WQPMT Meeting Notes – Part I

DATE	LOCATION	START TIME	END TIME
6/17/2025	Virtual	09:00 am	11:00 am

FACILITATOR	CONTACT EMAIL	CONTACT PHONE
Kathryn Rifenburg	Kathryn.Rifenburg@ODA.Oregon.Gov	971.600.5073

Attendees

Kathryn Rifenburg – Oregon Department of Agriculture
Todd Hudson - Oregon Health Authority
Warren Hanson - Oregon Department of Agriculture
Colin Donald - Oregon Department of Environmental Quality
Paul Measeles - Oregon Department of Agriculture
Thomas Whittington - Oregon Department of Forestry
Steve Mrazik - Department of Environmental Quality
Wade Peerman - Department of Environmental Quality
David Gruen – Department of Department of Environmental Quality
Gilbert Uribe – Oregon Department of Agriculture
Dani Lightle – Oregonians for Food and Shelter
Becky Anthony – Oregon Department of Fish and Wildlife
Kim Anderson - Oregon State University
Isabella Nelson - Oregon State University
Dan Brown – Department of Environmental Quality
Serhan Mermer – Oregon State University
Katie Murray – Oregonians for Food and Shelter
Gilbert Uribe – Oregon Department of Agriculture
Rob Hibbs - Oregon Department of Agriculture

Introduction

- Meeting is called to order by **Kathryn Rifenburg.** Kathryn also called for introductions.

2024 PSP Program Data – David Gruen

- **David Gruen** presented on the 2024 water quality data collected by the PSP Program. David described the nature of PSP sampling as "weekly discrete sampling" and further explained the rationale for this approach. This included
    - how monitoring data are evaluated: (1) EPA aquatic life benchmarks (ALB) in ug/L; (2)

Aquatic Life Ratio; and (3) Frequency of Detection and Mixtures.
    - an overview of water quality work completed in 2024, including the total number of samples taken at PSP basins, number of analyses completed, and total sample locations.
    - a data summary of the analytes detected in 2024. Of the 54, 4 analytes were detected at least one time above 50% of the lowest ALB. Of the 54, 10 were detected at least once above 100% of the lowest ALB. The remainder of the presentation focuses primarily on these findings.
    - A review of the pesticide of concern decision matrix and the pesticides of concern statewide and within each basin.
    - box and whisker graph showing the Aquatic Life Ratios of detections of select chemicals. The graph shows the total cound of detections for each of the 10 pesticides detected at 100% ALB. The graph shows the concentration of the detection relative to the ALB for the area.
- **David** reviewed the detection analysis for each of the 10 chemicals detected in PSP Basins in 2024, starting with the highest detections.
    - the imidacloprid detections discovered at the Pudding basin sample locations. These detections impact Mill Creek, and were found at over 1000% of the ABL. David identifies these findings as particularly concerning. David showed data recording concentrations detected in Pudding relative to minimum ALB by week over the course of several years. The data suggests that there is some activity leading to off-target movement of imidocloprid detected in the area, particularly the downstream testing sites, contributing to the high levels detected and effecting aquatic life species.
    - West Fork Palmer Creek as the most upstream site at the Yamhill PSP basin. Imidacloprid was detected at West Fork Palmer Creek and the downstream site, but in much lower concentrations. However, these detections remain above the chronic/acute benchmarks. Data shows that each week sampled resulted in detections above the ABL, sometimes over ten times the ABL. This indicates off-target movement of the pesticide in the area. David recommends education, technical assistance, and further outreach to pesticide users in the area to mitigate the issue.
- **Gilbert Uribe** requested clarity on the sample data in the weekly graphs shown. David clarified that empty boxes on these charts indicate that no sample was taken that week.
- Katie Murray offered contextual information in relation to the data presented by David and commented on the implications of weekly discrete sampling.
- Katie introduced Isabella Nelson prior to her presentation.

ODA/DEQ PSP Analysis and Potential Improvements Presentation – Isabella Nelson

- **Isabella Nelson** presented finding from data reporting related to pesticide detections using raw data provided by DEQ. Isabella identifies challenges and issues with methods used to present data, particularly the issues when MRLs and MDLs are dismissed. Isabella describes findings after a reanalysis of raw data from Amazon and Pudding detections of five chemicals. Isabella suggests that the reanalysis addresses biases and clarifies pesticides of high or low concern.

- **Isabella** identifies issues with publicly available graphs that display only one location at a time and samples at median or high concentrations. Isabella identifies that the current public data view options do not appropriately describe the ALB used, or the number of samples taken, including non-detections. Isabella proposes a data presentation that shows data prior to 2016 and includes MRLs.
- **Isabella** identifies the use of detection frequencies as problematic for the goal of performing sentinel monitoring. Isabella notes that the current sampling method biases the data set.
- **Isabella** shares a graph that shows inherent inconsistencies in sampling, with a large variation of sampling frequency across the years.
- **Isabella** identifies an issue with data included in the data view that fails quality control. **Isabella** emphasizes that samples that fail QC should be removed from the data set. David Gruen requests clarification on what indicates QC failure. Isabella clarifies that samples were utilized in the data set that were marked as FQC or SUS. Isabella shows a graph showing the failed QC samples and emphasizes the importance and value of doing this for the purposes of more accurate data.
- **Isabella** identifies the Oregon DEQ ALR method as unique to Oregon with no similar examples in peer-reviewed literature. Isabella evaluates the Oregon DEQ current method as over-estimating the risks identified in PSP sample data. Isabella identifies risk assessment improvements and a proposed methodology, including recommended EPA benchbarks more specifically defined.
- **Isabella** suggests a new descision matrix that considers the number of relevant benchmarks exceeded in a year relative to the number of detections above a defined benchmark. This will help minimize the number of pesticides identified as high concern that may not need to be identified as such.
- **Isabella** concludes the presentation by emphasizing the importance of publicly available graphs capturing the most accurate information, and reviews recommendation for improved analysis and presentation.
- Isabella calls for questions.
- **Paul Measeles** asks for clarification on the use of MDLs vs MRLs and identified the implications of using the proposed methods in reporting.
- **The committee continued discussing the implications of the proposed changes in data analysis and methodology.**
- **David** welcomed the feedback presented and requested a further conversation to continue discussing the presentation at a later date.

Adjourn

- Kathryn Rifenburg adjourns the meeting.

WQPMT Meeting Notes – Part II

DATE	LOCATION	START TIME	END TIME
6/17/2025	Virtual	11:00 am	12:00 pm

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Kathryn Rifenburg	Kathryn.Rifenburg@ODA.Oregon.Gov	971.600.5073

Attendees

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Steve Mrazik - Department of Environmental Quality
Wade Peerman - Department of Environmental Quality
David Gruen – Department of Department of Environmental Quality
Gilbert Uribe – Oregon Department of Agriculture
Becky Anthony – Oregon Department of Fish and Wildlife
Serhan Mermer – Oregon State University (left early)
Gilbert Uribe – Oregon Department of Agriculture
Rob Hibbs - Oregon Department of Agriculture

This portion of the meeting is called to order by Kathryn Rifenburg.

Overview of Key Discussion Topics

- Evaluation of project success vs. environmental outcomes.
- Challenges in measuring water quality improvements.
- Scope and resource limitations of the Pesticide Stewardship Partnership (PSP).
- Engagement and coordination with MS4 permit holders and urban municipalities.
- Tracking partner effectiveness vs. measurable environmental impacts.

Key Discussion Points

Measuring Success & Environmental Outcomes

- For example: the effectiveness of cover crop installations (e.g., 1,000 riparian feet) not translating into observable water quality improvements.

- Emphasis on distinguishing between project implementation success and measurable environmental impact (i.e., water quality improvements).
- Water quality improvements may not be immediate; time and different data are needed to assess impacts accurately.
- There's a risk of declaring a project a failure prematurely without considering indirect or long-term environmental benefits.

Need for Metrics

- Suggestion to create complementary metrics:
    - Partner Actions/Engagement, such as: Miles of riparian area treated, number of landowners engaged, acres of cover crops installed.
    - Environmental Outcomes: Frequency of pesticide detection in water samples, chemical concentration trends.
- Importance of tracking behavior change and meaningful landowner engagement rather than only outreach outputs like mailers.

PSP Scope and Capacity Concerns

- Questions raised about whether PSP should narrow its focus to **agricultural lands** in diverse basins like Yamhill and Pudding due to:
    - High land use diversity.
    - Limited resources (financial and staffing).
    - Challenges coordinating across urban, suburban, and agricultural stakeholders.
- Suggestion to limit the PSP's scope where appropriate and rely on TMDL (Total Maximum Daily Load) frameworks for urban pollution sources.

MS4 Permit Holders and Collaboration

- Potential to engage MS4 permit holders (e.g., Marion County, City of Medford) more directly in PSP efforts.
- Recognized that stormwater contributions from urban areas may significantly affect pesticide levels in water.
- Coordination with municipalities could help address pollution holistically and leverage resources.

Challenges in Attribution

- Difficult to directly link specific BMPs (Best Management Practices) to improvements in water quality due to:
    - Complex chemical behavior in soils and hydrological systems.
    - Many overlapping variables across cropping systems, pest pressures, and weather patterns.
- Acknowledgement that such analysis may require more advanced research (e.g., doctoral-level studies).

Data Sharing & Regulatory Sensitivity

- Discussion around non-regulatory nature of PSP data and maintaining trust with stakeholders.
- Emphasis on avoiding the perception that PSP data is used for enforcement.
- Importance of clearly communicating how data informs action and supports voluntary engagement.

Future Strategy and Recommendations

- Shift focus from general outreach to targeted, action-based strategies:
    - Example: addressing pesticide contributions from specific crops (e.g., hazelnuts).
- Establish models that link identified problems to interventions and trackable actions.
- Evaluate progress not solely by water quality changes but also by how well partners implement planned strategies.

Summary of Key Takeaways

- Effectiveness should be measured both through environmental outcomes and partner implementation success.
- Resource limitations may require more focused efforts, particularly in complex basins.
- Engagement with MS4 permit holders is both necessary and potentially beneficial.

Improved metrics and clearer strategies are needed to reflect the nuances of pesticide use, land management, and behavior change.

Adjourn

- Kathryn Rifenburg adjourns the meeting.