

Board of Forestry
2600 State Street
Salem, OR 97301

7/24/2019

Public Comment to the Oregon Board of Forestry

Case Study of the Tillamook State Forest and Herbicide Spray Use 2015-2019

Most Oregonians think of our state forests as places to camp, fish, hike and picnic with family and friends. We go to state forests in search of old growth trees and hiking trails along pristine streams. Timber on state lands is logged to generate “economic, environmental, and social benefits” in the form of revenue that goes back to counties. The Oregon Department of Forestry actively manages 745,000 acres of state forest lands. Timber harvests are carried out using the Forest Practices Act. ODF contracts with private helicopter applicators to conduct aerial herbicide sprays on state forests.

We believe herbicides that are used to manage Oregon’s state forests deserve greater scrutiny and stricter regulations, not only for the protection of the public and wildlife, but to protect drinking water systems fed by streams originating within Oregon’s state forests.

Based on contracts and forestry operation notification records obtained through a public records request to ODF, Beyond Toxics determined that ODF makes common use of aerial herbicide sprays. Here are the results from our case study of Oregon’s largest state forest: **Tillamook State Forest and Herbicide Spray Use 2015-2019.**

The Tillamook State Forest is publicly owned land located 40 miles west of Portland in the Northern Oregon Coast Range. With dozens of trails and 89 designated campsites, this state forest provides a myriad of activities – hunting, camping, angling, hiking and sight-seeing, swimming, mushroom picking, etc.

Majority of clear-cuts are treated with a tank mix of herbicides sprayed from the air by helicopter: State documents show that between 2015-2019, nearly 19,000 acres of the Tillamook State Forest were sprayed with herbicides. The vast majority, approximately 76% of these acres, were aerially sprayed with herbicides. The other 24% of the acres received ground sprays. ODF authorizes tank mixes of 3-5 chemicals including Glyphosate, Metsulfuron methyl, Aminopyralid, Imazapyr, Sulfometuron methyl plus multiple chemical additives.

Herbicide sprays are carried out within with State Protected Drinking Watersheds: We found that ODF authorizes aerial herbicide sprays in domestic drinking watersheds serving residential users and municipal drinking water systems. Two other state agencies, the Oregon Department of Environmental Quality (DEQ) and the Oregon Health Authority (OHA) are charged with drinking water protection under the federal Clean Water Act. These agencies spend public funds to study and identify domestic drinking watersheds that are vulnerable to contamination. Seemingly at cross-purposes with the work of its sister agencies, ODF conducted aerial herbicide sprays on clearcuts

overlapping with State Protected Drinking Watersheds. In the case of the Tillamook State Forest, the water coming from these protected areas provides drinking water for thousands of Oregonians living in Timber, Hillsboro and Cherry Grove. Under the Oregon Forest Practices Act, streams in state forests designated for domestic drinking water and fish habitat receive an inadequate 20 yard no-spray buffer (imagine a helicopter spraying herbicides 20 yards from players on a football field). In comparison, Washington State requires a 200' no-spray zone for domestic water streams.

Studies show that benefits don't necessarily outweigh the costs: It is understandable that cities and counties receiving economic benefits from timber harvest on state lands want to keep the status quo. However, spraying herbicides is not be a major factor impacting revenues from timber harvests. A study conducted by Oregon State University researchers suggests that “[o]n the economic side of the study, the research team concluded that herbicide isn't cheap, and that spraying does not always generate additional financial value.” The study authors concluded that “the study saw no failed stands or plantations, and valuable biodiversity tended to increase without herbicide use.” Furthermore, they found that herbicide use also depresses populations of birds and pollinators. ([*“Intensive forest management study tackles herbicide use,”*](#) posted 4/9/2019)

Oregon cities practice alternatives to protect drinking water intakes: The cities of Corvallis, Portland and Forest Grove, cities that get some or all of their domestic water from streams in forest holdings, currently manage their forested drinking watersheds without the use of pesticides. These cities don't clearcut or spray herbicides in their drinking watersheds. Oregon state forests have many beneficial uses, from recreation to drinking water to forestry. Inaction to change the current status quo regarding herbicide sprays fails the test of balancing beneficial uses.

RECOMMENDATION: The frequency of aerial herbicide sprays in state forests and the lack of policies to protect public safety and drinking water quality lead us to recommend that the BOF work with the DEQ and OHA to 1) adopt regulations to end herbicide sprays on state forest lands that overlap with Protected Drinking Watersheds and 2) phase-out all aerial sprays on state forest lands.

Submitted by,

Laurie Bernstein, Retired USFS fish biologist

Lisa Arkin, Executive Director, Beyond Toxics



Beyond Toxics

120 Shelton McMURPHEY Blvd. Suite #280, Eugene, OR 97401

Case Study of the Tillamook State Forest and Herbicide Spray Use 2015-2019



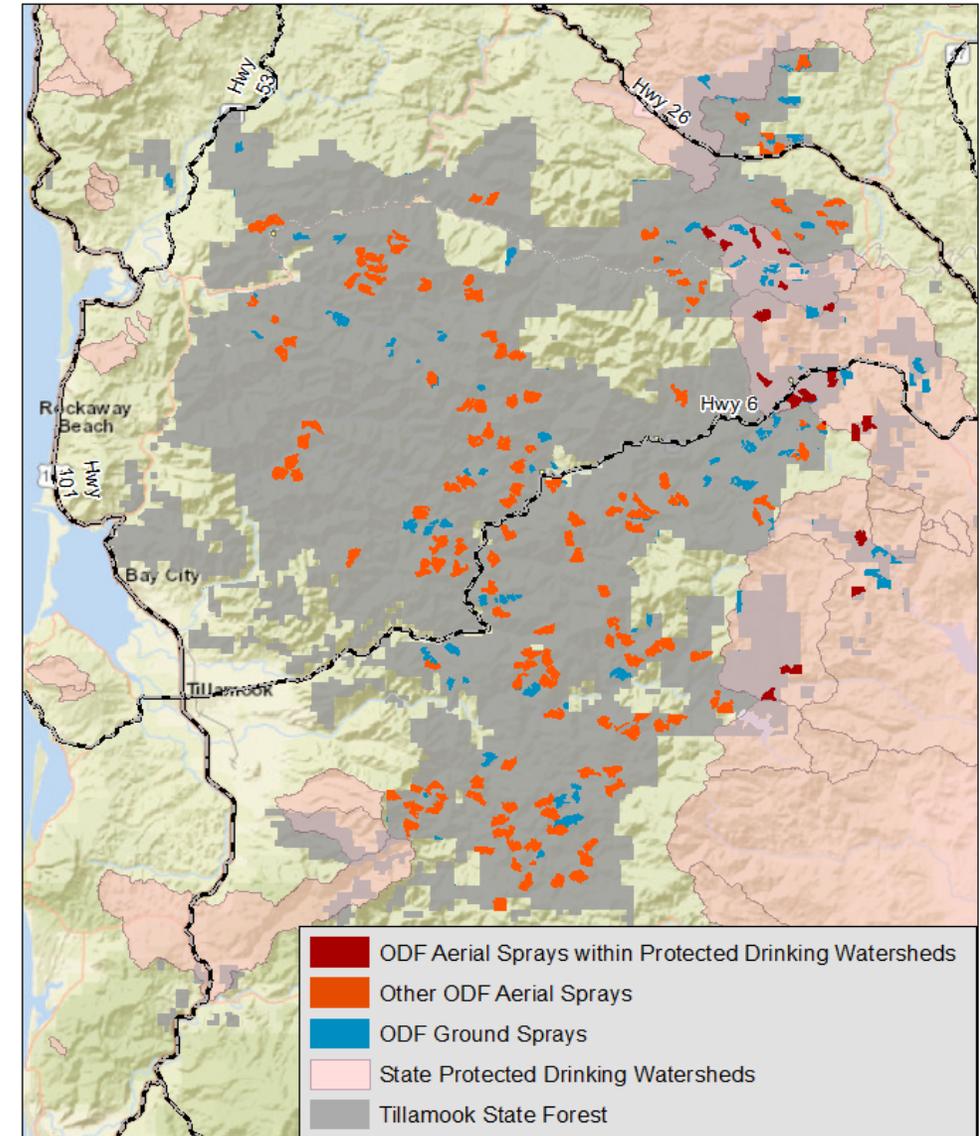
Front Cover of 2019 ODF Tillamook Forest Plan

AGENDA ITEM A
Attachment 7
Page 3 of 9

Tillamook State Forest Herbicide Sprays

14,332 Acres Aerial
4,548 Acres Ground
18,880 Total

Tillamook State Forest Herbicide Sprays 2015 - 2019



7/23/2019

0 2.5 5 10 15 20
Miles

AGENDA ITEM A

Attachment 7

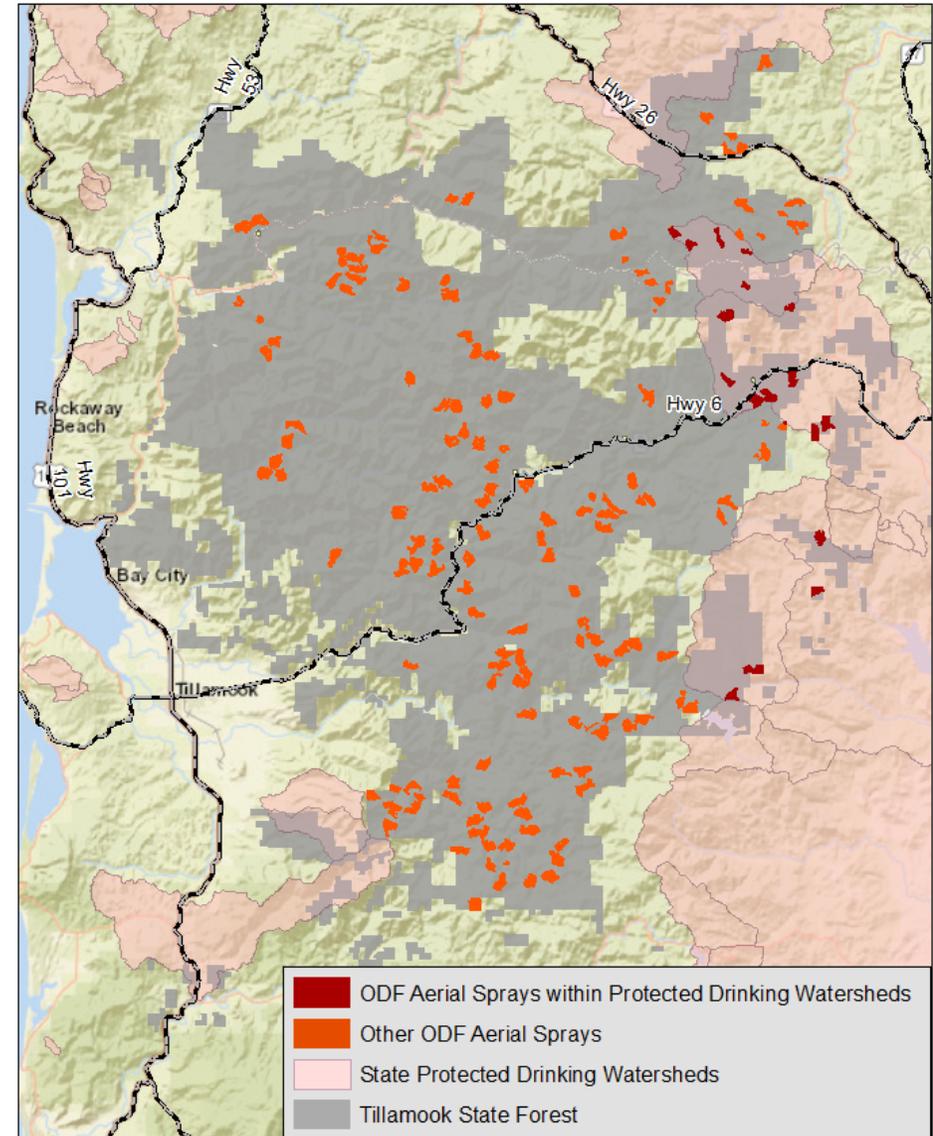
Page 4 of 9

Approximately 76% of all clear-cut units were aerially sprayed in the Tillamook State Forest.

Aerial Sprays:

2015 - 2,746 acres
2016 - 2,456 acres
2017 - 1,730 acres
2018 - 3,323 acres
2019 - 4,077 acres

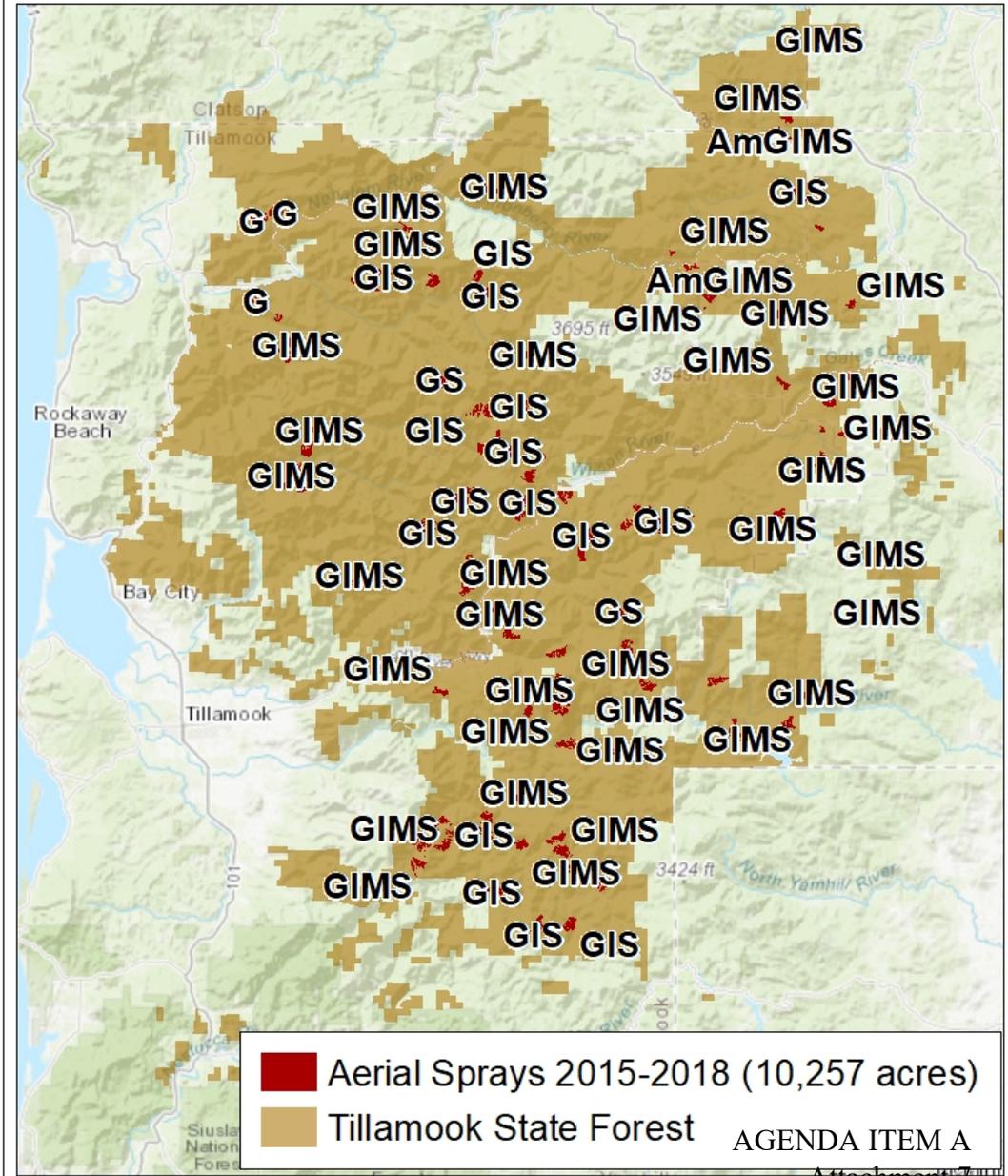
Tillamook State Forest Aerial Herbicide Sprays 2015 - 2019



Tank mixes of 3-5 chemicals

Am = Aminopyralid
G = Glyphosate
I = Imazapyr
M = Metsulfuron methyl
S = Sulfometuron methyl

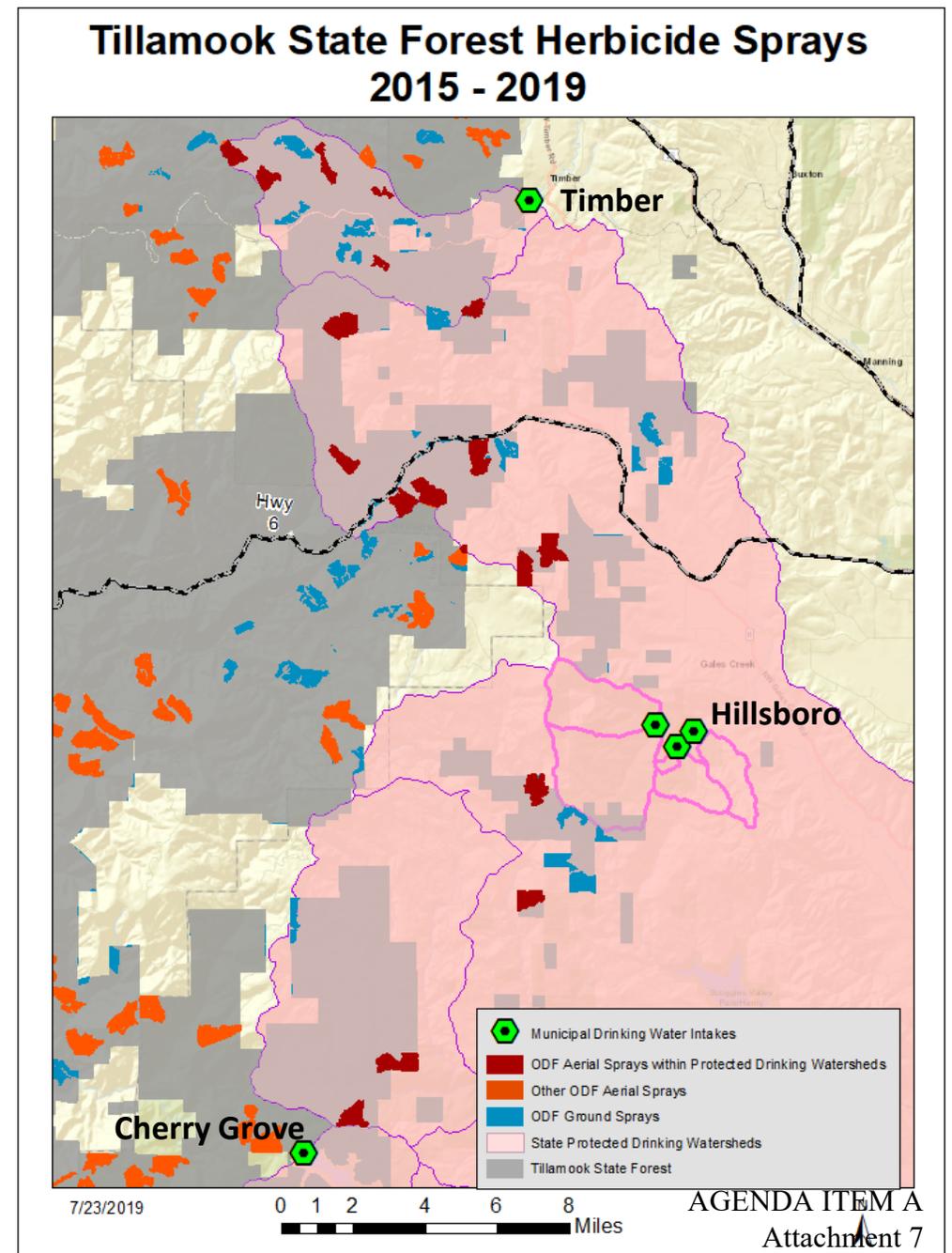
Tillamook State Forest



Impacts in Protected Drinking Watersheds

This map illustrates where ODF conducted herbicide sprays on state forest land overlap with and occur within designated Protected Drinking Watersheds.

Red = aerial sprays
Blue = ground sprays



Oregon Aerial Spray Stream Buffers vs Washington

Protection Area	Oregon Forest Practices for State Forests	Washington Forest Practices for State Forests
Fish-Bearing Stream Buffer	60'	150'
Domestic Water Use Stream	60' (10' ground spray)	200' and SEPA review (100-150' ground spray)
Perennial Non-Fish Stream Buffer	0'	75'-100'
Intermittent Non-Fish Stream Buffer	0'	50'-100'
Ground Water Protection Areas	0'	SEPA Review & banned AI's

Main Points:

- Regulate to protect all streams in Protected Drinking Watersheds (PDW);
- Establish chemical protections for streams in PDW by banning aerial herbicide sprays;
- Require DEQ's 1000' riparian protection areas and slope standards on F & D streams to deter erosion – protect N streams;
- Establish larger no-spray buffers for ground sprays; (100 ft.).



Fishing & Camping



Clean water for drinking