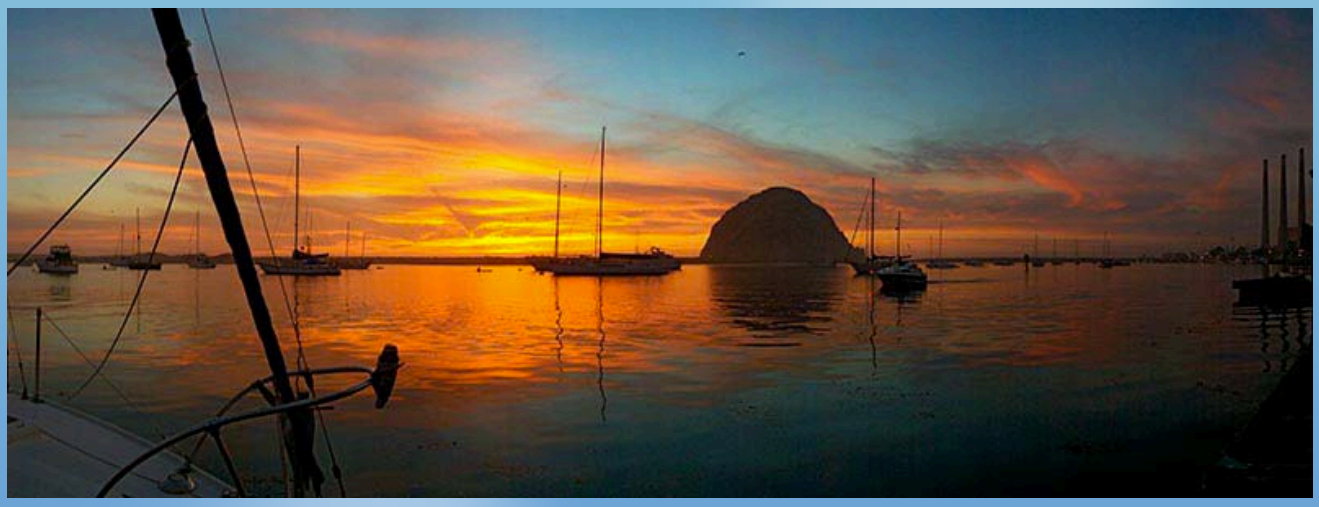
City of Morro Bay

Stormwater Annual Report

February 2009 – February 2010



Submitted: June 2010

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ANNUAL REPORT

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

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

A. Permittee Information

1. Permittee (Agency Name): City of Morro Bay ☐
2. Contact Person: Damaris Hanson ☐
3. Mailing Address: 595 Shasta Ave ☐
4. City, State and Zip Code: Morro Bay, California 93465 ☐
5. Contact Phone Number: 805-772-6261 ☐
6. WDID # 3 40MS04032
7. Have any areas been added to the MS4 due to annexation or other legal means? ☐ 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.

Section B. Reporting Period: Permit Coverage was achieved on February 17, 2009

(Annual Report is due by June 1st each year)

- ☒ February 1, 2009 to February 28, 2010
- ☐ February 1, 2010 to February 28, 2011
- ☐ February 1, 2011 to February 28, 2012
- ☐ February 1, 2012 to February 28, 2013
- ☐ February 1, 2013 to February 28, 2014

Section C: Executive Summary

The City of Morro Bay's Stormwater Management Program (SWMP) was developed in compliance with enrollment procedures under the National Pollutant Discharge Elimination System (NPDES) General Permit for the discharge of stormwater from small Municipal Separate Storm Sewer Systems (MS4) General Permit. The SWMP is a comprehensive program to establish and implement Best Management Practices (BMPs) that reduce the discharge of stormwater pollutants into water bodies and to protect and improve water quality within the City of Morro Bay. The City's SWMP was approved by the Central Coast Regional Water Quality Control Board (CCRWQCB) on February 17, 2009 (WDID # 3 40MS04032) at which time the City was granted permit coverage under the NPDES Small MS4 General Permit Water Quality Order No. 2003-0005 DWQ. On May 25th 2010 the Central Coast Water Board staff approved the May 20, 2010 version of the SWMP pursuant to General Permit Section D.

The Annual report is organized by each of the six Minimum Control Measures (MCM). Each Best Management Practice (BMP) provides:

- a description of the BMP
- the measurable goal
- how the measurable goal was achieved, including a statement whether or not the measurable goal was achieved
- the effectiveness assessment
- any proposed changes and a short summary of the activities for next permit cycle.

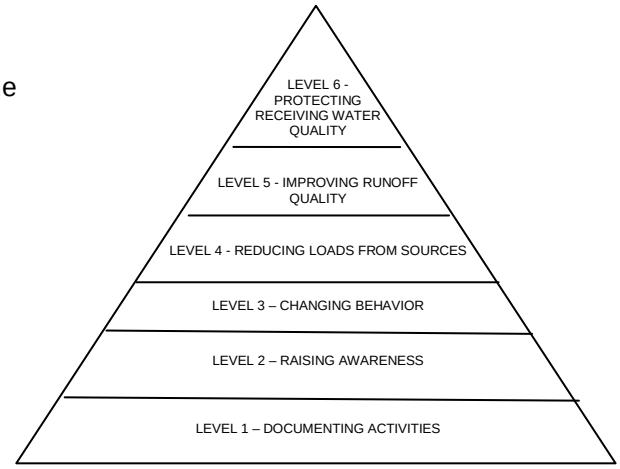
In permit year one the City has made great progress in developing a robust stormwater program. Some of the many highlights to the City's program include developing and distributing a residential brochure to all the citizens in Morro Bay. GIS mapping our storm drain system, and conducting a survey of the restaurant/food facilities on BMP's currently being used. Also the City has put a lot of energy into keeping up with the regional Joint Effort to develop a Hydromodification Management Plan and Low Impact Development. In doing so the City has developed Interim hydromodification control criteria which are applied to conditional projects with over 500 square feet of new or redevelopment. Several projects have completed these requirements and appear to be successful. The City has also incorporated LID into our City projects. The City conducted a Permeable Concrete demonstration project in the Library parking lot (see photos below). Two parking spaces were replaced with permeable concrete to allow for parking lot drainage to infiltrate into the ground. The City also created a car wash area for the Police and Fire Departments to wash their vehicles. The Police department has a permeable concrete area and the fire department has a permeable paver area for washing vehicles. The City Engineer has allowed deviations from the City's Standards to allow citizens to incorporate LID into their projects. For example grass pavers were allowed in a driveway approach instead of the standard concrete or asphalt driveway approach (see photo below).

Permeable concrete demonstration project in Library parking lot.

Example of grass paver driveway

The effectiveness assessment is another area the City has focused our efforts. Although it is difficult to rate the effectiveness of our program in permit year one the City does feel we have been successful in achieving a high level of effectiveness. The City used the California Stormwater Quality Association (CASQA) Municipal Stormwater Program Effectiveness Assessment Guidance Manual.

General Classification of outcome types



SECTION D: MINIMUM CONTROL MEASURES

PUBLIC EDUCATION AND OUTREACH

PE1: Participate in San Luis Obispo Partners for Water Quality

BMP Description:

Use collaborative regional partnerships ("SLO County Partners for Water Quality") to leverage shared resources to distribute stormwater pollution prevention public education and outreach information, materials, and activities throughout the City. Target audiences include, but are not limited to: General Public, Residential, Commercial Business, Industrial, Construction, Development, Municipal and Quasi-governmental agencies, as well as Tourists, and School Age Children. Topics to be covered are described in the BMPs below.

Measurable goal:

PE1A: Participate in monthly (12) SLO County Partners for Water Quality Meetings each year for planning and evaluating the status and performance of the stormwater pollution prevention public education and outreach programs within the County and for sharing information about what is working or not working.

PE1B: Review new materials gathered from other agencies and programs for inclusion in the City's outreach and education program.

Measurable goal achievements:

PE1A: This measurable goal (MG) was achieved. The City has participated in all partners meeting for the permit cycle year. One meeting was cancelled for a Region Water quality Control Board meeting, so the City participated in this meeting instead. A staff member was present at the partners meetings or if no staff member was available to participate in the meeting, staff kept in contact with the partners group via emails. The partners group is a great way for the City to stay informed with what other Cities are doing to implement their SWMP. The city participated in most (11 of the 12) regular monthly meetings held during the reporting period along with additional working meetings to work on SWMP's and other special topics. Regular meeting topics included public education event planning, public education and outreach work plans and budgets, shared public education materials, regulatory requirement updates, training and education opportunities, low impact development and hydromodification control, sources of stormwater funding, among other topics. Presentations included CASQA effectiveness overview, Central Coast Salmon Enhancement, Sammy's Family Fun Activity Book.

PE1B: This measurable goal was achieved. The partner's group has set up a Yahoo Group to share files to more easily between Cities. This has been a useful tool for Cities to share material. Various brochures are shared and CASQA manuals are also available. The Partners group also has been working towards collaborating together on all the Public Education and Outreach BMP's to be more effective than working alone. The Partners are planning to present the collaboration to the Water Board early next permit year.

Effectiveness Assessment:

Level 1: Documenting activities: City staff attends Partners meetings.

Changes to BMP for next permit year / Summary of activities for next permit cycle:

The City proposes to participate in all Partners meetings that are available, but since staff is limited a staff member may not always be present at the meetings. The City proposes to attend as many meeting as our limited staff can attend and if a staff member is not available to attend staff will stay informed via emails.

PE2: Residential Brochures

BMP Description:

Distribute stormwater pollution prevention brochures and other printed materials (provided in multilingual and/or pictorial) targeting residential audiences. Topics may include, but not limited to:

General stormwater pollution prevention information about the impacts of urban runoff and the distinction between municipal storm sewer and sanitary sewer systems; Proper lawn and garden care; Sustainable landscaping; Proper household hazardous waste storage and disposal including used motor oil; Proper pet waste disposal; Water conservation, proper automotive car washing; Integrated Pest Management and use of less toxic household products; illegal dumping, and illicit discharge prohibitions; and Public hotline reporting mechanisms

Measurable goal:

PE2A: Distribute printed materials throughout the City every other year. Send residential brochures through direct mail to ensure every resident receives a brochure. Include IWMA program on brochures.

PE4B: Distribute appropriate printed materials to appropriate business

PE4C: Post brochure on the City's website.

Measurable goal achievements:

PE4A: This MG was achieved. Brochures were created for the residents of Morro Bay. The brochure covered the following information: general information on stormwater and its effects on plants, people, fish, and animals. The other topics included proper lawn and garden care, proper household hazardous waste storage and disposal including used motor oil; proper pet waste disposal; Water conservation, proper automotive car washing; Integrated Pest Management and use of less toxic household products; and public hotline reporting mechanisms. The brochures were distributed to all the residents in Morro Bay by direct mail. The city sent the brochures by direct mail because this ensures that every resident with a mailbox receives a copy. If the brochures are sent as a water bill insert only those residents who pay the water bill receive a copy, therefore if a resident is a renter and doesn't receive a water bill they would also not receive a brochure. A total of 6,500 brochures were printed. 5,700 were distributed to the residents of Morro Bay. Extra brochures are available at the Public Services counter. The brochure can be viewed on our website: www.morro-bay.ca.us/stormwater under quick links: Residential Stormwater Pollution Solutions Brochure. Also see brochure below.

PE4B: This MG was achieved. Our Water Our World (OWOW) supplied the City with brochures on various topics included but not limited to; the use of less toxic pest management for snails and slugs, yellow jackets, aphids, spiders etc. Also included printed materials about growing a healthy garden, tips for a beautiful lawn, the use and disposal of pesticides, etc. These brochures are available at Miners Hardware.

PE4C: This MG was achieved. The residential brochure was posted on the City's website (link above). 83 hits and 67 downloads were reported on the website this permit cycle (See table with BMP PE8).

Effectiveness Assessment:

Level 1 - Documenting Activities: The brochures were created and distributed to all the residents in the city of Morro Bay.

Level 2 – Raising Awareness: Only two comments were received on the brochures. One being that the brochures seemed to cost a lot of money and this citizen believes if we are experiencing budget issues maybe our money should be spent elsewhere. One other citizen called and said that they were disappointed the brochures were not printed on recycled paper with soy-based ink (which would cost the city about double). This citizen also believes it was a waste of paper resources and only adds more trash into the landfills.

Despite these complaints we believe the brochures did get important information out to the residents and may have raised the awareness of the residents and possibly changed some of their behaviors, we just have no way to measure the results at this time. One phone call was

generated from the brochure about using creosote railroad ties in landscaping; the City doesn't have an ordinance against using railroad ties in landscaping.

Changes to BMP for next permit year / Summary of activities for next permit cycle:

The City doesn't propose to change this BMP and will send brochures out to residents again in year 3 of the permit cycle.

Stormwater Pollution Solutions
City of Morro Bay
Department of Public Services
955 SHASTA AVENUE
MORRO BAY, CA 93442
Stormwater Team
805-772-6261
www.morro-bay.ca.us/stormwater
Stormwater runoff occurs when precipitation from rain flows over the ground. Impervious surfaces like driveways, sidewalks, and streets prevent stormwater from naturally soaking into the ground.
Stormwater runoff is a problem because it can pick up debris, chemicals, dirt, and other pollutants flowing into a storm drain or street and eventually into the bay, estuary, and ocean. Anything that enters a storm drain is discharged untreated into the waterbodies we use for swimming, fishing, and admiring.
PRSRT STD
U.S. POSTAGE
PAID
San Luis Obispo, CA
Permit No. 7
POSTAL CUSTOMER
955 Shasta Avenue
Morro Bay, CA 93442
You are the Solution to Stormwater Pollution

STORMWATER POLLUTION

You can help. . .

Polluted stormwater runoff can have many adverse effects on plants, fish, animals, and people.

- Sediment can cloud the water and make it difficult or impossible for aquatic plants to grow. Sediment can also destroy aquatic habitat.
- Excess nutrients can cause algae blooms. When algae die, they sink to the bottom and decompose in a process that removes oxygen from the water. Fish and other aquatic organisms can't exist in water with low dissolved oxygen levels.
- Bacteria and other pathogens can wash into beach areas and create health hazards, possibly making beach closures necessary.
- Debris such as plastic bags, cigarette butts, fast food wrappers when washed into waterbodies can choke, suffocate, or disable aquatic life like ducks, fish and birds.

- Household hazardous wastes like insecticides, pesticides, paint, solvents, used motor oil, and other auto fluids can poison aquatic life. Land animals and people can become sick or die from eating diseased fish and shellfish or ingesting polluted water.
- Polluted stormwater often affects drinking water sources. This, in turn, can affect human health and increase drinking water treatment costs.

LAWN CARE

Excess fertilizers and pesticides applied to lawns and plants, wash off and pollute streams. In addition, yard clippings and leaves can wash into storm drains and contribute nutrients and organic matter to the estuary, bay and ocean.

- Don't over water your lawn. Consider using a soaker hose or a sprinkler with a timer.
- Use pesticides and fertilizers sparingly. When use is necessary, apply these chemicals in the recommended amounts. Use organic mulch and safer pest control methods whenever possible.
- Compost or mulch yard waste. Don't leave it in the street or sweep it into storm drains.

AUTO CARE

Washing your car and degreasing auto parts at home can send detergents and other contaminants to the estuary, bay, and ocean.

- Use a commercial car wash where the wash water goes into the sanitary sewer or is recycled.
- Repair leaks and dispose of used auto fluids and batteries at designated drop-off recycling locations.

Household Hazardous Waste Facility
160 Atascadero Rd
Phone Number 481-9213
Hours of operation: Saturday 11-3
Items accepted:
Paint, antifreeze, household cleaners, yard pesticides, automotive products.
Call for a complete list, or visit them on the web
www.iwma.com/tabhaz.html

Pet Waste

Pet waste can be a major source of bacteria and excess nutrients in local waters. When walking your pet, remember to pick up the waste and dispose of it properly. Put the pet waste in the trash; do not flush your pets waste. Leaving pet waste on the ground increases public health risks by allowing harmful bacteria and nutrients to wash into the storm drains and eventually into our estuary, bay, and ocean.

Este informe contiene información importante sobe agua de lluvia. Tradúzcalo o hable con alguien que lo entienda bien.

PE3: Public Education on the Proposed IDDE ordinance

BMP Description:

Provide public education on the proposed illicit discharge ordinance and the post- construction municipal code amendments (permit years 4 & 5) including the enforcement and penalties for noncompliance.

Measurable goal:

PE3A: Provide public education on the proposed illicit discharge ordinance.

Measurable goal achievements:

PE3A: This MG was achieved, and will continue in the next permit cycle. The residential brochures (BMP PE2) covered different topics including illicit discharges. The Restaurant brochure (IL3) also covers education on illicit discharges, this topic is discussed further in BMP IL3 .The City also brought a watershed model to Farmers Market in San Luis Obispo for Public Works week and demonstrated how illicit discharges are "washed" off the watershed into our creeks, rivers, bays and ocean (see photo below). The City has educated business and residents when we have gone out on enforcement actions. There have been several times the City has been called out to sites for stormwater illicit discharge complaints. See BMP PE6, Hotline reporting requirements, for illicit discharge enforcement actions.

Effectiveness Assessment:

Level 1 - Documenting Activities: Brochures were created and distributed to all the residents in the city of Morro Bay and restaurant brochures were distributed to all food facilities. Numerous citizens observed the watershed demonstration at Farmers Market.

Level 2 – Raising Awareness: The City believes the residential brochures and conducting the watershed model at farmers market help raise awareness but it is difficult to measure this BMP. Maybe in coming year this will be more apparent. The education conducted with illicit discharge enforcement actions helps to gain awareness and knowledge regarding illicit discharges and if the occurrence is not repeated then it is believed to have raised the awareness. None of these offenders were repeat offenders this permit cycle.

Changes to BMP for next permit year / Summary of activities for next permit cycle:

No Changes are proposed for this BMP. The City plans to conduct more public education for the IDDE ordinance and in years 4 & 5 the City will begin education for the Post-construction ordinance.

PE4: Interpretive signage for tourists

BMP Description:

Post stormwater pollution prevention information targeting tourists at local tourist attractions. Topics may include, but will not limited to include: Why stormwater pollution prevention is important; Impacts of urban runoff on local water bodies; Keep the Central Coast Beautiful; Stormwater Pollution Prevention Travel Tips; Clean Water recreational guides; Don't Feed the Wildlife, the Marine Plastic Debris Problem, and Don't Trash California campaign.

Measurable goal:

PE4B: Partner with the National Estuary Program to provide interpretive signage at high tourist impact areas.

Measurable goal achievements:

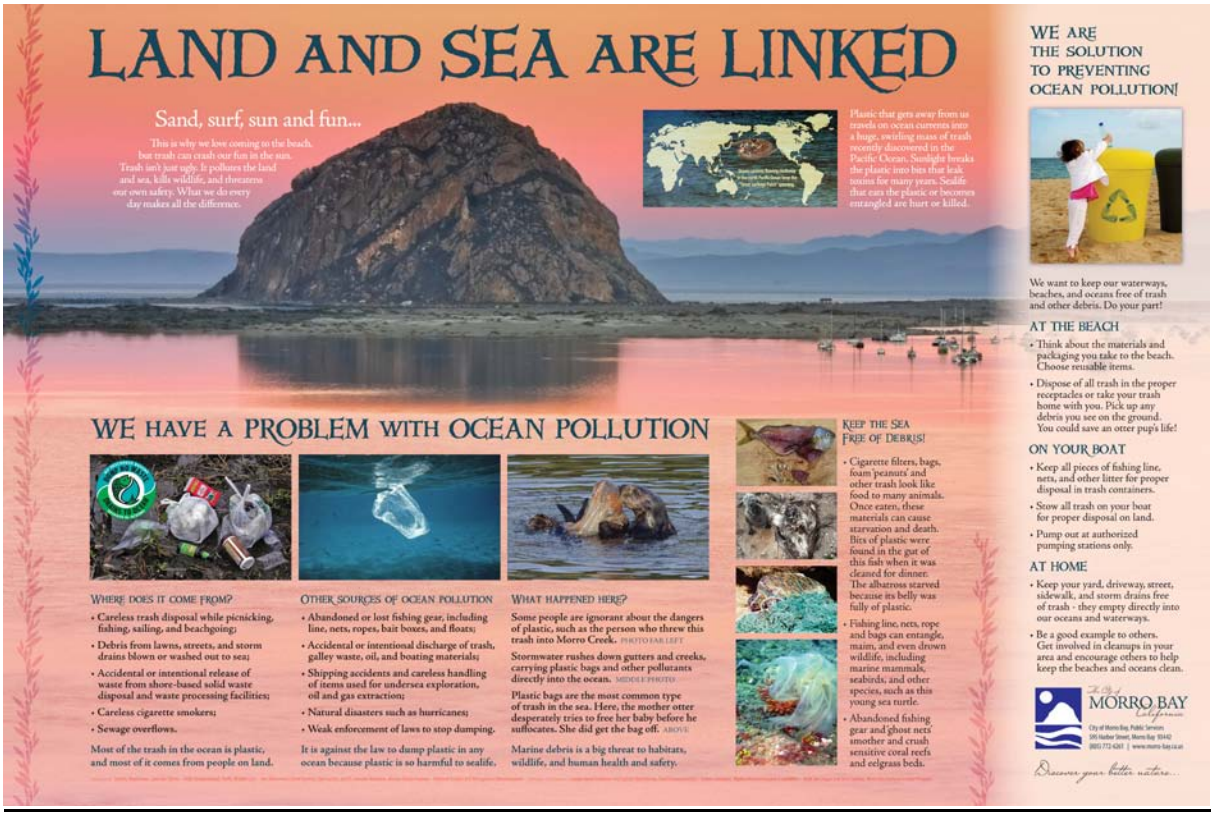
PE4B: This MG was achieved and is ongoing. A sign was designed by Gaia graphics, the sign is currently in the design phase. The interpretative sign (see proof below) focuses on the harmful effects of trash, mainly plastic, in the ocean. The sign will be installed next permit year.

Effectiveness Assessment:

Level 1 - Documenting Activities: The interpretative sign is in the process of being installed along the Embarcadero. The interpretative signs are a great way to get information out to the public, measuring the signs effectiveness is more difficult. The City believes the signs will raise the awareness of tourists of their exposure to the signs adjacent to the waterfront. Therefore in year two the City believes Level two, raising awareness, will be achieved.

Changes to BMP for next permit year / Summary of activities for next permit cycle:

No changes are proposed for the next permit cycle. The City plans to install and maintain the interpretative sign.



PE5: Stormwater education materials for local library

BMP Description:

Establish a collection of stormwater pollution prevention educational materials at the local library for school, youth, and other community groups.

Measurable goal:

PE5A: Measure and record the number and types of requests for library materials.

Measurable goal achievements:

PE5A: This MG was achieved. Eight books were donated to the local library. The book titles are as follows:

All the way to the Ocean, The three R's: Reuse, Reduce, Recycle, Why should I save water?, Water, One well: The story of water on Earth, Wump World, The Lorax, and Down comes the rain.

The books varied in education range, grades 1-5. The numbers of times the books have been checked out will be reported next permit year to give the books an entire year at the library. The City also went above and beyond this requirement and also donated these same 8 books to the Del Mar Elementary school library. This was done to attempt to reach more school aged children.

Effectiveness Assessment:

Level 1 - Documenting Activities: Stormwater pollution prevention educational materials were donated to the local library for school, youth, and other community groups.

Changes to BMP for next permit year / Summary of activities for next permit cycle:

No changes are proposed; the numbers of times these books are check out will be reported next permit year. More books will be donated to the library in year 3 & 5.

PE6: Stormwater information/reporting line

BMP Description:

Provide a Stormwater Pollution Prevention Telephone Information Line /Reporting Line for the public to get more information and report stormwater pollution problems.

Measurable goal:

PE6A: Maintain the 788-FISH SLO County Partners for Water Quality Stormwater Information Line to direct users to their local stormwater pollution prevention program.

PE6B: Promote the Public Services Main Line Citywide for Pollution Reporting Hotline in printed materials and on the City Stormwater Pollution Prevention Website beginning in Year 1.

PE6C: Record the number of stormwater concerns and/or complaints and document follow up actions and problem resolution. 100% of the stormwater reports will be responded to.

PE6D: Measure and record hotline follow-up response times.

Measurable goal achievements:

PE6A: MG was achieved. The city has maintained the 788-FISH County Partners for Water Quality Stormwater Information Line.

PE6B: MG was achieved. The Public Services Main Line was included in the residential, construction and the restaurant brochures as the pollution reporting hotline and on the City's Stormwater Pollution Prevention Website also has the hotline number posted.

PE6C: MG was achieved. The Stormwater illicit discharge generated from the hotline are summarized in the table below.

PE6D: MG was achieved. Also see table below for follow-up response times.

Effectiveness Assessment:

Level 1 - Documenting Activities: The reporting/hotline was advertised on city provided brochures (Residential, Construction etc) and on the stormwater website (www.morro-bay.ca.us/stormwater).

Level 2 – Raising Awareness: The education conducted with illicit discharge enforcement actions helps to gain awareness and knowledge regarding illicit discharges and if the occurrence is not repeated then it is believed to have raised the awareness. None of these offenders were repeat offenders this permit cycle. The next permit years will help determine if this awareness results in a changed behavior.

Changes to BMP for next permit year / Summary of activities for next permit cycle:

No changes are proposed for the next permit year, and the city plans to keep promoting the hotline/reporting phone number in the same manner.

Stormwater Reporting Hotline follow-up actions for permit year 1 Feb. 2009 - Feb. 2010

Date	*Stormwater Issue	*City of Morro Bay's response time and follow up actions	SWMP Section
* The full reports of the stormwater issues and responses can be provided on request; the following are a summary of the actions.			
2.23.09	Police and Fire responded to Northbound HWY 1 on ramp @ South Bay Blvd. @ 7:23 a.m. The incident was a Gasoline or other flammable liquid spill from a fuel tank on a passenger vehicle. Estimate spill was approx. 5-10 gallons.	Fire Department arrived on the scene at 7:25 a.m. The following actions were preformed at the scene: Hazardous materials spill control and confine, removal of gasoline. Notification of gasoline spill to CHP, SLO county environmental health, Ca department. Of fish and game, USCG and National response center.	IDDE
2.24.09	Fire department was called @ 10:46 a.m. to 986 Quintana, a motor vehicle services and repair shop. The incident was determined to be a gasoline spill.	Fire Department arrived on the scene at 10:47 a.m. The following actions were preformed: The gasoline spill was confined and cleaned up with absorbent pads. The spill was determined to less than a gallon. The owner was talked to about the hazards of non-stormwater discharges.	IDDE
3.11.09	At 4:00 p.m. a concerned neighbor call Public Services to report paint that was poured into the gutter in Reno Ct.	Public Services staff: Rob Livick and Damaris Hanson arrived on the scene @ 4:10 p.m. A faint white substance was observed in the gutter, it had appeared to be there for quite a while. The source and substance could not be determined. Door hangers were placed on all the doors in the Ct, which said an pollutant was observed in the vicinity. Also IWMA info was given for the proper disposal of pollutants.	IDDE
5.6.09	At approx. 11:00 a.m. a UPS driver reported Round Table Pizza was washing grease down the gutter	Public Services staff: Rob Livick and Damaris Hanson arrived on the scene shortly after the report came in, and spoke with staff who said they were cleaning the oven outside. Mike Mobley and Robert Victor with the collections department responded and sand bagged the storm drain inlet and proceeded to assist in the clean up the area with adsorbent pads. the supervisor was informed that they can't wash kitchen equipment into the street. Jim Hayes gave the supervisor a brochure and no grease sticker from the FOG program, and Damaris Hanson gave them a stormwater brochure for Restaurants	IDDE
10.26.09	Police called the Public Services office to report a sewage spill coming from Taco Bell at approximately 3:30	Collections staff (Jim Hayes, Mike Mobley and Robert Victor) arrived on the scene at approximately 3:40 and found a grease trap had overflowed and run into the street. Jim Hayes call Rob Livick and Damaris Hanson who arrived and spoke to the manager and called the store owner and upper management about the spill. Taco Bell staff proceed to clean the area and the owner said a plumber would be out shortly. They told to fix the problem immediately or the water will be shut off to the site. Education materials were given to taco bell. Jim Hayes call David Lacaro with RWQCB and said we handled the problem well and reporting on the CIWQS was optional.	IDDE
11.10.09	Public Services staff received a phone call from a citizen who has accidently spilled a small amount of paint in the street.	Staff spoke to the citizen and explained how to clean up the area with dry cleaning methods, most of which could not be cleaned-up.	IDDE
11.20.09	City staff was notified at 11:34 a.m. that the previous night the Grete Jean Lind (excavator) of the dredge contractor lost a bucket, which resulted in a spill of 4-5 gallons of what the ACOE (dredge contractor) described as biodegradable hydraulic fluid.	The next morning there was a visible sheen around the Harbor office. The ACOE has contracted with a sub for the clean-up.	IDDE

PE8: City's Stormwater Webpage

BMP Description:

Distribute stormwater pollution prevention educational materials using the City's Stormwater Pollution Prevention Website. Audiences and topics may include, but would not be limited to: General Public; Residential BMPs; Commercial Business BMPs; Industrial BMPs; Tourists, School Age Children and Educators.

Measurable goal:

PE8A: Maintain and update the City Stormwater Pollution Prevention website (www.morro-bay.ca.us/stormwater) at least once per quarter.
PE8B: Record the number of website hits to measure utilization.

Measurable goal achievements:

PE8A: MG was achieved. The City's Stormwater Pollution Prevention website has been updated at least once per quarter.
PE8B: MG was achieved. See table below for the total number of hits the City's Stormwater web page received. Also see the number of hits for specific items i.e. number of hits for the residential brochure.

Effectiveness Assessment:

Level 1 - Documenting Activities: The City created a stormwater webpage and has updated and maintained the website at least quarterly throughout the permit cycle.

Changes to BMP for next permit year / Summary of activities for next permit cycle:

No changes are proposed for the next permit cycle and the City proposes to continue maintaining the stormwater webpage in the same manner.

City of Morro Bay Stormwater Website Hits

Date Range: *04/24/2009 - 02/28/2010

Top Files	Valid Hits
SWMP Section 4 Minimum Control Measures	681
Stormwater webpage	296
SWMP Section 1	214
Erosion and Sediment control manual	158
Construction site BMP brochure	155
SWMP Section 3	178
Auto service BMP brochure	140
Restaurant BMP brochure	141
SWMP section 2	170
SWMP appendix D Watershed Maps	149
SWMP Section 5	141
Restaurant BMP brochure Spanish	121
SWMP appendix C City Maps	128
Auto service BMP brochure Spanish	110
SWMP Appendix F MS4 general permit	130
SWMP Appendix G Hydromodification requirements	127
SWMP Appendix H Clean Marina Program	138
SWMP Appendix A RWQCB Feb. 15th letter	170
SWMP Appendix E storm drain atlas	121

Residential Brochure	83
Coastal Clean-up day brochure	81
Appendix B City org chart	95
Total	3727

City of Morro Bay Stormwater webpage Downloads

Date Range: *04/24/2009 - 02/28/2010

Top Files	Downloads
SWMP Section 4 Minimum Control Measures	204
SWMP Appendix A RWCQB Feb 15th letter	168
SWMP Section 2 Water Quality	145
SWMP Section 1 Intro	143
Auto Service BMP Brochure	139
Restaurant BMP brochure	136
Erosion and sediment control manual	134
SWMP Section 5 reporting	125
SWMP Appendix G Hydromodification Requirements	123
SWMP Section 3 Requirements	121
Restaurant BMP Spanish Brochure	119
SWMP Appendix D Watershed Maps	118
SWMP Appendix E Storm Drain Atlas	111
Auto Service BMP Spanish Brochure	110
SWMP Appendix F MS4 General Permit	105
SWMP Appendix C City Maps	97
Construction Site BMP Brochure	91
SWMP Appendix H Clean Marina Program	83
SWMP Appendix B City org chart	81
Coastal Clean-up day poster	77
Residential Brochure	67
Total	2497

*The data range starts with 04/24/2009 because the City launched a new website on this day and started to track hits and downloads.

PE9: PSA's on public access channel

BMP Description:

Provide PSAs on public access channel 20 educating residents about stormwater pollution prevention.

Measurable goal:

PE9A: Provide at least one PSA per year on public access channel 20 educating residents about stormwater pollution prevention.

Measurable goal achievements:

PE9A: This MG was achieved. Two PSAs were run this permit year on channel 20. The EPA video "After the Storm" was run and also the National Estuary's Programs (NEP) commercial was used. The EPA video "After the Storm" is approximately 22 minutes and was run in-between City meetings. The video explains what a watershed is and that we all live, work and play in a watershed. The DVD also explains that protecting the nation's water resources will take the awareness and effort of individual citizens. The NEP's commercial to a 20 second commercial which shows all the drains leading to the ocean. Rubber ducks are used as pollution and eventually the ocean has a huge mass of rubber ducks. This video was shown at breaks for many public meetings.

No hotline calls were generated from the PSA's but staff believes the PSA's do reach a wide audience and may bring stormwater awareness to more citizens in Morro Bay.

Effectiveness Assessment:

Level 1 - Documenting Activities: Two PSA's were run on the local channel 20 for Morro Bay citizens viewing pleasure.

Level 2 – Raising Awareness: The City has no formal was of tracking whether or not the PSA's actually changed any ones behavior but the City believes the PSA's do reach a wide audience and may bring stormwater awareness to more citizens in Morro Bay.

Changes to BMP for next permit year / Summary of activities for next permit cycle:

No changes are proposed for the next permit cycle and the City proposes to continue providing PSAs on public access channel 20 educating residents about stormwater pollution prevention.

PUBLIC PARTICIPATION AND INVOLVEMENT

PP1: Public notice requirements

BMP Description:
Comply with public notice requirements for stormwater public participation and involvement activities.

Measurable goal:
PP1A: Determine public notice requirements for each public participation and involvement activity and ensure compliance.
PP1B: Maintain records for public participation and involvement events.

Measurable goal achievements:
PP1A This MG was achieved. Public notice requirements typically do not apply to these activities. Public meetings are noticed according to their requirements.
PP1B: This MG was achieved. Records are maintained according to the MS4 General Permit.

Effectiveness Assessment:
Level 1 - Documenting Activities: Public meetings are noticed according to their requirements. Records are maintained according to the MS4 General Permit.

Changes to BMP for next year/ Summary of activities for next year:
No changes are proposed for the next permit cycle and the City proposes to continue following the public notice requirements.

PP2: Stakeholder Meeting

BMP Description: Hold Public Involvement Stakeholders Meeting

Measurable goal: PP2A: Maintain a master stormwater stakeholder and interested parties list.
PP2B: Organize and conduct at least one stormwater stakeholder meeting per year to review the status and performance of the SWMP.
PP2C: Post the SWMP and stormwater annual report on the City's website for public review.

Measurable goal achievements:
PP2A: This MG was achieved. A master stakeholders/interested parties list has been developed and is available upon request. 31 Stakeholders are currently on our list.
PP2B: This MG was achieved. A stormwater stakeholders meeting was held on January 25th at the City Council meeting. The status of the SWMP was discussed with Council; no members of the public gave public comment regarding the status of the SWMP the meeting was televised on local access channel 20. Also at all Public Works Advisory Board (PWAB) meetings, which are held once a month, the SWMP was discussed in the Directors Report.
PP2C: This MG will be achieved. The SWMP annual report is posted on the website as soon as it was completed, it can be viewed at the City website:
www.morro-bay.ca.us/stormwater

Effectiveness Assessment:
Level 1 - Documenting Activities: Stakeholders list was created, SWMP was posted on the website and a meeting regarding the SWMP status was conducted.

Changes to BMP for next year/ Summary of activities for next year:
No changes are proposed for the next permit cycle and the City proposes to continue to hold at least one stakeholder meeting a year.

PP3: Promote and Participate in Coastal Cleanup / Creek Day

BMP Description:

Promote public participation in Coastal Cleanup Day and Creek Cleanups by collaborating with the SLO County Partners for water quality to advertise the events and assist with provision of incentives to participants.

Measurable goal:

PP3A: Promote and support at least one annual coast and/or creek cleanup opportunities within the SWMP coverage area. Record the amount and types of trash and debris removed and the number of participants.

Measurable goal achievements:

PP3A: This MG was achieved. The City participated in Coastal Cleanup this year. An announcement about the event and a flyer were available on the City's stormwater website see below. It is difficult for the City to have a site for creek clean up, because the lands surrounding our creeks are privately owned. The City has to get permission from all the property owners along the creek. Therefore the City participated in Coastal Cleanup and promoted Creek Day for the county. The city helped promote creek day by handing out flyers and posting posters at our city offices.

Coastal cleanup was a success. For the San Luis Obispo County area there were 1,425 volunteers and collected a total of 4,272 pounds of marine debris, including 3,440 pounds of trash and 832 pounds of recyclables. Morro Bay staff participated at the south Morro strand beach site. We had 70 volunteers and collected 62 pounds of trash and 68 pounds of recyclables. At this site we not only cleaned the beach but we expanded our cleaning efforts to a drainage channel behind the high school. This property belongs to Morro Bay high school and runs between the high school and the Cloisters neighborhood. Approximately 10 pounds of trash was removed from this drainage channel.

Top items found at the South Morro Strand site:

Cigarette butts 1307
Food Wrappers 423
Bags 182
Caps, lids 171
Straws 66
Cups, plastic eatery 64
Shotgun materials 59
Beverage cans 44
Glass beverages 43

Effectiveness Assessment:

Level 1: Documenting activities: Coastal Cleanup brochures were distributed through out the city, at business, teen center, parks, and city offices. Coastal cleanup also promoted the event on several radio stations and television stations.

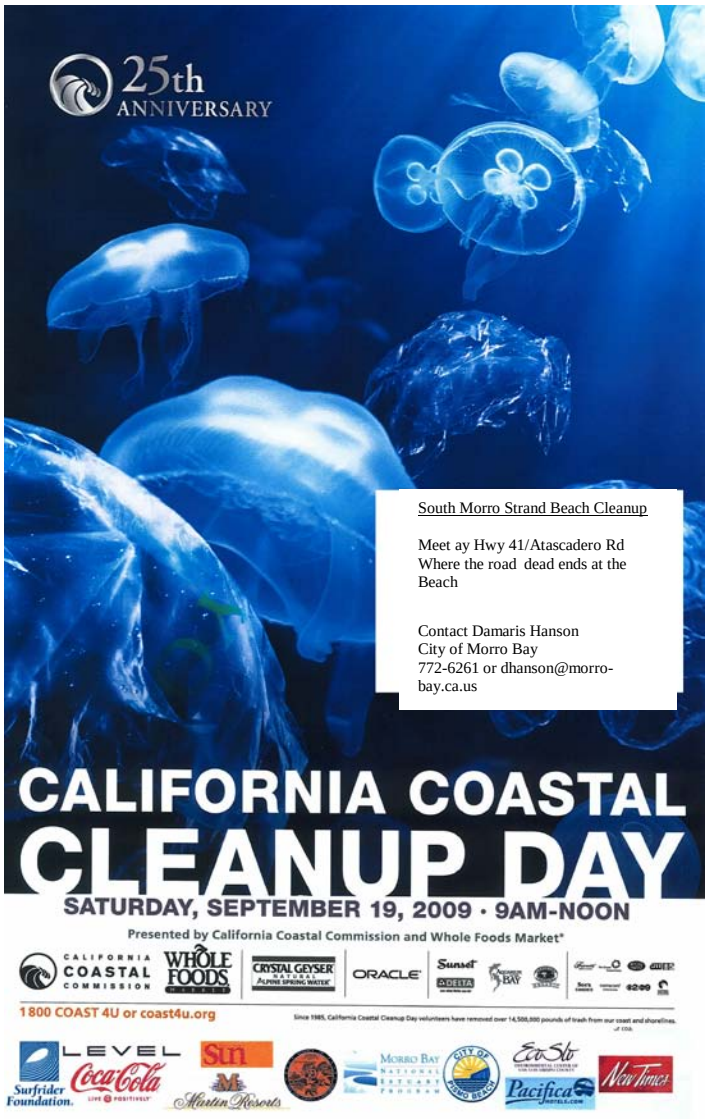
Level 2: Raising Awareness: The number of volunteers this year compared to the previous year increased by over 100 individuals, 1425 people participated for the entire county. At South Morro Stand site there were approximately 10 more volunteers this year compared to last year.

Level 3: Changing Behavior: Getting more volunteers shows that we have more citizens concerned about trash and debris in our ocean waters.

Level 4: Reducing Loads from Sources: In San Luis Obispo County 4,272 pounds of marine debris, including 3,440 pounds of trash and 832 pounds of recyclables were removed from reaching our waterways.

Changes to BMP for next year/ Summary of activities for next year:

No changes are proposed for the next permit cycle; the City will continue to promote and participate in Coastal Clean up and promote Creek Day.



PP4: Storm Drain Marking

BMP Description:

Mark the City's Storm drains with markers to educate citizens that the storm drains drain to the ocean and not a treatment plant.

Measurable goal:

PP4A: Storm drain marking will be required on **all** new development projects with storm drains inlets.

PP4B: Maintain storm drain markings on an ongoing basis. Twenty percent of storm drain inlets will be checked annually to ensure they are still marked with a no dump message, and staff will respond to public comments regarding missing storm drain markers.

Measurable goal achievements:

PP4A: This MG was achieved. No new development has occurred to require storm drain markers. If new development occurs and is required to install a storm drain system the developer will be required to install a storm drain marker.
PP4B: This MG was achieved. All storm drains were checked this year with the storm drain mapping project. 94 new storm drain markers were added.

Effectiveness Assessment:

Level 1: Documenting activities: All storm drains were checked during our GIS mapping, if a storm drain did not have a marker or if the previous marker was removed a new one was added.

Changes to BMP for next year/ Summary of activities for next year:

No Changes are proposed; this BMP is not scheduled for the future therefore there is no summary for next year's activities.

These storm drain markers were added at all storm drain inlet within the City limits.

PP5: Watershed Stewardship Programs

BMP Description:

Promote and support Watershed Stewardship Programs including, but not limited to: volunteer water quality monitoring, watershed planning, community reforestation, storm drain marking, community cleanups, and other environmental restoration activities.

Measurable goal:

PP5A: Promote and support the National Estuary Program's (NEP) Urban Watch and First Flush Monitoring Programs in the Chorro Watershed.
PP5B: Partner with Morro Bay Beautiful to host at least one tree-planting day per year.

Measurable goal achievements:

PP5A: This MG was achieved. The City receives the NEP's Urban Watch and First Flush Monitoring Program for the Chorro Watershed, which is reviewed by staff. The NEP also contacts City Staff if there is a possible illicit discharge, staff responds to the complaint immediately. Staff attempts to track the discharger and stop the discharge.
PP5B: This MG was achieved. The City partnered with Morro bay Beautiful and planted approximately 17 trees this permit year in Lila Kiser park, along Quintana Rd and in various empty tree wells in the Downtown area.

Effectiveness Assessment:

Level 1: Documenting activities: Staff reviews the NEP's Urban Watch and First Flush Monitoring Program and participated in tree plantings with Morro Bay Beautiful.

Changes to BMP for next year/ Summary of activities for next year

No changes are proposed next permit year. The City will continue supporting watershed stewardship programs.

ILLICIT DISCHARGE DETECTION AND ELIMINATION

IL1: Illicit discharge detection and elimination ordinance

BMP Description:

Adopt an ordinance prohibiting illicit discharges and including enforcement provisions. The ordinance will include a system of enforcement and penalties. Model ordinances will be used to help draft this ordinance.

The 17 categories of non-stormwater discharges or flows (i.e., authorized non-stormwater discharges) will be addressed only where they are identified as significant contributors of pollutants to the Small MS4. If any of the 17 non-stormwater discharges are deemed significantly contributors to stormwater pollution, BMPs will be added to remediate these individual negative impacts.

Measurable goal:

IL1B: Determine which non-stormwater discharges are deemed significant pollutants to the MS4. Any of the 17 non-stormwater discharges that are determined to be significant pollutants to the City's MS4, these discharges will be prohibited in the ordinance.

IL1C: Establish a system of enforcement and penalties and train inspectors prior to ordinance adoption.

Measurable goal achievements:

IL1B: This MG was achieved. According to the EPA Stormwater Phase II Final Rule on Illicit Discharge Detection and Elimination "*The illicit discharge detection and elimination program does not need to address the following categories of non-stormwater discharges or flows unless the operator of the regulated small MS4 identifies them as significant contributors of pollutants to its MS4.*" The City has investigated which non-stormwater discharges are considered significant pollutants to the MS4. Each potential stormwater pollutant discharge was evaluated and how each potential stormwater pollutant is managed within the MS4. All 17 non-stormwater discharges were determined to be non-significant contributors to pollution based on numerous controls already in place. See Table below for list of non-stormwater discharges and justifications. It is important to make this determination prior to drafting an IDDE ordinance. Once these 17 non-stormwater discharges have been determined significant or non-significant, the ordinance can be drafted. The City will adopt an IDDE ordinance in permit year two.

IL1C: This MG was achieved. The enforcement procedures the city follows is set forth in chapter 1.03: Administrative Citation Program. The municipal code is available online at the City's website, www.morro-bay.ca.us. Specific staff has been trained by the City police department on how to properly use the Administrative Citation Program procedures. The inspectors shall be trained prior to adoption on the ordinance. Inspectors training will commence in year 2 once a draft ordinance has been determined.

Effectiveness Assessment:

IL1B,C: Level 1: Documenting activities: The 17 non-stormwater discharges have been identified as to whether they are significant pollutants to this MS4 and how each discharge is managed.

Changes to BMP for next year/ Summary of activities for next year:

No changes are proposed; the City proposes to continue with implementing IL1 and adopting the illicit discharge ordinance by the end of permit cycle year two.

Non-Significant Stormwater Pollutant Discharges

The NPDES General Permit for MS4's requires the City to address the categories of non-stormwater discharges or flows, i.e. non-stormwater discharges, only where they are identified as significant contributors of pollutants to the small MS4. The Central Coast

Region Water Quality Control Board has requested the City of Morro Bay to clearly explain which of the 17 non-stormwater discharges listed in the General Permit are significant pollutants to the City's MS4 and how the City will manage each discharge. The City has developed the following procedures to address the 17 non-stormwater discharges:

Potential Illicit Discharge	Rationale for Determining Discharge is A Non-Significant Contributor of Pollution
Water line flushing and hydrant flushing	Water line flushing is necessary after a water main shutdown due to failure or a new line installation. Fire hydrant flushing is necessary to exercise the valves and test the water pressure. Procedures are taken to dechlorinate the water line as it is released into the atmosphere. Dechlorinating tablets are used during this process. Also erosion and sediment control measures are used to reduce any sediment from being washed into the storm drain system
Landscape irrigation	The City's Municipal Code 13.04.345 prohibits the use of water that results in excessive gutter runoff during normal water supply conditions.
Diverted stream flows	The City does not have the authority to authorize any work that involves diverting stream flows. State and Federal permits define how stream diverting work will be preformed. The City requires proof of these permits. If there is no permit the City will issue a Stop Work Order.
Rising ground waters	This is a natural occurrence in parts of the City during wet weather. If surfacing ground water is reported or observed by staff the City will investigate to ensure that the discharge is not due to a failure in the water distribution system or wastewater collection system. The City does not permit the pumping of uncontaminated groundwater to the City storm drain system unless the discharger has a valid NPDES permit for the discharge.
Uncontaminated ground water infiltration to storm sewers	The City's storm drain system is small and not located in areas with high ground water; therefore groundwater infiltration into the storm drain system is not significant.
Uncontaminated pumped ground water	Although rare, groundwater may be discovered at construction sites during excavation. The City does not allow the discharge of uncontaminated groundwater unless the discharge has a valid NPDES Permit for the discharge.
Discharges from potable water sources	Any new discharge is required to be conveyed to a stabilized landscape area and infiltrated.
Foundation drains	Any new discharge is required to be conveyed to a stabilized landscape area and infiltrated.
Air conditioning condensation	Any new discharge is required to be conveyed to a stabilized landscape area and infiltrated.

Irrigation water	The City's Municipal Code 13.04.345 prohibits the use of water that results in excessive gutter runoff during normal water supply conditions.
Springs	Water from springs is considered uncontaminated unless identified otherwise. Identified sources of contaminated groundwater are remediated, the City implements procedures to require site remediation and bring the site into compliance with applicable regulations.
Water from crawl space pumps	Any new discharge is required to be conveyed to a stabilized landscape area and infiltrated.
Footing drains	Any new discharge is required to be conveyed to a stabilized landscape area and infiltrated.
Lawn watering	The City's Municipal Code 13.04.345 prohibits the use of water that results in excessive gutter runoff during normal water supply conditions.
Individual residential car washing	The City does not regulate individual car washing. Water conservation tips are used for reducing excess runoff i.e. hoses shall have a spring loaded shutoff nozzles. The public education brochures distributed to residents states proper car washing techniques.
Flows from riparian habitats and wetlands	Contaminates may be introduced to riparian habitat or wetlands by Human activities. The City utilizes BMP's to protect these areas from human activity by restricting access and prohibiting activities which could be harmful to the habitat area, also removing trash and debris from these areas.
Dechlorinated swimming pool discharges	Morro Bay does not have the climate for swimming pools and as such there are currently only approximately 9 known swimming pools in the City limits. Therefore the City does not consider discharge from these sources to be significant.

IL2: GIS map the storm drain system

BMP Description:

Use GIS to map the storm drain conveyance system showing the location of storm drain features all outfalls and the names and locations of all waters of the US that receive discharges from those outfalls. Also the storm drain filters will be mapped along with other BMPs implemented.

Measurable goal:

IL2A**:** Start storm drain map and finish by year 2.

Measurable goal achievements:

IL2A: This MG was achieved. Storm Drain map completed. The City storm drains have been GIS mapped this permit year. The entire city was completed ahead of schedule, before the end of permit year 2. See photo below.

Effectiveness Assessment:

IL2A: Level 1: Documenting activities: Storm drain map completed, ahead of schedule.

Changes to BMP for next year/ Summary of activities for next year:

No changes are proposed; this BMP has no further requirements for future permit years.

Example of the storm drain map.

IL3: Illicit connections/discharge inspections

BMP Description:

Implement procedures for illicit connections/discharge inspections and dry weather screening for the storm drain system including restaurant business, auto service facilities, mobile cleaners and industrial facilities. These procedures will apply to anyone discharging into the City storm drain system. The procedures will ensure that any illicit connection or discharge detected will be detected and eliminated.

Measurable goal:

Restaurants (year one focused on Restaurants/food facilities)

IL3A: Develop and implement a procedure and checklist for detecting illicit connections and discharges for restaurants. Survey the restaurants and provide brochures to determine what BMPs are being implemented to get a baseline.

Measurable goal achievements:

IL3A: This MG was achieved. A survey was conducted on all of Morro Bay's Restaurant and Food Facilities. See below for the survey questions. 64 Facilities were surveyed and 59 participated in the survey. The survey consisted of 9 questions. The food facility operators were told that this survey was just to get an idea if which BMP's were currently being used and that no penalties would result. It was explained that in the next year the City plans to work with the operators in finding better practices to use that don't potentially cause stormwater pollution. These questions were created to determine a baseline to see what BMP's these facilities are already using. The survey consists of two categories, waste management and cleaning. Waste managements included proper maintenance of the dumpster area and grease disposal. The cleaning category consisted of where floor mats are being cleaned, where kitchen equipment is cleaned and hard surfaces around the building. Each question had corrective actions the facility could do to correct the potential violation. Brochures were given to all facilities in English and Spanish. The brochure can be viewed at www.morro-bay.ca.us/stormwater under quick links Restaurant Brochure. A copy of the English version is included below. The City feels the surveys were a success. The feedback from the surveys was excellent. Many facility operators were glad to see the city conducting a survey of this nature. Some also expressed that they were unaware that washing mats outdoors is not a good practice, and changed where they washed their mats immediately. A summary table was created with the response results to better define where we should focus our efforts next permit year. It appears pressure washing followed by mat washing received the highest yes responses, so the City will focus more heavily on these areas next permit year.

Effectiveness Assessment:

Level 1: Documenting activities: Surveys were conducted to get a baseline of which BMP are currently being used at food facilities in Morro Bay.

Level 2: Raising Awareness: The survey did raise the awareness of the food facility operators, many of which did not know a particular cleaning practice was a potential illicit discharge violation.

Level 3: Changing Behavior: Several food facility operators' changes the way they operated because of this survey.

Changes to BMP for next year/ Summary of activities for next year:

No Changes are proposed for the next permit year. The City plans to visit half the restaurant/Food facilities next permit year and begin working with the operators on better Best Management practices.

City of Morro Bay Stormwater Quality Survey Form for Restaurant/Food Facility

Business Name: _____ Address: _____

Owner/Operator: _____ Phone Number: _____

Form Completed by: _____ Title: _____

Waste Management	YES	NO	N/A	Corrective Action	Comment #
1. Is the dumpster/trash compactor leaking and likely to discharge offsite in a rain event?				Take appropriate action to remedy the leak and prevent leakage from reaching the storm drain system. Dumpsters should have a containment area around them to prevent any fluids from migrating offsite.	
2. Is there accumulated trash evident on or around the dumpsters?				The premises of a food facility shall be kept clean and free of trash and litter at all times.	
3. Are the tallow/grease bins open when not in use?				Tallow/grease bins shall remained closed while not in use.	
4. Is there an accumulation of grease build-up on or around the bins?				Clean up any grease that falls onto the ground. Recommend dry cleaning methods, any water used in cleaning must be discharged into the grease trap then sanitary sewer.	
5. Is there evidence of grease build-up near down spouts which suggest rooftop equipment is not being maintained?				Rooftop equipment must always be property maintained to prevent overflow and kept in proper working leak free condition.	
Cleaning	**YES**	**NO**	**N/A**	**Corrective Action**	**Comment #**
6. Are floor mats being cleaned outside where the wash water drains to the storm drain system?				Floor mat washing water shall drain to the sanitary sewer, not into the storm drain system.	
7. Is equipment being cleaned (degreasing) outside?				Clean equipment in a area which drains to the sanitary sewer or berm/contain an area and dispose of the wash water in the sanitary sewer.	
8. Is the floor wash water from indoors being directed outdoors?				Direct all floor wash water to the floor drains which drain to the sanitary sewer.	
9. Is the outside of the building or hard surfaces (parking lots) cleaned with a hose or pressure washing?				Use dry cleaning methods, or hire a certified mobile surface cleaner.	

Comments:

Summary table for Restaurant/Food Facility Survey

Waste Management	YES	NO
1. Is the dumpster/trash compactor leaking and likely to discharge offsite in a rain event?		100%
2. Is there accumulated trash evident on or around the dumpsters?		100%
3. Are the tallow/grease bins open when not in use?		100%
4. Is there an accumulation of grease build-up on or around the bins?	2%	98%
5. Is there evidence of grease build-up near down spouts which suggest rooftop equipment is not being maintained?		100%
Cleaning	**YES**	**NO**
6. Are floor mats being cleaned outside where the wash water drains to the storm drain system?	9%	91%
7. Is equipment being cleaned (degreasing) outside?	2%	98%
8. Is the floor wash water from indoors being directed outdoors?	4%	96%
9. Is the outside of the building or hard surfaces (parking lots) cleaned with a hose or pressure washing?	17%	83%

Protect our Bay and Ocean

Did you know that …
Every time you wash down storage areas, wash kitchen mats in an alley or sidewalk , or dump mop water outside—food particles, grease, cigarette butts, cleaners and other wastes flow into storm drains and end in our local creeks, Morro Bay and our Ocean. These wastes contaminate our local waterways and are hazardous to humans, fish and other wildlife.

Remember You are The Solution to Stormwater Pollution!

DON'TS:

Don't
Wash floor mats, hood filters , and other equipment outdoors.

DOS:

Do!
Wash mats indoors near a kitchen floor drain connected to a sanitary sewer or in the mop sink..

Water that runs off sidewalks, alleys, and street gutters flows into storm drains. Anything entering storm drains flows directly to Morro Bay and the Ocean. Unlike sanitary sewers (sinks, toilets etc.) which flow to a wastewater treatment plant, storm drains flow directly to local water ways without treatment of any kind!

Don't:
Hose down trash/recycle bins, grease storage or parking areas unless storm drains are blocked and water is vacuumed or pumped to the sanitary sewer.

Do!
Use dry clean methods such as sweeping or vacuuming to keep waste storage areas, parking lots, and other outside areas clean. Use a kitty litter type absorbent on grease and oil spots and to clean up

Don't:
Dump grease into trash bins or sinks. Disposing of grease into sanitary sewers is prohibited because it clogs sewer lines. Never pour grease into gutters or storm drains.

Do!
Collect grease in containers and contact a licensed recycling company to haul them away. The grease will be recycled into useful products like soaps, animal feed, or biodiesel fuel.

Don't:
Power wash roof exhaust equipment, building exteriors, or other outside areas unless the storm drains are blocked and wash water is vacuumed or pumped to the sanitary sewer.

Do!
Contract with a mobile cleaning company who agrees to collect all wash water for proper disposal. Sidewalks may be rinsed sparingly using water only if trash and debris are first swept up and grease is removed.

A special thanks to the Alameda Countywide Clean water Program and the City of Pleasanton for poster concept and design.

IL5: Pump Station Maintenance

BMP Description:

Maintain the pump-out stations free of charge at various locations throughout the bay. Maintain the signage of pump out locations and pamphlet handouts of the pump-out locations. See the Clean Marina Program in Appendix H.

Measurable goal:

IL5A: Maintain the Harbor departments free of charge pump out stations, along with signage and pamphlets delineating where the pump out station are located.

IL5B: Enforce existing provisions in Municipal Code chapter 15.24.010, which prohibits discharge of waste.

Measurable goal achievements:

IL5A: This MG was achieved. The Harbor department is maintaining two pump out stations, at Tidelands Park and south T pier, along with signage delineating the pump out stations. Since the pump out stations are free of charge one way of determining how often the pump out stations are used is by how often they are maintained. Approximately $3,500 in repairs to the Tidelands Dock pump out station was spent on maintaining the pump out station. The Tidelands Park pump-out station is used much more frequently than the South T pier pump out station therefore required maintenance this permit year.

IL5B: This MG was achieved. The harbor department continues to enforce Municipal Code chapter 15.24.010, prohibiting the discharge of waste in the bay.

15.24.010 - Refuse discharge prohibited.

A. No person shall discharge, or permit or allow any other person on a vessel under his control or command to discharge any human or animal excreta into the waters of Morro Bay.

B. No person shall throw, discharge, deposit or leave or cause, suffer or permit to be thrown, discharged, deposited or left, either from the shore or from any pier or vessel any refuse matter of any description, into the navigable waters of Morro Bay or on the shore of Morro Bay or any navigable water within the boundaries of the city where the same may be washed into Morro Bay or such navigable water, either by tides, by floods or otherwise.

C. No person shall place or allow vessels, boats, materials, garbage, refuse, timber or waste matter of any description to remain on or upon the shorelines of the Pacific Ocean or on the shorelines of Morro Bay within the city. The harbor director may remove the same with or without notice, at his option, and the cost thereof may be recovered from any person owning the same, or placing same or causing same to be placed on the shoreline.

(Ord. 364 § 1 (part), 1989: Ord. 119 § 1 (part), 1974: prior code § 9405.1)

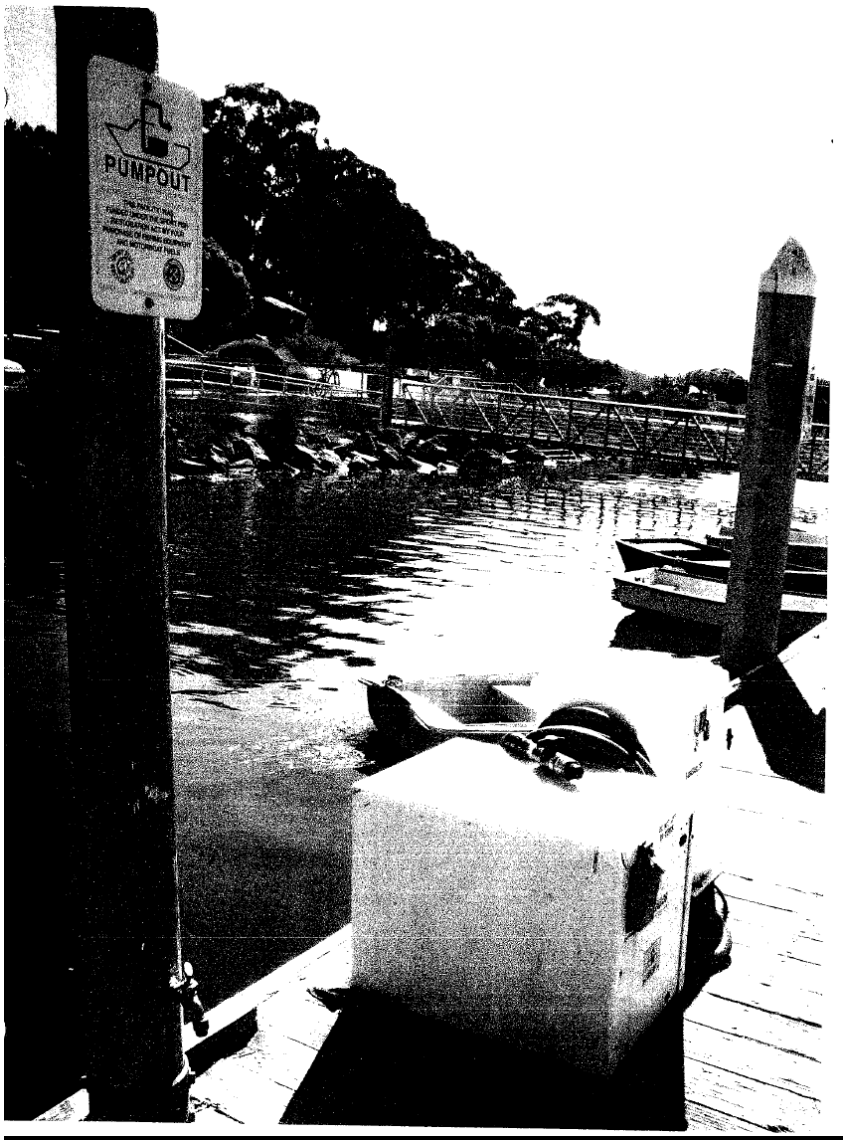
Effectiveness Assessment:

Level 1: Documenting activities: The pump-out stations were maintained in working order this permit year.

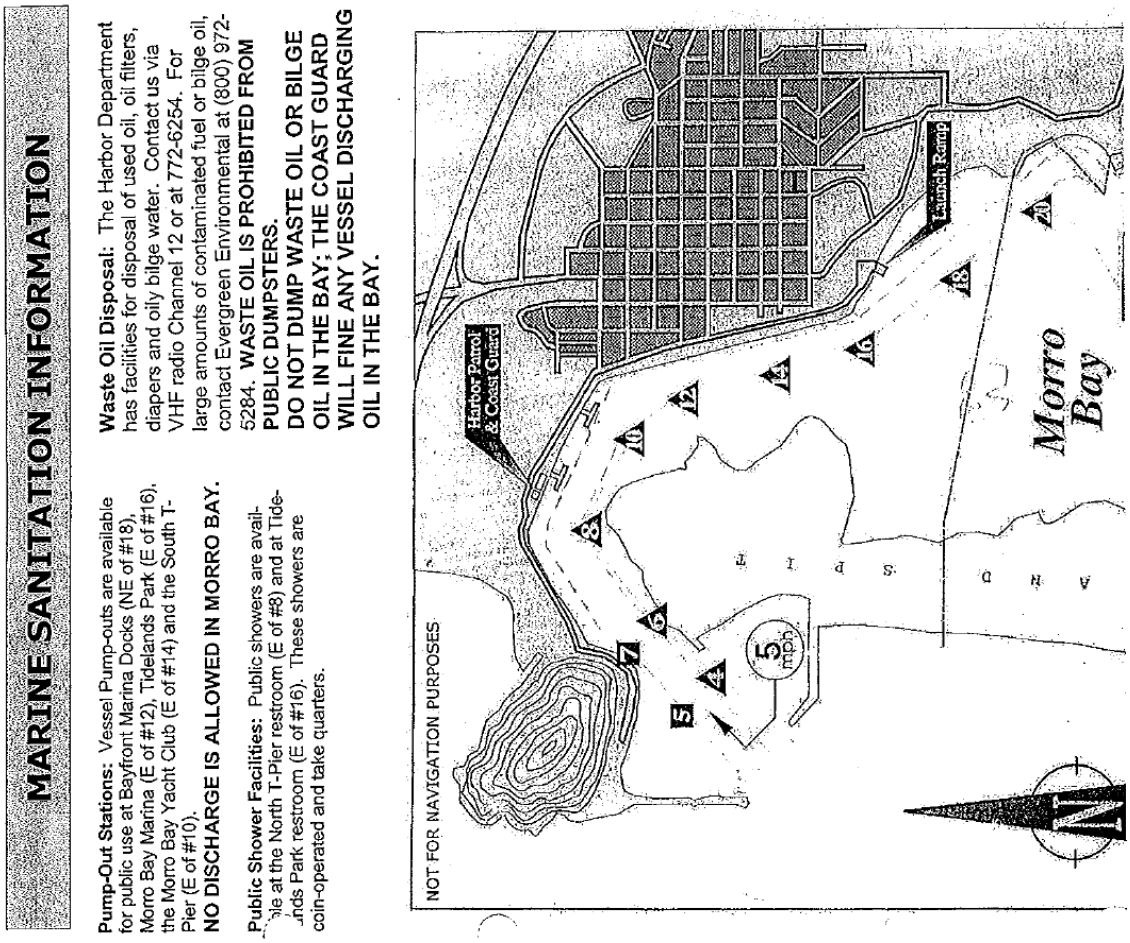
Level 2: Raising Awareness: The pamphlet and signage raises the awareness of boaters that the pump-out stations exist and there location.

Changes to BMP for next year/ Summary of activities for next year:

No changes are proposed. The City plans to maintain the pump out stations in the same manner and provide pamphlets and signage for the pump-out stations. Also the City will continue to enforce Municipal Code 15.24.010.



Pump out station at Tidelands Park along with signage.



Pamphlets delineating where the pump out station are located and oil waste disposal information, available at the Harbor office.

Signs provided by NEP to inform boaters of Pump out station locations.

IL6: Oil Disposal Waste Maintenance

BMP Description:
Maintain the waste oil disposal for used oil, oil filters, oily diapers, and oily bilge water.

Measurable goal:
IL6A: Maintain the Harbor departments waste oil disposal for used oil, oil filters, oily diapers, and oily bilge water.
IL6B: Maintain the pamphlet with information and VHF radio or telephone number for waste oil disposal information.

Measurable goal achievements:
IL6A: This MG was achieved. The Harbor department maintains the oil disposal for used oil, oil filters, oily diapers, and oily bilge water.
This permit year 16 drums of waste oil, crushed oil filters and oily rags were picked up from the recycling yard located on the Embarcadero from 2009-2010 to date. The drums typically have a 300 gallon capacity, however the drums containing filters are not measured the same way. During this permit year there was 1 drum of crushed oil filters picked up.
IL6B: This MG was achieved. The harbor department maintains a pamphlet with information and VHF radio and telephone number for waste oil disposal information (see pamphlet above)

Effectiveness Assessment:
Level 1: Documenting activities: The oil waste disposal area has been available for boaters all permit year.
Level 2: Raising Awareness: The pamphlet raises the awareness of boaters that the oil waste disposal area location and what is accepted.

Changes to BMP for next year/ Summary of activities for next year:
No changes are proposed; the City will maintain the oil disposal waste in the same manner next permit year.

CONSTRUCTION SITE RUNOFF CONTROL

CON1: Revise Municipal Code to update erosion and sediment control requirements

BMP Description:

Revise City Municipal Code Chapter 14.48 to update erosion and sediment control requirements and enforcement provisions for construction activities that are required to comply with the General Permit for discharge of stormwater associated with Construction Activities (Construction General Permit, CGP). Also revise chapter 14.48 to include construction activities that are not required to comply with the Construction General Permit, construction activities which disturb less than one acre of land.

Measurable goal:

CON1A: Revise existing Municipal Code chapter 14.48 to require additional specific construction site runoff control measures as required by the Construction General Permit and including, but not limited to: use of good site planning, minimization of soil movement, erosion and sediment control BMPs, good housekeeping practices for recycling and disposal of discarded building materials, concrete truck washouts, chemicals, litter, and sanitary waste at construction sites. The municipal code revisions shall include provisions for enforcement and penalties for noncompliance.

CON1B: Enforce new regulations on construction sites subject to the Construction General Permit.

Measurable goal achievements:

CON1A: This MG was achieved. The Municipal Code section 14.48 includes construction activities that are required to comply with the Construction General Permit (site over an acre or part of a larger common plan of development). Also construction sites less than an acre have been included in this section. This code section requires applicants/developers to follow CASQA's Best Management Manual and the City has an erosion and sediment control manual, both of which address the additional specific construction site runoff control measures mentioned above. The enforcement procedures the city follows is set forth in chapter 1.03: Administrative Citation Program. The municipal code is available online at the City's website, www.morro-bay.ca.us. Also the city can enforce this Municipal code section with the building code, chapter 1, appendix 1 Section 114 Stop Work Order.

CON1B: This MG was achieved. The State Water Boards website showed one active construction general permit (CGP) during this permit year, Estero Bay United Methodist Church. This site is currently in the home building stage, each house has erosion and sedimentation controls in place and the entire site is inspected along with all other construction site inspections (CON3). There are two other permits listed under Morro Bay but neither is located in Morro Bay. Chevron Environmental Management Co. is located in the county of San Luis Obispo and the permit under Cameron Reality Partners is located in San Luis Obispo. One project was issued a CGP permit in 2009 but has since been removed therefore the permit is not active. Seashell Workforce housing is still in the plan check process. If the project moves further in the plan check process the permit will be required to be reinstated.

Effectiveness Measure:

CON1A: Revised Municipal code chapter 14.48

Level 1: Documenting activities: Municipal Code includes provisions for construction activities that are required to comply with the Construction General Permit. Also construction sites less than an acre have been included in this section.

CON1B: Number of construction sites subject to the Construction General Permit, compared to the number inspected.

Level 1: Documenting activities: There is currently only one project subject to the CGP, this site has been inspected.

Changes to BMP for next permit year / Summary of activities for next permit cycle:

In the current SWMP this BMP was scheduled for implementation each year of the permit cycle. While the Municipal code will not be updated each year the regulation will be enforced each year. The City of Morro Bay proposed to change the implementation form each year to just this year, for the revisions to the Municipal Code and the municipal code section 14.48 will be enforced each year.

CON2: Plan Review for erosion and sediment controls

BMP Description:

Conduct construction site building and grading plan reviews.

Measurable goal:

CON2A: Review grading and building plans to verify that erosion and sedimentation control BMPs are included and are adequate before issuing a building permit.

CON2B: Ensure all projects required to be covered under the Construction General Permit displays the State Water resources Control Board Waste Discharge Identification (WIDID) number of the plans.

Measurable goal achievements:

CON2A: This MG was achieved. All building and grading plans with soil disturbance are required to show erosion and sedimentation controls measures. The plans are checked to verify the BMPs are shown on the plans and are adequate for the site. If BMPs are not included on the plans, the plans are returned with corrections and the City's erosion and sediment control manual is given to provide guidance.

CON2B: This MG was achieved. All projects which are over an acre of land or part of a larger common plan of development are required to obtain a permit from the State Board and provide this evidence by supplying the WDID number on the plans. Plans are checked to verify that the number is present and staff checks the State Board website to ensure the permit is valid. A SWPPP is required to be submitted and verified with the plans in accordance to the CGP requirements.

Effectiveness Assessment:

CON2A**:** Erosion control requirements added to building and grading plan review checklist.

Track how many building plans have erosion and sediment controls

Level 1: Documenting activities: All building plans which require erosion and sediment control must show the control on the plans prior to issuance of the building permit, to ensure all building plans fulfill this requirement.

Level 2: Raising Awareness: The majority of plans submitted contain erosion and sediment controls on the plans, the few which don't are given a correction to include the controls. Staff has observed more and more plans containing complete erosion and sediment control plans at first plan check.

CON2B**:** WDID number added to building and grading plan review checklist.

Level 1: Documenting activities: The city has only received one building plan which is over an acre this year. This site Seashell workforce housing did obtain a WDID number from the state board and submitted a SWPPP with the WDID number referenced. The CGP is no longer valid on the State Water Board website, because the project is not moving forward. The project is still in the plan check process and if it does move forward the City will require the CGP to be reinstated.

Changes to BMP for next permit year / Summary of activities for next permit cycle:

The City proposes to change the way we track how many building plans have erosion and sediment controls (CON2A) because every permit that is required to have control will have control prior to permit issuance. The city doesn't have the staff to track in this manner, and since all

permits will have control once issued this seems unnecessary. The City will continue to track how many have a CGP are issues and inspected.

CON3: Construction Site Inspections

BMP Description:

Conduct construction site inspections and enforce construction site runoff control requirements.

Measurable goal:

CON3A: Inspect construction site stormwater BMPs to ensure that they are being implemented and are properly maintained. Highest priority will go to site over an acre, steep slopes (over 15%) and sites with detailed erosion control plans. Create an erosion and sediment checklist for on-site inspections.

CON3B: The City will track erosion control inspections in the same way all inspections are tracked in our permit tracking program HDL.

CON3C: Inspectors shall attend the training course on Erosion and Sediment Control for Construction Projects to insure they are properly trained.

Measurable goal achievements:

CON3A: This MG was achieved. An erosion and sedimentation control checklist for onsite-inspection has been created see checklist below. The inspections are logged on the erosion and sediment control checklist. Site must have compliance or a stop work order is issued. All sites with exposed soil were inspected.

CON3B: This MG was achieved. The inspections are also tracked in our permit tracking system HDL. A list of all active building permits is created using our permit tracking system HDL. Any sites which don't contain site disturbance are eliminated, i.e. small interior room remodels, bathroom remodels etc. All other sites are inspected for erosion and sediment control requirements. Once an inspection is completed and the site is in compliance this is logged into HDL.

CON3C: This MG was achieved. The building inspector, Brian Cowen, conducts most of the site inspections. Brian Cowen participated in an erosion and sediment control workshop put on by the Region Water Board and Cal Trans. Some erosion and sediment control inspections are conducted by Damaris Hanson Engineering Technician. Damaris has received her certification as a Certified Professional in Erosion and Sediment Control CPESC, and meets the education requirements to fulfill this certification, 60 hours in a three-year period.

Effectiveness Assessment:

CON3A: Inspection procedures implemented: Checklist created.

Level 1 - Documenting Activities: The inspection checklist was created and used on all appropriate sites.

CON3B: Number of inspections conducted, number of compliant sites compared to number of non-compliant sites, enforcement action for non compliant site

Level 2 – Raising Awareness: 23 inspections were competed this permit cycle. 14 were compliant at the initial inspection and 8 were given corrections. No stop work orders were given for continued noncompliance. All sites were compliant by next inspection.

CON3C: Training certificates if applicable will be included in the annual report

Level 1 – Documenting Activities: Appropriate staff has had the appropriate training in ensure staff has the proper knowledge to perform the site inspections. To limit the amount of paper the training certificates can be provided upon request.

Level 2 – Raising Awareness: These training courses raise the awareness of staff who have attended. Therefore staff could more accurately inspect construction sites.

Changes to BMP for next permit year / Summary of activities for next permit cycle:

No changes at this time. The checklist works well; the City will continue to use this checklist.

General Information			
Project Location			
Date of Inspection		**Approximate Time**	
Inspector's Name(s)			
Describe present phase of construction			
Type of Inspection: ☐ Regular ☐ Pre-storm event ☐ During storm event ☐ Post-storm event			
Weather Information			
Has there been a storm event since the last inspection? ☐ Yes ☐ No **If yes, provide:** Storm Start Date & Time: Storm Duration (hrs): Approximate Amount of Precipitation (in):			
Weather at time of this inspection? ☐ Clear ☐ Cloudy ☐ Rain ☐ Fog ☐ High Winds ☐ Other:			
Are there any discharges at the time of inspection? ☐ Yes ☐ No **If yes, describe:**			

Erosion and Sediment Control Inspection Form

	BMP	BMP Installed?	BMP Maintenance Required?	Corrective Action Needed and Notes
1	Silt Fence	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No ☐ N/A	
2	Fiber Roll	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No ☐ N/A	
3	Stabilized Construction Entrance	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No ☐ N/A	
4	Concrete wash out	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No ☐ N/A	
5	Trash enclosure	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No ☐ N/A	
6		☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No ☐ N/A	
7		☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No ☐ N/A	
8		☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No ☐ N/A	
9		☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No ☐ N/A	

Overall Site Issues

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
1	Are all slopes and disturbed areas not actively being worked properly stabilized?	☐Yes ☐No ☐N/A	☐Yes ☐No ☐N/A	
2	Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) protected with barriers or similar BMPs?	☐Yes ☐No ☐N/A	☐Yes ☐No ☐N/A	
3	Are discharge points and receiving waters free of any sediment deposits?	☐Yes ☐No ☐N/A	☐Yes ☐No ☐N/A	
4	Are storm drain inlets properly protected?	☐Yes ☐No ☐N/A	☐Yes ☐No ☐N/A	
5	Are washout facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?	☐Yes ☐No ☐N/A	☐Yes ☐No ☐N/A	
6	Are vehicle and equipment fueling, cleaning, and maintenance areas free of spills, leaks, or any other deleterious material?	☐Yes ☐No ☐N/A	☐Yes ☐No ☐N/A	
7	Are materials that are potential stormwater contaminants stored inside or under cover?	☐Yes ☐No ☐N/A	☐Yes ☐No ☐N/A	
8	Are non-stormwater discharges (e.g., wash water, dewatering) properly controlled?	☐Yes ☐No ☐N/A	☐Yes ☐No ☐N/A	
9	(Other)	☐Yes ☐No ☐N/A	☐Yes ☐No ☐N/A	

Non-Compliance

Describe any incidents of non-compliance not described above:

Follow up with Owner/ Contractor for non-compliance issues:

Describe any incidents of non-compliance and what was discusses with the owner/contractor:
Date: Time:

Site visit to view corrections made:

Describe site and if all corrections were made:
Date: Time:

CON4: Public Education for the construction industry

BMP Description:

Distribute stormwater pollution prevention brochures and other printed materials (provided in multilingual and/or pictorial) targeting the development community and construction industry including construction site owners and operators and contractors. Topics may include, but not limited to: Construction Stormwater General Permit requirements; City ordinances and permits; Stormwater Pollution Prevention Plan (SWPPP) requirements; Erosion and sediment control BMPs; Illicit discharge detection and elimination; and proper disposal and recycling of construction materials.

Measurable goal:

CON4A: Distribute brochures with building permit applications. Include IWMA program on brochures.
CON4B: Distribute brochures to the General Contractors, Builders, and Developers operating in the City.
CON4C: Measure and record the number of brochures distributed.
CON4D: Post brochures on the City website.
CON4E: Number of compliant sites

Measurable goal achievements:

CON4A: This MG was achieved. A construction brochure (with the IWMA program information) has been created. The brochure can be viewed on our website www.morro-bay.ca.us/stormwater under quick links Construction activities BMP brochure. The best attempt is made by staff to give this brochure with every building permit. The brochure is sometimes not taken by the contractor because they say they have one already. The brochures are always available at the counter if a customer is looking for more information.
CON4B: This MG was achieved. As mentioned in CON4A a construction brochure is given with each building permit. Also an erosion and sediment control ALERT (See below) is mailed to all current building permits applicants, at the beginning of October, to remind them that starting October 15th the site shall have the erosion and sediment controls in place.

CON4C: This MG was achieved. All building permits with soil disturbance is given a construction brochure, as mentioned previously the brochures are not always taken by the applicant/contractor, therefore it is difficult for the City to have a exact number of brochures distributed. Twenty-three erosion and sediment control Alert's were sent out to the active sites with soil disturbance.
CON4D: The Construction brochure has been posted on the City's website: www.morro-bay.ca.us/stormwater under quick links. See brochure below.
CON4E: This rainy season - October 2009 - April 2010, all sites were compliant, no Administrative Citations were issued and no Stop Work orders for erosion control issues were issued. Last rainy season – October 2008 – April 2009, two stop work order were issued for erosion and sedimentation controls not in working order. The records for these stop work order can be provided at request.

Effectiveness Assessment:

Level 1 - Documenting Activities: Brochures were given to new building permit applicants and erosion and sediment control Alerts were mailed out to all active building permits.
Level 2 – Raising Awareness: The numbers of compliant sites decreased this permit year from 2 Stop Work Orders to no administrative citations or Stop Work orders were issued for erosion control issues.

Changes to BMP for next permit year / Summary of activities for next permit cycle:

No changes are proposed; the City plans to implement this BMP in the same manner next permit year.

City of Morro Bay
Morro Bay, CA 93442 • 805-772-6200

EROSION AND SEDIMENT CONTROL ALERT!

To: Property Owners
From: City of Morro Bay

It's that time of year again; time to install erosion and sediment control measures on all construction sites that have exposed soil. October 15th is fast approaching and we will be actively enforcing implementation of erosion and sediment controls.

If your site has exposed soil, you are required to implement erosion and sediment controls. The controls need to focus on keeping soils in their place rather than attempting to capture them after they have been dislodged and eroded from their point of origin. Implementation of the erosion and sediment controls will be strictly enforced to ensure that only clean water leaves the site.

Failure to install erosion and sediment controls prior to October 15, 2008, may result in monetary fines and/or a "stop work order". Please remind your contractor of these requirements, because ultimately the property owner can be held responsible. There are erosion and sediment control short courses available for assistance on how and where to properly install site control. For more information on available courses contact Public Services office at 772-6261 or stop by at 955 Shasta Ave.

Should you have any questions, please do not hesitate to contact Damaris Hanson at 805-772-6265 or dhanson@morro-bay.ca.us.

Your cooperation regarding this matter will be greatly appreciated.

Sincerely,
Damaris Hanson

Where can you dispose of hazardous materials?

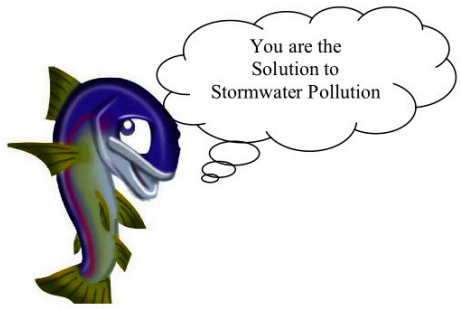
The Household Hazardous Waste Facility is located at:

160 Atascadero Road
Phone number: 481-9213

Hours of operation: Saturday 11-3

Items accepted:
Paint, antifreeze, household cleaners, yard pesticides, automotive products.
Call for a complete list.

To report a discharge or spill cal the City of Morro Bay at 772-6261 during normal business hours.



Sammy the Steelhead

City of Morro Bay

Best Management Practices for Construction Activities

The City of Morro Bay is committed to preventing pollutants from entering our local waterways. Everyday activities at construction sites have the potential to have a deleterious effect on our water ways. The Best Management Practices contained herein are designed to help the development community prevent contaminated runoff from polluting local waterways.

For more information call 772-6261
www.morro-bay.ca.us/stormwater

YOU ARE THE SOLUTION TO STORMWATER POLLUTION

The purpose of this brochure is to assist those involved in the construction industry in the implementation of routines into daily work activities to prevent the pollution of our local waterways.

These measures must be implemented at the latest by October 15th through April 15th of each year. Regardless, all measures must be in place prior to the occurrence of a predicted storm event.

How does development affect our local waterways?

When land is graded for new development projects our local environment feels the effects. The primary concern is the potential for sediment and contaminants in the runoff site. As the natural vegetation is cleared, soil is exposed and susceptible to the forces of erosion. Wind, water humans and machines carry sediment, contaminants, litter and debris off site and eventually into our waterways. This untreated waste affects the water quality, humans, animals, and environmental health, and can cause flooding when storm drains are clogged or blocked by sediment and debris.

How can Developers reduce the projects impact on water quality?

Ideally, the only thing to leave the site is clean rainwater. An effective stormwater management/erosion and sediment control plan should address all potential pollutants and a way to prevent them from migrating off site. The following BMPs' provide various ways you can control and prevent contaminated runoff from leaving your construction site.

Erosion Control Measures

Practices that prevent soil particles and construction debris from entering stormwater. Some of the more common include:

- Scheduling: Sequence construction to reduce the amount and duration of soil exposed to erosion by wind, rain and vehicle tracking.
- Preserve vegetation: preserving existing vegetation as a natural erosion control.
- Mulching, Geotextile mats: install natural or synthetic material to cover exposed ground.
- Dust Control: Stabilize soil from wind erosion
- Stabilized construction entrance: stabilize the access ways and areas where vehicle transportation may track material off site.
- Good Housekeeping: Keep the site free of litter and keep materials away from the street, gutters and storm drains.

Sediment Control Measures

Methods used to trap eroded sediment and prevent the sediment from migrating off site.

- Silt Fence: Installation of a silt fence, entrenched, will detain sediment laden water.
- Sand bags/gravel bags: Stack sand/gravel bags around storm drain inlets.
- Fiber rolls: Place fiber rolls along the site contours, stacked at a minimum of every 4 ft and entrenched 2-3 inches. Straw Bales are no longer allowed.

See the City of Morro Bay's Erosion and Sediment control Manual for more information.

CON5: Construction Site BMP manual

BMP Description:
Develop and disseminate a construction site BMP policy and procedures guidance manual. The CASQA Construction BMP Manual will be used as a model.

Measurable goal:
CON5A: Develop construction site BMP policy and procedures guidance manual.
CON5A: Disseminate policy and procedure guidance materials handouts with building permits and the City website.

Measurable goal achievements:
CON5A: This MG was achieved. Construction site BMP policy and procedures guidance manual has been developed. The manual was included in the SWMP. The manual has been audited this permit year and no changes were needed. The manual is available on the City's stormwater web page www.morro-bay.ca.us/stormwater under quick links Erosion and Sediment Control manual.
CON5B: This MG was achieved. Construction site BMP policy and procedures guidance manual was given with building permit corrections if no erosion and sediment controls were observed or is controls were not adequate.

Effectiveness Assessment:
Level 1 – Documenting Activities: BMP policy and procedures guidance manual developed.

Changes to BMP for next year/ Summary of activities for next year:
No changes are proposed; the City plans to implement this BMP in the same manner next permit year.

CON6: Training for building department

BMP Description:
Train municipal operations staff involved in reviewing grading and building plans, inspecting construction sites, or managing or monitoring construction sites for runoff control.

Measurable goal:
CON6A: City staff shall attend workshops and training courses on construction site runoff control and potential water quality impacts on an ongoing basis. The training will include at a minimum the Construction Stormwater General Permit requirements and erosion and sediment control BMPs.

Measurable goal achievements:
This MG was achieved. Building department staff, Brian Cowen, attended an Erosion and Sediment Control workshop put on by Cal Trans & Regional Water Board (March 23, 2009). Staff, Dan Doris and Brian Cowen also attended a training video, "Ground Control: Stormwater Pollution Prevention for Construction Sites", and took a post-video quiz. The staff passed the quiz with a score of 70% or better.

Effectiveness Assessment:
Level 1 – Documenting Activities: Building Staff attended at least one training course covering erosion and sediment controls and potential water quality impacts.

Changes to BMP for next year/ Summary of activities for next year:
No changes are proposed; staff will continue with training for the building department in permit year 2.

CON7: Stormwater Hotline

BMP Description:

Use the Public Stormwater Pollution Prevention Hotlline for citizen reporting on construction site runoff violations.

Measurable goal:

CON7A: Create a hotline for citizens to call and report on construction site runoff violations.
CON7B: Record the number of citizen reports and problem resolution and report annually. 100% of citizen reports will be responded to.

Measurable goal achievements:

CON7A: This MG was achieved. The main line for Public Services is used for the hotline. This number was included in all construction brochures given to the public.
CON7B: This MG was achieved. The citizen reports and problem resolutions are included on the **Stormwater Reporting Hotline follow-up actions for permit year 1 Feb. 2008 - Feb. 2009** Table there were no citizen reports regarding construction activity this permit year.

Effectiveness Assessment:

Level 1 – Documenting Activities: No citizen reports regarding construction activity were reported in permit year 1.

Changes to BMP for next year/ Summary of activities for next year:

No changes are proposed; the city will continue tracking the citizen reports regarding construction activity in the same manner.

POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW AND REDEVELOPMENT

PC1: Buffer zones for wetlands and riparian areas

BMP Description:

Continue enforcing Morro Bay's current Zoning Ordinance with existing riparian buffer zones of 50 feet and wetland buffer zones of 100 feet.

Measurable goal:

PC1A: Continue requiring projects to protect riparian and wetland areas by requiring a buffer zone, according to Morro Bay's Zoning Ordinance chapter 17.40.040, to the maximum extent practicable.

Measurable goal achievements:

PC1A: This MG was achieved. The Morro Bay Zoning Ordinance 17.40.040 was enforced on all building and planning permit, which were within 50 feet of a riparian area and 100 feet of a wetland. Two projects were subject to this ordinance, a 10 lot subdivision on Theresa Street has a 50 foot buffer from a riparian area and a single family house on North Main Street also has a 50 foot buffer from a riparian area. Both projects are in the planning phase.

Effectiveness Assessment:

Level 1 - Documenting Activities: All projects subject to Zoning Ordinance 17.40.040 were given the specific requirements.

Changes to BMP for next year/ Summary of activities for next year:

No changes are proposed for the next permit year, the City plans to keep enforcing the Zoning Ordinance buffer zones.

PC2: Revise CEQA initial study checklist

BMP Description:

Revise the CEQA initial study checklist to include urban runoff quantity and quality and post-construction stormwater management considerations.

Measurable goal:

PC2A: Revise the CEQA initial study checklist by the end of permit year 2.

Measurable goal achievements:

PC2A: This MG is ongoing. The Planning department is currently working on including urban runoff quality and post-construction stormwater management considerations to the CEQA checklist. Specific wording is currently being developed by the planning department and will be included in the CEQA checklist in permit year two.

Effectiveness Assessment:

Level 1 - Documenting Activities: Wording is currently being developed. The CEQA checklist will be updated next permit year.

Changes to BMP for next year/ Summary of activities for next year:

NO changes are proposed; the City will continue to revise the CEQA initial checklist.

PC3: Development review for post-construction management

BMP Description:

Continue to review post-construction stormwater management in the development review process.

Measurable goal:

PC3A: Continue to review current post-construction stormwater management in the development review process and incorporate the new requirements once developed.

Measurable goal achievements:

PC3A: This MG was achieved. The City has stormwater controls requirements in place (MBMC 14.48). These requirements apply to projects resulting in 2,500 sq ft of new or redeveloped impervious area. This requirement has water quality and water quantity requirements. The City has had no projects completed with over 2,500 sq ft of impervious area, only 2 projects qualified for the requirements and both projects are not currently being built. In May, 2008 the City developed interim storm water control requirements after receiving the February 15, 2008 letter from the Water Board. The interim requirements are:

Conditional development projects that exceed 500 square feet of new or redeveloped impervious area will be required to provide water quality treatment for the runoff resulting from a two year storm event either through retention (infiltration) or an alternative Water Quality BMP such as biofiltration, mechanical filtration or hydrodynamic separation.

Additionally, these same development or redevelopment projects that drain to a natural creek, swale or City storm drain either directly or indirectly will be required to provide peak runoff rate control for the runoff resulting from the two, ten and one- hundred year rainfall events. For the purposes of stormwater management the pre-construction condition shall be that of native soil and vegetation.

Drainage analysis, runoff calculations, design and justification of drainage facilities shall be preformed by a Registered Civil Engineer and submitted with the building permit application. The responsible Soils Engineer shall review all proposed infiltration or storage systems for site suitability.

These requirements only apply to conditional development project, since these interim requirements are not adopted in the municipal code.

Since the interim requirements have been implemented the City has had nine projects completed with stormwater control requirements. See below for an example of a drainage plan for a single family home with interim stormwater requirements.

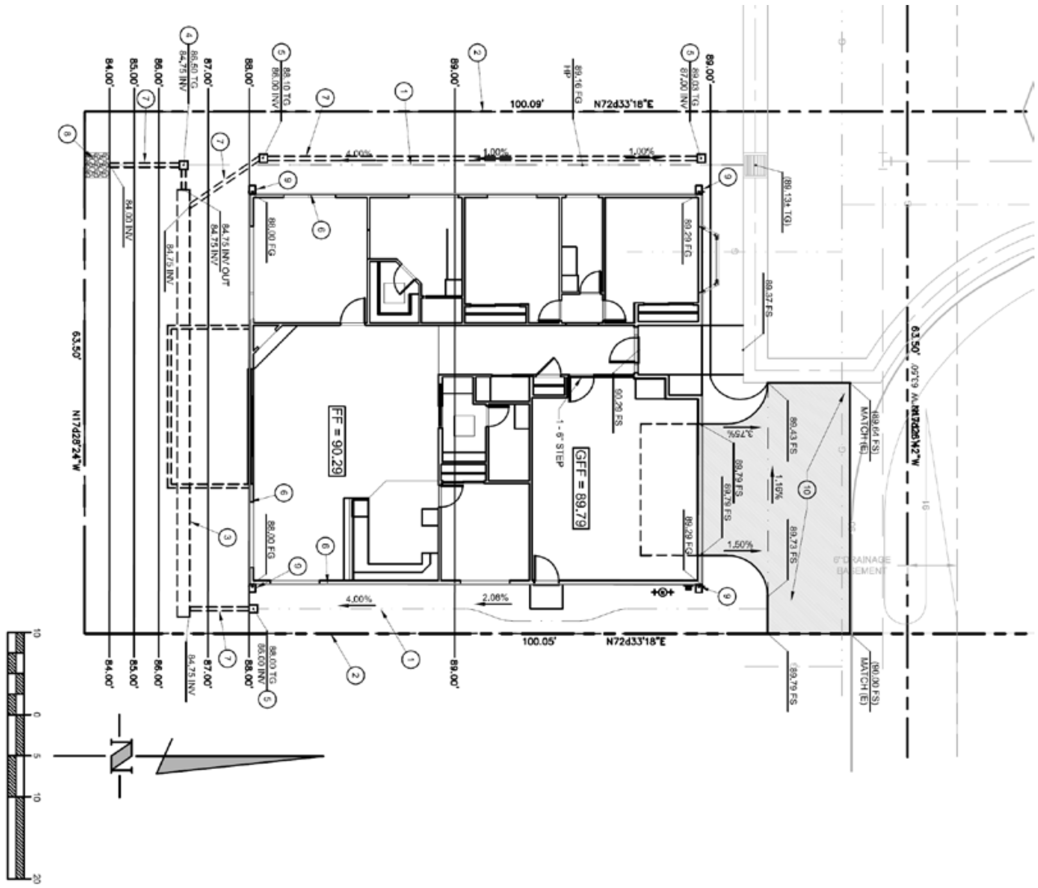
The City has different stormwater control requirements for the Embarcadero area. These requirements are similar to the interim requirements mentioned above, theses requirements apply to projects over 500 sq ft of new or re-development, but these projects are only required to deal with water quality on water quantity. The Embarcadero area is unique because it is built on revetment and infiltration results in a direct discharge. Also controlling peak flow is not an issue since the Ocean doesn't have a capacity issue. The City had two projects completed with these stormwater requirements this permit year.

Effectiveness Assessment:

Level 1 - Documenting Activities: The City has reviewed post-construction stormwater management in the development review process.

Changes to BMP for next year/ Summary of activities for next year:

No Changes at this time; the city is working with the Regional Water Board in the Joint Effort, therefore some changes maybe proposed at a latter date.


FF = 90.29
GFF = 89.79
N72d33'18"E
N17d28'24"W
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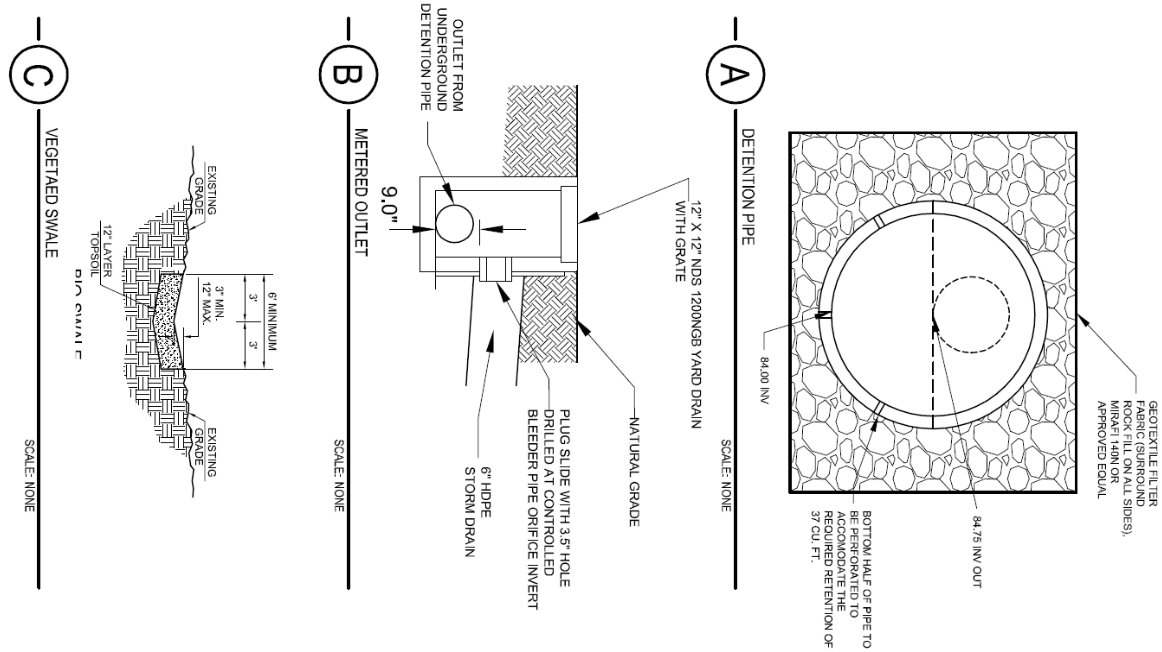
A
DETENTION PIPE
SCALE: NONE
GEOTEXTILE FILTER FABRIC (SURROUND ROCK FILL ON ALL SIDES). MIRAFI 140N OR APPROVED EQUAL
84.75 INV OUT
84.00 INV
BOTTOM HALF OF PIPE TO BE PERFORATED TO ACCOMODATE THE REQUIRED RETENTION OF 37 CU. FT.
B
METERED OUTLET
SCALE: NONE
12" X 12" NDS 1200NGB YARD DRAIN WITH GRATE
NATURAL GRADE
PLUG SLIDE WITH 3.5" HOLE DRILLED AT CONTROLLED BLEEDER PIPE ORIFICE INVERT
6" HDPE STORM DRAIN
OUTLET FROM UNDERGROUND DETENTION PIPE
9.0"
C
VEGETAED SWALE
SCALE: NONE
EXISTING GRADE
12' LAYER TOPSOIL
6' MINIMUM
3' MIN.
12" MAX.
EXISTING GRADE

PC6: Long-term watershed planning

BMP Description:

Commit to long-term watershed planning.

Measurable goal:

PC6A: Participate in the San Luis Obispo County Hydromodification Technical Advisory Committee (SLOCHTAC) to assist in the development of hydromodification control criteria to provide long-term watershed planning by developing hydromodification control criteria.

Measurable goal achievements:

PC6A: This MG was achieved. Rob Livick, City Engineer and Brian Cowen, Building Inspector, have been actively participating in the SLOCHTAC. The mission of the SLOCHTAC is to provide technical review and recommendations for Hydromodification Control Criteria, Low Impact Development Strategies and Other related Storm Water Quality Issues to insure that all the MS-4 agencies within San Luis Obispo County develop technically feasible, cost effective hydromodification plans that protect Water Quality.

Effectiveness Assessment:

Level 1 - Documenting Activities: The City has been actively participating in the SLOCHTAC.

Changes to BMP for next year/ Summary of activities for next year:

No Changes are proposed. Next permit year the city plan to continue working with the SLOCHTAC and with the RWQCB and the Joint effort to begin to develop long-term watershed planning.

GOODHOUSEKEEPING AND POLLUTION PREVENTION FOR MUNICIPAL OPERATIONS

MO1: Employee Training Program

BMP Description:

Implement an employee training program for municipal operations employees including, but not limited to, road maintenance, park and open space maintenance, fleet and building maintenance, new construction and land disturbances, water and wastewater system operators, and stormwater system maintenance operations employees. The training program includes provisions for new employee training and annual refresher training.

Measurable goal:

MO1A: Implement an employee training program for Public Services, Recreation and Parks, Planning and Building, Streets, Harbor, Police and, Fire department and Wastewater staff covering how to incorporate pollution prevention and good housekeeping into municipal operations.

MO1B: Provide stormwater pollution prevention training to each municipal operations employee on an annual basis.

MO1C: Measure the effectiveness of the training using scored quizzes and evaluations. Repeat training for scores less than 70%.

Measurable goal achievements:

MO1A: This MG was achieved. Two video training programs were selected to cover the needs of the City's municipal operations employees. The "Ground Control: Stormwater Pollution Prevention for Construction Sites" video training program is used for employees who work in construction related jobs, building and planning department. The "Storm Watch: Municipal Stormwater Pollution Prevention" video is used for employees who work in other field operations such as Parks, Roads, Water, and Wastewater. Each program was customized for each department's specific work needs and emphasized illicit discharge detection and elimination. The video training products used are the same the County of San Luis Obispo which they purchased from EXCAL visual.

MO1B: This was the City's first year showing the video and it was received very well. Each department watched the video and took a quiz. Any questions were answered and the quiz was graded. Also any areas were the employees felt we were lacking stormwater pollution prevention measures was discussed.

MO1C: All City departments with the exception of the Fire and Harbor Departments participated this year. All Departments which participated took a quiz and was required to achieve a passing score of 70% or more. All employees received a passing score.

Effectiveness Assessment:

Level 1: Documenting activities: The City created/conducted a Municipal employees training program.

Level 2: Raising Awareness: Municipal employee's awareness was raised through the training videos. Employees all passed the quizzes with a minimum score of 70% demonstrating staff understood the training concepts.

Changes to BMP for next year/ Summary of activities for next year:

No changes are proposed; the City will conduct a training refresher and new employee course in the next permit year. Facilitate the Fire and Harbor departments in the training and quiz.

MO2: Street Sweeping Program

BMP Description:

Implement a City street sweeping program.

Measurable goal:

MO2A: Sweep City roads on a weekly basis in heavily soiled areas. Heavily soiled areas are the Embarcadero and Downtown areas. Remaining areas of the city will be swept on a bimonthly basis.

MO2B: Sweep City-owned parking lots semi-monthly

MO2C: Track miles swept and the amount of material collected annually.

Measurable goal achievements:

MO2A: This MG was achieved. The City currently sweeps the Embarcadero and Downtown areas on a weekly basis and the remaining City streets are swept on a bimonthly basis.

MO2B: This MG was achieved. The City owned parking lots are cleaned by the Parks and Recreation department with a leaf blower. The parking lots are blown into the streets and the street sweeper then sweeps the debris. The City owner parking lots are only swept for major events, i.e. July 4th, Harbor festival etc.

MO2C: This MG was achieved. See table below with the amount of debris removed and miles swept.

Effectiveness Assessment:

Level 1: Documenting activities: The City has implemented a street sweeping program.

Level 4: Reducing Loads: The street sweeping program has reduced loads by removing pollutants before they have a chance to enter the Storm drain system and the City's waterways. See the table below for load amounts.

Changes to BMP for next year/ Summary of activities for next year:

The City proposes to change MO2C, tracking the number of miles swept. The City will report on the amount of debris removed and the streets swept but not report the amount of miles swept.

To quantify the amount of stormwater pollution that didn't reach the storm drain system				
The amount of sediment in tons that has been removed from the streets	327.1	tons		
The amount of sediment that would have reached the storm drain system if not removed by sweeping. Assuming 10 to 25% would have reached the storm drain system.	32.71	to	81.775	tons
The total amount of toxic pollutants kept from the storm drains	1308.4	to	13,084	pounds

Month Debris was swept and taken to the landfill	Quantity of debris removed (tons)
Feb-09	32.58
Mar-09	33.86
Apr-09	32.66
May-09	23.58
Jun-09	12.38
Jul-09	24.24
Aug-09	17.35
Sep-09	17.09
Oct-09	24.19
Nov-09	29.49
Dec-09	17.01
Jan-10	21.23
Feb-10	41.44
Total	**327.10**

MO4: SWPPP for the Corporation Yard

BMP Description:

Implement Stormwater Pollution Prevention Plans (SWPPPs) and Self-Inspection Checklists for Public Works Corporation Yard

Measurable goal:

MO4A: Develop and implement SWPPPs for Public Services corporation yard.
MO4B: Use a self-inspection checklist to conduct biannual inspections.
MO4C: Track the number and type of noncompliance and response time for preventive and corrective actions. Respond to all instances of noncompliance and implement corrective actions on 100% of noncompliance issues.

Measurable goal achievements:

MO4A: This MG was achieved and is ongoing. A SWPPP has been developed for the Public Services corporation yard. Implementation of the SWPPP will begin next permit year due to the fact that SWPPP was completed near the end the first permit year.
MO4B: This MG is ongoing. A self-inspection checklist has been created and will be used to conduct biannual inspections starting next permit year. The self-inspection was created near the end of the permit year and therefore the first inspection will be conducted in permit year 2.

MO4C: This MG is ongoing. Once an inspection occurs, staff will take action to correct all non-compliance issues.

Effectiveness Assessment:

Level 1: Documenting activities: The SWPPP and self-inspection checklist was completed this permit year.

Changes to BMP for next year/ Summary of activities for next year:

No changes are proposed; the City will continue implementing this BMP in the next permit year.

MO5: City Road Maintenance Procedures

BMP Description:

Implement City road maintenance procedures to prevent the discharge of pollutants during maintenance operations.

Measurable goal:

MO5A: Maintain the City road inventory.

Measurable goal achievements:

MO5A: The City has created a City road inventory to help determine which roads and when these roads need to be maintained. Next permit year the City will develop a road maintenance procedure manual that includes water quality protections including, but not limited to, proper stockpiling, erosion and sediment control BMPs, spill prevention and cleanup, saw cutting, paving and striping, equipment maintenance, proper fueling, and storm drain system maintenance.

Effectiveness Assessment:

Level 1: Documenting activities: The City road inventory has been created and maintained.

Changes to BMP for next year/ Summary of activities for next year:

No changes are proposed. Next permit year the City will create maintenance procedures to protect water quality.

MO6: City Facility Inspections

BMP Description:

Conduct City Facility Stormwater Pollution Prevention inspections including, but not limited to, Parks, City Facilities and Buildings, Vehicle and Equipment service areas, fueling stations, city construction sites, water and wastewater facilities, corporation yard and Harbor facilities in the permit coverage area.

Measurable goal:

MO6A: Use a self-inspection checklist to inspect City facilities for stormwater pollution prevention practices and procedures.

MO6B: Inspect facilities annually at a minimum to ensure ongoing compliance. Respond to 100% of noncompliance conditions and track all noncompliance issues, corrective, or preventive action and response times associated with City facility inspections.

Measurable goal achievements:

MO6A: This MG was achieved. A self–inspection checklist was created to inspect City facilities for stormwater pollution prevention practices and procedures. The SWPPP self–inspection checklist will be used for the Vehicle and Equipment service areas, fueling stations, water and wastewater facilities, corporation yard and Harbor facilities. The Erosion and Sediment inspections form (CON 3) will be used for city construction sites. A self-inspection checklist was created for Parks, City Facilities and Buildings.

MO6B: This MG is ongoing. The self-inspection checklist has been created in order to conduct the inspections. The self–inspection checklist was created late in permit year one, therefore in permit year 2 inspections of City facilities will commence.

Effectiveness Assessment:

Level 1: Documenting activities: The self-inspection checklist was created to inspect City facilities.

Changes to BMP for next year/ Summary of activities for next year:

No changes are proposed; the City will continue with implementing this BMP next permit year and inspections will be completed.

MO7: Hazardous Materials Storage Spill Prevention and Control Procedures

BMP Description:

Create hazardous materials storage and spill prevention and control procedures for stormwater pollution prevention in City facilities.

Measurable goal:

MO7A: Create new hazardous materials storage and spill prevention and control procedures and practices for stormwater pollution prevention requirements.

MO7B: Include checks for proper hazardous materials storage and spill prevention on the self-inspection checklist used for the city facility inspections described in MO6.

MO7C: Report the number of noncompliance and corrective actions implemented. Respond to all instances of noncompliance and implement corrective actions on 100% of noncompliance issues.

Measurable goal achievements:

MO7A: This MG was achieved. The city created a hazardous materials storage and spill prevention and control procedures and practices for stormwater pollution prevention.

MO7B This MG was achieved. The self-inspection checklist includes checks for proper hazardous material storage and spill prevention. See MO6A above.

MO7C: This MG is ongoing. The self-inspection checklist has been created in order to conduct the inspections. The self–inspection checklist was created late in permit year one, therefore in permit year 2 inspections of City facilities will commence.

Effectiveness Assessment:

Level 1 - Documenting Activities: A spill response plan was created.

Level 2 – Raising Awareness: Through the employee training program, municipal employees were informed of the spill response plan, and how to properly clean up spills was discussed in the videos.

Changes to BMP for next year/ Summary of activities for next year:

No changes are proposed; the City will continue with implementing this BMP next permit year and inspections will be completed.

MO8: City Vehicle Fuel Dispensing and Maintenance Facilities

BMP Description:

Implement procedures to prevent stormwater runoff pollution from City vehicle fuel dispensing and maintenance facilities.

Measurable goal:

MO8A: Audit city vehicle maintenance and fueling procedures and practices for stormwater pollution prevention BMPs including, but not limited to, proper material storage and spill prevention and control, proper cleaning procedures, proper material disposal, and oil recycling.

Measurable goal achievements:

MO8A: This MG was achieved. An audit was conducted and the City's current vehicle maintenance and fueling procedures for adequately address stormwater pollution prevention BMP's. The City's vehicle maintenance and fueling procedures adequately address stormwater pollution and no revisions are proposed. Training was given to the Fleet Maintenance and City Engineer which covered the procedures to prevent the release of gasoline or diesel and what to do if a leak does occur. A training guide was also provided to these employees which covers various areas including built not limited to; how to stop the release, containing the spill or overfill, proper clean up, emergency contact personnel and gasoline storage and dispensing facility daily inspection form.

Effectiveness Assessment:

Level 1 - Documenting Activities: An audit was conducted on the vehicle maintenance and fueling procedures and practices for stormwater pollution prevention. No deficiencies found.

Changes to BMP for next year/ Summary of activities for next year:

The current SWMP requires the City to revise any procedures as a result of the audit, but since no deficiencies were found, no revisions will be conducted next permit year. Also the SWMP requires an inspection to be completed next permit year; the City proposes to include this inspection with the SWPPP inspection (MO4).

MO10: Clean Marina Program

BMP Description:

Maintain the Clean Marina Program (Appendix H). Harbor department participates in the Clean Marina California Program which includes an array of BMPs including but not limited to: good boat-cleaning practices, education, signage, notices, Marina rules and regulations, waste receptacles, spill prevention.

Measurable goal:

MO10B: Internally the City will inspect for compliance annually during the city facility inspections described in BMP MO6.

Measurable goal achievements:

MO10A: This MG is ongoing. The Harbor department determined the procedures for conducting the Clean Marina inspections. The inspector will use the same check sheets used by the Clean Marina program to conduct the inspections. An inspection was not completed this permit year because the procedures to conduct the inspections were created late in the permit year. An inspection will be completed next permit year.

Effectiveness Assessment:

Level 1: Documenting activities: The procedures were created to inspect City facilities.

Changes to BMP for next year/ Summary of activities for next year:

MO11: City Landscape and Lawn Care Program

BMP Description:

Implement City landscaping and lawn care stormwater pollution prevention procedures for City facilities in the permit coverage area including, but not limited to: parks, recreational facilities, City owned buildings, and parking lots.

Measurable goal:

MO11A: Audit City landscape and lawn care procedures and practices for stormwater pollution prevention including, but not limited to: the proper use of less toxic alternative products for pesticide and herbicide use, proper use of fertilizers, proper green waste disposal, proper

irrigation practices, proper trash management and recycling practices, proper storage and maintenance of equipment, riparian corridor protection, and sustainable landscape design.

Measurable goal achievements:

MO11A: This MG was achieved. An audit was conducted of the current Parks Maintenance Manual. The manual was found to be lacking good procedures and practices for stormwater pollution prevention. The manual is outdated and the City will update the manual to include the proper use of less toxic alternative products for pesticide and herbicide use, proper use of fertilizers, proper green waste disposal, proper irrigation practices, proper trash management and recycling practices, proper storage and maintenance of equipment, riparian corridor protection and various other procedures to protect water quality.

Effectiveness Assessment:

Level 1 - Documenting Activities: An audit was conducted, and updates are needed.

Changes to BMP for next year/ Summary of activities for next year:

No changes are proposed at this time; the City plan to update the manual by the end of permit year 2.