

# Aerial application of herbicides



# SUBSTITUTE SENATE BILL 5597

A work group on the aerial application of herbicides on state and private forestlands is established to review all existing best management practices and, if necessary, develop recommendations for improving the best management practices for aerial application of herbicides on state and private forestlands, including the criteria to be used in evaluating best management practices.

## **Mission, Scope, Progress, and Deadlines**

# Misson:

Review the roles of all management and regulatory agencies in approving herbicides for use and application on forestlands in Washington and review existing state and federal programs, policies, and regulations concerning aerial application of herbicides on forestlands;



# Scope:

Review current herbicide application technology in the state and throughout the nation to increase herbicide application accuracy and other best management practices to minimize drift and exposure of humans, fish, and wildlife as well impact on drinking water, surface waters, and wetland areas;

Review research, reports, and data from government agencies, research institutions, nongovernmental organizations, and landowners regarding the most frequently used herbicides in forest practices, to inform the development and update of strategies related to herbicides management on forestlands

# Who is at the table

\*One senior level management representative from each of the following agencies:

(A) The department of agriculture; (B) The department of health;  
(C) The department of natural resources; (D) The department of fish and wildlife;  
and (E) The department of ecology

\*One representative of Washington State University pesticide safety education program

\* One representative from the Pacific Northwest agricultural safety and health center at the University of Washington;

# Who is at the table

Two industrial forestland owners with one from the west of the crest of the Cascade mountains and one from east of the crest of the Cascade mountains;

(B) One representative of small forestland owners; (C) One representative of large-scale organic farming; (D) One representative of aerial applicators;

(E) Three representatives of environmental or community interests

(F) One representative with expertise in noxious weed control; and

(G) One representative with pesticide registrant expertise in forest herbicides.

## **Representatives of Washington tribes**

# Scope

## Education and Information:

Goal of the working community is to educate about why there is application, and why arial application is being used.

What is being done to inform the community when it happens



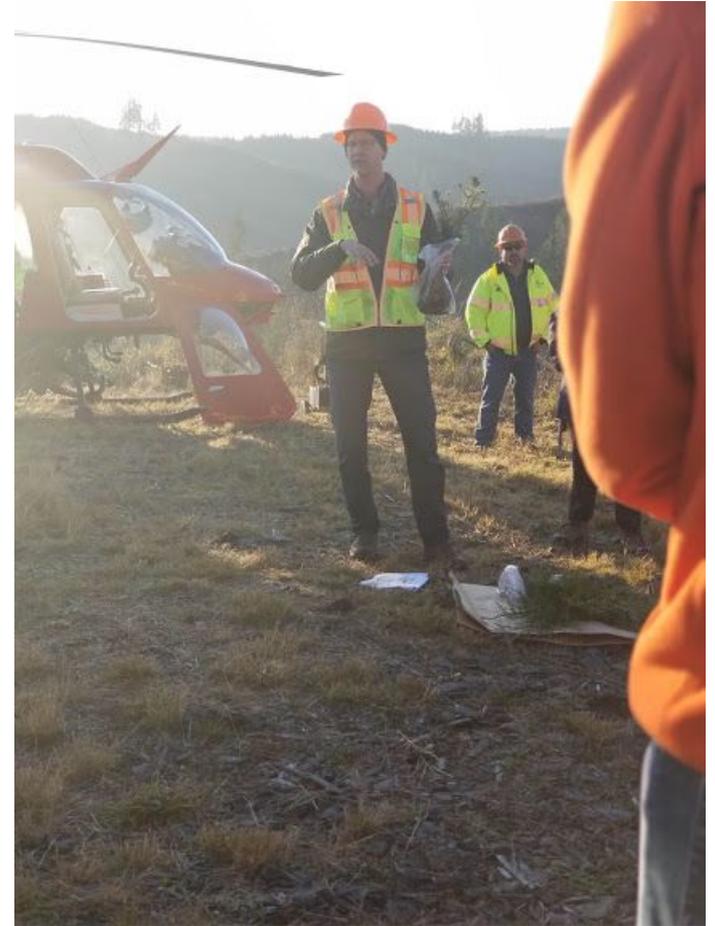


# How much herbicide is used?

Work group was educated on how little Active ingredients were used on site.

Given an example of a 1 ft by 1ft square with an eye proper of water to show that the amount of used product was approximately 2 ml per sq foot

Worked to show the GPS maps and the gaps of where the helicopter pilot skipped to miss the creeks and drainage areas

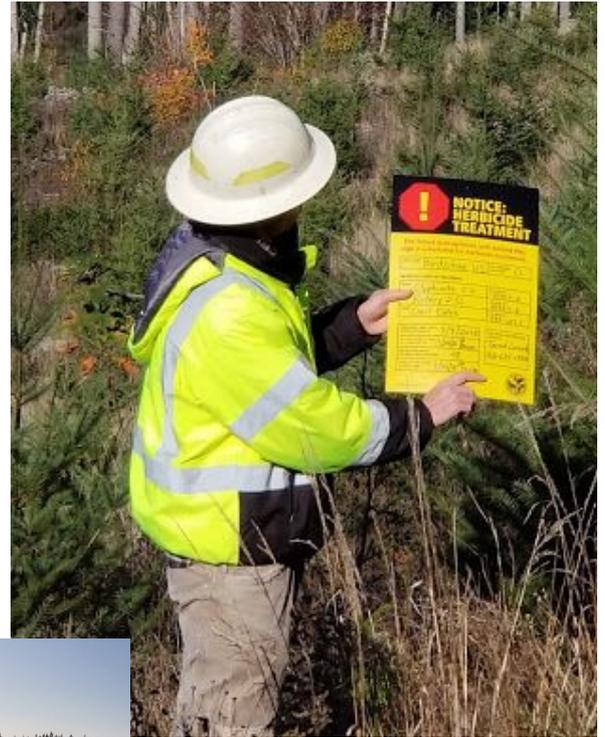


# Progress:

4 meetings

Review of posting policies

Time on sites to see sites that were treated and sites that were skipped.



# Progress



# Forest health and noxious/ invasive weeds

- **Non Native Weeds:**

- Impact health of forests
- Increase fire frequency and intensity
- Can be toxic to animals
- Do not provide adequate forage value
- Invasive weeds displace seedlings
- Dominate water resources
- Degrade the Biological diversity
- Many have root systems that provide inadequate hold for soil and stream banks

# Common problem plants

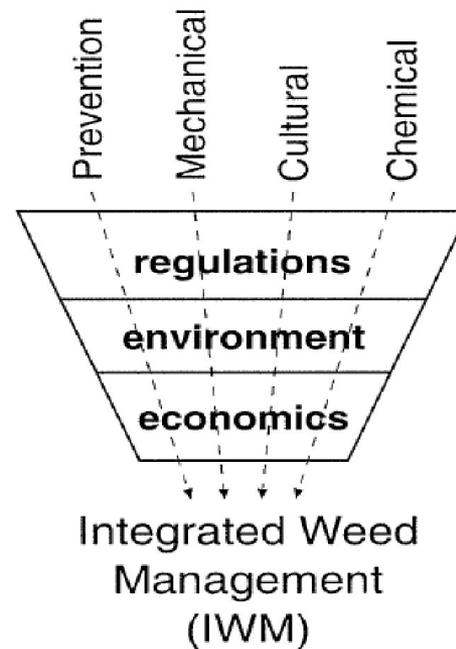
- Bull thistle
- Butterfly bush
- Canada thistle
- Slender false brome
- Garlic mustard
- Gorse
- Armenian (Himalayan) & Evergreen blackberry
- English ivy
- Knapweeds
- Knotweeds

# New weeds to watch for



# Integrated Vegetation Management

- Prevention IS the BEST WEED CONTROL
- Stop infestations when there are only a few plants to control!!!
- Prevention
- Mechanical
- Cultural
- Chemical
- Biological
- You must use them all together



# Chemical control

- IVM does include chemicals but we can only give information on products approved by WSU!
- #1 rule??? Read the lable
- It takes 4-8 hours for products to move fully into the plants.

# Weed Management in large Landscapes vs small

- Challenges
- Pre planting planning
- Post planting



# Pre planting

- Site assessment
  - Check for current weed problems
  - Evaluate soil, slope moisture
- Site prep
  - Control existing weeds
    - Herbicides or Solarization
      - (6 weeks)



# IVM includes the use of Pesticides

- Pesticides play a part in the puzzle
- You must be cautious with herbicides
- You need to know as much as you can about the plants and their interactions with the herbicides



# Next steps?

- **Create a recommendation??**
  - **On posting**
  - **On informing citizens**
  - **On timing**
  - **On pre and post testing of water**
  - **On what products to use?????**
  - **On permitting????**



# Deadline

- Recommendations December 31 2019 to then be implemented 2020

# Questions?

**“We do not inherit the Earth from our  
Ancestors, we borrow it from our  
Children.”**



**First Nations Proverb**