



# Aerial Herbicide Application under Forest Practices

Prepared for:

**The Work Group on Aerial Application  
of Herbicides on Forestlands**

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# Objectives

- Provide an introduction to DNR forest practices authorities and responsibilities
- Describe how DNR reviews and complies forest practice applications
- Describe actions taken following a 2016 work group's recommendations to the Forest Practices Board



# Statute and Rules



Photo credit: WA Department of Natural Resources



# The Forest Practices Act

- Establishes that, "... coincident with maintenance of a viable forest products industry, it is important to afford protection of forest soils, fisheries, wildlife, water quantity and quality, recreation, and scenic beauty."<sup>1</sup>
- Requires the Forest Practices Board (FPB) to, "... adopt forest practices rules ... that ... establish minimum standards for forest practices."<sup>2</sup>
- The FPB has adopted rules for the application of chemicals in the forested environment (Title 222 Chapter 38 WAC)

<sup>1</sup> RCW 76.09.010

<sup>2</sup> RCW 76.09.040

<sup>3</sup> RCW 76.09.020 and WAC 222-16-010



# Forest Practices Rules

## WAC 222-38-010

- The forest practices rules implement best management practices designed to:
  - Eliminate the direct entry of pesticides and fertilizer to water
  - Minimize pesticide/fertilizer entry into:
    - riparian management zones associated with fish-bearing waters;
    - wetland management zones; and
    - buffers of perennial non-fish-bearing waters





# Forest Practices Rules

## WAC 222-38-020(3) and (4)

- No aerial herbicide application is allowed in RMZ areas closest to streams, wetland management zones, or in other specific areas
- The minimum separation required varies
  - Using fish-bearing streams to illustrate:
    - In western WA, can be as little as 60 feet or as much as 150 feet
    - In eastern WA, between 75-100 feet



# Forest Practices Rules (con't)

## WAC 222-38-020 (4)

- A 200-foot buffer is required around homes
- A 100-foot buffer is required next to agricultural land
- Notification is required:
  - Posting at access points is required 5 days before and for 15 days after application

Buffered Features	Minimum Buffer, Favorable Winds (<7mph)	Maximum Buffer Calm/Unfavorable Winds
<i>Fish Bearing Waters</i>	60-150 feet. (width of inner zone)	325 feet
<i>Flowing non fish bearing waters</i>	50 feet	100 feet
<i>A Wetland</i>	50 feet	325 feet
<i>B Wetland</i>	25 feet	325 feet
<i>Residences</i>	200 feet	
<i>Agricultural lands</i>	100 feet	





# Forest Practices Rules (con't)

## WAC 222-38-020(7)

Herbicides must be applied in accordance with:

- Limitations printed on the federal EPA container registration label
- Rules adopted by Washington Department of Agriculture (e.g., licensing and reporting)
- Limitations established by the federal OSHA, or the state Department of Labor and Industries as they relate to the safety and health of the operators and the public
- Limitations established by state and local health departments for municipal watersheds



# Forest Practices Application Evaluation



Photo Credit: Washington Forest Protection Association



# Forest practice applications

Forest practices applications are required for aerial herbicide applications on forestland

Review under SEPA is required when there is a potential for substantial impact to the environment (“Class IV-special”)

- Determined based on WAC 222-16-070
- Very rare in practice

Otherwise, such FPAs are classified as “Class III” and SEPA review is not conducted



# FPA evaluation and decision

- FPAs are reviewed by DNR forest practices regulatory staff
  - An average ~195 new aerial herbicide FPAs per year
- Decisions to approve or disapprove are made no sooner than 14 days but generally must be made within 30 days



# Field Compliance

After approval, DNR does field compliance on aerial herbicide FPAs, focusing on:

- Avoiding harmful drift
  - Ensuring chemicals aren't applied in non-fish streams that have water; and
  - Ensuring proper posting of application timeframes.
- 
- DNR averages ~82 compliance visits per year for aerial herbicide applications





# Investigation and Enforcement

- DNR partners with Washington Department of Agriculture on investigation of reports of non-compliance on drift or other concerns
- DNR enforcement actions involve all available tools according to our enforcement policies:
  - Notices to comply; stop work orders; civil penalties
- Formal DNR enforcement has been rare: only 2 actions over the past seven years



# 2016 Aerial Spray Work Group



# 2016 Aerial Spray Work Group

- In 2016, the Forest Practices Board asked a work group to address concerns that had been contained in rule petitions
- The work group reported back with recommendations in five areas:
  - Availability of better information about herbicides in forestry
  - Advance notification of pending applications
  - Clarity about aerial application proposals (FPAs)
  - Field compliance of FPAs
  - Reporting after applications completed



# Status of work group recommendations

## 1. Availability of better information

- DNR created a web page
  - <https://www.dnr.wa.gov/applying-and-managing-pesticides>
- DNR updated “Forest Practices Illustrated” in mid-2017
  - <https://www.dnr.wa.gov/forest-practices-illustrated>
- DNR created a fact sheet in 2018
  - [https://www.dnr.wa.gov/publications/fp\\_pest\\_forestry\\_factsheet.pdf?xbf78dn2](https://www.dnr.wa.gov/publications/fp_pest_forestry_factsheet.pdf?xbf78dn2)





# Work group recommendations (cont.)

## 1. Availability of better information (cont.)

- The work group recommended that the Forest Practices Board update Board Manual Section 12
  - Work been delayed due to Board's focus on other priorities





# Work group recommendations (cont.)

## 2. Advance notification

- Agreement was not reached on changes to existing notification requirements
- DNR encourages interested people to sign up to use the forest practices application review system (FPARS)
  - <https://www.dnr.wa.gov/programs-and-services/forest-practices/forest-practices-application-review-system-fpars>



# Work group recommendations (cont.)

## 3. Forest Practices Application information

- The FPA form and instructions were changed in March 2017

## 4. Field compliance

- DNR committed to emphasizing and tracking compliance visits
  - 165 compliance visits in last two years



# Work group recommendations (cont.)

## 5. Reporting after application has been completed

- Agreed to recommend this as a voluntary best management practice
- DNR:
  - made changes to its information system to accommodate
  - worked through DNR Region staff to educate landowners
- Over two years, 90 voluntary reports have been received





A vibrant, moss-covered forest stream flows through a dense, lush forest. The water cascades over mossy rocks, creating a small waterfall. The surrounding vegetation is thick with green moss, ferns, and moss-covered tree trunks and branches. The scene is a rich, green ecosystem.

**Questions or discussion?**

Photo credit: University of Washington