# BULLETINS LIVE TWO:

## DIGGING INTO THE ENDANGERED SPECIES ACT

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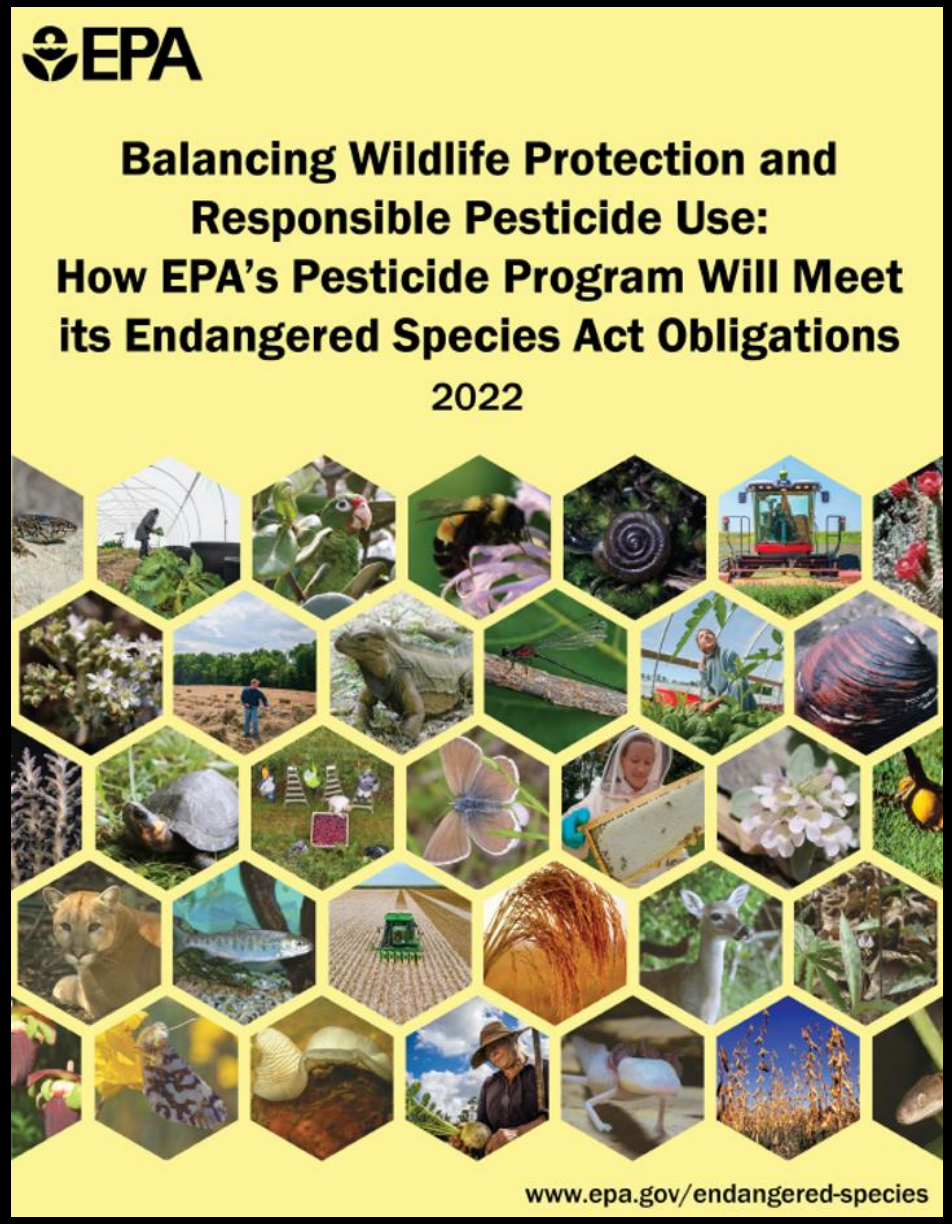
# Outline

- How did we get here?
- Where are endangered species in Oregon?
- How to know when/whether the new rules apply to you
- Using the EPA website: Bulletins Live Two
- Accumulating Points: How does it work?



# The Mega Lawsuit

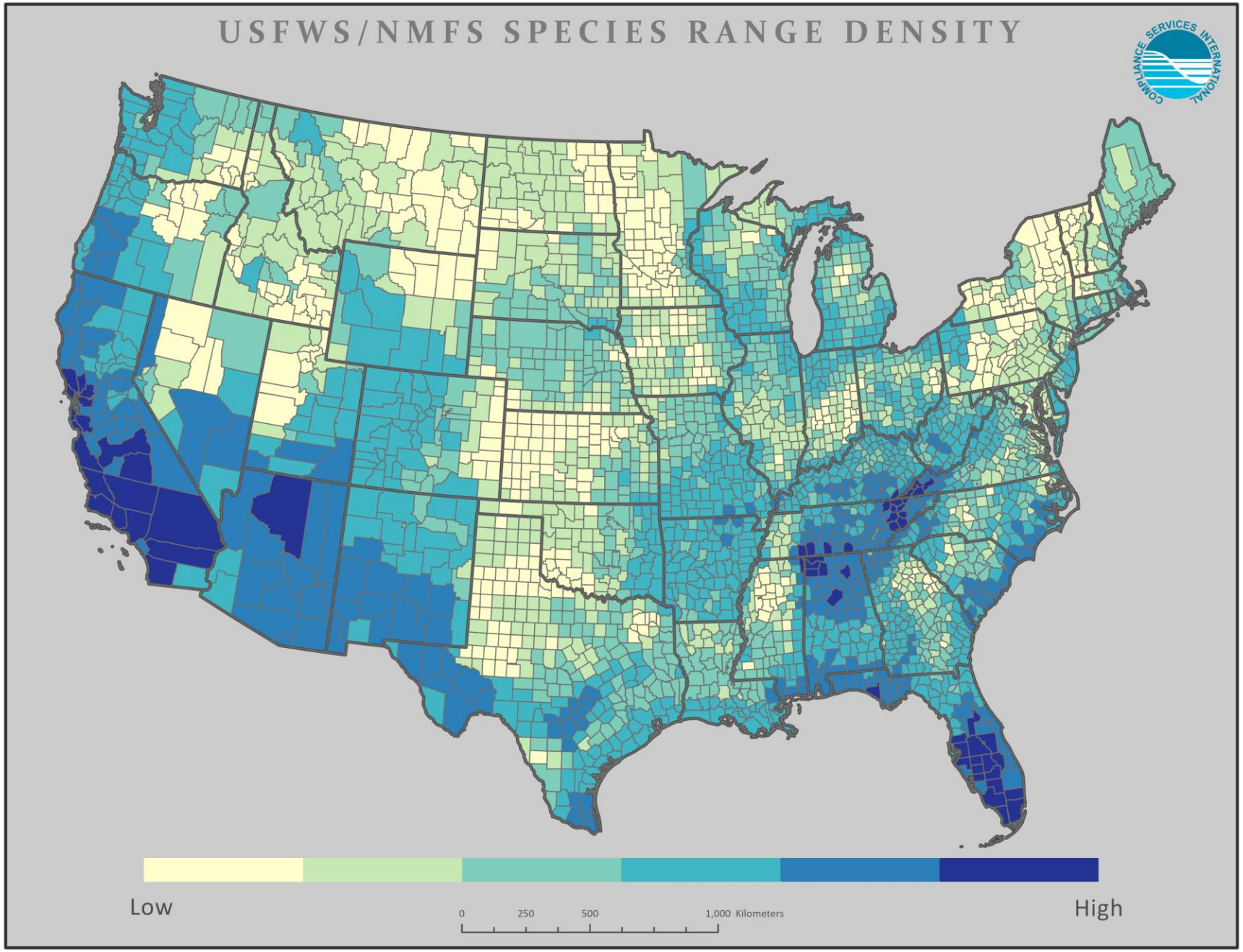
- Filed 2011 by Center for Biological Diversity & Pesticide Action Network
- Originally covered 382 active ingredients (reduced to 35)
- Final settlement signed September 12, 2023

| Strategy | Public Comment Period | Final deadline |
|---|---|---|
| Vulnerable Species Pilot Project | June 2023 | Update by end of 2024 |
| Herbicide Strategy | July 2023 | **August 20, 2024 FINALIZED** |
| Rodenticide Strategy | November 2023 | November 12, 2024 |
| Insecticide Strategy | **July 30, 2024** | Jan 17 – March 31, 2025 |

# EPA must take a case-by-case approach

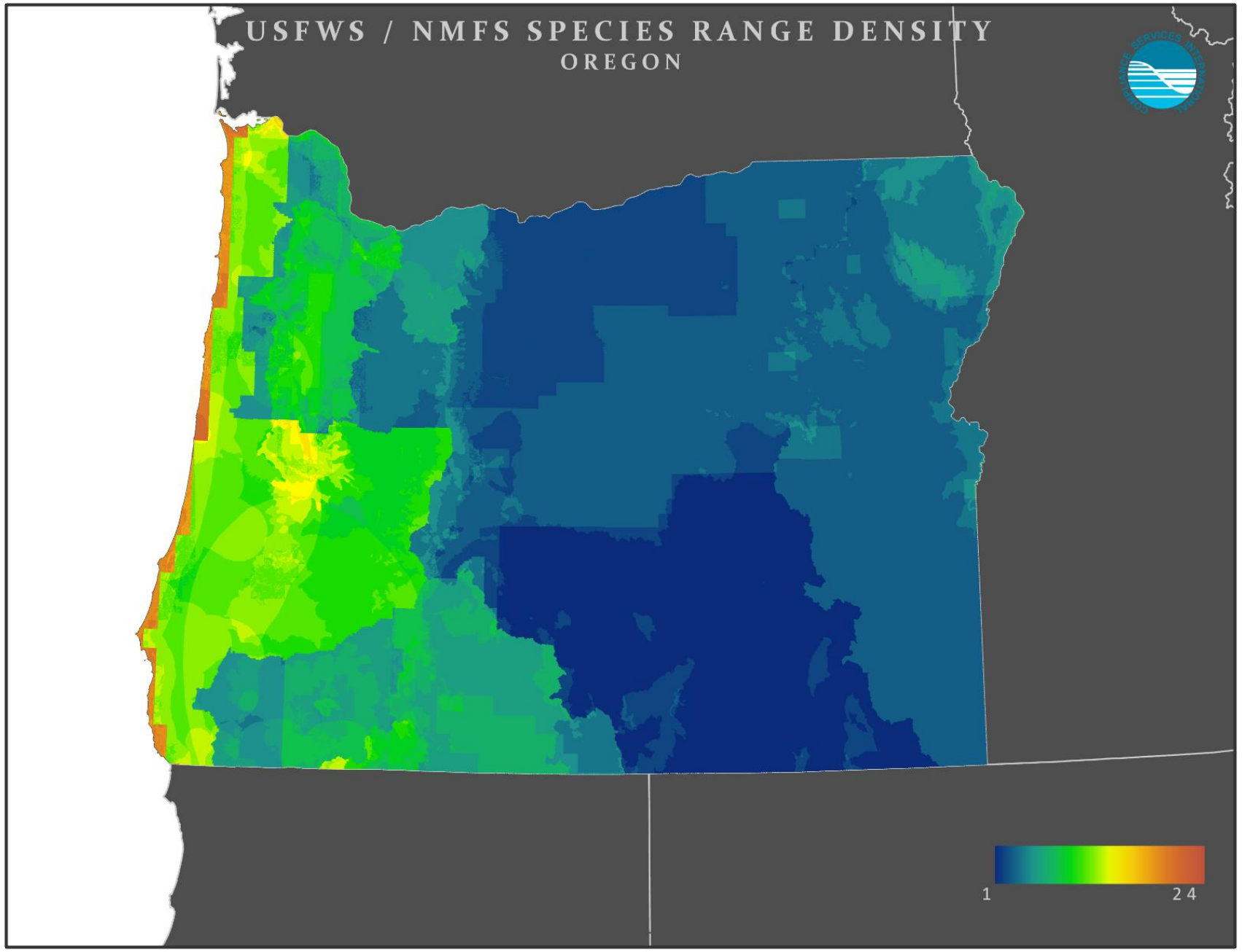
- For threatened/endangered species in the ocean (marine species), they must use mitigation strategies from the National Marine Fisheries Service (NMFS).
- For inland and freshwater-only threatened/endangered species, EPA must use mitigation strategies from the US Fish & Wildlife Service (USFWS).
- Together, they create a map for each species, the Pesticide Use Limitation Area (PULA) specific to the active ingredient.
- In order to use the active ingredient in the PULA (area), users must achieve a number of mitigation points to minimize the risk to species.

Every county in the US has at least one ESA-listed species



# Endangered species in Oregon

Ranges from 1 (dark blue) - to 24 (red on the coast)




Printable Bulletin
?
Gifford Pinchot National Forest
Kennewick
Portland
30
197
101
Salem
20
Ochoco National Forest
Bend
Oregon
84
Eugene
Umpqua National Forest
Malheur National Wildlife Refuge
Winema National Forest
Medford
95

The U.S. Fish & Wildlife Service proposed listing the monarch butterfly under the Endangered Species Act.

On December 10, 2024, the U.S. Fish and Wildlife Service proposed to list the monarch butterfly as a threatened species under the U.S. Endangered Species Act. Research supports that monarchs fit the Endangered Species Act (ESA) classification of ***threatened*** ("likely to become endangered in the foreseeable future throughout a significant portion of its range"), and not yet ***endangered*** ("in danger of extinction throughout all or a significant portion of its range"). The announcement to list monarchs under the federal ESA is a proposed rule, not a finalized decision. Currently, no legal protections under the federal ESA are in place for the monarch butterfly because of this proposal. However, the state of California has some existing regulations that can be viewed on the California Department of Fish & Wildlife (CDFW) website.

## Current Range

***Last Updated: 08-03-2023*** - *Wherever found*

Zoom in! Some species' locations may be small and hard to see from a wide perspective. To narrow-in on locations, check the state and county lists (below) and then use the zoom tool.

Want the FWS's current range for all species? Click here to download a zip file containing all individual shapefiles and metadata for all species.

* For consultation needs do not use only this current range map, please use IPaC.

Current range maps are only shown within the jurisdictional boundaries of the United States of America. The species may also occur outside this region.

# Endangered Species in Oregon by Category

## Marine species: NMFS jurisdiction

### Fishes

- Chinook salmon
  - Lower Columbia River ESU
  - Snake River fall-run ESU
  - Snake River spring/summer-run ESU
  - Upper Willamette River ESU
- Coho salmon
  - Lower Columbia River ESU
  - Oregon Coast ESU
  - Southern Oregon - Northern California Coast ESU
- Steelhead
  - Lower Columbia River DPS
  - Middle Columbia River DPS
  - Snake River Basin DPS
  - Upper Willamette River DPS

### Mammals

- Blue whale
- Finback whale
- Humpback whale
  - Central America DPS
  - Mexico DPS
  - Western North Pacific
- North Pacific Right Whale
- Sei whale
- Sperm whale
- Steller sea lion
  - Western DPS

## Species under joint jurisdiction

### Reptiles

- Leatherback sea turtle
- Loggerhead sea turtle
- Olive ridley sea turtle

## Non-marine species: USFWS jurisdiction

### Monocots

- Gentner's Fritillary
- Slender Orcutt grass
- Western lily

### Conifers

- Whitebark pine

### Dicots

- Applegate's milk-vetch
- Cook's lomatium
- Howell''s spectacular thelypody
- Kincaid's Lupine
- Large-flowered woolly meadowfoam
- MacFarlane's four-o'clock
- Malheur wire-lettuce
- McDonald's rock-cress
- Nelson's checker-mallow
- rough popcornflower
- Slickspot peppergrass
- Spalding's Catchfly
- Willamette daisy

### Crustaceans

- Vernal pool fairy shrimp
- Vernal pool tadpole shrimp

### Fishes

- Bull Trout
- Hutton tui chub
- Lahontan cutthroat trout
- Lost River sucker
- Shortnose Sucker
- Tidewater goby
- Warner sucker

### Insects

- Fender's blue butterfly
- Franklin's bumble bee
- Monarch butterfly
- Oregon silverspot butterfly
- Taylor's (=whulge) Checkerspot

### Mammals

- Columbian white-tailed deer
- Gray wolf
- North American wolverine
- Pacific Marten, Coastal DPS
- red tree vole

### Molluscs

- Snake River physa snail

### Amphibians

- Oregon spotted frog

### Birds

- Hawaiian petrel
- Marbled murrelet
- Northern spotted owl
- Short-tailed albatross
- Streaked Horned lark
- Western snowy plover
- Yellow-billed Cuckoo

# The Label is the Law: New label statement to watch for…

"Endangered Species Requirements – Before using this product, you must obtain any applicable Endangered Species Protection Bulletins (Bulletins) within six months prior to or on the day of application. To obtain Bulletins, go to Bulletins Live! Two (BLT) at **https://www.epa.gov/pesticides/bulletins**. When using this product, you must follow all directions and restrictions contained in any applicable Bulletin(s) for the area where you are applying the product, including any restrictions on application timing if applicable. It is a violation of Federal law to use this product in a manner inconsistent with its labeling, including this labeling instruction to follow all directions and restrictions contained in any applicable Bulletin(s). For general questions or technical help, call 1-844-447-3813, or email ESPP@epa.gov"

**Endangered Species**

- Endangered Species Home
- About the Endangered Species Protection Program
- Assessing Pesticides Under the Endangered Species Act
- Endangered Species: Information For Pesticides Users
- Litigation on Endangered Species and Pesticides
- **Bulletins Live!**
- For Kids

Contact Us about Protecting Endangered Species from Pesticides

# Endangered Species Protection Bulletins

Endangered Species Protection Bulletins are a part of EPA's Endangered Species Protection Program. Bulletins set forth geographically specific pesticide use limitations for the protection of threatened and endangered (listed) species and their designated critical habitat.

- Obtain Bulletins using EPA's Bulletins Live! Two application.
- Read the tutorial Bulletins Live! Two.
- Go to the quick start guide.
- View the November 2023 webinar for Bulletins Live! Two.
- BLT Q&A Page.
- Learn How to locate the EPA Registration number to search for product in Bulletins Live! Two.

If your pesticide label directs you to this website, you are required to follow the pesticide use limitation(s) found on your label and in the Bulletins Live! Two system for your intended application area, pesticide product, and application month. You may not see any geographically specific use limitations for the product you are applying even if your label directed you to this website because either:

1. EPA has not yet completed the process of identifying whether additional geographically specific use limitations are needed; or
2. there are no additional geographically specific use limitations required for the time period and location you plan to apply the pesticide product.

**Location**

Enter a zip code or city to start

Zoom in on the map

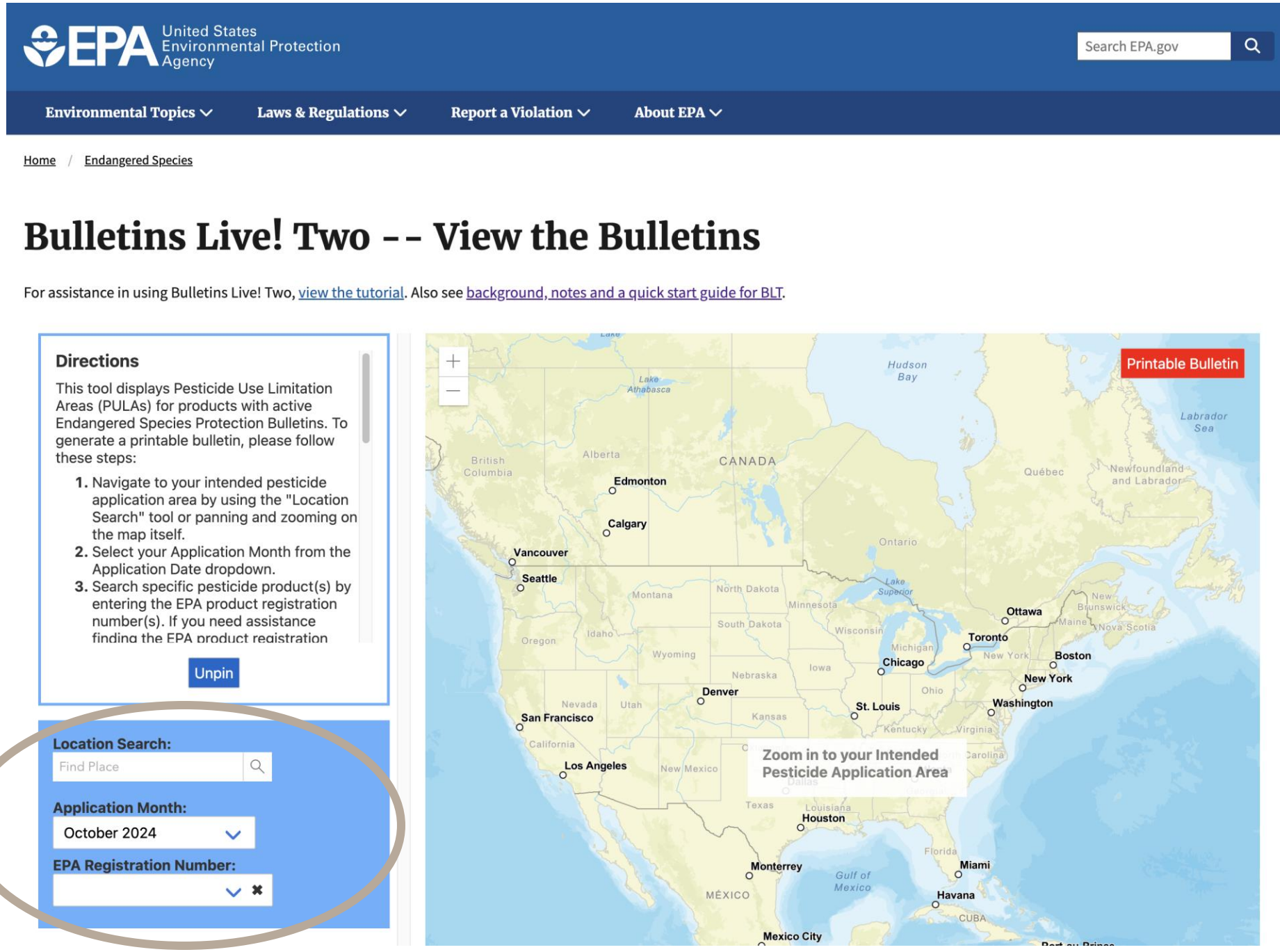
**Application Month**

Up to 6 months before

Plan ahead

**EPA Registration No.**

Not the EPA Establishment No.



# Bulletins Live! Two -- View the Bulletins

For assistance in using Bulletins Live! Two, view the tutorial. Also see background, notes and a quick start guide for BLT.

### Directions

This tool displays Pesticide Use Limitation Areas (PULAs) for products with active Endangered Species Protection Bulletins. To generate a printable bulletin, please follow these steps:

1. Navigate to your intended pesticide application area by using the "Location Search" tool or panning and zooming on the map itself.
2. Select your Application Month from the Application Date dropdown.
3. Search for a specific pesticide product using the EPA registration number and selecting from the search results. If you need assistance finding this registration

Unpin

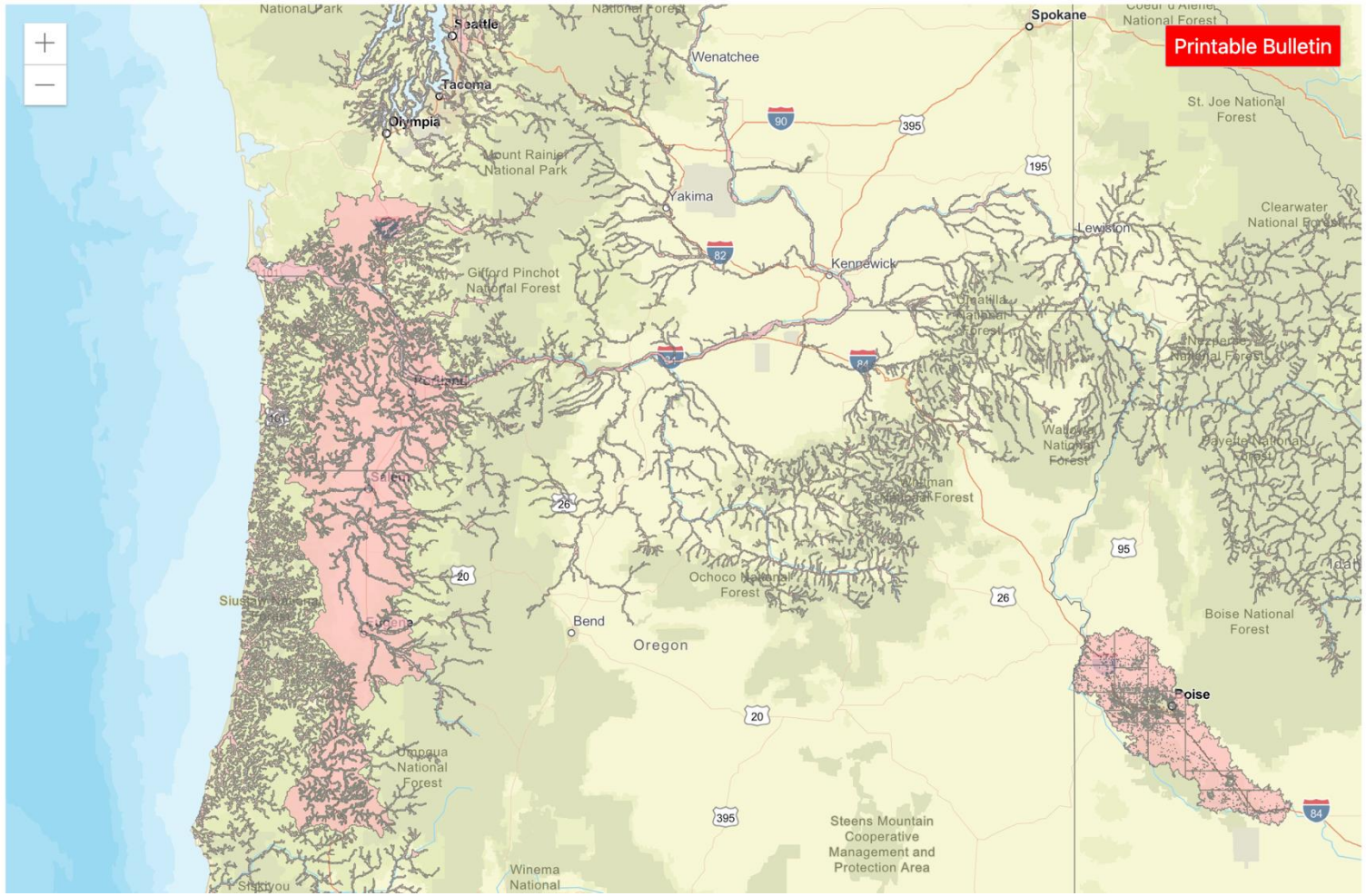
**Location Search:**

Find Place

**Application Month:**

October 2023

**EPA Registration Number:**



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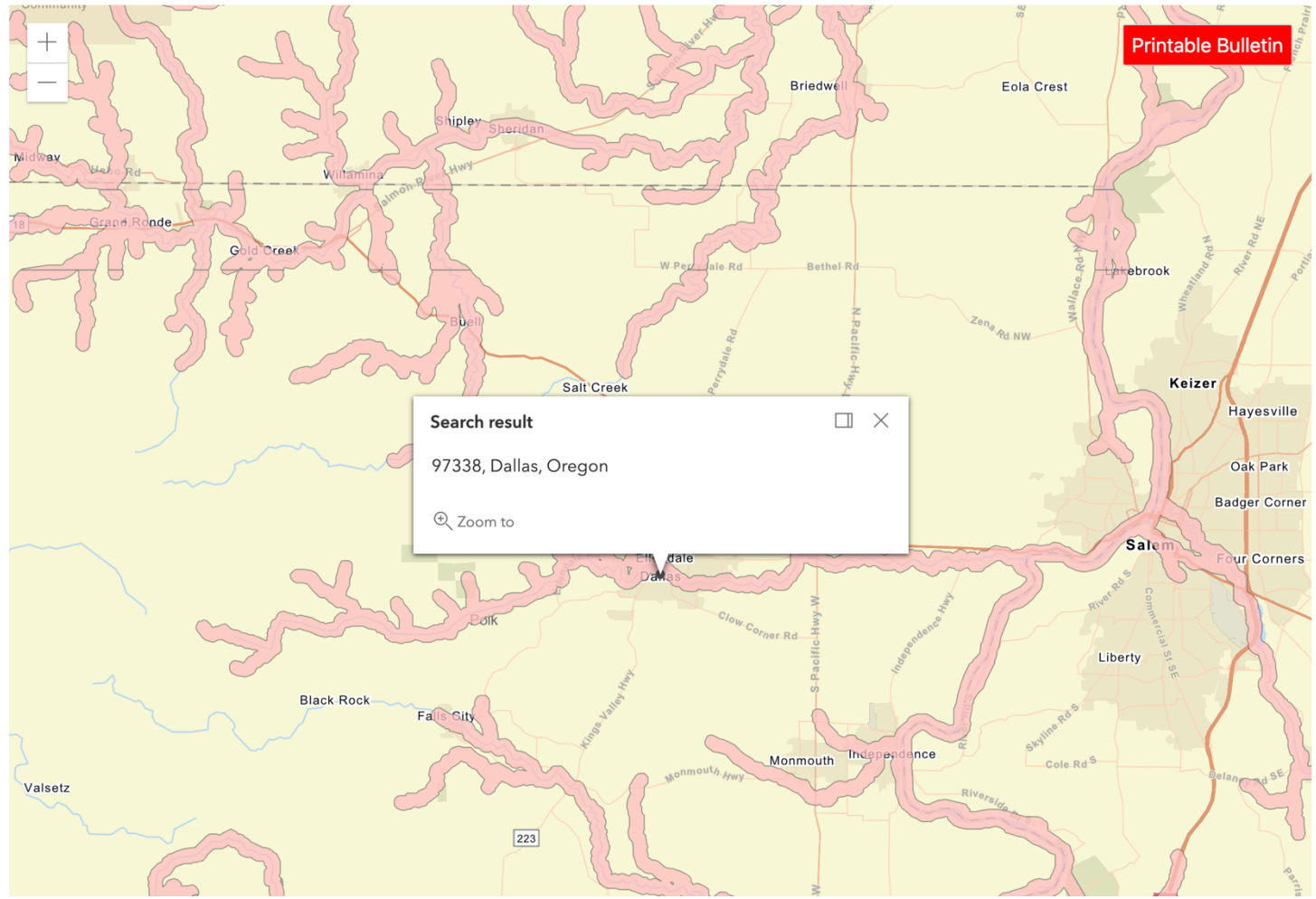
**Location Search:**
97338, Dallas, OR, USA

**Application Month:**
October 2023

**EPA Registration Number:**
19713-677

**Product Name:**
UP-FRONT HERBICIDE



printable bulletin in PDF format which you can print or save.

5. If a PULA that matches your search criteria does overlap your intended application area, click on the PULA polygon on the map to select it and activate the Limitations pane with the associated limitations. A yellow border surrounding the PULA indicates that it has been selected. Click on the "Printable Bulletin" button on the results pane to generate a printable bulletin in PDF format which you can print or save.

To view the PULA details prior to printing, click the "Full Details" button. To complete an additional search, use the "Clear Selected" button to clear your current results. If no

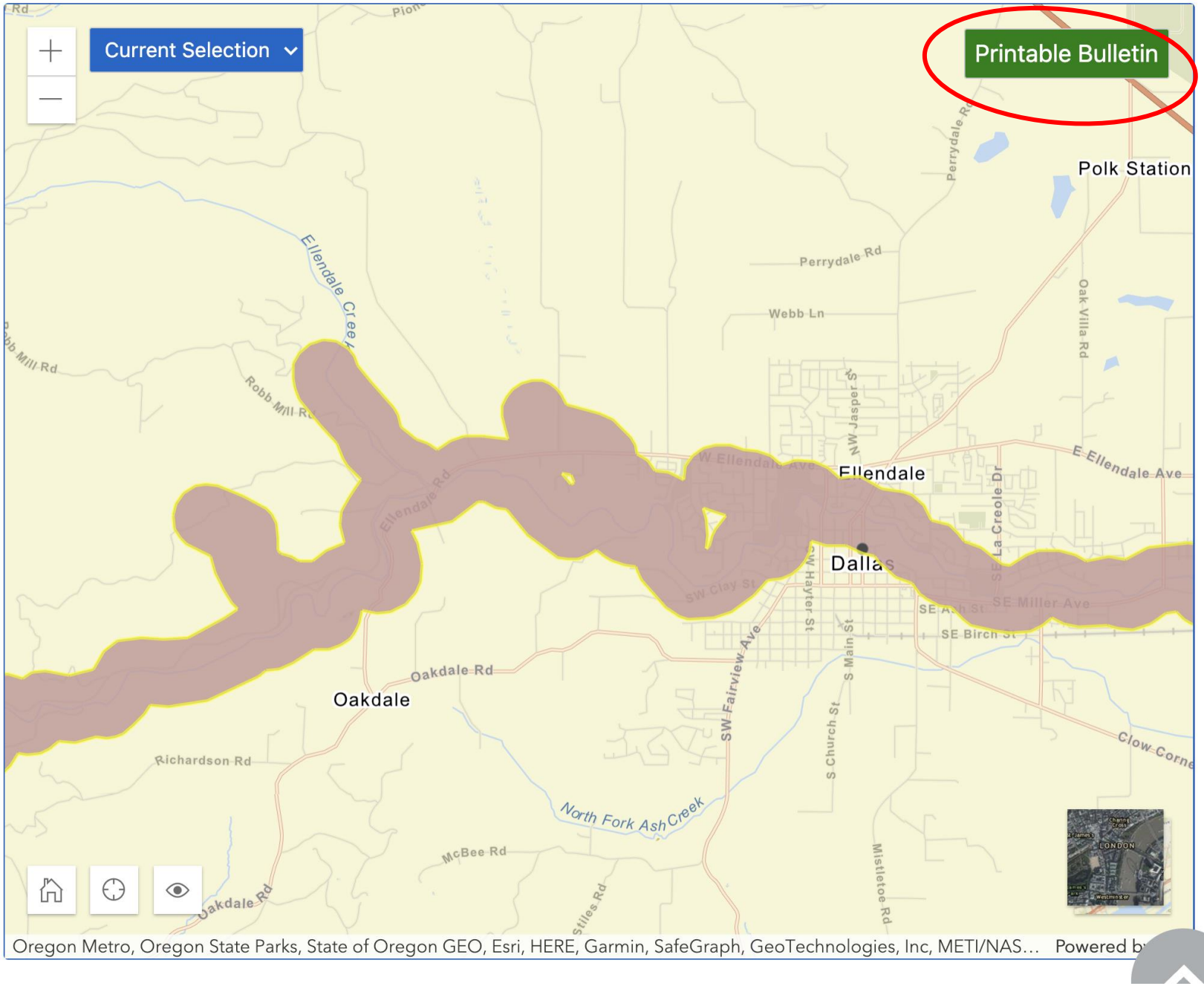
Unpin

## Limitations for Selected Area

**Pula ID:** 63
**Event Name:** Salmon BiOp 7
**Application Month:** April 2023

| Product | Count |
|---|---|
| UP-FRONT HERBICIDE (19713-677) | 1 |

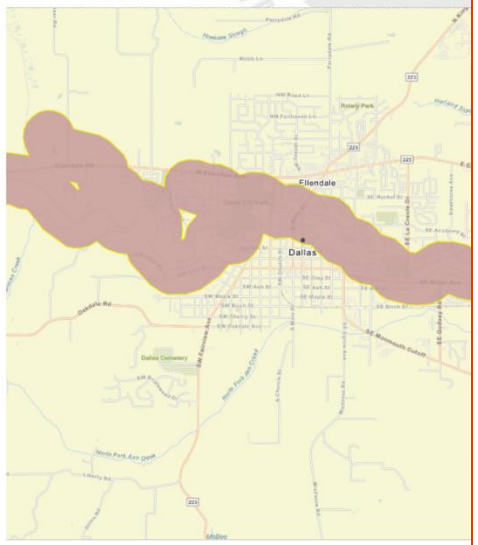
Full Details



## Endangered Species Protection Bulletin

**Application Month:** Octob
**Product:** UP-FI

1 Areas where pesticide use must be limited located beside the map to help pinpoint these




2 Look below at the Pesticide Use Limitation selected Active Ingredient(s) (ALs) or Produc printed map. Locate the Active Ingredient (AI table and identify the code in the last column limitation associated with that AI or Product. be found below in the Codes and Limitations Limitation Areas (PULAs) are visible on the n the highlighted PULA.

If you are applying a pesticide that contain multiple Products, then multiple codes may a when using this pesticide.

This document contains legal requirements for the use of certain pesticides.
Do not modify any text, graphics or coloration or otherwise alter this document.
ESPP Contact: ESPP@epa.gov Phone: 1-844-447-3813

## Endangered Species Protection Bulletin

### Pesticide Use Limitation Summary Table

| Product | AI | Use | Method | Form | Code |
|---|---|---|---|---|---|
| UP-FRONT HERBICIDE (19713-677) | Metolachlor, Sodium salt of fomesafen | All Agricultural Uses | All Application Methods | Soluble Concentrate | MRF22 |

### Codes and Limitations Table

| Code | Limitation |
|---|---|
| MRF22 | When applying metolachlor products within 50 meters (164 feet) of salmonid habitat (surface waters accessible to salmon, including, but not limited to lakes, reservoirs, rivers, streams, inundated floodplains, wetlands or natural ponds, estuaries and marine near-shore areas): Do not apply this product when soil is saturated, or when a storm event likely to produce runoff from the treated area is forecasted (by NOAA/National Weather Service, or other similar forecasting service) to occur within 48 hours following application. |

# Next steps

- Follow the directions on the label and the Bulletin
- Save a copy of the bulletin with your application plans/records
- If the application is delayed to the next month, revisit the Bulletins Live Two (BLT2) website
- EPA has a ESPP hotline (1-844-447-3813) and inbox (espp@epa.gov)

## Codes and Limitations Table

| Code | Limitation |
|---|---|
| E223 | Do not apply within the use limitation area between September 15 and May 15. |

## Endangered Species Protection Bulletin

### Pesticide Use Limitation Summary Table

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|---|---|---|---|---|---|
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# Are Bulletins Enforceable?

- Yes. When directed by a product label, users must obtain and follow the bulletin's directions. Failure to do so is a violation of the FIFRA: To use a pesticide in a manner inconsistent with its labeling.
- If the misuse results in "take" of listed species, the action is also enforceable under the Endangered Species Act by the USFWS and/or NMFS.

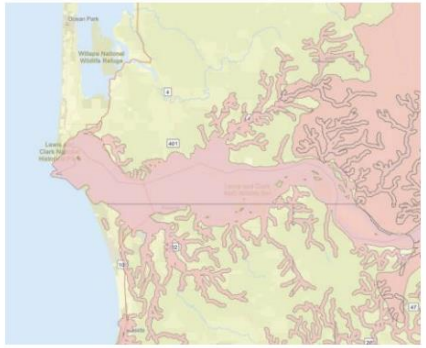
# Why aren't species identified on bulletins?

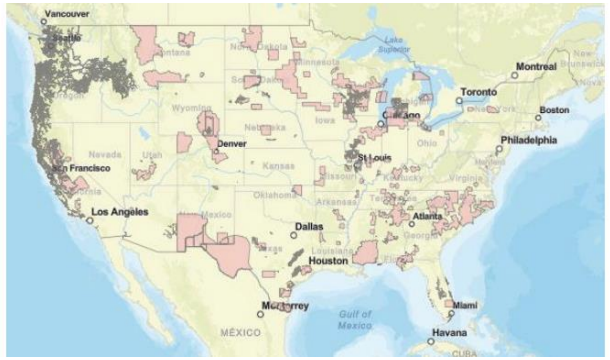


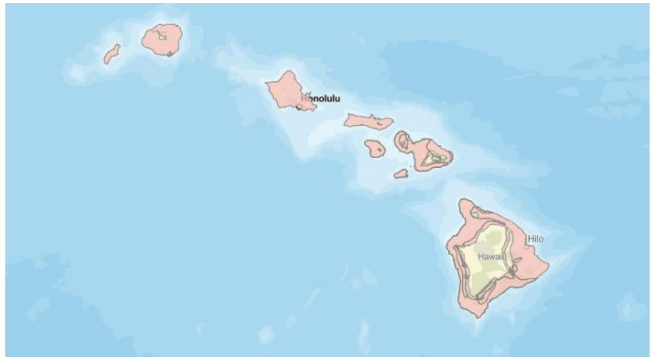


- Concerns about potential collection or disturbance of listed species
- NMFS and USFWS requested the species not be identified in bulletins.

# How often will bulletins be updated?






- In general, PULA boundaries and/or bulletins will not change until the next registration action occurs (at least once per active ingredient every 15 years).
- However, EPA is exploring options to allow for nimble changes when new data becomes available (for example, on species location/distribution).

# The Herbicide Strategy: Points system

| Runoff/Erosion Risk | Required Points for Use |
|---|---|
| Low | 3 |
| Medium | 6 |
| High | 9 |

Check the label/bulletin to learn how many points are required.

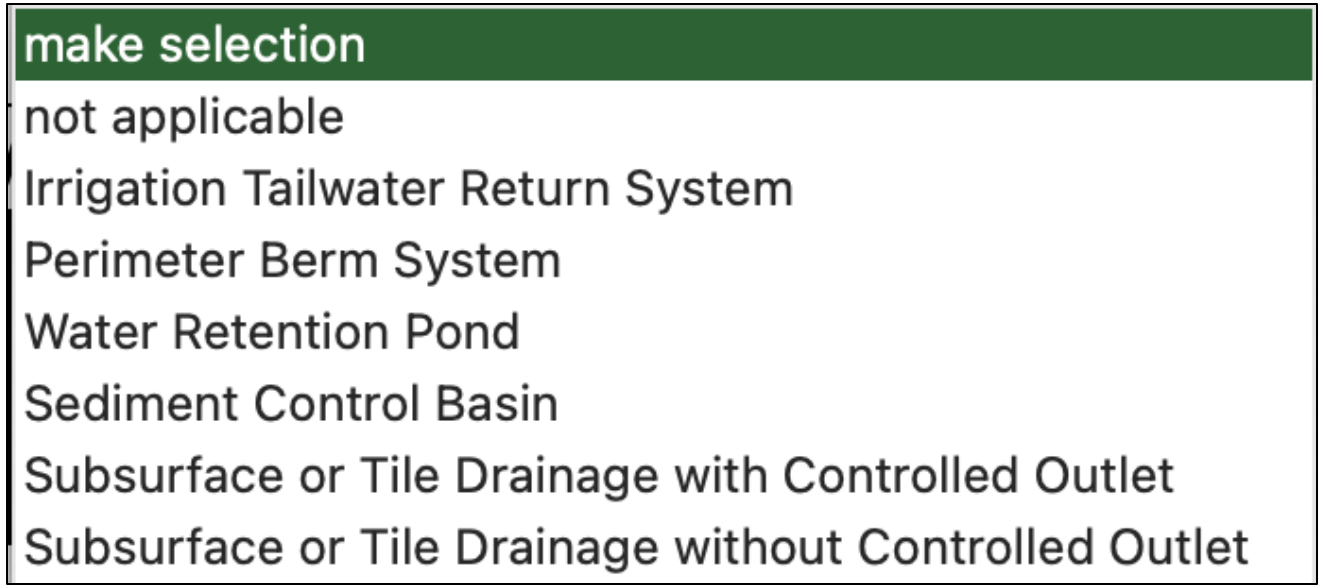
The field must acquire points through various mitigation measures.

# Mitigation Relief: Reduce Points Needed

| Category | Select Value | Number of points |
|---|---|---|
| **Mitigation Relief if the Area at Least 1000 Feet Down-Gradient from the Treated Farm/Field Contains Only Managed Areas.**<br>Managed areas are defined as:<br>a. Agricultural fields, including untreated portions of the treated field,<br>b. 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;<br>c. Buildings and their perimeters, silos, or other man-made structures with walls and/or roof;<br>d. Areas maintained as a mitigation measure for runoff/erosion or spray drift control, such as vegetative filter strips (VFS), field borders, hedgerows, Conservation Reserve Program lands (CRP), and other measures on EPA's Mitigation Menu Website;<br>e. Managed wetlands including constructed wetlands on the farm, and<br>f. 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. | yes | No Additional Runoff/Erosion Mitigation Needed |

# Mitigation Relief: Reduce Points Needed

| Systems that Capture Runoff and Discharge | | |
|---|---|---|
| **Category** | **Select Value** | **Number of points** |
| **Systems that Capture Runoff and Discharge** (water retention pond, sediment control basin, irrigation tailwater return system, perimeter berm system (present at the time of application and throughout the cropping season), subsurface or tile drainage with a controlled outlet or without a controlled outlet) | make selection | 0 |




9 points: Maximum mitigation achieved!

9 points: Maximum mitigation achieved!

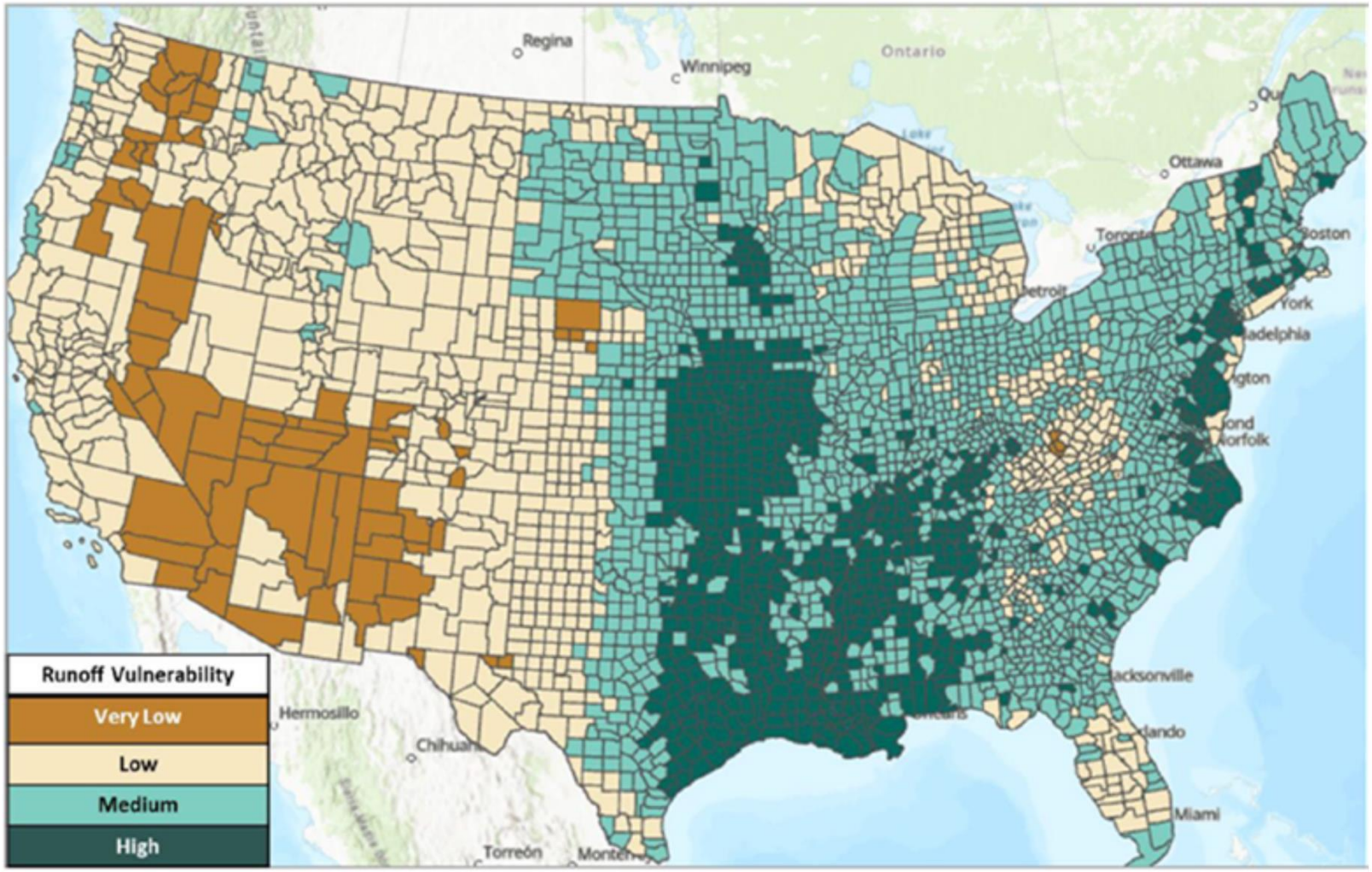
2 points

2 points

9 points: Maximum mitigation achieved!

1 point

# Mitigation Relief: Reduce Points Needed




EPA analyzed the runoff vulnerability of counties based on rainfall, soil, and other lines of evidence.

How likely is runoff/erosion in the northwest?

# Mitigation Relief: Reduce Points Needed

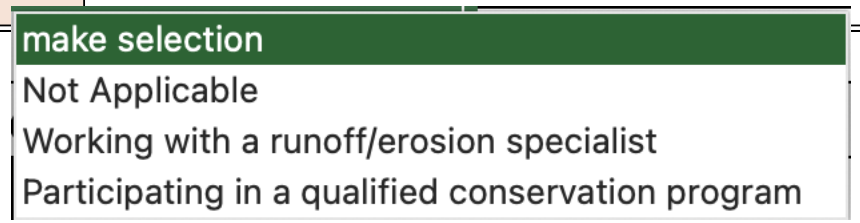
| Pesticide Runoff Vulnerability | | |
|---|---|---|
| **Select State** | **Select County** | **Number of points** |
| make selection | make selection | Select state then county from dropdown menus to the left |

| Pesticide Runoff Vulnerability | | |
|---|---|---|
| **Select State** | **Select County** | **Number of points** |
| Oregon | Hood River County | 3 |

| Oregon | Points |
|---|---|
| Baker County | 3 |
| Benton County | 2 |
| Clackamas County | 3 |
| Clatsop County | 3 |
| Columbia County | 3 |
| Coos County | 3 |
| Crook County | 6 |
| Curry County | 2 |
| Deschutes County | 6 |
| Douglas County | 3 |
| Gilliam County | 6 |
| Grant County | 3 |
| Harney County | 6 |
| Hood River County | 3 |
| Jackson County | 3 |
| Jefferson County | 3 |
| Josephine County | 3 |
| Klamath County | 6 |
| Lake County | 3 |
| Lane County | 3 |
| Lincoln County | 2 |
| Linn County | 3 |
| Malheur County | 6 |
| Marion County | 3 |
| Morrow County | 3 |
| Multnomah County | 3 |
| Polk County | 2 |
| Sherman County | 6 |
| Tillamook County | 3 |
| Umatilla County | 3 |
| Union County | 3 |
| Wallowa County | 3 |
| Wasco County | 6 |
| Washington County | 3 |
| Wheeler County | 3 |
| Yamhill County | 3 |

# Mitigation Relief: Reduce Points Needed

| Conservation Program and Runoff/Erosion Specialists/Mitigation Tracking | | |
|---|---|---|
| **Category** | **Select Value** | **Number of points** |
| **Mitigation Tracking** | make selection | 0 |
| **Follow Recommendations from a Runoff/Erosion Specialist or Participate in a Qualifying Conservation Program** | make selection | 0 |




1) Mitigation tracking: If yes (1 point): You're keeping track of the mitigations to ensure you are achieving the number of points needed. On paper or electronic format

2) Follow Recommendations from a Runoff/Erosion Specialist:

- Working with a runoff/erosion specialist (1 point)
- Participating in a qualified conservation program (2 points)

# Mitigation Relief: Reduce Points Needed

| Field Characteristics | | |
|---|---|---|
| **Category** | **Select Value** | **Number of points** |
| **Field with Slope <3%** (naturally low slope or flat fields; flat laser leveled fields) | yes | 2 |
| **Predominantly Sandy Soils** (fields with sand, loamy sand, or sandy loam soil without a restrictive layer that impedes the movement of water through the soil - e.g., "hard pan"). This option can only be used if the product label does not prohibit application on sandy soils. | yes | 2 |

- 2 points if the field is flat, less than 3% slope, perhaps “laser leveled”
- 2 points if soils are predominantly sandy because runoff is less likely. This option can only be used if the product label doesn’t prohibit application to sandy soils.

# Runoff/Erosion Mitigation Options: Conservation tillage

- No till……. 3 pts
- Perennial crop……. 3 pts
- Reduced tillage……. 2 pts
- Ridge tillage……. 2 pts
- Strip till……. 2 pts
- Mulch tillage……. 2 pts

Figure 2. A no-till field in Kentucky with corn being planted into plant residue from the previous crop. Photo by U.S. Department of Agriculture.

# Runoff/Erosion Mitigation Options: Reservoir tillage

- If yes……. 3 pts
- Tillage tools are used to create a depression in the soil between crop rows.
- The depressions collect water, allowing it to infiltrate the soil.
- The depressions must be be stable enough to remain in place through the growing season

Figure 4. Reservoir tillage equipment creates depressions in a potato field that collect rainfall or irrigation water and later provide soil moisture for the crop. Photos by Rebeccah Waterworth.

# Runoff/Erosion Mitigation Options: Contour farming

- If yes… 2 pts
- Contour farming or contour tillage changes the direction of runoff from down-slope to cross-slope.
- Ridges, furrows, even crop plantings that follow the contour of the land

Figure 5. A contour farmed field in Illinois with stubble from corn rows planted along the contour of a sloped field. Photo by Rebeccah Waterworth.

# Runoff/Erosion Mitigation Options: Vegetative Strips – In-field

- If yes……. 2 pts
- Managed areas of permanent herbaceous vegetation that filters runoff, designed for a multi-year lifespan of dense, upright growth
- Immediately downslope of the application area (or interspersed as in strip cropping)
- No invasive/noxious weeds

Figure 9. A vegetated barrier contains dense tall grasses adjacent to the field and functions as a vegetative filter strip. Photo by U.S. Department of Agriculture.

# Runoff/Erosion Mitigation Options:
# Terrace farming

Figure 10. Terraces (left) are used on sloped fields to divide a field into flatter farmable terraces. Rock wall terraces (right) are less common and are used in steep terrain. Photos by U.S. Department of Agriculture.

- If yes…. 2 pts
- A stair-stepping technique making flat areas along a gradient
- Flat areas should have 3% slope or less

# Runoff/Erosion Mitigation Options: Cover crop/continuous ground cover

- Long term cover crop, no-till… 3 pts
- Short term cover crop, no till… 2 pts
- Cover crop with tillage… 1 pt
  - A perennial crop may be considered a “tilled cover crop” in the year of establishment (the year of tillage)

Figure 11. A long duration cover crop in Kentucky is terminated by application of an herbicide to prepare the field for spring planting. Photo by U.S. Department of Agriculture.

# Runoff/Erosion Mitigation Options: Irrigation Water Management

- Above ground drip tape…. 2 pts
- Below ground drip tape…. 3 pts
- Below tarp irrigation…. 3 pts
- Drip emitters…. 2 pts
- Dry farming…. 3 pts
- Micro-sprinklers…. 2 pts
- Non-irrigated lands…. 3 pts
- Sensing technology & center-pivot…. 2 pts

Figure 14. Subsurface drip tape irrigation hoses run into and are buried underneath plastic in strawberries in California. Photo by U.S. Department of Agriculture.

# Runoff/Erosion Mitigation Options: Mulching with Natural and Artificial Materials

- Mulching with natural materials… 3 pts
- Mulching with artificial materials…. 1 pt
- Must be 2 inches deep, with at least 70% ground cover, stable to heavy rain and/or wind
- Requires periodic inspection

# Runoff/Erosion Mitigation Options: Erosion barriers

- If yes… 2 pts
- Placed in such a way that runoff does not flow over top of them
- Staked firmly to ensure water does not travel under them
- Remove sediment or replace wattles, as needed to maintain function

# Runoff/Erosion Mitigation Options: Grassed waterway adjacent to field

- If yes… 2 pts
- Meant for areas with channelized flow, downslope of the application area
- Perennial native grasses are encouraged
- Invasive/noxious weeds not allowed

Figure 18. Multiple grassed waterways in a corn field in Illinois manage runoff down a slope and off the field. Photo by Rebeccah Waterworth.

# Runoff/Erosion Mitigation Options: Vegetative filter strips adjacent to field

- If 20-30 feet wide… 1 pt
- If 30-60 feet wide… 2 pts
- If more than 60 feet… 3 pts
- Downslope from application area, designed to be stable through multiple growing seasons with dense, upright growth
- Minimum 20 feet wide

Figure 19. A vegetative filter strip provides a buffer between the edge of a tilled field and a stream. Photo by U.S. Department of Agriculture.

# Runoff/Erosion Mitigation Options: Vegetated ditch adjacent to field

- If yes… 1 pt
- Must be downslope of the application area with capacity to accommodate runnove from a 24-hour duration storm

Figure 23. A vegetated ditch at the edge of a sugarcane field before planting. Photo by U.S. Department of Agriculture.

# Runoff/Erosion Mitigation Options: Riparian buffer/cover adjacent to field

- Non-flooded, vegetated area between a field and a water body
- May contain herbaceous or woody vegetation
- 20-30 feet… 1 pt
- 30-60 feet… 2 pts
- More than 60 feet… 3 pts

Figure 25. An aerial view of riparian buffers along a creek containing a mix of trees and herbaceous vegetation. Photo by U.S. Department of Agriculture.

# Runoff/Erosion Mitigation Options: Wetlands adjacent to field

- If yes… 3 pts
- Constructed or natural
- Similar to riparian areas, but wetlands are permanently or seasonally flooded
- Downslope of the application area
- No noxious/invasive weeds

Figure 28. Constructed wetlands on a farm collect runoff from fields. Photo by U.S. Department of Agriculture.

# Runoff/Erosion Mitigation Options: Terrestrial Habitat Landscape Improvement adjacent to field

- Critical area planting, cross wind trap strips, hedgerow planting, herbaceous wind barriers, windbreak-shelterbelt establishment and renovation, tree shrub planting, forest stand improvement, upland wildlife habitat management
- If 20-30 feet… 1 pt
- If 30-60 feet… 2 pts
- If more than 60 feet… 3 pts

Figure 29. A critical area planting (a type of terrestrial habitat landscape improvement) consisting of herbaceous vegetation at the edge of a field. Photo by U.S. Department of Agriculture.

# Runoff/Erosion Mitigation Options: Filtering devices adjacent to field

- With activated carbon… 3 pts
- With compost… 1 pt
- Filters, sleeves, socks, or filtration units containing carbon or compost

Compost filter socks by Filtrexx Sediment Control

https://www.epa.gov/pesticides/mitigation-menu Look for the runoff points calculator (xlsm)

| In-Field Mitigation Measures | | |
|---|---|---|
| **Category** | **Select Value** | **Number of points** |
| **Conservation Tillage** (no-till, perennial crop (e.g., orchards that are not tilled), reduced tillage, strip tillage, ridge tillage, mulch tillage) | make selection | 0 |
| **Reservoir Tillage** (reservoir tillage, furrow diking, basin tillage) | make selection | 0 |
| **Contour Farming** (contour farming, contour tillage, contour orchard and perennial crops) | make selection | 0 |
| **Vegetative Strips – In-Field** (inter-row vegetated strips, strip cropping or intercropping, alley cropping, prairie strips, contour buffer strips, contour strip cropping, vegetative barrier (occurring in a contoured field)) | make selection | 0 |
| **Terrace Farming** (terrace farming, terracing, field terracing) | make selection | 0 |
| **Cover Crop or Continuous Ground Cover** (cover crop, double cropping, relay cropping) | make selection | 0 |
| **Irrigation Water Management** (use of soil moisture sensors/evapotranspiration meters with center pivots & sprinklers; above ground drip tape, drip emitters; micro-sprinklers; use of below tarp irrigation, below ground drip tape; dry farming, non-irrigated lands) | make selection | 0 |
| **Mulching with Natural and Artificial Materials** (mulching with permeable artificial materials (i.e., landscape fabrics, synthetic mulches), mulching with natural materials) | make selection | 0 |
| **Erosion Barriers** (wattles, silt fences) | no | 0 |

https://www.epa.gov/pesticides/mitigation-menu Look for the runoff points calculator (xlsm)

| Field-adjacent Mitigation Measures | | |
|---|---|---|
| **Category** | **Select Value** | **Number of points** |
| **Grassed Waterway** | make selection | 0 |
| **Vegetative Filter Strips or Field Border adjacent to field** | make selection | 0 |
| **Vegetated Ditch** | make selection | 0 |
| **Riparian Forest Buffer; Riparian Herbaceous Cover** | make selection | 0 |
| **Constructed and Natural Wetlands** (constructed and natural wetlands, wetland and riparian landscape/habitat improvement) | make selection | 0 |
| **Terrestrial Habitat Landscape Improvement** (critical area planting, cross wind trap strips, hedgerow planting, herbaceous wind barriers, windbreak-shelterbelt establishment and renovation, tree shrub planting, forest stand improvement, upland wildlife habitat management) | make selection | 0 |
| **Filtering Devices** (filters, sleeves, socks, or filtration units containing activated carbon or compost amendments) | make selection | 0 |

https://www.epa.gov/pesticides/mitigation-menu Look for the runoff points calculator (xlsm)

| Application Parameters | | |
|---|---|---|
| **Category** | **nter or Select Valu** | **Number of points** |
| **Is the planned application a: soil injection; tree injection; chemigation applied subsurface or under impermeable plastic mulch; spot treatment (<1,000 square feet being treated); treatment of the farm/field less than 1/10th of an acre?** | make selection | If yes… Essentially 9, no more points needed. |
| **Annual application rate reduction** (enter % below the maximum labeled annual application rate) | 0% | Sliding scale, 2 pts for 50% reduction |
| **Reduction in the proportion of field treated** (enter % field area treated using banded application, partial field treatment, ground precision sprayer, smart sprayer, or other specialized method) | 0% | Sliding scale, 3 pts for 50% reduction |
| **Soil incorporation** (watering-in or mechanical incorporation before a runoff producing event; a runoff producing event is considered as follows:<br>- A 50% or greater chance of rainfall of 1 inch or more is expected to occur within 48 hours of the application as predicted by the NOAA/National Weather Service. AND,<br>- The precipitation potential is 50% or greater at any point during the 48-hr period.) | make selection | If yes… 1 pt |

# EPA must take a case-by-case approach

- For threatened/endangered species in the ocean (marine species), they must use mitigation strategies from the National Marine Fisheries Service (NMFS).
- For inland and freshwater-only threatened/endangered species, EPA must use mitigation strategies from the US Fish & Wildlife Service (USFWS).
- Together, they create a map for each species, the Pesticide Use Limitation Area (PULA) specific to the active ingredient.
- In order to use the active ingredient in the PULA (area), users must achieve a number of mitigation points to minimize the risk to species.

**Location**

Enter a zip code or city to start

Zoom in on the map

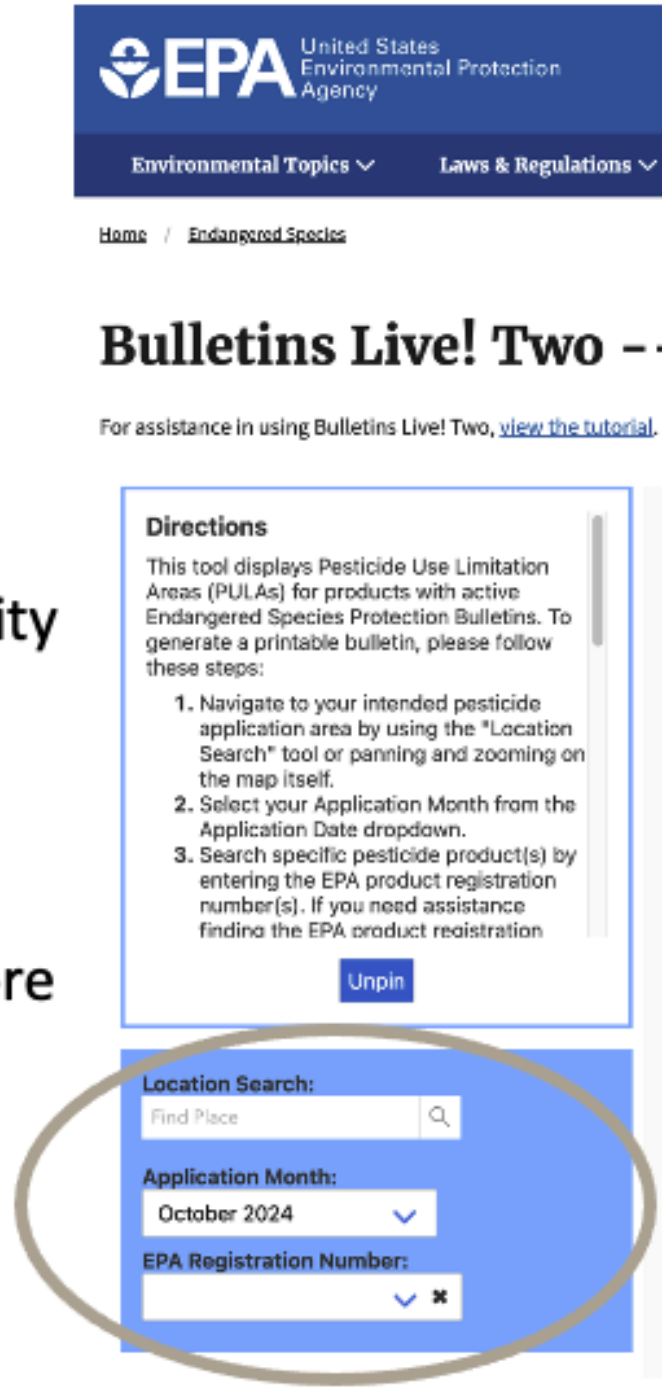
**Application Month**

Up to 6 months before

Plan ahead

**EPA Registration No.**

Not the EPA Establishment No.

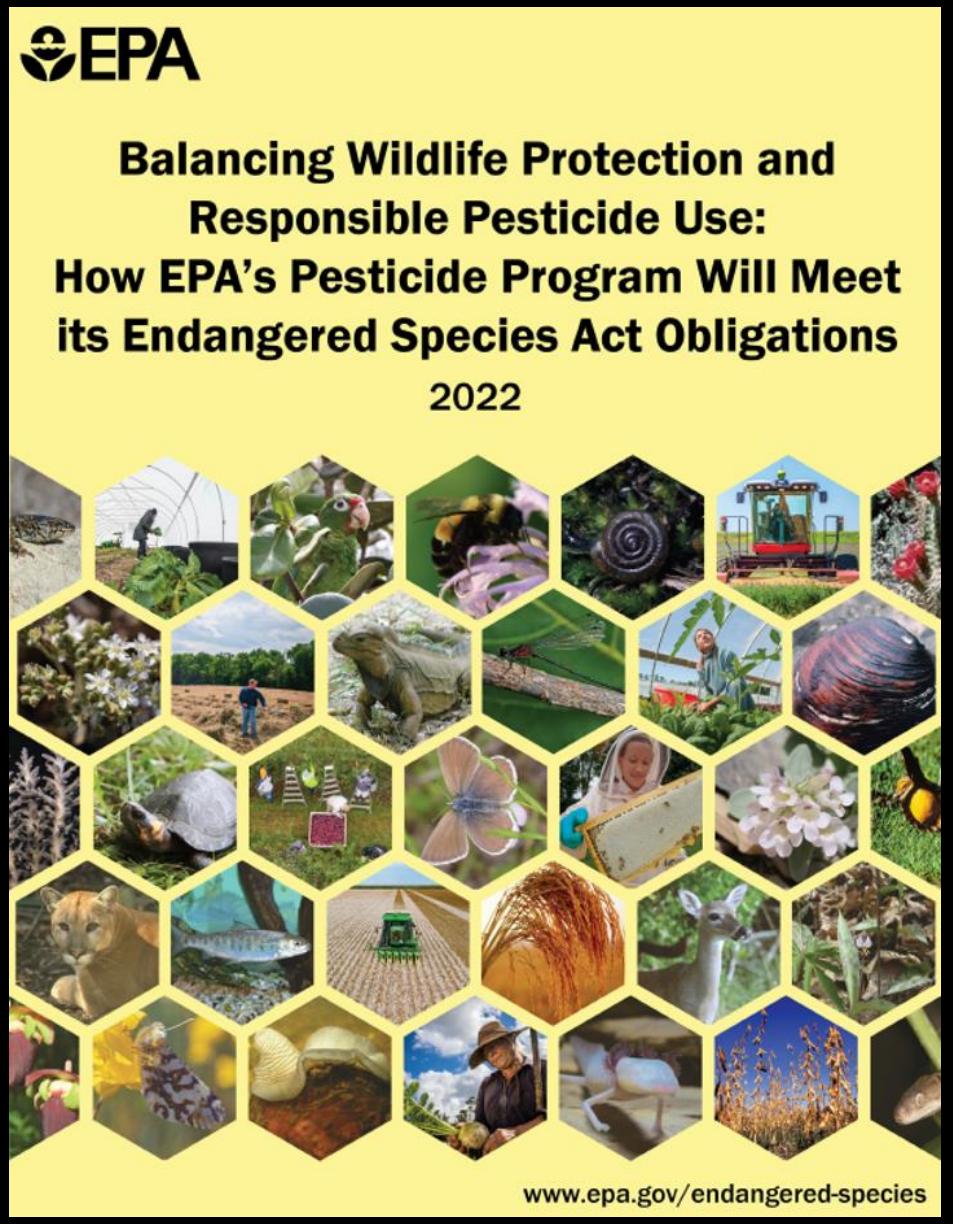



# You must take a case-by-case approach

- Field by field
- Consider the timing
- Product-specific
  - Searching by product name is not sufficient. You must search by EPA Reg. No.

# Outline

- How did we get here?
- Where are endangered species in Oregon?
- How to know when/whether the new rules apply to you
- Using the EPA website: Bulletins Live Two
- Accumulating Points: How does it work?
- In closing: https://www.epa.gov/pesticides/mitigation-menu



# BULLETINS LIVE TWO:

## DIGGING INTO THE ENDANGERED SPECIES ACT

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