

## HOW TO MAKE YOUR LANDSCAPE ENVIRONMENTALLY FRIENDLY

### WHAT'S THE PROBLEM WITH URBAN AND STORM WATER RUNOFF?

Urban runoff is the water that flows off our yards, streets, parking lots, and driveways into the storm drains and eventually into our streams, rivers and the ocean during the dry season. Whether it is from sprinkler over-spray, car washing or hosing down the driveway, everyone is a potential contributor to urban runoff. On the other hand, storm water runoff occurs only when it rains. In either case the runoff picks up pollutants from our yards, driveways, streets and gutters and flows directly into our local waterways.

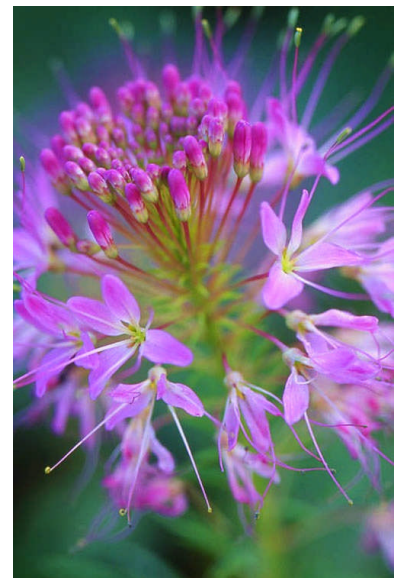
Whether by everyday irrigation or washing activities, or by rain, the water flows into the storm drains picking up pollutants like soil, motor oil, pesticides, fertilizers, pet wastes, and litter. All these contaminants end up in our waterways. Many people mistakenly think that the water entering our storm drains is cleaned or treated in some way. The truth is that the storm drain and sewer systems are entirely separate. Our storm drain system channels water, untreated, directly into our streams, rivers and the ocean. If our urban runoff water and storm water is contaminated, it will kill the plants and animals living in our streams and rivers, and cause beach closures and postings. Urban runoff is a major source of water pollution. Testing of water samples in several areas in El Cajon recently detected pollutants originating from excessive or inappropriate use of fertilizers.



### HOW CAN GARDENING HURT OUR WATERWAYS?

Caring for your garden and landscape on property that is miles from the ocean may seem to have little to do with stream, river and ocean pollution, but many gardening activities can be quite detrimental to water quality. Normal landscape and garden maintenance activities can be major contributors to storm drain pollution. Soils, yard wastes, over watering, and garden chemicals become part of the urban runoff mix that winds its way through streets, gutters and storm drains before entering our streams, rivers and ultimately the ocean.

- Nutrients from fertilizers, such as phosphorus and nitrogen, promote algae blooms and excessive plant growth. Algae depletes oxygen making it unavailable to fish and other aquatic life. Algae blooms and excessive plants limit much needed sunlight.
- Pesticides and herbicides don't just kill garden pests, they also harm beneficial insects, aquatic plants and fish that live in our waterways.
- Yard waste such as leaves and grass are pollutants in our waterways because during decomposition they absorb oxygen needed by fish and aquatic animals.
- Sediments add suspended solids to water, clogging the gills of fish and blocking sunlight, affecting photosynthesis of aquatic plants and phytoplankton.



### YOU CAN HELP

Whether you take care of your own yard or contract a professional service, you can play an important role in reducing storm water pollution, protecting water quality and conserving our valuable water and

natural resources. By implementing the simple solutions in this fact sheet you can take part in protecting our local waterways and beaches.

### **WHAT DOES COMPOSTING HAVE TO DO WITH STORM DRAIN POLLUTION?**

Runoff of chemical fertilizers into waterways is a serious problem. The increase of nitrogen and phosphorous causes bacteria to thrive, depleting the amount of oxygen available for fish. Compost releases nutrients slowly and doesn't have this runoff problem. There are other benefits to composting including creation of healthier soils and plants, which are less likely to succumb to pest infestations, thus reducing the need for chemical pest agents. Another obvious benefit is waste reduction in our landfills.



### **THINGS TO TALK TO YOUR YARD CARE SERVICE ABOUT**

If you use a professional yard care service, it is still up to you to make sure that your landscaper does not contribute to the storm drain pollution problem. Here are some things to consider when hiring a service or to discuss with your current service.

- When hiring a landscape maintenance service, check to make sure that they use integrated pest management methods.
- Ask them to grasscycle (leave the clippings on the lawn). Grasscycling reduces thatch, improves the soil, and reduces fertilizer requirements. Have them check regularly that sprinklers are functioning properly.
- Make sure they sweep up clippings and dispose of them properly, rather than blowing them out into the street.
- Discuss pest management. If you decide to use pesticides, know which ones are being used, use only when necessary and not on a set schedule. You should also be notified whenever they are applied. It is illegal for any landscape maintenance person to apply pesticides without a license. Check to make sure that they're properly trained and state licensed to apply pesticides.
- Know how often fertilizers are used. Even professionals over-fertilize.

### **WHAT YOU CAN DO**

#### **Fertilizing**

- Improve the health of your soil by adding compost and using organic mulches. You'll reduce your need for fertilizers and your plants will be healthier.
- Use fertilizers sparingly.
- Consider using organic fertilizers, since they release nutrients more slowly. Leave grass clippings on your lawn as a natural fertilizer.

#### **Watering**

- Avoid over-watering. Don't let water run out into the street.
- Use efficient irrigation methods such as soaker hoses and micro-sprinklers.
- If you have a spray head sprinkler system, consider adjusting your water method to a cycle and soak. Instead of watering for 15-minutes straight, break up the session into 5-minute intervals, allowing water to soak in before the next application.

#### **Yard Waste**

- Sweep up yard clippings from your sidewalks and gutters.
- Use your yard waste collection program, or better yet, start a compost pile.

## Pest Control

Use an integrated pest management (IPM) approach for a safer long-term solution to weed and insect problems rather than a more temporary chemical-only approach. Here are some helpful hints:

- The most effective pest control starts with prevention: building healthy soil, selecting appropriate plants, watering effectively, and using mulch. An ounce of prevention is better than a pound of pesticide.
- If you still have some pest problems, supplement with simple physical controls such as a strong spray of water, barriers, traps, and handpicking.
- Encourage biological controls by attracting beneficial insects. Make your yard a haven for beneficial insects by taking simple steps to provide them with food, water and shelter. Protect beneficial insects by avoiding broad-spectrum pesticides. You can even buy beneficial insects.
- Use pesticides only as a last resort and only use a pesticide that is specifically designed to control your pest. The insect should be listed on the label. Over 90% of the insects on your lawn and garden are not harmful.
- If you do use pesticides, please read the labels, and use only as directed. In their zeal to control the problems, many gardeners use pesticides at a rate over 20 times that of farmers.

