Oregonians for Food & Shelter

AERIAL PESTICIDE APPLICATION IN FORESTRY: USAGE, LAWS, AND REGULATIONS

Facts About Forestry Pesticide Use [1]

- Pesticide application to forestland includes primarily herbicides, which target noxious and invasive weeds such as blackberry and Scotch broom.
- Typically, herbicides are only applied one to three times total to any given parcel, only during the first few years of a 40-70-year production cycle.
- Herbicides are used as a key aspect of reforestation. Herbicides hold back noxious and invasive weeds to ensure that newly planted trees can out compete them and become “free to grow,” which is required by Oregon law.
- Pesticide use in forestry accounts for approximately 4 percent of total commercial pesticide use in the state across all other contexts.

Laws and Regulations governing pesticide use in forestry [2]

- Multiple federal and state agencies regulate pesticide use and impacts, including the US Environmental Protection Agency, and Oregon Departments of Agriculture, Forestry, and Environmental Quality.
- Pesticide regulation is governed by overarching federal laws including the Clean Water Act and the Endangered Species Act, and includes extensive assessments for every registered product. These assessments evaluate risks to humans and the environment and lead to labels and use requirements.

State Aerial Pesticide Protections

	Washington	California	Oregon
State enforcement of **product label laws**	√	√	√
Buffers on all **flowing water**	√	√	√
Buffers on **community water intakes**	√	√	√
Buffers on **individual water intakes**			√
Buffers on **Agricultural water intakes**			√
Buffers around **Homes**	√		√
Buffers on **Schools during school hours**		√	√
Buffers on **Schools ALL days/hours**			√
Specific **Aerial Applicator License**		√	√
Specific **Seasonal Window** of operation			√
Neighbor Real-Time Notice prior to application			√
Neighbor Post-operation notification			√

- Pesticides are rigorously evaluated and regulated for use in specific contexts. Labels are specific to sites and application methods, such as forestry and aerial application – and usage requirements are designed accordingly to be protective in specific settings.
- Oregon’s state-imposed laws are even stricter than existing federal laws. The Oregon Forest Practices Act, first established in 1971 and updated more than 40 times since, sets stringent standards for a variety of forest management practices including harvest, reforestation, and pesticide application.
- The most recent update happened just last year and was the most comprehensive overhaul of forest practice rules in 50 years resulting from a collaborative effort between the timber industry and environmental groups, known as the Private Forest Accord (PFA).

[1] https://www.oregon.gov/odf/Documents/workingforests/HerbicideFacts.pdf
[2]https://www.oregon.gov/oda/programs/Pesticides/Documents/2023/PesticidesandWaterinForestry.pdf

- Senate Bill 1602, the first bill passed as part of the PFA in 2020, further expanded protections for helicopter applications of herbicides by widening existing buffers around forest waters and creating new large (300 foot) buffers around homes, schools and drinking water intakes.
- SB 1602 also created an electronic notification system for real-time communication of helicopter herbicide applications to neighbors within a mile of planned applications. Oregon is now the only state to require these protections.

Aerial Application is safe, precise, and effective

- Aerial application is often the safest, fastest, and most efficient way to apply herbicides, particularly to remote, steep and rough forest terrain.
- Aerial application requires one trained and licensed pilot in a protected cockpit to apply herbicides. The alternative, ground-based application, uses a team of workers that need to walk through dangerous and often unsafe terrain carrying heavy backpacks.
- Cutting-edge technology is used to guarantee areas such as waterways, neighbor boundaries, and other no-spray areas are adequately buffered and protected. This technology includes GPS, nozzle and droplet technologies, and anti-drift additives which carry droplets straight to the ground.
- Whether pesticides are applied aerially or by ground, pesticide drift is illegal, and results in serious consequences, from fines to loss of professional licensure.

Data demonstrate that regulations work, and even before the most recent state updates!

- The Oregon Department of Agriculture reports that from 2019-present, there have only been five documented violations of drift from helicopter applications of herbicides in forestry – an average of one incident per year across the entire state.
- Data from the Department of Environmental Quality confirm that forests provide the highest water quality of any land use in the state, including those with active management activities like harvest and herbicide use (see tables starting with table 2, and the second paragraph on page 7).
- After a decade of water quality monitoring through the Pesticide Stewardship Partnership (a joint effort of the Oregon Departments of Environmental Quality, Agriculture, Forestry and the Oregon Health Authority) pesticides were only detected in eight percent of samples taken from forested areas, and the highest level of detections were seven times lower than safety benchmarks for aquatic life. Both the Yamhill and South Umpqua monitoring efforts concluded applications used in forestry lie within the low concern category and pose a low threat to aquatic life.
- According to the Eugene Water and Electric Board's recent water quality monitoring of the McKenzie watershed, their water "meets or exceeds all state and federal drinking water health standards, and that EWEB has once again been listed as an "Outstanding Performer" by Oregon Health Authority (OHA). This is despite private industrial forestland accounting for the greatest single land use in the McKenzie watershed (approx. 37 percent), and despite extensive testing for hundreds of potential contaminants. They found no evidence of significant contamination from forestry. In 2012, EWEB concluded, "Forestry pesticide use is not considered a likely threat to drinking water quality."