

Washington Friends of Farms & Forests 2019 Pest/Pesticide Issues Forum

PANELIST	BIO	FORUM TOPICS & SUMMARY
Robin Schoen-Nessa WA Dept. of Agriculture Assistant Director for Pesticide Programs Pesticide Management Division (360) 902-2011 rsnessa@agr.wa.gov http://agr.wa.gov/	Robin has served WSDA in the Pesticide Management Division for over 20 years, beginning as a pesticide investigator in 1988. She has also served as manager of the Registration and Licensing Program. Robin holds a BS in toxicology and environmental health from Western Washington University. She attended Seattle University School of Law.	 Overview of pesticide program Two bills dealing with pesticides passed the legislature. Senate Bill 5550 creates the pesticide application safety work group. WSDA will co-chair. The first meeting will be in September. Senate Bill 5597 creates a work group on aerial herbicide applications on forestland. The legislature also provided additional funding for pesticide application safety training, but only half as much as requested.
Joel Kangiser WA Dept. of Agriculture Pesticide Compliance Prog. Manager (360) 902-2013 jkangiser@agr.wa.gov http://agr.wa.gov/	Joel holds a BS in Crop Science from OSU. Before coming to work for the WSDA in 1990, Joel worked for two agricultural chemical dealerships and also operated his own business in urban horticultural and structural pest control. Joel has worked in WSDA's Compliance and Registration programs.	 WSDA updated the rules for use restricted herbicides. They went into effect in January 2019. They changed nozzle size and pressure. (See power point.) Worker Protection Standard – new requirements are fully enforceable When WSDA does WPS inspections, the most common violations are for central notice posting, pesticide safety training, and decontamination supplies.
Flor Servin WA Dept. of Agriculture Outreach & Education Supervisor, TSE (509) 423-0242 <u>fservin@agr.wa.gov</u>	Flor has been a safety trainer with the department for 18 years. She has a BS degree in Entomology from the National School of Agriculture in Mexico and a certificate in tree Fruit production from Wenatchee Valley College. Flor is based in Wenatchee.	 The Technical Services & Education program partners with the community. They do worker protection training, air blast sprayer calibration, and waste pesticide collection. They teach private applicator training in Spanish (WSU teaches it in English) They are now offering more classes than in the past. Demand has increased, all training sessions are booked full through 2021.
Gary Bahr WA Dept. of Agriculture Natural Resources Assessment Section Manager Hydrogeologist (360) 902-1936 gbahr@agr.wa.gov	Gary has served WSDA since 2015. Gary began his agricultural career in 1991 while working on chemigation, pesticide inspections, and ground and surface water protection at the Idaho State Department of Agriculture. Gary serves on a workgroup that advises the EPA Office of Pesticide Programs. Gary holds a BS in Forestry and Soils, and a MS in Water Resources from Iowa State University.	 Update on the WSDA NRAS pesticide and water quality monitoring program AND on pesticide topics from the state workgroup (AAPCO, SFIREG) that advises EPA Office of Pesticides Program. The Natural Resources Assessment section does ag land use mapping and pesticide use inventory They send data from the state to EPA for use in Endangered Species consultations They do ground water monitoring and coordinate with the departments of Ecology and Health.

PANELIST	BIO	FORUM TOPICS & SUMMARY
Karla Salp WA Dept. of Agriculture Public Engagement Specialist (360) 902-2178 ksalp@agr.wa.gov http://agr.wa.gov/	Karla Salp joined WSDA in 2015 to provide public outreach, communications and social media presence relating to gypsy moth eradication, including aerial application. Prior to joining WSDA, Karla worked for the Washington Grown TV show and Washington Friends of Farms & Forests. Karla grew up on a farm in George, WA and is a certified master gardener.	 Also do surface water monitoring, when they get detections, it's usually herbicides with a few insecticides and fungicides. Of all the 2017 water samples taken, less than 4 % have detections Out of 1643 samples collected in 2017, 116 exceeded thresholds. Completed a study in Whatcom County measuring how different types of hedgerows keep pesticides out of surface water. A 15-foot buffer is effective. The study will be published in the Journal of Environmental Quality. The gypsy moth program uses social media and lots of communication to ensure broad public awareness of spraying WSDA found one Asian gypsy moth near Martha Lake in Snohomish County They found European gypsy moths at one site in King County and two sites in Kitsap County WSDA sent four notices to residents in and near each treatment area, so neighbors are aware before they see the helicopter They start notifying in December, they spray in April or May See https://agr.wa.gov/gypsymoth
Mary Fee WA Noxious Weed Control Board Executive Secretary (360) 902-2053 <u>mfee@agr.wa.gov</u> <u>https://www.nwcb.wa.gov/</u>	Mary assists with the noxious weed listing process and supports counties. She managed interagency projects, inspections, and control measures as a King County noxious weed specialist. At Ferry County, she provided education and landowner support as the noxious weed coordinator. Mary holds a BS in Biology with a minor in Environmental Chemistry from EWU.	 Update from the Washington State Noxious Weed Control Board and RCW 17.10 Possible Draft Changes The Noxious weed program is beginning the process of updating its enabling legislation, RCW 17.10. Anybody can propose a change to the noxious weed list. They still have Bee-U-tify seed packets with seeds of native plants to replace weeds. There are different mixes for eastern and western Washington. A few County weed board have vacancies. They want and need foresters to help fill vacant positions. One proposed change may require weed control on forestland along roads and at loading sites - areas that could vector the spread of weeds.

PANELIST	BIO	FORUM TOPICS & SUMMARY
Ray Willard WA Dept. of Transportation State Roadside Asset Manager (360) 705-7865 WillarR@wsdot.wa.gov www.wsdot.wa.gov/maintenance/ vegetation	Ray has worked on development and management of WSDOT's roadside vegetation and litter control programs for 25 years. He is past president of the WA State Weed Assn. and the National Roadside Vegetation Mgmt. Assn., and current national research coordinator for the Transportation Research Board's committee on Roadside Maintenance Operations. He is a licensed landscape architect and holds a Bachelor of Landscape Architecture from UW.	 Current stats on herbicide use and other roadside vegetation management Development of the Asset Management Plan for roadsides Pollinator's and roadside vegetation management Check out the Invasive Species Council website - https://invasivespecies.wa.gov/ WSDOT has a lack of funding for road maintenance. Increasing regulation increases costs. WSDOT will have a huge budget ask for maintenance in the future. WSDOT may use a spray drone to treat weeds in wetlands.
Ralph Johnson WA Dept. of Natural Resources Forestry Training Manager Forest Resources Division (360) 902-1644 Ralph.johnson@dnr.wa.gov	Ralph coordinates forestry training for the WA DNR State Lands program. He is a forestry graduate from Humboldt State University and holds a Ph.D. in Education from Colorado State University. He has conducted pesticide training for Cooperative Extension.	 The importance of pesticide label details Enhancing basic Worker Protection Training Conducts pesticide education for DNR staff. Emphasizes worker protection and decontamination supplies.
Teresa Ann Ciapusci WA Dept. of Natural Resources Region/Operations Outreach Manager, Forest Practices Division (360) 902-1635 Teresa.Ciapusci@dnr.wa.gov www.dnr.wa.gov	Teresa Ann joined DNR in October 2018. She is a professional Forester with over 30 years of experience in field forestry and strategic planning for the Forest Service, Bureau of Land Management and state of Washington. She was a licensed applicator in Oregon and California. She was a contributing author to the USDA Forest Service's SW Region Aerial Spray Environmental Impact Statement. She currently manages a team overseeing statewide consistency in enforcement of the WA State Forest Practices rules.	 Aerial application over forestland Citizen questions about aerial application Overview of SSB 5597 – aerial pesticide applications on forestland work group
Jon Jennings WA Dept. of Ecology Aquatic Pesticide Permit Specialist (360) 407-6283 jonathan.jennings@ecy.wa.gov	Jon has worked for Ecology's Water Quality Program for 12 years. He is currently the Aquatic Pesticide Permit Specialist. Jon holds BS degrees in chemistry and computer programming.	 Update on Washington aquatic pesticide use NPDES permitting activities NPDES permits for aquatic pesticide applications Will follow EPA lead on glyphosate, will not make any changes in existing permits.

PANELIST	BIO	FORUM TOPICS & SUMMARY
Gwen Hoheisel Washington State University Regional Extension Specialist in Tree Fruit, Grape, and Berry Affiliate in Center for Precision and Automated Agricultural Systems 509-786-5609 ghoheisel@wsu.edu	Gwen is a WSU Professor in Extension and holds a degree in entomology. She started in Extension at 2006 and focuses sustainable pest management and application technology in tree fruit, grapes, and berries. Most of her projects evaluate commercial technologies, educate stakeholders, and collaborate with engineers to develop new technologies. Gwen also does research on blueberries.	 WSU Extension and Center for Precision and Automated Agricultural Systems (CPAAS) engineering for precision/smart agriculture. The program is driven by industry request. They try to solve problems now and thirty years into the future. In cooperation with WSDA they teach bilingual classes on best management practices for air blast sprayers. The class teaches operators to use better nozzles, slower speeds, reduced pressure, etc. to reduce drift. They use fluorescent tracer dye to measure drift. Fruit diseases are developing resistance to fungicides. This is a significant developing problem.
Carol Black Washington State University Urban IPM & Pesticide Safety Education (509) 335-9222 ramsay@wsu.edu http://pep.wsu.edu	Carol directs the Urban IPM and Pesticide Safety Education Program team, serving both pre-license and recertification. She directs the Pesticide Regulatory Education Program under a cooperative agreement between WSU and EPA. Carol is a Fellow and founding member of the American Association of Pesticide Safety Educators.	 Laundering herbicide contaminated work wear Internet Training Options Conducting a study on laundering clothing with pesticide residues. Some other countries (France and Brazil) require applicators to wear clothing with specific types of fabric. WSU offers online pre-license and recertification modules, it fills a niche. Some online courses are in Spanish, they are working on a landscape pre-license course in Spanish.
Sally Buckingham WA Dept. of Labor and Industries Div. of Occupational Safety & Health Industrial Hygienist (360) 647-7322 Bucu235@Ini.wa.gov	Sally serves as the agency's technical and policy expert concerning industrial hygiene agriculture/pesticide issues, process safety management, anhydrous ammonia, grain handling, combustible dust and formaldehyde topics.	 Worker Protection Standard rule update Respirator cartridges may need to be changed more often when the is wildfire smoke in the air. Some filters have an indicator to show when they need to be changed. Cannabis growers often have no understanding of pesticides, agriculture or safety protocols. L&I is concerned about misuse of pesticide by cannabis growers. WPS rulemaking information: https://www.lni.wa.gov/Safety/Rules/WhatsNew/WorkerProtection2017/
Wayne Clifford WA State Dept. of Health Zoonotic Disease & Pesticide Manager (360) 236-3181 Wayne.clifford@doh.wa.gov	Wayne leads the Department of Health's Pesticide Illness Surveillance and Prevention Program. Health investigations are aimed at root-cause analysis. Data is used to inform stakeholders and the public about pesticide safety issues.	 Status of Pesticide Illness Data through 2017 The Department of Health has no role in compliance. They cooperate with WSDA and L&I. The total number of incidents of human exposure to pesticides is increasing slightly. The number of ag drift cases is level. (Discussion: Acreage of tree fruit and wine grapes has increased. It appears the incident rate per acre has decreased.)

PESTICIDE MANAGEMENT DIVISION

Registration, Compliance & Technical Services and Education (TSE)



Not Pictured: Licensing, Waste Pesticides and DNMP

PESTICIDE MANAGEMENT DIVISION

- Pesticide Application Safety Workgroup (SB 5550) Implementing the recommendations of the pesticide application safety work group.
 - Establishes an ongoing <u>Pesticide Application Safety Committee (PAS)</u> WSDA, DOH, LNI, DNR, WSU, PNASH, WSU (PSEP)
 - 1st Meeting September 2019; Meet 3x/year ; Annual Report due
 - Advisory Workgroup to Collect Information and Make Recommendations Final Bill Report
 - <u>Pesticide Safety Education</u> Just one time funding <u>intended</u> to expand training for agricultural workers on the proper use and disposal of pesticides. Only half of the funding requested. Only pays for one position for 2 years.
- Aerial Herbicide Application (SSB 5597) Establish an <u>Aerial Application</u>
 <u>Workgroup</u>
 - Review BMP's re: aerial application of herbicides on state and private forest lands
 - DNR/WSDA (Co-Chair), DFW, ECY, DOH & WSU PSEP, Other groups



PESTICIDE COMPLIANCE PROGRAM

Use Restricted Herbicide Rules

County Phenoxy Rules in <u>Eastern WA</u> Updated January 2019

Changed "nozzle orifice opening size" and "maximum pressure limits" to...

Applications must be made at a certain droplet spectrum size (Medium, Course or Very Coarse) according to the American Society of Agricultural and Biological Engineers (ASABE).

Repealed numerous outdated and redundant requirements



Worker Protection Standards (WPS)

WSDA adopted EPA requirements effective January 2018 Provided technical assistance on new requirements in 2018 New requirements fully enforceable this season Reminder: Potential Civil Penalties on 1st-time Violations Coordinating with LNI on their rulemaking



WPS Inspections

46 WPS inspections conducted FY 2018 Issued 29 NOCs and 3 NOIs

Inspection Elements	No. of Violations
Decontamination Supplies	21
Pesticide Safety Training	24
Central Notice Posting	26
Personal Protective Equipment	11

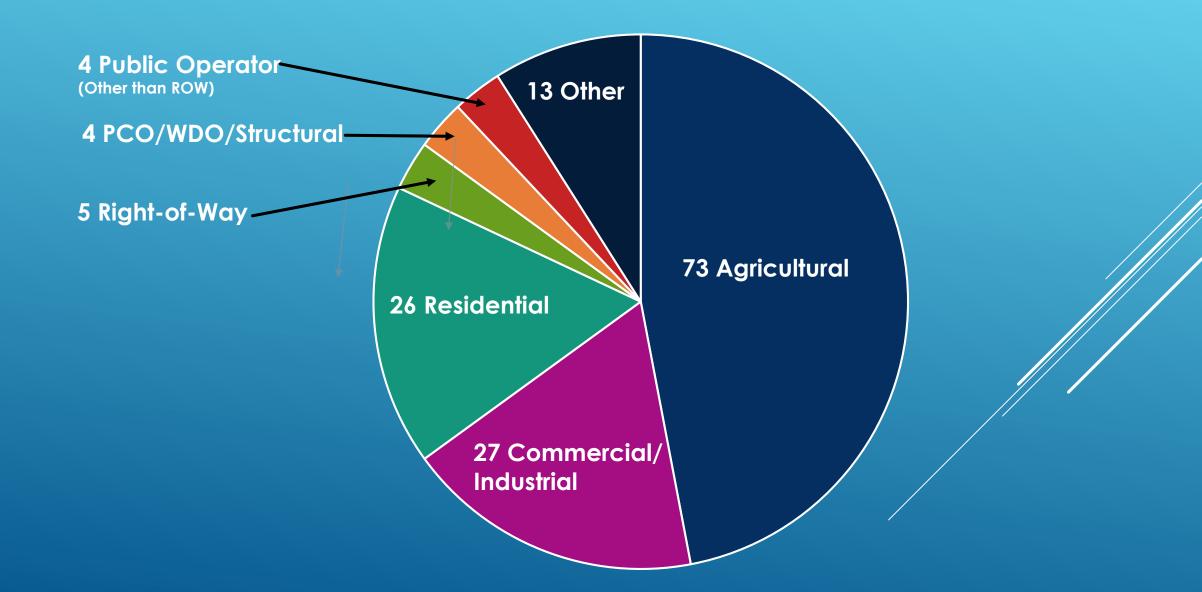


OTHER INSPECTIONS

Inspection Type	Total Conducted	NOCs Issued	NOIs Issued
Agricultural Use	27	15	1
Non-Agricultural Use	47	25	0
Applicator	40	23	2
Dealer	39	30	0
Market Place	50	32	2
Producer Establishment	6	*	*
Total	209	125	5
Total with WPS	255	154	8

152 INVESTIGATIONS







Washington State Department of Agriculture

INVESTIGATIONS BY COUNTY

Eastern WA

VS.

Western WA

Eastern WA	#
Adams	3
Benton	11
Chelan	14
Columbia	1
Douglas	2
Franklin	1
Grant	12
Kittitas	2
Klickitat	4
Lincoln	1
Okanogan	7
Spokane	16
Stevens	1
Walla Walla	9
Whitman	4
Yakima	15
E WA Total	103

Western WA	#
Clallam	1
Clark	6
Cowlitz	3
Grays Harbor	1
King	7
Kitsap	2
Lewis	2
Mason	1
Pierce	6
San Juan	1
Skagit	2
Snohomish	3
Thurston	8
Whatcom	5
W WA Total	48

Drift Vs Other

Investigations	Total	Allegations Of Drift	Other Issues (non-drift)
Agricultural	73	60	13
Non-Agricultural	59	40	19
Other	19	NA	19
Marijuana	1	0	1
Total	152	100	52



Washington State Department of Agriculture

Take Home

Drift Incidents Still Dominate Investigations, especially In Agriculture

Air-blast Drift Remains A High Concern

Applicators Need To Take Necessary Precautions

Questions???



PESTICIDE MANAGEMENT DIVISION

- Robin Schoen-Nessa, Assistant Director, PMD Olympia
 P: 360-902-2011 Email: <u>rnessa@agr.wa.gov</u>
- Joel Kangiser, Program Manager Pesticide Compliance
 P: 360-902-2013 Email: jkangiser@agr.wa.gov
- Flor Servin, Outreach& Education Supervisor, TSE
 P: 509-423-0242 Email: <u>fservin@agr.wa.gov</u>

WSDA Technical Service and Education Program -Update

Flor Servin

Technical Services and Education Program

- New program within the Pesticide Management Division
- Partners with the community to offer trainings



Technical Services and Education Program (TSEP) – current services

Technical assistance

Waste pesticide
 collection and disposal





 Demand is on the rise for all pesticide training workshops TSEP offers

Private Applicator Pre-license Courses

- * 20-hr course
- Different locations in Central Washington
- * Spanish Only
- * Average 35% passing rate

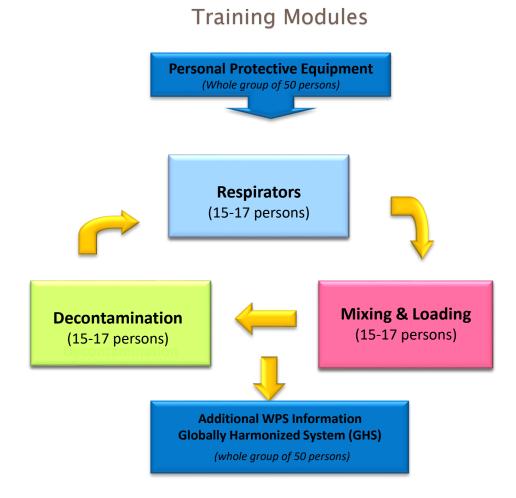


Pesticide Handler Trainings

- 8-hr class offered in Spanish and English
- * Two types
 - Hands-on
 - * Interactive
- Changes to meet the demand, requirements and needs



Hands-on Pesticide Safety Training for Pesticide Handlers



WPS Train the Trainer

- * A two-day program
- Trainer certification
 Program
- WSDA handler/worker training verification cards



Airblast Sprayer Calibration and Best Management Practices

- 8-hr program offered in English and Spanish
- * Has been offered in conjunction with WSU
- Highly interactive and hands-on – Classroom and field activities



Respirator Use Train-the-Trainer

- * 6-hr program for supervisors and managers
- Offered in English and Spanish
- Has not been offered in the last two years due to lack of resources and time.



On-farm Technical Assistance on Airblast Sprayer Calibration and Best Management Practices (T.A.)

- * 4-hour Technical assistance on airblast sprayer calibration and configuration
- for growers, orchard managers, spray supervisors that participate directly in the decision making during pesticide applications and in the process of the calibration of the airblast sprayers
- * obtain information of the calibration process that the farm follows

2019 Accomplishments

Workshop Name	Number of Workshops in FY 2019	Number of Participants	Number of Agriculture Establishments	Number of partnerships	Bilingual (English/ Spanish)
Hands-on Pesticide Safety for Pesticide Handlers	5	190	44	6	Spanish only
Interactive Pesticide Safety Training for Pesticide Handlers	17	2262	422	8	23%
WPS Train the Trainer	5	143*	94	3	80%
BMP's Sprayer Calibration	0	0	0	0	0
Pre-License Classes	7	228	-	6	Spanish only
On-farm T.A.	2	10	2	-	50%
TOTALS	36	2833	562	23	

2019 Accomplishments

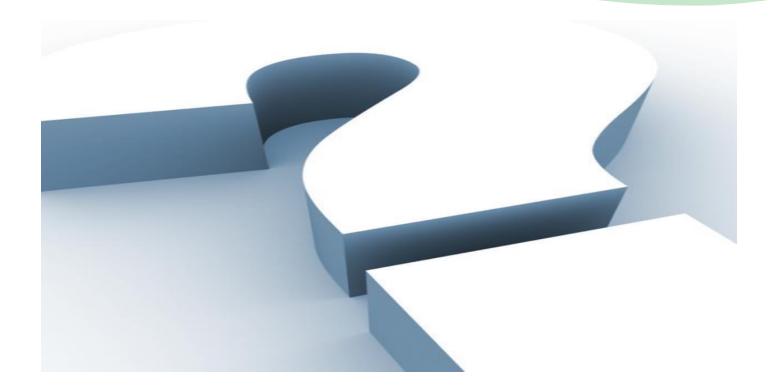
- We will be conducting four collection events this year.
- Conducted several site visits to identify unwanted products

Total Amount of Pesticides Collected in FY 2019

Date Range	Number of	Pounds of	AVG.
	Customers	Pesticides	Pounds /
	Served	Collected	Customer
FY 19 (10 months)*	110	75,222	684



Questions?





Pesticides and Water Quality Programs

Natural Resources Assessment Section, WSDA

Gary Bahr NRAS Section Manager

Natural Resources Assessment Section (NRAS)

- Presentation Topics
 - Natural Resource Assessment Section
 - NRAS Program Topics
 - Regional and National topics

Natural Resources Assessment Section (NRAS)

- Research group in the Director's office Olympia and Yakima
- Eleven employees Hydrology, Hydrogeology, Agronomy, Soil Science, Forestry, Environmental Engineering, Toxicology
- Rachel Seman-Varner (PhD) hired for the Pesticide Use Program in September, 2018
- Kelly McLain Promoted to Policy in Directors Office

Natural Resources Assessment Section (NRAS)

- ✓ Pesticide related program topics:
 - ✓ Agricultural Land Use Mapping
 - ✓ Pesticide Use Inventory
 - ✓ Ambient Surface Water Monitoring for Pesticides
 - ✓ Endangered Species Protection
 - ✓ Toxicology, pesticide and adjuvant registration review
 - ✓ Ground Water Monitoring and Protection
 - ✓ Special monitoring



- Mapping program and products
- Ag lands are mapped in every area of state
- Creating new tools for our website
- Legislative and Congressional District Ag Maps and Commodity Stats
- Key program for our pesticide program efforts



Pesticide Use Inventory

- Pesticide Use Inventory compliments water quality and pesticide management programs
- Rachel Seman-Varner is updating the program
- 2019 Pesticide Use inventory
 - Potatoes east and west side meetings
 - Cranberries Long Beach and Grayland meetings
 - More planned for upcoming fall/winter



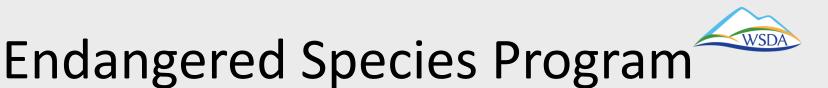
Endangered Species Program

- EPA initiated consultation in January 2017 by issuing the firstever nationwide Biological Evaluations (BEs) for chlorpyrifos, diazinon, and malathion
- Pursuant to a consent decree, NMFS was required to issue a final BiOp for these three pesticides by December 31, 2017
- NMFS issued a final BiOp on December 29, 2017
 - A draft BiOp was not released prior to the final



Endangered Species Program

- The BiOP found "jeopardy" to 38 species and "adverse modifications" to 37 critical habitat units
- For species with "jeopardy" findings, Reasonable and Prudent Alternatives (RPAs) are identified to avoid jeopardy
- Reasonable and Prudent Measures (RPMs) are intended to minimize "take"



- EPA initiated a Public Comment period in Spring 2018, requested comment on:
 - The scientific approaches and data sources used to support the BiOp
 - The RPAs and RPMs
 - Stewardship Programs
 - National- and state-level use and usage data and information
- EPA OPP is working through the comments and approaches
- NMFS is reviewing 1,3-D, racemic metolachlor, bromoxynil, and prometryn by December 31, 2019



Toxicology Program

- Coordination with WSDA PMD, Food Safety, Ecology, DOH, and EPA
- Pesticide registration and registration reviews
 - 24(c) and Section 18
- Adjuvant registration
- Aquatic Herbicide Permits
- Special reviews for ESA, human health, aquatics, animal feed, and other topics to support PMD, Food Safety, Ecology, EPA
- BiOp pesticides review and comments to EPA
- Cannabis pesticide residue data review



Ground Water Program

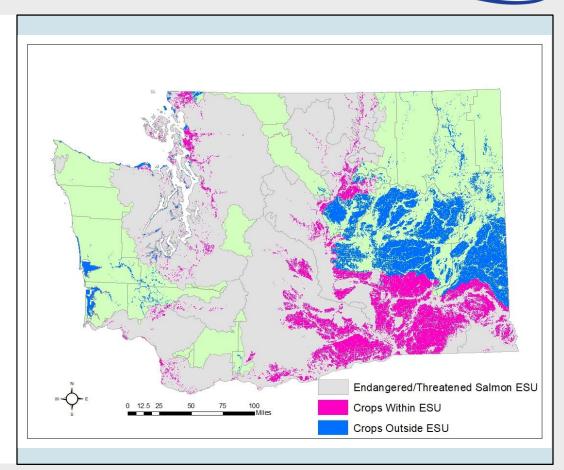
- Coordination with DOH and Ecology
- Review all Public Drinking Water Pesticide Detections
- Review pesticide testing lists with agencies
- Conduct followup work with DOH, Ecology for localized monitoring for Pesticides

Recent projects in Walla Walla and Whatcom Counties

 Assist DOH with detections of older pesticides such as Dinoseb

Ambient Surface Water Pesticide Monitoring Program

- 52 Evolutionary Significant Units (ESU) for Salmon
 - 28 threatened or endangered, 14 in WA
- ESA listing covers ~60% of Washington Assess possible pesticide affects on salmon
- Share results with federal, state and local partners
- Pesticide use and agricultural practices change
 - Identify trends
 - Compare to modeled estimates



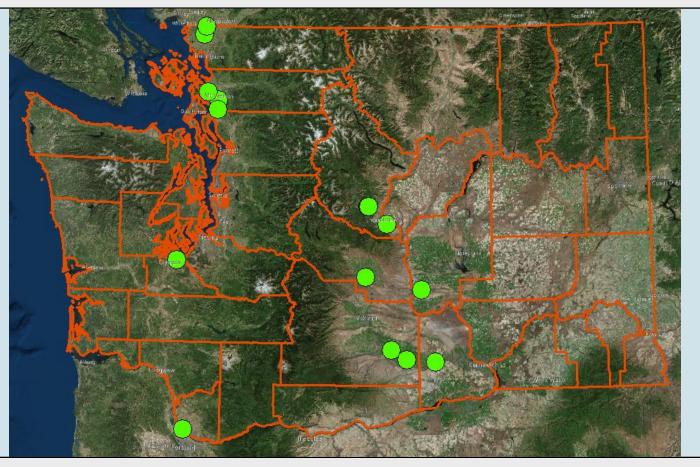
Where do we monitor?



3 Urban and 13 Agricultural Sites in 2017

140+ Current Use Pesticides, Legacy Chemicals & Degradates

Weekly or biweekly sampling for 12-26 weeks (March – September)





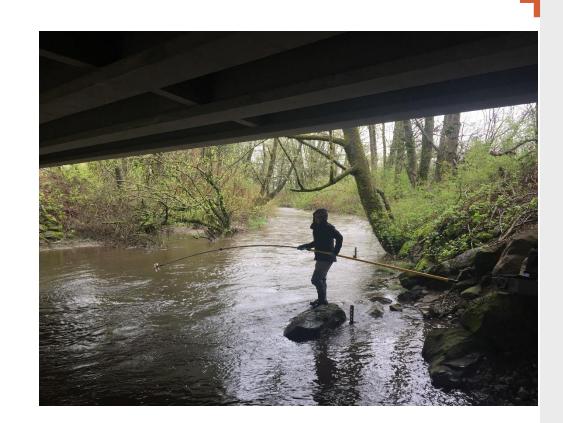




How do we monitor?







How do we monitor?





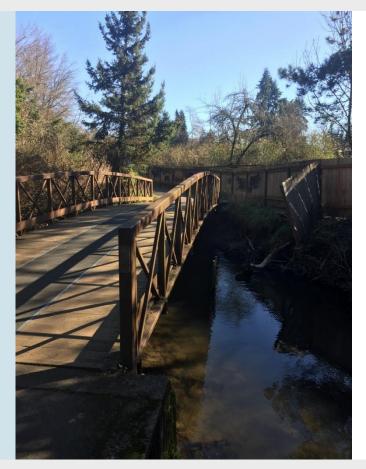
Bertrand Creek

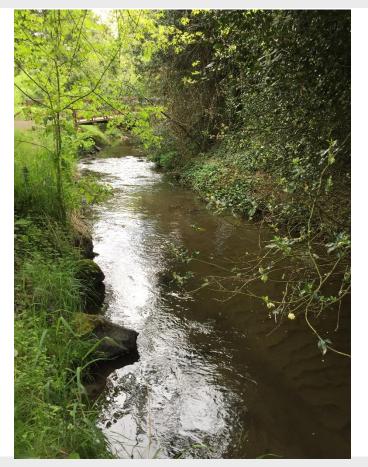




Burnt Bridge Creek





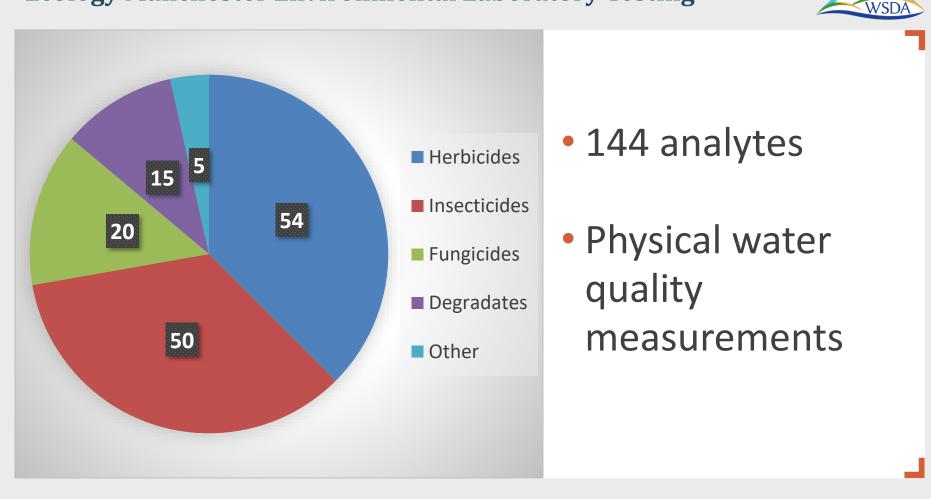


Samples go to Ecology Manchester Environmental Laboratory





Ecology Manchester Environmental Laboratory Testing





Water Quality Criteria

What are they?

- 1. Pesticide concentration that can be harmful to aquatic life
- 2. Developed by EPA based on most accurate, current science
- 3. Washington State criteria

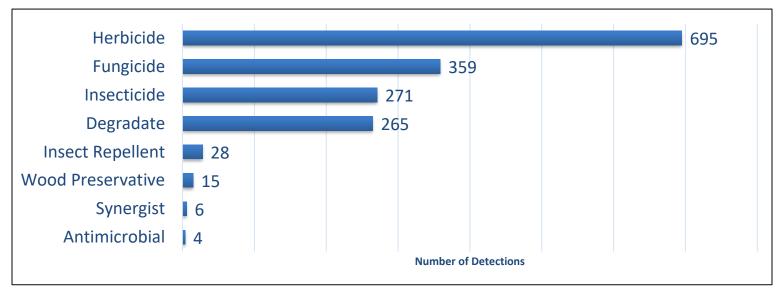
NRAS compares results to Benchmarks and Criteria

Evaluate pesticides that may be Pesticides of Concern

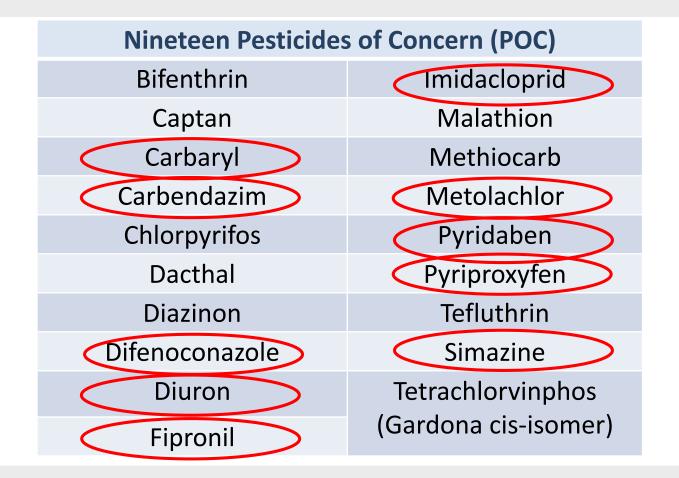
NRAS Monitoring Results (2017)



- 1,643 pesticide detections out of a possible 42,030 results (3.9% detection frequency) Detected 85 pesticides, 116 Exceedances of an Aquatic Criteria
- Herbicides (42.3%) were the most frequently detected







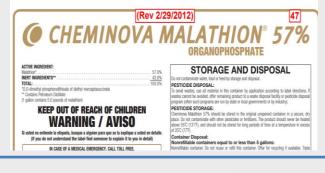


Data Communication and Outreach

Communication and Outreach

- Working with WSDA Communications Office and Partners
 - Factsheets, reports, newsletters, presentations, and outreach meetings
 - Journal Publications 2015 Riparian Study has been accepted in the Journal of Environmental Quality (JEQ)
- WSU Extension and recertification workshops
- Conservation Districts
- pesticide applicators, general public,
- State, local, and federal agencies,
- Commodity groups, Commissions, associations, governmental committees, others

Malathion



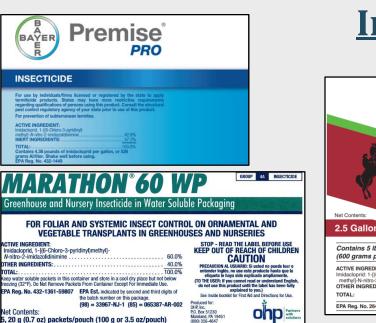
BAYER

ACTIVE INGREDIENT

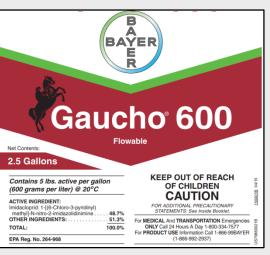
Net Contents:

5, 20 g (0.7 oz) packets/pouch (100 g or 3.5 oz/pouch)

Simazine (Rev 7/26/2011) 19 Drexel Simazine 4L GROUP 5 HERBICIDE PRECAUTIONARY STATEMENTS (Contil) Il mixors, loaders, applicators and other handlers must wear Pre-emergence control of many annual Broadleaf weeds and rg-sleeved shirt and long pants, shoes plus socks, and chemi Grasses in agricultural and ornamental crops. ACTIVE INCREDIENT i pilots, flaggers, and groundboom applicators must wear: in idition, groundboom applicators must also wear chemical-resistan OTHER INCREDIENTS 57.9% oliow manufacturer's instructions for cleaning impirations PDF II TOTAL no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. This product contains 4 pounds of Simazine per gallon -----



Imidacloprid



ADMIRE® PROTECTANT Net Contents:		
1 GAL. 12 OZ. (140 FL. OZ.)	GROUP 4A INSECTIC	IDE
For uses in pest management and maintenance of plant health. ACTIVE INOREDIENT: Imidaelogid1, 1[6-Chioro-3-pyridinyl]methyl]- //entro-2-imidazolidinimine 42.8% 07.2% 07.6% OTHER INGREDIENTS: 57.2% 07.1% TOTAL: 100.0% 100.1%	STOP - Read the label before use KEEP OUT OF REACH OF CHILDREN CAUTION FOR ADDITIONAL PRECAUTIONARY STATEMENTS: See Inside Bookket.	131212D 12/13
EPA Reg. No. 264-827 Contains 4.6 pounds of active ingredient per gallon or 550 grams AJ/liter. SHAKE WELL BEFORE USING	For MEDICAL And TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577 For PRODUCT USE Information Call 1-866-99BAYER (1-866-992-2937)	79554567D

Factsheets Woodland Creek



Summary of 2017 Surface Water Monitoring Program Results | November 2018

Hotelset 2005 Hotelse



The Washington State Department of Agriculture (WSDA) has monitored pesticide concentrations in surface water throughout the state since 2003. WSDA staff take surface water samples during the typical pesticide use ceason (March - September). In 2017, WSDA monitored 16 sites in Washington, 1 of which was in Thurston County. State and federal agencies use this data to evaluate water quality and make exposure assessments for pesticides registered for use in Washington State.

WSDA Natural Resources Assessment Section Watershed and site information

- Sampling history: New site as of 2017
- Watershed area: 12,500 acres (~20 square miles)
- Area in agricultural use: 500 acres (~4% of total watershed acreage)
- Main crops: Ornamental nurseries, sod farms, golf courses, and pasture
- Fish habitat: Fall Chinook, fall chum, and coho salmon; and winter steelhead (Washington State Department of Fish and Wildlife SalmonScape: <u>apps.wdfw.we.gov/</u> salmonscape/)

Sampling dates: 14 sampling events, March 28th - September 25th, once every 2 weeks Water testing:

- 144 chemicals (current and legacy insecticides, herbicides, fungicides, rodenticides, pesticide degradates, and other pesticide products)
- Streamflow and total suspended solids
- · Air and water temperature measured every 30 minutes

Sample analysis at Manchester Environmental Lab, Port Orchard, Washington
Notes:

- The creek flows through almost 5 miles of Lacey, Washington's residential, commercial, and agricultural areas.
- · Adult salmon have been observed by WSDA staff at this site during spawning season.

Results and Conclusions

- There were 31 pesticide detections in Woodland Creek. Of these, 1 was above WSDA's assessment criteria.
- Out of all the chemicals tested for, there was 1 type of insecticide, 4 fungicides, 4 herbicides, 2 degradates, and 2 other pesticide-related chemicals detected.
- WSDA identifies a pesticide as a Pesticide of Concern (POC) when it has been found somewhere in the state above WSDA's assessment criteria in recent years. Carbendazim, difenoconazole, and pyridaben are POCs that were detected in Woodland Creek.
- · The detection of pyridaben at this site was higher than WSDA's assessment criteria.
- Pyridaben was only detected at the beginning of July. This insecticide is used in greenhouses and on fruit trees.

Recommendations

- · Make use of natural protections
- Use buffers, filter strips, sediment basins, ground cover, and setbacks.

Be informed

- · Read and follow pesticide label directions, and be familiar with active ingredients.
- · Plan applications using the weather forecast to reduce the chances of drift or runoff.
- Review WSDA's POCs and choose less-toxic pesticides when possible.
- · Care for your equipment and products
- · Calibrate, maintain, and inspect application equipment regularly.
- Properly dispose of all unneeded pesticides. Visit <u>agr.wa.gov/wastepesticide</u> to learn about waste pesticide collection events.

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National - State FIFRA Issues Research and Evaluation Group (SFIREG)



- States Lead Pesticide Agencies work with EPA, resolve challenges with pesticide programs and policies
 - Pesticide Operations and Management (POM)
 - focused on registration, certification, and enforcement
 - Environmental Quality Issues (EQI)
 - focused on water quality, threatened and endangered species, human health and the environment, risk assessments, and technical aspects of FIFRA



SFIREG EQI

- SFIREG Environmental Quality Issues (EQI) Working Committee
 - Gary Bahr, WSDA, Chair
- James Cooper, Florida Department of Agriculture and Consumer Services
- John Allran, North Carolina Department of Agriculture and Consumer Services
- Laura Mensch, Delaware Department of Agriculture
- Hotze Wijnja, Massachusetts Department of Agricultural Resources
- Mary E. Tomlinson, Maine Board of Pesticide Control
- Carrie Leach, Purdue University, Laboratory Liasion
- Nan Singhasemanon, California Department of Pesticide Regulation
- Colton Bond, Oregon Department of Agriculture



Various EQI and POM Topics

- SW and GW Monitoring programs and data
- Reporting of data and EPA WQX
- Aquatic Life Benchmarks
- Pesticide ESA BiOps, EPA next steps and Bulletins Live 2
 - Buffers, RPAs, RPMs, Stewardship Approaches
- Cover Crop Issues and Label Plant-Back Restrictions
- Neonicotinoid reviews
- Pollinator Plans and topics
- Cannabis pesticide residue workgroup
- Pesticide regulation for Hemp



Various EQI and POM Topics

- Technology Workgroup (UAVs, Robot sprayers, Micro-rate dispensers, Nanotechnology, Labels)
- Dicamba products, drift, volatilization, buffers, restrictions, enforcement
- EPA is re-evaluating its approach to reviewing FIFRA Section 24(c) requests, and the circumstances under which EPA will exercise its authority to disapprove State requests
- Certification and Training Program
- WPS Program
- Regulation of Devices
- Evaluation of the use of registered pesticides in animal feed



Questions?

Gary Bahr

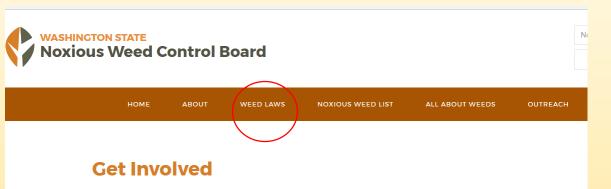
Section Manager, Olympia Ground Water Monitoring Lead 360.902.1936 gbahr@agr.wa.gov Washington State Noxious Weed Control Board Update & RCW 17.10 Draft Possible Changes May 9th, 2019

Update

- Noxious Weed List Process
- 2019 Weed Changes
- Projects and Resources

Noxious Weed Listing Process

- Jan-April: submission of proposals
- <u>May:</u> Noxious Weed Committee (NWC) begins to review requested changes
- <u>September:</u> NWC makes recommendations to State Weed Board
- <u>November</u>: Public hearing, State Weed Board votes on changes
- January: New changes take effect in new Noxious Weed List
- Within 90 days County Noxious Weed Control Boards adopt their noxious weed list



Participate in the Process

The Annual Process to Amend the Washington State Noxious Weed List

Every year, the Washington State Noxious Weed Board adopts a new Noxious Weed List (WAC 16-750)

Weed species may be added or removed, the Class (A, B, or C) can be changed, or the required control area of a Class B Designate may be changed. The Noxious Weed Committee meets several times a year to review and discuss proposed changes, and they present their recommendations at the November Board meeting so that the Board can make a well-informed decision.

Anyone in Washington state can request that a plant species be added or removed from the Noxious Weed List.

- 1. You can download the document explaining how to participate in the listing process here.
- 2. The request must be submitted between January 1st and April 30th for consideration. Requests can be mailed or emailed to State Noxious Weed Board.

To submit a request, you should provide the following information:

- The common and scientific name of the plant species, if known
- The specific change request (addition, removal, class or designation change)

Adopted changes for 2019:

- Designating Eurasian watermilfoil, *Myriophyllum spicatum*, grass-leaved arrowhead, *Sagittaria graminea*, diffuse knapweed, *Centaurea diffusa*, and purple loosestrife, *Lythrum salicaria*, in Mason County.
- **Undesignating** hoary alyssum, Berteroa incana, in Ferry County
- Designating Brazilian elodea, Egeria densa, in Pacific and Snohomish counties
- Designating butterfly bush, Buddleja davidii, in San Juan and Grays Harbor counties
- Designating camelthorn, Alhagi maurorum, in Walla Walla County
- Designating Dalmatian toadflax, *Linaria dalmatica* ssp. *dalmatica*, in Cowlitz, Kittitas, and Franklin counties
- Designating European coltsfoot, *Tussilago farfara*, in Adams, Lincoln, Benton, and Franklin counties
- Designating fanwort, Cabomba caroliniana, in Grays Harbor County
- Designating hairy willow-herb, Epilobium hirsutum, in Walla Walla County
- Designating houndstongue, Cynoglossum officinale, in Douglas and Franklin counties
- **Undesignating** indigobush, Amorpha fruticosa, in Skamania County
- Designating nonnative hawkweed species and hybrids of the meadow subgenus (*Pilosella*) in Ferry County
- **Undesignating** meadow knapweed, *Centaurea x moncktonii*, in Skamania and Clark counties
- **Undesignating** spotted knapweed, *Centaurea stoebe*, in Skamania County

Scientific name updates for 2019

- Kochia: Kochia scoparia to Bassia scoparia
- Leafy spurge: Euphorbia esula to Euphorbia virgata
- Himalayan knotweed: Polygonum polystachyum to Persicaria wallichii
- Russian knapweed: Acroptilon repens to Rhaponticum repens
- Tansy ragwort: Senecio jacobaea to Jacobaea vulgaris

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2019 Updated and Reprinted Brochures

Garden Wise

Eastern Updates

*Flowering Rush

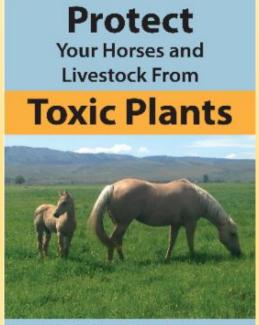
Eastern and Western WA versions show an invasive species, and then multiple non-invasive alternatives are provided with pictures and descriptions.

Western Updates

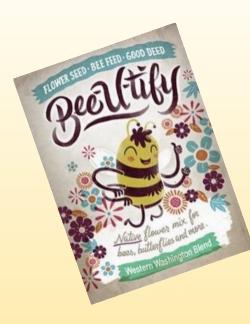
- * Flowering Rush
- * Italian Arum * Revenna Grass Additional plant recommendations

Toxic Plants

A guide to identifying and controlling common, toxic noxious weeds and other toxic plant species.



A guide to identifying and controlling common, toxic noxicus weeds and other toxic plant species.



Bea-u-tify Seed Packets

- The WSNWCB, along with several county weed noxious weed boards and the Washington Invasive Species Counsel, provided funding for seed packets in 2019.
- The seed mixes for both Eastern and Western seed packets have been modified to only include native pollinator friendly species.
- Approximately 60,000 packets were produced.



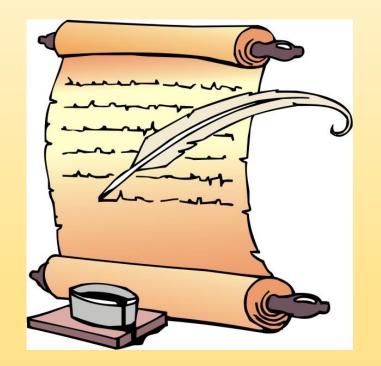
\$15,000 for 2019 Class A Eradication Projects



Asotin County Common Crupina
 Island County Garlic Mustard
 Skamania County Garlic Mustard
 Mason County Giant Hogweed
 Asotin County Mediterranean Sage



RCW 17.10 Possible Draft Changes



126 RCW 17.10.050

- 127 Activated county noxious weed control board—Members—Election—Terms—Meetings—
- 128 Quorum—Expenses—Officers—Vacancy.
- 129 (1) Each activated county noxious weed control board consists of five voting members
- 130 appointed by the county legislative authority in consultation with the county noxious weed
- 131 board. In appointing the voting members, the county legislative authority shall divide the county
- 132 into five geographical areas that best represent the county's interests, and appoint a voting
- 133 member from each geographical area. At least four-three of the voting members shall be engaged
- 134 in the primary production of agricultural products. There is one nonvoting member on the board
- 135 who is the chair of the county extension office or an extension agent appointed by the chair of
- 136 the county extension office. Each voting member of the board serves a term of four years, except

Fee, Mary

Intent- to obtain consistency within the weed board, and input from the weed board.

Fee, Mary

Intent- To allow for more diversity on the board, hopefully fulfilling un-seated positions. Discussed wanting to make sure that board members are invested in working the land and feeling the impact of noxious weed board decisions. After Jan. 17th 2019 discussion, reverted back to four.

Why is there a need to update RCW 17.10.140 Owner's duty to control?



Vectors of spread-Staging areas Right-of-ways

Potentially Open Canopies



Shade Tolerant Species

Spotted Knapweed

369 RCW 17.10.140

370 Owner's duty to control spread of noxious weeds.

- 371 (1) Except as is provided under subsection (2) of this section, every owner shall perform or
- cause to be performed those acts as may be necessary to:
- 373 (a) Eradicate all class <u>A</u> noxious weeds;
- (b) Control and prevent the spread of all class B noxious weeds designated for control in that
- region within and from the owner's property; and
- 376 (c) Control and prevent the spread of all class B and class C noxious weeds listed on the
- 377 county weed list as locally mandated control priorities within and from the owner's property.
- 378 (2) Forest lands classified under RCW 17.10.240(2), or meeting the definition of forest lands
- contained in RCW 17.10.240, are subject to the requirements of subsection (1)(a) and (b) of this
- section at all times. Forest lands are subject to the requirements of subsection (1)(c) of this
- 381 section only within a one thousand foot buffer strip of adjacent land uses. In addition, forest
- 382 lands are subject to subsection (1)(c) of this section for a single five-year period following the
- 383 harvesting of trees for lumber.
- 384 [<u>1997</u> c 353 § 17; 1969 <u>ex.s.</u> c 113 § 14.]

Class C Noxious Weeds	Chelan 13		Columbia 5	Cowlitz 8
absinth wormwood		1		
Austian fieldcress				
babysbreath	1			
black henbane				
blackgrass				
buffalobur	1		1	
cereal rye		1		
common barberry				
common catsear		1		
common groundsel		1		1
common St. Johnswort	1	1		
common tansy		1		1
common teasel		1		1
curlyleaf pondweed		1		
English hawthorn		1		
English ivy	1			
Eurasian watermilfoil hy	brid			
evergreen blackberry		1		
field bindweed		1		
fragrant waterlily		1		
hairy whitetop		1		
Himalayan blackberry		1		
hoary cress				
Italian Arum	1		1	
Japanese eelgrass				
jointed goatgrass				
jubata grass	1		1	
	-		-	

Class C Noxious Weeds lawnweed	Chelan	Clallam	Columbia	Cowlitz
medusahead	1			
non-native cattails				
old man's beard		1		
oxeye daisy	1			
pampas grass		1		1
perennial sowthistle				
reed canerygrass		1		
Russian olive				
scentless mayweed				
smoothseed alfalfa dodd	ler			
spikeweed				
spiny cocklebur				
spotted jewelweed		1		
Swainsonpea				
thistle, bull	1			
thistle, canada	1	1		1
tree-of-heaven				1
ventenata	1			
white cockle	1		1	
wild carrot	1		1	
yellow flag iris		1		1
yellow toadflax		1		1

(2) Forest lands used solely for the planting, growing, or harvesting of trees and which are 740 typified, except during a single period of five years following clear-cut logging, by canopies so 741 dense as to prohibit growth of an understory may be subject to an annual noxious weed 742 assessment levied by a county legislative authority that does not exceed one-tenth of the 743 weighted average per acre noxious weed assessment levied on all other lands in unincorporated 744 areas within the county that are subject to the weed assessment. This assessment shall be 745 computed in accordance with the formula in subsection (3) of this section. 746 (3) The calculation of the "weighted average per acre noxious weed assessment" is a ratio 747 748 expressed as follows: (a) The numerator is the total amount of funds estimated to be collected from the per acre 749 assessment on all lands except (i) forest lands as identified in subsection (2) of this section, (ii) 750 lands exempt from the noxious weed assessment, and (iii) lands located in an incorporated area. 751 752 (b) The denominator is the total acreage from which funds in (a) of this subsection are collected. For lands of less than one acre in size, the denominator calculation may be based on 753 the following assumptions: (i) Unimproved lands are calculated as being one-half acre in size on 754 the average, and (ii) improved lands are calculated as being one-third acre in size on the average. 755 The county legislative authority may choose to calculate the denominator for lands of less than 756 757 one acre in size using other assumptions about average parcel size based on local information.

(4) For those counties that levy a per parcel assessment to help fund noxious weed control

759 programs, the per parcel assessment on forest lands as defined in subsection (2) of this section

760 shall not exceed one-tenth of the per parcel assessment on nonforest lands.

761 [1997 c 353 § 27; 1995 c 374 § 77; 1987 c 438 § 31; 1975 1st ex.s. c 13 § 10; 1969 ex.s. c 113 §

762 24.]

Forestland concerns if assessment is increased-

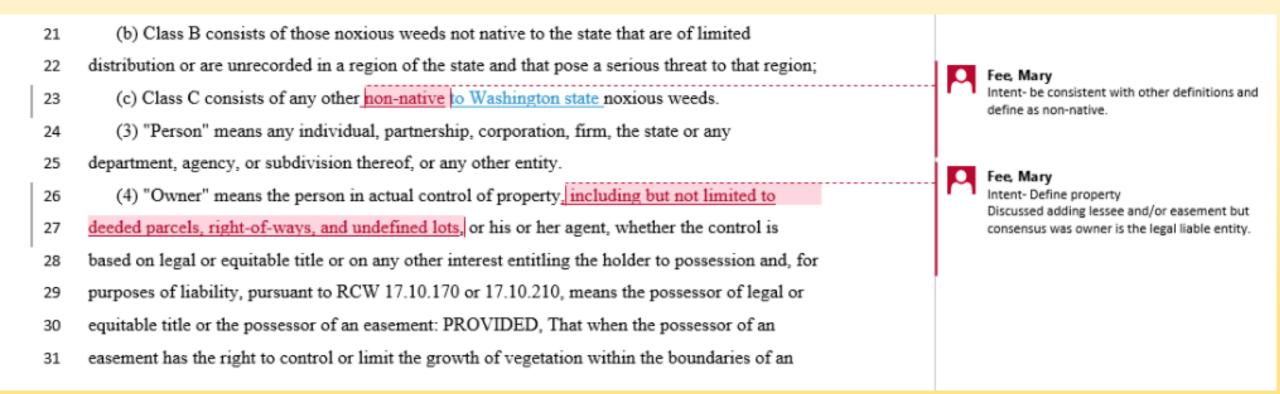
Many local districts would like to assess a small fee on forestlands which can add up and create a large expense when compounded over time. Revenue from tree harvest is a many year investment.

	Counties with reduced	forest land assessm	nent	
County	Assessment Formula	Current forest	If changed to full	Difference
		noxious weed	noxious weed	over a 50 year
		assessment of 100	assessment of 100	period
		acres	acres	
Clallam	.13 cents/acre plus 1.50 per parcel. 1/10 for forest land	0.145	14.5	717.75
Cowlitz	\$4.32 per non forest parcel plus \$0.10 cents per non forest acre	0.1432	14.32	708.84
King	\$3.171 per parcel and 22.65 cents per acre on all property not classified as forest land. Property classified as forest land, as defined in RCW 84.33.035, that is used solely for the planting, growing or harvesting of trees and that is typified by canopies so dense as to prohibit the growth of an understory shall be assessed at the rate of 31.71 cents per parcel and 2.265 cents per acre.	0.25821	25.821	1278.1395
Kittitas	Incorporated Lands: \$0.00875/Acre (\$3.38/parcel minimum), Designated Forest: \$0.00350/Acre (\$1.54/parcel minimum), All Other Lands: \$0.0350/Acre (\$15.40/parcel minimum)	0.035	3.5	173.25
Klickitat	\$6.50 parcel and 4 cents per acre (forest @1/10th)	0.105	10.5	519.75
Lewis	eight dollar (\$8.00) assessment (forest@1/10)	\$ 0.08	8	396
San Juan	Non-forest land: \$6.25 per parcel and \$0.625 per acre; Forestland: \$0.625 per parcel and \$0.0625 per acre (SJC Ord. 1- 2009)	0.6875	68.75	3403.125
Thurston	Forest lands are \$0.44 per parcel plus \$0.0284 per acre. All other lands are \$4.40 per parcel plus \$0.40 per acre for parcels up to 5 acres, and \$0.15 per acre for each acre in excess of 5 acres.	0.444	44.4	2197.8

Questions? Comments?

Mary Fee, executive Secretary WA State Noxious Weed Control Board Email: mfee@agr.wa.gov Office Phone: (360)902-2053 Website: <u>https://www.nwcb.wa.gov/</u>

RCW 17.10.010 Definitions



RCW 17.10.010 Definitions

- 46 list under RCW 17.10.080.
- 47 (11) "Screenings" means a mixture of mill or elevator run mixture or a combination of
- 48 varying amounts of materials obtained in the process of cleaning either grain or seeds, or both,
- 49 such as light or broken grain or seed, weed seeds, hulls, chaff, joints, straw, elevator dust, floor
- 50 sweepings, sand, and dirt.
- 51 (12) "Parcel" for the purpose of this chapter is defined as real property that has been assessed
- 52 and-given a parcel number or is deeded real property, right-of-ways, undefined lots, or lots
- 53 having a legal description.
- 54 [1997 c 353 § 2; 1995 c 255 § 6; 1987 c 438 § 1; 1975 1st ex.s. c 13 § 1; 1969 ex.s. c 113 § 1.]
- 55
- 56 RCW 17.10.020
- 57 County noxious weed control boards—Created—Jurisdiction—Inactive status.
- 58 (1) In each county of the state there is created a noxious weed control board, bearing the
- 59 name of the county within which it is located. The jurisdictional boundaries of each board are the
- 60 boundaries of the county within which it is located.

Fee, Mary Intent- Add definition of parcel to alleviate any discrepancies. The verbiage for this definition was combined from several other definitions including WAC 458.53.020 and RCW 65.04.045. No need for assessed.

C Reply Resolve



65 RCW 17.10.030

66 State noxious weed control board—Members—Terms—Elections—Meetings—

67 Reimbursement for travel expenses.

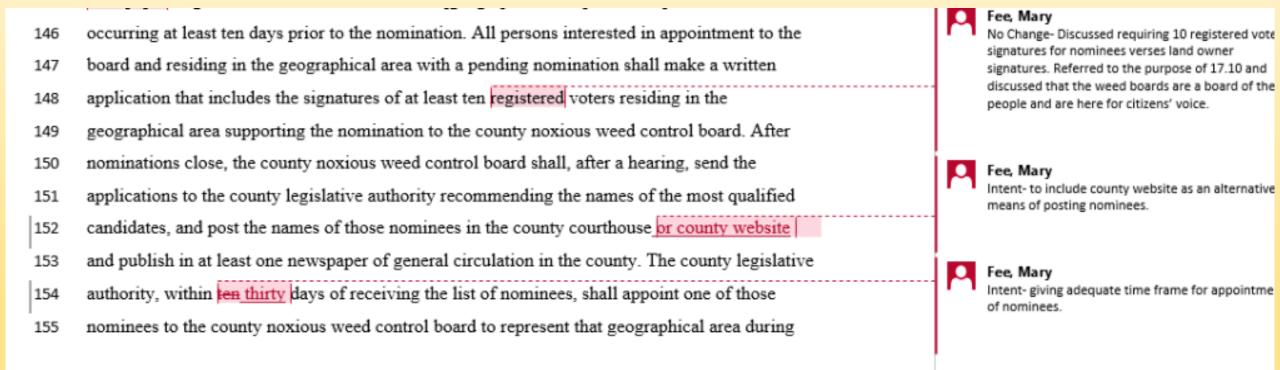
There is created a state noxious weed control board comprised of nine voting members and 68 three four nonvoting members. Four of the voting members shall be elected by the members of 69 the various activated county noxious weed control boards, and shall be residents of a county in 70 which a county noxious weed control board has been activated and a member of said board, and 71 those qualifications shall continue through their term of office. Two of these members shall be 72 elected from the west side of the state, the crest of the Cascades being the dividing line, and two 73 from the east side of the state. The director of agriculture is a voting member of the board. One 74 voting member shall be elected by the directors of the various active weed districts formed under 75 chapter 17.04 or 17.06 RCW. The Washington state association of counties appoints one voting 76 member who shall be a member of a county legislative authority. The Washington state weed 77 coordinators association appoints one non-voting technical advisor. The director shall appoint 78 two voting members to represent the public interest, one from the west side and one from the east 79 side of the state. The director shall also appoint three nonvoting members representing scientific 80 disciplines relating to weed control. The term of office for all members of the board is three four 81 years from the date of election or appointment. 82

Fee, Mary Intent- to account for coordinator's association member.

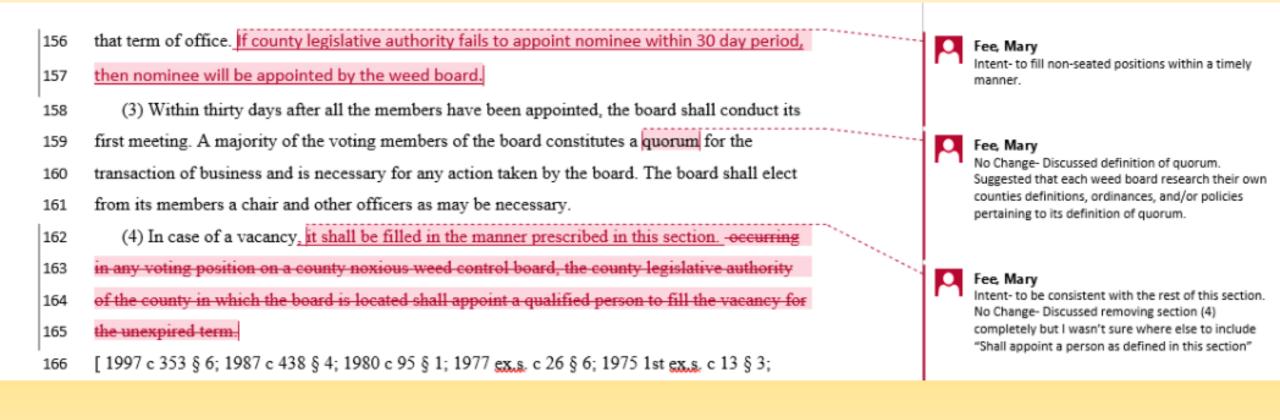
Fee, Mary Intent- add technical input from the coordinator's association.

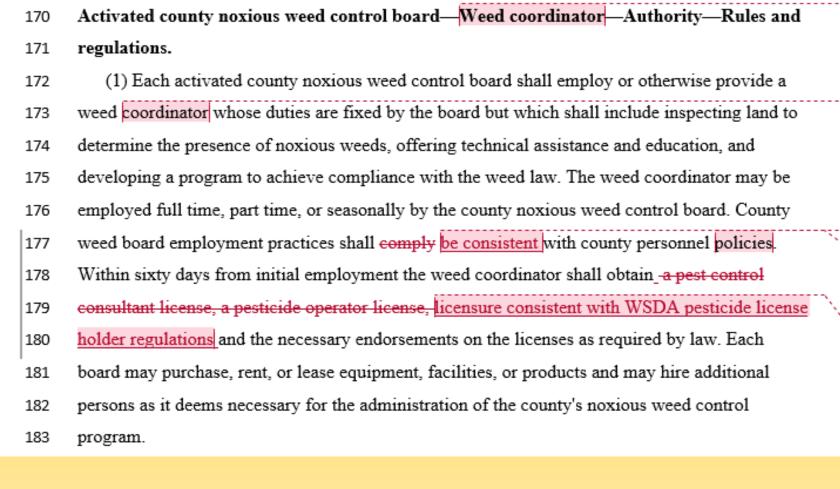
Fee, Mary Intent- to allow for consistency within the board.

RCW 17.10.050 Activated county noxious weed control board— Members—Election—Terms—Meetings—Quorum—Expenses— Officers—Vacancy.



RCW 17.10.050 Activated county noxious weed control board—Members—Election—Terms— Meetings—Quorum—Expenses—Officers—Vacancy.





RCW 17.10.060

169

coordinator, board, and legislative authority.

Fee, Mary

No Change- Discussed coordinator employment and county umbrella for risk management and insurance.

Fee, Mary

Intent- because some boards more parallel junior taxing districts, they need to employ similar personnel policies to the county but may not be directly governed by another county department. This allows for both situation.

Fee, Mary

No Change- Discussed ability to purchase own insurances and bonds to cover noxious weed program practices and procedures.



Fee, Mary Intent- Update verbiage for pesticide licensure.

RCW 17.10.070 194

- State noxious weed control board-Powers-Report. 195
- (1) In addition to the powers conferred on the state noxious weed control board under other 196
- provisions of this chapter, it has the power to: 197
- (a) Employ a state noxious weed control board executive secretary, education specialist, and 198
- additional persons as it deems necessary, to disseminate information relating to noxious weeds to 199
- county noxious weed control boards and weed districts, to coordinate the educational and weed 200
- 201 control efforts of the various county and regional noxious weed control boards and weed
- districts, and to assist the board in carrying out its responsibilities; 202
- (b) Adopt, amend, or repeal rules, pursuant to the administrative procedure act, chapter 34.05 203
- RCW, as may be necessary to carry out the duties and authorities assigned to the board by this 204

205 chapter.

Fee, Mary Intent- to dedicate an education specialist position.

RCW 17.10.074 Director—Powers.

218	(a) Require the county legislative authority or the noxious weed control board of any county
219	or any weed district to report to it concerning the presence, absence, or estimated amount of
220	noxious weeds and measures, if any, taken or planned for the control thereof;
221	(b) Employ staff as may be necessary in the administration of this chapter;
222	(c) Adopt, amend, or repeal rules, pursuant to the administrative procedure act, chapter 34.05
223	RCW, as may be necessary to carry out this chapter;
224	(d) Do such things as may be necessary and incidental to the administration of its functions
225	pursuant to this chapter including but not limited to surveying for and detecting noxious weed
226	infestations;
227	(e)(2) In addition to the powers conferred on the director under other provisions of this chapter,
228	the director, with the advice of the state noxious weed control board, shall:
1	
228	the director, with the advice of the state noxious weed control board, shall:
228 229	the director, with the advice of the state noxious weed control board, shall: (a)-Upon receipt of a complaint signed by a majority of the members of an adjacent county
228 229 230	the director, with the advice of the state noxious weed control board, shall: (a)-Upon receipt of a complaint signed by a majority of the members of an adjacent county noxious weed control board or weed district, or by one hundred registered voters that are land
228 229 230 231	the director, with the advice of the state noxious weed control board, shall: (a)-Upon receipt of a complaint signed by a majority of the members of an adjacent county noxious weed control board or weed district, or by one hundred registered voters that are land owners within the county, require the county legislative authority or noxious weed control board
228 229 230 231 232	the director, with the advice of the state noxious weed control board, shall: (a)-Upon receipt of a complaint signed by a majority of the members of an adjacent county noxious weed control board or weed district, or by one hundred registered voters that are land owners within the county, require the county legislative authority or noxious weed control board of the county or weed district that is the subject of the complaint to respond to the complaint

Ρ

Fee, Mary Intent- to enforce the control of reported infestations of class A or class B noxious weeds in a county that lacks control action for these reported infestations.

310 RCW 17.10.100

- 311 Order to county board to include weed from state board's list in county's noxious weed list.
- 312 Where any of the following occur, the state noxious weed control board may shall, hold
- 313 following a hearing, then may order any county noxious weed control board or weed district to
- 314 include a noxious weed from the state board's list in the county's noxious weed list:
- 315 (1) Where the state noxious weed control board receives a petition from at least one hundred
- 316 registered voters within the county requesting that the weed be listed.
- 317 (2) Where the state noxious weed control board receives a request for inclusion from an
- 318 adjacent county's noxious weed control board or weed district, which the adjacent board or
- 319 district has included that weed in its county or district list, and the adjacent board or weed district
- 320 alleges documents that its noxious weed control program is being hampered by the failure to
- 321 include the weed on the county's noxious weed list.
- 322 [1997 c 353 § 12; 1987 c 438 § 10; 1969 ex.s. c 113 § 10.]

Fee, Mary

Intent- to require the inclusion of noxious weed defined in section 1 and 2. Jan. 17th 2019- change to hold a hearing, then may order...for the purpose of allowing the board to justly make the decision "to order" or "not to order" depending on the outcome of the hearing.

Fee, Mary (AGR)

Jan 17th 2019- to be consistent with boards and districts.

Fee, Mary

Intent- verify through documentation that the failure to include such weed is negatively effecting the adjacent weed board or district.

323

389

390 RCW 17.10.145

- 391 State agencies' duty to control spread of noxious weeds—Replacement of noxious weeds
- 392 with native forage plants that are beneficial to pollinators.
- 393 (1) All state agencies shall control noxious weeds on lands they own, lease, or otherwise
- 394 control through integrated pest management practices. Agencies shall appoint a liaison to
- 395 develop plans in cooperation with county noxious weed control boards to control noxious weeds
- 396 in accordance with standards in this chapter.
- 397 (2) All state agencies' lands must comply with this chapter, regardless of noxious weed
- 398 control efforts on adjacent lands.

Fee, Mary (AGR) Jan 17th 2019- Clean up wording.

Fee, Mary (AGR)

Jan 17th 2019- Intent to have agencies designated point person to work in cooperation with county noxious weed boards.

RCW 17.10.145 State agencies' duty to control spread of noxious weeds—

- 399 (3) Whenever any state lands or state right-of-way are within any weed board program, the
- 400 county treasurer shall certify annually and forward to the appropriate state agency for payment a
- 401 statement showing the amount of the tax to which the lands would be liable if they were in
- 402 private ownership, separately describing each lot or parcel and, if delinquent, with interest and
- 403 penalties consistent with RCW 84.56.020.".
- 404 (43) While conducting planned projects to ensure compliance with this chapter, all agencies
- 405 must give preference, when deemed appropriate by the acting agency for the project and targeted

Fee, Mary

Intent- that state lands be assessed in the same manner as private lands.

Discussed WSDOT not having parcel numbers and having an assessment based on road miles. Also mentioned having state wide consistency in WSDOT assessments.

Discussed consistency within agencies and between counties. Also discussed having a dedicated line item in state budgets.

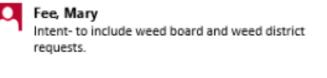
658 RCW 17.10.205

- 659 Control of noxious weeds in open areas.
- 660 Open areas subject to the spread of noxious weeds, including but not limited to subdivisions,
- 661 school grounds, playgrounds, parks, and rights-of-way shall be subject to regulation by activated
- 662 county noxious weed control boards in the same manner and to the same extent as is provided for
- 663 all terrestrial and aquatic lands of the state.
- 664 [1997 c 353 § 24; 1975 1st ex.s. c 13 § 16.]



RCW 17.10.235 Selling product, article, or feed containing noxious weed seeds or toxic weeds—Penalty—Rules—Inspections—Fees.

- 709 (2) Any person who knowingly or negligently sells or otherwise distributes a product, article,
- 710 screenings, or feed stuff designated by rule containing noxious weed seeds or toxic weeds
- 711 designated for control by rule and in an amount greater than the amount established by the
- 712 director for the seed or weed by rule is guilty of a misdemeanor.
- 713 (3) The department of agriculture shall, upon request of the buyer, <u>county weed board</u>, or
- 714 weed district inspect products, screenings, articles, or feed stuffs designated by rule and charge
- 715 fees, in accordance with chapter 22.09 RCW, to determine the presence of designated noxious
- 716 weed seeds or toxic weeds.
- 717 [1997 c 353 § 26; 1987 c 438 § 30; 1979 c 118 § 4.]





Change- Discussed how weed boards could

potential operate as junior taxing districts.

- 896 RCW 17.10.890
- 897 Deactivation of county noxious weed control board—Hearing.
- 898 The following procedures shall be followed to deactivate a county noxious weed control board:
- 899 A county weed board can only be deactivated if there are no class A or class B noxious weeds in
- 900 the county. Upon receiving documentation of the absence of class A or class B noxious weeds,
- 901 the county legislative authority may initiate the following procedures:
- 902 (1) The county legislative authority holds a hearing to determine whether there continues to be a
- 903 need for an activated county noxious weed control board if:
- 904 (a) A petition is filed by one hundred registered voters within the county;
- 905 (b) A petition is filed by a county noxious weed control board as provided in RCW 17.10.240; or
- 906 (c) The county legislative authority passes a motion to hold such a hearing.
- 907 (2) Except as provided in subsection (4) of this section, the hearing shall be held within sixty
- 908 days of final action taken under subsection (1) of this section.
- 909 (3) If, after a hearing, the county legislative authority determines that no need exists for a county
- 910 noxious weed control board, due to the absence of class A or class B noxious weeds designated
- 911 for control in the region, the county legislative authority shall deactivate the board.
- 912 (4) The county legislative authority shall not convene a hearing as provided for in subsection (1)
- 913 of this section more frequently than once a year.

Fee, Mary

Intent- to define logic reasoning and procedures to deactivate a county noxious weed board.



Pesticides and WA DNR Trust Lands





State Trust Lands

Focus on PPE: All the Products



PRINCIPAL FUNCTIONING AGENTS:	
Acid blue 9 and ingredients ineffective as adjuvant	100%
TOTAL	100%

KEEP OUT OF REACH OF CHILDREN

Read label before use. Keep only in original container. Avoid breathing dust/fume/gas/mist/vapors/spray. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection.



Environmental Fate

BIODE

Soil Texture

Rainfall

	VELPAR® L (Pints/Acre)			
Soil Texture	Percent Organic Matter in Soil			
Description	<1%	1-5%	>5%	
Coarse				
Loamy sand, sandy loam	2–3	2–3	4-6	
Medium				
Loam, silt loam, silt, clay loam,sandy clay loam	2–3	3–6	4-6	
Fine				
Silty clay loam, sandy clay, silty clay, clay	3-6	3–6	4-6	



WPS Training-Worker & Handler

 Most of field staff is WPS-Worker trained. Silviculture staff licensed or handler trained



State Trust Lands

Beyond the EPA – Enhance the Worker Video

- Understanding the Central Posting Board
- Different PPE requirements between Handler and Worker
- The Agricultural Use box on the label



Decontamination Supplies

Worker training emphasizes

When working in the unit 30 days post end of REI. Must have basic decontamination supplies (WAC)

"(3) Timing.

(a) If any pesticide with a restricted-entry interval greater than four hours was applied, the decontamination supplies must be provided from the time workers first enter the treated area until at least thirty days after the restricted-entry interval expires."



When Eye Protection is Required

- 1 pint of water
- Immediately available
- Don't use as your drinking water





State Uplands Pesticide

- Methods
 - Basal spray for big leaf maple
 - Backpack (waving wand)
 - Aerial
 - Mostly contractor applied







State Trust Lands



Pesticide Use on Forested Lands in Washington State

Washington Friends of Farms and Forests 2019 Pest/Pesticide Issues Forum



dnr.wa.gov

DNR Forest Practices





dnr.wa.gov

Aerial Applications

- DNR approves about 230 aerial spray applications annually
- Vegetation Control
- Fertilization

- Numerous chemical active ingredients
- Additional surfactants and non-active ingredients





Hand/Ground Applications



- Application process generally not required
- Allowed except within the core zone or channel migration zone



What do people want to know?

- Treatment location, acres, and unit size
- Potential environmental and health effects
- Buffers and protection measures
- Posting and notice requirements





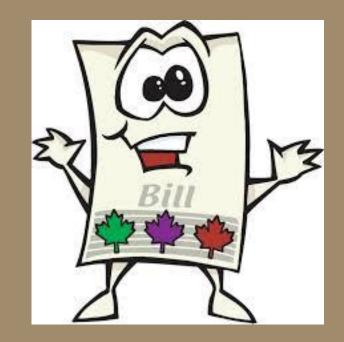
2019 Legislation





SSB 5597

- Strong support
 - Senate: 48 Yea, 1 Nay
 - House: 95 Yea, 1 Nay



- Forwarded to Governor for signature
- Report including findings, recommendations, and draft legislation due December 31, 2019
- Legislation expires December 31, 2020



Goals

Establish a work group

Evaluate best management practices

- Recommend improvements to best management practices
- Minimize exposure to people and nontarget species



Work Group



- Legislative members
- Senior level agency managers
- State Universities
- Industrial forest landowners
- Small forest landowners
- Tribes involved in timber production

- Large-scale organic farming
- Aerial applicators
- Environmental or community interests
- Noxious weed control
- Pesticide registrant with expertise in forest herbicides



Research

 Review research, reports, and data about the most frequently used herbicides in forest practices



- Study roles of management and regulatory agencies approving use and application on forestlands
- Study application accuracy





Products

- Develop and update strategies for herbicide use on forestlands
- Recommend integrated pest management approaches
- Minimize effects on non-target species
- Protect public safety and human health
- Provide effective, economically feasible control on a commercial forestry scale



Thank You

Teresa Ann Ciapusci Region/Operations Outreach Manager DNR Forest Practices (360) 902-1635 teresa.ciapusci@dnr.wa.gov



dnr.wa.gov



WSU Application Technology Education and Research

Gwen Hoheisel WSU Extension – Prosser ghoheisel@wsu.edu





Educate, Evaluate, Create

THE PROSSER TEAM



Lav Khot, CPAAS



Anura (post doc) Haitham (PhD) Rajeev







Margaret Lexie +2 in 2019

Dr. Michelle Moyer, Hort



DRIVEN BY INDUSTRY REQUEST

SHORT TERM SOLUTIONS: CURRENT TECHNOLOGY

• WSDA-WSU (GS Long &) BMP class; 4/year,



- WSU Grape Certificate Program; 4 week online course
- Many mini-workshops (statewide, multiple commodities) Newsletters talks atc. Slide curtesy



SHORT TERM SOLUTIONS: CURRENT TECHNOLOGY

- IMPACTS of Extension/Education Programs
 - 2 surveys of multiple programs
 (App Tech Group and BMP class)

Task	Pre	Post				
Calibration						
regularly maintenance	36-40%	64-69%				
Using ceramic nozzles	54%	92%				
Checking speed	54%	94%				
Optimization						
Monitoring air direction	38%	69%				
Reduce air volume	0%	33%				
Looking at spray deposit	1%	31%				



DRIVEN BY INDUSTRY REQUEST

SHORT TERM SOLUTIONS: CURRENT TECHNOLOGY

- Sprayer Evaluation
 - Blueberry, Grapes, TF
 - feeds into the education





Funded by OR Blueberry Commission and WSGWRP



DRIVEN BY INDUSTRY REQUEST

SHORT TERM SOLUTIONS: CURRENT TECHNOLOGY

- MECHANISTIC MODEL FOR AG DRIFT
- Florescent tracer used to measure drift



Photos by TJ Mullinax, Good Fruit Grower



DRIVEN BY INDUSTRY NEED

LONG TERM SOLUTIONS: ENGINEERING SOLUTIONS

- Retrofitting existing sprayers
- WSU & OSU
- Commercially available, but growers will need help.



Start at 20sec

https://www.smartguided.com/intelligent-sprayer



DRIVEN BY INDUSTRY NEED

LONG TERM SOLUTIONS: ENGINEERING SOLUTIONS

Alternative Spray Systems

less toxic & resistance management

- SSCDS
 - Reduced drift and exposure
 - Commercial orchard in 2020?



Source: Good Fruit Grower

 Thermal sprayer for psyllids & disease
 – More oils





DRIVEN BY INDUSTRY NEED

LONG TERM SOLUTIONS: ENGINEERING SOLUTIONS

Alternative Spray Systems less toxic & resistance management

- Ozone (Khot, grapes and pears)
 - Alternative sprayer
 - late season botrytis control?

Photo by David Gadoury, Cornell AgriTech



- UV (Moyer, grapes)
 - Early season and 'break through' periods



Extending Knowledge. Changing Lives.



Questions?

WSU AND UMES LAUNDERING STUDY

Carol Black and Dr. Anugrah Shaw, Textile Researcher

INTERNATIONAL CONSORTIUM FOR DEVELOPMENT & EVALUATION OF PPE FOR PESTICIDE OPERATORS & RE-ENTRY WORKERS

- ISO 27065:2011 Protective clothing Performance requirements for protective clothing worn by operators applying liquid pesticides.
- ASTM F2669-12 Standard Performance Specification for Protective Clothing Worn by Operators Applying Pesticides.
- Proposed revisions to the above standards based on new laboratory data
- A similar performance requirement is being developed for gloves.

16-17 MAY 2019, LYON, FRANCE

- Decontamination Study Laboratory research: 2018-2019
 - Methodology development and validation
 - Discuss data for
 - Two level C1 fabrics
 - Three Level C2 fabrics
- **Decontamination Study Field research** in Brazil and US
 - Study design for ongoing project in Brazil and US
 - Preliminary data for ongoing pilot project in Brazil
 - Update on US project

WASHINGTON STATE EFFORT

- Laboratory Studies
 - France

Field Studies

- Brazil
- Washington

• Field Studies for Laundering Garments

- Wear "Level 1" garment when spraying
- Wash per normal routine
- Track herbicides applied
- Track dates garments laundered
- Send in at end of spray season
- Analyze
 - Water rinse
 - Artificial sweat and rinse
 - Chemical extraction

WSU'S INTERNET COURSE OFFERINGS

Recertification and Pre-License Training

Carol Black, Becky Maguire, Wendy Sue Wheeler, Carrie Foss, Erin O'Rourke, Janet Peterson, Kristi Boone

1996 WAS THE START

- Created content & delivery system for RURAL WA
 - CEU credits a challenge for remote locations
 - For online training, applicators had to go to a designated location

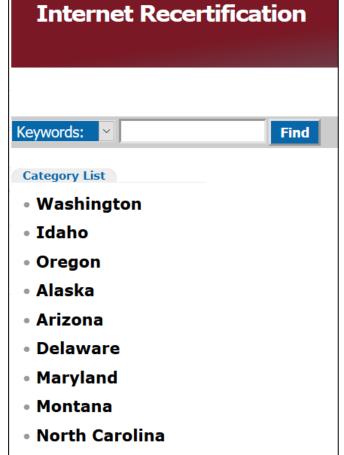


2004 BIG CHANGES

- WSDA Allows Courses Be Taken at Nonmonitored Locations
- Designed
 - Trainings and Course Platform
 - Shopping Cart
 - Reporting System
- Launched one-hour modules: WA, ID, AK, OR

2017 BIG CHANGES

- Updating Course Platform and PDShop
- New platform to host courses
- Updated shopping cart/web site
- Retooled all the older courses
- Assess our pricing structure
 - On par with our face-to-face courses
 - What the market charges



Pesticide Applicator

Nevada

Required Interactivity

- Active login statements
- Questions scattered throughout module
- Now, final quiz they must pass at the end to meet OR requirement

Verify attendance

- Agreement statement in module
- Agree to participate throughout
- Infraction is violation of state pesticide laws
- Periodic inquiries with participants

Concern for concurrent sessions running

- Monitor duplicative times
 - Contact person and disallow credits if occurred
 - Now have a forfeiture statement that if concurrence happens, no \$\$ no credit
 - Yes, it happens yes they confess and then buy again and start over



Expansion to Other States beyond Region 10

• 1996-2005

- 5-7 modules offered
- 32-62 completed
- **2006-2014**
 - 14-28 modules offered
 - 638-2400 completed
- 2015-2018
 - 46 modules offered
 - 2500-3400 completed

State Participation

- 2007 7 states
- 2014 21 states
- 2018 19 states, going down

Hopefully significant increase since WSU is now listed FIRST in Internet Courses with WSDA

STATE REPORTS

- Monthly electronic spreadsheet
 - Some formatted differently
- Paper forms
- Less than per month

	WSU Internet Courses December 28 - Noon December 31, 2018					
•	License	LName	FName	Course #	Course Title	Date
	1938	Serres	William	WSDA 2018-1U	Weed Identification and Management (2018-REC033)	12/29/2018
					Brush Up On Safety - A Look at Pyrethroid Insecticides	
	<mark>6650</mark>	Gomez	Jamie M	WSDA 2018-2K	(2018-REC049)	12/31/2018
	7575	Casseday	Sean S	WSDA 2018-2M	How HOT are you? Heat Stress (2018-REC051)	12/31/2018
	11556	Player	Todd L	WSDA 2018-1C	Public Health Pests - A Review of the Basics (2018-REC009)	12/28/2018
	11556	Player	Todd L	WSDA 2018-1L	Principles of Vertebrate Pest Management (2018-REC024)	12/28/2018
	11556	Player	Todd L	WSDA 2018-1V	Bed Bugs (2018-REC034)	12/29/2018
	11556	Player	Todd L	WSDA 2018-1X	Bees Wasps and Their Management (2018-REC032)	12/29/2018
	Pesticide Storage Disposal and Container Recycling (201		Pesticide Storage Disposal and Container Recycling (2018-			
	11556	Player	Todd L	WSDA 2018-1Z	REC036)	12/28/2018
	11556	Player	Todd L	WSDA 2018-2M	How HOT are you? Heat Stress (2018-REC051)	12/28/2018
	11556	Player	Todd L	WSDA 2018-20	Pets and Pesticides (2018-REC053)	12/28/2018
	15161	Badda	Cecelia	WSDA 2018-10	Pesticide Hazards and Your Health (2018-REC026)	12/28/2018
	Pesticide Storage Disposal and Container Recycling (2018					
	15161	Badda	Cecelia	WSDA 2018-1Z	REC036)	12/28/2018
	Pesticide Stewardship for Organic Production (2018-					
	15161	Badda	Cecelia	WSDA 2018-2E	REC043)	12/28/2018
					Pesticide Risk Assessment Pesticide Labeling and	
	15161	Badda	Cecelia	WSDA 2018-2N	Protective Garments (2018-REC052)	12/29/2018
	15161	Badda	Cecelia	WSDA 2018-20	Pets and Pesticides (2018-REC053)	12/28/2018

Washington's 2018 Final Report (of 3,397 total completions 58%)

Total unique users	333 people	
Total course completions	1,958 modules	
January- October: Average per Month	49 modules	15 people
November:	313 modules	84 people
December TOTAL:	1,155 modules	200 people
December 1 – 13 59%	381 modules	95 people
December 14 – 20	197 modules	64 people
December 21 – 27	197 modules	67 people
December 28 –31, Noon	273 modules	74 people

Expiration of Recertification Courses

- Time is up midnight December 31
- End of December is Crazy
- University shut downs
- Pre-license Courses
 - Originally no expiration date, now six months from purchase
 - Can share with others
- Keeping content up to date

Spanish Recertification – 5 modules

- Translations
- Narration

Item Details

Item Name: 2019 Entendiendo Las Etiquetas de Plaguicidas Item #: 2019-REC027 Price/ea: \$15.00 Average Rating



Product Image Gallery



This course is in Spanish.

Este curso se encuentra en español.

Este curso describe el lenguaje que se encuentra en las etiquetas de pesticidas, incluyendo el uso restringido, nombres de productos,

• Spanish Pre-license for Core, Landscape weeds SOON!





- Pre-License
- Recertification
- Structural Pest IPM 7
- Hortsense 🗷
- Pestsense 7
- School IPM 7
- Resources
- Contact Us

WSU IPM 7

WA Pesticide Database 계 WSDA Pesticide Division 계 WSDA Pesticide Licensing 계 NPIC 계 Urban IPM and Pestici

WASHINGTON STATE UNIVERSITY

On Track to Reach More People

2018 Jan-April = 220 modules 2019 Jan-April = 328 modules

Register for Courses >

Study Materials ►

Specialty Workshops

Integrated Pest Management Workshops, Structural Pest Inspector Workshops, Pest Management Professionals Workshops, and Aerial Applicator Fly-ins.

WSU Urban IPM and Pesticide Safety Education Program

News & Updates NEW COURSE - <u>Structural Pest</u> Inspector May 29 & 30

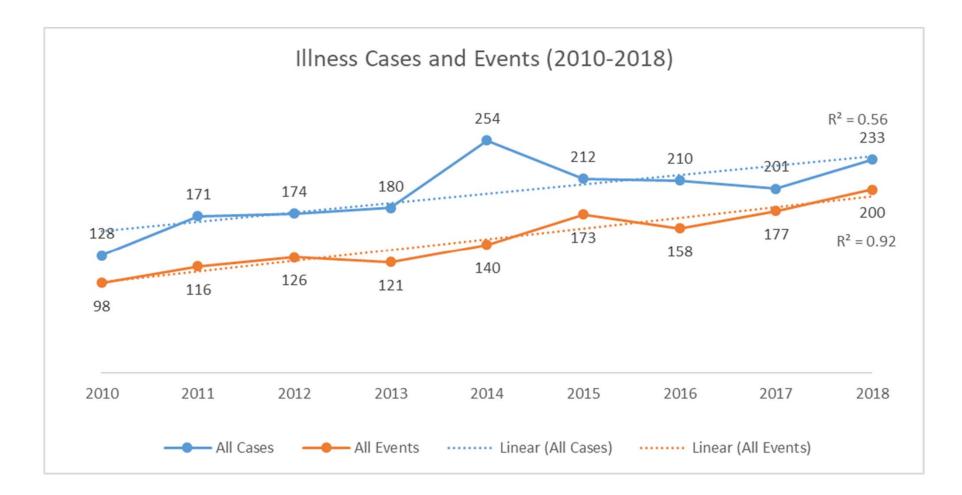
Recertification Registration



DEPARTMENT OF HEALTH PESTICIDE PROGRAM

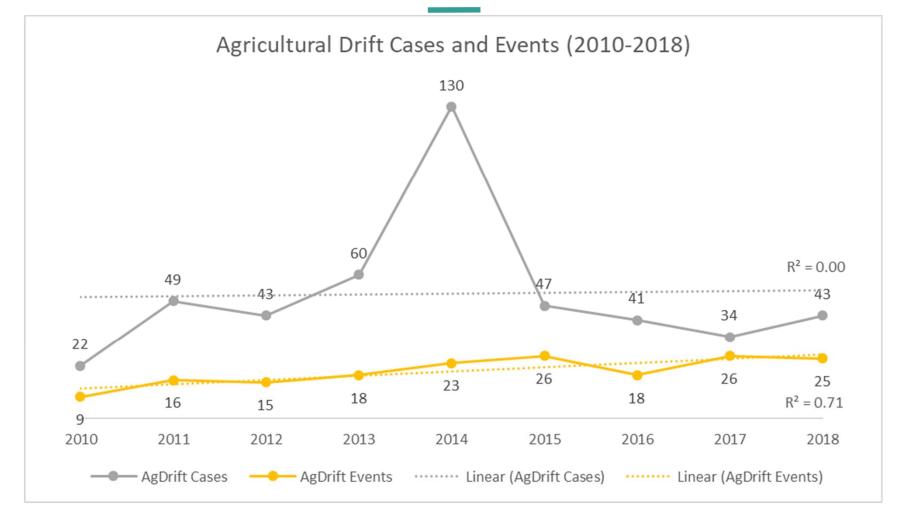
Wayne Clifford, Pesticide Illness Surveillance Manager Office of Environmental Public Health Sciences

All Pesticide Events and Illness Cases



WA State DOH | 2

Agricultural Drift Events and Illness Cases



WA State DOH | 3

Thank You

Wayne Clifford
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