❹ If You Must Use Pesticides ...

- **Use a pesticide that is specifically designed to control your pest.** The insect should be listed on the label. Approximately 90% of the insects on your lawn and garden are not harmful.

- **Read labels!** Use only as directed. In their zeal to control the problem, many gardeners use pesticides at over *20 times the rate* that farmers do.

❺ Pesticide Disposal

- Household toxics–such as pesticides, cleansers and motor oil–can pollute the ocean and poison groundwater if disposed of in storm drains or gutters.

- Rinse empty pesticide containers and use rinse water as you would the product. Dispose of empty rinsed containers in the trash.
- City of Los Angeles residents should dispose of unused household toxics at a HazMobile instead of into the sink.

Call 1(800) 98 TOXIC (8-6942) for the location nearest you.

Dumping toxics into the street, gutter or storm drain is illegal!

- Gardeners, landscapers and residents outside the City of Los Angeles can call the reference numbers listed in this pamphlet to learn where they can properly dispose of household toxics.

Spill Response Agencies

City of Los Angeles
Department of Public Works, Bureau of Engineering
Stormwater Management Division
1 (800) 974-9794

City of Los Angeles
Police Department, Hazardous Materials Unit
(213) 237-2793 or (213) 485-4011

Los Angeles Fire Department
Health/Hazardous Materials Program
City: (213) 485-8080 County: (213) 890-4045

Recycling & Hazardous Waste Disposal

City of Los Angeles
Small Business Hazardous Waste Hotline
(800) 98-TOXIC/ 988-6942

Solid Resources Citywide Recycling Division
(213) 847-1444

Los Angeles County
Department of Public Works
Recycling & Household Hazardous Waste Hotline
1 (800) 552-5218

To Report Illegal Dumping

City of Los Angeles
Department of Public Works, Bureau of Engineering
Stormwater Management Division
1 (800) 974-9794

Los Angeles County
Department of Public Works
1 (800) 303-0003

To Report a Clogged Catch Basin

City of Los Angeles
Department of Public Works, Bureau of Engineering
Stormwater Management Division
1 (800) 974-9794

Los Angeles County
Department of Public Works
(818) 458-HELP or (888) CLEAN-LA

This is one in a series of pamphlets describing storm drain protection measures. Other pamphlets include:

Automotive Maintenance & Car Care

Food Service Industry

Fresh Concrete & Mortar Application

General Construction & Site Supervision

Heavy Equipment & Earthmoving Activities

Home Repair & Remodeling

Horse Owners & Equine Industry

Painting

Swimming Pool, Jacuzzi & Fountain Maintenance

Roadwork & Paving

For more information about storm drain protection or additional pamphlets, call:

STORMWATER PROGRAM
CITY OF LOS ANGELES

1 (800) 974-9794
Bureau of Sanitation
Department of Public Works
City of Los Angeles

Printed on Recycled Paper 5/96

Stormwater Best Management Practices (BMPs)

Landscaping Gardening & Pest Control

Safe Environmental Habits and Procedures for:

Gardeners
Homeowners
Landscapers

Stormwater Management Division Department of Public Works

Ocean Pollution Prevention It's Up to Us

Los Angeles has two drainage systems–the sewers and the ***storm drains.*** The storm drain system was designed to prevent flooding by carrying excess rainwater away from city streets out to the ocean.

Because the system contains no filters, it now serves the *unintended* function of carrying urban pollution straight to the ocean.

This pamphlet tells you how to prevent ocean pollution from "stormwater" or "urban runoff."

Rain, industrial and household water mixed with urban pollutants creates stormwater pollution. The pollutants include: oil and other automotive fluids, paint and construction debris, yard and pet wastes, pesticides and litter.

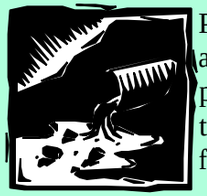
Urban runoff pollution flows to the ocean through the storm drain system–1,500 miles of pipes that take water and debris straight from Los Angeles streets to the ocean. Each day, 100 million gallons of polluted urban runoff enter the ocean untreated, leaving toxic chemicals in our surf and over 4,300 *tons* of trash on our beaches annually.

Urban runoff pollution contaminates the ocean, closes beaches, harms aquatic life and increases the risk of inland flooding by clogging gutters and catch basins.

These Best Management Practices (BMPs) will ensure a cleaner ocean and city.

Problems

Landscaping and garden maintenance activities can be major contributors to ocean pollution. Soils, yard wastes, overwatering and garden chemicals become part of the urban runoff mix that winds its way through streets, gutters and storm drains before entering the ocean.



Poorly functioning sprinklers and overwatering, for example, waste water and increase the number of pollutants flowing into storm drains.

Fertilizers, pesticides and herbicides are washed off lawns and landscaped areas. These chemicals not only kill garden invaders, they also harm useful insects, poison fish and contaminate ground and ocean water.

Leaves, grass clippings and tree trimmings that are swept or blown into the street and gutter are also ocean polluters. These wastes clog catch basins, increasing the risk of flooding on your street, and carry garden chemicals into the ocean. As they decompose, they also absorb oxygen fish need to survive.

Solutions

Best Management Practices that include the proper handling, storage and disposal of materials can prevent pollutants from entering the ocean through the storm drain system.

❶ General Landscaping Tips

- Protect stockpiles and materials from wind and rain by storing them under tarps or secured plastic sheeting.
- Schedule grading and excavation projects for dry weather.
- Prevent erosion by planting fast-growing annual and perennial grasses. These will shield and bind the soil.

❷ Garden & Lawn Maintenance

- Do not overwater. Conserve water by using irrigation practices such as drip irrigation, soaker hoses or micro-spray systems.
- In communities with curbside yard waste recycling, place clippings and pruning waste in approved containers for pickup. Or, take clippings to a landfill that composts yard waste.
- Do not blow or rake leaves into the street, gutter or storm drains.
- Use organic or non-toxic fertilizers.

- Do not over-fertilize and do not fertilize near ditches, streams or other water bodies.
- Store pesticides, fertilizers and other chemicals in a covered area to prevent runoff.

❸ Pesticide Alternatives

The "chemicals-only" approach to pest control is only a temporary fix. A more common-sense approach is needed for a long-term solution. It is called ***Integrated Pest Management.***

Plan your IPMº strategy in this order:

A) Physical Controls

- Caulking holes
- Hand picking
- Barriers
- Traps

B) Biological Controls

- Predatory insects
  e.g. Green lacewings eat aphids
- Bacterial insecticides
  e.g. Bacillus thuringiensis kills caterpillars

C) Chemical Controls - *Your Last Resort*

Use these least-toxic products:

- Dehydrating dusts (e.g. silica gel)
- Insecticidal soaps
- Boric acid powder
- Horticultural oils
- Pyrethrin-based insecticides

Safe Substitutes for Pest Control

Garden Aphids and Mites - Mix 1 tablespoon of liquid soap and 1 cup of vegetable oil. Add 1 teaspoon of this mixture to a cup of water and spray. (Oil may harm vegetable plants in the cabbage family.)

Caterpillars - When caterpillars are eating, apply products containing Bacillus thuringiensis to leaves.

Ants - Place boric acid powder or hydramethylnon baits in problem areas, cracks and insect walkways. It is a mild poison, so be sure it is inaccessible to children and pets.

Roaches - Apply boric acid powder to cracks and entry points (see ants above). Place bay leaves on pantry shelves.