

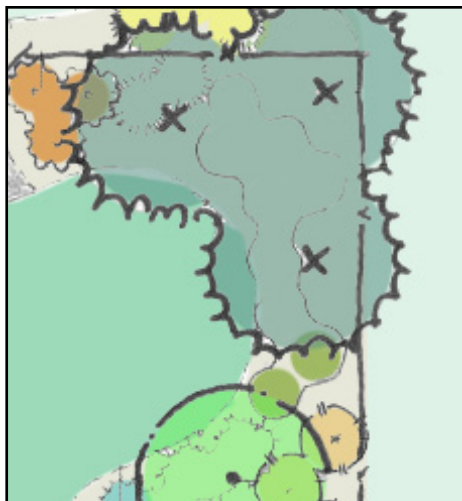
WATER QUALITY

for the Home Gardener



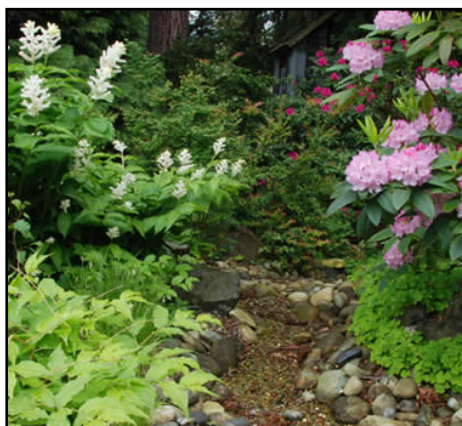
When used improperly, pesticides and fertilizers applied in the garden present a significant pollution risk to our local streams and rivers. **Integrated Pest Management** is a strategy of thoughtful land-care decisions that help minimize chemical use in the garden while keeping our plants healthy, our gardens pest-free, and our waters safe and clean! Your contribution to better water quality begins with these actions:

□ Start with good design!



- Know your site conditions! How much sun do you receive? What are the soil conditions? How does water move across your property?
- Adopt a “Right Plant, Right Place” philosophy that matches your plant’s growing requirements with the site conditions.
- Select plant varieties and cultivars that are disease and drought resistant.
- Consider using annuals to fill in the gaps. They’ll help suppress weeds until the rest of your plants mature and get established.
- Select native Northwest plants that, once established, will thrive without added pesticides, fertilizers and pruning. They’re often more drought tolerant, resistant to pests, and attract diverse local wildlife that help pollinate and fight pests.
- Incorporate rain gardens, swales, and greenroofs into your landscape to minimize stormwater runoff potential.

□ Keep your plants healthy



- Successful IPM begins with correct identification of the plant, pest, or weed. Once you understand your needs, you can select the appropriate IPM practice.
- Purchase your plants from suppliers that guarantee weed-free seeds, soil, and nursery stock.
- Build healthy soil by adding compost and mulch.
- Learn about proper planting and mulching techniques.
- Provide an appropriate amount of water for your plants. Overwatering is a frequent cause of plant disease.
- Irrigating in mid-morning allows plants to dry rapidly, which will reduce the likelihood of infections by fungi.

WHAT ARE NATIVE PLANTS?

In general, plant species are considered native to the Pacific Northwest if they were present before European settlement (~1850). A more detailed explanation, however, is that native plants are those that have benefited from thousands of years of co-evolution with local soils, animals, and microorganisms. The geographic boundaries of these relationships are known as ecoregions.

As a result, native plants are generally better adapted to the ecoregion climate, resistant to regional pests and diseases, and provide habitat that supports critical lifecycle functions of local wildlife. When purchasing native plants for your garden, try to select seed or stock that was grown in your home ecoregion.

Oregon's eight ecoregions:

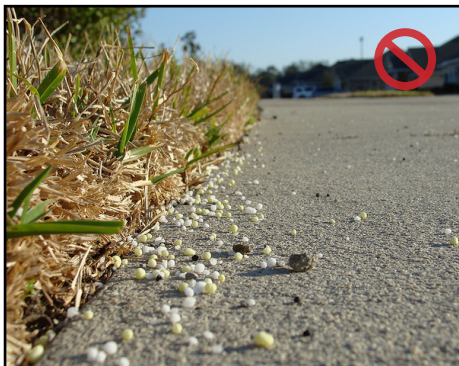


☐ Prioritize physical and cultural controls



- Keep your trees healthy by following proper pruning techniques. Thinning of shade trees may help alleviate unwanted moss by allowing in more sunlight.
- Many common garden weeds can be removed through hand pulling or non-chemical methods.
- Use “natural enemies”, such as lady bugs and lacewings, to control pests.
- Avoid overwatering lawns and garden beds. The runoff can carry chemicals off your lawn and into nearby storm drains.
- Mow high! Tall grass produces deeper roots that better absorb water. Set your mower to its highest setting.
- Recycle grass clippings and leaves in order to return organic matter back to your lawn.
- Add a layer of mulch to your garden bed to help suppress weeds and retain soil moisture.

☐ Be smart with chemicals



- Pesticides and fertilizers should only be used when non-chemical alternatives are ineffective. Consider the water quality implications when using any type of home or garden chemical treatment.
- Select chemicals based on the actual need and consider plant phenology (natural growth cycles) for best application times. Contact the Clackamas SWCD WeedWise Program for assistance.
- Consult the **Grow Smart, Grow Safe** guide for the least hazardous products available for your specific need. Product ratings include: hazard to aquatic life, chemical half-life in the soil, and water pollution and runoff hazard.
- Prevent spills when mixing and handling chemicals. Calibrate application equipment before filling and using it in the garden.
- Mix only the amount of chemical that is needed for the specific job.
- Spot-treat problem areas rather than broadcast applications. Sweep excess granules from the sidewalk or driveway.
- Use slow-release fertilizers to minimize leaching. Don't apply if rain is in the forecast.
- Never rinse application equipment near ditches, streams, or storm drains. Dispose of garden chemicals properly.



Visit www.conservationdistrict.org to learn more about the urban conservation program and additional services offered by the Clackamas County Soil and Water Conservation District.

Images: www.wnps.org, www.oregonstate.edu, www.nacdnet.org

Erik Carr, Urban and Community Conservationist
Clackamas County Soil and Water Conservation District
503-210-6012
ecarr@conservationdistrict.org