



# EPA's Endangered Species Workplan: updates

*Presented By: Christopher McCullough*



Washington  
State Department of  
Agriculture

# Outline

- Regulations
- Lawsuits
- Natural Resources & Agricultural Sciences
- EPA workplan
- Bulletins Live! Two
- General label mitigations



# Pesticide regulatory duties

- Register pesticides
  - Collect and assess the information on the benefits and risks
- Make regulations that govern pesticide use
- Set tolerances

**Environmental Protection Agency**

## State Lead Agencies

- Licensing and training applicators
- Ensure compliance to pesticide regulations
- Register pesticides for the state
  - Special local needs

# EPA is required to follow federal laws

- ACTIONS can't result in HARM to endangered species, critical habitat
- If an action MAY harm, EPA must CONSULT
  - U.S. Fish and Wildlife Service
  - National Marine Fisheries Service

## Endangered Species Act

## Federal Insecticide, Fungicide, and Rodenticide Act

- EPA approves new pesticide registrations, new uses
- Consider economic and human health benefits
- EPA must review EVERY registered active ingredient every 15 years

# A brief history of ESA lawsuits

## Lawsuit: Wash. Toxics

**Coalition v. EPA:** EPA sued for failure to consult on effects of 58 pesticides on threatened and endangered salmon. EPA initiates consultation with NMFS on 37 pesticides in 2004.

## National Academy of Sciences Report:

NAS reviewed and recommended interagency risk assessment methods. NMFS, FWS, EPA, USDA agree to interim approaches.

## Applying approach to pilot compounds:

EPA issues Biological Evaluation for organophosphates on all species. NMFS publishes final Biological Opinion with Jeopardy finding for 38 species.

## NMFS and EPA collaboration:

Continue consultations for 37 compounds from initial lawsuit. Continue efforts to enact conservation measures for diazinon, chlorpyrifos, malathion, carbaryl, methomyl.

2001

2002

2008

2010

2013

2017

2020

2021

2024

## FIFRA Counterpart Regulations:

Gives EPA authority to make Jeopardy determinations with concurrence. 2005 lawsuit: court ruled that EPA could not make "Not Likely to Adversely Affect" determinations without Service concurrence.

## New BiOp completed (2008) for

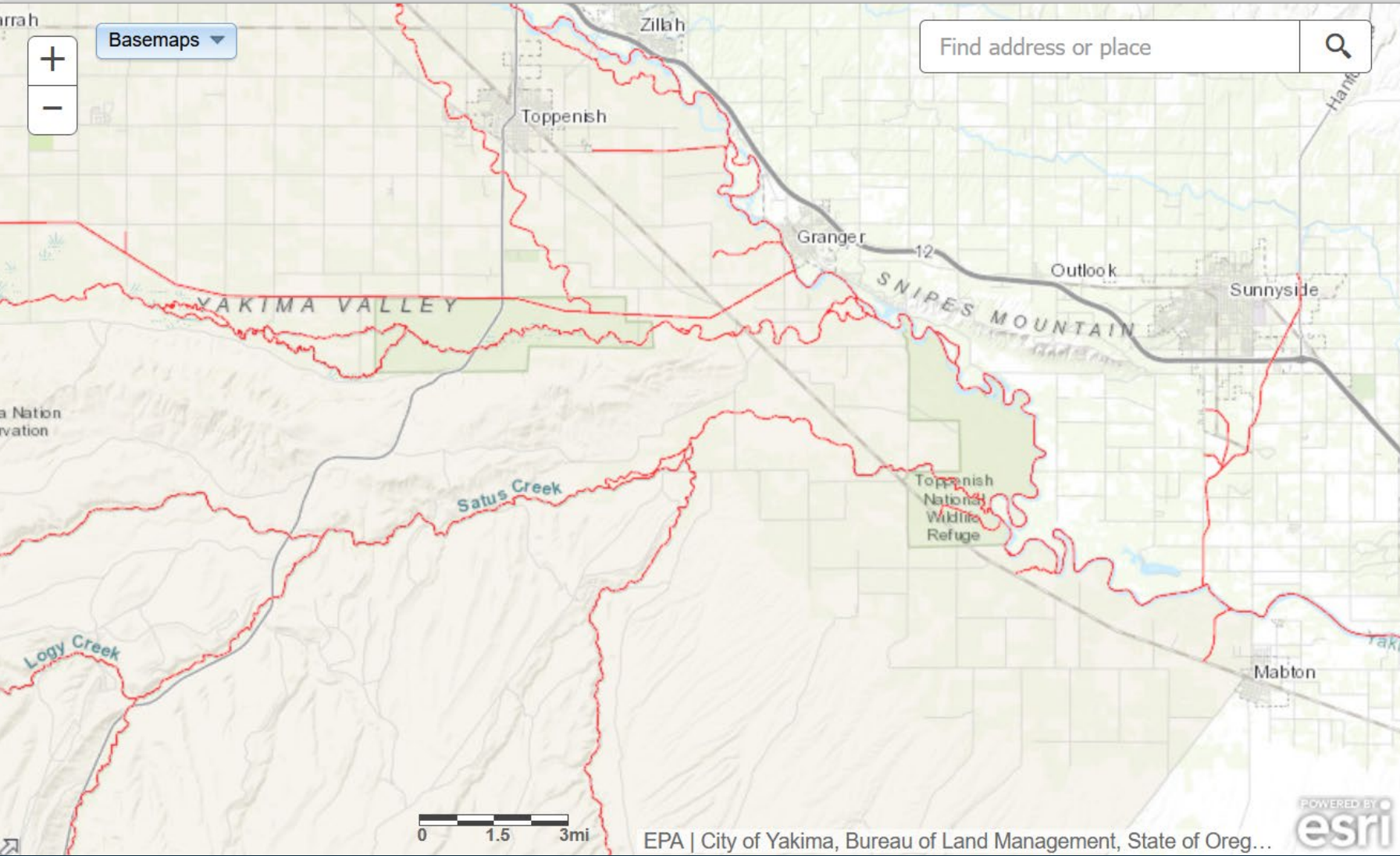
organophosphates (chlorpyrifos, diazinon, malathion) on salmonids with Jeopardy finding for 27 species. EPA does not implement mitigation; differing assessment methods.

## EPA Report on Revised Methods:

EPA publishes independent report on its risk assessment and biological evaluation methods for listed species.



# Court-Ordered Pesticide Limitations



## Pesticide diazinon Segments with Limitations

- Limitation 1
- County
- State

(Navigation note: Press the "shift" key and click and drag to draw a rectangle around an area and zoom in.)

▼ diazinon

Select a Pesticide

- 1,3-dichloropropene
- bromoxynil
- carbaryl
- chlorpyrifos
- diazinon
- malathion
- methomyl
- metolachlor
- prometryn

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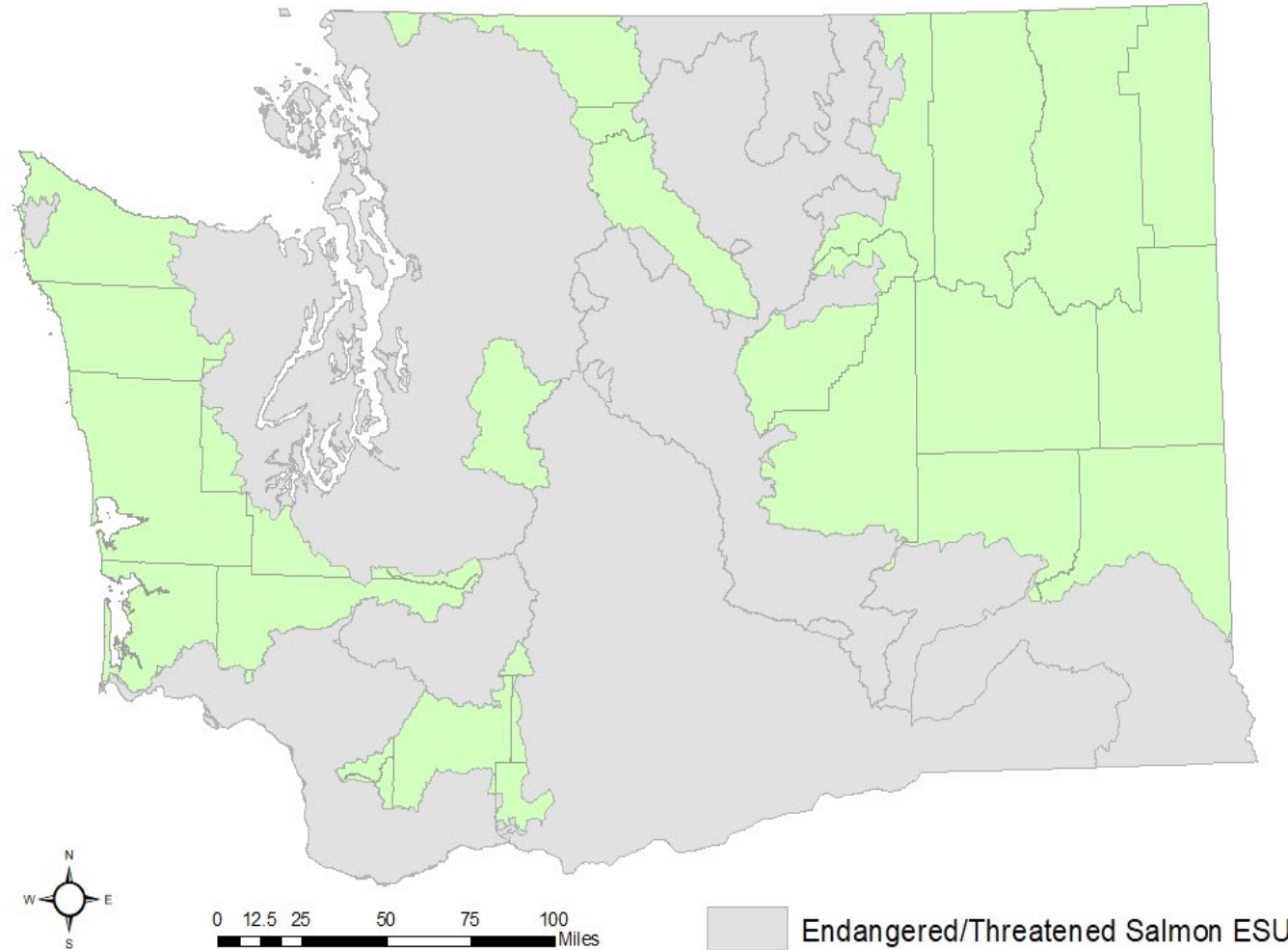
waters include all relevant estuaries  
f here.



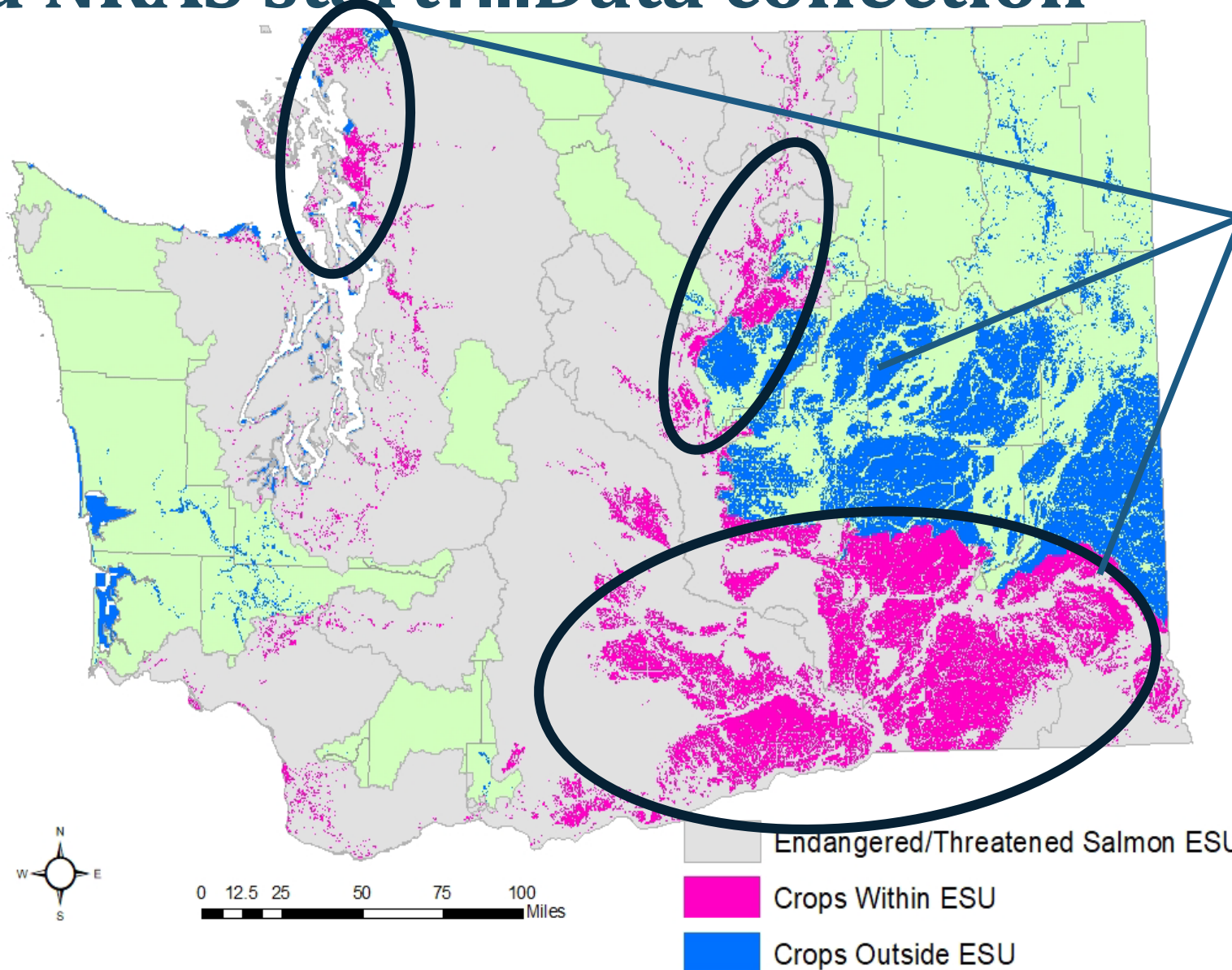
# Why did NRAS start?...Data collection



Greyed areas – Important areas for salmon habitat



# Why did NRAS start?...Data collection



Overlap salmon habitat and ag land

- Endangered/Threatened Salmon ESU
- Crops Within ESU
- Crops Outside ESU



# Natural Resources and Agricultural Sciences (NRAS)

- Soil health
- Agricultural land use mapping
- Surface and groundwater monitoring
- Pesticide Stewardship
- Pesticide usage
- Drought
  
- [Agr.wa.gov/agscience](http://Agr.wa.gov/agscience)



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**Balancing Wildlife Protection and  
Responsible Pesticide Use:  
How EPA's Pesticide Program Will Meet  
its Endangered Species Act Obligations  
2022**





# EPA's multipronged approach



**Intrepid 2F<sup>®</sup>**  
**INSECTICIDE**

™/® Trademarks of Corteva Agriscience and its affiliated companies

Active Ingredient:  
methoxyfenozide: Benzoic acid, 3-methoxy-2-methyl-2-(3,5-dimethylbenzoyl)-2-(1,1-dimethylethyl) hydrazide ..... 22.6%

Other Ingredients ..... 77.4%

Total ..... 100.0%

## Bulletins Live! Two --

For assistance in using Bulletins Live! Two, [view the tutorial](#). A

**Location Search:**  
Find Place

**Application Month:**  
January 2024

**EPA Registration Number:**



### Pesticide Strategies

- Herbicide
- Insecticide
- Rodenticide
- Fungicide

### Registration Review

- Mancozeb
- 2,4-D
- Imidacloprid
- Atrazine

### Bulletins Live! Two

- Metolachlor
- Bromoxynil
- Malathion
- Diazinon

### Vulnerable Species Action Plan

- White Bluffs Bladderpod

# Select Ongoing and Upcoming ESA Activities

## Late 2023 (completed)

- DRAFT rodenticide BE and mitigation strategy
- Draft Herbicide strategy and vulnerable species public comments
- DRAFT acetamiprid and dinotefuran BEs
- Final Enlist BiOp
- First Washington State Bulletins

## Mid 2024 (completed)

- Finalize herbicide strategy and begin to inform registration and registration review decisions
- Release DRAFT insecticide strategy for public comment
- Draft PULA refinement process and outreach

## 2025 and beyond

- Finalize insecticide strategy and begin to inform registration and registration review decisions
- Draft Hawaii Strategy for Public Comment
- Develop Fungicide Strategy

- Final NMFS methomyl and carbaryl BiOps
- Hawaii workshop
- Mitigation workshop
- Updated Enlist mitigation requirements per FWS BiOp
- Implement NMFS BiOp on 2 OPs

Glufosinate-P, First herbicide in WA with general label mitigations

- Vulnerable Species Action Plan**
- On-line Mitigation Menu**
- Final BEs for acetamiprid and dinotefuran
- Draft BEs on benzovindiflupyr and bicyclopyrone
- Final Rodenticide BE and mitigation strategy**
- PULA refinement process

## Early 2024 (completed)

## Late 2024

# EPA's multipronged approach



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## Bulletins Live! Two

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- Bromoxynil
- Malathion
- Diazinon

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# How mitigations are added

## Mitigation menus

- The “Strategies”
- Pre-emptive mitigations to register pesticides now, refine later
- Drift reduction measures
- Runoff mitigation menus
- General changes for everywhere

## Bulletins

- Bulletins Live! Two
- Pesticide Use Limitation Areas
- Specific geographic limitations



Mitigations for reducing off-target movement of pesticides through established conservation practices.

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**Active Ingredient:**

methoxyfenozide: Benzoic acid, 3-methoxy-2-methyl-,2-(3,5-dimethylbenzoyl)-2-(1,1-dimethylethyl) hydrazide .....

Other Ingredients.....

Total .....

Contains 2 lb active ingredient per gallon

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**Precautionary Statements**

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**Hazards to Humans and Domestic Animals**

EPA Reg. No. 62719-442

## **Endangered Species**

It is a Federal offense to use any pesticide in a manner that results in the death of an endangered species. Use of this product may pose a hazard to endangered or threatened species. When using this product, you must follow the measures contained in the Endangered Species Protection Bulletin for the county in which you are applying the product. To obtain Bulletins, no more than 6 months before using this product, consult <http://www.epa.gov/espp/>. You must use the Bulletin valid for the month in which you will apply the product.

# Pesticides in BLT! in WA

- Prometryn\*
- Metolachlor \*
- 1,3-D\*
- Bromoxynil\*
- Malathion\*
- Diazinon\*
- Chlorpyrifos\*
- Cyantraniliprole



*\*Coincides with salmon and steelhead habitat*



# Active mitigations found in BLT

## Washington

- Do not apply to saturated soils or when runoff producing rain is expected
- For aerial applications, a no-spray buffer is required
- Above an application rate, use one of the mitigations listed
- Do not tank mix with other neurotoxic pesticides

## Other states

- Do not apply product in PULA
- Apply only at night with 50-ft buffers
- Do not apply near lupine habitat
- Only apply when wind is blowing away from critical habitat

# General label mitigations

Application Method	Droplet Size Distribution (DSD)	Minimum Buffer Distance
Aerial	medium	50 ft
Ground	medium or coarser	10 ft

Protection areas include all areas with the following exceptions which can be included in the buffer footage, provided that people are not present within the application exclusion zone during the application, and they will not be contacted by the pesticide, either directly or through drift (see 40 CFR 170.405(a) and 40 CFR 170.505(a)):

- Agricultural fields, including untreated portions of the treated field.
- Roads, paved or gravel surfaces, mowed grassy areas adjacent to field, and areas of bare ground from recent plowing or grading that are contiguous with the treated area.
- Buildings and their perimeters, silos, or other man-made structures with walls and/or roof.
- Areas maintained as a mitigation measure for runoff/erosion or drift control, such as vegetative filter strips (VFS), field borders, hedgerows, Conservation Reserve Program lands (CRP), and other mitigation measures identified by EPA on the mitigation menu.<sup>1</sup>
- Managed wetlands including constructed wetlands on the farm.
- On-farm contained irrigation water resources that are not connected to adjacent water bodies, including on-farm irrigation canals and ditches, water conveyances, managed irrigation/runoff retention basins, and tailwater collection ponds.

# General label mitigations

## **MANDATORY RUNOFF MITIGATION:**

- DO NOT appl when soils are saturated or above field capacity.
- DO NOT apply during rain.

You must achieve a minimum of three points for the crop uses listed on this label unless otherwise stipulated below.

Applicators must access and search Bulletins Live! Two (BLT) at <https://www.epa.gov/pesticides/bulletins> within six months of the application to determine whether the application site falls within a Pesticide Use Limitation Area (PULA) that has a Bulletin in BLT. If you are located inside a PULA, follow the instructions in the bulletin.

If the application site is located outside a PULA, runoff/erosion mitigation is required for this product unless certain field/application parameters are present at the time of application (i.e., subsurface or tile drains with controlled outlet, perimeter berm systems, irrigation tailwater return systems, spot treatment, etc). Access EPA's Mitigation Menu Website at [www.epa.gov/pesticides/mitigation-menu](http://www.epa.gov/pesticides/mitigation-menu) for a full list of field/application parameters to evaluate whether your field is subject to runoff/erosion mitigation.





# What are the mitigations?



# Menus

- Conservation tillage
- Vegetative strips
- Cover crops
- Grassed waterway
- Sediment basin
- Tile drains
- Soil moisture sensors
- Micro sprinkler

## Pesticides

[A-Z Index](#)

[Antimicrobial Pesticides](#)

[Biopesticides](#)

[International Activities](#)

## Mitigation Menu

Date of last update: October 16, 2024

### On this page:

- [How do I know if Runoff/Erosion Mitigation is Required?](#)

<https://www.epa.gov/pesticides/mitigation-on-menu>



# Might be familiar

- Many of these are established NRCS practices
- Used for suspended sediment and fertilizers, works for pesticides too!

**Table 6. NRCS conservation practice standards relevant to carbaryl and methomyl conservation measures**

Mitigation option from conservation measure section	Relevant NRCS Conservation Practice Standard (code #)
Vegetated filter strip	393 <sup>a</sup>
Filter strip	393 <sup>a</sup>
Contour buffer strips	332 <sup>b</sup>
Strip cropping	585
Contour farming	330
Alley cropping	311 <sup>c</sup>
Terrace	600 <sup>d</sup>
Mulching with natural materials	484
No-till or reduced tillage	392
Grassed waterways, vegetated ditches	412 <sup>d</sup>
Field border	386 <sup>e</sup>
Riparian forest buffers	391
Retention pond	378

Final Conference and Biological Opinion; Carbaryl OPR-2021-01400; Methomyl OPR-2021-01401; 01-31-24

Mitigation option from conservation measure section	Relevant NRCS Conservation Practice Standard (code #)
Water and sediment control basin	638
Constructed wetland	656
Irrigation and drainage tailwater recovery	447
Hedgerow planting	422
Cover cropping	340
Surface roughening	609



# Geographic mitigation relief

- Erosion risk points
  - Based on precipitation
- Sandy soils
  - Texture is  $\geq 50\%$  sand, sandy loam, or loamy sand
- Flat fields
  - Slope  $\leq 3\%$  slope

Mitigation points
6
3
2
0

# Pesticide Stewardship Program

- Information exchange
  - Updates on changing regulations
  - Feedback for the EPA
- Cooperation
  - Research on mitigations and other practices
  - Ideas that may not be know
- Participation
  - Pilot program underway in Palouse



# Contact us

<https://agr.wa.gov/agscience>

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AGRICULTURAL LAND USE



SOIL HEALTH



WATER QUALITY



WATER QUANTITY



STEWARDSHIP



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