

**STORM WATER PROGRAM  
PLANNING PRIORITY PROJECT CHECKLIST**

Form  
PC

**Owner/Developer must complete form and submit to the Public Works Department with appropriate plans**

Project Name	Owner Name	Developer Name
Project Address	Owner Address	Developer Address
Check/Tract Number	Owner Phone	Developer Phone

<b>Part 1 – Type of Project is:</b>	<b>Yes</b>	<b>No</b>
1. 10 or more unit homes, including single and multiple family homes, condominiums, apartments, etc*		
2. An industrial or commercial development with 100,000 + square foot of impervious surface*		
3. A automotive service facility* – (5000 square feet or more)		
4. A retail gasoline outlet * - (5000 square feet or more)		
5. A restaurant * (5000 square feet or more)		
6. A parking lot with either 5000 square feet or impervious surface or with 25 or more parking spaces *		
7. A single family hillside dwelling (one acre or more of surface area) *		
8. Redevelopment projects * – as defined on back		
9. Project located in, adjacent to or discharging directly to an ESA (as defined on back) AND creates 2,500* square feet or more of impervious surface area		

If any of the boxes in Part 1 is checked "Yes", this project will require the preparation of a Standard Urban Storm Water Mitigation Plan (SUSMP) along with a Maintenance Agreement and Transfer (See Definitions on back)

\*Numerical Criteria will apply

<b>Part B – Project Specific Concerns/Characteristics:</b>	<b>Yes</b>	<b>No</b>
1. A single family hillside dwelling (less than one acre) – SUSMP required but no numeric criteria		
2. A automotive service facility (less than 5000 square feet or more) – SUSMP required but no numeric criteria		
3. A retail gasoline outlet (less than 5000 square feet or more) – SUSMP required but no numeric criteria		
4. A restaurant (less than 5000 square feet or more) – SUSMP required but no numeric criteria		
4. Vehicles or equipment fueling areas (retail or private)		
5. Vehicle or equipment maintenance areas, including repairs or washings		
6. Commercial or industrial waste handling or storage		
7. Outdoor handling or storage of hazardous waste materials		
8. Outdoor manufacturing areas		
9. Outdoor food handling or processing		
10. Outdoor animal care, confinement or slaughter		
11. Outdoor horticultural activities		

If any of the boxes in Part 2 is checked "Yes", this project will require the preparation of a Site Specific Storm Water Mitigation Plan (SSSMP) along with a Maintenance Agreement and Transfer (See Definitions on back). If boxes in Parts 1 & 2 are both checked "Yes", a combined urban stormwater plan will be needed.

Applicant Signature

Print Name

Title

Date

## **DEFINITIONS:**

**Environmentally Sensitive Areas (ESAs):** An area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem, and which would be easily disturbed or degraded by human activities and developments. Also, an area designated by the City as approved by the Regional Water Quality Control Board.

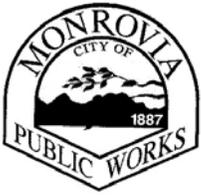
**Hillside:** Property where the slope is 25% or greater and where grading contemplates cut or fill slopes.

**Maintenance Agreement and Transfer:** All developments subject to an SUSMP and site specific plan requirements provide verification of maintenance provisions for Structural and Treatment Control BMPs, including but not limited to legal agreements, covenants, CEQA mitigation requirements, and or conditional use permits. Verification at a minimum shall include:

- A sign statement from the public entity assuming responsibility for Structural or Treatment Control BMP maintenance and that it meets all local agency design standards; or
- The developer signed statement accepting responsibility for maintenance until the responsibility is legally transferred; and either
- Written conditions in the sales or lease agreements, which requires the recipient to assume responsibility for maintenance and conduct a maintenance inspection at least once a year; or
- Written text in project conditions, covenants and restrictions (CCRs) for residential properties assigning maintenance responsibilities to Home Owner Associations for maintenance of the Structural and Treatment Control BMPs; or
- Any legal enforceable agreement that assigns responsibility for maintenance of post-construction Structural or Treatment Control BMPs

**Pervious surfaces:** Those surfaces that allow storm water to runoff to percolate through. Typical pervious surfaces include: grass, gravel, concrete pavers, and some designed asphalts.

**Redevelopment:** Land disturbing activities that results in the creation, addition, or replacement of 5,000 square feet or more of impervious surface on an already developed site. Redevelopment includes, but is not limited to: the expansion of a building footprint; addition or replacement of a structure; replacement of impervious surface area that is not part of a routine maintenance activity; and land disturbing activities related to structural or impervious surfaces. It does not include routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of facility, nor does it include modifications to existing single family structures, emergency construction activities required to immediately protect public health and safety



**LOCAL STORM WATER POLLUTION PREVENTION PLAN (LSWPPP)**

Form  
**LS1**

**For Sites: Less than 1 acre**

Construction

Owner Name _____	Site Name _____
Owner Address _____	Site Address _____
Contact/Ph. No. _____	Tract No. _____
Contractor Name _____  Contractor Address _____  Contact/Phone No _____	<b>Indicate Size of Disturbed Area</b> Including Stockpiles _____ ACRES
	<b>BUILDING PERMIT NO.</b>
	<b>GRADING PERMIT NO.</b>

All construction projects that have the potential to significantly affect storm water during the construction but which are not large enough to be subject to the State's General Construction Activity Storm Water Discharge Permit (GCASP) are required to prepare and submit a Local Storm Water Pollution Prevention Plan (LSWPPP) prior to the issuance of a building or grading permit. In addition, projects where soil disturbance will occur between October 1 and April 15 are required to complete the Wet Weather Erosion Control Plan addendum information. When these developed these plans, the applicant should address site conditions, identify construction activities with the potential to cause storm water pollution, and identify the Best Management Practices (BMPs) that will best suit the construction activities.

Provide a narrative description of the major features of the proposed project (low density housing, commercial development, industrial complex, etc.) Attach additional sheets, if necessary.

<b>Project Type</b>	

What are the estimated construction start and finish dates on this project?

What are the estimated dates during which soil will be disturbed during on this project?

<b>Start Date</b>	
<b>Finish Date</b>	

<b>Start Date</b>	
<b>Finish Date</b>	

**IF SOIL WILL BE DISTRUBED BETWEEN NOVEMBER 1 AND APRIL 15, SUBMIT WVECPC (FORM LS-3) TO THE GRADING SUBMITALL**

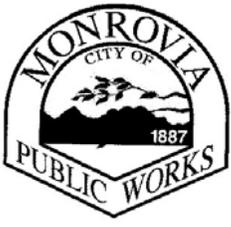
Are there any unique features relating the adjacent water bodies? (i.e., in or around a wetland, river, stream or estuary?)

<b>Unique Project Features</b>	

**Use form LS-2 to indicate which BMPs will be used to control storm water pollution from the project site. In addition submit a site plan that demonstrates where selected BMPs will be used.**

As the Project Owner, I certify that appropriate BMPs will be implemented to effectively minimize the negative impacts of this project construction activities on storm water quality. The project contractor is aware that the selected BMPs must be installed, monitored and maintained to ensure their effectiveness. The BMPs not selected for implementation are redundant or deemed not applicable o the proposed construction activities.

Owner/Authorized Representative Signature \_\_\_\_\_ Print Name \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_



**LOCAL STORM WATER POLLUTION  
PREVENTION PLAN (LSWPPP)  
For sites less than 1 acre**

PROJECT ADDRESS:  
\_\_\_\_\_  
\_\_\_\_\_

Indicate on the following tables which BMP will be used to control storm water pollution at the project site. In addition, an **INSPECTION LOG** and **CONSTRUCTION SITE CHECKLIST** must be kept on file at the project site

<b>GENERAL SITE MANAGEMENT</b>			
<b>BMP DESCRIPTION</b>	<b>Will BMP BE USED?</b>		<b>IF YES, STATE REASON (Use additional sheets if necessary) IF NO, STATE REASON (Use additional sheets if necessary)</b>
	<b>YES</b>	<b>NO</b>	
<b>SITE PLANNING CONSIDERATIONS</b>			
Project Scheduling (EC-1)			
Preservation of Existing Vegetation (EC-2)			
<b>CONSTRUCTION PRACTICES</b>			
Sediment Control Procedures (sand bags, etc)			
Dewatering Operations (NS-2)			
Paving Operations (NS-3)			
Structure Construction and Painting (CA 003)*			
Dust Control (ECS21)*			
<b>VEHICLE &amp; EQUIPMENT MAINTENANCE</b>			
Vehicle and Equipment Cleaning (NS-8)			
Vehicle and Equipment Fueling (NS-9)			
Vehicle and Equipment Maintenance (NS-10)			
<b>TRACKING CONTROL</b>			
Stabilized Construction Entrances (TC-2)			
<b>CONTRACTOR TRAINING</b>			
Employee/Subcontractor Training (CA 40)*			

\*Refers to 1993 CA Stormwater Quality Task Force Best Management Practice Handbook

<b>CONSTRUCTION MATERIALS AND WASTE MANAGEMENT</b>			
<b>BMP DESCRIPTION</b>	<b>Will BMP BE USED?</b>		<b>IF YES, STATE REASON (Use additional sheets if necessary) IF NO, STATE REASON (Use additional sheets if necessary)</b>
	<b>YES</b>	<b>NO</b>	
<b>MATERIAL MANAGEMENT</b>			
Material Delivery & Storage (WM-1)			
Material Use (WM-2)			
Spill Prevention & Control (WM-4)			
<b>WASTE MANAGEMENT</b>			
Solid Waste Management (WM-5)			
Hazardous Waste Management (WM-6)			
Contaminated Soil Management (WM-7)			
Concrete Waste Management (WM-8)			
Sanitary/Septic Waste Management (WM-9)			



**WET WEATHER  
EROSION CONTROL PLAN**

Complete this page only if  
soil disturbance will occur  
between  
**OCTOBER 1 AND APRIL 15**

**Form  
LS-3**

Indicate on the following tables which BMP will be used to control wet weather erosion and off site sediment at the project site.

Project Name and Address

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EROSION CONTROL PRACTICES			
BMP DESCRIPTION	Will BMP BE USED?		IF YES, EXPLAIN HOW (attach additional sheets if necessary) IF NO, STATE REASON (attach additional sheets if necessary)
	YES	NO	
<b>SITE PLANNING CONSIDERATIONS</b>			
Project Scheduling (EC-1)			
Preservation of Existing Vegetation (EC-2)			
<b>VEGATATIVE STABILIZATION</b>			
Seeding & Planting (ESC10*)			
Mulching (ESC11*)			
<b>PHYSICAL STABILIZATION</b>			
Geotextiles & Mats (EC-7)			
Dust Control (ESC21*)			
Temporary Stream Crossings (NS-4)			
Construction Road Stabilization (TC-2)			
<b>DIVERSION OF RUNOFF</b>			
Earth Dike (EC-9)			
Temporary Drain & Swales (EC-9)			
Slope Drain (EC-11)			
<b>VELOCITY REDUCTON</b>			
Outlet Protection (EC-10)			
Check Dams (SE-4)			
Slope Roughening/Terracing (ESC42*)			

\*Refers to the 1993 CA Stormwater Quality Task Force Best Management Practices Handbook

SEDIMENT CONTROL PRACTICES			
BMP DESCRIPTION	Will BMP BE USED?		IF YES, EXPLAIN HOW (attach additional sheets if necessary) IF NO, STATE REASON (attach additional sheets if necessary)
	YES	NO	
<b>Sediment Control</b>			
Silt Fencing (SE-1)			
Straw Bale Barrier (SE-9)			
Sand Bag Barrier (SE-8)			
Brush or Rock Filter (ESC53)			
Storm Drain Inlet Protection (SE-10)			
Sediment Trap (SE-3)			
Sediment Basin (SE-2)			

\*Refers to the 1993 CA Stormwater Quality Task Force Best Management Practices Handbook

**Note: All BMPs selected must be identified on site plans**

For additional information on BMPs, see the latest edition of the 2003 California Storm Water Quality Assoc. Stormwater Best Management Practice Handbooks.



# OWNER'S CERTIFICATION MINIMUM BMPs FOR ALL CONSTRUCTION PROJECTS

Form  
OC1

Project Name _____	<b>Building/Grading Permit Number</b>
Project Location _____	
Owner Name _____	Contractor Name _____
Address _____	Address _____
Phone _____	Phone _____
Fax _____	Fax _____

The National Pollution Discharge Elimination System (NPDES) is a portion of the Clean Water Act that applies to the protection of the receiving waters. Under permits from the Los Angeles Regional Water Quality Control Board (RWQCB), certain activities are subject to RWQCB enforcement. To meet the requirements of the Los Angeles County Municipal Storm Water Permit (CAS004001), minimum requirements for sediment control, erosion control and construction activities must be implemented on each project site. Minimum requirements include:

**SEDIMENT CONTROL:** Eroded sediments from areas disturbed by construction and from stockpiles of soil shall be retained on site to minimize sediment transport from site to streets, drainage facilities or adjacent properties via runoff, vehicle tracking or wind.

**CONSTRUCTION MATERIALS CONTROL:** Construction related materials, wastes, spills or residues shall be retained on site to minimize transport from site to streets, drainage facilities or adjacent properties by wind or runoff. Runoff from equipment and vehicle washing shall be contained at construction sites unless treated to removed sediments and pollutants.

**NON-STORM WATER RUNOFF:** Non-storm water runoff from equipment and vehicle washing and any other activity shall be contained at the project site.

**EROSION:** Erosion from slope and channels shall be controlled by implementing effective combination of BMPs (as approved in Regional Board Resolution No. 99-03), such as the limiting of grading scheduled during the wet season; inspecting graded areas during rain events; planting and maintenance of vegetation on slopes; and covering erosion susceptible slopes

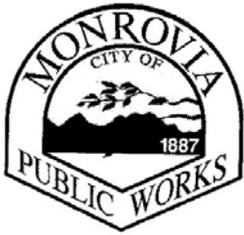
*Minimum BMPs include: (1) soil piles must be covered with tarps or plastic, (2) leaking equipment must be repaired immediately, (3) refueling must be conducted away from catch basins, (4) catch basins must be protected when working nearby, (5) vacuum all concrete saw cutting, (6) never wash concrete waste waters into the street, (7) keep the site clean, sweep the gutters at the end of the working day and keep a trash receptacle on site.*

## Owner's Certification

I hereby certify that I have read, understand and will comply with the requirements indicated above.

\_\_\_\_\_  
Property Owner/Developer (signature)                      Property Owner/Developer (printed)                      Title                      Date

Best Management Practices to be implemented shall include those recommended in the pamphlets describing Stormwater BMPs for construction site, such as, "Blue Print for a Cleaner Ocean, California Storm Water Best Management Practice Handbook –Construction Activity. The "Construction Site Best Management Practices (BMP) Manual – Caltrans" is also an excellent source for construction site BMPs.



**STORM WATER PLANNING PROGRAM  
PRIORITY DEVELOPMENT/REDEVELOPMENT PROJECTS**

Form  
**P1**

Project Name _____  Project Location _____	<p><b>General Project Certification</b></p> <p><b>A completed original of this form must accompany all SUSMP submittals</b></p>
Company Name _____ Address _____ Contact Name/Title _____ Phone/Fax _____	

Best Management Practices (BMPs) have been incorporated in the design of this project to accomplish the following goals:

1. Minimize impacts from storm water runoff on the biological integrity of Natural Drainage Systems and water bodies in accordance with requirements under CEQA (Cal Pub Resources Code § 21100), CWC § 13369, CWA § 319, CWA § 402(p), CWA § 404, CZARA § 6217(g), ESA § 7, and local governmental ordinances.
2. Maximize the percentage of permeable surfaces to allow more percolation of storm water into the ground.
3. Minimize the amount of storm water directed to impermeable surfaces and the MS4.
4. Minimize pollution emanating from parking lots through the use of appropriate Treatment Control BMPs and good housekeeping practices.
5. Properly design and maintain Treatment Control BMPs in a manner that does not promote the breeding of vectors.
6. Provide for appropriate permanent measures to reduce storm water pollutant loads in stormwater from the development site.

*I certify that this Standard Urban Storm Water Mitigation Plan and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted. The information contained herein is, to the best of my knowledge and belief, true, accurate and complete.*

Property Owner/Developer (signature)	Property Owner/Developer (printed)	Title	Date
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**Post Construction / Maintenance Certification**

Proper operation of Best Management Practices (BMPs) is important component of reducing pollutants in urban and storm water runoff. As the responsible party, I certify that the BMP will be implemented, monitored and maintained to ensure their effectiveness. In the event of a property transfer, the new owner will be notified of the BMPs in use at this site and must include written conditions in sales or lease agreement, which requires the recipient to assume responsibility for maintenance and conduct a maintenance inspection at least once a year.

Property Owner/Developer (signature)	Property Owner/Developer (printed)	Title	Date
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Signatory Requirements: This section shall be signed by the landowner. If the landowner is not an individual, the signatures may be from a corporate officer, a manager if the authority to sign has been delegated to the manager, a general partner, or a sole proprietor.

**PLANNING BEST MANAGEMENT PRACTICES**

<b>BMP NAME</b>	<b>BMP IDENTIFICATION NO. AND NAME</b>	<b>CHECK IF TO BE USED</b>
Car Wash Facility	SD-33, Vehicle Washing Areas	
Constructed Wetlands	TC-21, Constructed Wetlands	
Control of Impervious Runoff	Not Applicable	
Energy Dissipaters	ESC-40, Outlet Protection	
Extended Detention Basins	TC-22, Extended Detention Basins	
Infiltration Trenches	TC-11, Infiltration	
Inlet Trash Tracks	Not Applicable	
Landscape Planting	SD-10, Site Design & Landscape Planting; EC-2 Preserve existing presentation; ESC10, Seeding and Planting; EC-3, Hydraulic Mulch	
Linings for Urban Runoff Conveyance Channels	Not Applicable	
Materials Management	SC-30, Outdoor Loading/Unloading of Materials; SC-31, Outdoor Container, Storage of Liquids, SC-33, Outdoor Storage of Raw Materials, Products and By-Products	
Media Filtration	TC-40, Media Filtration	
Motor Fuel Concrete Dispensing Canopy	NS-9, Vehicle and Equipment Fueling	
Motor Fuel Dispensing Area	NS-9, Vehicle and Equipment Fueling	
Oil/Water Separator and Water Quality Inlets	TC7, Oil/Water Separators and Water Quality Inlets	
Outdoor Storage	SC-31, Outdoor Container, Storage of Liquids, SC-33, Outdoor Storage of Raw Materials, Products and By-Products	
Porous Pavement and Alternative Surfaces	TC-11, Infiltration	
Protect Slopes and Channels	EC-10, Velocity Dissipation Devices; E-11, Slope Drains	
Self Contain Areas for Vehicle or Equipment Washing, Steam Cleaning, Maintenance, Repair, or Material Processing	SD-33, Vehicle & Equipment Washing and Steam Cleaning; NS-10, Vehicle and Equipment Maintenance and Repair; SC-32, Outdoor Processing Equipment Operations & Maintenance	
Storm Drain System Stenciling & Signage	SD-13, Storm Drain System Signs	
Trash Container Ares	WM-5, Solid Waste Management	
Vegetated Swales and Strips	TC-30, Vegetative Swale, TC-31 Vegetative Buffer Strip	
Wet Ponds	TC-20, Wet Pond	

Please refer to the 2003 California Storm Water Best Management Practice Handbook for detailed BMP information

## **Self Inspection Forms**

**For sites preparing a Local Storm Water Pollution Prevention Plan  
[Local SWPPP]**

BMPs for construction sites are usually temporary measures that require frequent maintenance to maintain their effectiveness and may require relocation or re-installation, particularly as the project progresses.

Regular inspections are required, particularly during the rainy season.

In order to ensure that BMPs are properly implemented and functioning effectively, and to identify necessary maintenance and repairs, developers and contractors are required to perform self-inspections. The attached CONSTRUCTION SITE INSPECTION CHECK LIST AND CONSTRUCTION INSPECTION LOG must be completed:

- **Before and after every rainfall with .025 inches or more of predicted or actual precipitation**

**and**

- **at 24 hours intervals during extended rainfall events**



*Prepared by Department of Public Works*



# CONSTRUCTION SITE INSPECTION CHECKLIST (CONTRACTOR)

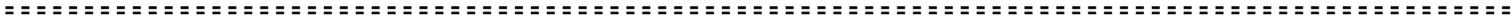
Project: \_\_\_\_\_

Contractor \_\_\_\_\_

Inspected By: \_\_\_\_\_

Date: \_\_\_\_\_

Weather Information: (If it has rained, approx rainfall amount in inches) \_\_\_\_\_



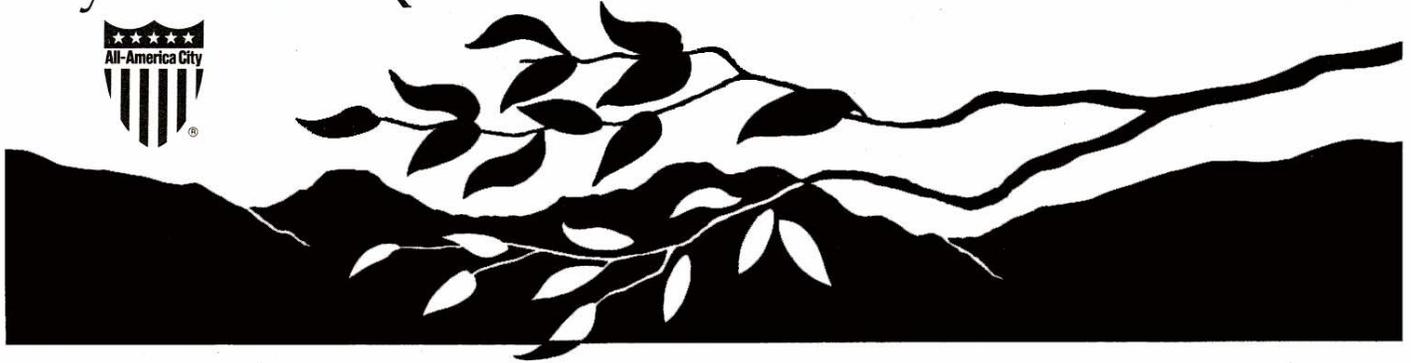
Check "Yes", "No", or "N/A" if not applicable.

1. Has there been rain at the site since the last inspection?
2. All sediment barriers( e.g., sandbags, straw bales, and silt fences) in place and in accordance with the Plan (Erosion Control, LSWPPP, etc.) and are they functioning properly?
3. If present, are all exposed slopes protected from erosion through the implementation of acceptable soil stabilization practices?
4. If present, are all sediment traps/basins installed and functioning properly?
5. Are all material handling and storage areas reasonably clean and free of spills, leaks, or other deleterious materials?
6. Are all equipment storage and maintenance areas reasonably clean and free of spills leaks or any other deleterious materials?
7. Are all materials and equipment properly covered?
8. Are all external discharge points (i.e., outfalls) reasonably free of any noticeable pollutant discharges?
9. Are all internal discharge points (i.e., storm drain inlets)

	Yes	No	N/A
1. Has there been rain at the site since the last inspection?			
2. All sediment barriers( e.g., sandbags, straw bales, and silt fences) in place and in accordance with the Plan (Erosion Control, LSWPPP, etc.) and are they functioning properly?			
3. If present, are all exposed slopes protected from erosion through the implementation of acceptable soil stabilization practices?			
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7. Are all materials and equipment properly covered?			
8. Are all external discharge points (i.e., outfalls) reasonably free of any noticeable pollutant discharges?			
9. Are all internal discharge points (i.e., storm drain inlets)			







## ATTENTION:

### DEVELOPERS & CONTRACTORS

Effective March 1, 2003, as required by the State of California's Regional Water Quality Control Board – LA's "Los Angeles County Municipal Storm Water National Pollutant Discharge Elimination System (NPDES) Permit, Board Order 01-182, all development/construction projects between one (1) and five (5) acres will require coverage under a State General Construction Activities Stormwater Permit-GCASP.

**Prior to the issuance of a grading permit**, applicant must submit to the City proof of:

- Waste Discharge Identification Number for filing a Notice of Intent (NOI) for coverage under a GCASP
- Certification that Storm Water Pollution Prevention Plan (SWPPP) has been prepared by project developer

The current State of California fee for filing a Notice of Intent (NOI) is \$200 + \$20/acre, plus 18.5 surcharge (**See acreage chart on reverse side for fee totals**). The City *cannot issue* a grading permit until the above items have been completed as required by State of California's Regional Water Quality Control Board, Order No. 01-182.

Effective March 1, 2003:

- Industrial/Commercial development projects that disturb one acre or more of surface area will be required to submit Standard Urban Stormwater Mitigation Plan (SUSMP) to demonstrate design and implement post construction treatment controls to mitigate stormwater pollution. Prior to this change, the threshold was 100,000 square feet or more of impervious area.

The City of Monrovia Department of Public Works is available to assist you with any questions you may have.

<u>Acres</u>	<u>Fee</u>	<u>18.5% Surcharge</u>	<u>Total Fee</u>	<u>Acres</u>	<u>Fee</u>	<u>18.5% Surcharge</u>	<u>Total Fee</u>
0	\$200.00	\$37	\$237	51	\$1,220.00	\$226	\$1,446
1	\$220.00	\$41	\$261	52	\$1,240.00	\$229	\$1,469
2	\$240.00	\$44	\$284	53	\$1,260.00	\$233	\$1,493
3	\$260.00	\$48	\$308	54	\$1,280.00	\$237	\$1,517
4	\$280.00	\$52	\$332	55	\$1,300.00	\$241	\$1,541
5	\$300.00	\$56	\$356	56	\$1,320.00	\$244	\$1,564
6	\$320.00	\$59	\$379	57	\$1,340.00	\$248	\$1,588
7	\$340.00	\$63	\$403	58	\$1,360.00	\$252	\$1,612
8	\$360.00	\$67	\$427	59	\$1,380.00	\$255	\$1,635
9	\$380.00	\$70	\$450	60	\$1,400.00	\$259	\$1,659
10	\$400.00	\$74	\$474	61	\$1,420.00	\$263	\$1,683
11	\$420.00	\$78	\$498	62	\$1,440.00	\$266	\$1,706
12	\$440.00	\$81	\$521	63	\$1,460.00	\$270	\$1,730
13	\$460.00	\$85	\$545	64	\$1,480.00	\$274	\$1,754
14	\$480.00	\$89	\$569	65	\$1,500.00	\$278	\$1,778
15	\$500.00	\$93	\$593	66	\$1,520.00	\$281	\$1,801
16	\$520.00	\$96	\$616	67	\$1,540.00	\$285	\$1,825
17	\$540.00	\$100	\$640	68	\$1,560.00	\$289	\$1,849
18	\$560.00	\$104	\$664	69	\$1,580.00	\$292	\$1,872
19	\$580.00	\$107	\$687	70	\$1,600.00	\$296	\$1,896
20	\$600.00	\$111	\$711	71	\$1,620.00	\$300	\$1,920
21	\$620.00	\$115	\$735	72	\$1,640.00	\$303	\$1,943
22	\$640.00	\$118	\$758	73	\$1,660.00	\$307	\$1,967
23	\$660.00	\$122	\$782	74	\$1,680.00	\$311	\$1,991
24	\$680.00	\$126	\$806	75	\$1,700.00	\$315	\$2,015
25	\$700.00	\$130	\$830	76	\$1,720.00	\$318	\$2,038
26	\$720.00	\$133	\$853	77	\$1,740.00	\$322	\$2,062
27	\$740.00	\$137	\$877	78	\$1,760.00	\$326	\$2,086
28	\$760.00	\$141	\$901	79	\$1,780.00	\$329	\$2,109
29	\$780.00	\$144	\$924	80	\$1,800.00	\$333	\$2,133
30	\$800.00	\$148	\$948	81	\$1,820.00	\$337	\$2,157
31	\$820.00	\$152	\$972	82	\$1,840.00	\$340	\$2,180
32	\$840.00	\$155	\$995	83	\$1,860.00	\$344	\$2,204
33	\$860.00	\$159	\$1,019	84	\$1,880.00	\$348	\$2,228
34	\$880.00	\$163	\$1,043	85	\$1,900.00	\$352	\$2,252
35	\$900.00	\$167	\$1,067	86	\$1,920.00	\$355	\$2,275
36	\$920.00	\$170	\$1,090	87	\$1,940.00	\$359	\$2,299
37	\$940.00	\$174	\$1,114	88	\$1,960.00	\$363	\$2,323
38	\$960.00	\$178	\$1,138	89	\$1,980.00	\$366	\$2,346
39	\$980.00	\$181	\$1,161	90	\$2,000.00	\$370	\$2,370
40	\$1,000.00	\$185	\$1,185	91	\$2,020.00	\$374	\$2,394
41	\$1,020.00	\$189	\$1,209	92	\$2,040.00	\$377	\$2,417
42	\$1,040.00	\$192	\$1,232	93	\$2,060.00	\$381	\$2,441
43	\$1,060.00	\$196	\$1,256	94	\$2,080.00	\$385	\$2,465
44	\$1,080.00	\$200	\$1,280	95	\$2,100.00	\$389	\$2,489
45	\$1,100.00	\$204	\$1,304	96	\$2,120.00	\$392	\$2,512
46	\$1,120.00	\$207	\$1,327	97	\$2,140.00	\$396	\$2,536
47	\$1,140.00	\$211	\$1,351	98	\$2,160.00	\$400	\$2,560
48	\$1,160.00	\$215	\$1,375	99	\$2,180.00	\$403	\$2,583
49	\$1,180.00	\$218	\$1,398	>100	\$2,200.00	\$407	\$2,607
50	\$1,200.00	\$222	\$1,422				

## Acquire Appropriate State Storm Water Permits

Construction projects that disturb five acres of land or greater, require coverage under a State's General Construction Activities Storm Water Permit (GCASP). A copy of an Notice of Intent (NOI) must be submitted to the City.

After March 10, 2003, projects less than five acres will have to obtain a GCASP from the State, and provide the City with proof of a Waste Discharge Identification Number (WDID), and certification that a SWPPP has been prepared for the project.

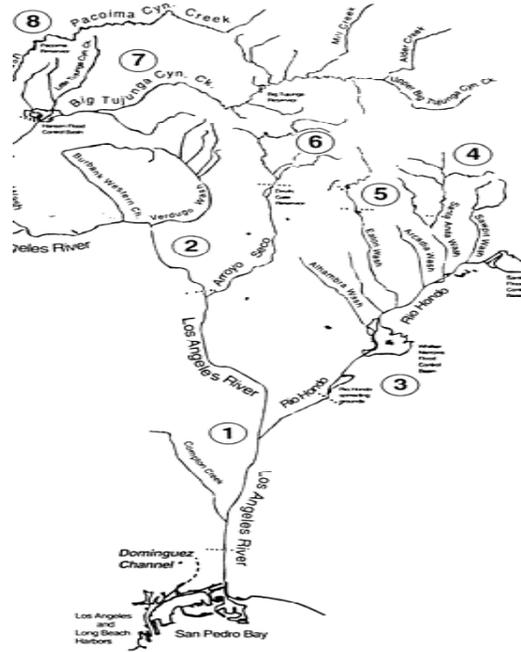
The City will not issue grading permits until all requirements have been completed.

## Department Commitment/ Department Questions

The City of Monrovia Department of Public Works is committed to administering and enforcing the City Municipal Storm Water and Urban Runoff NPDES Permit.

If you have any questions, please contact the Department of Public Works at (626) 932-5575.

With your help, the elimination of urban runoff pollution from construction sites can be achieved.



Some Major Surface Waters of the Los Angeles River Watershed

Map provided from the Water Quality Control Plan - Los Angeles Region, RWCQB-LA

Monrovia is located at Number 4 in the Los Angeles River Watershed between the Santa Anita Wash and Sawpit Wash.



The City of Monrovia acknowledges the following agencies for some information provided in this brochure:

Hunter Kennedy & Associates  
Regional Water Quality Control Board - LA

## Stormwater Best Management Practices (BMPs)

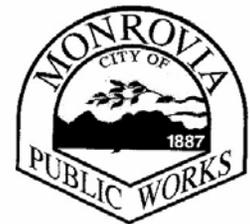
### General Construction & Site Supervision



**General Contractors  
Construction Inspectors  
Home Builders  
Developers  
Mason & Brick Layers  
Patio Construction Workers  
Side Construction Crew**

City of Monrovia  
Department of Public Works  
415 S. Ivy Avenue  
Monrovia, CA 91016-2888

Tel: 626-932-5575  
Fax: 626-932-5559



## General Construction Problems

Construction site activities are a common source of urban runoff pollution. Materials and waste blown or washed into the street, gutter or storm drain can flow directly to the ocean.

Sediment is the most common pollutant washed from worksites, creating multiple problems once it enters the ocean. Sediment clogs the gills of fish, blocks light transmission and increases ocean water temperature, all of which harm aquatic creatures and disturb the food chain upon which both fish and people depend.

Sediment also carries with other worksite pollutants such as: pesticides, cleaning solvents, cement wash, asphalt and car fluids like motor oil, grease and fuel. As a result, poorly maintained vehicles and equipment leaking fuel and oil on the construction site also contributes to ocean pollution.

## Solutions



Best Management Practices (BMPs) such as handling, storing, and disposing of materials properly can prevent pollutants from entering the storm drains.

The following general business practices conducted on your project site assist you from discharging polluted runoff to the City's storm drain system.

## General Business Practices

- Keep pollutants off exposed surfaces. Placing trash receptacles and recycling receptacles around the site to insure that potential pollutants of concern are disposed of properly.
- Cover and maintain all dumpsters. Check frequently for leaks. Place dumpsters under a roof or cover with tarps or plastic sheeting. Never clean a dumpster by hosing it down.
- Keep materials out of the rain. Cover exposed stock piles of soil or construction materials with plastic sheeting or temporary roofs.
- Designate one area for auto parking, vehicle refueling and routine equipment maintenance. The designated area should be well away from gutters or storm drains. Make major repairs to equipment or vehicles off site.
- Make sure portable toilets are in good working order. Check frequently for leaks.
- Use little water as possible for dust control.
- Regularly self inspect all site BMPs after a major or prolonged rain event to insure BMP effectiveness. Only properly maintained BMPs will be effective in prevent discharges.

## Clean Up Spills

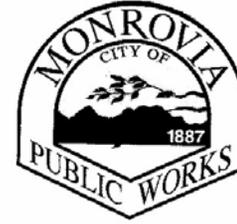
- Clean up leaks, drips and other spills immediately. This will prevent contaminated soil or residue on paved surfaces.
- Never hose down "dirty" pavement or surfaces where materials have spilled. Use dry cleanup methods whenever possible.

## Advance Planning to Prevent Pollution



Advance planning can prevent violations from occurring. Take the time to plan! Here are a few items to include:

- An erosion control program worked out before construction begins, prevents or minimizes most erosion and sedimentation problems.
- Prepare a Local Storm Water Pollution Prevention Plan (LSWPP), if required, to identify & mitigate storm water issues.
- Train your employees and subcontractors. You are accountable for violations as a result subcontractors actions.
- Make these brochures available to everyone working on site. Inform subcontractors about storm water requirements and their own responsibilities.
- Schedule excavation and grading activities for dry weather periods.
- Control surface runoff to reduce soil erosion, especially during excavation. Use drainage ditches to divert water flow.
- Use gravel approaches to reduce soil compaction and limit the tracking of sediments into the streets, where truck traffic is frequent.
- Prevent erosion by planting fast-growing annual and perennial grasses. These will shield and bind the soil.
- Do not remove trees or shrubs unnecessarily. They help decrease erosion.



# City of Monrovia Planning Developer's Guidelines & Review



## **THIS DOCUMENT IS FOR GUIDENCE PURPOSES ONLY.**

The following documents take precedence over this guidance document:

- NPDES Permit CAS004001
- RWQCB Resolution No. 99-03 (Approved BMPs)
- SWRCB Resolution No. 00-02 (SUSMP Requirements)
- Other relevant orders and resolutions from the CA Regional Water Quality Control Board, State Water Resources Control Board or applicable regulatory agencies

### Suggested Additional References Include:

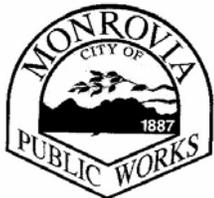
California Storm Water Best Management Practices Handbook; or "Start at the Source", Bay Area Storm Water Management Agencies Association, 1999.

## **Storm Water Pollution Prevention Guidelines for Developers of the Following Projects:**

- 10 or more Residential Units
- 100,000 Sq. Foot. Commercial/ Industrial Developments (1 acre starting March 2003)
- Automotive Service Facilities
- Retail Gasoline Outlets
- Restaurants
- Parking lots over 5,000 sq. ft. or over 25 spaces exposed to rain
- Any existing facility in categories herein that are creating, adding, or replacing 5,000 sq. ft. or more of impervious surface
- Single Family Hillside Project
- Projects Over 2,500 sq. ft. and located in or directly adjacent to or discharging to an Environmentally Sensitive Area

Projects with these site specific characteristics:

- Vehicle or equipment fueling areas
- Vehicle or equipment maintenance areas, including washing and repair
- Commercial or industrial waste handling or storage
- Outdoor handling or storing of hazardous materials
- Outdoor manufacturing
- Outdoor Food processing
- Outdoor animal care, confinement, or slaughter
- Outdoor horticultural activities



Prepared by the Department of Public Works  
415 S. Ivy Avenue  
Monrovia, CA 91016-2888  
Phone No.: 626-932-5575

# PROGRAM SUMMARY

On December 13, 2001, the California Regional Water Quality Control Board, Los Angeles Region (RWQCB), adopted NPDES Permit No. CA004002, governing municipal stormwater and urban runoff discharges within the County of Los Angeles. Under this permit, the City of Monrovia is required to develop and implement a program to incorporate stormwater pollution issues in development planning of projects.

The requirement to implement a program addressing development planning is based on the primary objectives of the 1987 Amendments to the Clean Water Act that established a framework for regulating stormwater discharges from municipal, industrial, and construction activities under the National Pollution Discharge Elimination System (NPDES). The primary objectives are to:



- Effectively prohibit non-stormwater discharges; and
- Reduce the discharge of pollutants to the “Maximum Extent Practicable” (MEP)

To achieve these goals, applicants whose projects are determined to be “Planning Priority Projects” are now required to incorporate post construction control Best Management Practices (BMPs) into their project, and submit plans to the City as part of the plan review process (A list of approved BMPs approved by the RWQCB can be found on the back of City Form P1).

To assist you in this process, City Planning and Public Works staff will guide you through the process. Projects determined to be a “Planning Priority Project” must prepare a Urban Stormwater Mitigation Plan. City Form “**PC**” will be provided to the applicant to assist in project determination. If the project is determined to be a “priority” project (either SUSMP or Site Specific), then Form “**P1**” must be completed, and the applicant will prepare the mitigation plan showing BMPs to be used.

Applicants will also need to prepare “Local Stormwater Pollution Prevent and Wet Weather Erosion Control” plans for applicable construction priority projects. City staff will provide all applicable forms. To facilitate project review, all applicable forms and plans and should be submitted at the same time.

This pamphlet is provided to assist you in the process and provide some helpful information. Should you require assistance during this process, please contact the Department of Public Works at (626) 932-5577.

THANK YOU FOR YOUR COOPERATION.

## EXAMPLE BEST MANAGEMENT PRACTICES

- Provide reduced width sidewalks and incorporate landscaped buffer areas between sidewalks and streets. However, sidewalk widths must still comply with regulations for the American with Disabilities Act and other life safety requirements.
- Design residential streets for minimum required pavement widths needed to comply with all zoning and applicable ordinances to support travel lanes, on-street parking, emergency, maintenance, service vehicle access; sidewalks; and vegetated open channels.
- Comply with all zoning and applicable ordinances to minimize the number of residential street cul-de-sacs and incorporate landscape areas to reduce their impervious cover. The radius of cul-de-sacs should be the minimum required to accommodate emergency and maintenance vehicles. Alternative turnarounds should be considered.
- Use permeable materials for private sidewalks, driveways, parking lots or interior roadway surfaces (i.e., hybrid lots, parking groves, permeable overflow parking etc.)
- Use open space development that incorporate smaller lot sizes
- Reduce building density
- Comply with all zoning and applicable ordinance to reduce overall lot imperviousness associated with parking lots by providing compact car spaces, minimizing stall dimensions, incorporating efficient parking lanes, and using pervious materials in spill over areas.
- Direct rooftop runoff to pervious areas such as yards, open channels, or vegetated areas, and avoid routing rooftop runoff to the roadway or storm water conveyance system.

Other BMPs include:

- Vegetated Swales and strips
- Extended/dry detention basins
- Infiltration basins
- Infiltration trenches
- Wet Ponds
- Constructed Wetlands (land permitting)
- Oil/Water Separators
- Catch Basin Inserts
- Continuous flow deflection/separation system
- Storm drain inlets
- Media Filtration
- Bioretention facility
- Dry wells
- Cisterns
- Foundation planting
- Catch basin screens
- Normal flow storage/separation system
- Filtration systems
- Primary waste water treatment systems
- Storm drain inlets

## SUSMP Projects & Numerical Treatment Criteria

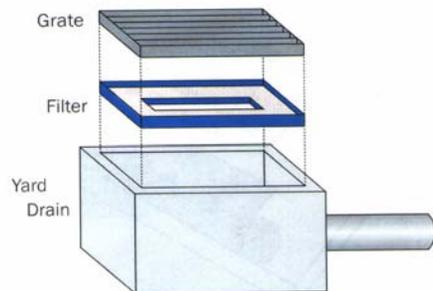
Projects in the following categories are identified as SUSMP projects and must incorporate provision for post-construction treatment BMPs on either a volumetric or flow based basis as specified by the NPDES permit

1. Single Family hillside development of one acre or more
2. 10 or more residential dwelling units
3. 100,000 square feet industrial development (This will change to one acre in March 2003)
4. Retail gasoline outlet with 5,000 square feet or more of impervious area and serving 100 or more vehicles per day
5. Restaurants with 5,000 square feet or 25 parking spaces or more
6. Project located in, adjacent to, or discharging to an Environmentally Sensitive Area that meet the following conditions: (1) where development will discharge storm water and urban runoff that is likely to impact sensitive biological species or habitat; and (2) create 2,500 square feet or more of impervious surface area
7. Existing subject facilities creating or replacing 5,000 square feet or more (redevelopment)

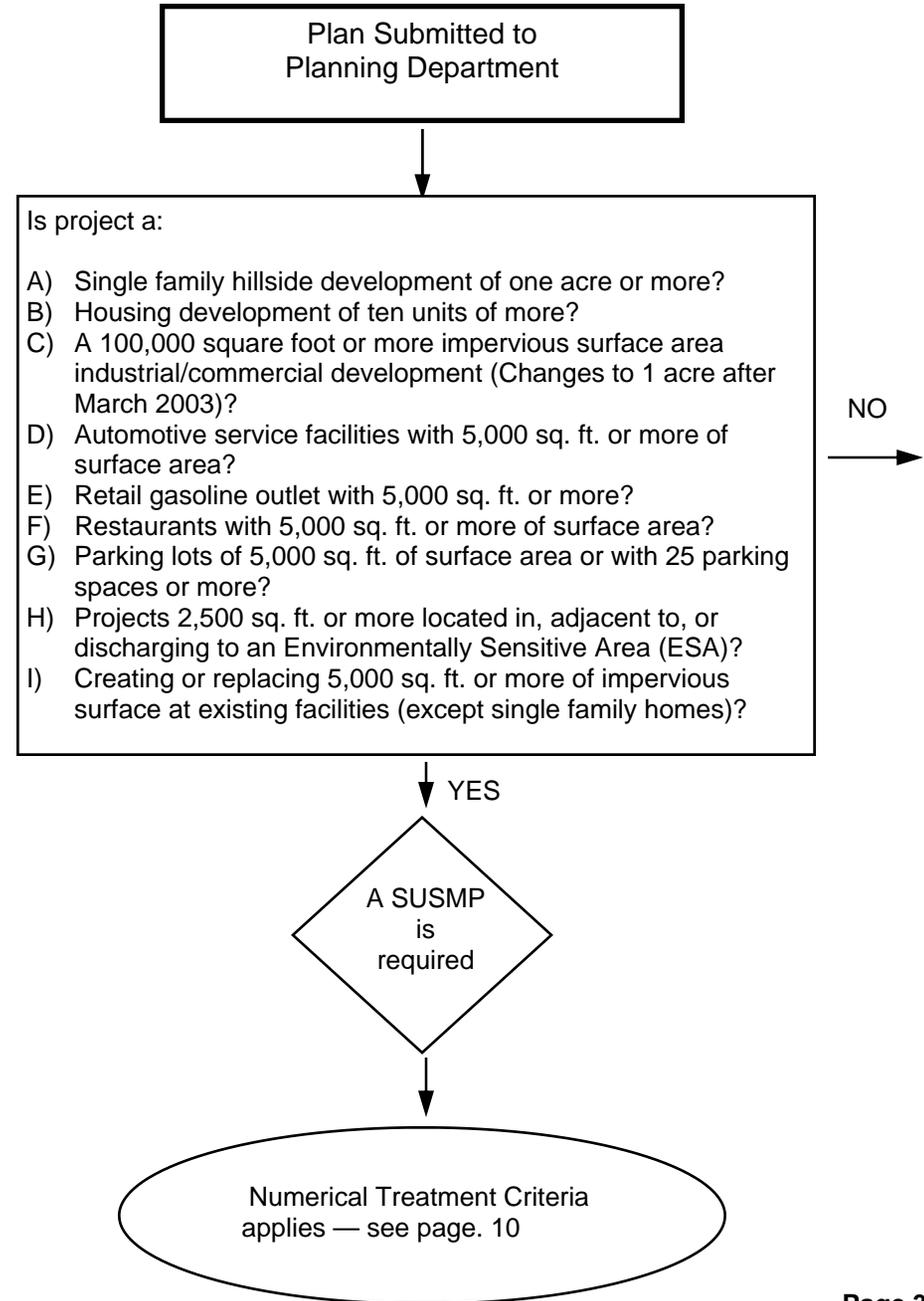
The most common used criteria for treatment BMPs are:

1. Volume Based Treatment BMPs must be designed to adequately treat runoff produced from a storm event of .075 inches; or
2. Flow based Treatment BMPs must be designed to adequately treat runoff produced from a rain event equal to at least 0.2 inches per hour

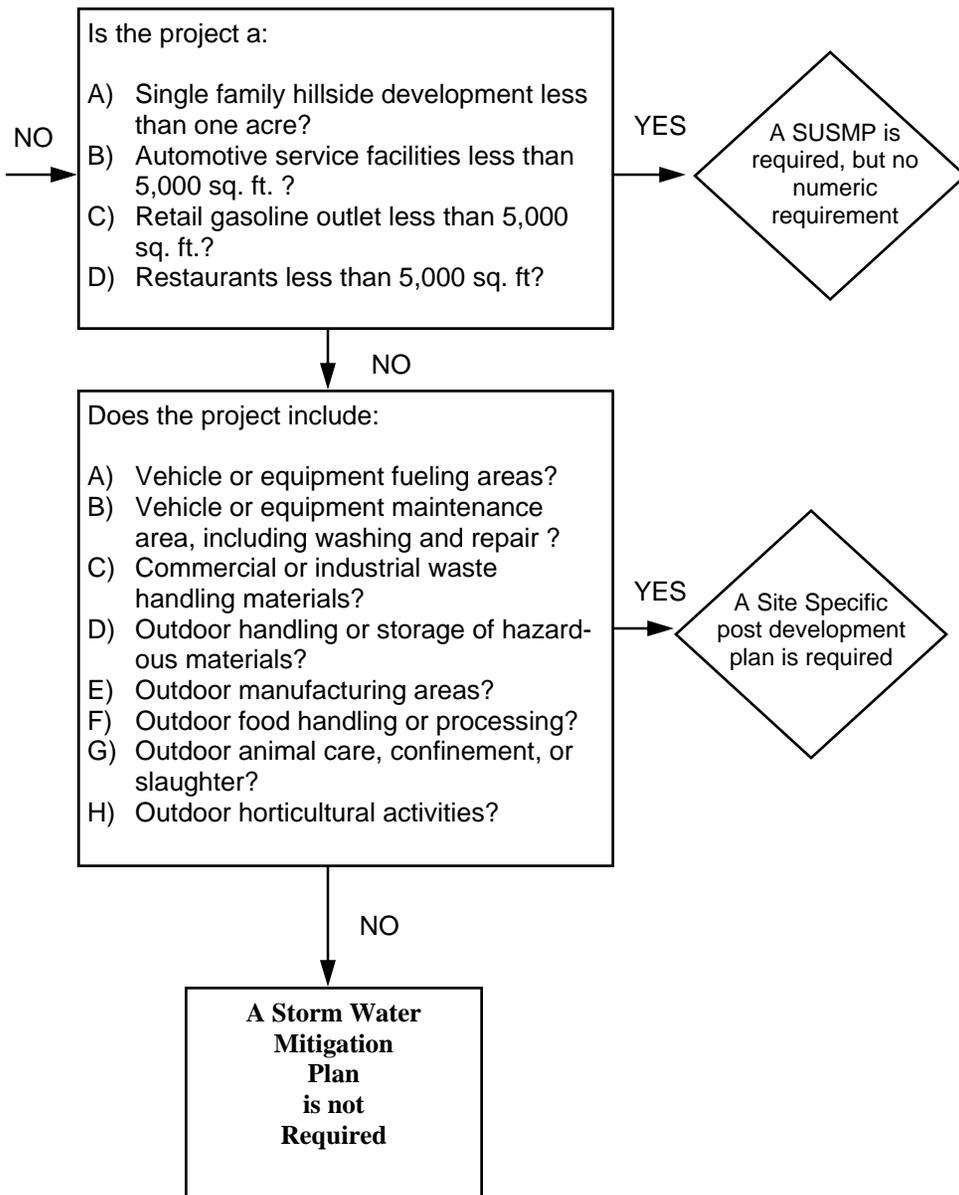
The calculations showing adequacy of the treatment BMPs must be wet -ink stamped by a registered engineer and include roof and parking lot areas. All treatment BMPs must be designed in a manner that flooding and soil instability will not result.



## PLANNING PRIORITY PROJECT FLOW CHART



# PRIORITY PROJECT PLANNING FLOW CHART— Contin.



## EQUIPMENT/ACCESSORY WASH AREAS

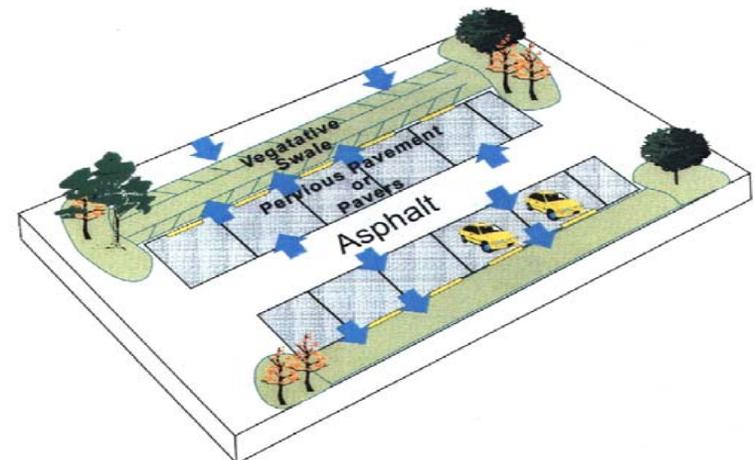
Outdoor equipment and accessory cleaning has the potential to contribute metal, oils and grease, solvents, phosphates and suspended solids to the City's storm drain system. Project plans must include provisions for

- Discharge through an approved grease interceptor to the sanitary sewer system (an Industrial Waste Discharge Permit may be required)
- If the wash area is located outdoors, it must be covered, paved, have a secondary containment and be connected to the sanitary sewer

## PARKING LOTS

Parking lots may accumulate oil, grease, and other vehicle fluids. To minimize the off site transport of these pollutants to the City's storm drain system, the project must incorporate design to:

- Reduce the amount of impervious land coverage of parking areas
- Infiltrate runoff before it reaches the storm drain system
- Treat runoff before it reaches the storm drain system
- Treat to remove oil and petroleum hydrocarbons at parking lots that are heavily used
- Ensure adequate operation and maintenance of treatment systems. The most common cause of treatment system failure is improper/ failed maintenance



## **PROVIDE STORMWATER SYSTEM SIGNAGE & STENCILING**

Storm drain stencils are high visible source controls that are typically placed directly adjacent to storm drain inlets. Graphical icons, either illustrating anti-dumping symbols or images of receiving water fauna are effective supplements to the anti-dumping messages. Projects will be required to consider the following:

- All storm drain inlets and catch basins must be stenciled with prohibitive language (i.e., “NO DUMPING—DRAINS TO OCEAN”) and/or graphical icons discouraging illegal dumping.
- Signs and prohibitive language and/or graphical icons discouraging illegal dumping must be posted along channels and creeks
- Legibility of stencil and signs must be maintained



## **PROTECT SLOPES AND CHANNELS**

If slopes and channels will be part of the project, the plans must include BMPs consistent with local codes and ordinances to decrease the potential of slopes and/or channels from eroding and impacting stormwater runoff:

- Convey runoff safely from the tops of slopes and stabilize disturb slopes
- Stabilize permanent channel crossings
- Vegetate slopes with native or drought tolerant vegetation
- Install energy disapters, such as riprap, at outlets of new storm drains, culverts, conduits, or channels that enter unlined channels in accordance with applicable specifications to minimize erosion

## **PROPERLY DESIGN OUTDOOR MATERIAL STORAGE AREAS**

Improper storage of materials outdoors can allow toxic compounds, oil and grease, heavy metals, nutrients and suspended solids to enter the City’s storm drain system. Where project plans or activities include materials that may contribute pollutants to the storm drain system, the following BMPs are required:

- Areas where materials are to be stored must be: (1) placed in an enclosure, such as, but not limited to, a cabinet, shed or similar structure; (2) protected by a secondary containment structure (i.e., berms, dikes, curbs)
- The storage areas must be paved and sufficiently impervious to contain leaks and spills
- Where feasible, the storage area should have a roof or awning to minimize collection of stormwater within the secondary containment area.

## **PROPERLY DESIGN TRASH STORAGE AREA**

Loose trash and debris can be easily transported by wind and water into nearby storm drain inlets, channels, and/or creeks. All trash container areas must meet the following requirements:

- Trash enclosures must be equipped with lids or screened, roofed or walled to prevent off site transport of trash
- Runoff should be diverted around trash areas to avoid flow through, and trash enclosure drainage should be directed to vegetated areas whenever feasible

## **PROVIDE PROOF OF ONGOING BMP MAINTENANCE**

Improper maintenance is the one most common reason water quality controls do not function as designed or to fail entirely. Developers must provide a statement declaring responsibility for all structural BMP maintenance until the time the property is transferred. The transfer of property must have conditions requiring the recipient to assume responsibility for maintenance of any structural BMPs to be included in the sales or lease agreement for the property.

If structural BMPs are located within a public area proposed for transfer, they will be the responsibility of the developer until the City, County or other appropriate public agency accepts them, and will be considered on a case by case basis. Written text in project conditions, CC&Rs for residential properties with home owner associations for maintenance of structural or treatment control BMPs must be included as part of any submittal.

## **SITE SPECIFIC PROJECT REQUIREMENTS**

For projects meeting the criteria for site specific mitigation plans, the project engineer must review the unique characteristics of the site and design specific BMPs to reduce the discharge pollutants in stormwater runoff to the maximum extent practicable. The plan should include all applicable preceding requirements plus BMP from any of the following sections (if your project will not involve these areas, they do not need to be addressed)

### **EQUIPMENT/VEHICLE WASH AREAS**

Equipment/accessory washing/steam cleaning has the potential to contribute metals, oil and grease/solvents, phosphates and suspended solids to the storm drain system. Include in your project plans an area for washing/steam cleaning of equipment and accessories. This area must meet the following:

- the area must be self contained, equipped with a grease trap, and properly connected to the sanitary sewer
- If the wash area is to be located outdoors, it must be covered, paved, have a secondary containment, and be connected to the sanitary sewer.

# STANDARD URBAN STORM WATER MITIGATION PLAN (SUSMP)

## LOADING/UNLOADING AREAS

Load/unloading dock areas have the potential for material spills to be quickly transported to the storm drain system. To minimize potential, the following design criteria are required:



- Cover loading dock area or design drainage to minimize run-on and run-off of stormwater
- Direct connections to storm drains from depressed loading dock (truck wells) are prohibited

## REPAIR/MAINTENANCE BAYS

Oil and grease, solvents, car battery acid, coolant and gasoline from repair/maintenance bays can negatively impact stormwater if allowed to come into contact with stormwater runoff. To prevent this from occurring, design plans for repair/maintenance bays must include the following:

- Repair/maintenance bays must be indoors or designed in such a way that does not allow stormwater run-on or contact with stormwater runoff
- Design area to capture all wash water leaks and spills. Connect drains to a sump for collection and disposal. Direct connection of repair/maintenance bays to the storm drain is prohibited. An Industrial Waste Discharge Permit may be required.

## FUELING AREA

Fueling areas have a high potential to contribute oil, grease, battery acid, coolant and gasoline to the storm drain system. Project plans must include the following BMPs:

- Where feasible, fuel dispensing areas should be covered with an overhang roof structure or canopy. The canopy's minimum dimensions must be equal to or greater than the area within the grade break. The canopy must not drain onto fuel dispensing area, and the canopy downspouts must be routed to prevent drainage across the fueling area
- Fuel dispensing areas must be paved with Portland cement concrete (or equivalent smooth impervious surface). Use of asphalt concrete shall be prohibited
- Fuel dispensing area must have a 2% to 4% slope to prevent ponding, must be separated from rest of site grade break that prevent runoff to the maximum extent practicable
- At a minimum, the concrete fuel dispensing area must be 6.5 feet from the corner of each fueling dispenser, or the length at which the hose and nozzle assembly may be operated plus one (1) foot, whichever is less

## SINGLE FAMILY HILLSIDE HOMES

The submittal from applicants for new single-family hillside homes must include provision for post construction BMPs:

1. Conserve natural area
2. Protect slopes and channels
3. Provide storm drain system stencil and signage
4. Divert roof runoff to vegetative areas before discharge unless diversion would result in slope instability
5. Divert surface flow to vegetative areas before discharge unless diversion would result in slope instability

Those SFH homes one acre or greater are subject to numeric design criteria (pg. 10)

**Applicants with other Priority Projects must include:**

## PEAK STORMWATER RUNOFF DISCHARGE

Peak stormwater runoff discharge rates shall not exceed pre-development levels for development where an increase peak stormwater discharge may result in an increase potential for downstream erosions.

## CONSERVE NATURAL AREAS

If applicable, the following items are required and must be implemented in the site layout during the subdivision design and approval process, consistent with applicable General Plan and Local Area Plan policies:

- Concentrate or cluster development on portions of a site leaving the remaining land in a natural undisturbed condition
- Limit clearing and grading natural vegetation to the minimum amount needed.
- Maximize trees and other vegetation at each site. Whenever practical, promote natural vegetative by using parking lot islands and other landscape areas
- Preserve riparian areas and wetlands

## MINIMIZE STORMWATER POLLUTANTS OF CONCERN

Pollutants that can be expected to be washed in to the storm drain system by stormwater runoff from equipment or surfaces should be identified. BMPs best suited to reduce these pollutants must be incorporated into the project design. A list of BMPs that can be used is located on page 11.