractor's payments per General Conditions Article 2.4.

UCSC requires its contractor to comply with the law and with the SWRCB General Permit for Discharges of Storm Water Runoff Associated with Construction Activity in its contract with the contractor. UCSC does not contract directly with subcontractors, but does require in the contract with the contractor that the subcontractors comply with all requirements imposed upon the contractor. If there is a violation, UCSC can hold its contractor in breach of contract, requiring the contractor to remedy the violation either through the action of the contractor itself, or by the contractor declaring its subcontractor to be in violation of the subcontract.

As the landowner, UCSC applies for coverage under the SWRCB General Permit for Discharges of Storm Water Runoff Associated with Construction Activity for all applicable sites. Prior to applying for coverage, UCSC reviews all SWPPPs for completeness using the SWPPP monitoring program checklist provided by SWRCB.

##### ii. Status of Measurable Goals

**48.01:** Erosion Control Standards and related requirements incorporated into all applicable new construction contracts.

All new applicable construction contracts contained requirements for Erosion Control Standards and related requirements as part of Division 1 Specifications. All project specific Division 1 Specifications are archived in the Physical Planning and Construction Contracts Office.

**48.02:** All SWPPP and related documents are reviewed for completeness before the NOI is submitted.

All SWPPPs were reviewed as part of the construction submittal process. All submittals and associated transmittals are archived in the Physical Planning and Construction Contracts Office.

**48.03:** All new construction contracts contain standard provisions for penalties and breach of contract.

All construction contracts contained provisions for penalties and breach of contract provisions. All construction

contracts are archived in the Physical Planning and Construction Contracts Office.

**iii. Appropriateness:** (Scale 0-9high) 9

**iv. Effectiveness:** CASQA Level 1

**v. Proposed Modifications:** None

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.

See each BMP above for documentation.

- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated. Refer to the SWMP for the Year 2 Implementation Schedule

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
48.01	PP&C	Erosion Control Standards and related requirements incorporated into all applicable new construction contracts.		X	Yes	Yes
48.02	PP&C	All SWPPP and related documents are reviewed for completeness before the NOI is submitted.		X	Yes	Yes
48.03	PP&C	All new construction contracts contain standard provisions for penalties and breach of contract.		X	Yes	Yes

<b>51</b>	<b>Construction Site Inspection Procedures</b>
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- a. BMPs

**i. General Summary**

The University Representative has the authority to stop work on construction projects that are not implementing Erosion Control or SWPPP requirements. To improve the inspection and enforcement process, PP&C will develop and implement inspection procedures and checklists for storm water management. The inspection procedure will apply to all sites that disturb more than 50 cubic yards of dirt and projects over one acre. The procedures and checklist will be developed during Permit Year 1 and implementation will begin no later than the beginning of Permit Year 2.

**ii. Status of Measurable Goals**

Procedures and checklists developed during Permit Year 1.

Checklist has been developed and distributed for use.

**iii. Appropriateness:** (Scale 0-9high) 9

**iv. Effectiveness:** CASQA Level 1

**v. Proposed Modifications:** None

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.

Checklist is available at Physical Planning and Construction Office.

- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated.

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
51.01	PP&C	Procedures and checklists developed during Permit Year 1.		X	Yes	No

<b>54</b>	<b>Construction Site Storm Water BMP Training</b>
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- a. BMPs

**i. General summary**

100% of affected PP&C and PP-Work Management staff have participated in training before October 1 of Permit Year 1.

29 of 31 affected PP&C and PP-Work Management staff participated in training on September 28, 2009. The remaining 2 were trained subsequent to the original training.

**ii. Appropriateness:** (Scale 0-9high) 9

**iv. Effectiveness:** CASQA Level 2

**v. Proposed Modifications:** None

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.

A sign in sheet for all attendees is on kept by the Storm Water Programs Manager.

- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated. Refer to the SWMP for the Year 2 Implementation Schedule

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
54.01	PP&C	100% of affected PP&C and PP-Work Management staff have participated in training before October 1 of Permit Year 1.		X	Yes	Yes

## 5. NEW DEVELOPMENT DESIGN REQUIREMENTS FOR STORM WATER MANAGEMENT

If your community is subject to Attachment 4 (Supplemental Provisions) of the General Permit, note your compliance with and progress implementing the Design Standards in this section, if applicable.

BMP	Description	Status					
		Implemented	Not Applicable	Modified <sup>1</sup>	Effective	Effectiveness Unknown	Not Effective
55	Main Campus Planning and Design Requirements for Storm Water Management and Watershed Protection	X		X		X	
57	MSC Planning and Design Requirements for Storm Water Management and Watershed Protection	X				X	
58	MBEST Planning and Design Requirements for Storm Water Management and Watershed Protection	X				X	
60	Operation and Maintenance of New Development BMPs	X			X		

## NEW DEVELOPMENT DESIGN REQUIREMENTS FOR STORM WATER MANAGEMENT

55	Main Campus Planning and Design Requirements for Storm Water Management and Watershed Protection
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- a. BMPs

### i. General summary

SWMP sections 4.2.5.1 to 4.2.5.4 describe the context and approach for planning and development at the main campus. This BMP details the implementation tasks that UCSC will take to realize the described approach.

## ii. Status of Measurable Goals

**55.01:** PP&C and PP-Work Management shall each document that applicable measures are included in all completed construction projects.

Campus Standards are reviewed for each new project and all applicable measures are included in project design. Design review comments are compiled by the Project Manager. Design review comments are available upon request.

**55.02:** For all projects funded for design after July 2009, PP&C and Work Management shall each document that Civil and Site Design Guidelines Supplement have been included in the completed projects.

Civil and Site Design Guidelines Supplement was provided to the project designers at every project kick-off meeting. The applicable items in the supplement were reviewed for inclusion during the design review process. Design review comments are available upon request.

All design requirements except the Sanitary Sewer requirements were added to the Campus Standards. See Standards at <http://ppc.ucsc.edu/standards>. UCSC is in the process of completing a Sanitary Sewer Master Plan and would like to use the findings from the study to determine the most applicable design changes to the sanitary sewer standards.

**55.07:** Design requirements added to Campus Standards during Permit Year 1.

All design requirements were added to Campus Standards, see Standards at <http://ppc.ucsc.edu/standards>. Number 21, Provide 12" deep sediment trap in bottom of all drain inlets and catch basins was modified to the following: *Provide 12" deep sediment trap as necessary*. The concern is that the sump provides a breeding ground for vectors. .

**55.09:** Implement LRDP UTIL-9G and summarize findings and planned implementation schedule.

Carollo Engineers was hired by the campus and completed the "Campus Water Reuse Study" in May 2009. The study listed a variety of projects but it determined that plumbing Codes would need to be further refined for easier implementation of rainwater harvesting.

"Campus Water Reuse Study", May 2009 by Carollo Engineers is on file at Physical Planning and Construction.

**55.10:** Design requirements added to Campus Standards in Year 1.

Buffer requirement was added to the Campus Standards. See Standards at <http://ppc.ucsc.edu/standards/p3/>

**55.11:** On an annual basis, PP&C will report on the number of Area Plans that were initiated or developed during the permit year.

Northeast Campus Area Plan process began in fall of 2009 with draft plan completed in spring of 2010. Geologist/Hydrogeologist was retained by UCSC to identify all affected watersheds in the planning area and assess potential impacts and identify appropriate BMP.

**ii. Appropriateness:** (Scale 0-9high) 9

**iv. Effectiveness:** CASQA Level 1

**v.Proposed Modifications:** BMP 55.02 should have been a frequency of one-time. It is listed to be completed in years 1-5. Given the Civil and Site Design Guidelines Supplement was added to the Campus Standards in year 1, these guidelines are now covered by BMP 48, Campus Standards Handbook and Construction Contracts for Storm Water.

BMP 55.07 Number 21, Provide 12” deep sediment trap in bottom of all drain inlets and catch basins was modified to the following: *Provide 12” deep sediment trap as necessary*. The concern is that the sump provides a breeding ground for vectors.

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.

See each BMP above for location of documentation.

- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated. Refer to the SWMP for the Year 2 Implementation Schedule

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
55.01	PP&C, PP-Work Management	PP&C and PP-Work Management shall each document that applicable measures are included in all completed construction projects.		X	Yes	Yes
55.02	PP&C, PP-Work Management	For all projects funded for design after July 2009, PP&C and Work Management shall each document that Civil and Site Design Guidelines Supplement have been included in the completed projects.	X		Yes	No
55.07	PP&C	Design requirements added to Campus Standards during Permit Year 1.		X	Yes	No
55.09	PP&C	Implement LRDP UTIL-9G and summarize findings and planned implementation schedule.		X	Yes	No

55.10	PP&C	Design requirements added to Campus Standards in Year 1.		X	Yes	No
55.11	PP&C	On an annual basis, PP&C will report on the number of Area Plans that were initiated or developed during the permit year.		X	Yes	Yes

<b>57</b>	<b>MSC Planning and Design Requirements for Storm Water Management and Watershed Protection</b>					
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## a. BMPs

**i. General summary**

The CLRDP is the land use plan for the physical development of the 98-acre Marine Science Campus (formerly Long Marine Lab), including Younger Lagoon Reserve. The CLRDP contains comprehensive provisions for storm water management and watershed protection as the Marine Science Campus is developed. Included in the CLRDP are policies, policy implementation measures, a Resource Management Plan and a Drainage Concept Plan that taken together will ensure that development will protect and in some areas enhance the watershed.

**ii. Status of Measurable Goals**

Implement the storm water components of the CLRDP. Annually provide a summary of implementation.

No new development under the CLRDP has been approved, so planning and design requirements have not been implemented. Detailed planning for implementation of Resource Management Plan is underway. Campus is implementing source control measures in the Drainage Concept Plan for existing development.

**ii. Appropriateness:** (Scale 0-9high) 9**iv. Effectiveness:** CASQA Level 1**v. Proposed Modifications:** None

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.

The CLRDP annual report for 2009 has been submitted to the Coastal Commission and is available at PP&C office.

- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated. Refer to the SWMP for the Year 2 Implementation Schedule



BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
57.01	PP&C	Implement the storm water components of the CLRDP. Annually provide a summary of implementation.		X	Yes	Yes

<b>58</b>	<b>MBEST Planning and Design Requirements for Storm Water Management and Watershed Protection</b>					
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## a. BMPs

## i. General summary

The Master plan for the MBEST Center requires that all surface runoff from new development to be directed to 10-year retention basins for infiltration with any overflow directed to a 100-year retention basin. Ten-year retention basins are owned and operated by MBEST. Hundred-year retention basins are maintained by the City of Marina. Ten-year retention basins are inspected monthly and maintained as needed.

## ii. Status of Measurable Goals

Infiltration basins are included in all new development.

No new development therefore no infiltration basins were constructed.

## ii. Appropriateness: (Scale 0-9high) 9

## iv. Effectiveness: CASQA Level 6

## v. Proposed Modifications: None

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.
- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated. Refer to the SWMP for the Year 2 Implementation Schedule

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
58.01	MBEST	Infiltration basins are included in all new development.		X	Yes	Yes

<b>60</b>	<b>Operation and Maintenance of New Development BMPs</b>
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## a. BMPs

## i. General summary

As a non traditional MS4 UCSC is the final owner of nearly all structural BMPs. To ensure long term maintenance of BMPs installed in new construction, UCSC will add new structural BMPs to BMP #78: Storm Drain Systems Inspection and Preventative Maintenance. If Grounds Services is not identified as the responsible department, the identified department will adopt an appropriate inspection and maintenance schedule. Or for BMPs installed in areas which will be leased by others, long term maintenance will be assured by including an operation and maintenance requirement in the governing documents, such as the Covenants, Conditions and Restrictions (CC&R) or other appropriate documents.

## ii. Status of Measurable Goals

Prior to final completion of project, responsibility for long term maintenance of all new structural BMPs has been assigned and accepted.

Two projects were completed during year 1 with structural BMPs requiring long term maintenance, Digital Arts Facility and Ranch View Terrace. Grounds Services participated in the final site walks for each project along with the Project Manager and the Contractor to discuss all new site development. During these walks both the Project Manager and Contractor provide Grounds Services with any necessary information including maintenance manuals to assist in long term maintenance.

## ii. Appropriateness: (Scale 0-9high) 9

## iv. Effectiveness: CASQA Level 1

## v. Proposed Modifications: None

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.

Areas associated with new completed projects are added to maintenance log books kept by Grounds Services. They are filed in the Grounds Services Office.

- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated. Refer to the SWMP for the Year 2 Implementation Schedule

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
60.01	PP&C	Prior to final completion of project, responsibility for long term maintenance of all new structural BMPs has been assigned and accepted.		X	Yes	Yes

**6. POLLUTION PREVENTION FOR OPERATIONS AND MAINTENANCE**

<b>BMP</b>	<b>Description</b>	<b>Status</b>					
		<b>Im ple men ted</b>	<b>Not Ap pli cable</b>	<b>Mod ified<sup>1</sup></b>	<b>Eff ective</b>	<b>Eff ectiveness Un known</b>	<b>Not Eff ective</b>
62	Storm Water BMP Training	X			X		
63	Equipment and Materials Storage Areas	X			X		
64	Washing University Owned Vehicles	X			X		
68	Street and Parking Lot Maintenance in Faculty/Staff Housing	X			X		
69	Food Service BMPs	X		X	X		
75	Fleet Services BMPs from SWPPP	X			X		
76	Integrated Pest Management Program	X			X		
77	Cleaning Streets and Parking Lots	X		X	X		
78	Storm Drain Systems Inspection and Preventative Maintenance	X			X		
79	Campus Recycling Program	X			X		
81	Grounds Services: Landscape Maintenance and Turf Management	X			X		
82	Maintenance of Fountains and Decorative Water Bodies	X			X		
83	Household Hazardous Waste Minimization	X			X		
85	Custodial Services BMPs	X			X		
90	Water Line Flushing	X			X		
91	Vehicle Maintenance Prohibitions	X			X		
93	Pet Prohibitions	X			X		
94	Homeless Encampments	X			X		
95	Hazardous Waste Management Program	X			X		
96	Hazardous Materials Emergency Response Organization	X			X		

<b>62</b>	<b>Storm Water BMP Training</b>
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## a. BMPs

## i. General summary

On an annual basis, key employees receive training on general storm water awareness and on applicable BMPs to protect storm water quality. All pollution prevention training / public education and outreach documents will discuss permissible and impermissible activities as well as how to report concerns.

Training may utilize the Electronic Brochures and Flyers described in BMP #1.

## ii. Status of Measurable Goals

**62.01:** At least 90% of applicable PP-Grounds employees will participate in initial training.

90% of applicable PP-Grounds employees participated in initial training on January 20, 2010. Sign in sheet on file.

**62.04:** Participation by 100% of applicable MBEST staff in Year1.

100% of MBEST staff attended training on January 22, 2010. Sign in sheet is on file.

**62.05:** At least 90% of applicable TAPS Maintenance employees will participate in initial training.

100% of applicable TAPS maintenance employees participated in training on January 20, 2010. Sign in sheet in on file.

**iii. Appropriateness:** (Scale 0-9high) 9

**iv. Effectiveness:** CASQA Level 2

**v. Proposed Modifications:** None

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.

Sign in sheets were provided for all trainings and they are on file.

- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated. Refer to the SWMP for the Year 2 Implementation Schedule

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
62.01	PP-Grounds	At least 90% of applicable PP-Grounds employees will participate in initial training.		X	Yes	Yes
62.04	MBEST	Participation by 100% of applicable MBEST staff in Year1		X	Yes	Yes
62.05	TAPS	At least 90% of applicable TAPS Maintenance employees will participate in initial training		X	Yes	Yes

<b>63</b>	<b>Equipment and Materials Storage Areas</b>
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## a. BMPs

## i. General summary

This BMP applies to equipment and material storage areas for UCSC facilities operations.

## ii. Status of Measurable Goals

Equipment and material storage requirements are included in all training required by BMP #62. 100% of noted CUPA inspection deficiencies corrected within 30 days.

Equipment and material storage requirements were included in all trainings.

## ii. Appropriateness: (Scale 0-9high) 9

## iv. Effectiveness: CASQA Level 2

## v. Proposed Modifications: None

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.

Power Point Presentations are kept on file by the Storm Water Manager. EH&S provides letters to CUPA Inspector noting completion of all deficiencies. Letters are on file at EH&S office.

- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated. Refer to the SWMP for the Year 2 Implementation Schedule

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
63	Various Staff	Equipment and material storage requirements are included in all training required by BMP #62. 100% of noted CUPA inspection deficiencies corrected within 30 days.		X	Yes	Yes

<b>64</b>	<b>Washing University Owned Vehicles</b>
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## a. BMPs

## i. General summary

This BMP applies to equipment and material storage areas for UCSC facilities operations.

## ii. Status of Measurable Goals

Vehicle washing requirements are included in all training required by BMP #62.

Vehicle washing requirements were included in all trainings.

**ii. Appropriateness:** (Scale 0-9high) 9

**iv. Effectiveness:** CASQA Level 2

**v. Proposed Modifications:** None

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.

Power Point Presentation is kept on file by the Storm Water Manager.

- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated. Refer to the SWMP for the Year 2 Implementation Schedule

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
64	Various Staff	Vehicle washing requirements are included in all training required by BMP #62.		X	Yes	Yes

<b>68</b>	<b>Street and Parking Lot Maintenance in Faculty/Staff Housing</b>
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- a. BMPs

**i. General summary**

Prevent storm water contamination from roads and parking lots. Streets and parking lots associated with Faculty/Staff Housing shall be cleaned not less than once annually. One cleaning shall occur prior to the wet season.

**ii. Status of Measurable Goals**

Cleaning is performed according to established schedule.

Grounds Services performs routine street sweeping of Faculty/Staff Housing areas.

**ii. Appropriateness:** (Scale 0-9high) 9

**iv. Effectiveness:** CASQA Level 4

**v. Proposed Modifications:** None

- d. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.

Grounds Services maintains a Sweeper Log on file at the Grounds Services Office.

- e. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated. Refer to the SWMP for the Year 2 Implementation Schedule

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
68.01	Faculty Housing	Cleaning is performed according to established schedule.		X	Yes	Yes

<b>69</b>	<b>Food Service BMPs</b>
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a. BMPs

**i. General summary**

To ensure storm water quality is not negatively affected by food service activities, BMPs were selected by the BMP Development Team for Food Service Facilities (refer to BMP #18). The practices selected cover the following activities: washing of equipment, cleaning loading docks, cleaning outdoor dining areas, handling and disposal for fats, oil and grease (FOG), and handling of solid wastes and recyclable materials. These practices are to be implemented starting in Year 1. Where current facilities are inadequate to fully implement these BMPs a plan for future improvements (such as capital projects) will be developed and implemented.

**ii. Status of Measurable Goals**

**69.01:** Operating procedures developed and implemented at each facility. Where current facilities are inadequate to fully implement these BMPs, a plan for future improvements (such as capital projects) was developed and is being implemented.

Appendix I was sent to each dining hall manager and adopted at each dining hall. Appendix I was incorporated into Dining Services employee training.

**69.02:** Operating procedures developed and implemented. Where current facilities are inadequate to fully implement these BMPs, a plan for future improvements (such as capital projects) was developed and is being implemented.

Appendix I sent to College Administrative Officers (CAO) which oversee vender operated food services facilities. Vender operated food services facilities operating procedures implemented as appropriate.

**69.03:** Training conducted annually by responsible department.

Dining Services employees were trained in June 2010. Sign in sheet on file.

**69.04:** Training conducted annually by food service contractor.

CAO verified that contractors have completed training.

**69.05:** Training conducted annually by responsible department.

Training conducted at All Staff meeting, Fall 2009. Sign in sheet on file

**69.06:** Training conducted by responsible department.

An introduction to Storm Water Management BMPs is provided at on-boarding for all new Dining employees. All on-boarding is documented by Dining Trainer/Translator.

**69.07:** Training conducted by responsible department.

CAO verified that contractors have completed new employee training.

**69.08:** Training conducted by responsible department.

No new staff employees added in 2009-2010. All student employees with maintenance responsibilities participated in storm water training as part of safety training and on-boarding.

**69.09:** 100% of observations corrected within 30 days of notification by EH&S.

Food facility inspection reports are provided to the unit manager and assistant director. All food facility findings related to potential storm water issues were promptly addressed.

Environmental Programs Manager email records and training powerpoint for Dining Services

**ii. Appropriateness:** (Scale 0-9high) 9

**iv. Effectiveness:** CASQA Level 2

**v. Proposed Modifications:** BMP 69.2, 69.4, and 69.7 are BMPs to address Food Service Contractors. We propose to eliminate BMP 69.2, 69.4 and 69.7 as separate BMPs and instead include the measureable goals in our contract language as part of BMP 43, Management Controls to Prevent Illicit Discharges.

BMP 69.9 Primary Implementer is EH&S. We propose to include CUHS Dining as second primary implementer.

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.

Documentation is on file with CUHS Director.

- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated. Refer to the SWMP for the Year 2 Implementation Schedule



BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
69.01	CUHS Dining	Operating procedures developed and implemented at each facility. Where current facilities are inadequate to fully implement these BMPs, a plan for future improvements (such as capital projects) was developed and is being implemented.		X	Yes	Yes
69.02	Food Services Contractors	Operating procedures developed and implemented. Where current facilities are inadequate to fully implement these BMPs, a plan for future improvements (such as capital projects) was developed and is being implemented.	X		Yes	No
69.03	CUHS Dining	Training conducted annually by responsible department.		X	Yes	Yes
69.04	Food Services Contractors	Training conducted annually by food service contractor.	X		Yes	No
69.05	CUHS	Training conducted annually by responsible department.		X	Yes	Yes
69.06	CUHS	Training conducted by responsible department.		X	Yes	Yes
69.07	Food Services Contractors	Training conducted by responsible department	X		Yes	No
69.08	CUHS	Training conducted by responsible department		X	Yes	Yes
69.09	EH&S, CUHS Dining	100% of observations corrected within 30 days of notification by EH&S.		X	Yes	Yes

75	Fleet Services BMPs from SWPPP
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## a. BMPs

## i. General summary

The Central Garage is covered under the General Permit for Industrial Facilities. Therefore, the Central Garage shall continue the BMPs described in the SWPPP developed for compliance with the Industrial General Permit. As required by the State General Permit for Storm Water Associated with Industrial Activities, an annual assessment of the Fleet Services monitoring plan, data and BMP effectiveness is conducted and included in the Annual Report submitted to the Regional Board in compliance with WDID#344I001727.

**ii. Status of Measurable Goals**

The effectiveness of BMPs and their implementation to be reviewed during annual compliance review inspection as required by the State General Permit for Storm Water Associated with Industrial Activities, WDID#344I001727.

**ii. Appropriateness:** (Scale 0-9high) 9

**iv. Effectiveness:** CASQA Level 1

**v. Proposed Modifications:** None

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.

The annual report for reporting period July 1, 2009 through June 30, 2010 was submitted on June 24, 2010.

- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated. Refer to the SWMP for the Year 2 Implementation Schedule

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
75.01	Environmental Programs Manager	The effectiveness of BMPs and their implementation to be reviewed during annual compliance review inspection as required by the State General Permit for Storm Water Associated with Industrial Activities, WDID#344I001727.		X	Yes	Yes

<b>76</b>	<b>Integrated Pest Management Program</b>
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- a. BMPs

**i. General summary**

UCSC practices an Integrated Pest Management Program (IPM) led by the Physical Plant Grounds Services. The Physical Plant Pest Management Office identifies which alternative pest control strategies can be used effectively, and is continually researching safer alternative pest control methods and products. The IPM program requires the least toxic and effective means for use are utilized.

Any use of a pesticide by UCSC and/or contracted private firms must obtain prior approval from the Environmental Health & Safety Office. This approval is specific to the pesticide, the application method and the application situation. The EH&S Environmental Programs Manager reviews the request and either approves (with usage and safety recommendations) or denies the request.

**ii. Status of Measurable Goals**

Campus pesticide use complies with campus IPM program.

All pest management operations carried out by Grounds Services followed the IPM program and were made using least toxic methods possible. Any pesticides used were approved by EH&S.

**ii. Appropriateness:** (Scale 0-9high) 9

**iv. Effectiveness:** CASQA Level 1

**v. Proposed Modifications:** None

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.
- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated. Refer to the SWMP for the Year 2 Implementation Schedule

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
76.01	PP-Grounds	Campus pesticide use complies with campus IPM program.		X	Yes	Yes

<b>77</b>	<b>Cleaning Streets and Parking Lots</b>
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a. BMPs

**i. General summary**

Streets and parking lots are cleaned to remove vehicle contaminants, leaf litter, sediment, and litter in order to prevent them from being carried into drainage channels during the rainy season.

**ii. Status of Measurable Goals**

**77.01:** Main Campus streets: Primary roads are swept monthly. Secondary roads are swept on a bimonthly basis.

Grounds Services maintains a Sweeper Log on file at the Grounds Services Office.

**77.02:** MSC: Street sweeping is conducted 4 times per year.

Grounds Services maintains a Sweeper Log on file at the Grounds Services Office.

**77.03:** All parking lots shall be cleaned at least 10 times per year.

Parking lots were cleaned. A sweeper log is on file at the TAPS office

**77.05:** Establish and maintain a schedule for servicing parking lots.

Grounds Services maintains a Sweeper Log on file at the Grounds Services Office.

**77.06:** MBEST will clean parking lots once per year. Catch basins will be maintained once per year.

Completed on September 22, 2009. Invoice for services on file at MBEST.

**iii. Appropriateness:** (Scale 0-9high) 9

**iv. Effectiveness:** CASQA Level 4

**v. Proposed Modifications:** None

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.
- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated. Refer to the SWMP for the Year 2 Implementation Schedule

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
77.01, 77.02, 77.05	PP-Grounds	Street Sweeping performed as listed above		X	Yes	Yes
77.03	TAPS	All parking lots shall be cleaned at least 10 times per year.		X	Yes	Yes
77.06	MBEST	MBEST will clean parking lots once per year. Catch basins will be maintained once per year		X	Yes	Yes

<b>78</b>	<b>Storm Drain Systems Inspection and Preventative Maintenance</b>
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## a. BMPs

## i. General summary

UCSC Storm Drain Preventative Maintenance (PM) Program's purpose is to address infiltration, sediment, oil and grease. UCSC will continue to inspect and maintain engineered storm drain systems in developed areas.

## ii. Status of Measurable Goals

Inspection and maintenance is implemented according to schedule.

Inspections and maintenance were performed according to schedule.

## ii. Appropriateness: (Scale 0-9high) 9

## iv. Effectiveness: CASQA Level 4

## v. Proposed Modifications: None

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.

Grounds Services maintains a Storm Drain Maintenance Schedule Log on file at the Grounds Services Office.

- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated. Refer to the SWMP for the Year 2 Implementation Schedule

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
78	PP-Grounds	Grounds Services maintains a Storm Drain Maintenance Schedule Log on file at the Grounds Services Office.		X	Yes	Yes

<b>79</b>	<b>Campus Recycling Program</b>
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## a. BMPs

## i. General summary

The Refuse / Recycling Program currently collects material throughout all areas of campus. Members of the UCSC community can easily discard their materials in readily available containers, thus reducing the amount of litter otherwise carried into drainage channels during the rainy season. The campus waste management program works to preserve natural resources by encouraging recycling and reuse of materials. Currently, Grounds' Refuse / Recycling operations utilizes 9 different trucks, with a team of 9 FTE staff ( and 5 student employees

in recycling) to collect materials from conveniently located bins all over campus. Additionally, Grounds personnel patrol campus roads, paths and landscapes collecting litter. This program will continue throughout Permit Years 1-5.

## ii. Status of Measurable Goals

The Grounds Services waste management program continues to provide recycling services for the Main Campus and MSC.

Grounds Services provides recycling services for academic units, housing units, special events, and capital projects. Diversion data is recorded.

ii. **Appropriateness:** (Scale 0-9high) 9

iv. **Effectiveness:** CASQA Level 1

v. **Proposed Modifications:** None

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.

Diversion data is recorded and filed by Grounds Services

- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated. Refer to the SWMP for the Year 2 Implementation Schedule

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
78	PP-Grounds	The Grounds Services waste management program continues to provide recycling services for the Main Campus and MSC		X	Yes	Yes

<b>81</b>	<b>Grounds Services: Landscape Maintenance and Turf Management</b>
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- a. BMPs

### i. General summary

PP-Grounds provides a variety of outdoor maintenance services including: litter collection, hard surface blowing/sweeping and general garden maintenance.

The Tree Crew currently performs tree evaluation and corrective trimming, seasonal pruning, hazardous tree evaluation, tree removal, tree planting, and tree protection consultation.

Grounds Services also provides trash and recycling containers and clean-up services for special events.

Grounds Maintenance seeks to control the storm water impacts of lawn care practices at UCSC's Main Campus, MSC and 2300 Delaware. The key procedures include:

- Water management (including computerized controllers linked to a weather station and equipped with leak detection) for turf health, reduction of excess water-related diseases and soil compaction.
- Fertility management for turf health, reduction of nutritional or poor growth-related diseases, and to increase turf competition with weedy species.
- Soil compaction reduction to improve water, nutrient, and gas exchange to turf root system for increased vigor.
- Sanitation.
- Mowing height, frequency, and orientation.

PP-Grounds Services will continue its Landscape Maintenance and Turf Management Program throughout Permit Years 1-5.

## **ii. Status of Measurable Goals**

**81.01:** Grounds Maintenance continues existing practices including hazardous materials use minimization, mulching, and litter control.

Area gardeners complied with the above restrictions.

**81.02:** Turf management program continues existing practices for water management, fertility management, soil aeration, sanitation and mowing to maximize turf utility with minimal off-turf impacts.

Grounds continues to operate RainMaster Evolution controllers where installed and adjusts irrigation schedules for stand alone clocks based on local evapotranspiration (ET). Lawns are aerated and fertilized twice a year. Mowing equipment is cleaned frequently to reduce weed importation.

**iii. Appropriateness:** (Scale 0-9high) 9

**iv. Effectiveness:** CASQA Level 4

**v. Proposed Modifications:** None

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.
- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated. Refer to the SWMP for the Year 2 Implementation Schedule

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
81.01	PP-Grounds	Grounds Maintenance continues existing practices including hazardous materials use minimization, mulching, and litter control.		X	Yes	Yes
81.02	PP-Grounds	Turf management program continues existing practices for water management, fertility management, soil aeration, sanitation and mowing to maximize turf utility with minimal off-turf impacts.		X	Yes	Yes

<b>82</b>	<b>Maintenance of Fountains and Decorative Water Bodies</b>
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## a. BMPs

## i. General summary

CUHS and PP-Grounds will collaborate to develop and implement fountain and decorative pool maintenance processes and procedures that ensure discharges will not negatively impact storm water quality. CUHS Facilities and PP-Grounds will collaborate by the end of Permit Year 2.

## ii. Status of Measurable Goals

CUHS and PP-Grounds to develop maintenance BMPs for all water features by the end of Permit Year 2.

Cowell fountain not drained during 2009-2010. Crown fountain cleaning conducted in a way that did not cause erosion or discharge cleaning agents into storm drains. Planning has begun to form a water feature work group to establish a standard maintenance practice.

## ii. Appropriateness: (Scale 0-9high) 9

## iv. Effectiveness: CASQA Level 1

## v. Proposed Modifications: None

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.
- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated. Refer to the SWMP



## for the Year 2 Implementation Schedule

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
82.01	PP-Grounds	CUHS and PP-Grounds to develop maintenance BMPs for all water features by the end of Permit Year 2.		X	Yes	Yes

<b>83</b>	<b>Household Hazardous Waste Minimization</b>
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## a. BMPs

## i. General summary

For the primary purpose of minimizing abandoned and hard-to-handle household hazardous waste, CUHS will continue distribution of selected cleaning products to applicable student living areas; accept return of unused products at the end of the academic year; and as needed, provide for proper disposal of any unusable products. This is a combined effort from Student Residents and CUHS-Facilities to minimize waste and toxics normally produced by residential facilities.

## ii. Status of Measurable Goals

CUHS Facilities will report annually on the quantity of household hazardous waste collected.

CUHS continues to provide cleaning products to residents. Unused products were collected at the end of the school year and redistributed for use or disposed of in the UCSC household waste disposal process. Universal waste is collected year-round at sites at each residential area and disposed of through regular shipments to waste disposal vendors.

Because most potential household waste is actually redistributed for reuse the actual amount disposed of through campus household waste disposal process was approximately 45 quart bottles.

## ii. Appropriateness: (Scale 0-9high) 9

## iv. Effectiveness: CASQA Level 2

## v. Proposed Modifications: None

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.
- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated. Refer to the SWMP for the Year 2 Implementation Schedule

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
83.01	CUHS	CUHS Facilities will report annually on the quantity of household hazardous waste collected.		X	Yes	Yes

<b>85</b>	<b>Custodial Services BMPs</b>
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## a. BMPs

## i. General summary

Custodial Services has adopted the following BMPs:

- If carpet and upholstery cleaning is contracted outside of the university, the cleaning water tanks must be emptied into a sink, custodial sink or toilet, and not a storm drain.
  - Keep lids on cleaning barrels and containers, and store them indoors or under a cover to reduce exposure to rain.
  - Keep storage areas dry and clean. Conduct regular inspections in conformance with hazardous materials storage requirements so that leaks and spills are detected as soon as possible.
  - All waste products of custodial services, including mop bucket water, cleaning solutions and other water mixtures must be disposed of in campus indoor drains (custodial sinks, floor drains, sinks, etc.). These drains connect to the sanitary sewer, which connects to the City wastewater treatment plant.
- On an annual basis, PP-Custodial Services employees receive training on general storm water awareness and on applicable BMPs to reduce storm water contamination.
- Training may utilize Electronic Brochures and Flyers for General Storm Water Awareness and Targeted Topics (BMP #1).

Training will begin Permit Year 1.

## ii. Status of Measurable Goals

**85.01:** Custodial BMPs are integrated into the work routine.

Written and oral instructions are given to each Custodial Staff. Supervisors routinely inspect custodial closets and any infractions found are corrected.

Safety meeting sign-in sheets and custodial closet inspections are on file in the Custodial Office.

**85.02:** At least 90% of applicable PP-Custodial employees will participate in initial training. At least 90 % of applicable PP-Custodial employees will be retrained annually.

Annual training for custodial employees has been conducted for the last two years. Both day and night crew attended the training.

Sign in sheets are on file in the Physical Plant Custodial Office.

**85.03:** At least 90% of applicable PP-Custodial new employees receive storm water training during new employee orientation.

No new employees during year one.

**iii. Appropriateness:** (Scale 0-9high) 9

**iv. Effectiveness:** CASQA Level 2

**v. Proposed Modifications:** None

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.
- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated. Refer to the SWMP for the Year 2 Implementation Schedule

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
85.01	PP-Custodial	Custodial BMPs are integrated into the work routine		X	Yes	Yes
85.02	PP-Custodial	At least 90% of applicable PP-Custodial employees will participate in initial training. At least 90 % of applicable PP-Custodial employees will be retrained annually.		X	Yes	Yes
85.03	PP-Custodial	At least 90% of applicable PP-Custodial new employees receive storm water training during new employee orientation		X	Yes	Yes

<b>90</b>	<b>Water Line Flushing</b>
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a. BMPs

**i. General summary**

Water line flushing is performed by PP-Plumbing and by the UCSC Fire Department to maintain potable water supply and to verify hydrant flows. During water line flushing, diverters or other means will be used to avoid erosion or damage to landscaping (plantings, mulches, etc.). Water line flushing by PP-Plumbing and the campus Fire Department will continue through Permit Years 1-5 in a manner that prevents erosion and damage

to landscaping.

**ii. Status of Measurable Goals**

**90.01:** Erosion or other landscape damage does not occur during water line flushing.

Fire Department purchased a Remote Flow Diffuser which is used during water line flushing.

**90.02:** Erosion or other landscape damage does not occur during water line flushing.

All hydrant flush P.M.'s have been skipped for the past 3 years due to water conservation efforts.

**iii. Appropriateness:** (Scale 0-9high) 9

**iv. Effectiveness:** CASQA Level 2

**v. Proposed Modifications:** None

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.

Fire Department Developed Standard Operating Procedure for Flushing of Hydrants.

- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated. Refer to the SWMP for the Year 2 Implementation Schedule

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
90.01	Fire Department	Erosion or other landscape damage does not occur during water line flushing		X	Yes	Yes
90.02	PP-Plumbing	Erosion or other landscape damage does not occur during water line flushing		X	Yes	Yes

<b>91</b>	<b>Vehicle Maintenance Prohibitions</b>
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- a. BMPs

**i. General summary**

TAPS parking policies and residential rental agreements prohibit vehicle maintenance on campus, except at the campus Central Garage facility (covered by a SWPPP, see BMP #75). This policy and the rental agreements prevent oil, grease, heavy metals, and chemicals from being carried into storm water runoff.

**ii. Status of Measurable Goals**

**91.01:** Vehicle maintenance prohibitions remain in place in parking policies.

BMP is maintained and implemented by Parking Enforcement, a unit within University Police.

**91.02:** Vehicle maintenance prohibitions remain in place for residential rental agreements.

CUHS will provide information about vehicle maintenance prohibition (and other storm water related policies) to residents in either electronic or paper format on an ongoing basis.

All residential lease agreements and property use and maintenance restrictions contain language pertaining to vehicle maintenance prohibition.

**iii. Appropriateness:** (Scale 0-9high) 9

**iv. Effectiveness:** CASQA Level 1

**v. Proposed Modifications:** None

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.

Residential lease agreements are on file at CUHS office.

- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated. Refer to the SWMP for the Year 2 Implementation Schedule

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
91.01	TAPS	Vehicle maintenance prohibitions remain in place in parking policies.		X	Yes	Yes
91.02	CUHS	Vehicle maintenance prohibitions remain in place for residential rental agreements		X	Yes	Yes

<b>93</b>	<b>Pet Prohibitions</b>
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- a. BMPs

**i. General summary**

UCSC has a policy of prohibiting most pets on the Main Campus, the developed areas of the Marine Science Campus and at 2300 Delaware. See: <http://www.ucsc.edu/ppmanual/html/sps0005.htm>. This policy reduces the occurrence pathogen/coliform contamination in storm water from domestic animals.

**ii. Status of Measurable Goals**

UCSC continues to have a policy that restricts domestic animals on campus.

Animal Control Officer enforces policy as well as provides education on policy

**ii. Appropriateness:** (Scale 0-9high) 9

**iv. Effectiveness:** CASQA Level 1

**v. Proposed Modifications:** None

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.
- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated. Refer to the SWMP for the Year 2 Implementation Schedule

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
93.01	University Police	UCSC continues to have a policy that restricts domestic animals on campus		X	Yes	Yes

<b>94</b>	<b>Pet Prohibitions</b>
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a. BMPs

**i. General summary**

UCSC has a policy of prohibiting most pets on the Main Campus, the developed areas of the Marine Science Campus and at 2300 Delaware. See: <http://www.ucsc.edu/ppmanual/html/sps0005.htm>. This policy reduces the occurrence pathogen/coliform contamination in storm water from domestic animals.

**ii. Status of Measurable Goals**

University Police enforce night access policies. If homeless encampments are found, summary of control activities reported.

University Police work with other departments on and off Campus to remove encampments both on Campus and adjacent to campus boundaries.

**ii. Appropriateness:** (Scale 0-9high) 9

**iv. Effectiveness:** CASQA Level 1

**v. Proposed Modifications:** None

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.
- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated. Refer to the SWMP for the Year 2 Implementation Schedule

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
94	University Police	University Police enforce night access policies. If homeless encampments are found, summary of control activities reported		X	Yes	Yes

<b>95</b>	<b>Vehicle Maintenance Prohibitions</b>
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## a. BMPs

**i. General summary**

TAPS parking policies and residential rental agreements prohibit vehicle maintenance on campus, except at the campus Central Garage facility (covered by a SWPPP, see BMP #75). This policy and the rental agreements prevent oil, grease, heavy metals, and chemicals from being carried into storm water runoff.

**ii. Status of Measurable Goals**

**95.01:** On an annual basis, Hazardous Waste Manager summarizes program effectiveness and any changes made.

Hazardous waste practices, including electronic container tracking for all facilities and weekly hazardous waste pickup for the Main Campus were continued.

**95.02:** On an annual basis, Hazardous Waste Manager will provide the number of campus community members that have successfully completed the hazardous waste training course.

Training classes were held multiple times during the year. 56 members have successfully completed the hazardous waste training course.

**iii. Appropriateness:** (Scale 0-9high) 9**iv. Effectiveness:** CASQA Level 2**v. Proposed Modifications:** None

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.
- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated. Refer to the SWMP for the Year 2 Implementation Schedule

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
95.01	Environmental Programs Manager	On an annual basis, Hazardous Waste Manager summarizes program effectiveness and any changes made		X	Yes	Yes
95.02	Environmental Programs Manager	On an annual basis, Hazardous Waste Manager will provide the number of campus community members that have successfully completed the hazardous waste training course		X	Yes	Yes

<b>96</b>	<b>Hazardous Materials Emergency Response Organization</b>
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a. BMPs

**i. General summary**

UCSC operates an emergency response team for hazardous materials that are in or may enter the storm drain system, as described in the UCSC Hazardous Materials Management Plan. EH&S is an integral component of this team. EH&S staff oversees the proper stabilization, clean-up and disposal of spilled hazardous materials and initiates corrective actions to prevent recurrences. This BMP applies to Main Campus, Marine Science Campus and 2300 Delaware.

**ii. Status of Measurable Goals**

Hazardous Materials Emergency Response Organization continues to provide response to hazardous materials releases.

UCSC's emergency response team continues to respond to spills.

**ii. Appropriateness: (Scale 0-9high) 9**

**iv. Effectiveness: CASQA Level 4**

**v. Proposed Modifications: None**



- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.

Campus Dispatch ER records / Environmental Managers record of ER responses.

- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated. Refer to the SWMP for the Year 2 Implementation Schedule

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
96.01	EH&S	Hazardous Materials Emergency Response Organization continues to provide response to hazardous materials releases		X	Yes	Yes

## 7. UCSC Specific Measures to Reduce Storm Water Impacts

BMP	Description	Status					
		Implemented	Not Applicable	Modified	Effective	Effectiveness Unknown	Not Effective
100	Stormwater Infrastructure Improvements	X				X	
101	Water Quality Monitoring	X		X	X		
104	Encourage Alternative Transportation	X			X		
107	Existing Storm Water System Review	X			X		
108	Annual Program Review	X			X		

<b>100</b>	<b>Stormwater Infrastructure Improvements</b>
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- a. BMPs

### i. General summary

This project includes infrastructure improvements, for issues identified in the Stormwater and Drainage Master Plan at locations along campus stream channels and drainages. Design and construction of the improvements

are anticipated to take place in multiple phases over a multi-year period. Phase I will focus on erosion problems at the top of the drainage channels and some repairs in severely eroded areas. Phase II will focus on erosion problems within the drainage channels. Phases I and II of the Infrastructure Improvements Project storm water drainage components have a combined estimated construction cost of approximately \$5,400,000. This project is a state-funded project and Phase 1 is scheduled to start construction in 2008. Phase II has been funded for design and will need approval for construction in 2009. The 2004 Stormwater and Drainage Master Plan is available for review at <http://ppc.ucsc.edu/cp/projects/9065/>. A project description can be found in Volume III, Chapter 2 of: <http://lrdp.ucsc.edu/final-eir.shtml>.

## **ii. Status of Measurable Goals**

Phases I and II are completed in 5 years.

Phase 1 Construction, complete 09/2010, phase 2 design expected completion 06/2011

## **ii. Appropriateness: (Scale 0-9high) 9**

## **iv. Effectiveness: CASQA Level 1**

## **v. Proposed Modifications: None**

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.

All construction documents are archived at Physical Planning and Construction office.

- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated. Refer to the SWMP for the Year 2 Implementation Schedule

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
100.01	PP&C	Phases I and II are completed in 5 years.		X	Yes	Yes

<b>101</b>	<b>Water Quality Monitoring</b>
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## **a. BMPs**

### **i. General summary**

The campus has been conducting surface and groundwater quality monitoring for eighteen years. Samples have been collected annually at nine campus locations and analyzed for 40 water quality parameters. Sample locations represent a variety of environments:

- campus spring water
- surface water from undeveloped campus areas
- storm water from developed portions of campus
- campus ground water.

An annual assessment of the monitoring program will include an evaluation of the appropriateness of sample locations, monitoring frequencies and water quality parameters in terms of maintaining continuity with the historic data and providing meaningful data to inform the SWMP. The annual assessment may dictate monitoring plan amendments to be implemented in subsequent years. Potential required monitoring plan modifications would not exceed the addition of one more groundwater-monitoring site and the addition of one more annual groundwater monitoring event to the existing annual suite unless directed under a separate order. Subsequent monitoring requirements may be reduced based upon analytical results collected.

## ii. Status of Measurable Goals

On an annual basis, the monitoring plan is implemented

Annual surface and ground water quality monitoring was continued.

## ii. Appropriateness: (Scale 0-9high) 9

## iv. Effectiveness: CASQA Level 2

**v. Proposed Modifications:** Discontinue sampling at Porter Infill location. Reduce WSW#1 monitoring frequency to once annually, after the first significant precipitation event.

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.

2009-2010 Annual Water Quality Monitoring Results Report prepared by Weber Hayes and Associates is kept on file by the Storm Water Manager.

- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

Discontinue sampling at Porter Infill location. Reduce WSW#1 monitoring frequency to once annually, after the first significant precipitation event.

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
101.01	Environmental Programs Manager	44.01,.02,.07	X		Yes	Yes

<b>104</b>	<b>Encourage Alternative Transportation</b>
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- a. BMPs

## i. General summary

Reduce the use of personal automobile and associated impacts. UCSC will continue its existing and integrated approach to reduce the use of the personal automobile (and its associated impacts) by offering no-cost and low-cost commuting alternatives such as bus passes and vanpools, charging parking fees that reflect the costs of providing parking services, providing bike paths, providing showers for bike riders, frequent on-campus shuttle service (including bike shuttles), etc.

**ii. Status of Measurable Goals**

Commuting alternatives continue to be supported by UCSC.

TAPS continues to provide all the programs mentioned above, expanding and enhancing each when appropriate and feasible. More than 60% of all person-trips to and from the UCSC campus were made using a commute alternative.

**ii. Appropriateness:** (Scale 0-9high) 9

**iv. Effectiveness:** CASQA Level 2

**v. Proposed Modifications:** None

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.

See TAPS website at <http://www2.ucsc.edu/taps/>

- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated. Refer to the SWMP for the Year 2 Implementation Schedule

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
104	TAPS	Commuting alternatives continue to be supported by UCSC		X	Yes	Yes

<b>107</b>	<b>Existing Storm Water System Review</b>
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- a. BMPs

**i. General summary**

UCSC will formalize the program to characterize and evaluate the potential for contaminants to enter sinkholes and develop a plan to institute controls where the evaluation indicates potential for significant contaminant transport to a sinkhole.

**ii. Status of Measurable Goals**

Proximity defined; sinkholes identified and program to characterize and evaluate formalized.

Campus map of sinkholes developed. Locations exhibiting potential sources of contamination in proximity to sinkholes identified. Mitigation of potential risk of contaminants entering sinkhole has been implemented at priority locations.

**ii. Appropriateness:** (Scale 0-9high) 9

**iv. Effectiveness:** CASQA Level 2**v. Proposed Modifications:** None

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.

Sinkhole water quality risk evaluation documentation on file with Environmental Programs Manager.

- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated. Refer to the SWMP for the Year 2 Implementation Schedule

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
107	Environmental Programs Manager	Proximity defined; sinkholes identified and program to characterize and evaluate formalized		X	Yes	Yes

<b>108</b>	<b>Annual Program Review</b>
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## a. BMPs

**i. General summary**

In accordance with the general permit requirements, UCSC will prepare an annual report. The annual report will include:

1. Status of compliance with permit conditions;
2. Status of the identified measurable goals;
3. An assessment of the appropriateness and effectiveness of the identified BMPs;
4. Evaluation of information collected and analyzed, including applicable monitoring data;
5. A summary of the storm water activities planned for the next permit year;
6. Recommended amendments to the SWMP along with a justification for such changes; and
7. Changes in responsibilities for implementing portions of the SWMP.

**ii. Status of Measurable Goals**

Annual SWMP review is completed as described above.

Annual SWMP review is completed and detailed in the report above.

**ii. Appropriateness:** (Scale 0-9high) 9**iv. Effectiveness:** CASQA Level 1**v. Proposed Modifications:** None

- b. Present results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.
- c. Briefly summarize the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule). If you propose activities that differ from those originally proposed in the approved SWMP, provide justification.

There is no change from the schedule provided in the current approved SWMP anticipated. Refer to the SWMP for the Year 2 Implementation Schedule

BMP	Implementers	Proposed Measurable Goal	Modified?		Schedule	
			YES	NO	Complete this year	Ongoing Implementation
108	Storm Water Manager	Annual SWMP review is completed as described above		X	Yes	Yes

**E. Certification**

*"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."*

John Barnes

September 14, 2010

Signature of Permittee (legally responsible person)

Date Signed

JOHN BARNES

Name (printed)

Interim Associate Vice Chancellor

Physical Planning and Construction  
Campus Architect

Title