OREGON DEPARTMENT OF AGRICULTURE

Pesticides Program
635 Capitol St, NE, Salem, OR 97301-2532
503.986.4700 | Oregon.gov/ODA

Agenda

DATE	LOCATION	START TIME	END TIME
10/22/2024	Virtual- details below	1:00 PM	3:00 PM

FACILITATOR	CONTACT EMAIL	CONTACT PHONE
Gilbert Uribe Valdez	gilberto.uribe.valdez@oda.oregon.gov	503.689.2983

SCHEDULE

TIME	AGENDA ITEM	PRESENTER
1:00 PM	Welcome and Introductions	Gilbert Uribe Valdez
1:05 PM	Endangered Species Act grower workshop overview	Kathryn Rifenburg
1:20 PM	PSP background, current model, opportunities for growth	Kathryn Rifenburg
1:40 PM	PSP and ESA implementation exercise	Annie Krueger
3:00 PM	Adjourn	Gilbert Uribe Valdez

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Endangered Species Act Pesticide Mitigations – What it means for OR Applicators

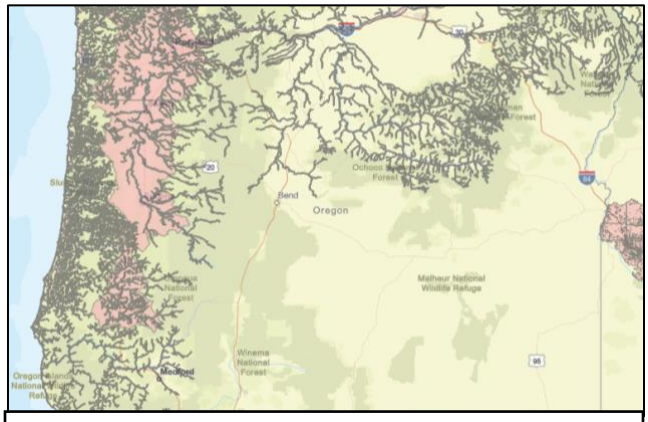
EPA has committed to fulfilling its obligations under the Endangered Species Act (ESA) to assess the impact of agency actions on threatened and endangered species.

- Read more on EPA's workplan here EPA's Workplan and Progress Toward Better Protections for Endangered Species | US EPA
- CSI has collaborated with the Weed Science Society of America on a story map to provide more high level background here The Endangered Species Act and Pesticides

In 2023, EPA began implementing geographically specific requirements, or bulletins, for specific pesticide active ingredients, requiring landscape-level mitigations for applications occurring within certain species areas. Applicators are directed to the Bulletins Live! Two webpage and must determine if the pesticide product has a bulletin required in their location.

- A bulletin "sets forth geographically specific pesticide use limitations for the protection of threatened and endangered (listed) species and their designated critical habitat."
- The geographic specific area where the limitation applies is called a Pesticide Use Limitation Area (PULA)

In Oregon, there are PULAs for salmon species (stream lines shown in pink in the map) where applicators applying certain products must implement no-spray zones and/or runoff mitigation measures (ex: riparian forest buffers, vegetative filter strips, etc.) to use the product. In the Willamette Valley, there is also a PULA for terrestrial species requiring spray drift buffers for aerial applications however this only pertains to one active ingredient at this time.



Screenshot from the *Bulletins Live! Two* webpage. Pesticide Use Limitation Areas (PULAs) are shown in pink. If a pesticide label directs a user to Bulletins Live! Two and the pesticide has bulletins in the region, applicators in the pink area will have to implement mitigations.

- As EPA and the U.S. Fish and Wildlife Service work through more pesticide active ingredients in their consultations new areas may be added to the map requiring similar mitigations for listed terrestrial species.
- As EPA and National Marine Fisheries Service (NMFS) work through more pesticide active ingredients in consultation, more products may require similar mitigations in these same salmon protection areas. NMFS has also developed a point-based system for applicators to follow for determining run-off mitigations (see page 2).
- EPA is developing additional "Strategies" for more rapidly assessing pesticides risk to listed species which could further expand PULAs in OR.

In 2024, OSU, ODA, WSDA and NMFS organized a workshop series to document the challenges pesticide applicators identified for interpreting and implementing these new requirements. Findings from these workshops have been shared broadly and are informing how Oregon and Washington interested parties can help alleviate this new and evolving regulatory burden. In 2025, workshops will focus on working with the agriculture communities to best support these efforts.

Pesticide applicators face increasing complexity in navigating new mitigation requirements for listed species. Working collaboratively at the local level can provide key assistance to the agriculture community and support conservation objectives for listed species and beyond.

Drift and Runoff Reduction Measures and Associated Points

Choose and implement mitigation options from the table below that achieve an equal or greater number of points for drift and/or runoff per the instructions in the Bulletin. Mitigation options can be added together to achieve the required number of drift and/or runoff points.

Drift Measures	Estimated % reduction loading	Points	Runoff/drainage Measures	Estimated % reduction loading	Points
No Spray Drift Buffers[1, 2, 3]:			Vegetated filter strip[5, 9]:		
Ground:					
10 meters	90	70	5 meters	40	20
20 meters	95	75	10 meters	65	45
50 meters	98	80	20 meters	80	60
Air blast:					
10 meters	80	60	Inter row	50	30
20 meters	95	75			
50 meters	99	80			
Aerial					
Medium or coarser droplets (ASABE S641):			Vegetated ditches[5]	50	30
20 meters	70	50			
50 meters	87	65			
75 meters	91	70			
100 meters	94	75			
Finer droplets (< Medium ASABE S641):					
20 meters	42	20			
50 meters	66	45			
75 meters	75	55			
100 meters	80	60			
Spray Drift Reduction Technology[4]	Varies	Varies	Runoff Reduction Technology[4]	Varies	Varies
Granular treatment, Drip Chemigation	99	80	Water control structures[5]:		
			Edge of field	40	20
			In-field	50	30
Spot Applications <0.1 A[6]	99	80	Spot Applications <0.1A[6]	99	80
Riparian Hedgerow[7]	30	10	No-till or reduced tillage[5]	50	30
			Retention pond[5,10]	75	55
Participation in recognized stewardship program[4]	Varies	Varies	Participation in recognized stewardship program[4]	Varies	Varies
Functional riparian system alongside water ways, > 10 meters wide[8]	99	80	Functional riparian system alongside water ways, > 10 meters wide[8]	99	80

[1] AgDrift Tier 1 Ground Boom – point deposition estimates compared to field edge (1 m buffer): low boom, very fine to fine distribution, 50th percentile distribution.

[2] AgDrift Tier 1 Orchard Airblast - point deposition estimates for sparse orchard compared to field edge (1m buffer).

[3] AgDrift Tier 1 Aerial – point deposition estimates compared to field edge (1 meter buffer)- Medium assumed VDM = 254 µm, Finer droplets assumed VDM = 137 µm.

[4] Requires NMFS review for efficacy, e.g. recent proposal for consideration of sprinkler chemigation needs NMFS review of supporting materials.

[5] Alix et al. 2017

[6] Spot applications are applications to small distinct areas, typically using hand-held wand and backpack sprayer. Estimated reductions assumed a median field size of 0.278 km2 (Yan and Roy 2016).

[7] Washington State Department of Agriculture riparian vegetation pilot study (Hancock et al. 2019); 27-36% reduction in spray drift observed.

[8] informed by USDA National Resource Conservation Service (NRCS) Conservation Buffers (NRCS 2000) and USDA NRCS practice standards for riparian forest buffer and riparian herbaceous cover (Ac. 390 and 391, available at: https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/technical/cp/ncps/)

[9] Consider Natural Resource Conservation Service, "Conservation Practice Standard: Filter Strip Code 393" US Department of Agriculture, 2016 (https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1241319.pdf)

[10] Retention pond or other closed system capable of retaining runoff from treated area, such as those that may be employed for culturing cranberries or rice.