

## Oregon's Pesticide Stewardship Program Water Quality through Collaboration

Environmental Quality



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# Pesticide Stewardship and Water Quality

## Pesticide Stewardship Partnerships (PSPs)

- History, current status and accomplishments
- Key challenges and priorities

## Pesticide Stewardship Program Expansion

- PSP Expansion into new watersheds
- Technical Assistance Support
- Pesticide Waste Collection

#### **Pesticide Stewardship Partnerships (PSPs)**

Collaborating at the watershed level Key Steps in Partnership Projects

<u>Monitor for current use pesticides in</u> surface waters from drift & runoff

Identify streams with elevated pesticide concentrations or high # of detections

Collaborate to <u>implement voluntary</u> management practices

Follow-up monitoring to determine improvements over time







# Features & Benefits of the PSP Program

## **Monitoring Data Creates Awareness and Feedback**

- Ability to identify pesticides of possible concern
  - Change the pesticide use/application practices
  - Switch to alternative products or management practices
- Ability to demonstrate where there <u>aren't</u> problems
- Clear environmental outcome measures

## Watershed-based / Voluntary / Collaborative

- Avoids burdensome regulatory issues
- Local, most effective solutions (not "one-size-fits-all")
- Multiple partnerships lessens the burden on any one entity

## Oregon Pesticide Stewardship Partnerships Current Projects in 7 Watersheds



#### **Actions Implemented**

- Spray drift reduction training
- Installation of weather stations
- Alternative control methods
- ♦ Less toxic pesticides
- ♦ IPM training & assistance
- Buffer strips & minimal spraying near streams

## Hood River PSP: What Can Be Achieved?

#### Goal: Reduction in concentrations & frequency of detections over time



#### Malathion in Wasco Watersheds 2011-2013 Median Concentration of Detections



#### Little Walla Walla River Distributaries (3 sites) Diuron (Karmex) - Average Concentrations Spring 2010-2013



# PSP Monitoring Status in Western Oregon Watersheds

- 20+ pesticide ingredients often found during one monitoring season in single watershed
- Relatively small number of benchmarks exceeded, but high detection frequency
- Wide array of ag and non-ag operations that use many of the same pesticides





## Pesticide-related Water Quality Management: Addressing Agency Resource Needs

- Consistent long-term funding of monitoring program
- 2013 Oregon Legislature allocated resources:
  - 1. Add 2 <u>new</u> watersheds to PSP program
  - 2. Refine existing PSP monitoring efforts
  - 3. Conduct pesticide waste collection events during biennium (7 events over two years)
  - 4. Provide technical assistance in existing PSP areas for biennium

#### #1 Oregon Pesticide Stewardship Partnerships Potential New Sub-Basins/Watersheds for 2014-2015

Based on a high level qualitative review/assessment by the WQPMT Key criteria: pesticide use & 3 major land use categories (ag, urban & forestry) represented



### Waste Pesticide Disposal: Oregon PSP Program

**Proposed Locations for Pesticide Collection in 2014-2015** 



## Technical Assistance Project in Yamhill Sub-Basin:

Spray Optimization & Drift Reduction for Small Fruit

## Tunnel Sprayer Demonstrations and Field Testing

\* Proven technology in Vineyards to reduce 99% of drift and reduce chemical usage by 35% \* Purchasing demonstration unit to run preliminary tests in caneberries and blueberries







## -Thank You -Questions







State of Oregon Department of Environmental Quality





Oregon Department of Agriculture





