



State of Oregon
Department of
Environmental
Quality

Where Are We?

Implementing Revised Human Health Criteria for Toxics in Oregon

Toxics Reduction Workshop | October 31, 2013

Jennifer Wigal, Deputy Administrator for Water
Dennis Ades, Manager Surface Water Quality

Background

- Oregon revised human health criteria based on a higher fish consumption rate
 - 175 g/day (vs. 17.5 g/day)
- Protects waterbody beneficial uses of



Fishing



*Drinking water source
protection*

Background

- Adopted implementation provisions to address:
 - High levels of background pollutants
 - Situations where effluent limits can't be met

- EPA approved revisions on Oct. 17, 2011 making the criteria effective in Oregon

Background

- Revised criteria affect:
 - NPDES permitting (at time of renewal)
 - Assessment of state waters
 - TMDLs
 - Nonpoint sources
 - Clean Up program

Final NPDES Guidance Documents

- Reasonable Potential Analysis for Toxics
 - Improved guidance for determining whether or not effluent meets water quality toxics criteria
 - Includes guidance on Intake Credits

- Site-Specific Background Pollutant Criterion
 - Intake credits and background pollutant criteria account for pollutants already in receiving water

Contact: Spencer Bohaboy bohaboy.spencer@deq.state.or.us

Final NPDES Guidance Documents

➤ Variances

- Allows an exemption from when criteria aren't attainable—requires a pollutant reduction plan
- Permitting tools have not yet been used



Final NPDES Guidance Documents

➤ Arsenic Reduction Policy

- Companion to revised arsenic criteria

Applies to:

- surface water drinking water source areas
- industrial sources meeting arsenic criteria, BUT
 - add inorganic arsenic, and
 - increase receiving stream concentration by 10% or more
- Pollutant Reduction Plan

Final NPDES Guidance Documents

- Methylmercury criterion implementation
 - Tissue-based rather than measured in water column
 - Unique implementation issues
 - Difficult to determine source of mercury in fish—upstream sources vs. discharger? Focus on reduction
 - If discharger contributing to mercury in effluent (i.e. detection of total mercury) then a pollutant reduction plan is needed (can opt to do fish tissue analysis)
 - 2012 Integrated Report will include meHg listings

Improved Permit Process

- Earlier review of permit (5 yr. cycle)
 - **Year 0-2:** Tier I Monitoring—identify pollutants of concern
 - **Year 2-3:** Tier II Monitoring—collect ambient data and identify potential sources
 - **Year 3-4:** Reasonable Potential Analysis, assess compliance options
 - **Year 5:** Renewal

So Now What?



What's the effect on permittees?

➤ Emerging picture

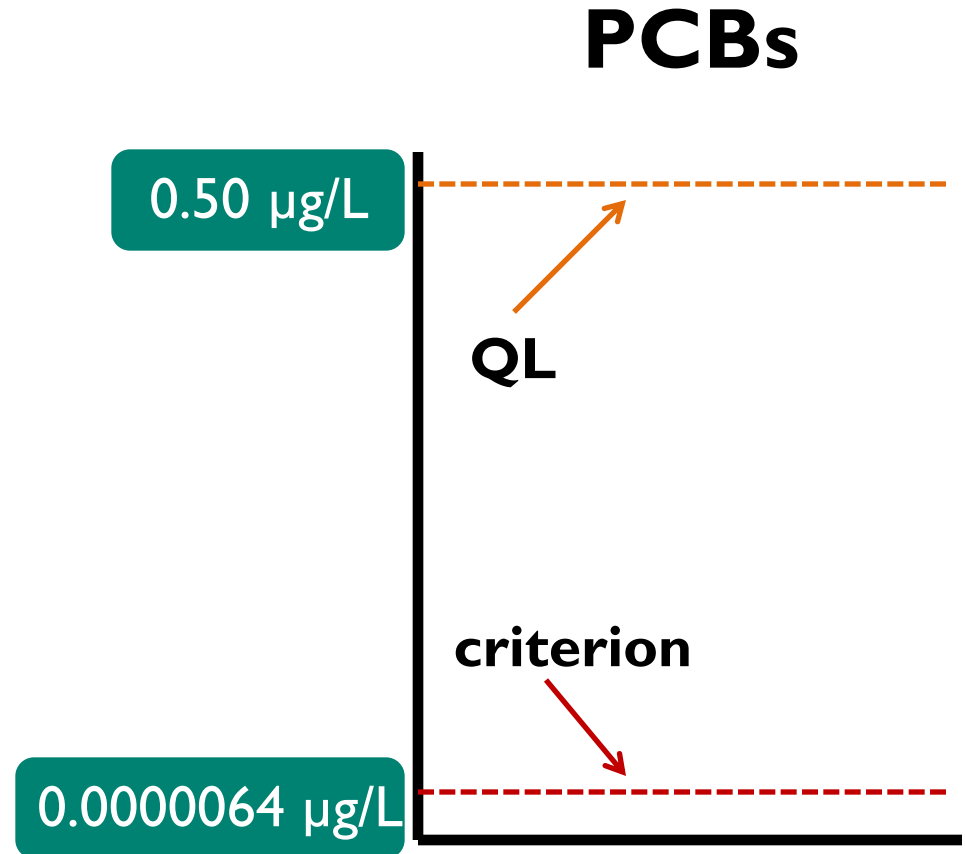
- If needed, new human health criteria limits are being incorporated into permits at renewal
- Some permits delayed in renewal
 - Feb. 2012 court decision regarding temperature litigation
 - Affected development and issuance/reissuance of NPDES permits w/ natural conditions temperature limits (would include toxic limits, if applicable)

What's the effect on permittees?

- Monitoring data frequently incomplete (i.e. quality and quantity)
 - Ambient water quality data
 - Effluent water quality data
- Renew permit with explicit toxics monitoring data requirements
- At renewal, permit writers will analyze data to determine if effluent limits are needed for any toxic pollutant

Will Dischargers Meet Criteria?

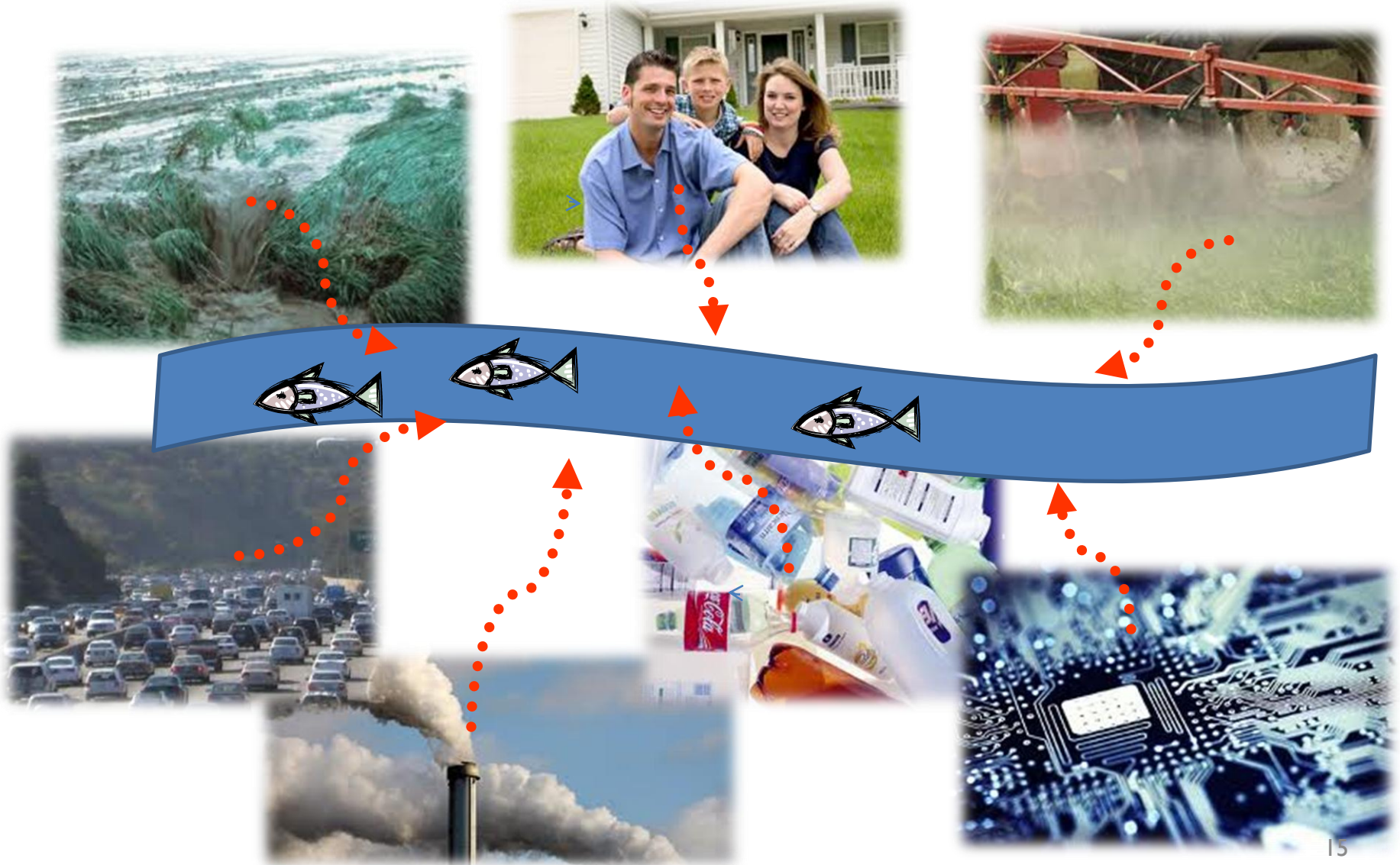
- Quantitation Limits
 - Ability of analytical methods to detect toxics at low levels
 - The quantitation limit becomes the compliance point if criterion below QL
 - Implications for both ambient and effluent monitoring



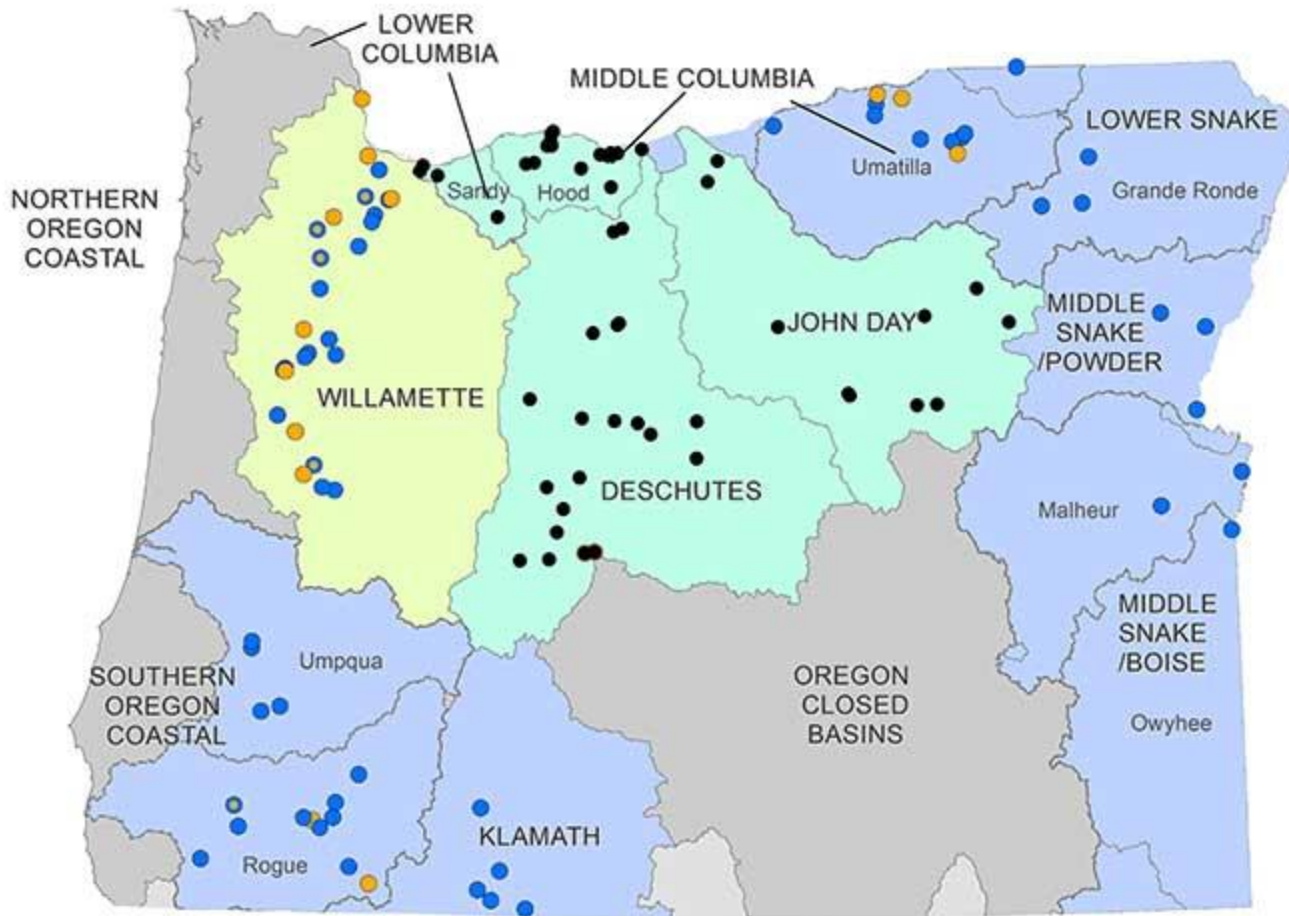
*It's not all about
water quality
standards...*



Toxic pollutants are everywhere!



Toxics Monitoring Program



Year Sampled Sampling Sites

2008-2010	● water
2011	● fish
2012	● water and fish
2013	● sampled for water in 2012 data not yet available

Contact: Lori Pillsbury,
pillsbury.lori@deq.state.or.us

DEQ Toxics Reduction Efforts

- Executive Order No. 12-05: “Fostering Environmentally-Friendly Purchasing and Product Design”
 - One component: Strengthens demand for low toxicity products through state purchasing practices and guidelines
- Pesticide Stewardship Partnership
 - Identifies potential concerns and ways to reduce pesticide use in OR



What's Next?



On the Horizon

➤ Protecting aquatic life from toxic pollutants

- Long history...
 - 2004 Oregon adoption of criteria
 - Litigation
 - Endangered Species Act Consultation
 - EPA's Jan. 2013 action



Aquatic Life Criteria Rulemaking

- Need to address freshwater criteria for 4 pollutants
 - Ammonia (acute & chronic)
 - Aluminum (acute & chronic)
 - Copper (acute & chronic)
 - Cadmium (acute)

- EPA has recommended criteria for ammonia & copper that may address ESA issues
 - DEQ will address these criteria first



From where Oregon sits...

- Toxics reduction is a comprehensive effort
- We are in the early stages of implementation
- Anticipate use of multiple NPDES compliance strategies
 - geographic/statewide
 - Specific pollutants

DEQ Websites

➤ **Human Health Toxics Rulemaking**

<http://www.deq.state.or.us/wq/standards/humanhealthrule.htm>

➤ **Toxic Pollutants**

<http://www.deq.state.or.us/wq/standards/toxics.htm>

➤ **Guidance Documents**

<http://www.deq.state.or.us/wq/pubs/pubs.htm#imds>

➤ **Toxics Reduction Strategy**

<http://www.deq.state.or.us/toxics/>