PARC Meeting

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Oregon Pesticide Stewardship Partnerships Update

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Pesticide Stewardship Partnership Approach

Using collaborative partnerships, local expertise and voluntary actions to produce measurable water quality improvements

Pesticide Stewardship Partnerships: What are the key elements?

Monitor for current use pesticides

↓

Identify streams with elevated pesticides levels

↓

Collaborate to implement best practices

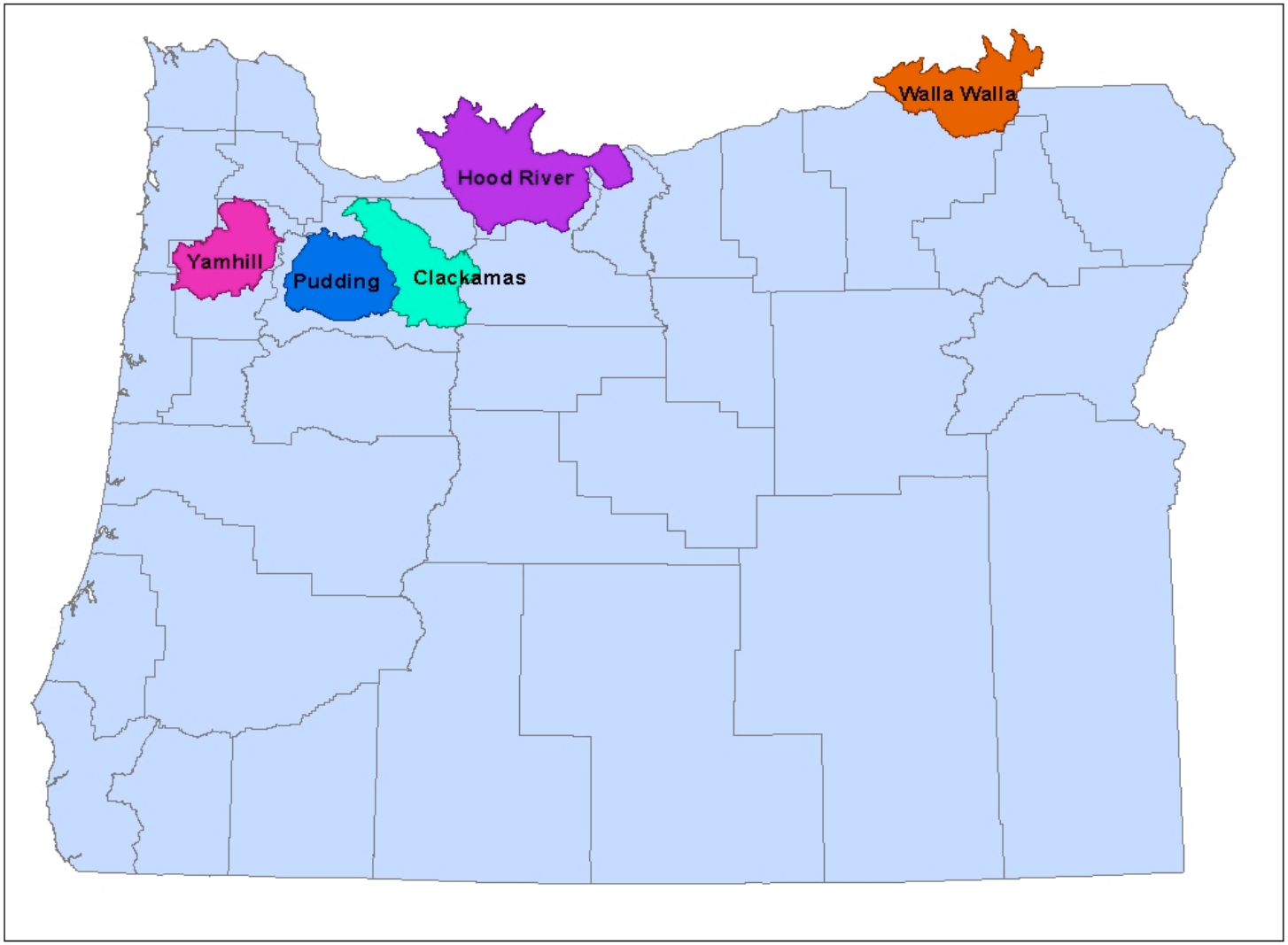
↓

Follow-up monitoring to determine progress

Pesticide Stewardship Partnerships: Who are the Partners?

- *Oregon Department of Environmental Quality*
- *OSU Extension Service*
- *Grower groups*
- *Oregon Department of Agriculture*
- *Soil and Water Conservation Districts*
- *Watershed Councils*
- *Tribes*
- *Agricultural Product Suppliers*

5 Current Pesticide Stewardship Partnership Projects

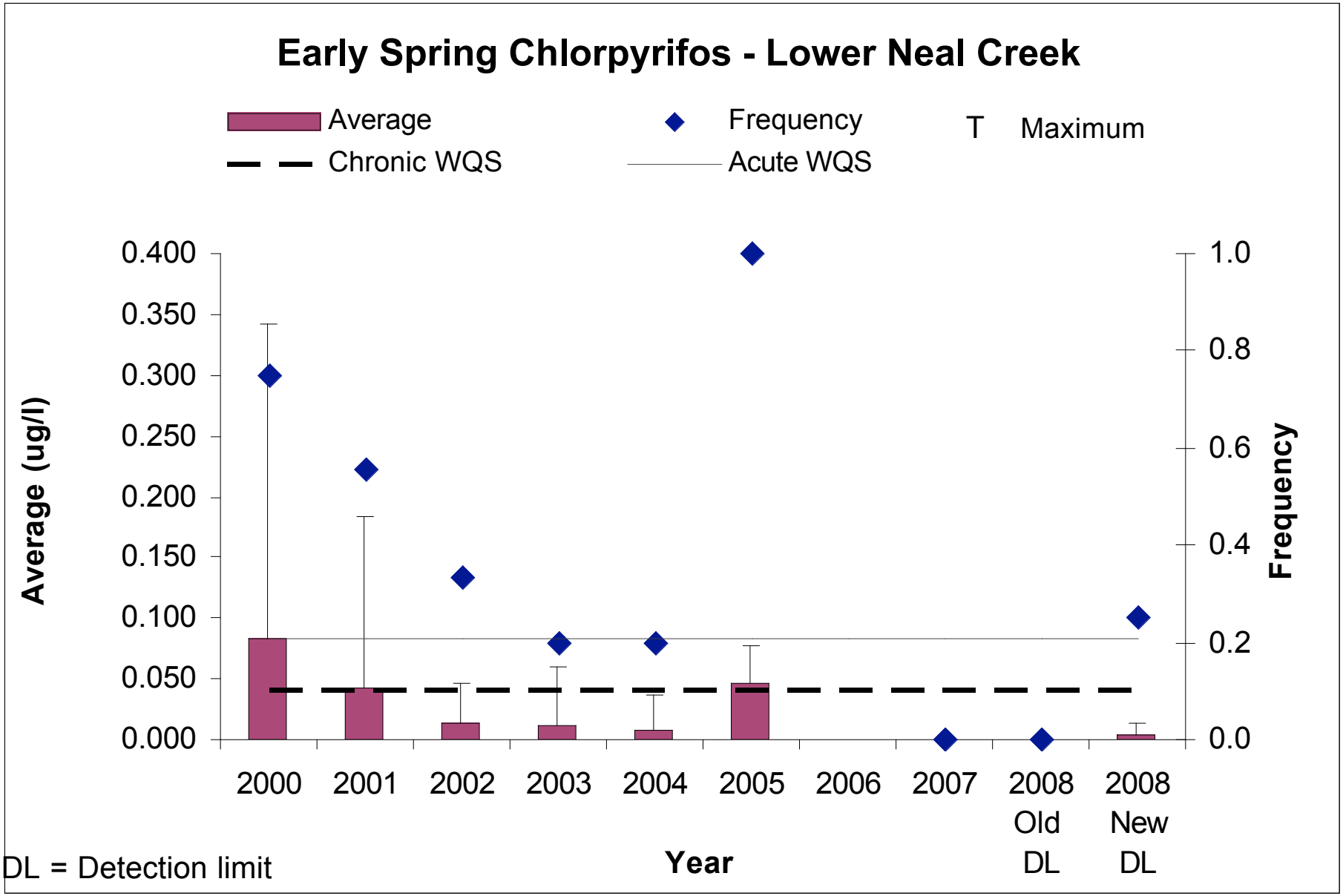


Current PSP Project Overview

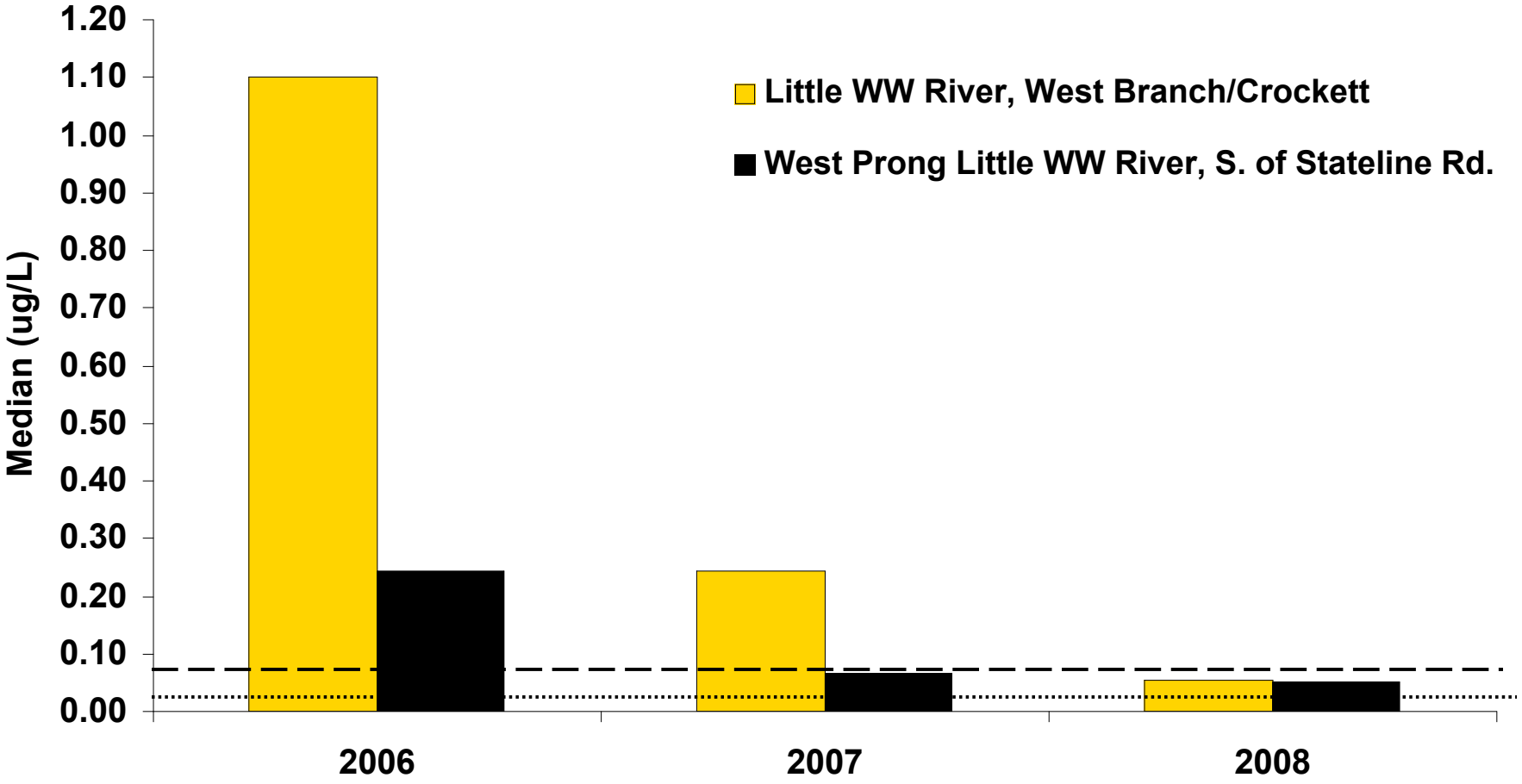
Project	Year Monitoring Began	Funding Source(s)
Hood	2000	Warm Springs Tribe
Walla Walla	2005	EPA 319 (non-point source) grants
Pudding	2005	EPA 319 grants (new and leftover funds)
Clackamas	2005	EPA 319 grants (leftover funds)
Yamhill	2007	EPA TMDL grant & leftover 319 funds

Recent Pesticide Monitoring Results

- Hood and Walla Walla
  - *Improving trends for chlorpyrifos and some other organophosphates*
  - *One dominant ag land use allows for strategic focus & short term results*
- Clackamas, Pudding and Yamhill
  - *Trends aren't discernable ...yet*
  - *Diversity of ag and other land uses poses major challenges*


Early Spring Chlorpyrifos - Lower Neal Creek
Average
Frequency
T Maximum
Chronic WQS
Acute WQS
0.400
0.350
0.300
0.250
0.200
0.150
0.100
0.050
0.000
1.0
0.8
0.6
0.4
0.2
0.0
Average (ug/l)
Frequency
2000
2001
2002
2003
2004
2005
2006
2007
2008 Old DL
2008 New DL
Year
DL = Detection limit

2006-2008 Walla Walla Basin Monitoring
Median of Chlorpyrifos Detections



Hood River Pesticide Stewardship Activities

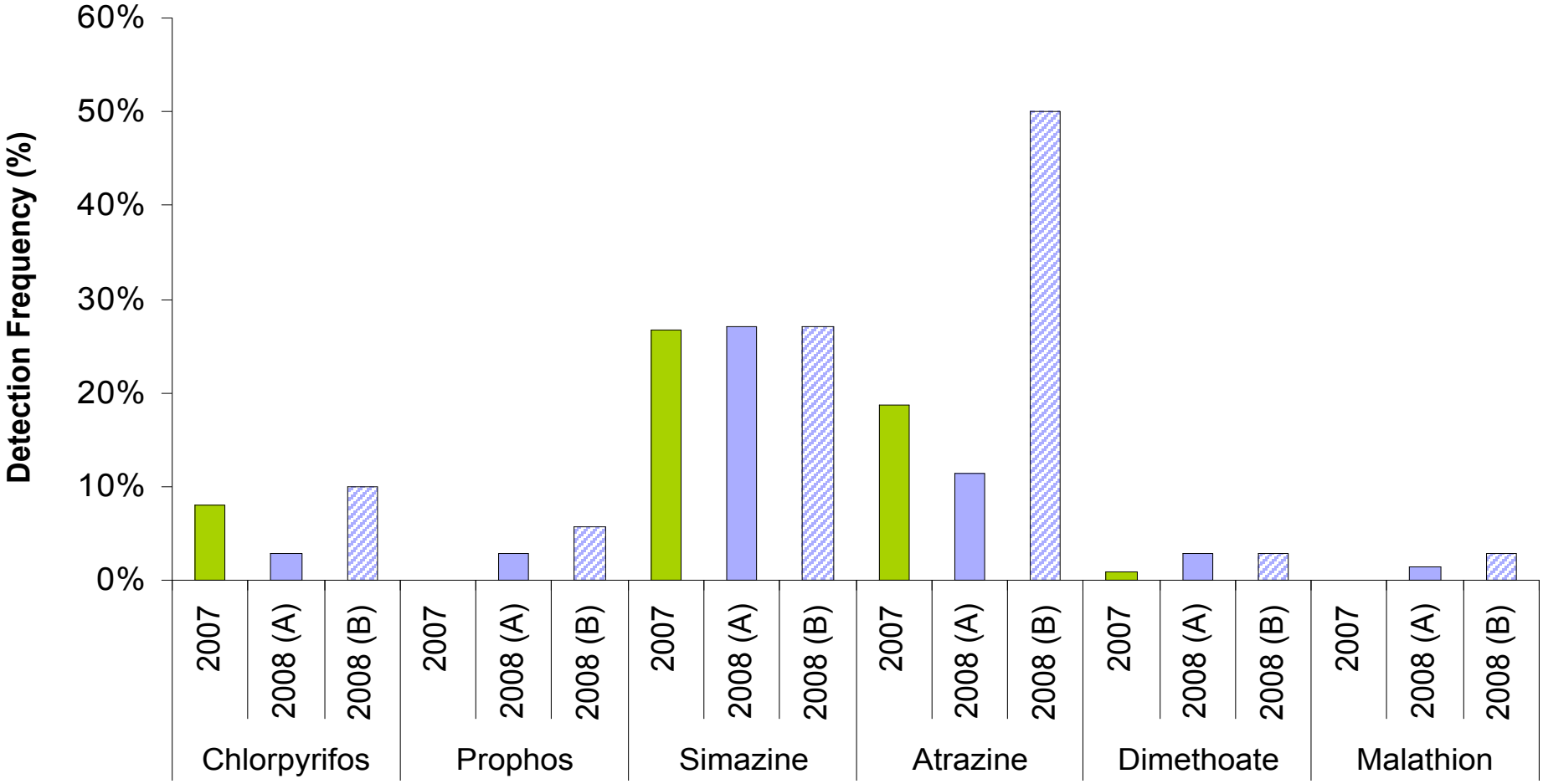
- Hood River Grower-Shipper Association BMP Handbook
  - *Still used to educate growers about drift reduction practices & equipment, and other ways to reduce WQ impacts*
- OSU Extension conducted Spanish language applicator trainings
- Coddling moth mating disruption program expanding → reducing reliance on chemical controls

Walla Walla Partnership: Collaborative Improvement Actions

- OSU Extension & Grower group technical assistance and outreach:
  - *March 2007 Spray Calibration Workshop*
  - *Promoting alternatives to organophosphates and other best practices*
  - *One-on-one applicator training*
  - *Buffer strips along streams*

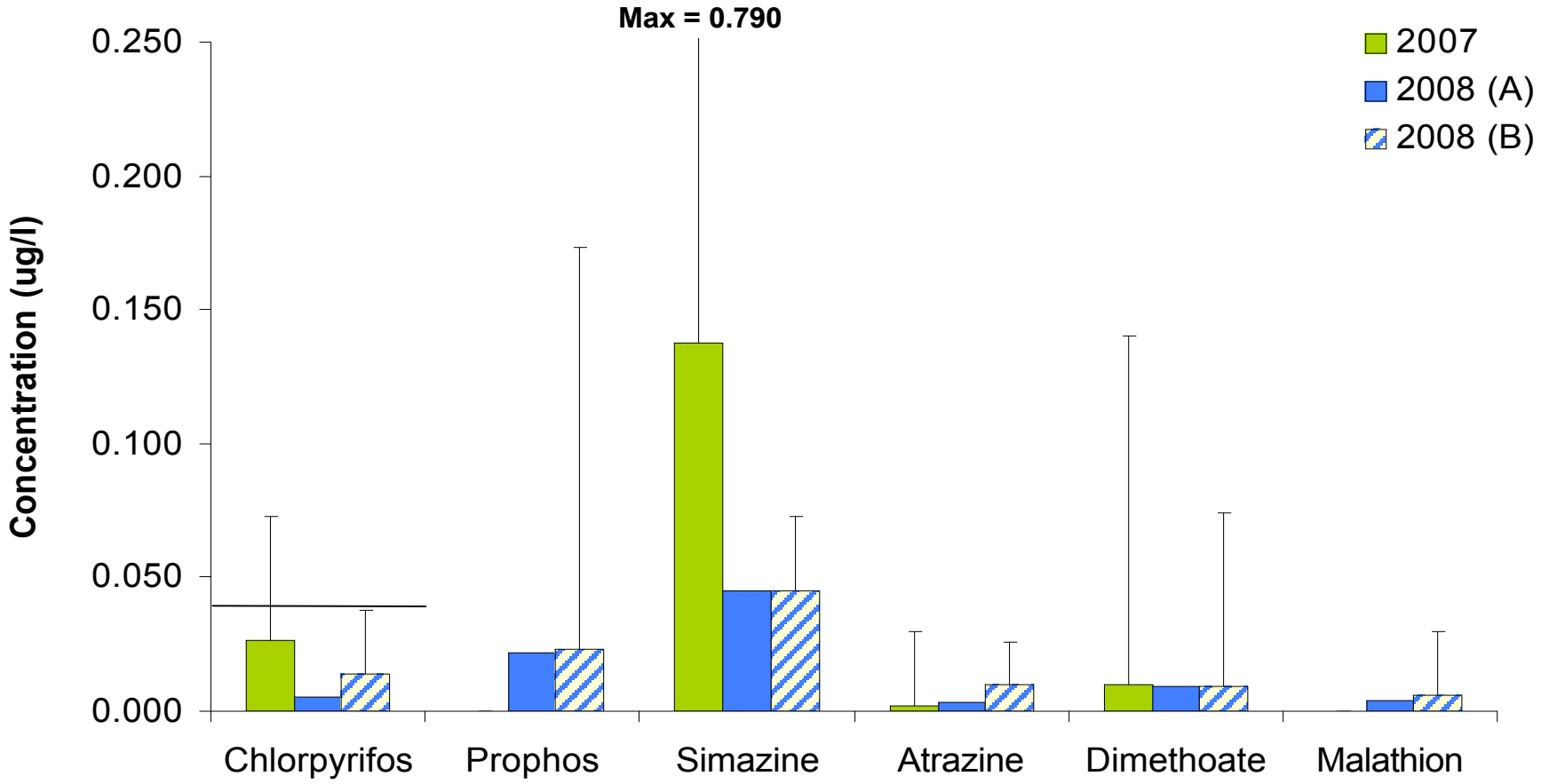
- Installation of weather stations by watershed council

Yamhill Basin (all sites)
Detection Frequency



(A) = Includes Detections > old limit of 0.025 ug/l
(B) = New Detection Limit of 0.01 ug/l

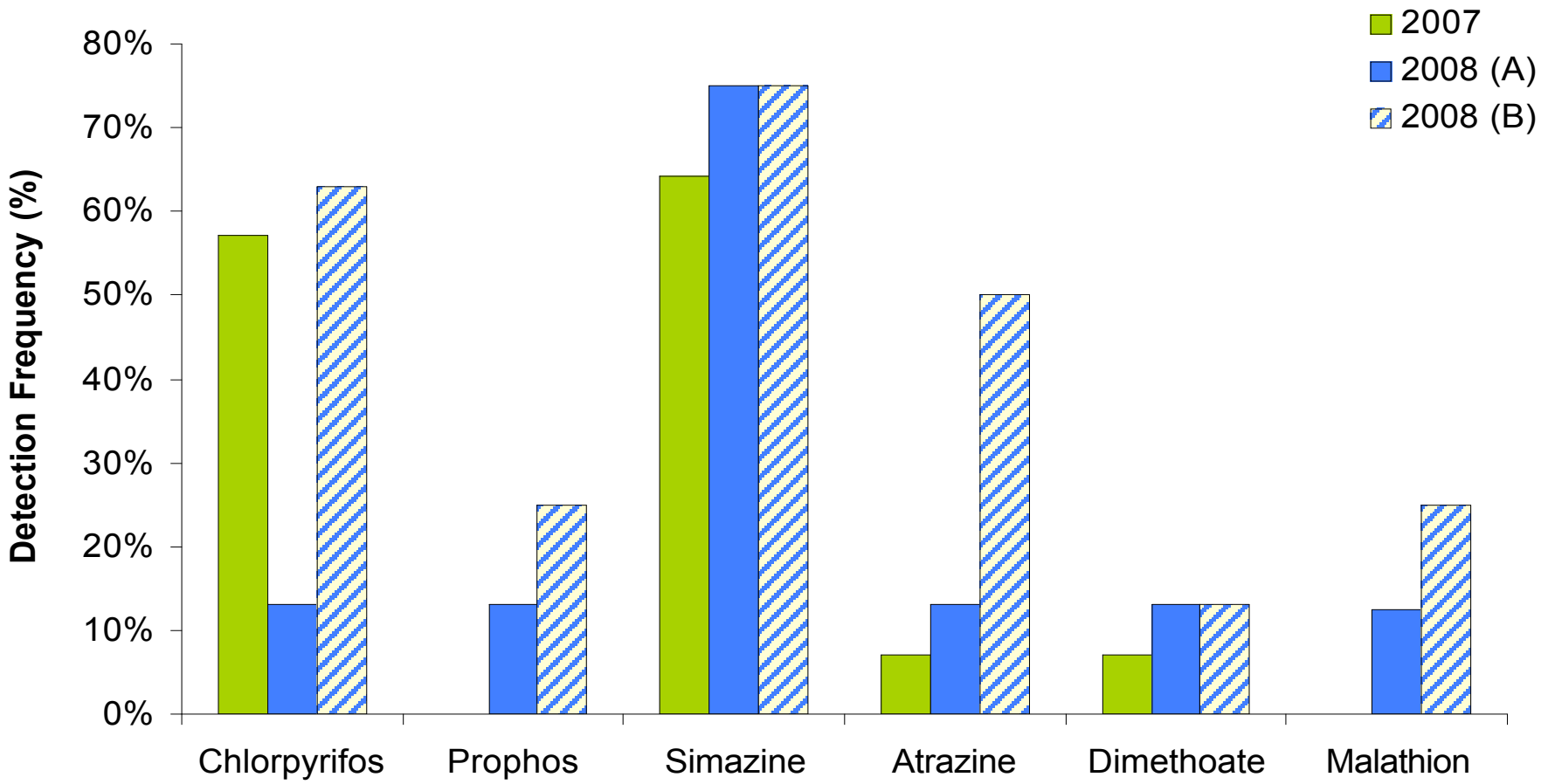
West Fork Palmer @ Webfoot Bridge
Average and Maximum Concentrations



(A) = Includes Detections > old limit of 0.025 ug/l
(B) = New Detection Limit of 0.01 ug/l

Chlorpyrifos Chronic WQ Standard = 0.041 ug/

West Fork Palmer Ck. @ Webfoot Rd. Bridge
Detection Frequency



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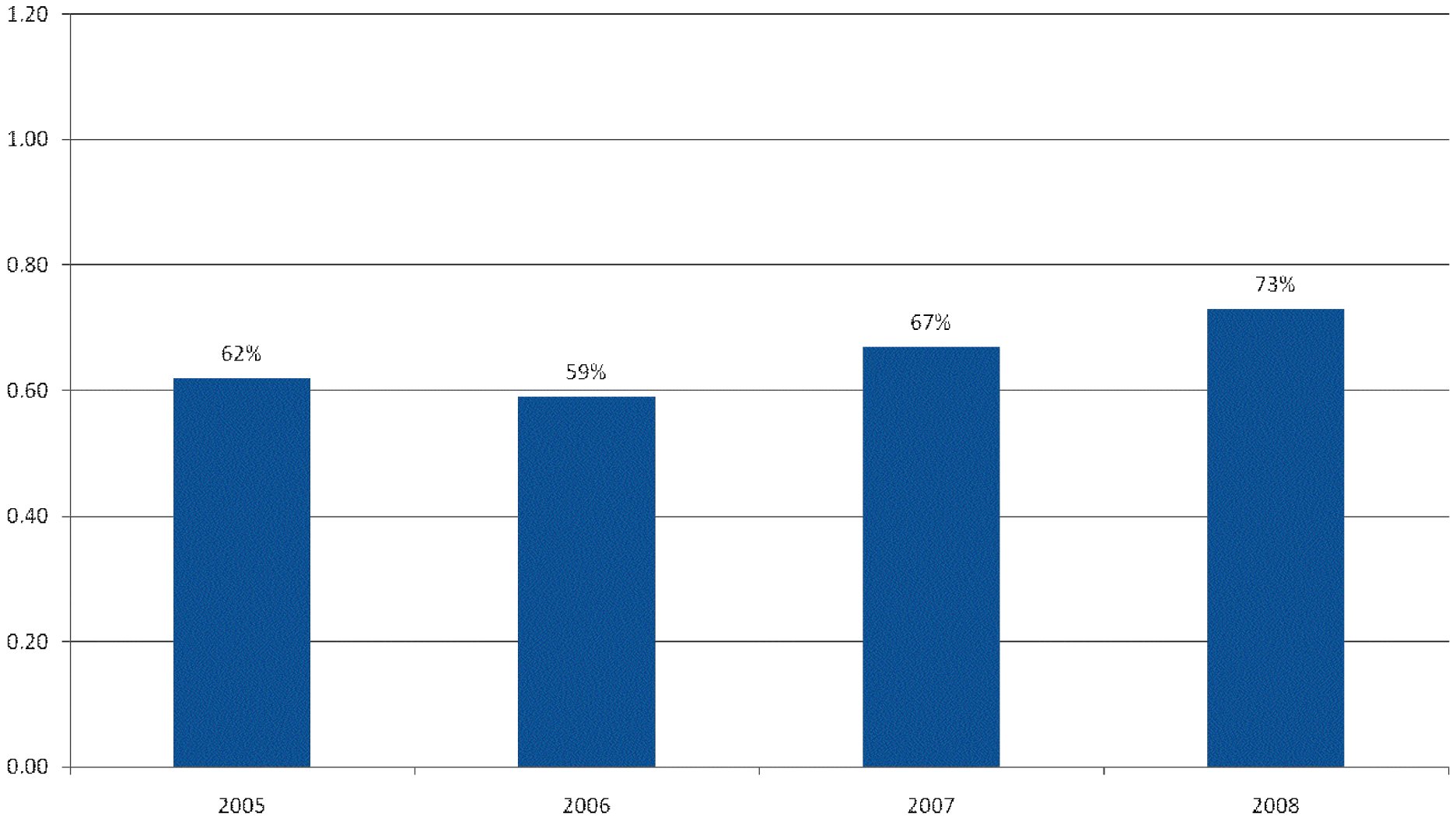
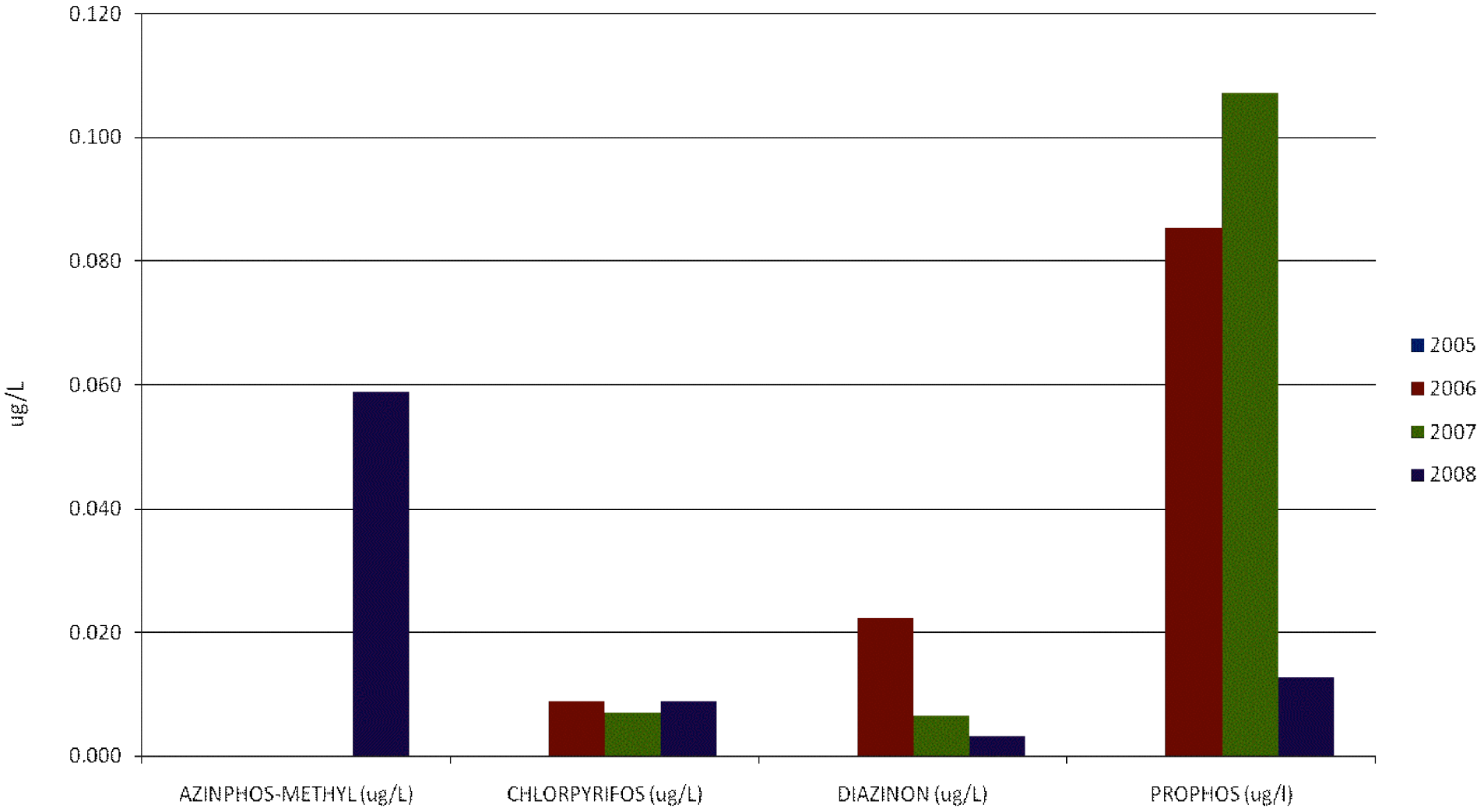
(B) = New Detection Limit of 0.01 ug/l

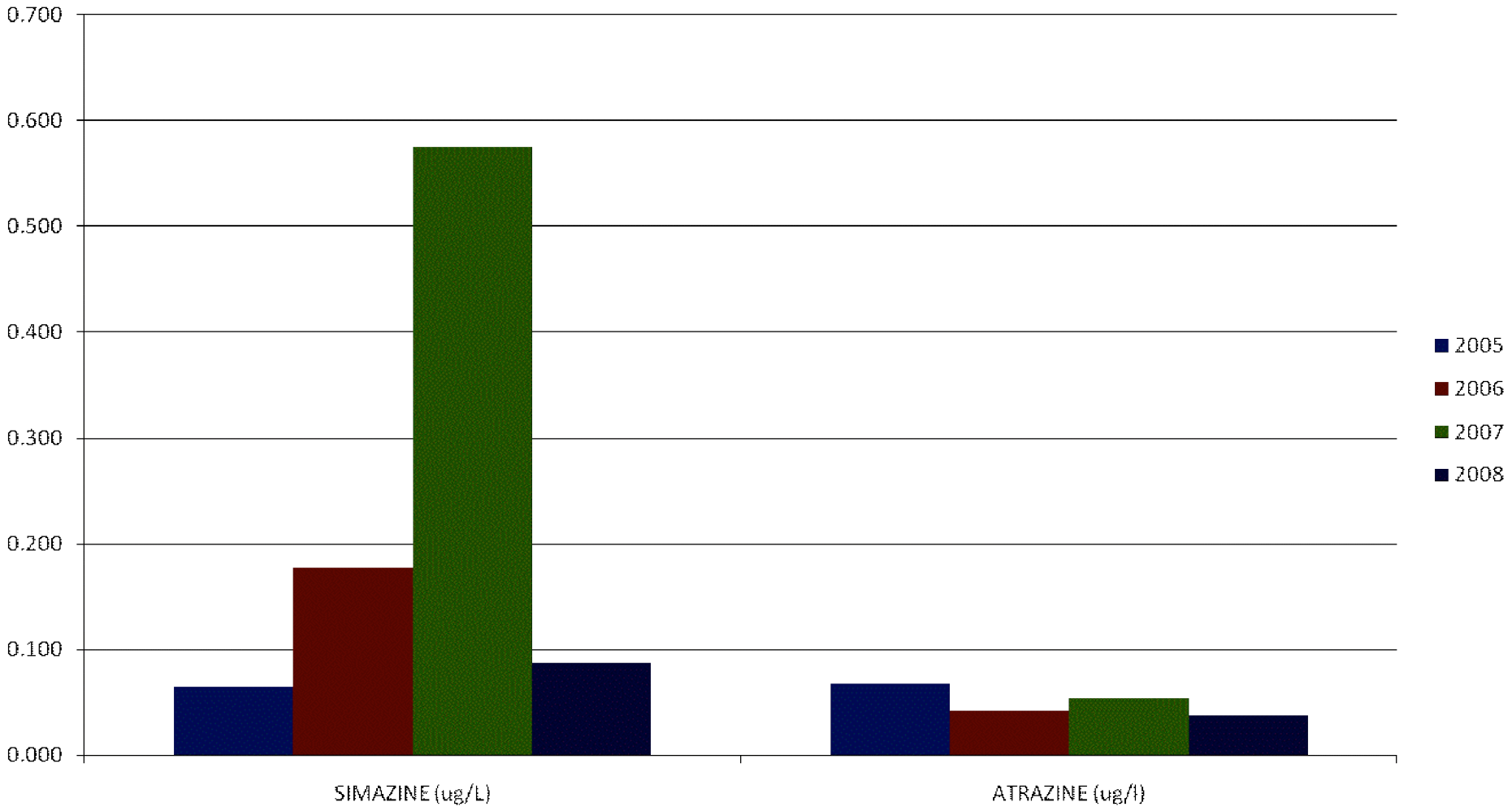
Pudding PSP
Percent of Sampling Events
Pesticides Detected



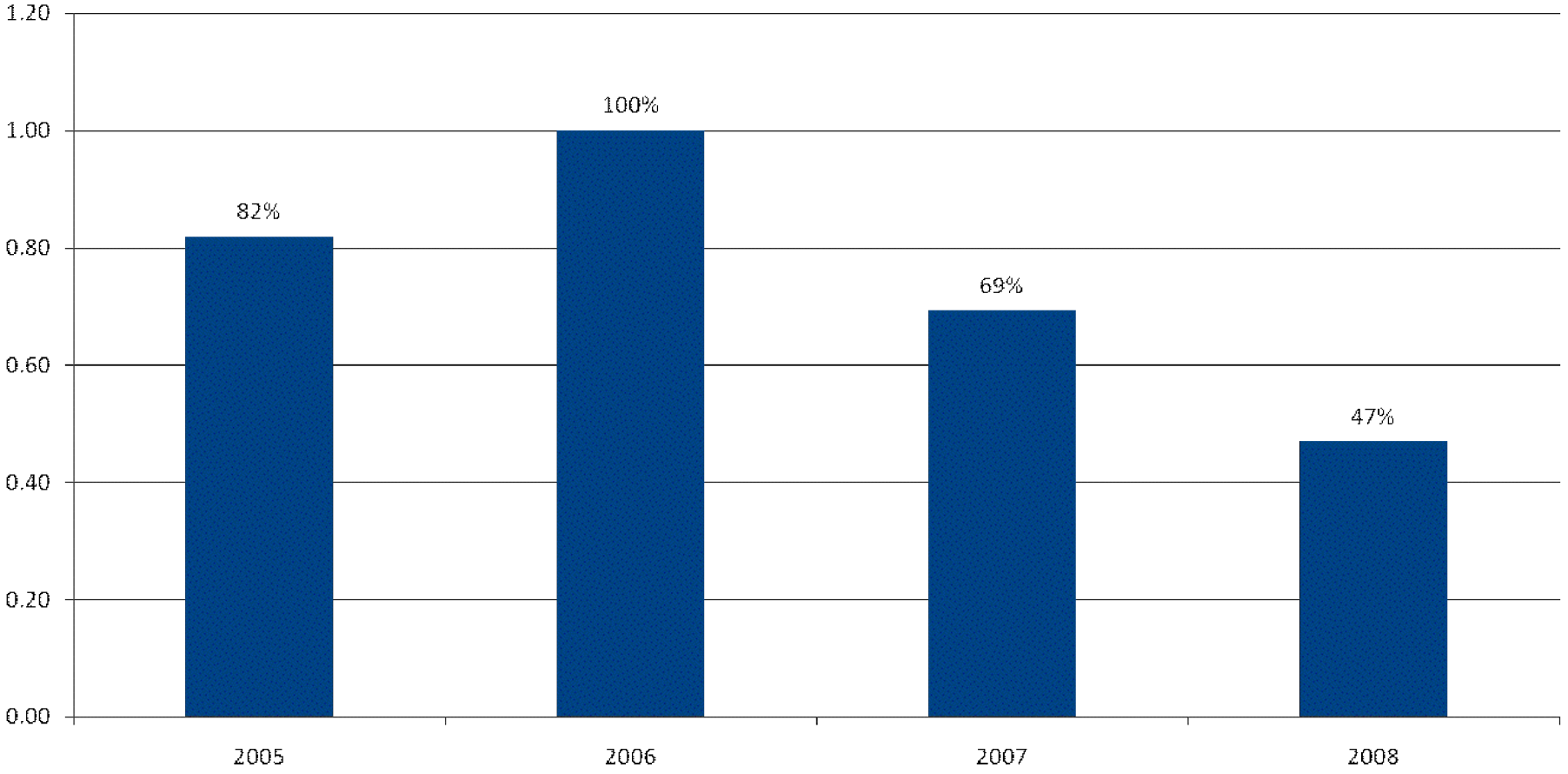
Zollner Creek at USGS Gauge
Average OP Pesticide Concentrations



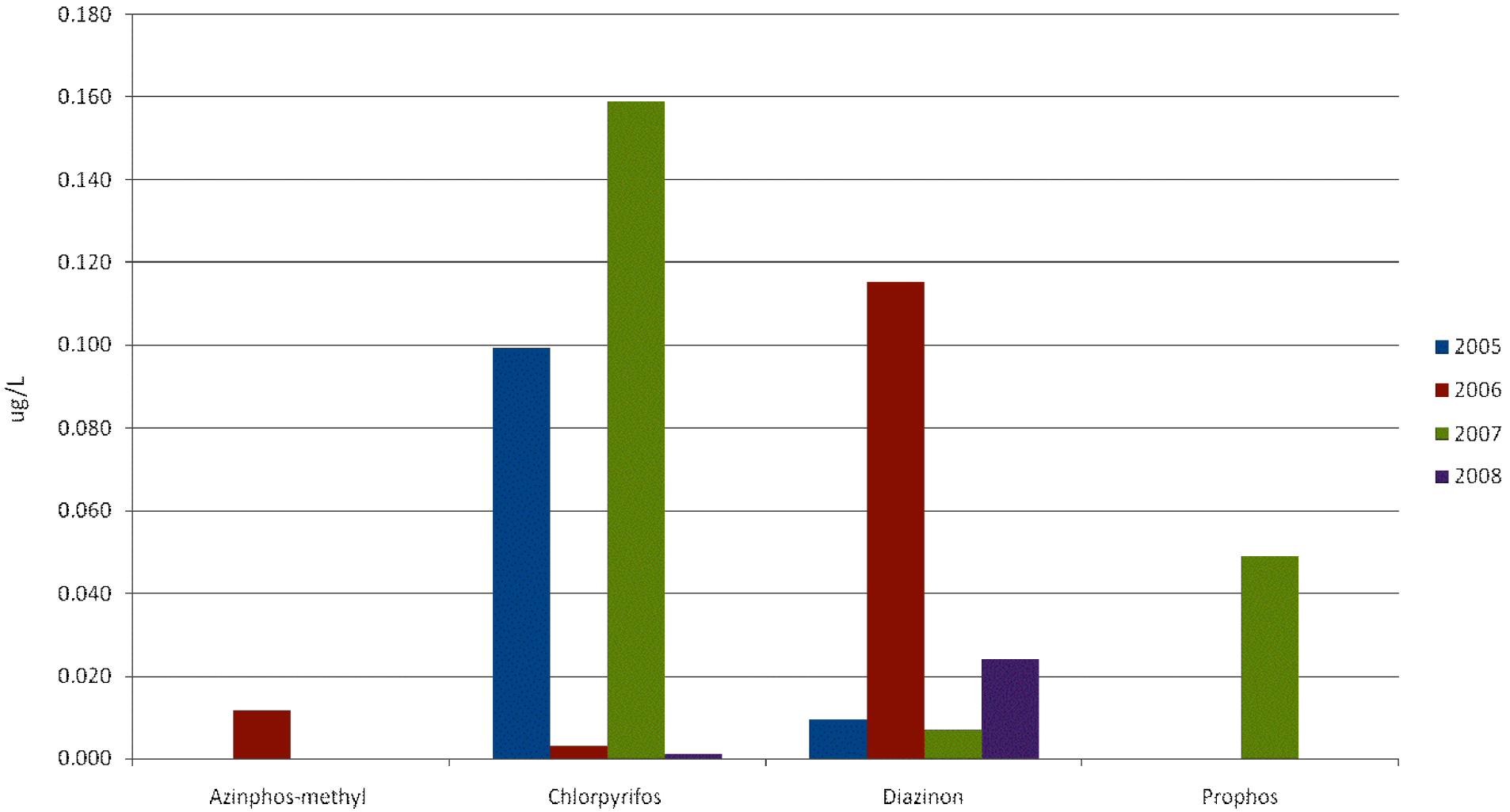
Zollner Creek at USGS Gauge
Average Triazine Herbicide Concentrations



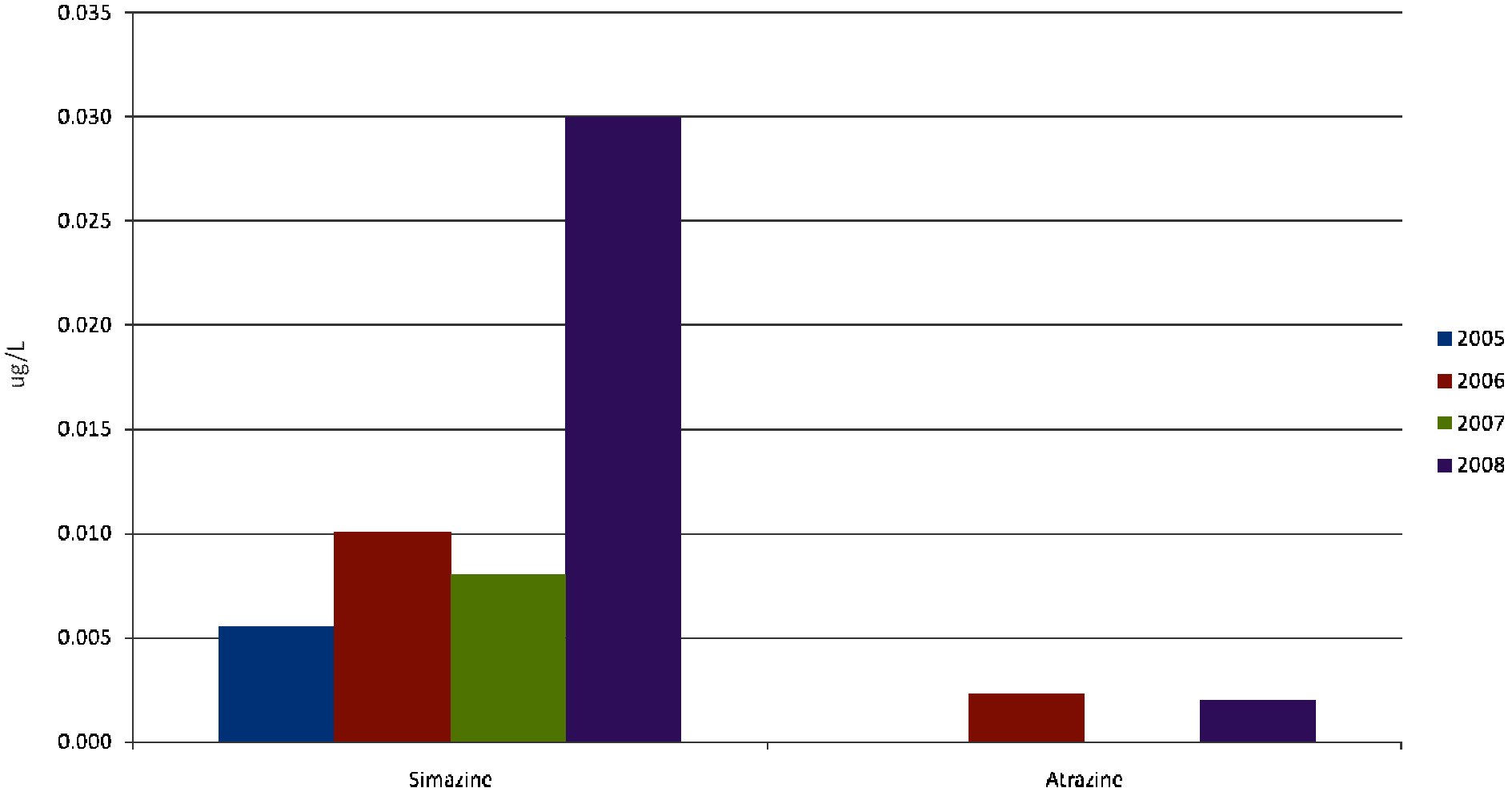
Clackamas PSP:
Percent of Sampling Events
Pesticides Detected



North Fork Deep Creek at Springwater Trail
Average OP Pesticide Concentrations



North Fork Deep Creek at Springwater Trail
Average Triazine Herbicide Concentrations



Stewardship Activities in North Willamette PSP watersheds

- OSU conducting intensive IPM training in Pudding and Yamhill Watersheds
  - *March 20th workshops in Mt. Angel and McMinnville*
  - *Provide on-line tools to growers to track IPM actions and results*
- Clackamas "Pilot Project" for Inter-Agency WQ Pesticide Team
  - *Working with local stakeholders on outreach strategies for rural residential sector and multiple ag industries*

Ag Pesticide Waste Collections: Reducing Risks to Oregon Waters

- 2006 -2009 Events in PSP Watersheds
  - *Over 72,000 pounds of waste pesticides collected and properly disposed from 6 events*
  - *Mix of "legacy" and current use pesticides*
  - *Over 6,000 pounds of rinsed empty containers for recycling*

Pesticide Stewardship Partnerships: Current and Future Challenges

WHAT'S NEXT?

- Changes in Pesticide Analytical Capabilities
  - *Expanding number of pesticides analyzed from 15 to over 100*
  - *Lower detection limits to provide more data*
- Expand scope of projects to include other of land uses (forest, urban)
  - *Working with ODF & Tribes on including managed forest monitoring sites in S. Yamhill*
- Plans to Revive Mill Creek (The Dalles) PSP in Fall 2009