Case Studies / Lessons Learned

Andrea Sonnen, ODA Pesticide Investigator

OREGON DEPARTMENT OF AGRICULTURE

Who Am I?

- Native Oregonian
- Dual Degree Recipient
- Lead Investigator
- Mom
- Summer Farmstand Operator
- Family and Sports Enthusiast

NEWS:
ODA Pesticide Collection Events

- Dec. 6, 2025: Simplot, Halsey

- Dec. 13, 2025: Deschutes County Expo Center, Redmond

- Jan. 24, 2026: Pendleton Convention Center, Pendleton

TQRCG

Implementation of Oregon's EPA-Approved Certification & Training Plan

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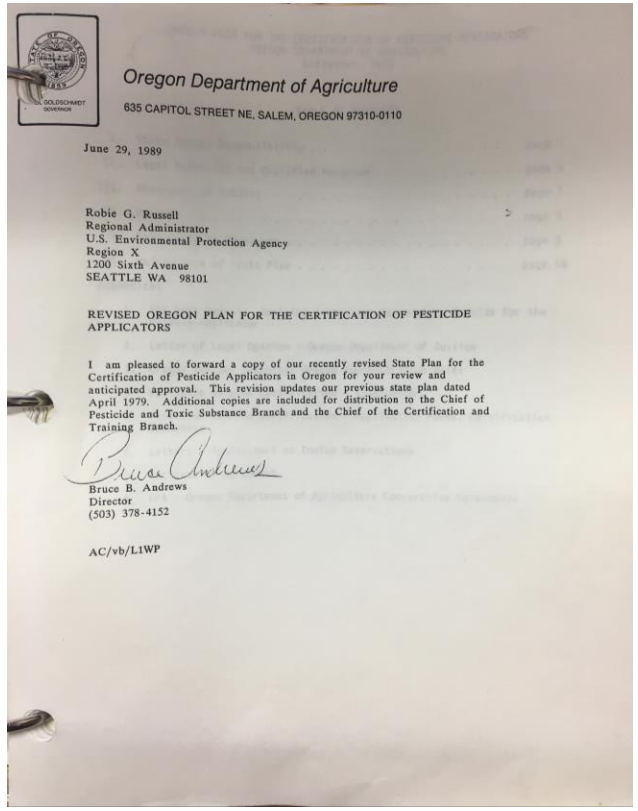
AGRICULTURE

Federal Certification & Training Rule

- Amended federal regulations (40 CFR 171) require broad programmatic changes at the state-level.
- Implementation can occur over multiple years according to an EPA-approved Certification & Training plan.
- Partnerships and collaboration are critical for implementation.



Oregon Department of Agriculture

635 CAPITOL STREET NE, SALEM, OREGON 97310-0110

June 29, 1989

Robie G. Russell
Regional Administrator
U.S. Environmental Protection Agency
Region X
1200 Sixth Avenue
SEATTLE WA 98101

REVISED OREGON PLAN FOR THE CERTIFICATION OF PESTICIDE APPLICATORS

I am pleased to forward a copy of our recently revised State Plan for the Certification of Pesticide Applicators in Oregon for your review and anticipated approval. This revision updates our previous state plan dated April 1979. Additional copies are included for distribution to the Chief of Pesticide and Toxic Substance Branch and the Chief of the Certification and Training Branch.

Bruce B. Andrews
Director
(503) 378-4152

AC/vb/L1WP

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Rulemaking

- Anticipate multiple rounds of rulemaking in 2026 (some concurrent).
- Break up rulemaking by topic area to better facilitate feedback from rules advisory committees.
- Note: The federal rule does include a process for amending Oregon's plan and implementation timeline.

Anticipated Changes (not comprehensive)*

- Age Requirements (must be 18 or older with possible exceptions)
- Expansion of definition of pesticide “use” (with regards to RUPs)
- New Categories (*e.g.,* Soil Fumigation; Non-soil Fumigation)
- Revisions to category definitions (*e.g.,* Demonstration & Research (D&R) category; Public Health)
- Adopt competency standards for license categories
- New requirements for supervision of non-certified applicators
- Adopt standards for license reciprocity
- Changes to commercial applicator and dealer recordkeeping

***More Detailed List of Anticipated Changes by License Type:**
https://oda.direct/CTChanges

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Manual Revisions/Development

Implemented

- Seed Treatment (2019)
- Non-Soil Fumigation (2021)
- Oregon Core Manual Addendum – Spanish (2025)

In Development

- Ag. Herbicide (collaboration with OSU)
- Ag. Soil Fumigation (national manual)
- IIHS: General Pest (collaboration with OSU)
- Laws and Safety – English (national manual)
- Public Health (collaboration with OSU)
- Ag. Insecticide/Fungicide (collaboration with OSU)
- Right-of-Way (collaboration with OSU)
- Public Health (collaboration with OSU)
- Private Applicator – English (national manual)

Remaining

- Aerial
- Ag. Livestock Pest
- Ag. Vertebrate Pest
- Aquatic
- Consultant
- Demonstration & Research
- IIHS Wood Treatment
- Laws and Safety – Spanish
- Marine Antifouling
- T&O Herbicide
- T&O Insecticide/Fungicide
- Private Applicator – Spanish
- Regulatory Weed

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Summary of Implementation Timeline

Completed

- Oregon Legislature enacted statutory changes – HB 2031 (2021) and HB 4062 (2022)
- Adopted new/amended rules to implement HB 2031 and HB 4062 (Nov. 2023)
- Revised certification credentials (Jan. 2024)

2026 - 2030

- Adopt new and amended rules.
- Adopt new/revised certification manuals and exams.
- Adopt "special" recertification training (alternative to re-examination for currently certified applicators).
- Adopt annual training for noncertified applicators (*e.g.,* licensed pesticide apprentices, licensed immediately supervised trainees).

Jan. 2030

- Deadline for all certified applicators to either retake and pass the updated certification exams or take the appropriate special trainings.

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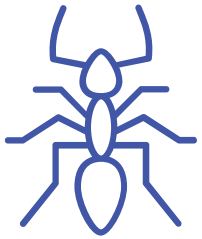
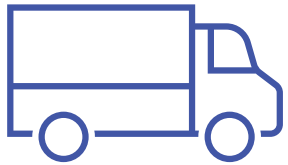
ODA Pesticide Program

Sales



Use



Distribution

OREGON DEPARTMENT OF AGRICULTURE

ODA Pesticide Investigators District Map

For general inquiries, call ODA at 503.986.4635.

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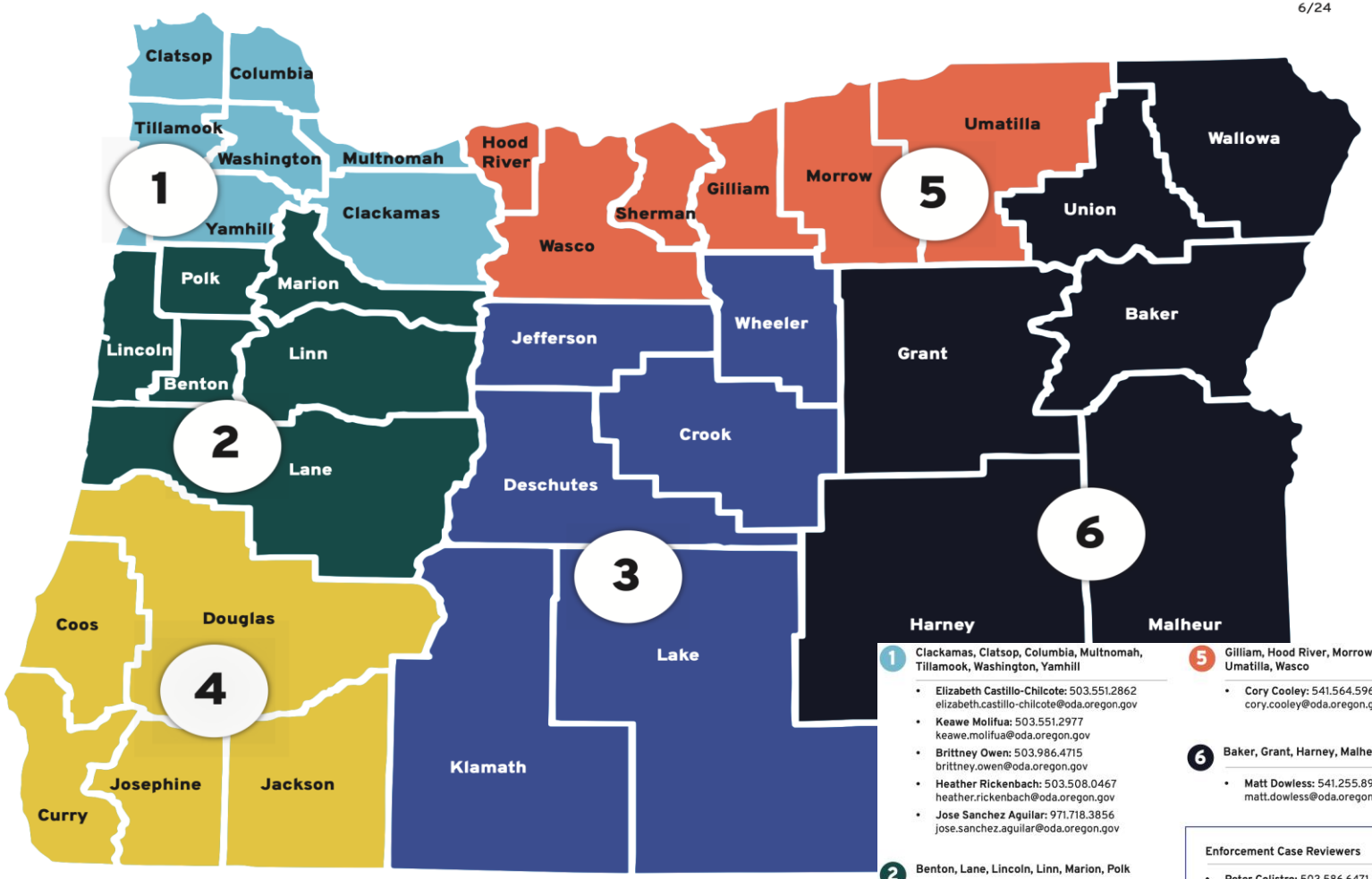
6/24



1 Clackamas, Clatsop, Columbia, Multnomah, Tillamook, Washington, Yamhill

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- Vacant

Lead Investigator

- **Andrea Sonnen:** 971.301.0659 andrea.sonnen@oda.oregon.gov

Salem Office Address

635 Capitol St. NE, Salem 97301

ODA Pesticide Investigator Map

TQRCG

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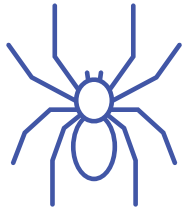
A Pesticide Is:



Prevent

Destroy

Repel

Mitigate

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LICENSING

RECORDKEEPING

APPLICATORS

DEALERS

What we do?

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Investigation Process - Complaints

- Talk to complainant
- Talk to business/applicator
- Site visit
- Sampling (if appropriate)
- Review application records / labels
- Case review / enforcement action

I Don’t Complain, I Just Wine

VINEYARD CASE STUDIES

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Complaint:
"Company came out an
treated a **grass field** near t
vineyard and they are see
symptoms in their vineyard
following the app

Complaint:
"numerous grapevin
deformed leaves indi
herbicide damage
observed because of **neighbor**.

Complaint:
"possible herbicide damage on a few of their vineyard fields from **grassland** application."

Complaint:
"seeing damage from **nurse**
that he suspects is 2,4-D a
their vineyard."

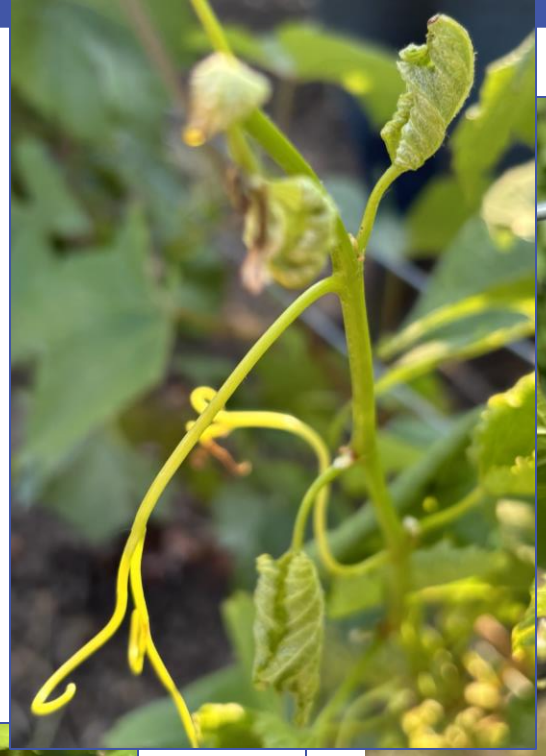
Complaint:
"damage caused from 2,4-D to grapevines by his **neighbor**."

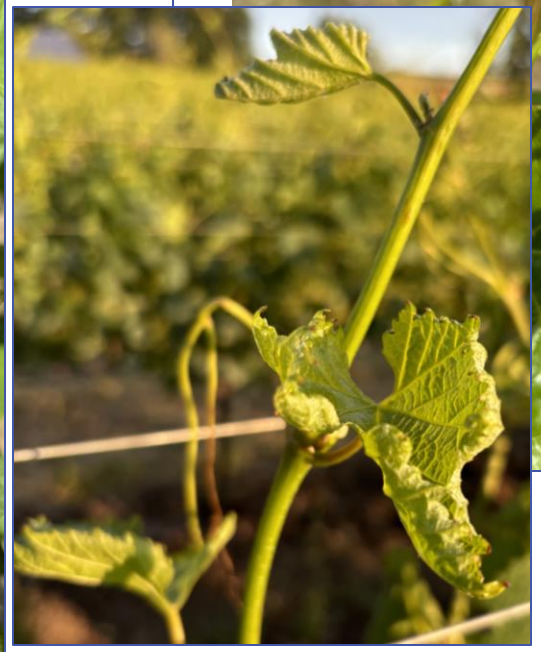
Complaint:
"seem to be exper
some herbicide drift damage from **unknown source** on their
esta

Complaint:
"drift incident in her vineyard potentially by **county roads department**."

Complaint:
"possible herbicide damage to vineyard blocks from **unknown** application.

laint:
vineyard is showing signs of growth regulator damage from **neighbor**."





Applicators stated…

- **Products used:** Mainly Crossbow + Glyphosate products (Roundup, Glystar, etc.), many others
- **Application timing:** May, June, July
- **Equipment used:** Hand wand, Boom from ATV, tractor, spray rig
- “Thought it was ok”
- “Didn’t know it could do that”
- “Store said they should use it”

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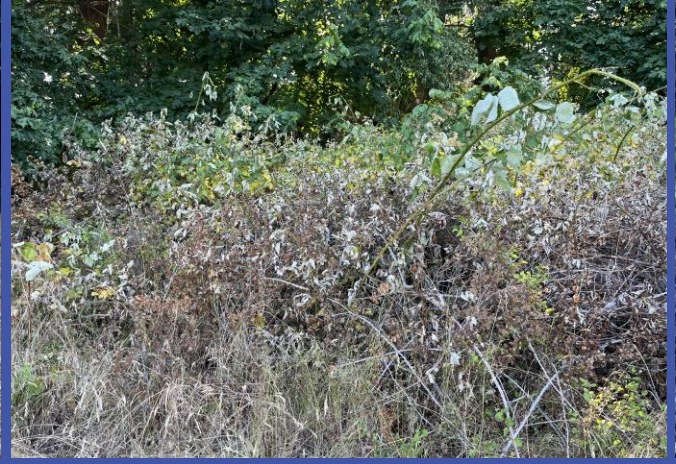
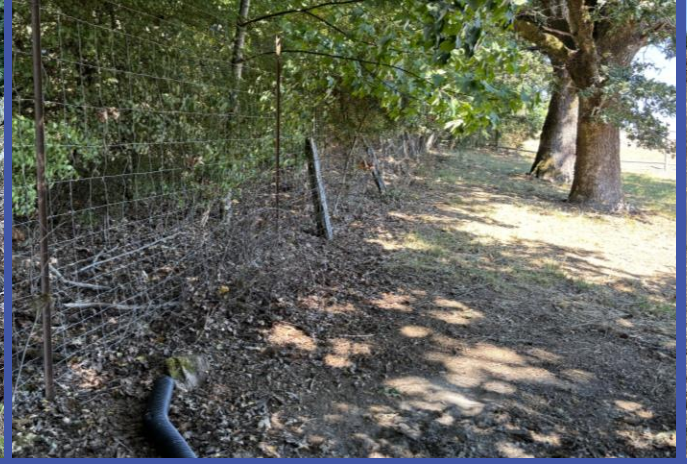

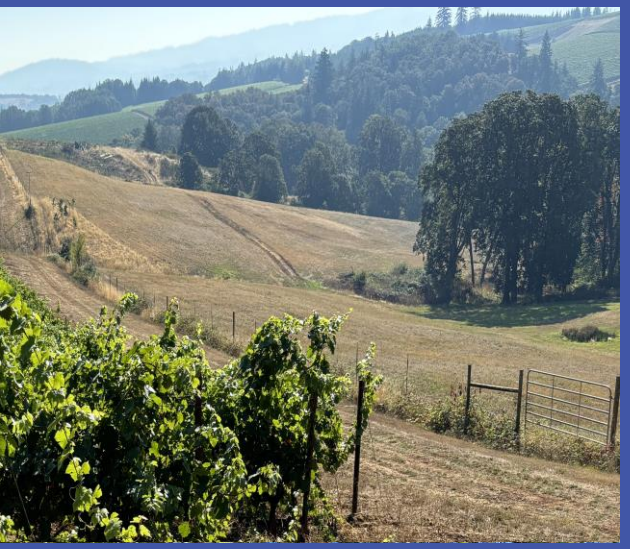

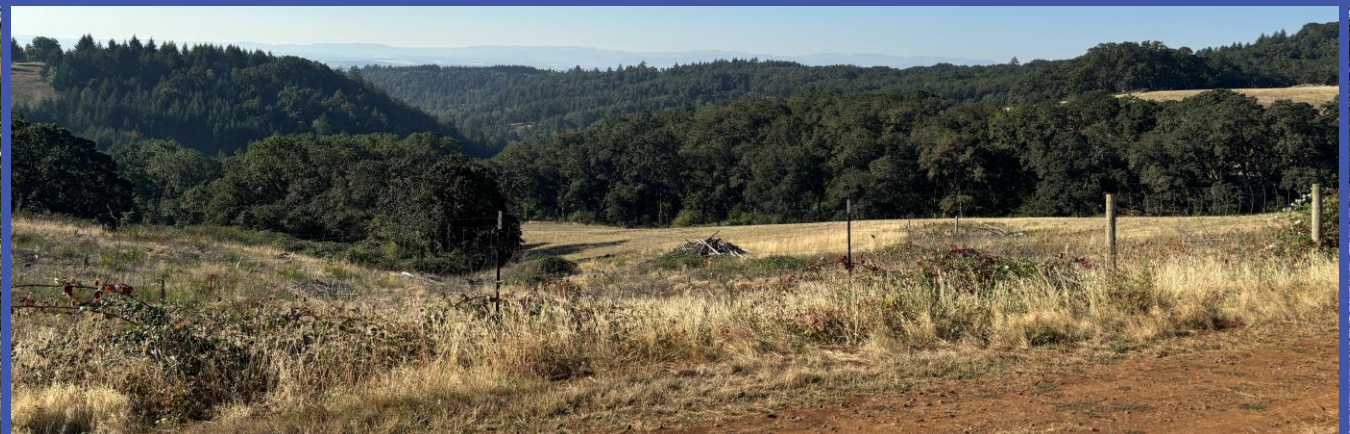

Results

- 9 vineyard cases showed potential herbicide symptoms
- 5 vineyards had pesticide A.I. present at time of sampling
- 3 vineyard detainments (destroy crop)

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What could applicators have done differently?

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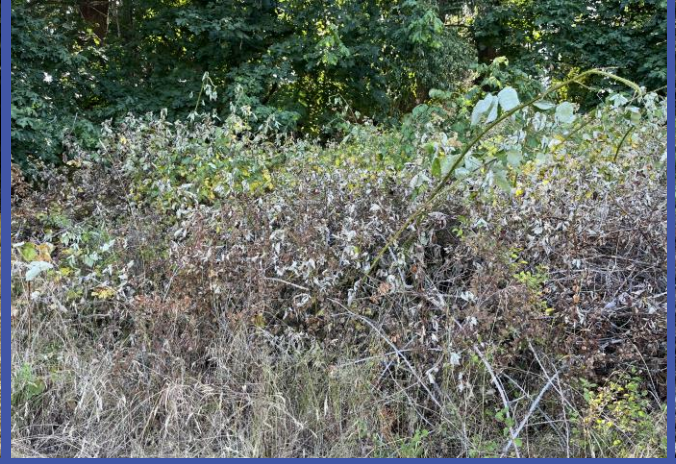
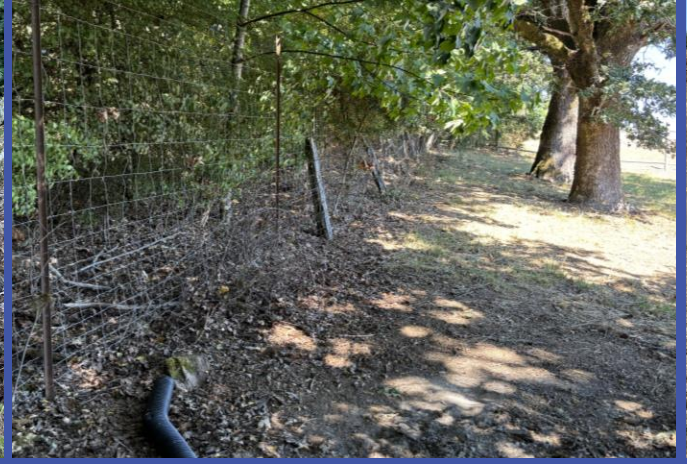

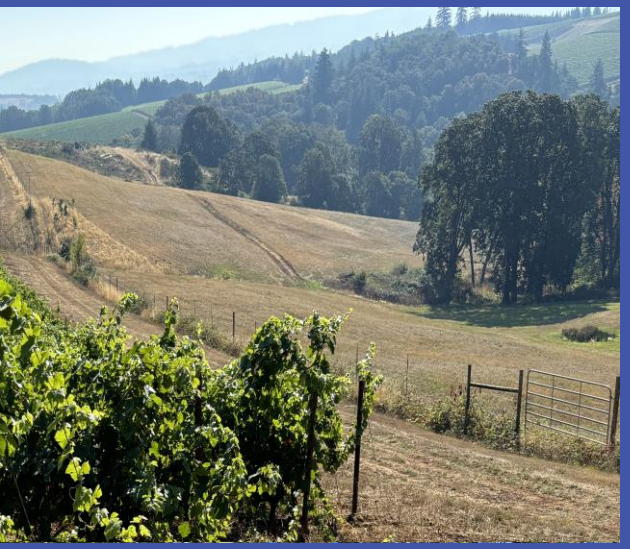

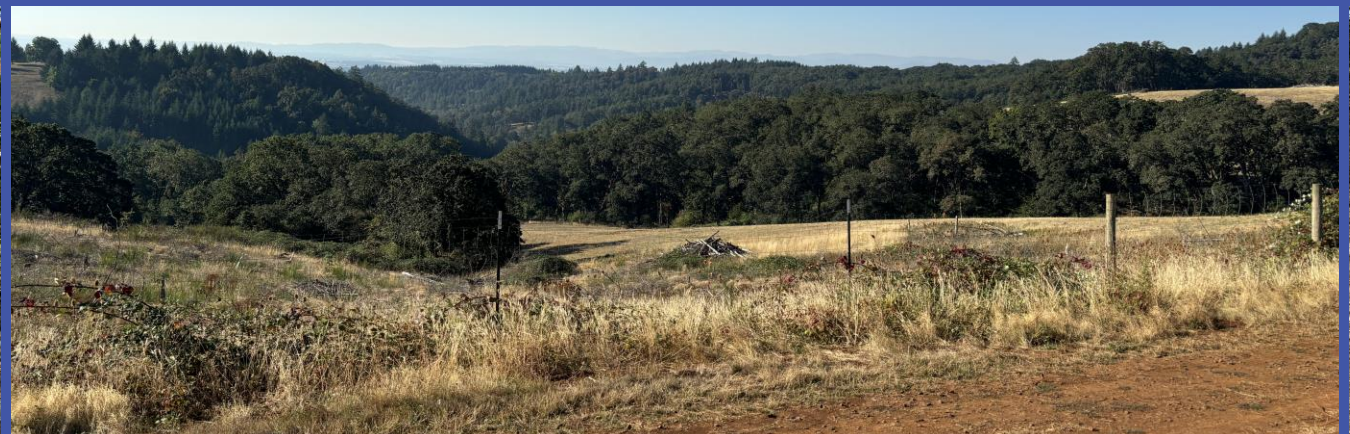

Lessons Learned

- Know sensitive areas
- Use drift prevention methods

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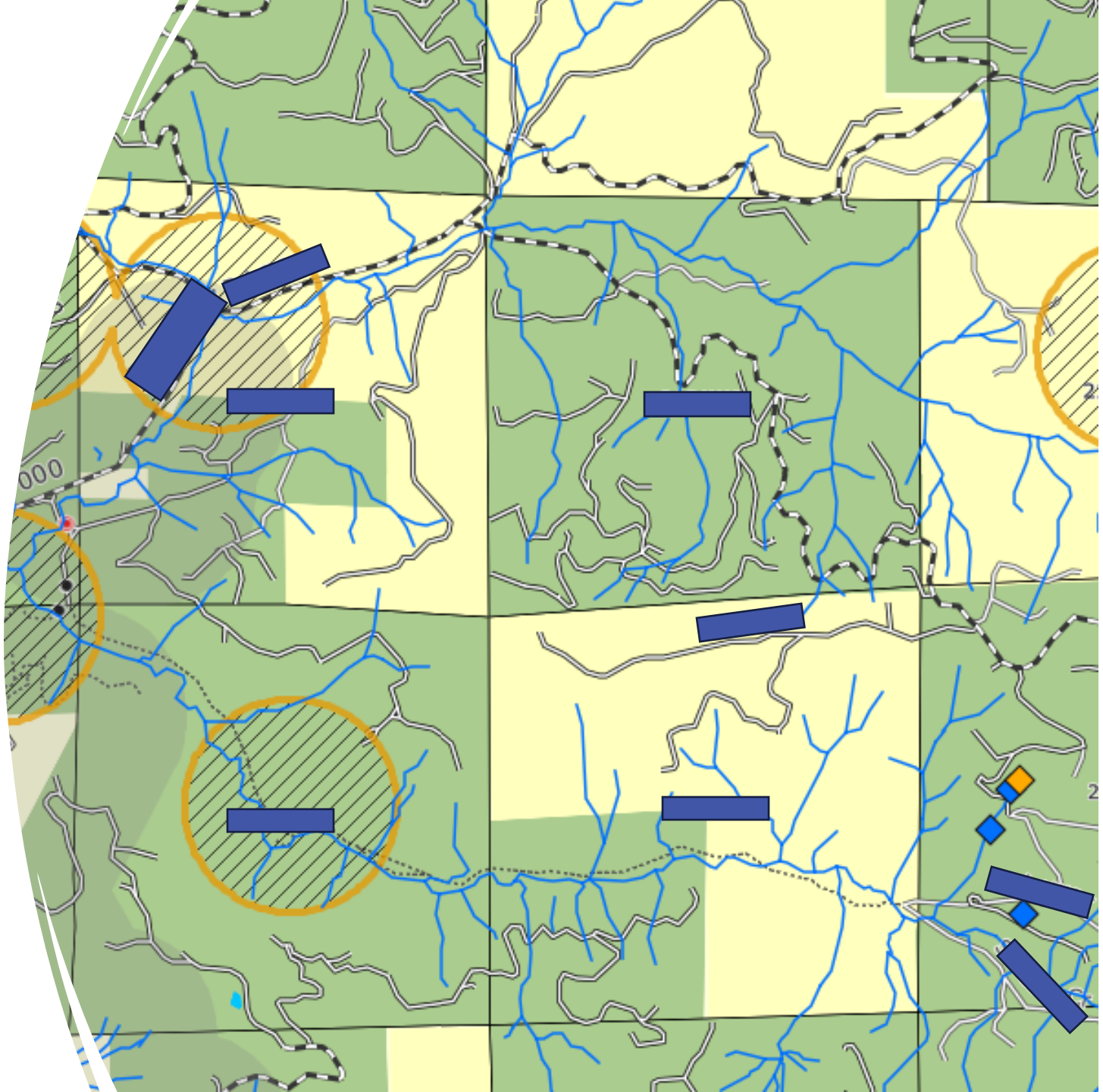
Overlooked and unappreciated…

CASE STUDY 2

OREGON DEPARTMENT OF AGRICULTURE

“Self Report”

- Mid-summer
- Forestry Roadside Application
- Missed a stream crossing
- Wanted to do their due diligence by reporting



Applicator stated…

- They applied roadside weed control for landowner
- They used a tank mix of Garlon XRT and 2,4-D LV6
- They use different color flagging tape to indicate stop and start spraying around hazards/sensitive areas
- There are about 40-50 stream crossing in the area he was spraying

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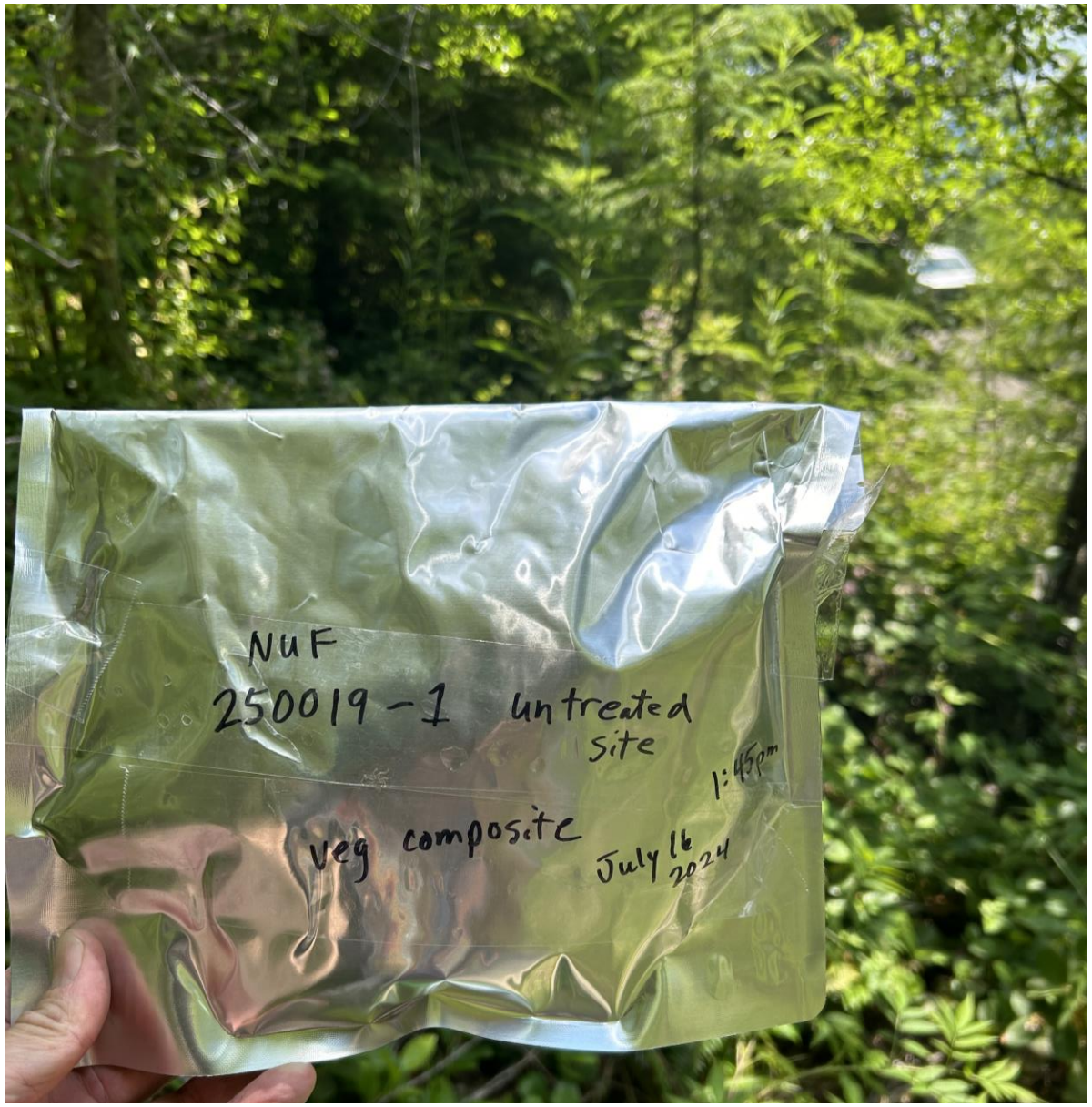
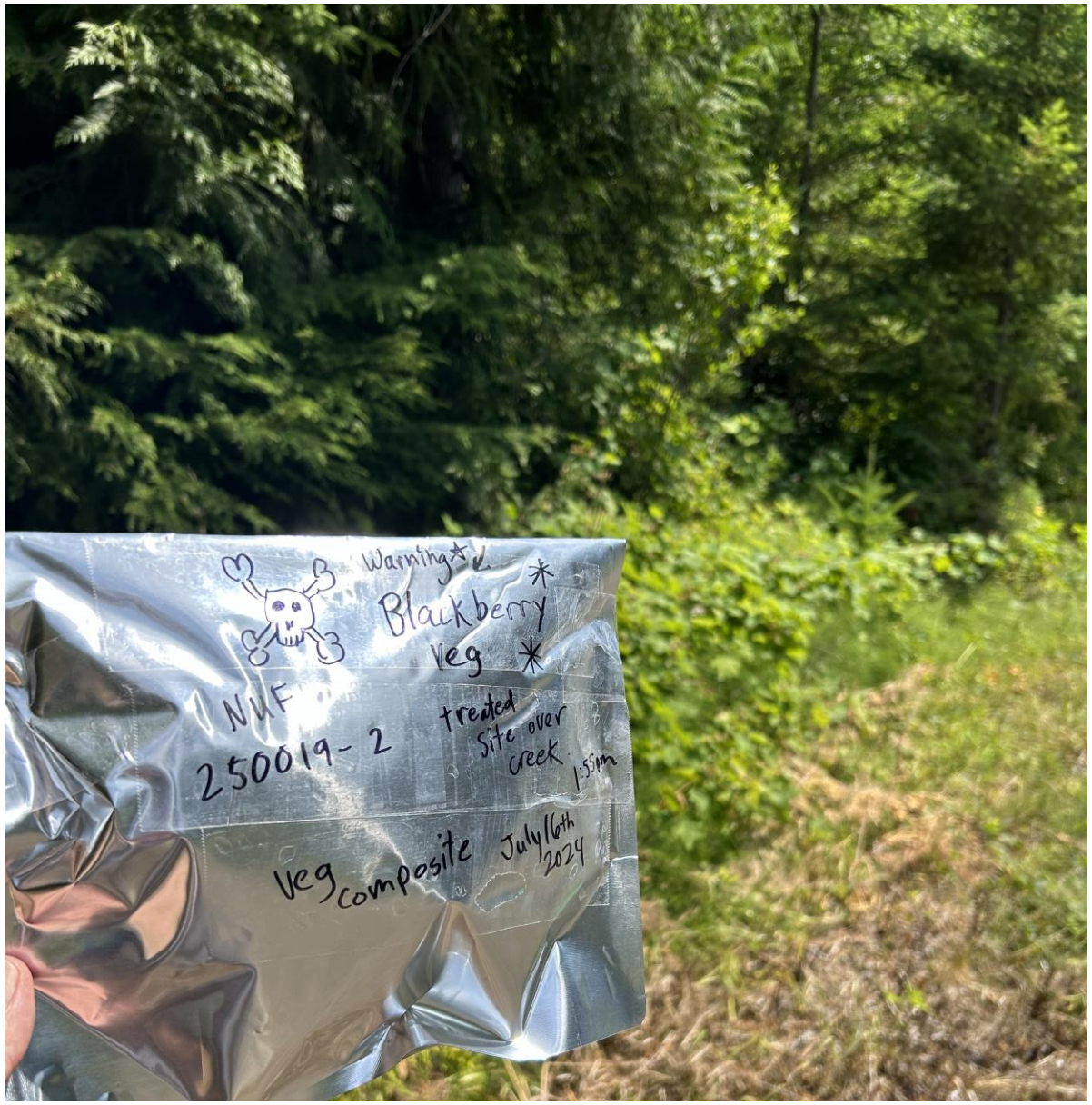

NUF
250019-1 untreated site
1:45pm
veg composite
July 16 2024


Warning
Blackberry
Veg
NUF
250019-2 treated site over creek
1:55pm
Veg composite July 16th 2024

Results

- 2,4-D detected in vegetation over the stream at 36 ppm
- Triclopyr detected in vegetation over the stream at 59 ppm

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What could applicators have done differently?

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Lessons Learned

- Visual cues can be very helpful in many settings
- Accidents happen
- Be aware of sensitive sites within and near your application area

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Be Wise … Sanitize

CASE STUDY 3

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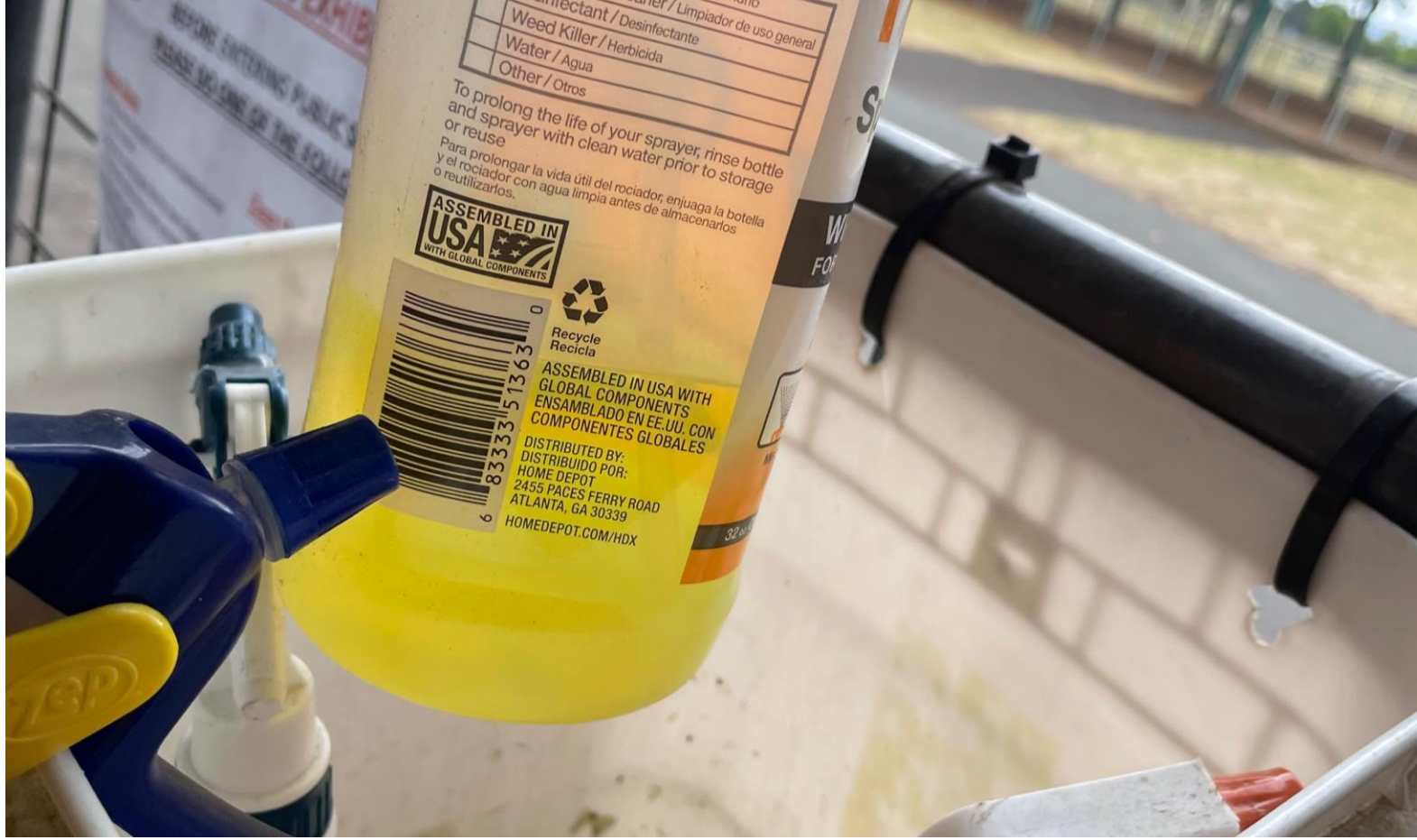
“People with adverse health because of chemical exposure at the county fair due to extremely strict biosecurity measures”

- County Fair requiring people to spray shoes with Virkon disinfectant at the livestock areas
- Product in spray bottles and pump sprayers that leaked badly
- Adults and kids got chemical burns
- Someone got in eyes and had to go to ER


Weed Killer / Herbicida
Water / Agua
Other / Otros
To prolong the life of your sprayer, rinse bottle and sprayer with clean water prior to storage or reuse
Para prolongar la vida útil del rociador, enjuaga la botella y el rociador con agua limpia antes de almacenarlos o reutilizarlos.
ASSEMBLED IN USA WITH GLOBAL COMPONENTS
Recycle
Recicla
ASSEMBLED IN USA WITH GLOBAL COMPONENTS
ENSAMBLADO EN EE.UU. CON COMPONENTES GLOBALES
DISTRIBUTED BY:
DISTRIBUIDO POR:
HOME DEPOT
2455 PACES FERRY ROAD
ATLANTA, GA 30339
HOMEDEPOT.COM/HDX

srmotorz.com
SRX
SRR XTREME
COATINGS · TRUCK ACCESSORIES · HITCHES
BEDROCK
TRUCK BEDS
Bradford Built
Truck Beds & Trailer

STOP HERE
ATTENTION EXHIBITORS
STOP HERE
BEFORE ENTERING PUBLIC SPACE,
PLEASE DO ONE OF THE FOLLOWING:
hange Shoes
• Bring shoes not worn in barn or livestock areas to this location
• Stop here and change into the clean shoes
• Leave barn shoes here, lined up nicely
• Enter public space
• When you return, change back into barn shoes, and keep public shoes in a clean place for next time
Clean Shoes
• Go to the wash rack and thoroughly wash and scrub your shoes.
• Ensure all organic material is removed
• Return to this spot and disinfect the shoes you washed by thoroughly spraying the bottom and edges of the soles prior to entering public space.
Reminder, it's your responsibility, and Duty of Care, to ensure that you are not bringing contaminants into public space. Failure could result in legal liability for you, and you may be expelled from the Fair, forfeit prize money and entry fees, and lose eligibility to participate at the Fair in the future.

PARA SU SALUD Y SEGURIDAD
FOR YOUR HEALTH AND SAFETY
NO SMOKING
NO VAPING

Application Information…

- They use it to kill E. coli at the county fair
- They require animal exhibitors to spray their shoes with Virkon (Children and adults)
- They hired a security group to make sure people did it
- They spray the walkway every time when and where the animals cross
- Spray bottles were unlabeled and leaked
- No training for Virkon application

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Label Information…

- **KEEP OUT OF REACH OF CHILDREN**
- DANGER
- Do not get in eyes, on skin or on clothing.
- Wear goggles (or face shield). Wear protective clothing (long sleeve shirt and long pants, socks plus shoes and water-proof gloves).
- Only use on waterproof or non-porous footwear
- Do not allow direct contact with people
- Completely dry prior to housing animals, using equipment, or allowing people to contact treated sites.

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What could the county fair have done differently?

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Lessons Learned

- Read the label
- Research pest
- Research application
- Call ODA if you have pesticide related questions

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Is It Legal?

CAUGHT IN THE ACT SECTION

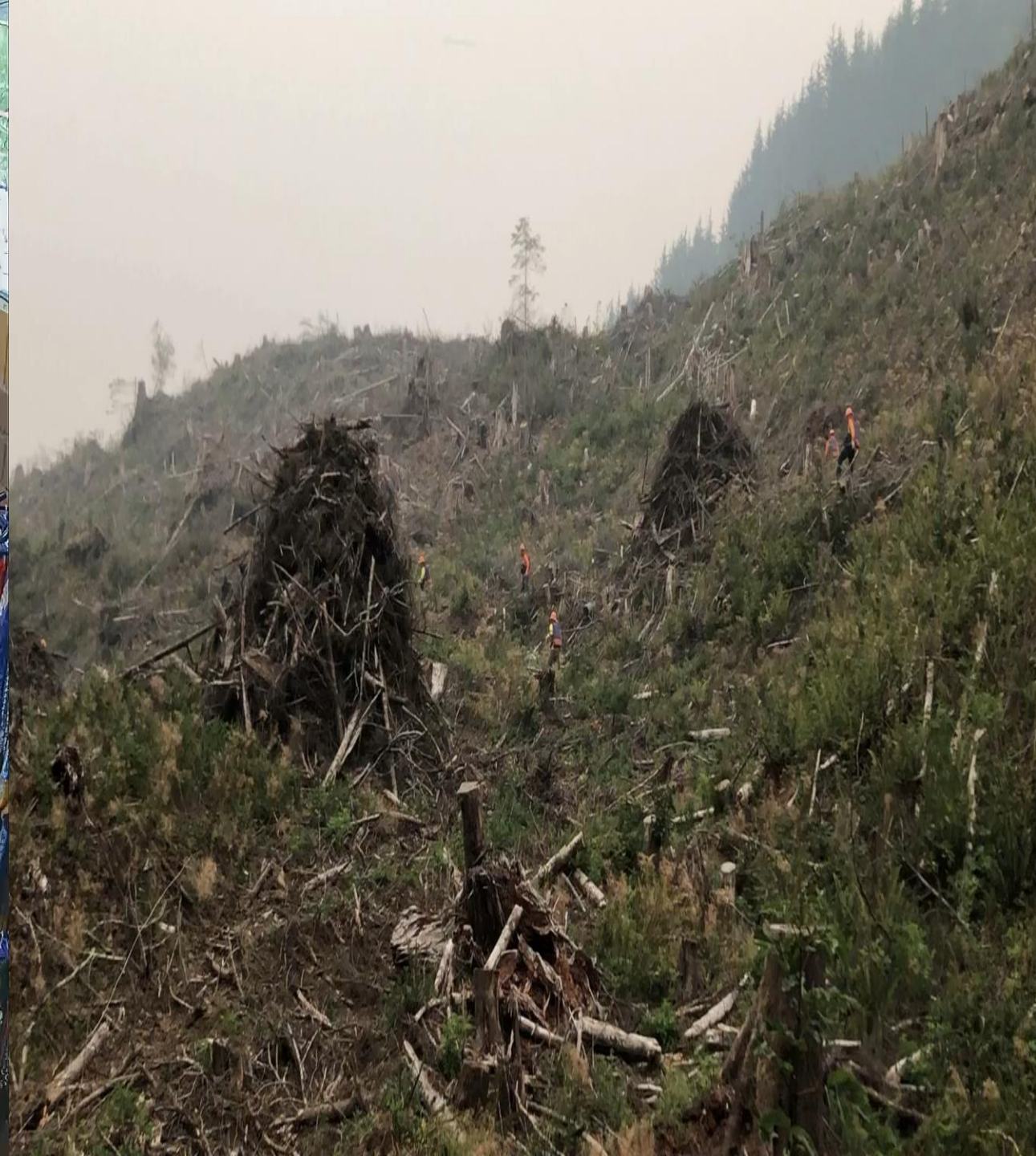
OREGON DEPARTMENT OF AGRICULTURE

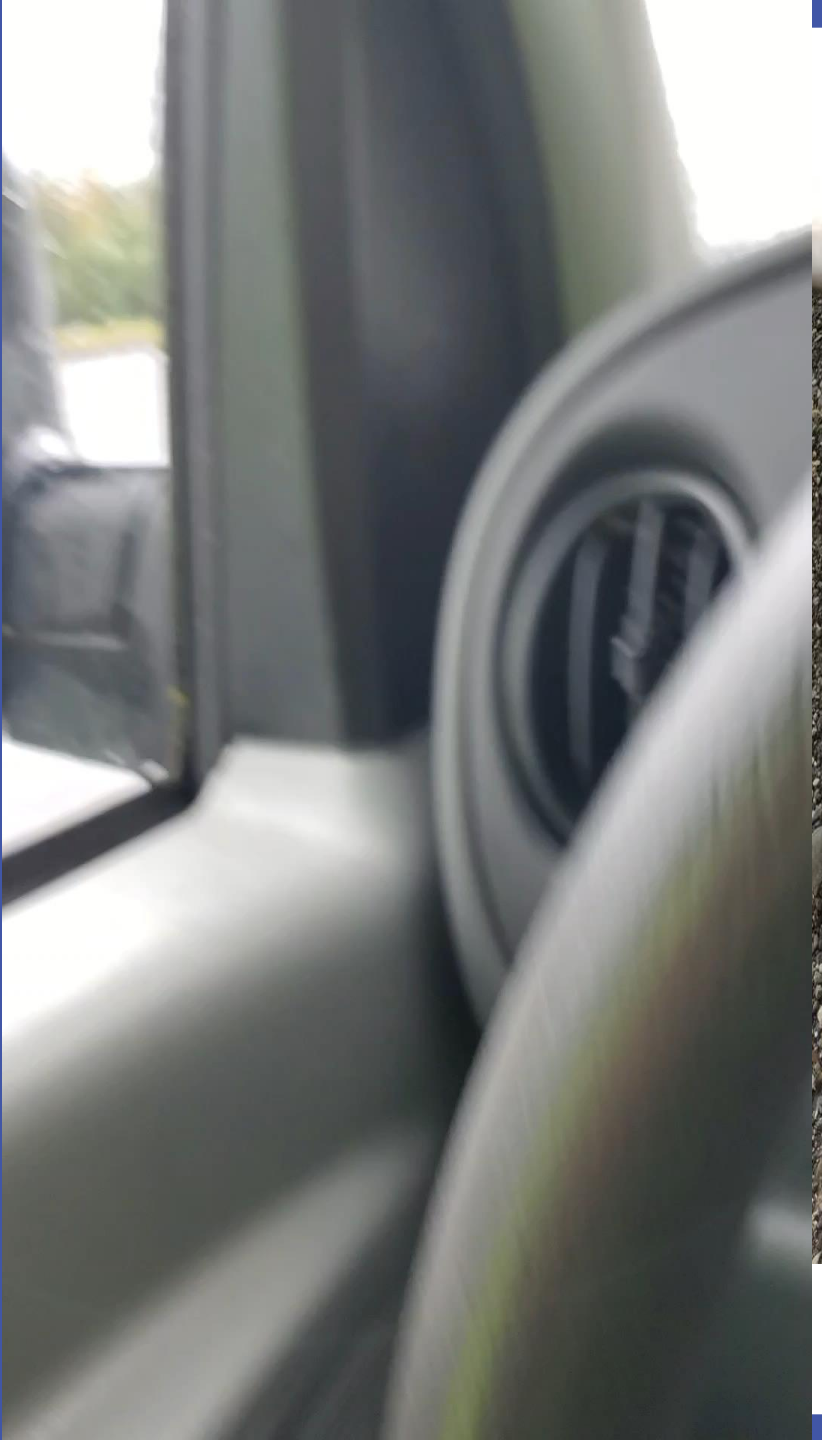
Complaints: “Sprayer was …

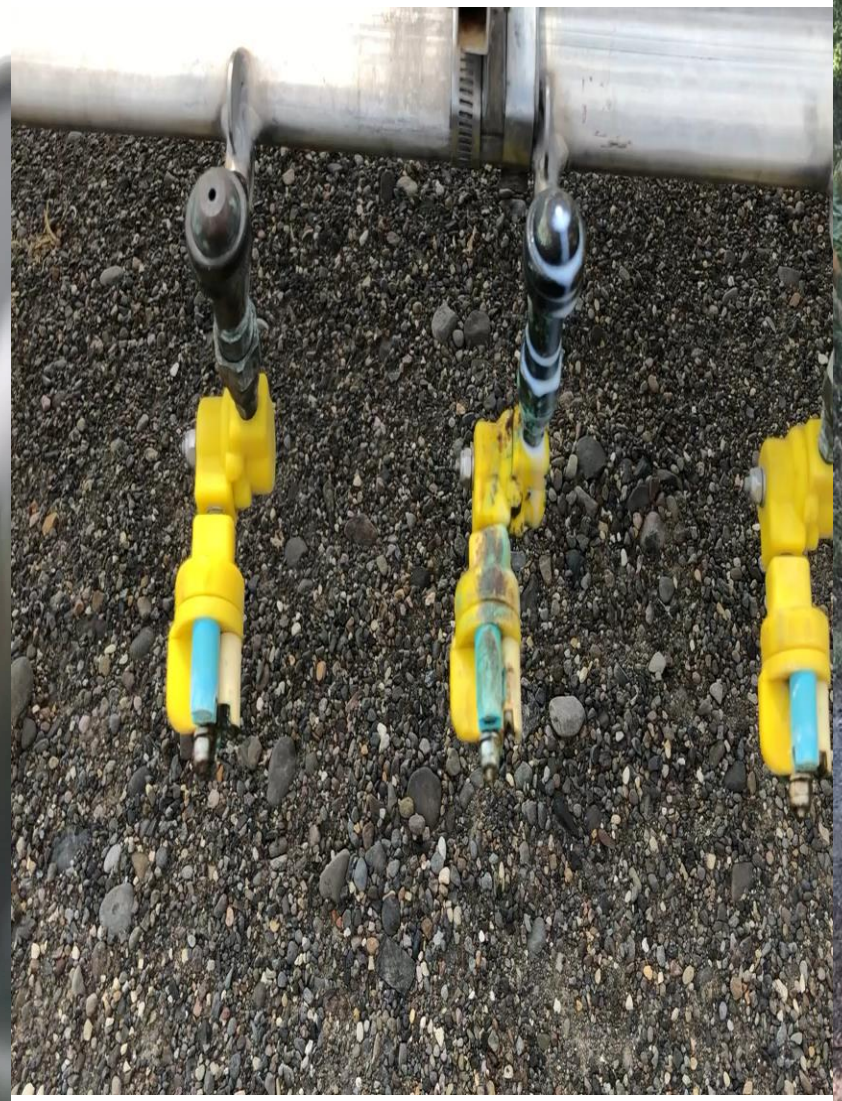
- …spraying in the rain
- …spraying into water
- …spraying when windy
- …spraying on the road/field/anything
- …spraying out of window
- …spraying w/o LS shirt, pants, gloves, eye protection, respirator

N48643

05-03-2018 Thu
The World's Best
Hummingbird Feeder
Miller St & Floor







Complaint: “Sprayer was…

- …spraying in the rain
- …spraying into water
- …spraying when windy
- …spraying on the road/field/anything
- …spraying out of window
- …spraying w/o LS shirt, pants, gloves, eye protection, respirator

Is it legal to …

- …spray in the rain?
- …spray into water?
- …spray when windy?
- …spray spraying on the road/field/anything?
- …spray out of window?
- …spray w/o LS shirt, pants, gloves, eye protection, respirator?

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READ THE LABEL

THANK YOU!

Andrea Sonnen
ODA Lead Pesticide Investigator
andrea.sonnen@oda.oregon.gov
971-301-0659

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