



# Fifteenmile Watershed Council Meeting

June 27, 2017

## Wasco County and Fifteenmile Creek 2016 Pesticide Monitoring Results



Kevin Masterson, DEQ and Kirk Cook, ODA

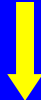
[masterson.kevin@deq.state.or.us](mailto:masterson.kevin@deq.state.or.us)

[kcook@oda.state.or.us](mailto:kcook@oda.state.or.us)

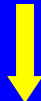
# Pesticide Stewardship Partnerships (PSPs)

## *Key Steps in Partnership Projects*

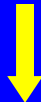
Monitor for current use pesticides in surface waters from drift & runoff



Identify streams with elevated pesticide concentrations or high # of detections



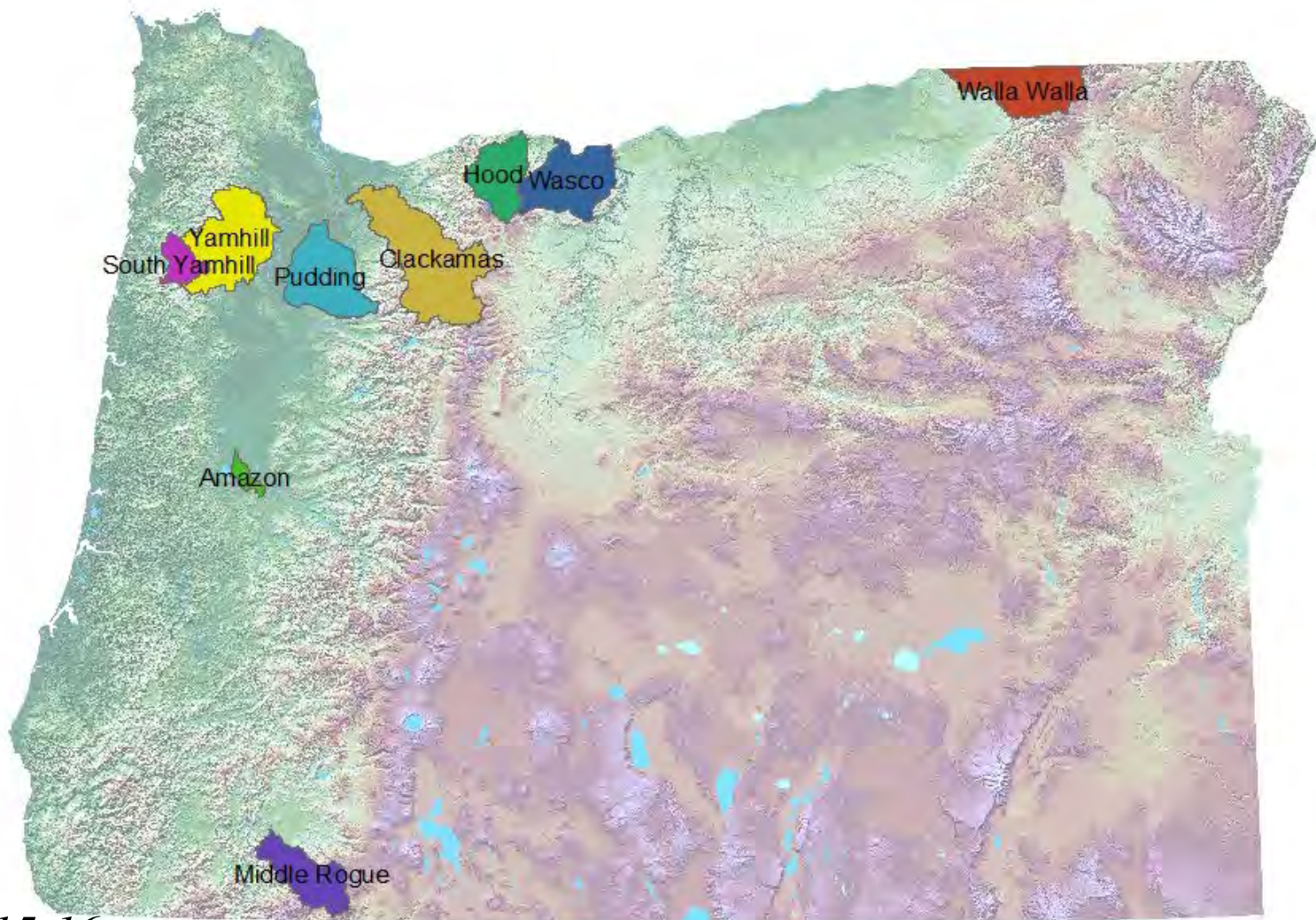
Collaborate to implement voluntary management practices



Follow-up monitoring to determine improvements over time



# Pesticide Stewardship Partnerships: 9 Oregon Watersheds\*



\* As of 2015-16



# Wasco Watersheds PSP



**Oregon**  
Department  
of Agriculture

- Project History
  - Pilot monitoring and outreach 2002-2005 (Mill Creek)
  - Re-established program in 2010 (3 streams)
- Partners:
  - Wasco Soil and Water Conservation District
  - OSU Extension Service and IPPC
  - Columbia Gorge Fruit Growers
  - Oregon DEQ and ODA
  - The Dalles Watershed Council
  - Fifteenmile Creek Watershed Council



# Pesticide Monitoring Locations in Watershed



**Oregon**  
Department  
of Agriculture

- 4 to 5 Monitoring Locations
  - Mill Creek
    - At Wright Road
    - At 2<sup>nd</sup> Street Bridge in The Dalles
  - Threemile Creek
    - At Hwy 197
  - **Fifteenmile Creek**
    - **Above Seufert Falls (aka Cushing Falls)**
    - **2017: Dufur City Park (limited monitoring)**



# 2017 Wasco PSP Monitoring Locations



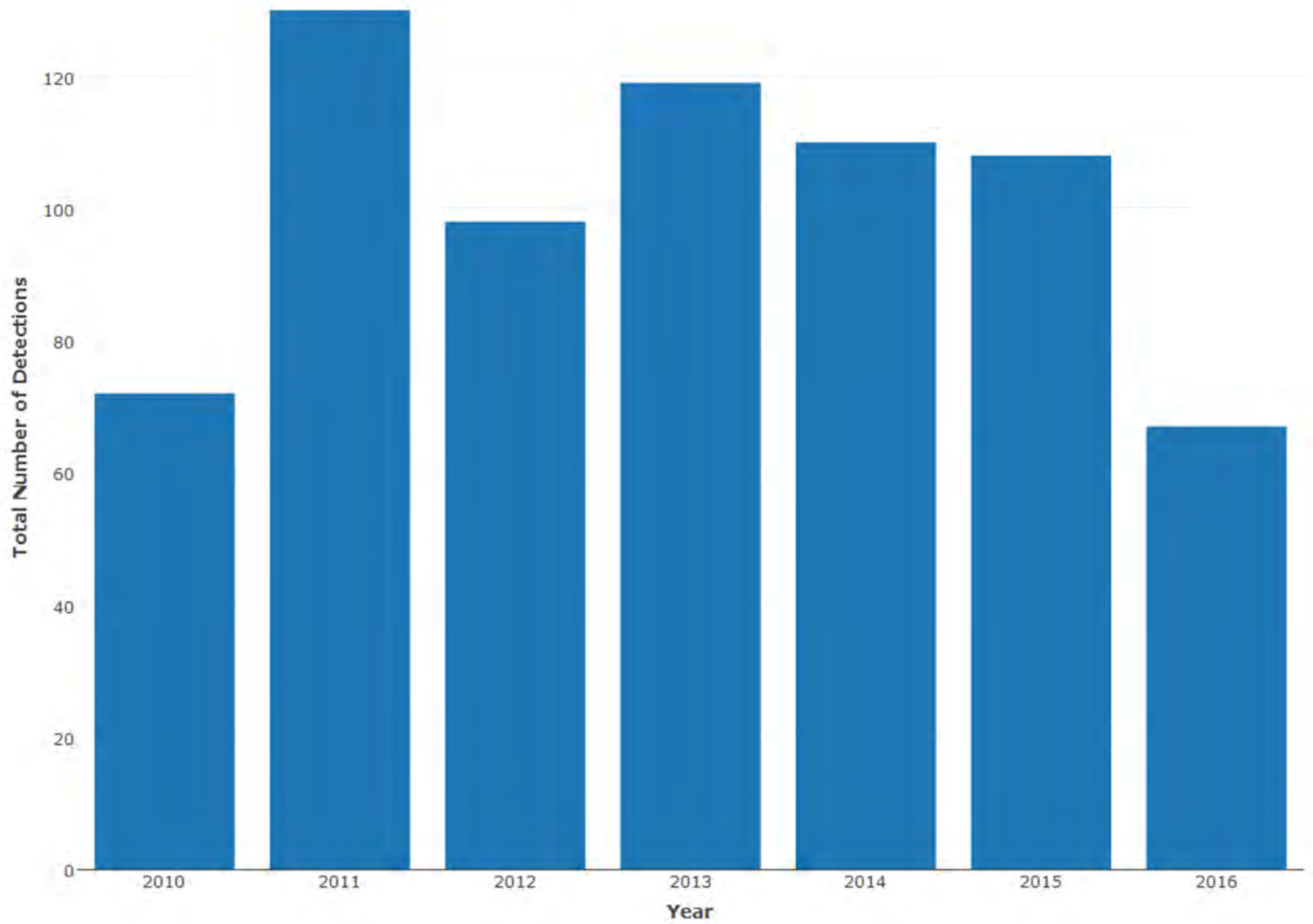


# Pesticide Monitoring Overview



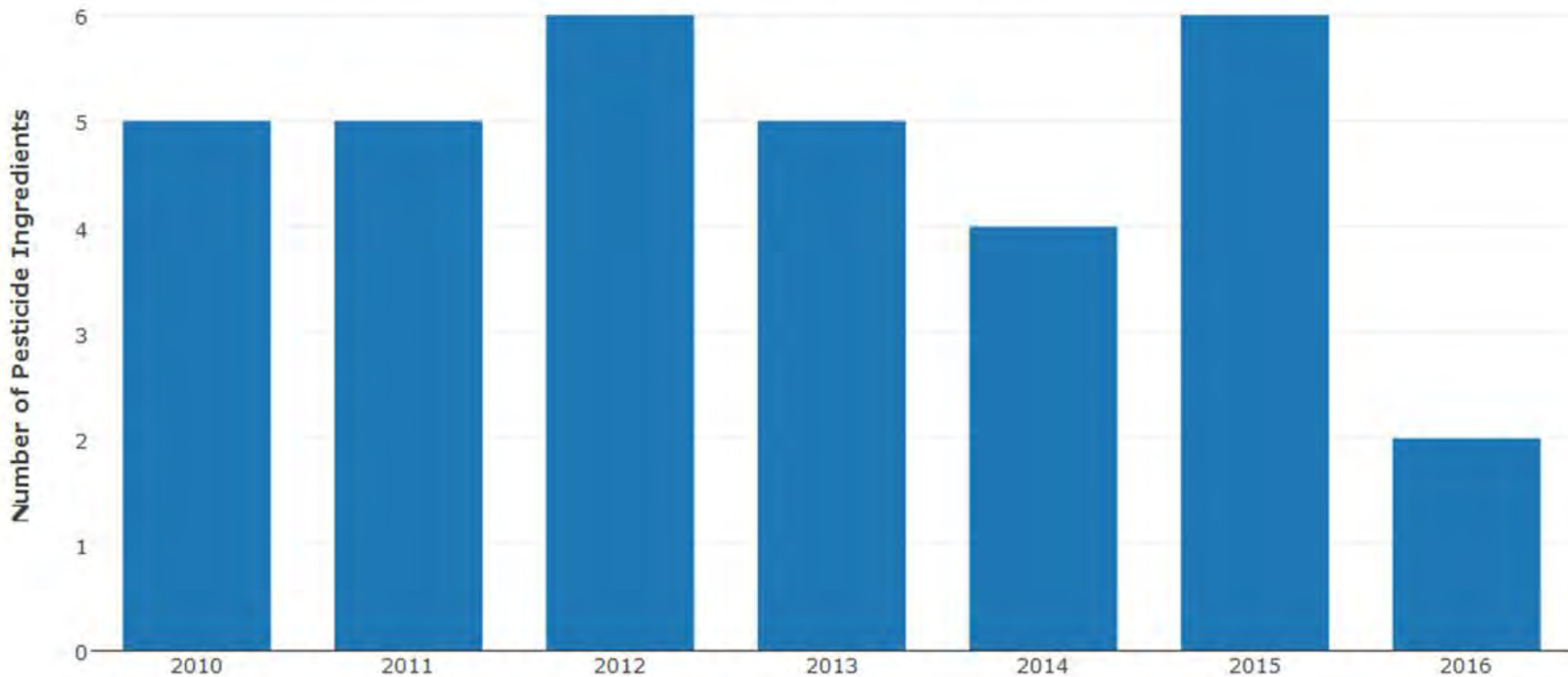
- 2016 Wasco Monitoring Timeframe
  - 15 water sampling events – Wasco SWCD
    - Weekly from late March through mid-April
    - Weekly from late May through end of July
- What Pesticides Are Analyzed?
  - Approximately 125 insecticides, herbicides and fungicides (list evolves over time)

### Total Number of Detections in the Wasco Basin



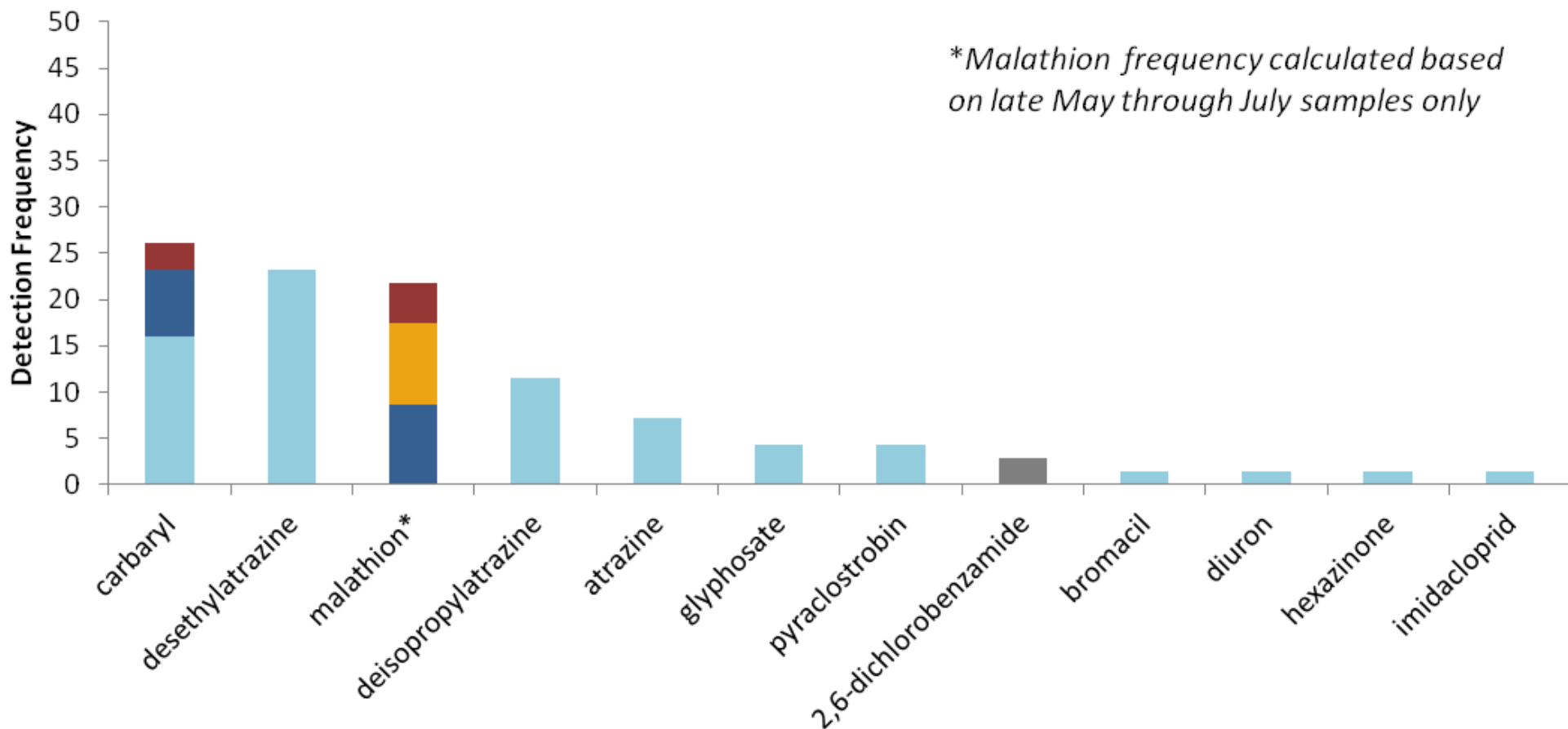


**Number of Pesticide Ingredients Detected in Fifteenmile Creek**

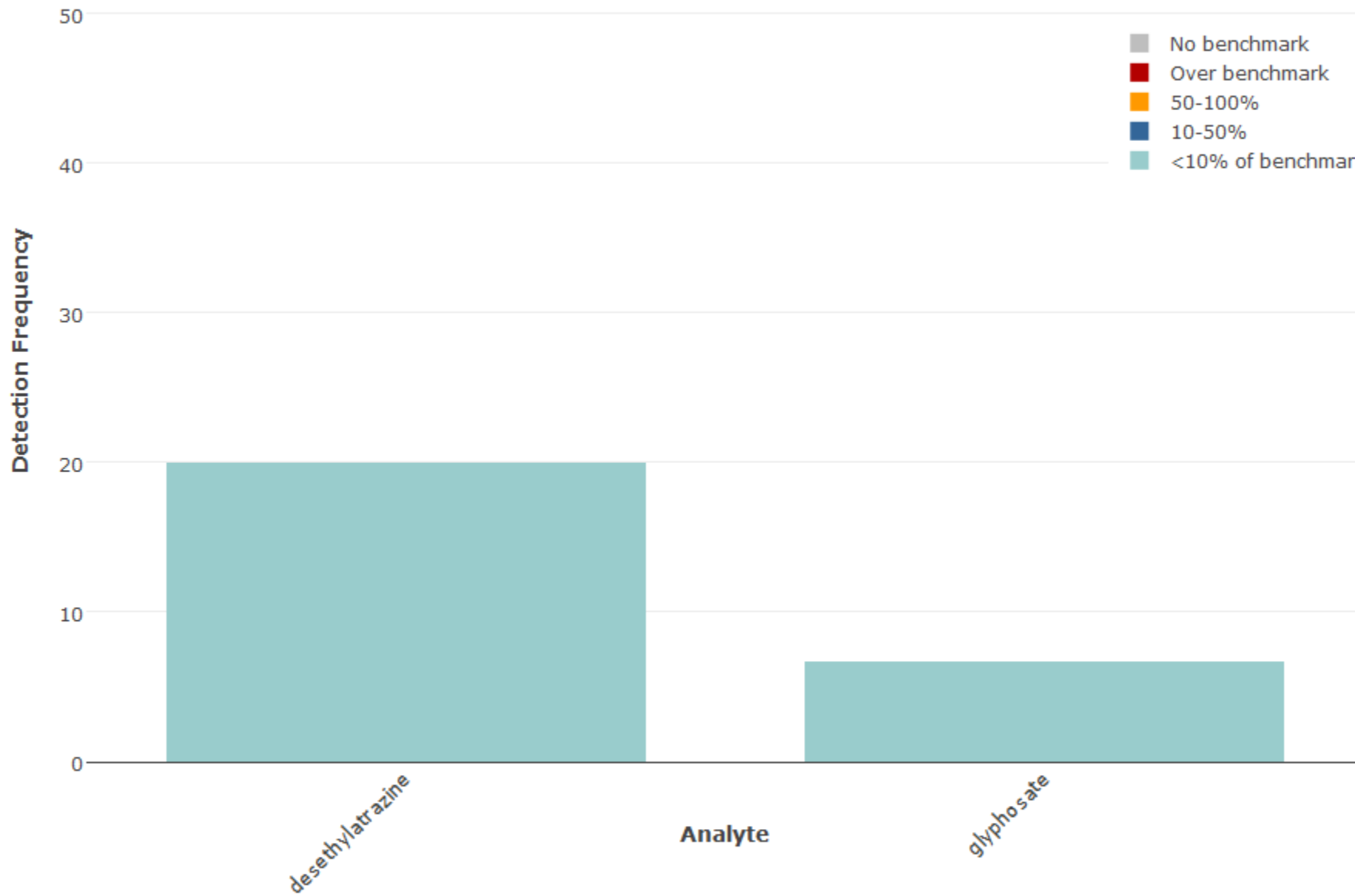


# Detection Frequency in Wasco Basin 2016

<10% 10-50% 50-100% Over Benchmark No bench

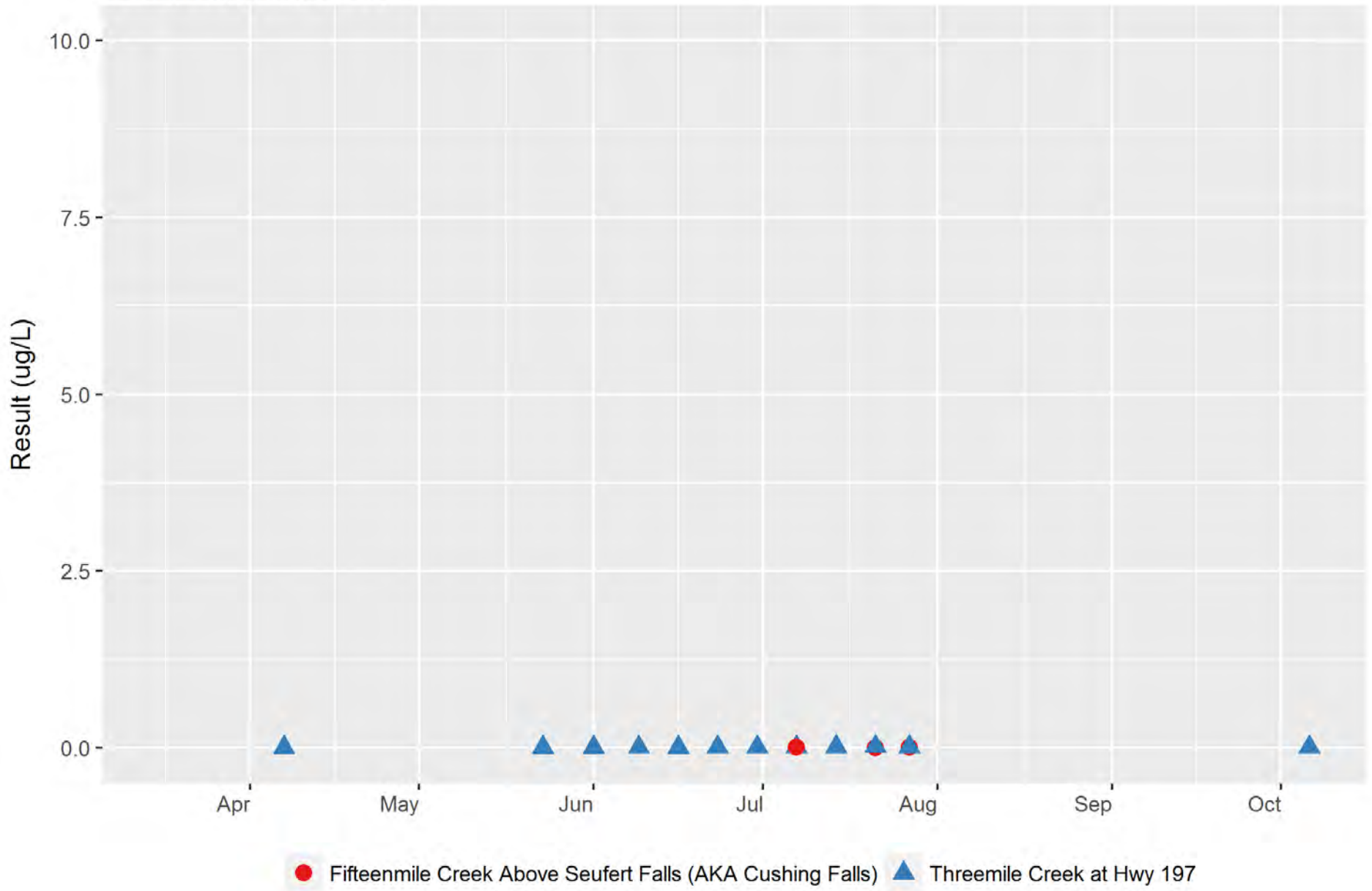


# Fifteenmile Creek 2016 Detection Frequency

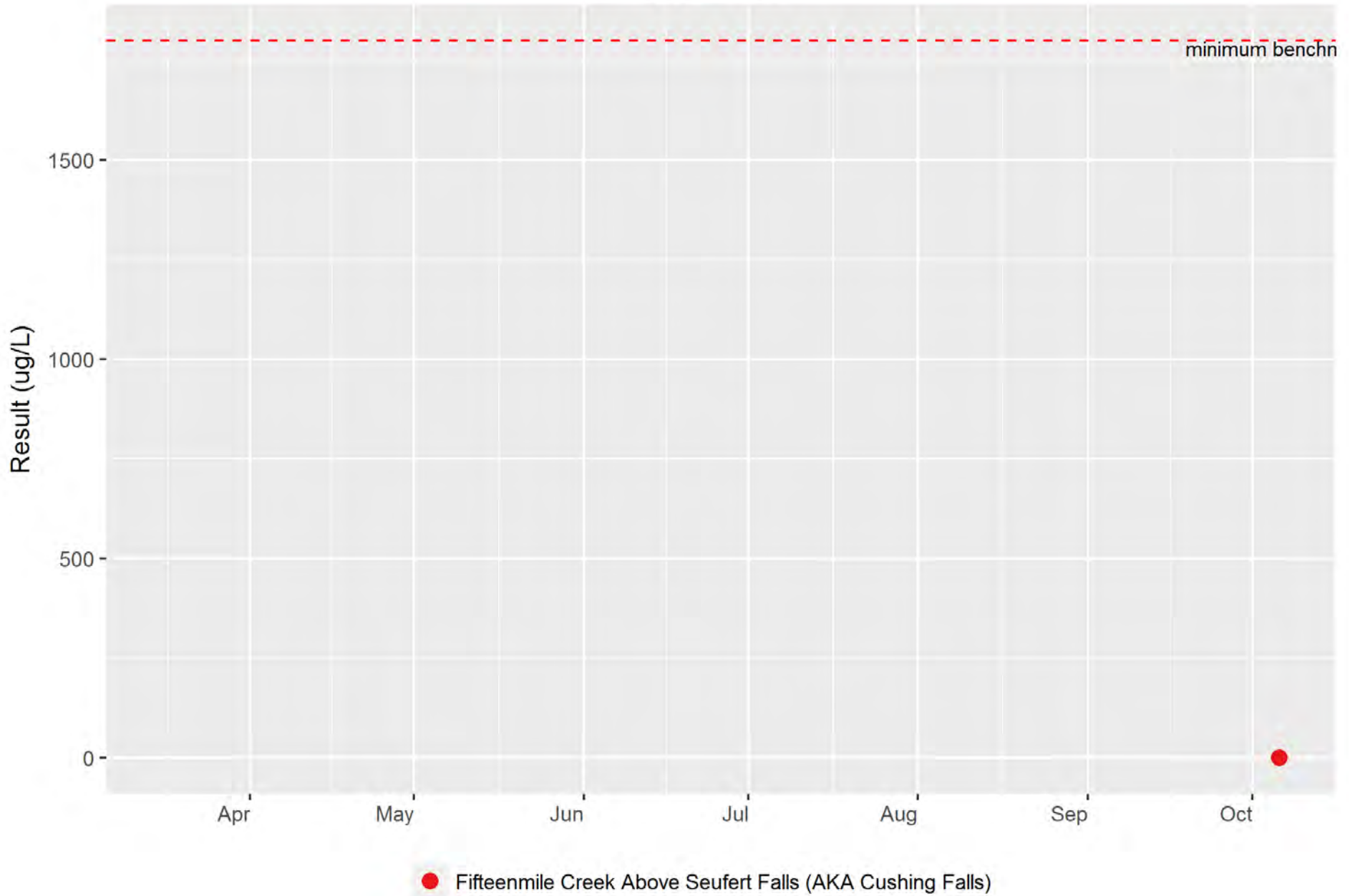


# Wasco 2016 desethylatrazine

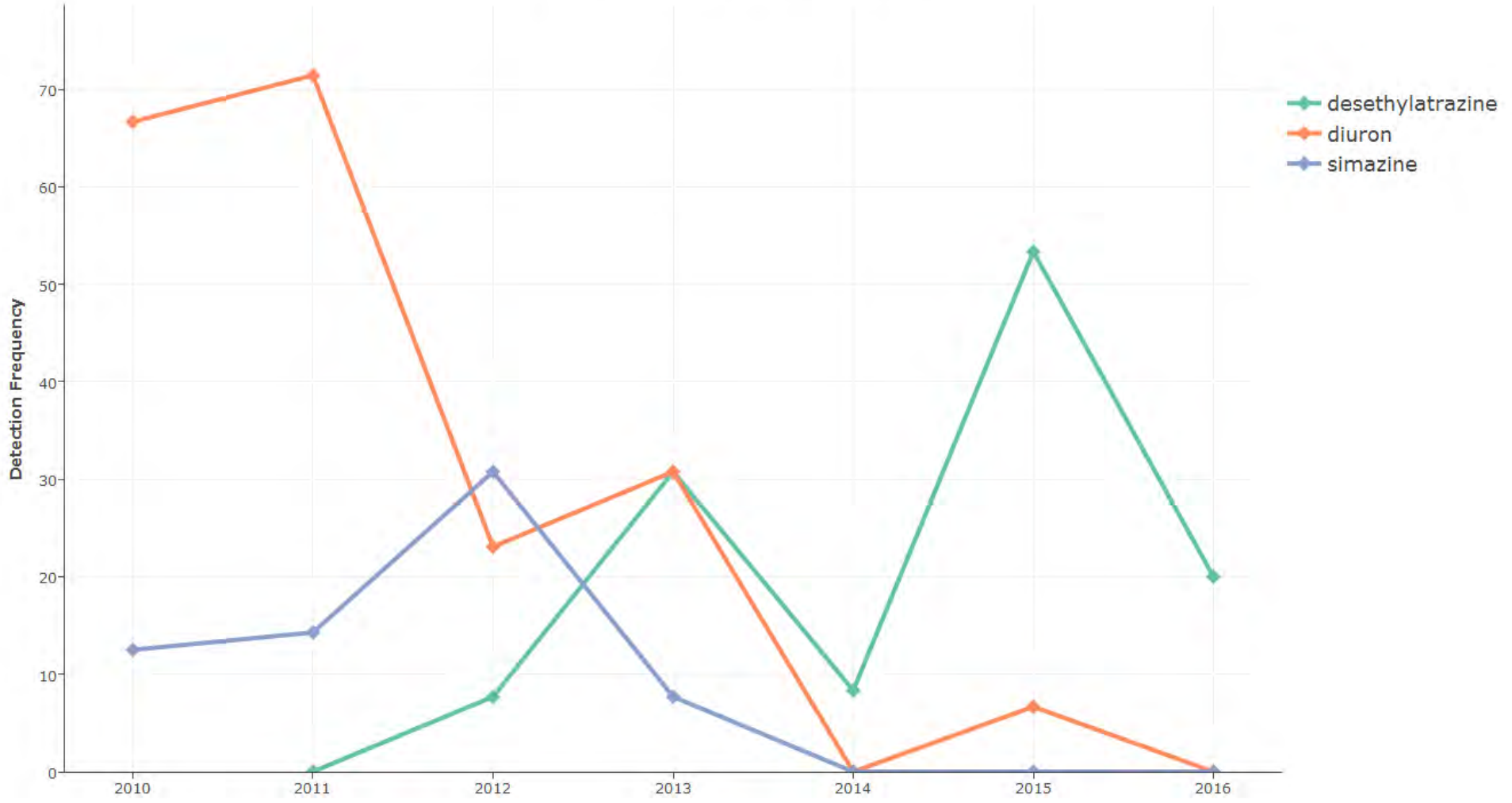
minimum benchmark: 1000



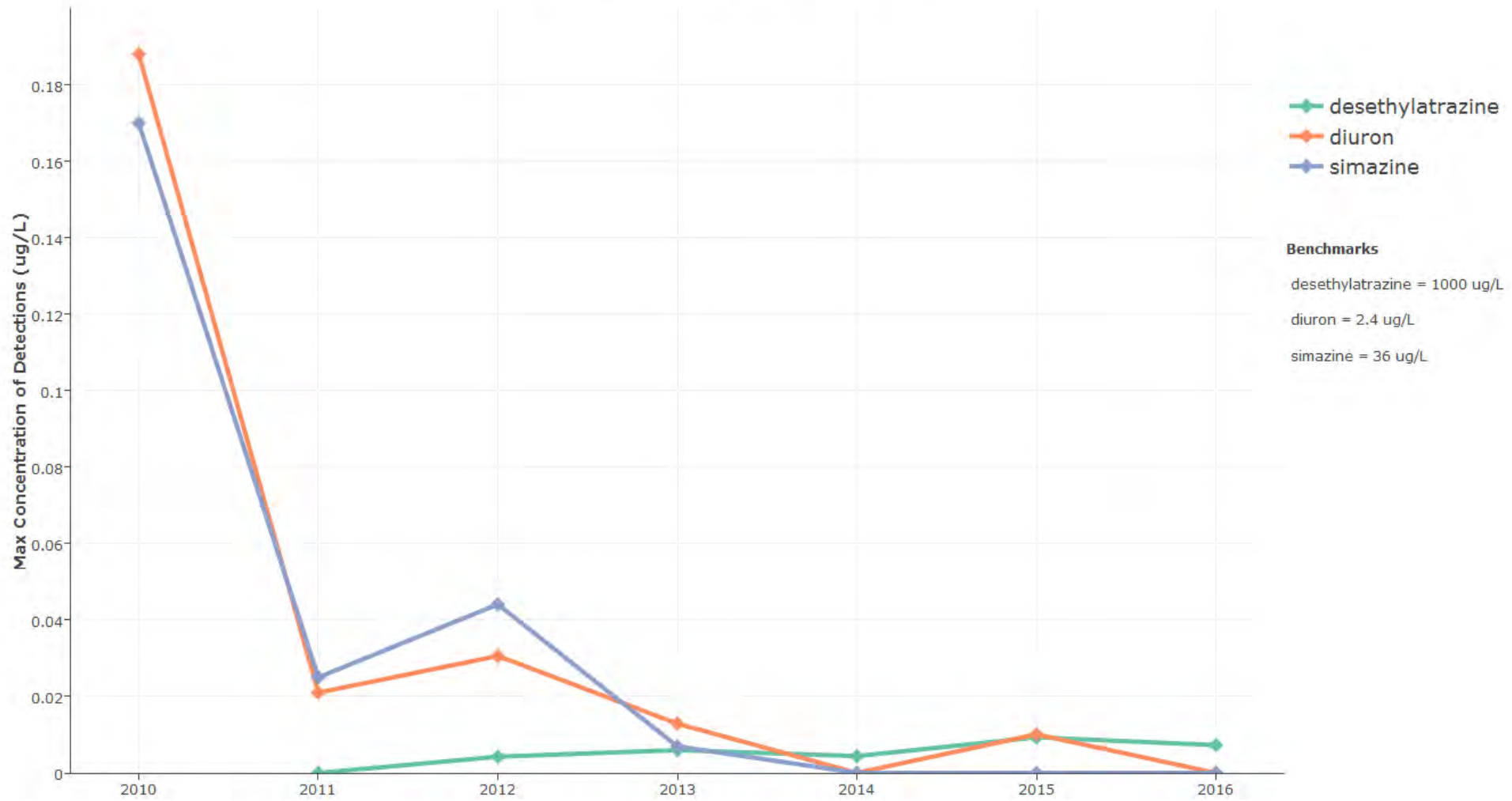
# Wasco 2016 glyphosate



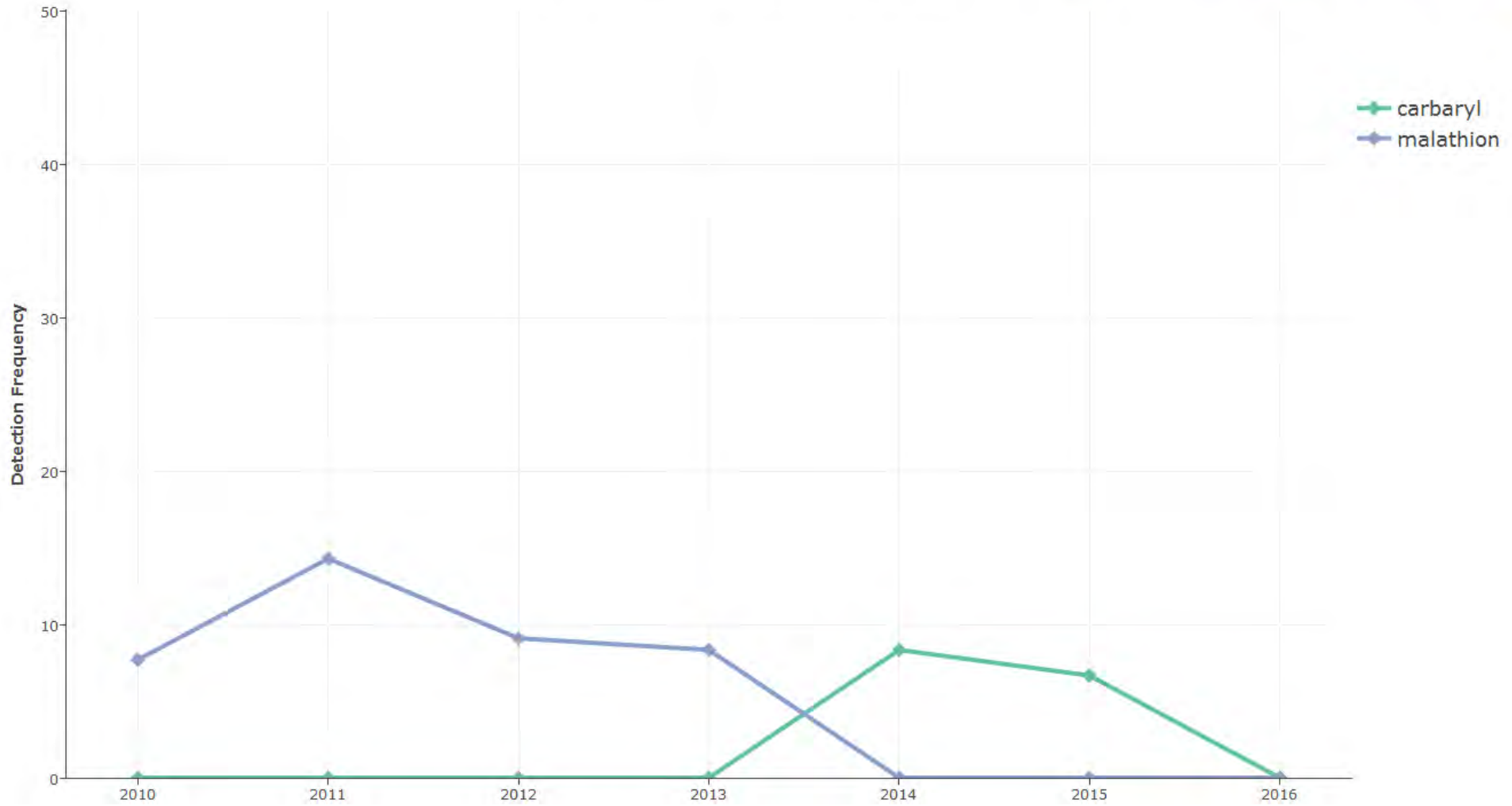
### Herbicides in Fifteenmile Creek



### Herbicides in Fifteenmile Creek

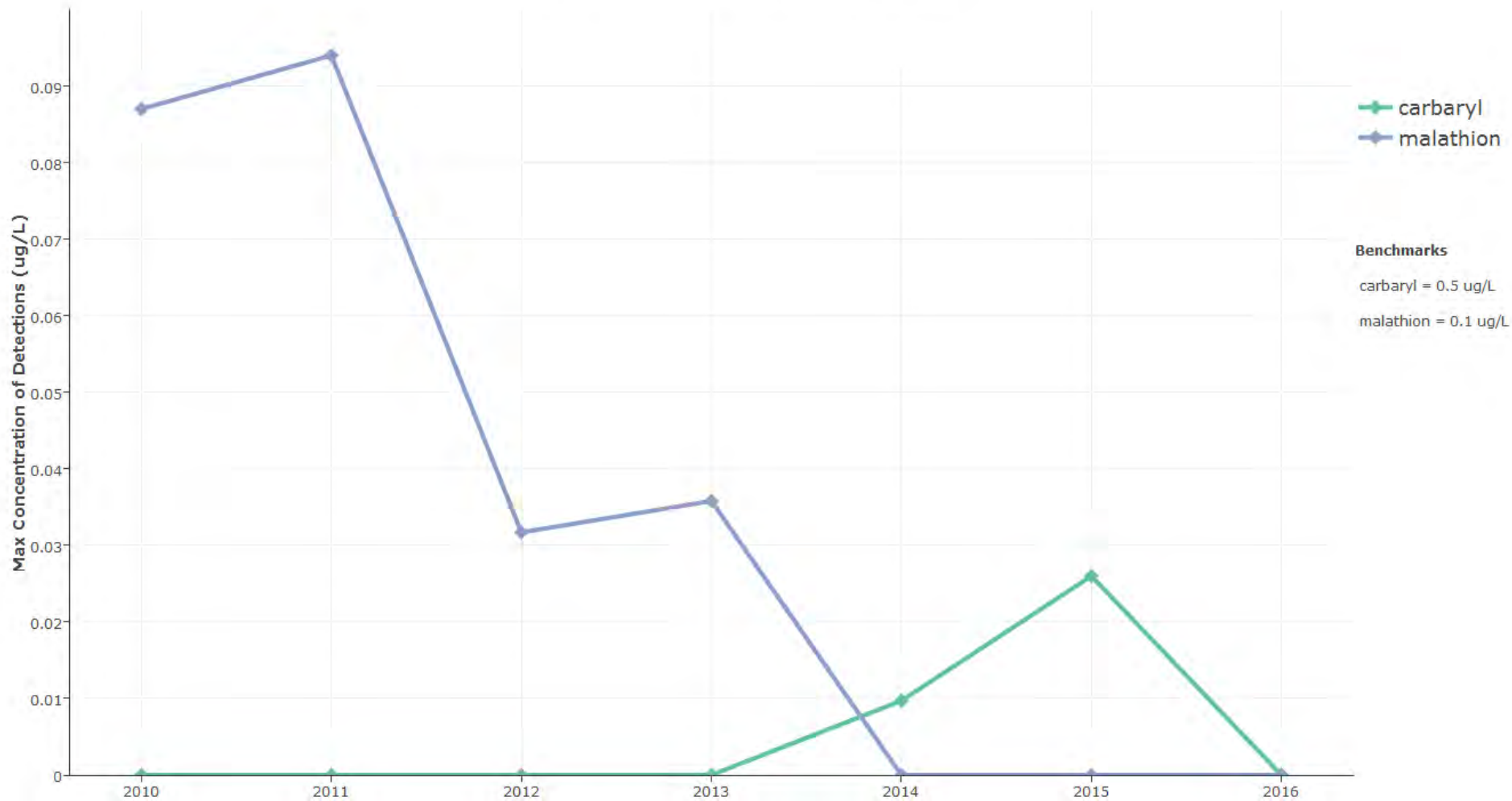


# Insecticides in Fifteenmile Creek





### Insecticides in Fifteenmile Creek



# Overall Benefits of the PSP Program

- **Creates awareness** – feedback for pest management practices
- **A cost-effective alternative to a regulatory approach**
  - Proactive, transparent, locally-driven and voluntary
- **Provides real world data vs. conservative models** (*that may overestimate pesticide concentrations in water*) for decision-making and formulating policy
- **Helps ensure that unnecessary regulatory burdens are not placed on pesticide users**
  - Minimal detections of some pesticides support that many current regulations, labeling and use practices are effective in mitigating risk to water resources.