



Herbicide Use in Forestry

A forest management tool

What are herbicides?

Herbicides are considered a “pesticide,” which is a broad term for chemicals that also include fungicides, insecticides, rodenticides and other pest control tools. Herbicides are used in agriculture, residential and urban areas, forestry, industrial sites, railroads, and other settings.

How are herbicides used in forestry?

Forest landowners primarily use herbicides to prepare forestland for tree planting and again to control competing weeds that hinder survival and growth of young trees.

Herbicide treatments used in forest management include foliar spray (broadcast, strip, spot, or direct), stem injection, basal spray, and cut-stump. Herbicide applications are done by aerial (helicopter, fixed-wing or unmanned aircraft system (drone)), ground equipment or hand.

Forest landowners also use herbicides to control invasive noxious weeds, such as gorse, Scotch broom, Himalayan blackberry, and Japanese knotweed. These noxious weeds can encroach on roads and streams, displace native species, and lower the quality of habitat for wildlife. Noxious weeds can also increase the risk of wildfire and can make cropland less productive.

How often are herbicides used in forestry?

Forest landowners are responsible for about 4 percent of all pesticides (including herbicides), by weight, used every year in Oregon. In western Oregon, herbicides are typically applied 1 to 3 times during a 40-to-70 year timber harvest rotation. Herbicides are commonly used for site preparation before tree planting and sometimes later to control competing vegetation while seedlings gain height. In eastern Oregon, herbicides are used less frequently because of different management methods on the slower-growing forests than the rest of Oregon.

What laws regulate forest herbicide use?

All pesticides used in the United States must be registered with the U.S. Environmental Protection Agency (EPA) and must carry federally approved labels describing permitted uses and appropriate protection measures. To be registered, pesticides must be tested for effects on humans and the environment.

Pesticide sellers and applicators must comply with the state's Pesticide Control law (Oregon Revised Statute Chapter 634) which requires state product registration and applicator licensing. The law prohibits faulty, careless, or negligent application of herbicides.

Pesticide users on forestland must also follow Oregon's Forest Practices Act (FPA), administered by the Oregon Department of Forestry (ODF). The FPA requires operators to protect human health and safety, soil, air, fish, wildlife, and water quality through measures that:

- Retain and protect trees and plants along some streams following logging,
- Prohibit helicopter herbicide applications within:
 - 300 feet around schools and dwellings
 - 75 feet or more of fish-use or drinking water streams and
 - 50 feet for some non-fish streams,
- Prohibit other aerial applications (non-helicopter) within 60 feet of fish-use or drinking water streams
- Prohibit all aerial applications within 60 feet of open water greater than ¼ acre,
- Prohibit ground-based applications within 10 feet of fish-use or drinking water streams and open water greater than ¼ acre, and
- Prevent, control and report leaks and spills.

Note: A pesticide license is required for an individual to prescribe use of or application of herbicide on another person's land. Landowners are not required to have a pesticide applicator's license for prescribing or applying herbicide to their own land.

How are herbicides monitored in streams?

ODF continues to work with federal, state, and local partners to monitor water quality and stream health during forest management activities. Oregon's Pesticide Stewardship Program, facilitated by ODA, identifies local pesticide-related water quality issues, monitors pesticide presence in watersheds across the state, and helps pesticide users identify and implement solutions to improve water quality and crop management.

What is required prior to applying pesticides?

Before applying herbicides on forestland, the pesticide applicator must submit a notification of operation that describes the planned application using ODF's internet-based system called E-Notification (also known as FERNs). The E-Notification must be submitted at least 15-days prior to beginning the operation.

For helicopter pesticide applications, the operator sets a 90-day application period and may begin 15-days after the notification submission date, if ODF determines there is no "nearby recipient" within 1 mile of the spray unit. If there is a "nearby recipient" within 1 mile of the spray unit, the operator must wait 30-days before spraying. The operator must status in E-Notification a planned spray unit by 7 p.m. the day before spraying.



For submission of forest operations, subscriptions to notifications or registrations of dwellings or water intakes see <http://ferns.odf.oregon.gov/E-Notification>

Note: ODF requires an E-Notification for herbicide application where the desired outcome is forest management, but is not required for vegetation management around households.

How can I get information on herbicide applications?

The E-Notification is an internet database of submitted notifications, which is accessible to the public as a subscriber or registrant. Subscribers receive an email for their area of interest when a notification is submitted to E-Notification. Registrants may register their resident parcel or surface water intake to receive an E-Notification alert for next day planned helicopter pesticide applications within one mile of their home or surface water intake. ODF will reconcile the registrant's parcel and surface water intake information into the E-Notification database to determine potential "nearby recipients" within 1 mile of the spray unit. Registrants may view planned helicopter pesticide applications 14-days after the notification submission date.

What if I suspect a violation of the law?

If you suspect a violation of the Oregon FPA laws has occurred, please contact your local ODF stewardship forester at <https://tinyurl.com/odf-find-a-forester>. The ODF stewardship forester will investigate your report in coordination with other state agencies and provide information back to you on their findings.

What if there is a pesticide spill?

For immediate emergencies, please call 911. Under rules administered by the ODF and Oregon Department of Environmental Quality (DEQ), if a spill occurs on forestland, those responsible are required to report the incident.

Report a pesticide spill by calling the Oregon Emergency Response System (1-800-452-0311) or the National Response Center (1-800-424-8802) and contact your local ODF stewardship forester at <https://tinyurl.com/odf-find-a-forester>.

Oregon Department of Forestry Field Offices

For more information about the Oregon FPA or the Forest Practice Rules, please contact your local ODF stewardship forester at <https://tinyurl.com/odf-find-a-forester>

For additional information:

- National Pesticide Information Center
<http://www.npic.orst.edu>
- Oregon Department of Agriculture (ODA)
 - Oregon's lead agency for pesticide use
<http://www.oregon.gov/ODA/PEST/www.oregon.gov/ODA/PEST/>
 - Oregon's Noxious Weed Program
<https://www.oregon.gov/ODA/programs/Weeds/Pages/Default.aspx>
 - Pesticide Analytical and Response Center (PARC)
<http://www.oregon.gov/ODA/programs/Pesticides/Pages/PARC.aspx>
 - Pesticide Stewardship Program
<https://www.oregon.gov/oda/programs/pesticides/water/pages/pesticidestewardship.aspx>
- Oregon Department of Environmental Quality (DEQ)
<http://www.oregon.gov/DEQ/>
- U.S. Environmental Protection Agency (EPA)
<http://www.epa.gov/pesticides/>