Pesticide Stewardship Partnership

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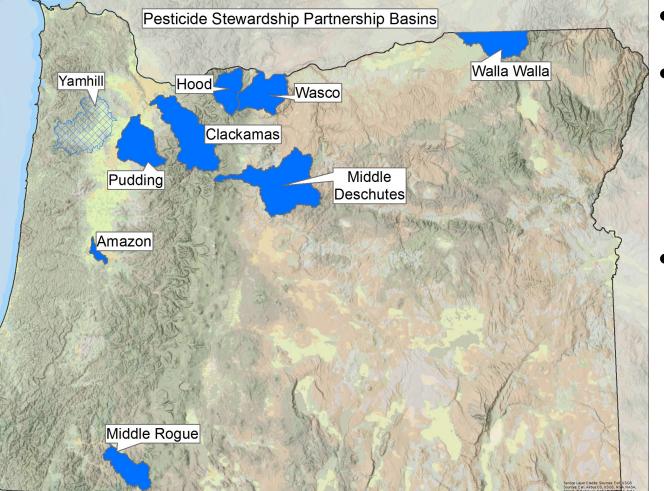


Overview

- What is the Pesticide Stewardship Partnership (PSP)
- PSP background
- Jurisdictional roles
- How the PSP Functions
 - Education
 - Water quality
 - Collection events
- Successes and challenges
- Areas of focus
- Questions



What is the PSP?



- Voluntary and nonregulatory
- Goal: reduce off-target pesticide movement into streams and improve water quality
- Method: Use water quality data to focus educational efforts and provide technical assistance to address any impaired waterways



Background



- Started in Hood River in 1999
- Water Quality Pesticide Management Team
- PSP Advisory Group
- Alternative to 303(d) listing
- EPA Cooperative Agreement



EPA Cooperative Agreement

• FIFRA State Lead Agency (SLA)

Cooperative Agreement with the US EPA

- Requirements:
 - Develop and implement State Water Quality Pesticide Management Plan
 - Report water quality improvement efforts and activities
- "State of Oregon Pesticide Management Plan for Water Quality Protection" - 2011
 - focuses on protecting water from the contamination of pesticides currently registered and used in Oregon
 - Legacy pesticides addressed by DEQ through the CWA
- PSP satisfies the requirements of the EPA approved plan



Jurisdictional Roles

Oregon Department of Agriculture

- EPA-designated state lead agency for pesticides
- Develop and implement the Pesticide Management Plan
- Develop WQ portion of EPA cooperative agreement
- Lead agency for PSP
- Administer PSP biennial budget and grants
- Lead pesticide collection events

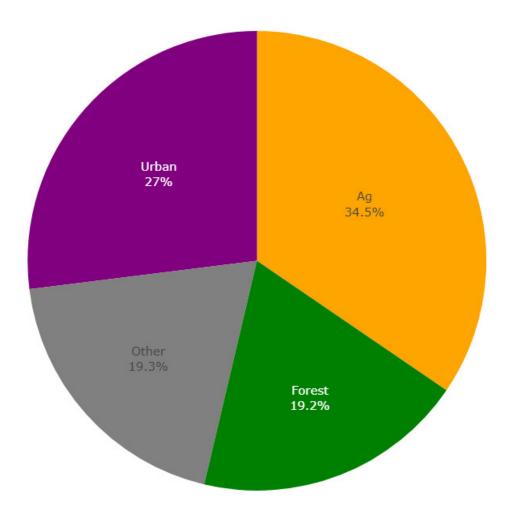
Department of Environmental Quality

- Conduct data analysis for statewide pesticides of concern
- Provide watershed partners technical assistance in monitoring and sampling
- Develop seasonal monitoring schedules for PSPs
- Identify emerging pesticide analytical priorities for DEQ Lab method development



Background

PSP Stations Upstream Land Use





How the PSP Functions

Monitor for pesticides

Add and/or remove sites based on evaluation of water quality data

Identify priority pesticides or areas of concern

Follow-up monitoring to track effectiveness of voluntary efforts Education, outreach and technical assistance = voluntary behavior change



Past Education and Outreach



- Not just for pesticide users
- Funded by PSP partner grants
- IPM and spray calibration workshops
- Locally relevant factsheets
- Installation of weather stations
- Buffer strips & minimize spraying near streams

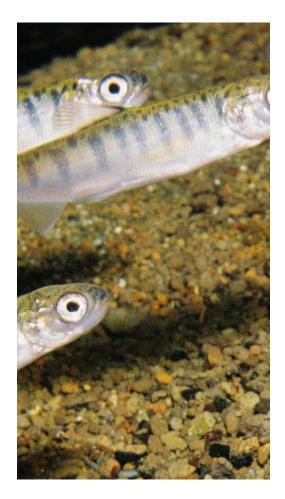


Outreach and Education- Grants

- ODA will no longer fund requests for project focused solely on monitoring.
- All requests must include education, outreach, or technical assistance projects that have clear and measurable goals.
- The annual and final reports have specific units (number of education events, number of attendees, etc.) that are required.
- To create more equality among our local PSP partners, we have set a flat fee per number of samples taken during the grant period.
- We will not be asking partners to take flow sampling this grant cycle.



Water Quality Data

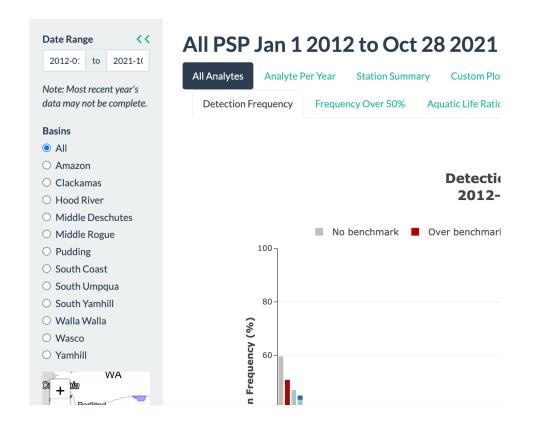


- Local partners funded by PSP grants
- Water Quality Sampling and Analysis
 - 134 compounds
 - 5-11 samples sites in each PSP
- Data is presented to the partners at the beginning of the year and made available on DEQ's website
- Now it's also updated weekly on the Data Viewer



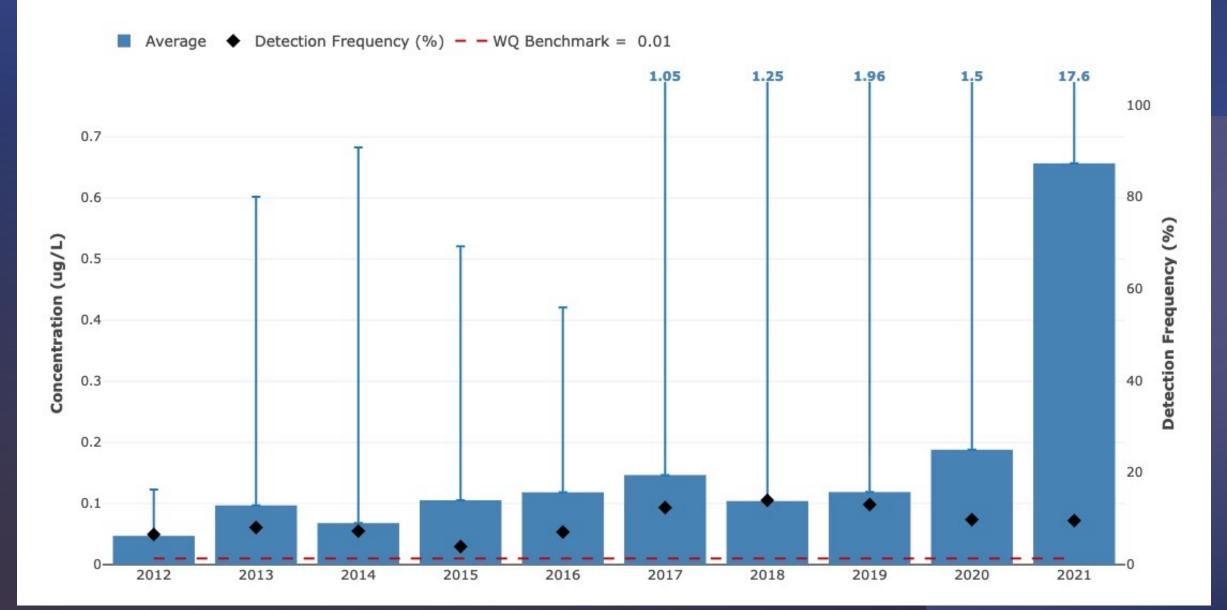
Data Viewer

- Interactive tool that displays PSP monitoring data
- Analyze data in real time as questions come up at meetings
- First presented to stakeholders in 2018
- Crop layer removed
- Additional language for clarification around sampling points added



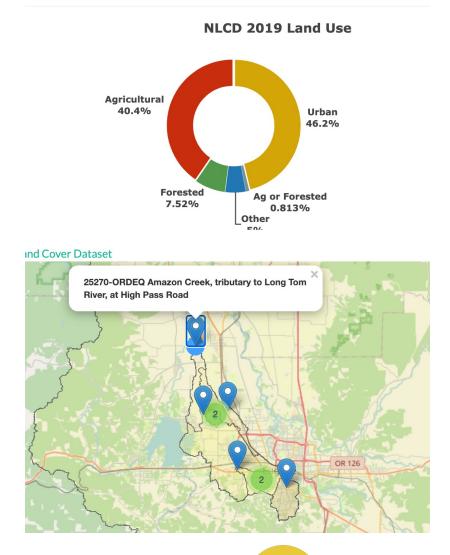


Imidacloprid



Data Viewer

- Partners previously had data and sampling locations on their websites
- The same information can now be found in one location with the percent land use that flows into a given sampling point







Pesticide Collection Events

- Increased capacity due to chlorpyrifos ruling
- >730,000 lbs of unusable or unwanted pesticides to date
- 2022 events
 - Pendleton
 - Ontario
 - Clackamas
 - Medford
 - Mt Angel
 - Madras



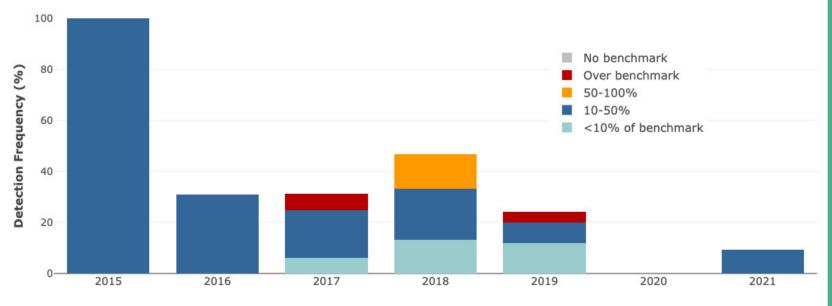
Noteworthy Collection Event Happenings

- Furthest Distance Driven by an Attendee: 1.5 hours
- Largest event: 54 participants (McMinnville, 2014)
- Largest quantity collected: 48,148 lbs (McMinnville, 2016)
- Significant inventory:
 - Agent Orange- 2,4-D and 2,4,5-T in 55 gal drums
 - Mercuric Chloride
 - DDT



Successes- Middle Rogue

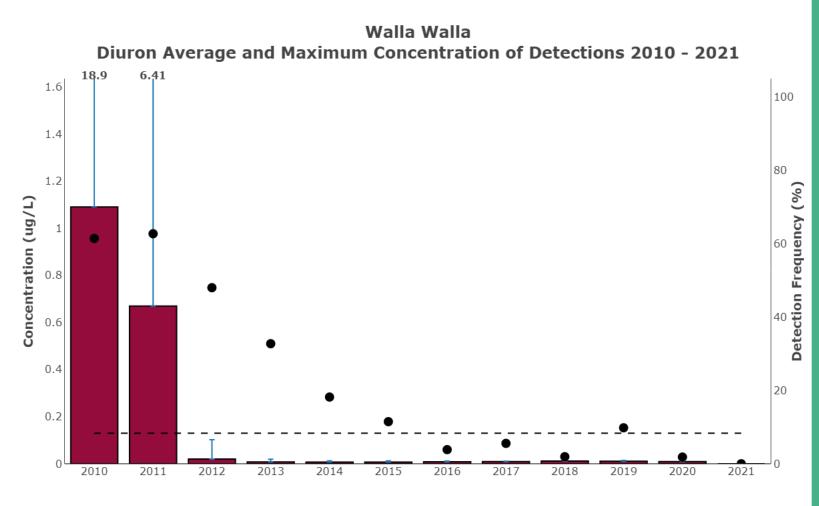
- Oxyfluorfen detected in Jackson Creek 2015 2018.
- Over the following year
 - Installed straw waddles
 - Monitored weather
 - Reduced oxyfluorfen applications by 33%
 - Use of an alternate material, oryzalin
- No detections in 2020 and 1 detection in 2021.





Successes- Walla Walla

 Irrigation District switched to mechanical control of vegetation, along with spot spraying of less toxic and persistent herbicide.



Programmatic Challenges

- Partners capacity
- Staff turnover
- PSP areas with varied land use show less improvement
- Minimal records of past educational efforts
- Capacity of DEQ lab



Current Areas of Focus

- Program evaluation began in October 2021
- Increased support for the local partners
- Additional education and technical assistance reporting requirement for next grant cycle
- Increased communication and collaboration with local partners



Current Areas of Focus

- Reevaluate what pesticides are included in the analysis
- Reevaluate collection of flow data
- Increased Tech Assistance and Education support







QUESTIONS?

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