

INFORMATION FOR RESIDENTS - PESTICIDE USE AND WATER QUALITY

Pesticides and Gardening

Unwanted insects in your lawn, garden, or home can be a source of frustration and damage the plants that you are trying to grow and maintain. Some pests can also potentially transmit disease. In order to effectively prevent or remove these pests, it is important to understand what is attracting them, how they are entering the home or garden, and what control is best for that specific pest. Approaching pests in this manner will save money, have a longer-lasting effect on the pest, and protect the environment.

TAKE ACTION! The next time you need to address a pest in your home or garden, follow the steps below.

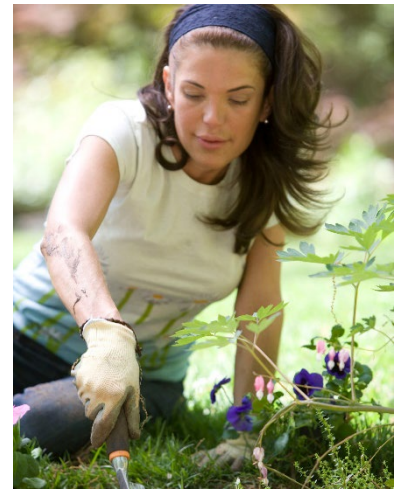
1. Identify if the Bug is Good or Bad

Check if the bug you are seeing is a beneficial insect that eats the “bad” bugs and pollinates your plants. [Click here for the 10 Most Wanted Bugs in Your Garden](#) or [here to identify typical beneficial insects](#).

2. Identify What Controls are Best for Your Pest

The OWOW partnership and the UC Integrated Pest Management Program have detailed information that can help you determine the best method to control your pest.

- English: [Ants](#) | En Español: [Hormigas](#)
- English: [Aphids](#) | En Español: [Áfidos o pulgones](#)
- English: [Bed Bugs](#) | En Español: [Chinchas](#)
- English: [Cockroaches](#) | En Español: [Cucarachas](#)
- English: [Fleas](#) | En Español: [Pulgas](#)
- English: [Moles, Voles, Gophers](#) | En Español: [Tuzas](#)
- English: [Mosquitoes](#) | En Español: [Mosquitos](#)
- English: [Rats and Mice](#) | En Español: [Ratas y Ratones](#)
- English: [Snails and Slugs](#) | En Español: [Caracoles y babosas](#)
- English: [Spiders](#) | En Español: [Arañas](#)
- English: [Yellow Jackets](#) | En Español: [Avispas chaqueta amarilla](#)



3. Consider No or Less Toxic Alternatives

First, try control pests with less toxic methods, such as traps, mulch, insecticidal soap, or beneficial insects like ladybugs. To learn more about less toxic pest management methods and products, visit the [OWOW partnership](#), [University of California](#), [Master Gardeners of El Dorado County](#), or [El Dorado Chapter California Native Plant Society](#).

4. If You Must Use Pesticides – Follow These Best Practices

- Read labels and apply pesticides using recommended amounts and application methods.
- Use the least amount of chemical needed. Remember, more is not always better.
- Avoid application when it is windy or before it rains.

- Don't overwater the area immediately after pesticide application. Excess water will carry the chemicals straight to the storm drain system and then to the local streams and rivers.
- Take care not to spill the product, and don't rinse spills into the street. If a spill occurs, absorb it with sawdust or kitty litter, sweep the absorbent material into a paper bag, and take absorbent material to your local hazardous waste collection facility. You may also contact your County Agricultural Commissioner or the County Office of Environmental Health to ask how to dispose of the bagged absorbent material.

Additional best practices [can be found here](#).

Hiring Pest Control and Landscape Professionals

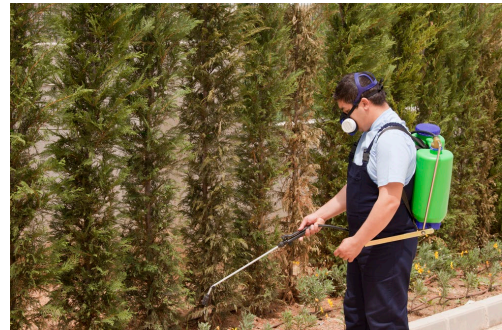
When dealing with unwanted pests around your home or business, you may want to hire a pest control service to take care of the problem for you. Pest control professionals have access to different products, specialized training, and other equipment that may be needed in order to manage a serious infestation or problem.

Pest management professionals can learn more about integrated pest management approaches and available training by visiting the UC IPM Program for [structural pest management](#) or [landscape pest management](#).

TAKE ACTION! By following these steps, you can support pest control companies that understand and implement integrated pest management and less toxic approaches.

1. Do some research about the pest you have and how it can be controlled
2. Ensure the pest control operator has a license issued by the California State Structural Pest Control Board and any other registrations, certifications, or insurance required. To verify the license for a pest control operator, visit the [Department for Consumer Affairs](#).
3. Hire a pest control operator who is certified as using integrated pest management practices, applies effective non-chemical strategies first, and knows how to effectively manage pests. Some [questions that you can ask and things to consider can be found here](#) and [here](#). Several certification groups can also be helpful in finding a pest control company:

- [Eco Wise Certified](#)
- [Green Shield Certified](#)
- [Green Pro Certified](#)



Disposing of Pesticides

If you have pesticides (liquid or solid) that you no longer need, they must be disposed of properly so that they do not harm you or the environment. Any leftover pesticides must be taken to your local household hazardous waste (HHW) facility. You can find your nearest HHW location by calling the California Environmental Hotline (1-800-253-2687). Residents may only dispose of empty pesticide containers in the trash without rinsing them.

EL DORADO COUNTY PESTICIDE DISPOSAL OPTIONS

TAKE ACTION! Any amount of unused pesticide must be disposed of at your local household hazardous waste facility or event. Regardless of what the label may say, it is illegal in California to dispose of any amount of pesticide in the trash. To find household hazardous waste [facilities near you](#) and El Dorado County provided [collection events](#), visit the County's Environmental Management Department's [webpage](#) or contact them directly at (530) 621-5300 or at emd.info@edcgov.us.

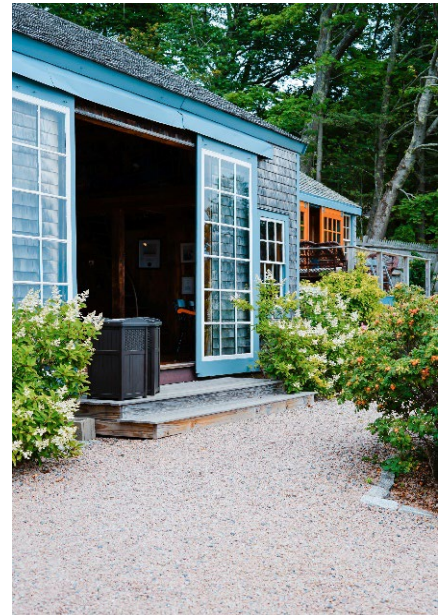


Landscape Design and Irrigation Management to Prevent Pesticide Runoff

Proper design and management of the landscaping around our homes and businesses can help prevent pesticide runoff from these areas into local waterbodies. Some [ways to reduce your landscaping irrigation needs and keep irrigation water onsite can be found here](#) and [here](#). Discover County-specific tips by [using the UC Seasonal Landscape IPM Checklist](#) or by contacting the [Master Gardeners of El Dorado County](#) or the [El Dorado Chapter California Native Plant Society](#).

TAKE ACTION! Slow the flow by following the [University of California's Statewide Integrated Pest Management Program](#) recommendations for pesticide-smart landscape design:

- **Help water soak into the ground.**
 - Use stones, pavers, gravel, mulch, or other materials that allow water to soak into the ground in areas where you don't have plants.
 - Aerate your soil and use organic material, like compost, as well as perforated drainage lines, to reduce areas of water pooling in your landscaping.
- **Create landscape features to collect runoff water.**
 - Consider using trees, rain gardens, terrace walls, rain barrels, or swales (long, shallow, grassy depressions) to hold water within the landscaped area and allow it to soak into the ground rather than draining directly to our surface waterbodies.
 - Consider using river-friendly gardening approaches such as selecting appropriate plants, minimizing the use of chemical pesticides, and creating "hydrozones" by grouping plants according to water needs. Learn more about how to make your yard river-friendly by following these [River-Friendly Landscape Guidelines](#).
- **Install and properly operate irrigation systems and equipment.**
 - Make sure your irrigation equipment is working properly by regularly inspecting it and consider installing a "smart" irrigation controller to reduce overwatering.



Pyrethroid Pesticides in Waterways

Although there are many different types of pesticides, one group of pesticides called *pyrethroids* is of particular concern because they are being found in our local waterways. Pyrethroid pesticides are primarily used for ants, cockroaches, and other insects. However, it takes them a long time to break down into less harmful components once they're in the environment, which means that they can cause unintended harm to many other types of beneficial insects (e.g., bees, ladybugs) and aquatic life.

TAKE ACTION! Products that contain pyrethroids typically have active ingredients that end with the letters “-thrin.” When reading the pesticide label, look to see if any of the active ingredients include the following:

- Permethrin
- Bifenthrin
- Cyfluthrin
- Beta-cyfluthrin
- Cypermethrin
- Deltamethrin
- Lambda-cyhalothrin
- Tralomethrin
- Esfenvalerate (an exception to the “-thrin” rule)

If a pyrethroid is an active ingredient, consider other ways that you might address the pest, such as other less toxic pesticides or controls that do not require the use of a pesticide.

To learn more, visit [Our Water – Our World: Pesticides and Water Quality](#).

TAKE ACTION! Next time you visit your local gardening and home supply retailer, look for displays and educational materials about pesticides and which controls are best for each type of pest that you may encounter. You can also click here [to find stores near you that participate in the OWOW program](#).

LEARN MORE!

Visit the UC Integrated Pest Management Program for [more resources on pesticide best practices](#).

For more information about how El Dorado County is working toward improving local water quality, please visit the [Tahoe Planning and Stormwater Management Homepage](#) or contact us at:

Phone: (530) 573-7906

Email: stormwater@edcgov.us

