

Protect our River

Tree Grower Tips

Oregon is the largest Christmas tree producer in the nation, and much of the Christmas tree industry is concentrated along the Clackamas River watershed, a drinking water source for over 360,000 Oregonians and a wild salmon stronghold.

Pesticide Use on Tree Farms:

Many tree growers apply herbicides, like Roundup, to control weeds. They apply insecticides, such as Lorsban, to kill damage causing aphids. Growers also use fungicides to control diseases. The Oregon Department of Environmental Quality has found many toxic pesticides at levels exceeding EPA benchmarks in the Clackamas watershed. At least two of these – chlorpyrifos and chlorothalonil – are used by growers.

Pesticides can cause health risks:



Herbicides

Atrazine
Weed Killer Spray



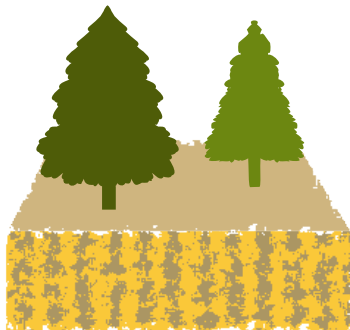
Insecticides

Chlorpyrifos
Sprays & Granules



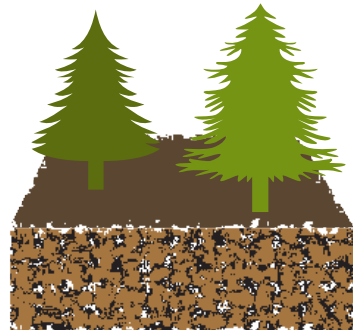
Fungicides

Chlorothalonil
Mold & Mildew Spray



Pine Trees

Sandy or sandy loam soil
Porous, drains quickly



Fir and Spruce Trees

Fine-texture loams and clay loam
Holds more water

Prevention and Monitoring:

To minimize use of pesticides, plant tree species well-suited for your specific site conditions, especially soil type and drainage. Contact Oregon State University's Natural Resource Conservation Service Field Office or Clackamas Soil and Water Conservation District to find out what soil type you have and which trees might be most appropriate. Once planted, check your trees often for pests and disease. Catching an infestation early enables you to contain the problem quickly, keeping damage to a minimum.

Hedgerows and Buffers:

One of the best ways to keep pesticides out of waterways is to leave a vegetative buffer strip along the stream. Buffers help protect waterways from drifting pesticide spray and trap sediments, pesticides and pollutants carried by runoff. Buffers also minimize stream bank erosion by holding soil in place. For technical assistance with erosion control or prevention, contact the Clackamas Soil and Water Conservation District.



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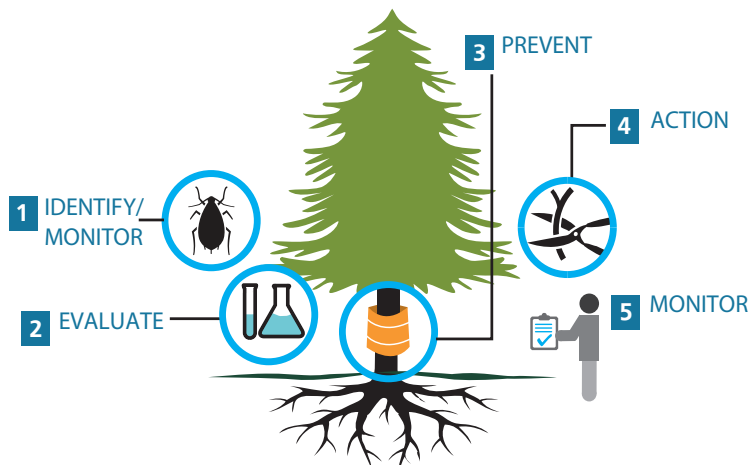
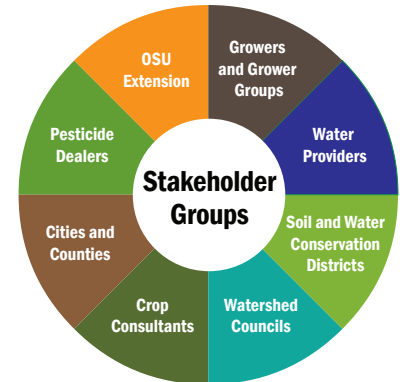
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Pesticides carried by stormwater runoff, wind and irrigation can contaminate streams and the Clackamas River, threatening the health of aquatic life and the safety of drinking water.

Learn about pesticide best practices:

Agricultural producers such as Christmas tree growers are facing possible regulation if pesticide levels in streams are not reduced.

Work with Clackamas River Basin Council, Clackamas Soil and Water Conservation District and Oregon State University to create a plan for the Clackamas Watershed to voluntarily reduce or eliminate pesticides of concern; leaving growers free from excessive regulation and reporting requirements.



Integrated Pest Management:

Programs and information are available for growers who want to minimize environmental impacts by practicing integrated pest management. The Clackamas Basin Pesticide Stewardship Partnership offers many resources.

IPM is not a single pest control method but a series of pest management evaluations, decisions and controls. IPM plans describe potential pests and define the critical threshold for the pest to be classified as a problem. Early detection can control pests before damage is severe.

Resources:

Clackamas River Basin Council
www.clackamasriver.org/resident-resources

Clackamas River Water Providers
www.clackamasproviders.org

Clackamas Soil and Water Conservation District
www.conservationsdistrict.org

Metro/Grow Smart, Grow Safe
www.growsmartgrowsafe.org

OSU Extension Christmas Tree Program
www.extension.oregonstate.edu/forests/christmas-trees

North Willamette Research and Extension Center
www.extension.oregonstate.edu/nwrec/christmas-trees
offers the Pacific Northwest Weed Management Handbook

US Department of Agriculture
www.nrcs.usda.gov

Oregon Department of Agriculture
www.oregon.gov/ODA/programs/Pesticides

Clackamas Basin Pesticide Stewardship Partnership
www.conservationsdistrict.org/programs

Parting with Pesticides

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