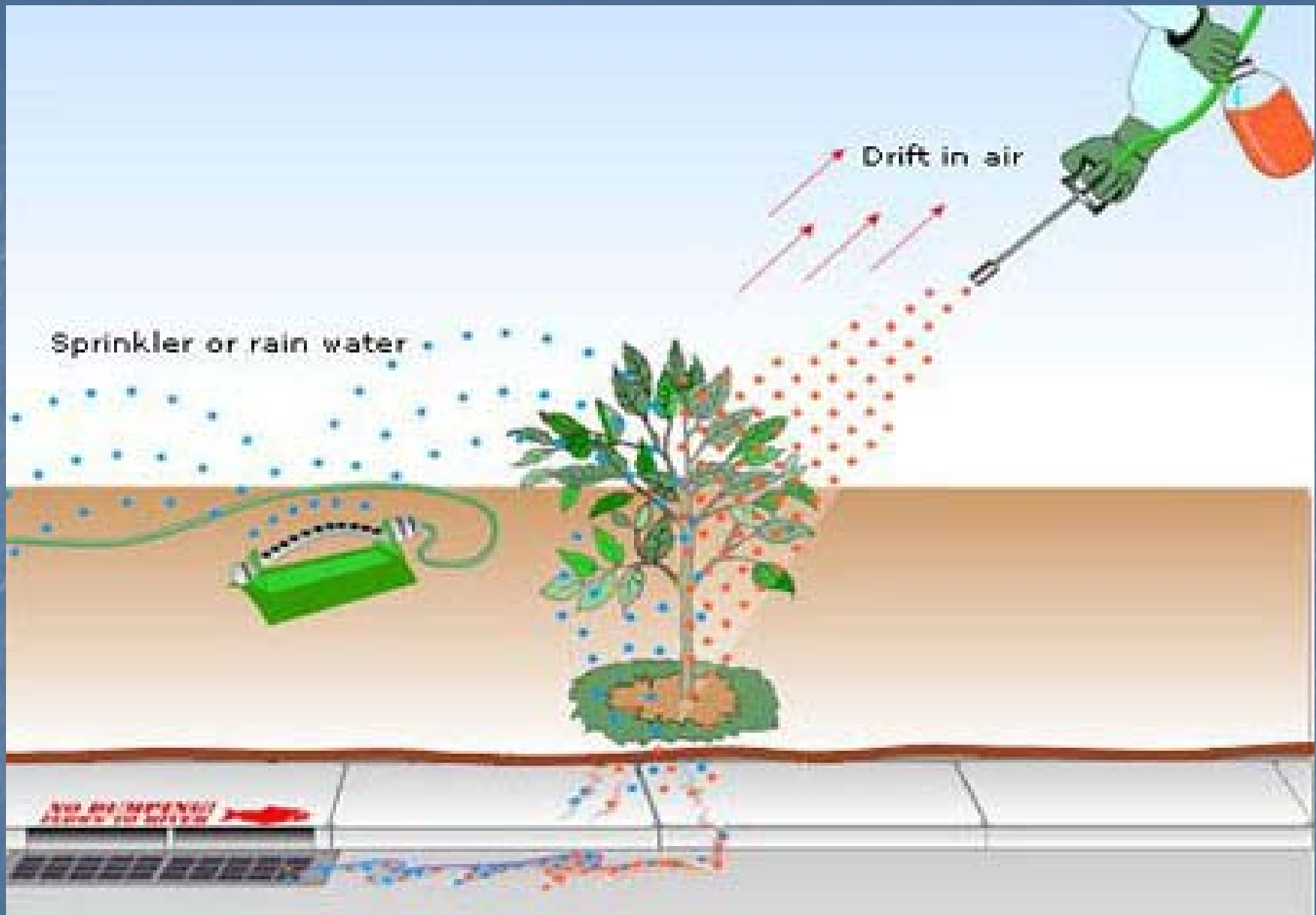


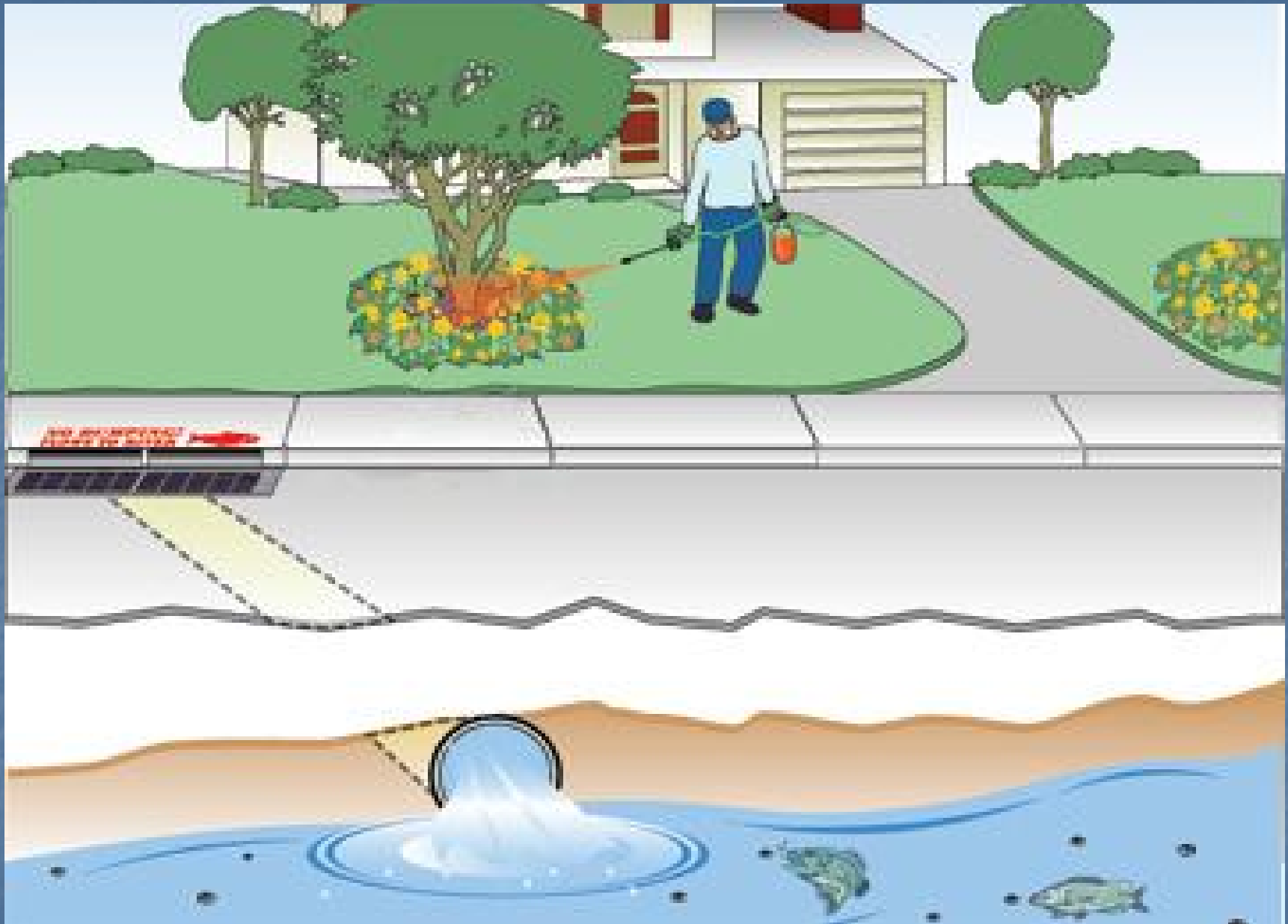
HOW MUCH IS TOO MUCH?
Or preventing pesticide pollution
in the urban environment

Presented by

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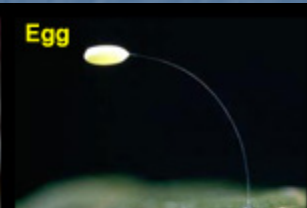
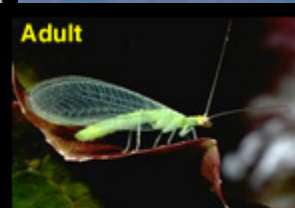
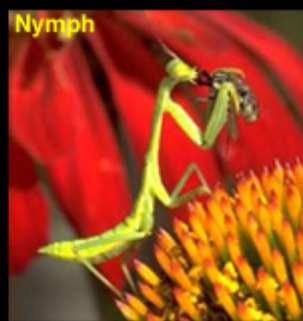


What you can do to help

- Do I really need to you use a pesticide or fertilizer?
- Are there less toxic or non-toxic alternatives available?
- Check out available information on websites such as those provided by the UC IPM program.

IPM

- Plant pest-resistant or well-adapted plant varieties such as native plants.
- Discourage pests by modifying the way you design, water, fertilize, and manage your garden.
- Alter the garden or home environment to deprive pests of the food, water, shelter, or other requirements they need to thrive.
- Keep pests out of the home and garden using barriers, screens, and caulking.
- Squash, trap, wash off, or prune out pests.
- Rely on [natural enemies](#) in your garden to kill pests, thereby eliminating the need for insecticides that may end up in our waterways.
- Pesticides should only be used when nonchemical methods are ineffective and pests are reaching intolerable levels; choose products carefully so that the least toxic, most effective material is used.
- **Learn how to**
- [Identify and manage](#) pests with least toxic methods:
- [Quick Tips](#) provide quick answers for some common home and landscape pests.
- [Home and garden](#) pages gives more detailed information for hundreds of pests.
- Properly water, fertilize, and care for plants to reduce future pest problems.
- See more tips on environmentally-friendly gardening practices:
- [Biological Control Pest Note](#)



Buying Pesticides

- **CHOOSING THE RIGHT PESTICIDE**

- The first step in choosing a pesticide is to accurately identify the organism (e.g., the specific insect, weed, or plant disease) that is causing the problem. If the pest is misidentified, you will not be able to choose an effective pesticide or other management strategy. If you aren't confident that you can do this using your own experience, get help from your University of California Cooperative Extension office or other reliable source. Use the plant problem-solving tables in the back of University of California Agriculture and Natural Resources publications, [Pests of the Garden and Small Farm](#) and [Pests of Landscape Trees and Shrubs](#) to identify major pests on most common garden plants.

Buying Pesticides

- Before purchasing a pesticide, also check the label to be sure it is appropriate to use on your plants or treatment site. For instance:
- Be sure the particular type of plant or site you plan to treat is listed on the label.
- Do not use pesticides labeled for use on ornamental plants on plants that will be eaten.
- Never use pesticides labeled for "outdoor use only" indoors.
- Pesticides can seriously damage some plants; read the label to be sure treated plants won't be injured.

Choosing Pesticides

- Finally, when choosing pesticides, remember that most pesticides (even the more toxic ones) only control certain stages of the pest. Many insecticides kill only the larval (e.g., caterpillars) stage, not the eggs or pupae. Other insecticides target only adults. Many fungicides are preventive treatments and will not eliminate infections that have already started, although they may slow their spread. Likewise, some herbicides (preemergence herbicides) kill germinating weeds but not established ones, while others (postemergence herbicides) are effective against actively growing weeds.

Using Pesticides

- **If you must use pesticides, follow these tips to reduce pesticide effects on your local waterways:**
- Identify your pest problem and choose the least toxic pesticide that targets your pest and achieves the results you want. For information about pest identification and management, see [how to manage pests in homes, gardens, landscapes, and turf](#).
- Determine how much pesticide you need and buy only the amount that you can use up.
- Use spot treatments whenever possible.
- Always wear a long-sleeved shirt, pants, eye protection, and other equipment required on the pesticide container label.
- [Dispose](#) of unused chemicals properly and according to label instructions.
- **Outdoors**
- Avoid overwatering after applying pesticides or fertilizers.
- Never let pesticide runoff flow into storm drains.
- Do not apply pesticides outdoors when rain is forecast or when it is windy out.
- Avoid applying pesticides on paved areas or near waterways.

Check Items

- **Keep Pesticides Out of Our Waterways by Following These Guidelines.**
- **Pesticides applied in the garden can move off target by drifting in the air or washing off into storm drains or creeks.**
- Illustration by C. Rusconi.
- - Be aware of weather patterns and do not apply pesticides just prior to rainfall or during windy conditions.
 - Avoid applying pesticides to hard surfaces such as sidewalks or driveways, where they can easily be washed off.
 - Check pesticide labels for warnings regarding use near bodies of water such as streams, rivers, and lakes.
 - Never dispose of pesticides in storm drains, sinks, or toilets.
 - Under no circumstances should pest control equipment be cleaned in a location where rinse water could flow into gutters, storm drains, or open waterways.
 - Never apply more than the rate listed on a pesticide label.
 - Be aware that some pesticides are more easily carried in surface runoff than others and therefore have a greater potential to move off site during irrigation or storms. The leaching and runoff risks of specific pesticides can be obtained from the [UC IPM Web site WaterTox database](#).

On Target



What you can do to help

- Follow the directions on fertilizers and pesticides.
- Do not use too much or when rain is expected.
- More is not necessarily better!

What you can do to help

- Do not put unused pesticides and fertilizers down the drain.
- Take them to a household hazardous waste collection center for disposal.
- Properly dispose of containers.

Disposal of Pesticides

- Never flush or drain
- Use it
- Check label for disposal instructions
- Do not Recycle
- Dispose properly in Garbage.
- County Hazardous waste collection

