

# Water Quality Standards Rule

---

Kelly Susewind  
Special Assistant to Director Maia Bellon

March 24, 2016



DEPARTMENT OF  
**ECOLOGY**  
State of Washington

Proposed Amendments to  
Surface Water Quality Standards  
Chapter 173-201A WAC

**Proposal addresses:**

Human Health Criteria (HHC)

---

Implementation tools, including clarification on  
Combined Sewer Overflows (CSOs)

# Overview of Human Health Criteria

Water quality standards protect surface waters so they are safe to drink and it's safe to eat fish living in those waters

---

EPA promulgated HHC standards for Washington in the federal National Toxics Rule, in place since 1992

---

Federal rule is out of date, does not reflect current Washington fish consumers or new toxicity information

---

Washington is in the best position to adopt rules that are protective and approvable by EPA

# Rule Proposal Timeline

- **January 2015** – Ecology’s initial proposed rule, combined with toxics legislation, created a strong package to submit to EPA for approval
- **July 2015** – Proposed rule paused because the toxics reduction package failed in the Legislature
- **September 2015** – EPA issued a rule proposing HHC applicable to Washington's waters
- **October 2015** – Governor Inslee announced a new direction for the State rule
- **February 2016** – Ecology proposed a new rule, incorporating Governor Inslee’s directives

# State's New 2016 Proposed Rule

New proposed rule released for  
public review and comment on February 3, 2016

---

1. Fish consumption rate stays the same – 175 g/day
2. 1-in-1 million additional lifetime risk of cancer
3. Retains implementation tools for wastewater dischargers
4. Clarifies how HHC apply to CSO discharges
5. “Hold-the-line” not part of this proposal

# EPA's Proposed Rule for Washington

Proposes 1-in-1 million additional lifetime cancer risk rate  
& 175 g/day fish consumption rate

---

Contains no implementation tools for Washington  
dischargers

---

Creates more stringent criteria for arsenic, PCBs

---

Sets new criteria for methyl mercury

## How Does EPA's Rulemaking Impact Washington?

Washington needs EPA federal approval before state rules become effective for federal actions.

---

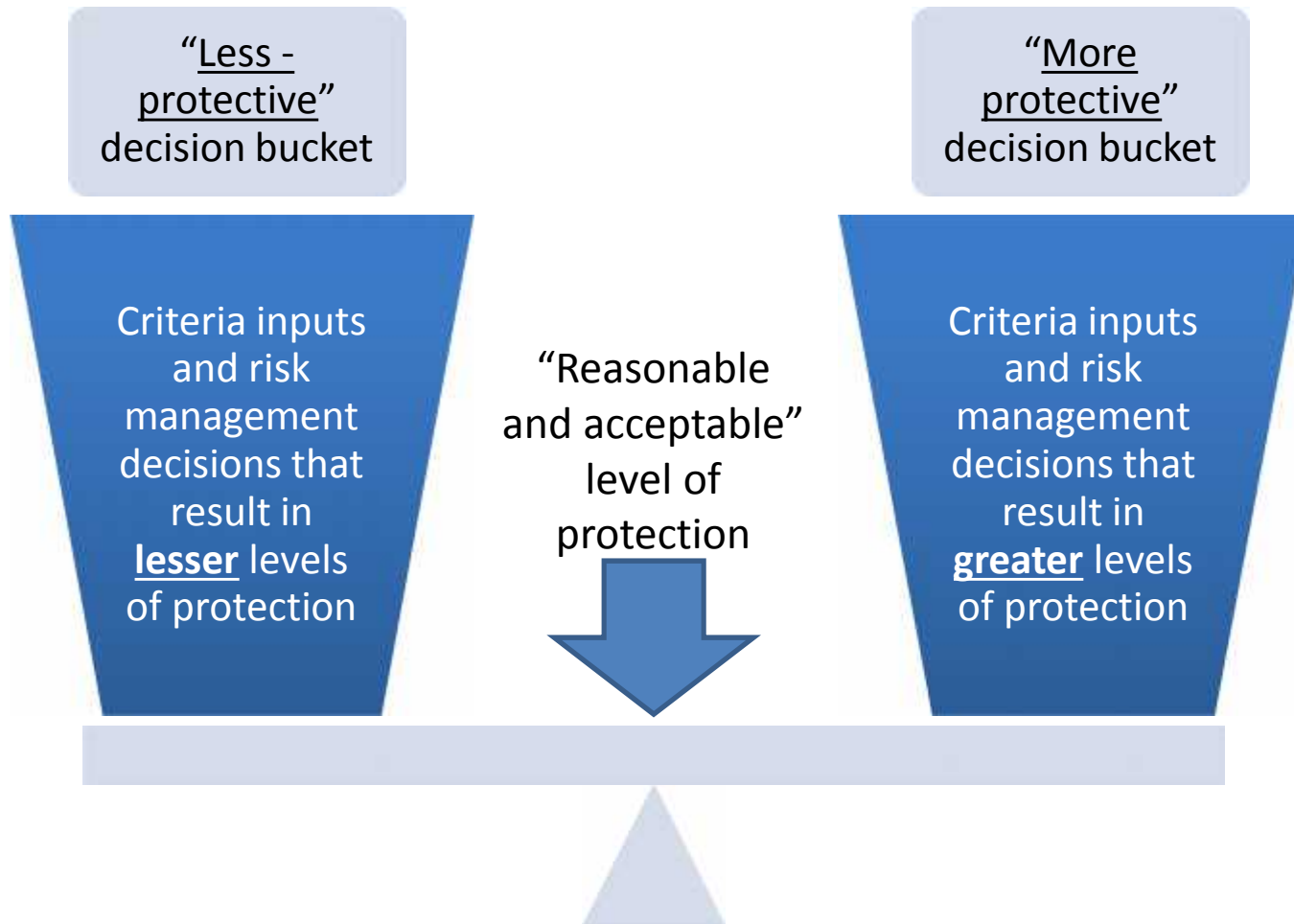
If EPA issues a disapproval, Washington has 90 days to resubmit or EPA will start federal promulgation.

# Similarities and Differences of Proposed Rules

	Initial 2015 state proposed rule	New 2016 state proposed rule	EPA proposed rule
<b>Fish consumption rate</b>	175 grams per day	175 grams per day	175 grams per day
<b>Additional lifetime risk rate for cancer causing chemicals</b>	$10^{-5}$ (1 in 100,000)	$10^{-6}$ (1 in 1,000,000)	$10^{-6}$ (1 in 1,000,000)
<b>Relative Source Contribution value for non-carcinogenic chemicals</b>	1	1	Values ranging from 0.2 to 0.8
<b>Drinking water intake</b>	2 liters/day	2.4 liters/day	2.4 liters/day
<b>Cancer slope factor and reference doses for specific chemicals</b>	Used EPA IRIS values and other sources	Used updated values in EPA IRIS and updated EPA criteria guidance document.	Updated EPA criteria guidance document.



# Washington's Approach to Criteria Calculation



**States make state-specific decisions to fit their own unique needs and circumstances**

# New Proposed Rule: Summary Statistics

## State Proposed Criteria

	State Proposed Criteria		
	Number of criteria with a <b>lower</b> concentration of pollutant than current <b>National Toxics Criteria</b>	Number of criteria with a <b>higher</b> concentration of pollutant than current <b>National Toxics Criteria</b>	Number of criteria <b>lower</b> concentration of pollutant than <b>proposed EPA</b> criteria
Fresh Water (98 proposed criteria)	<b>58</b>	<b>24</b>	<b>13</b>
Marine Water (96 proposed criteria)	<b>66</b>	<b>11</b>	<b>13</b>

# Challenging Chemicals: PCBs

Criteria calculated at a risk level of  $4 \times 10^{-5}$

---

Risk level of four additional occurrences of cancer, after  
70 years of daily exposure, in 100,000 people

---

Resulting calculated PCB criteria  
would be 0.00029 ppb

---

Apply the hold-the-line decision

# Challenging Chemicals: Arsenic

Washington has high levels of naturally occurring arsenic

---

Adopt Safe Drinking Water Act regulatory level of  
10 parts-per-billion total arsenic

---

Accompany with pollution prevention requirements

---

Adopted in other states, approved by EPA

---

Reduces human-derived sources of arsenic pollution

# Challenging Chemicals: Mercury

Current federal standards are for total mercury

---

EPA's approach uses methylmercury in tissue

---

Sources of mercury outside scope Clean Water Act tools

---

Defer adoption of new mercury criteria

---

After EPA approves WA rule, develop and adopt  
comprehensive mercury rule

# PCBs, Arsenic and Mercury

	Initial 2015 state proposed rule	New 2016 state proposed rule	EPA proposed rule
<b>PCBs</b>	<b>0.00017 ug/L</b> (same as current National Toxics Rule)	<b>0.00017 ug/L</b> (same as current National Toxics Rule)	<b>0.0000073 ug/L</b>
<b>Arsenic</b>	<b>10 ug/L</b> and pollution minimization requirements (total arsenic)	<b>10 ug/L</b> and pollution minimization requirements (total arsenic)	freshwater: <b>0.0045 ug/L</b> marine: <b>0.0059 ug/L</b> (inorganic arsenic)
<b>Mercury</b>	Will not adopt criteria values for mercury.  Will remain under the NTR	Will not adopt criteria values for mercury.  Will remain under the NTR	Would promulgate a brand new criteria value for <b>methyl mercury</b> (not mercury) at <b>0.033 mg/kg in tissue.</b>  <b>This would replace the mercury criteria in the NTR.</b>

# Compliance Schedules

Ensures compliance is achieved as soon as possible

---

Describes when a compliance schedule can go beyond the term of a permit

---

Authorizes compliance schedules for longer periods of time where a total maximum daily load (TMDL) exists

---

Describes circumstances when more time is needed but no TMDL exists

# Variance

Establishes a process for considering a variance

---

Establishes minimum qualifications for granting variances for individual dischargers, stretches of waters, or application to multiple dischargers



# Intake Credits

Addresses situations where facilities discharge background pollutants contained in the intake water

---

Clarifies conditions where intake credits would be allowed for determining reasonable potential and water quality-based effluent limits

# Combined Sewer Overflow Treatment Plants

Provides clarification, but does not change any current practices for permit requirements

---

Outlines means of criteria compliance through best management practices, rules, orders and directives

# Public Involvement and Hearings

Public comment period: February 3 - April 22, 2016

## **In-person and Webinar Hearings**

- **Seattle:** April 5 at 6:30 p.m.
- **Spokane:** April 6 at 6:30 p.m.
- **Webinar:** April 7 at 1:30 – 4:30 p.m.
- **Webinar:** April 7 at 6:30 p.m.

---

We will accept written comments on the proposed rule using an online form, email, physical mail, or fax.

### **Contact:**

Becca Conklin

360-407-6413

[swqs@ecy.wa.gov](mailto:swqs@ecy.wa.gov)

Fax: 360-407-7534 (attn: Becca Conklin,  
Water Quality Standards Rulemaking)

# Next Steps to a Final Rule

Public comment period ends April 22, 2016

---

Comments considered

---

Intended adoption date is August 1, 2016.

---

Read more at [www.ecy.wa.gov](http://www.ecy.wa.gov)



(Photo credit: Kidron Cool)

# Questions?

