(PROPOSED) WATER QUALITY STANDARDS FOR SURFACE WATERS OF THE STATE OF WASHINGTON—CH. 173-201A, WAC: COMMENTS OF WATERKEEPERS WASHINGTON AND PACIFIC COAST FEDERATION OF FISHERMEN'S ASSOCIATOINS/INSTITUTE FOR FISHERIES RESOURCES (collectively "Waterkeepers Washington")

I. INTRODUCTION AND BACKGROUND

Ecology's proposed human health water quality standards rule provides Washington with the opportunity to recognize and safeguard the diverse communities in this state who consume fish and to protect their cultural, historical, subsistence, and recreational consumption of fish. *See* Declarations from Waterkeepers Washington staff and members provided with these comments. Unfortunately, rather than embrace this opportunity, Ecology has instead offered a rule that depends on dubious math and arbitrary choices to largely leave old standards in place, while simultaneously providing new avenues for polluters to avoid complying with all water quality standards. The people of Washington State deserve better.

Ecology's proposed rule and components of the equation used to develop human health water quality standards have several shortcomings discussed in detail below: (1) the fish consumption rate of 175 grams per day ("g/day"), while an improvement, is still inadequate because survey data shows significantly higher consumption rates by Native American and Asian/Pacific Islander communities in

the state; (2) the use of a $1x10^{-5}$ cancer risk rate is a discriminatory, unsupported, and unacceptable change; (3) Ecology's change of assumed body weight (and refusal to change other components of the equation that would make standards more protective) is arbitrary; (4) the proposed human health water quality standards that are the ultimate result of Ecology's endless tinkering with the equation are arbitrary and not the result of the application of best science and for three of the most dangerous and persistent chemicals in our waters—Polychlorinated biphenyls ("PCBs"), arsenic, and methylmercury—Ecology's proposal would let inadequate protections stand or even, in the case of arsenic, allow a 555-fold increase in the concentrations of the toxic in our waters; and (5) Ecology's proposals for new and expanded water quality compliance off-ramps are not justified by the minimally-increased protections in this rule, unsupported, unlawful under the Clean Water Act, and a concession to pollution dischargers that will prevent progress toward fishable and swimmable waters in this state.

Waterkeepers Washington urge Ecology to abandon this misguided draft rule and quickly issue a straightforward proposal that would provide the effective and sound safeguards required by the Clean Water Act. Waterkeepers Washington further adopts and incorporates by this reference, the comments submitted by the Northwest Indian Fisheries Commission.

ED_002991_00014508-00002

A. The Clean Water Act, and EPA Regulation and Guidance Requires Water Quality Standards that Are Protective of All Designated Uses For All Members of The Community.

The Clean Water Act requires states to develop water quality standards necessary to meet the requirements of the Clean Water Act, including to protect designated uses of water. 33 U.S.C. § 1313. Those designated uses encompass the "fishable and swimmable" protections of the Clean Water Act: protecting and cleaning up our nation's waters so that they are clean enough for drinking, for direct human contact for fishing and recreation, for healthy aquatic resources, and for catching and consuming fish and shellfish. Water Quality Standards include criteria, often numeric, sometimes narrative, necessary to ensure that the designated uses are attained and protected. When states fail to develop adequate standards, the Environmental Protection Agency ("EPA") must step in and do so within specified time deadlines. 33 U.S.C. § 1313.

"Fishability" encompasses the ability of people to harvest fish and shellfish and to safely eat the harvested fish and shellfish in quantities that those individuals would normally consume. As recently stated by EPA in its letter to Maine disapproving portions of Maine's water quality standards, for tribal fishing rights and lands, the designated use must recognize and encompass the manner in which tribes use the water, including for sustenance fishing. *See* Attachment A to Decision Letter dated February 2, 2015, from EPA to the state of Maine at 2-3 and

ED_002991_00014508-00003

28 (copy attached) ("Maine Letter"). In Washington, harvesting and eating fish, including for subsistence (sustenance) by tribes is the designated use of the waterbody that the Clean Water Act requires be protected.

Many toxic pollutants at issue in this rulemaking accumulate in fish and shellfish tissue, biomagnifying up the food chain. EPA, Water Quality Standards Handbook § 3.1.3 ("EPA WQS Handbook") ("The consumption of contaminated fish tissue is of serious concern because the presence of even extremely low ambient concentrations of bioaccumulative pollutants (sublethal to aquatic life) in surface waters can result in residue concentrations in fish tissue that can pose a human health risk."), *available at* http://water.epa.gov/scitech/swguidance/standards/handbook/chapter03.cfm#section13,m.

Because state and federal regulators have an obligation to set water quality standards to allow individuals and communities to harvest and eat shellfish safely in the quantities they would normally eat, it is incumbent upon the regulators to determine the amount of fish people actually consume when setting the human health water quality criteria for toxic pollutants. In numerous guidance documents, EPA has made clear that states must use locally-accurate and protective fish consumption rates to set water quality standards. *See, e.g.*, EPA, Methodology for Deriving Ambient, Water Quality Criteria for the Protection of Human Health at 2-

ED_002991_00014508-00004

13(Oct. 2000) ("EPA 2000 Guidance"). Accurately determining the fish consumption rate is integral to regulators' ability to set protective human health water quality standards such that the level of toxic pollutants are low enough that fish remain safe to eat, even for people who eat greater amounts of fish than others. *Id.*; *see generally* National Environmental Justice Advisory Council, Fish Consumption and Environmental Justice at 30-32 (Dec. 2001). *See also*, Maine Letter at 2-3 and 37-42. If a state sets the foundational fish consumption rate lower than the amounts actually consumed, the commensurate human health water quality standards will be too lenient and people consuming fish may ingest levels of toxins that will put them at increased risk for adverse health consequences. EPA 2000 Guidance. Failure to adopt human health water quality standards based on an accurate fish consumption rate, including a rate adequate to protect sustenance fishing by tribes and other cultures, is a failure to promulgate water quality standards that meet the requirements of the Clean Water Act.

Other components of the human health water quality standards equation are also critical to ensuring adequately protective standards. As important as the fish consumption rate is the acceptable cancer risk rate, i.e. the risk that a person consuming fish will contract cancer during his or her lifetime because of exposure to toxins that may accumulate in fish. In Washington State, that number has been set at 10^{-6}, a one in one million chance that the average fish consumer would

ED_002991_00014508-00005

contract cancer from eating fish from the state. A $1x10^{-6}$ risk factor is generally considered protective. 40 C.F.R. § 131.36(b)(1). *See also*, Maine Letter at 3.

Finally, additional components of the equation that affect the outcome are assumptions about a person's body weight, lifespan, the relative amount of toxins from ingestion of fish, as opposed to other sources (the "relative source contribution" number), and the use of bioconcentration or bioaccumulation factors. At every step, Ecology has selected the less protective option for the equation, often rejecting EPA's best-science recommendations.

B. Washington's Fish Consumption Rate and Attendant Water Quality Standards Are and Have Been Inadequate and Underprotective.

Currently, Washington's fish consumption rate is set at 6.5 g/day. As Ecology knows, this is substantially below what almost all people in Washington actually eat. Surveys of various communities in Washington show consumption rates many times higher. *See*, Surveys from various Puget Sound region tribes, included with these comments, and information from Elwha Tribe used in Port Angeles cleanup showing consumption rates as high as 584 g/day.[1]

---

[1] It has been recognized for decades that Washington's fish consumption rate, along with the water quality standards based on it, are not adequate, but Ecology has been extremely unresponsive to this issue. During its 2003 Water Quality rulemaking, Ecology received comments regarding fish consumption from the Lummi and Umatilla tribes, and the Columbia Intertribal Fisheries Commission. Umatilla called out the need to use higher tribal consumption rates for the standard. *See,* Ecology, *Responsiveness Summary* at 68-69 (June 23, 2003), *available at* http://www.ecy.wa.gov/programs/wq/swqs/supporting_docs/final_response_sum-061903.pdf. Unfortunately, Ecology's response was wrong and misleading, likely slowing down future attempts to address the inadequate standards. Ecology responded ". . .human health criteria are established in federal rule and Ecology cannot change factors such as consumption

ED_002991_00014508-00006

Since 2000, EPA's guidance has directed states to move away from the outdated National Toxics Rule for human health water quality standards and to use the best available data including local consumer surveys that reflect the amount of fish local populations actually consume in order to fully protect that designated use. EPA 2000 Guidance at 1-12.

Similarly, not long after EPA issued its 2000 guidance on fish consumption and human health criteria, a Federal Advisory Committee to EPA issued a report regarding the need for states to ensure that all populations are protected, including those that have particularly high fish consumption rates for cultural, religious, social and/or economic reasons. National Environmental Justice Advisory Committee, *Fish Consumption and Environmental Justice* (2002), *available at* http://perma.cc/0D64qSMD6s8 ("Environmental Justice Report"). The Environmental Justice Report confirmed and emphasized the need for states to use data reflective of actual consumption rates of various communities and to set standards that are protective of consumers at those rates. *Id.* at 30-32. The Environmental Justice Report also emphasized the need to consider that some consumption rates may currently be suppressed due to reduced fish availability and

---

rate." *Id.* at 68. This was completely false under the basic requirements of the Clean Water Act and EPA Guidance. The only reason Washington's standards had been established by federal rule was because Washington had failed in its initial Clean Water Act obligation to establish protective standards. The Clean Water Act makes it a state obligation in the first instance to ensure protective standards are in place and states can change national rules at any time as long as the change is adequate under the Act.

ED_002991_00014508-00007

other factors. *Id.* at 43-49. More recently, EPA has reiterated that tribes' consumption rates, in particular consumption at rates that have not be suppressed, must be protected. Maine Letter at 3.

Since 2010, on at least eight occasions, EPA has repeatedly informed Washington that its fish consumption rate is not accurate and is not sufficiently protective. *See* Attached Correspondence from EPA to Ecology from Oct. 11, 2010; Dec. 16, 2010; Jan. 17, 2012; Sept. 6, 2012; June 21, 2013; Apr. 8, 2014; Dec. 18, 2014; and Jan. 20, 2015. The two most recent communications warned Ecology (yet again) that the current fish consumption rate is inadequate and that Ecology should <u>not</u> decrease the cancer risk protection rate it uses to calculate human health criteria water quality standards. In particular, on April 8, 2014, EPA Regional Administrator Dennis McLerran wrote to Ecology's Director Maia Bellon stating that

> the best available science includes evidence of fish consumption rates well above 6.5 grams per day among high fish consumers in Washington, which raises concerns that the human health criteria in effect for Clean Water Act purposes in Washington are not sufficiently protective. In addition, as we have also discussed, another important element of a final rule is choosing a cancer risk level that provides risk protection for all Washington citizens, including communities that eat higher amounts of fish.

Later, on December 18, 2014, EPA announced that it had initiated an internal rulemaking process to amend the Nation Toxics Rule for Washington's human health water quality criteria. EPA reiterated:

ED_002991_00014508-00008

> the need for the State to base its decision on sound science and the best available data, which provide evidence of fish consumption rates well above 6.5 grams per day in Washington, and to explain why a change in the State's long-standing cancer risk protection level is necessary and how it is consistent with its strategy for protecting higher fish consumers in Washington.

At this time, EPA is continues to work on proposed revisions to Washington's standards within the National Toxics Rule.

II. THE PROPOSED HUMAN HEALTH WATER QUALITY STANDARDS ARE NOT SUFFICIENTLY PROTECTIVE, FAIL TO CONFORM TO THE REQUIREMENTS OF GUIDANCE AND LAW, AND ARE ARBITRARY.

Despite the near-uniform recognition that Washington's human health water quality standards are inadequate, Ecology has proposed a rule that does not provide the improved protections necessary to protect fish consumers in Washington and that Ecology itself acknowledges will have no actual effect. Instead, Ecology's proposal fudges the math to reach an end-result with very few changes, none meaningful.

A. Ecology Should Use a More Protective Fish Consumption Rate.

Again, surveys of Washington communities show fish consumption rates far higher than the 175 g/day proposal, even without considering suppressed consumption due to severely reduced stocks of salmon, shellfish, and other fish

ED_002991_00014508-00009

relied upon by many Washington residents.[2] One recent EPA document noted survey data showing adult Suquamish tribal members have a fish consumption rate totaling 584.2 g/day. EPA, Record of Decision: Lower Duwamish Waterway Superfund Site App'x B at 33 & n.46 (Nov. 2014), excerpt attached. EPA also highlighted that the Muckleshoot and Suquamish Tribes have raised the issue of their fish consumption rates being suppressed as a result of fishing conditions. *Id. See also,* Comment Letters from Confederated Tribes and Bands of the Yakama Nation, March 25, 2014 (noting Yakama has higher consumption rates and never "agreed" to 175 g/day); The Tulalip Tribes, March 28, 2014; Puyallup Tribe of Indians, April 9, 2014; Stillaguamish Tribe of Indians, April 2, 2014 (noting that consumption has been suppressed due to efforts to build up salmon runs decimated by non-Indian actions); and Northwest Indian Fisheries Commission, September 5, 2014 (pointing out that the compromise at 175 g/day is no longer acceptable if Ecology changes the cancer risk rate) (all currently in Ecology's record and available on Ecology's web page for this rulemaking).

Ecology's proposed 175 g/day fish consumption rate is insufficiently protective of the many Washington residents who eat fish in excess of that rate. The increase from 6.5 g/day is admittedly a step in the right direction, but still

[2] Attached are surveys from The Confederated Tribes of the Colville Reservation, the Columbia River Inter-Tribal Fish Commission, The Lummi Nation, The Suquamish Tribe, the Swinomish Indian Tribal Community, and the Tulalip and Squaxin Island Tribes.

ED_002991_00014508-00010

plainly not compliant with EPA direction and guidance to protect actual amounts of fish consumed by *all* members of the community. This is doubly important because of the substantial environmental justice concern the fish consumption rate presents as its effects are most acutely felt by people of color such as Tribes, certain immigrant groups, and subsistence fishers.

Moreover, as explained below, the fish consumption rate does not exist in a vacuum and must be considered simultaneously with the other components of the human health water quality standards. Ecology's decision to endlessly tinker with various components of the human health criteria equation wholly negates any progress that may have occurred as a result of finally utilizing a fish consumption rate that moves toward a more accurate reflection of what residents of Washington actually eat. As Ecology itself admits, there will be no benefits to consumers of fish from this rule and the increased fish consumption rate. Ecology, Preliminary Cost-Benefit and Least-Burdensome Alternative Analyses at 50 (Jan. 2015), *available at* https://fortress.wa.gov/ecy/publications/publications/1410056.pdf ("CBA")

B. Ecology Must Retain the $1x10^{-6}$ Cancer Risk Rate as a Necessary Component of the Water Quality Standards Equation.

Washington's cancer risk rate for human health criteria water quality standards has always been one in one million or $1x10^{-6}$, as part of the National Toxics Rule. 40 C.F.R. §131.36. Ecology has now, for the first time, proposed to

weaken the standards by increasing the allowable rate of cancer to one in one hundred thousand or $1x10^{-5}$ in its human health water quality standards equation. Proposed Rule at 13 n.C.

As Ecology acknowledges "the additional lifetime cancer risk level for carcinogens can make a large difference . . . . If the risk level increases, the criteria become less stringent." Ecology, Overview of key decisions in rule amendment at 13 (Jan. 2015) ("Overview"). As Ecology goes on to explain, using a $1x10^{-5}$ cancer risk level *is the same as dividing the fish consumption rate by ten and maintaining a $1x10^{-6}$ rate*, *id.* at 19 (emphasis added), meaning the end result is no more protective than a 17.5 g/day consumption rate with the 10^{-6} risk.[3] In correspondence concerning Ecology's pre-public comment proposals for this rulemaking, EPA pointed out that Ecology has not "explain[ed] why a change in the State's long-standing cancer risk protection level is necessary and how it is consistent with its strategy for protecting higher fish consumers in Washington." EPA Dec. 18, 2014 letter. Ecology offered no credible justification, before or after EPA's letter, for a change it has acknowledged will result in less protective

[3] This is a result already soundly rejected by EPA when it was proposed by the state of Idaho in 2013. *See* enclosed letter from EPA to Idaho regarding rejection of 17.5 g/day fish consumption rate (May 10, 2012). Notably, Ecology is proposing 45 freshwater criteria that are as bad as or worse than the rejected Idaho criteria. *See* excerpt of letter from EPA to Idaho with added highlights of equal or worse criteria (May 10, 2012).

ED_002991_00014508-00012

standards, nor has Ecology explained how the change is consistent with the Clean Water Act's command to protect all uses of waters in Washington.

In attempting to now explain this unnecessary and less-protective change in the face of significant objection and criticism from EPA, tribes, and Waterkeepers Washington when the Governor did a test run of the proposal in 2013, Ecology states it will use a less-protective cancer risk rate in water quality standard equations because of the need to take into account highly-exposed populations of Native Americans and Asian immigrants, using a 175 g/day fish consumption rate.[4] Overview at 20 ("Washington is making the preliminary decision to apply the risk level of 10^{-5} to highly exposed populations, which includes recreational fishers, subsistence fishers, tribes, and immigrant fishers."). That decision—to lower the consideration of cancer risk for those most affected by toxins in the water and fish—is utterly contrary to the Clean Water Act, environmental justice principles, undoes any of the progress made by using a more accurate fish consumption rate, and raises serious civil rights concerns. EPA has plainly stated as much in its correspondence to the state of Maine rejecting Maine's human health standards due to just this kind of problem. EPA has informed Maine that in addition to tribal fishing and fish consumption rates being a designated use that must be protected,

[4] Again, Ecology gives itself a bit too much credit by claiming high consumers are protected by a 175 g/day given the ample evidence that this number is lower than many tribes' actual consumption rates.

ED_002991_00014508-00013

Maine must use the 10^{-6} cancer risk rate to protect tribes. EPA points out that for tribal fishing rights, tribes *are* the general population requiring the 1 in 1 million level of protection. Maine Letter at 3, 33-34, and 35-36. It would have been unacceptable for Maine to argue that tribal members were somehow assuming a higher level of risk because they were some special "high consuming subpopulation." It is equally unacceptable for Washington to use that tactic here to weaken water quality protections.

The very point of protecting fish consumers under the Clean Water Act is compromised, because those who eat the most fish make up the exact population for whom these numbers matter most and the group for which Ecology should not compromise its consideration of cancer. Instead, Ecology has effectively said that cancer risk for one segment of the population, high fish consumers, can be ten-times higher than for the general population. *See id.* That proposal to value the health of one group of people differently from another is unacceptable and is a violation of the Clean Water Act and a likely violation of state and federal civil rights law.

C. Ecology Must Abandon Its Arbitrary and Selective Approach to Tinkering With Components of the Water Quality Standards Equation.

In addition to changing the cancer risk number in the equation, Ecology also adjusted some, but not all, components of the human health water quality standards

ED_002991_00014508-00014

equation in reference to EPA's Exposure Factors Handbook ("EFH"). In so doing, Ecology cherry-picked only EPA's recommendations that would weaken water quality standards while rejecting those that would strengthen the standards. Again, Ecology's actions are entirely results driven as opposed to being based on the best science or what will be most protective of the most residents of Washington. This is the hallmark of arbitrary agency action.

The factors Ecology engineered in its standards equation, in addition to the cancer risk factor, are body weight, life expectancy, relative source contribution, and the use of bioconcentration as opposed to bioaccumulation factors. Each of these components affects the outcome of the human health criteria equation. For body weight, Ecology chose to adopt EPA's recommendation that would drive the standard downward. For life expectancy and source contribution however, Ecology rejected EPA's recommendations, on thin "states-rights" grounds, because those factors would strengthen the standards. On the bioconcentration as opposed to bioaccumulation issue, it appears from the Overview document that Ecology is confused about the science and the difference between these two factors as its discussion is muddled and inconsistent with the science and the Clean Water Act. And, of course, Ecology has rejected EPA's recommendation to retain the cancer risk rate at $1x10^{-6}$. In some instances where Ecology rejects EPA's EFH recommendations, Ecology asserts that states make the first effort at developing

water quality standards. *See, e.g.,* Overview at 15-17, 23, 31 ("risk management decision made by states"). While this is true, it does not give a state a free hand to disregard the requirements of the Clean Water Act and best science nor disregard the needs of the community. Further, Ecology's explanations in its Overview document are often garbled and unclear regarding what precisely Ecology is doing and why. *See, e.g.*, Overview at 30-32 (presenting legally and scientifically flawed analysis of bioaccumulation vs. bioconcentration). With respect to life expectancy, Ecology is not even forthcoming on what EPA's most recent recommendations are. *See, e.g.*, *id.* at 23-24. Overall, Ecology's justifications are unclear and unsound.

1. Ecology's selection of a higher body weight results in a less protective standard and fails to consider implications for subsistence communities and the relationship between increased weights, related health effects and access to traditional foods.

Ecology's proposed rule moves from a 70 kg (154.32 lbs) body weight assumption, to 80 kg (176.37), *see* Rule Proposal Overview at 23-24, that will make standards less-protective. By assuming that people consuming fish weigh more than EPA assumed in the National Toxics Rule, which sets the current standards in Washington, concentrations of toxics will be permitted to be as much as 10% to 15% less protective. Catherine O'Neill, *Washington State's Weakened Water Quality Standards Will Keep Fish Off the Table, Undermine Tribal Health*,

ED_002991_00014508-00016

Center for Progressive Reform Blog (Mar. 4, 2014), *available at* http://goo.gl/7R04n3 (copy attached).

This component of the equation is also important for considering discriminatory impacts of weakening the standards equation in this and similar ways. Traditional foods are crucial to the health of native people and to tribes. Reduced access to traditional foods has resulted in myriad health problems in tribal areas, including increased body weights. A study commissioned by the Karuk Tribe found that "[t]he loss of traditional food sources is now recognized as being directly responsible for a host of diet-related illnesses among Native Americans, including diabetes, obesity, heart disease, tuberculosis, hypertension, kidney troubles, and strokes." Kari Marie Norgaard, *The Effects of Altered Diet on the Health of the Karuk People* at 5 (2004) (copy attached). The United States Centers for Disease Control & Prevention has also recognized the importance of traditional foods in fighting diseases in American Indian communities. *See* Native Diabetes Wellness Program, Centers for Disease Control & Prevention, *Traditional Foods in Native America: A Compendium of Stories from the Indigenous Food Sovereignty Movement in American Indian and Alaska Native Communities* (2013) (copy attached). This effort is of crucial importance because the rate of diabetes for American Indians and Alaska Natives is two to three times that of other groups in the U.S. Centers for Disease Control & Prevention, MMRW Weekly Summary

ED_002991_00014508-00017

(Aug. 1, 2003). For the Yakama Nation, the rate of diabetes is twice that of other populations in Washington. *See* O'Neill, *Washington State's Weakened Water Quality Standards*.[5] It is doubly irrational to use one of the results of taking away healthy subsistence foods for native communities—increased body weight—as a reason to then further weaken health protections for eating those foods.

There is evidence that Ecology's decision came at the urging of industry polluters. *See* Email from Nancy Judd, Wind Ward Environmental Consulting, to Cheryl Niemi, Washington Dept. of Ecology (Dec. 16, 2013) ("The result of using [a higher] average body weight is HH WQC that are still protective but are 10-15% higher") (copy attached); O'Neill, *Washington State's Weakened Water Quality Standards Will Keep Fish Off the Table*. Ecology needs to distance itself from such efforts and ensure that it is applying EPA's best science recommendations, not looking for ways to weaken the standards.

As for other communities that consumer high amounts of fish and shellfish, using an 80kg body weight significantly overstates weight, particularly for those in Asian-American/Pacific Islander communities, again resulting in reduced

[5] Efforts in the Northwest to reinvigorate traditional foods and food systems would be undermined by the Ecology plan to use an increased body weight as one part of its efforts to weaken the water quality standards equation. The Northwest Indian Fisheries Commission outlined such an effort by the Muckleshoot Tribe. NWIFC, Muckleshoot food program fosters creative solutions (Feb. 8, 2012), *available at* http://nwifc.org/2012/02/muckleshoot-food-program-fosters-creative-solutions/. That program, which received USDA funding, and the CDC effort to promote traditional foods demonstrates the inefficiency and inequity of spending public funds to combat diabetes and other ills by encouraging traditional foods if states are permitted to allow contamination of those traditional foods.

ED_002991_00014508-00018

protections for those communities. A study of fish consumption by ten such communities in King County indicated an average body weight of 62 kg for men and women. Ruth Sechena et al., *Asian and Pacific Islander Seafood Consumption Study* at 62 (May 27, 1999), *available at* http://goo.gl/ptLiZZ. (copy attached). A dietary survey assessing fish consumption of Japanese and Korean women found similar body weight results to the King County study of the Asian and Pacific Islander community for women (57 kg, according to a presentation by one of the study's co-authors). Ami Tsuchiya et al., *Fish intake guidelines: incorporating n-3 fatty acid intake and contaminant exposure in the Korean and Japanese communities*, 87 Am. J. Clinical Nutrition 1867-75 (2008), *available at* http://ajcn.nutrition.org/content/87/6/1867.long. (copy attached). The mean weight of the participants in the Tsuchiya et al. study was 55 kg for the Japanese women and 59 kg for the Korean women. *Id.*

2. Ecology's selective rejection of other EFH recommendations further weakens protections and is arbitrary and contrary to best science.

Ecology's reduced protections based on body weight is cherry-picking the one component of the standards equation that would lower protections from among the relevant recent default values found in EPA's EFH. While body weight assumptions may increase, the 2011 EFH contains other values that would be more protective, such as those for life expectancy, drinking water intake, and Relative

ED_002991_00014508-00019

Source Contribution (as well, of course, as the cancer risk rate). Instead of simply adopting all EPA's recommended values along with body weight, Ecology has instead chosen only to modify the one default (body weight) that is now less protective.

Ecology refuses to utilize EPA's recommendations regarding Relative Source Contribution (applicable to non-carcinogens). EPA rightly points out that people's burden of toxins, and relative risk, come from a variety of sources. EPA, Human Health Ambient Water Quality Criteria and Fish Consumption Rates: Frequently Asked Questions, *available at* http://water.epa.gov/scitech/swguidance/standards/criteria/health/methodology/upload/hhfaqs.pdf (copy attached). EPA therefore recommends that, absent scientific data about relative contributions of sources of toxins to the populations that are to be protected by the water quality standards, states should use a default value of 20 percent (.20) in the water quality standards equation to account for the obvious fact that not all toxins a person ingests will necessarily come from fish. *Id.* EPA further states that if the sources of exposure to a chemical are well-known and documented, a state may use a calculated relative source contribution but EPA recommends that the value *not be greater than 80% (.80).* Ecology pays no heed to EPA's recommendation and uses a relative source contribution value for all its calculations of 1.0—that is, Ecology assumes that a person in Washington ingests toxins only from fish or shellfish and

ED_002991_00014508-00020

not from any other source. As Ecology admits, using .20 for the relative source contribution, as opposed to 1.0, would have made the resulting water quality standards more stringent. Overview at 22. Ecology does not provide evidence suggesting that it has good scientific data in Washington about sources of toxins or that sources of exposures are "well-known and documented."

Ecology also apparently rejects (without disclosing that it is doing so) EPA's recommendation that life expectancy factors must be increased; that 70 years is no longer best science. Rather, EPA recommends an average life expectancy for men and women combined of 78 years. EPA Exposure Factors Handbook at 18-1 (2011), *available at* http://www.epa.gov/ncea/efh/pdfs/efh-complete.pdf. Again, retaining the outdated life expectancy figure results in a less-protective water quality standard. Simply changing exposure duration through an updated life expectancy of 78 years would in fact have canceled out Ecology's body weight change in terms of the effect on the resulting water quality standards. Ecology offers no explanation for declining to use a more accurate life expectancy, simply citing to older EPA documents for the 70 years assumption Ecology retains.

Ecology also rejects EPA's recommendation (and indeed the recommendation of the scientific community) to use bioaccumulation instead of bioconcentration figures in the water quality standards equation. And again, the result is a less-protective standard. Ecology's discussion of this is unclear in the

extreme and betrays an apparent lack of understanding of the purpose of using one as opposed to the other. Since as early as 2000, EPA has made clear that it favors use of the more protective BAF over BCF. EPA 2000 Guidance at 1-5.

Bioaccumulation reflects how toxins move in the environment and how they ultimately affect people consuming fish and shellfish. It is the accurate figure to use for assessing how much of a toxin a person takes in when eating fish and shellfish and must be the figure used if Ecology is properly assessing risk and exposure from eating fish. While those fish and shellfish may have accumulated those toxins a variety of ways—directly from the water, from contaminated sediments in the water (that became contaminated because of pollution discharges to the water), from eating smaller fish that were contaminated from the water/sediments—the basic fact remains that these toxins got into the fish that people consume because of pollutants getting into the water. The BCF captures only a subset of the BAF because it does not measure all routes through which aquatic organisms are exposed to toxins. Jon A. Arnot and Frank Gobas, *A review of bioconcentration factor (BCF) and bioaccumulation factor (BAF) assessments for organic chemicals in aquatic organisms*, 14 Environ. Rev. 257, 259-62 (2006), *available at* http://research.rem.sfu.ca/papers/gobas/A%20Review%20of%20Bioconcentration%20factor%20(BCF)%20and.pdf. These terms are not interchangeable. *Id.* This is because "[f]or some chemicals (particularly those that

are highly persistent and hydrophobic), the magnitude of bioaccumulation by aquatic organisms can be substantially greater than the magnitude of bioconcentration. *Thus, an assessment of bioconcentration alone would underestimate the extent of accumulation in aquatic biota for these chemicals.*" EPA 2000 Guidance, at 5-2 (emphasis added).

In attempting to justify its continued use of EPA's outdated 1980 guidance recommending use of BCF, instead of the 2000 EPA Guidance's clear command otherwise, Ecology misrepresents (or at least misunderstands) the nature of the Clean Water Act requirements and the relationship between bioconcentration and bioaccumulation. Ecology makes the following statement: "If the scope of the Clean Water Act is limited to addressing potential exposures from NPDES—or other Clean Water Act regulated discharges to surface waters. . .". Overview at 31. This is a grossly incorrect statement of the law. As such it is of extreme concern coming from the agency developing standards under the Clean Water Act. In fact, the Clean Water Act plainly applies to much more than point source discharges of pollutants that must obtain NPDES permits. Water quality standards set the standards for water bodies, regardless of the source of pollutants.

The Clean Water Act regulates water pollution two basic ways—one is regulating point source discharges, but Ecology's statement ignores the entire second half of the Clean Water Act. Congress also directed states and EPA to set

ED_002991_00014508-00023

water quality standards to protect all uses of water—these standards are set independent of the permitting system—they are standard of cleanliness applicable regardless of pollution sources. *Pronsolino v. Nastri,* 291 F.3d 1123, 1126 (9th Cir. 2002) ("At the same time, Congress decidedly did *not* in 1972 give up on the broader goal of attaining acceptable water quality. CWA § 101(a), 33 U.S.C. § 1251(a). . . [t]he 1972 statute therefore put in place mechanisms other than direct federal regulation of point sources, designed to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." § 101(a).") (citations omitted). These standards then drive the TMDL cleanup process which encompasses all sources of pollutants to water, point and non-point. *Pronsolino*, 291 F.3d at 1131-32. Ecology's statements in this regard border on shocking in their ignorance of the point of setting standards. Ecology is just wrong on the law.

Similarly, Ecology's statements trying to distinguish why it chooses to use the old, outdated BCF are wrong on the science. The use of BAF relative to BCF has nothing to do with how a pollutant got into a water body. Instead, these distinct factors consider how the pollutant got into fish or other aquatic organisms after getting into the water. The BCF considers only dermal and inhalation exposure of aquatic organisms, whereas BAF considers the BCF plus aquatic organisms' exposure through the food they eat also. Arnot, 14 Environ. Rev. at 259-62. How the pollutant got into the water initially before being taken up by the

ED_002991_00014508-00024

aquatic organism is irrelevant. *See id.* Likewise, the BCF and BAF do not distinguish between sources inside or outside of Washington or whether the source is regulated by the CWA, in contrast to Ecology's apparent view. *See* Proposed Rule Overview at 30. Ecology's quote to the EPA WQS Handbook is similarly misguided as that document is referring to pathways of human exposure and the human health criteria's focus on surface water, *id.* at 31; it does not address in any way aquatic organisms' exposure, the subject of the distinction between BAF and BCF. Ecology should have simply looked to the 2000 EPA Guidance's clear recommendation that states use a BAF, but instead chose, once again and in extremely garbled fashion, to reject EPA's recommendation in favor of a weaker, less-protective approach.

In sum, Ecology's choices in this rulemaking appear to be dictated entirely by keeping the water quality standards unchanged. Ecology's actions are arbitrary and divorced from the science and the law and Waterkeepers Washington urges Ecology to reject this approach and redo the water quality standards with an approach that is protective of all Washington residents and consistent with the best science and recommendations from EPA.

ED_002991_00014508-00025

III. ECOLOGY'S ARBITRARY APPROACH RESULTS IN STANDARDS THAT ARE WEAKER THAN THEY WOULD BE WITH A PROPER FACT AND SCIENCE-BASED APPROACH AND RESULT IN DIMINISHED PROTECTIONS FOR FISH CONSUMERS.

While Ecology's move to a more accurate fish consumption rate is laudable, nearly all of that progress is immediately undone by its tinkering with other parts of the water quality standards equation as set forth above. For all of Ecology's effort in preparing this proposed rule, few standards will be more stringent or more protective than under the current National Toxics Rule, most will stay the same, and one will get dramatically worse. Among cancer-causing chemicals, the majority of fresh water standards simply remain unchanged.

Even Ecology has acknowledged that little, if anything, will change on the ground and in the water. Ecology found in its cost/benefit analysis that "while it is theoretically possible for existing facilities to be impacted by a change in criteria values, based on the reasonable potential determination and resulting from the proposed rule amendments, no such existing facility will be impacted." CBA at 41. In the same document, Ecology puts it starkly: there will be no cost to polluters from this no rule because they will not have to take any new steps, and there will be no benefits to fish consumers. *Id.* at 61 ("We do not expect additional costs to be incurred under the proposed rule, under existing approved methods and data. We do not expect additional benefits to be gained under the proposed rule,

ED_002991_00014508-00026

under existing approved methods and data.").[6] Apparently this was an important goal of the new standards; no actual impact on the polluting industries. At the end of the day, Ecology has built a complicated looking rocket ship that simply idles on the launch pad.

It is important to recall that EPA's, environmental groups', and Tribes' criticism of Ecology's low and inaccurate 6.5 g/day fish consumption rate was not because there is intrinsic value in an accurate fish consumption rate. Rather, the fish consumption rate should be scientifically-supported and should be used in a regulatory system that will result in real health protections for all consumers of fish and shellfish. Ecology's proposed rule contains a just-for-show fish consumption rate of 175 g/day that is insulting to the people and groups working on and affected by the issue. When combined with the other decreases to protections of fish-consumers, the change proves illusory.

For many chemicals, the change to the cancer risk rate part of the equation alone would result in a decrease—a weakening—of human health water quality standards, despite the increased fish consumption rate[7] and combined with the arbitrary selection of some but not all EPA recommendations, overall ensures that

---

[6] The "benefits" that Ecology finds are benefits to industry from the off-ramps that excuse or delay compliance with water quality standards.

[7] Ecology, Draft – Washington Human Health Criteria Review Documents Tables (Aug. 8, 2014), *available at* http://www.ecy.wa.gov/programs/wq/swqs/WAHHCrevdocs080714.pdf ("Ecology Criteria Comparison Tables").

ED_002991_00014508-00027

many of the standards would be weaker than even the current National Toxics Rule. When this was called to Ecology's attention in 2014, this obviously unacceptable outcome caused Ecology to scramble to paper over the result, but not to actually address the problem in a meaningful way. In order to avoid the outcome wrought by weakening the cancer risk number and rejecting EPA recommendations, Ecology uses a concept it refers to as "anti-backsliding" whereby chemicals for which protections would be weaker are left the same as they currently are under the National Toxics Rule driven by no scientifically or ethically justifiable approach. Proposed rule at 13 n.A. The result is a muddled hodgepodge of sometimes more protective criteria and sometimes the same concentrations as are allowed currently. An outcome like this—with no scientific or policy justification for the end result—is the very definition of arbitrary and is a clear demonstration that there has been no discernible explanation or justification for the change to the cancer risk rate or selective rejection of EPA recommendations.

Overall, the permitted concentrations for the majority of toxics criteria for freshwater and a significant number of marine water would not change from the admittedly-inadequate current standards using Ecology's proposed weaker cancer risk protection rate or other arbitrary tinkering Ecology did to the standards equation. *See* Ecology Criteria Comparison Tables. Among, carcinogens, under

ED_002991_00014508-00028

the "anti-backsliding" measure (because Ecology's method would actually make them weaker), only 11 criteria for fresh water will be more protective, as compared to 40 that will remain the same with one (arsenic)[8] actually becoming less protective. *Id.* For three of the most hazardous and persistent chemicals in our waters—PCBs, arsenic, and methylmercury—the proposed rule does nothing or actually increases the amount of chemical allowed in Washington waters. The *entire point* of this exercise is to *correct* the current situation where Washington's human health water quality standards for toxins is too weak and not adequately protective.

Ecology's tortured treatment of PCB's is particularly emblematic of the arbitrary nature of Ecology's actions here. PCBs are some of the most dangerous chemicals in Washington's waters. As Ecology has acknowledged "PCBs accumulate and persist in the environment and can cause harmful health effects." Overview at 37. The health effects from PCBs include skin conditions, neurobehavioral issues, immunological issues, cancer, and liver damage. *Id.* Yet, Ecology apparently determined that even its less protective cancer risk rate of $1x10^{-5}$ is still too protective for PCBs because, even applying that weaker rate, it would still result in a water quality standard more stringent than what Ecology currently applies for PCBs from the National Toxics Rule. *See* Ecology Criteria

[8] The decreased protections against arsenic are not based on the cancer risk level and are discussed below.

ED_002991_00014508-00029

Comparison Tables. To avoid the apparently undesirable outcome of actually strengthening protections against PCBs in water, Ecology then tried out an even less protective cancer risk rate of $4x10^{-5}$ (one in 25,000) specifically for PCBs alone. But when Ecology applied that formula, the resulting standard ended up being less protective, or weaker, than the current standard. Proposed Rule at 13 n.E At that point, to make it "come out" Ecology applied its "anti-backsliding" concept to keep the PCB water quality standard exactly where it is now—the under-protective National Toxics Rule criterion. Ecology offers no rational explanation for singling out PCBs for this special, tortured treatment, nor can there be such an explanation. The entire exercise certainly appears to be one geared to ensuring the standards comes out where Ecology wanted to land—at a standard unchanged—and that Ecology tinkered with the math and methodology until it got there.

Similarly, for methylmercury (a highly toxic metal), applying the corrected fish consumption rate and the proper factors from EPA's EFH recommendations would have resulted in a more protective water quality standard. And again, this result was apparently undesirable. Instead, Ecology simply proposed to put off any new regulation and will leave the current mercury standard as is. Overview at 49-52. To justify its action, Ecology asserts it is simply too difficult to complete a mercury standard at this time. This assertion that "its too hard" is neither

ED_002991_00014508-00030

supported, nor supportable. First, Ecology could simply rely on a correct equation and accept the result. Second, Ecology could look to other states that apparently were able to address mercury. For example the State of Minnesota has a protective fish consumption and mercury standard and even addressed the fact that different bioaccumulation standards (and therefore different water quality standards) should apply in the northern part of the state where geologic and vegetative conditions aid methylation requiring a stricter standard. *See* http://www.pca.state.mn.us/index.php/water/water-types-and-programs/minnesotas-impaired-waters-and-tmdls/tmdl-projects/special-projects/statewide-mercury-tmdl-pollutant-reduction-plan.html;http://www.pca.state.mn.us/index.php/view-document.html?gid=288;http://www.pca.state.mn.us/index.php/view-document.html?gid=8507. And, Minnesota has taken the matter a step further and developed and implemented a mercury TMDL. *Id.* Ecology's claim that it's just "too hard" to do its job right now rings hollow.

For arsenic Ecology is proposing a 555-fold increase[9] in the permitted amount of arsenic in Washington's fresh water. Overview at 43 (comparing 2015 proposal allowing 10 µg/L arsenic vs. 0.018 µg/L in the current standard). Ecology attempts to justify this change by citing the higher concentrations of

[9] Tellingly, Ecology has simply omitted the column for factor of change for arsenic. *See* Ecology Criteria Comparison Tables at 2.

arsenic in the western United States, but Ecology provides little evidence of natural levels or whether these levels are consistent across all state waters. *Id.* at 44. [10] Ecology also seems to suggest that simply adopting the "drinking water standard," it has met its Clean Water Act section 304 obligations. Ecology's understanding of the law is incorrect. EPA has directly addressed this issue and has made plain that Safe Drinking Water Act ("SDWA") standards are not to be used as a substitute for Clean Water Act section 304(a)(1) human health standards:

> The section 304(a)(1) criteria also [should] include fish bioaccumulation and consumption factors in addition to direct human drinking water intake. These numbers were *not developed to serve as "at-the-tap" drinking water standards, and they have no regulatory significance under the SDWA. Drinking water standards are* established based on considerations, including technological and economic feasibility, *not relevant to section 304(a)(1) criteria.* Section 304(a)(1) criteria are more analogous to the maximum contaminant level goals. . . of the SDWA. . .[which] do not take treatment, cost, and other feasibility factors into consideration. . .

EPA WQS Handbook, § 3.2.4, *available at* (emphasis added). As noted by EPA, drinking water standards are simply standards that a municipal entity has to meet "at the tap" for a community water supply, and that statute allows cost and other factors to be taken into account. Nowhere does the Clean Water Act allow for cost

[10] While Ecology also claims that it is simply patterning some of its actions after Oregon, Ecology's justification is thin at best. Ecology failed to mention that Washington's proposed arsenic concentration is nearly five times higher than Oregon's. *See* Ecology, Washington Proposed HHC vs. Oregon Adopted HHC, *available at* http://www.ecy.wa.gov/programs/wq/swqs/ECYPropvsORHHC.pdf. Likewise, Washington's proposed PCB concentration is over twenty-six times higher than Oregon's. *Id.*

ED_002991_00014508-00032

and technology and economic feasibility to be considered *when setting standards.* Those factors might come into consideration in permitting or other regulatory decisions but have no place in setting the standards to be met for human health. Congress has allowed for or directed consideration of cost and/or feasibility in other environmental laws, for example the Clean Air Act, but has pointedly omitted those considerations here. Ecology's recommendation is therefore based on incorrect interpretation and application of the Clean Water Act and the SDWA.

Waterkeepers Washington also adopts and hereby incorporates the comments of the tribes and Northwest Indian Fisheries Commission related to the proposed arsenic standards.

IV. THE PROPOSED RULE INCLUDES OFF-RAMPS THAT UNDERMINE THE PURPOSE OF THE CLEAN WATER ACT.

Despite Ecology having proposed only modest changes to a handful of human health water quality standards, the Proposed Rule contains new and expanded off-ramps and loopholes that would allow polluters many avenues of delaying and avoiding compliance with clean water standards. This includes all water quality standards, not just the few toxics standards that have become slightly more stringent. There is no factual or legal justification for any of Ecology's off-ramps, in particular the expanded variance loophole and compliance plans.

Finally, In addition to expanding harmful off-ramps, Ecology failed to look at any implementation rules that would reduce toxic pollution such as, for example,

ED_002991_00014508-00033

banning mixing zones (areas of waterbodies at the end of a polluter's pipe that are allowed to violate water quality standards) for bioaccumulative toxins that are a concern for human health as in EPA's requirements for the Great Lakes Initiative, 40 C.F.R. Pt. 132. Ecology should reexamine its mixing zone policy instead of focusing only on policies designed to allow polluters to escape compliance with protective standards.

A. Ecology's Variance Proposal is Not Compliant with the Clean Water Act and Lacks a Rationale.

1. Water quality standards drive many important components of the Clean Water Act and variances disrupt, rather than aid, implementation of the Act.

In general, variances appear to be a tool that has outlived its usefulness (if they were ever a legitimate application under the Clean Water Act). Ecology's justification for the use(s) of variances is inconsistent with the basic structure and requirements of the Clean Water Act and Waterkeepers Washington strongly question their proposed expanded use. Variances generally, and certainly the ones proposed here, appear to be nothing more than an off-ramp away from steadily improving water quality and meeting standards. Variances are not an "aid" to meeting water quality standards, but an excuse to avoid them. Their continued and expanded use makes no sense under the basic requirements of the Clean Water Act.

ED_002991_00014508-00034

As noted above, states must set water quality standards to protect designated uses and in many instances those standards are plainly not being met, Washington or elsewhere. Where water quality standards are not attained, a state must report this fact to EPA and the water is added to a § 303(d) or impaired water list. 33 U.S.C. § 1313(d). Once on the list, the water body is in the queue for preparation of a clean-up plan—a Total Maximum Daily Load ("TMDL") plan. States have a significant amount of time to prepare and finalize TMDLs.

A TMDL sets Waste Load Allocations ("WLAs") which assign specific load limits to specific point source discharges. In setting WLAs, a state has determined that these are the discharge limits necessary to return the water to meeting water quality standards (along with whatever reductions have been assigned to the Load Allocation ("LA")). If the WLAs do not meet that definition, then the TMDL is deficient and must be redone. Similarly, if the WLA and LA reductions are expected to take an extremely long time it could be argued that the TMDL is deficient because it is impossible to say with any reasonable assurance that the reductions will actually occur, a requirement in EPA's TMDL guidance. Rather, as work on a water body progresses, states reassess and readjust a TMDL as necessary. The water body remains "impaired" in status (and thereby subject to the TMDL clean up plan) until it achieves water quality standards. This is the straight-forward way that waters are to be cleaned up under the Clean Water Act

ED_002991_00014508-00035

structure adopted by Congress. The water quality standards set to protect the designated uses of the water serve as the goal and guiding principle toward which the TMDL and it implementation must always be geared. It serves no purpose and in fact wholly disrupts this structure, to gut the process by rewriting or eliminating the applicable water quality standard.

Point sources must have permits to discharge and those permits are to include effluent limitations and other provisions (for example compliance plans) to ensure that the permit is designed to not cause or contribute to violations of water quality standards. In a TMDL situation, a point source will have been assigned a wasteload allocation, a part of the TMDL with which point sources must comply. The point source's permit must include limits as necessary to comply with the wasteload allocation. Again, compliance plans are a method to help point sources reach compliance over the course of a permit. *See also below.*

2. *Ecology's justification for expanded variances lacks legal or factual support.*

Given this Clean Water Act structure, there is no reason to allow "variances" from water quality standards. Ecology argues that expanded variances are needed because updated variables in the water quality standards equation "will generally result in more protective criteria" that "may be difficult to meet." Proposed Rule Overview at 64. Obviously, this is simply false. As noted above and in Ecology's own materials, this rule results in very few changes to actual water quality

ED_002991_00014508-00036

standards and the changes that do occur are minimal; indeed, Ecology has determined that the new rule will not result in any cost to any polluter. *See,* CBA at 41. Further, Ecology's permitting and compliance off-ramps cover all pollutants, not just these new standards—a huge new loophole across the board for all polluters. There is no justification (and of course Ecology has provided none), for an expansion of off-ramps like variances for the unchanged toxics standards, much less for all pollutants.

Ecology also claims variances are desirable to provide *time* to make progress towards attaining standards.[11] This implies, incorrectly, that the Clean Water Act imposes some sort of penalty on a state for failing to achieve water quality standards by a certain date. Regrettably, it does not. A variance does not "create" additional time; whatever time is genuinely needed to meet water quality standards, that time will be taken regardless of whether the state adopts a variance. Rather a variance undoes the water quality standard that has already been determined necessary to protect designated uses of the water. The variance is

[11] Ecology also shockingly states that a variance—undoing the applicable water quality standard—might be used where it is "not known if a polluter can meet" the standard. Overview at 5. If a polluter cannot control pollution in its discharge as necessary to protect human health, then that discharge must not be permitted. It is astounding that Ecology would ever consider permitting that kind of discharge into any Washington water and would consider undoing an applicable water quality standard to allow it to happen. This is not an acceptable use of a variance under the law.

unnecessary and a misleading statement from the state about what the water quality should be to support designated uses.

Further, the purported "time" issue is not a genuine problem. Once a water is on the list, states have ample time to prepare a TMDL for EPA approval (and many states, including Washington, take far longer than is reasonably needed). This is not the timeline for completing the TMDL and bringing the water into compliance with standards. This is just the period of time a state has to propose and finalize the cleanup plan. During that time, states should be working aggressively with point sources, at a minimum, to ensure that permits are meeting the requirements of 40 C.F.R. § 122.44(d) which will make the TMDL process easier. Once the TMDL is approved by EPA, again regrettably, there is nothing in the Clean Water Act requiring that the TMDL goals be met in some set period of time. While it is true that a water body may not yet attain water quality standards even when the point sources implement their reductions, it simply means that the water will remain listed under 303(d) as impaired until standards are attained. That is how the law works. The claim that "long term" strategies necessitate variances is ridiculous. The "long term strategy" is the TMDL itself—the clean up plan to meet water quality standards, not weaken them. There is no need to weaken protections, even temporarily, for our nation's waters under the existing structure.

ED_002991_00014508-00038

To weaken water quality standards will simply confuse, exacerbate, perpetuate, (or possibly even create) an impairment situation by allowing more pollution over more time making ultimate cleanup lengthier and more difficult. It is self-defeating. This is the precise opposite of the Clean Water Act goals and requirements. If dischargers need time to employ new technologies or methods to meet stricter permit limits, the use of compliance plans and schedules ensures they use that time to install aggressive pollution controls, without weakening standards.

In fact, variances can work against the very things Ecology claims might require time. For example, if the problem is primarily a non-point source one, downgrading and weakening standards through variances provides a disincentive to moving quickly and aggressively to deal with water quality problems. Application of a loophole like variances simply derails the statutory process of identifying troubled bodies of water and getting to work on a plan for clean up. Waterkeepers Washington urge Ecology to rethink this failed and unnecessary policy and eliminate it from the proposed rule. At a minimum, Ecology should not be expanding the use of variances, but should be striving to narrow their use to very limited circumstances.

ED_002991_00014508-00039

B. If Used at All, Variances Must Be Significantly Narrowed and Circumscribed, Not Expanded, to Ensure They Do Not Defeat the Proper Function of the Clean Water Act.

Variances to water quality standards are currently allowed (but certainly not required) by EPA rule, but the rule is plain they must be used sparingly. 40 C.F.R. § 131.10. If Ecology insists on the continued use of variances (again, a choice that the Waterkeepers Washington think is not consistent with the requirements of the Clean Water Act), then certain additional tightening of the rule is necessary.

Ecology proposes to require a five-year interim review schedule. Proposed Rule at 16. This is unlawful under the Clean Water Act and EPA regulation. Variances are water quality standards in their own right and as such, must be approved by EPA and must be revisited every three years as part of the required triennial review to justify retention. 33 U.S.C. § 1313(c) and 40 C.F.R. § 131.10(g) and (h). *See also* EPA WQS Handbook, parts 2.7 and 2.8. Renewal of a variance must be fully-justified at each three-year mark as again, they are highly contrary to Clean Water Act requirements and purposes and should be carefully monitored and generally disfavored. Variances are required to be as short as possible and during the course of the variance, the discharger must regularly demonstrate that reasonable progress is being made to attain water quality standards. *Id.* This should require, in every permit where a variance is utilized, month monitoring and reporting of discharges and progress on reductions; and very

ED_002991_00014508-00040

specific interim milestones and deadlines for action and progress. (Again, however, it must be noted that this is really just describing a compliance plan and there does not appear to be any legal or factual support for anything other than a compliance plan—there is no need to "write down" the applicable water quality standard in order to give a discharge time to come into compliance with the applicable standard.) Variances should in most instances not extend beyond three years—at most, they might extend for the length of a single permit term with a review at the three-year mark.

Ecology is also proposing variances for entire stretches of water. Proposed Rule at 66. Again, Ecology's large expansion of this suspect concept is at odds with the Clean Water Act and federal regulation. Variances are not appropriate for anything other than portions (generally small) of water bodies and they pertain only to a *single discharge or possibly a very small group of geographically-proximate discharges* into that reach. Overview at 65. This is contrary to the most basic principles underlying the Clean Water Act and its implementing regulations. The scope of the variance must be both discharger- and water body-specific and it should also be pollutant-specific; it should extend for the shortest distance possible in the water body[12] and must be decided and supported with a full rulemaking

[12] This is basically consistent with EPA guidance now, but it is abused and Ecology will be well-served to make that clear in this rule. This also points up the fact that variances aren't really necessary—mixing zones do the same thing—another idea that is enormously abused and

ED_002991_00014508-00041

record, with public comment, on a case by case basis. Ecology also proposes to introduce, for the first time, multiple discharger variances. Ecology should be clear that there are no variances allowed for an entire water body or an entire region or state for any pollutant.

Certain conditions for a variance are more prone to abuse, such as where human conditions supposedly have permanently altered the water body such that it is not possible to meet standards or would be more environmentally damaging to attempt to do so or where it is it is economically prohibitive to return the water to meeting standards and Ecology must tighten those restrictions and not use them as an excuse to expand here. It is *never* appropriate to grant a variance where standards can be attained with reductions on point and nonpoint sources, including elimination of discharges. 40 C.F.R. §§ 131.10(d) and (g).

Consistent with the requirements of the Clean Water Act and EPA regulation, Ecology must specify in rule that a variance absolutely cannot be adopted if the water quality criterion can be achieved with either or a combination of technology-based requirements *and* aggressive permit requirements for best management practices such as low impact development for new development and retrofits for existing sources. Again, Ecology must not promulgate rules that are a

---

contrary to basic Clean Water Act principles. At least one of either mixing zones or variances—anti-Clean Water Act concepts—should be eliminated as together they ensure the impaired status of waters for decades.

ED_002991_00014508-00042

disincentive to consistent forward progress on improving water quality and meeting water quality standards.

Ecology's rule must make clear that a variance does not replace or otherwise alter the underlying designated use, including fish consumption.

Finally, the rule must specify that variances can *never* be an option for new or expanding discharges as such a concept is completely contrary to the requirements of the Clean Water Act and existing EPA regulation.

C. Compliance Schedules Should Not Be Expanded but Used Carefully to Promote and Enhance, Not Avoid, Compliance With the Clean Water Act.

Compliance schedules are recognized by EPA as an acceptable tool in permitting under some circumstances. 40 C.F.R. § 122.47. Ordinarily, compliance schedules are appropriate where an existing permittee needs time to comply with a new standard such as a new water quality standard or a new technology standard or both. Ecology's rules already provide for the use of compliance plans in permitting. The justification for compliance schedules is that compliance with a new standard cannot happen instantly, and so a plan may be created that includes interim, enforceable milestones with a firm date by which time permit requirements must be met. While EPA's regulations do not set a maximum allowable time for compliance schedules, they must ensure compliance "as soon as possible." *Id.* at § 122.47(a)(1). Case law has warned against compliance plans

ED_002991_00014508-00043

cannot exceed the five-year term of a permit. *Citizens for a Better Environment v. Union Oil Co. of Cal.*, 83 F.3d 1111, 1120 (9th Cir. 1996). Further, "schedule of compliance" as defined in the Clean Water Act plainly contemplates a period of time constrained by the four corners of a five-year permit. 33 U.S.C. § 1362(17). *See also*, 40 C.F.R. § 122.2.

Generally, the five-year term of a permit should be more than adequate to bring a facility into compliance—by adding the necessary new technology or entering into pre-treatment agreements or implementing process changes. While Ecology rules currently provide for two permit terms or a full decade—this length of time is unlikely to be necessary and as noted above, is contrary to existing law and policy. Ecology now seeks even further expansion and that proposal is simply unwarranted by the facts or the law. Proposed rule at 20. Anything more than a permit term is plainly just an attempt to avoid compliance as opposed to working diligently on addressing a pollutant discharge problem. If a discharger of pollutants is unable to come into compliance over the course of a decade, then that discharge should not be allowed. Dumping pollutants into our waterways is not a right. Under no other area of the law are violators allowed a decade to come into compliance with the law (for example worker or patient safety codes, tax laws, traffic codes) and then given an indefinite pass if it is "just too hard." Neither should it be acceptable with requirements for clean and healthy water.

ED_002991_00014508-00044

Ecology's primary justification for the elimination of the current (illegal because it is already too long) ten-year cap on compliance plans is its claim that it is required to do so by statute. *See* Overview at 59 (citing RCW 90.48.605). The Washington Legislature cannot dictate action contrary to the requirements of the Clean Water Act. Therefore, either the cited statute need not be read so expansively or, if that is indeed the intent, it is in conflict with federal law and must give way under basic principles of federalism.

Given that Ecology's only two justifications for an extreme expansion of compliance plans (basically "noncompliance plans") fail on the facts and the law because the new standards will have no on the ground effects and the state legislature cannot override federal law, Ecology should withdraw the proposal for expanded compliance plans.

D. Intake Credits Must Be More Carefully Tailored to Specific Waterbody Circumstances.

For the first time, Ecology in the Proposed Rule would allow intake credits. Proposed Rule at 16-18. The intake credits system "allows permitting authorities to conclude that the return of unaltered intake water pollutants to the same body of water under identified circumstances does not cause, have the reasonable potential to cause, or contribute to an exceedance above water quality standards." Proposed Rule Overview at 53. In other words, intake credits allow dischargers to discharge

ED_002991_00014508-00045

water that violates ordinarily-applicable limits if the discharger has not added pollutants to the water.

Intake credits are a particularly problematic concept for toxins such as those at issue in this rulemaking. Many chemicals for which such exceptions will be sought are for chemicals that accumulate in fish tissue and water over time such that even small additions are harmful. Allowing intake credits could weaken the ability to rid Washington's waters of these dangerous pollutants and would contribute to and/or perpetuate the death by a thousand cuts problem of bioaccumulation that Washington is currently experiencing with these pollutants.

If intake credits will be included in the rules, Ecology must strengthen the rules to protect against abuse and the bioaccumulation problem. Ecology's record for this rulemaking demonstrates that industry complains toxins are difficult to measure and detect in their discharge in the small amounts dictated by standards and that is why an intake credit is necessary. Close inspection of this rationale shows a lack of logic in then applying intake credits in anything other than a very tightly-controlled manner. If these toxins are indeed so difficult to discern, it is not then clear to Waterkeepers Washington how industry and Ecology think they will be able to discern whether the polluter is adding to the problem. Many small, "undetectable" amounts appear later as a violation of standards downstream, and as a huge bioaccumulation problem at the mouth of the Columbia, the Duwamish, and

ED_002991_00014508-00046

in Puget Sound. This is unacceptable and simply perpetuates the current problem. Ecology should impose strict laboratory and testing requirements on any discharger seeking an intake credit and ensure that monitoring occurs frequently with full public disclosure. Further, permits should be written with no-detect limits such that as laboratory methods improve at detection, the amounts of these toxic pollutants is steadily pushed downward—the plain intent and requirement of the Clean Water Act. Any permit allowing an intake credit must strictly specific testing at the point of intake to determine the background level of the subject pollutant and testing again at the point of discharge (in the pipe or facility, not once it hits the water) and any increase in the pollutant must be considered a permit violation. Finally, Ecology's intake credit must be pollutant, waterbody, and discharger specific—anything more broad and loosely-regulated will simply be subject to abuse and will be nothing more than a permit to perpetuate pollution.

V. THE DEIS IS INADEQUATE IN ITS FAILURE TO CONSIDER REASONABLE ALTERNATIVES.

Ecology failed to consider and evaluate numerous important alternatives, rendering the DEIS inadequate. For example, Ecology entirely failed to consider any fish consumption rate higher than 175 g/day, even though numerous studies show fish consumption rates well in excess of that rate. DEIS at 18. Nor did Ecology consider a cancer risk rate of $1x10^{-6}$ with the other proposed changes, i.e. body weight and fish consumption rate. *Id.* Instead, Ecology briefly mentioned

adopting Oregon's standards, but those criteria would not be the same as holding all of Ecology's proposals constant and using a $1x10^{-6}$ cancer risk rate. *Id.* Ecology also failed to consider maintaining a 70 kg body weight or increasing the life expectancy used in its calculation and how those changes would affect the chosen proposal. Lastly, Ecology unacceptably limited its comparison of the alternatives it did present, providing only one paragraph on "usability" and one on "environmental protection." *Id.* at 19. Yet in the tables presented, the qualitative ratings of alternatives 3 and 4 are the same, but there is essentially no explanation as to why one was selected over other. *Id.*

CONCLUSION

The net cumulative effect of Ecology's proposed rulemaking is to write itself and polluters out of the Clean Water Act. First, Ecology manipulates the water quality standards equation and methodology multiple ways to avoid actually protecting the designated use of fishing and eating fish and shellfish for residents of the state, the basic requirement for setting standards under the Act. As Ecology acknowledges, the rule it is proposing will have no actual effect on water quality. Then, Ecology excuses compliance with those inadequate standards for polluters—and for all water quality standards—by proposing to allow variances from water quality standards for an indefinite period of time, potentially decades. On top of dumbing down the standards with lengthy variances, Ecology will write

ED_002991_00014508-00048

compliance plans for polluters, again of indefinite length and ultimately proposes to allow polluters to give up at some point in the future. And of course, Ecology will retain options for polluters on top of variances and compliance plans such as "mixing zones"—areas of a waterbody at the end of a polluters' pipes where water quality standards can be violated permanently without even needing a plan to come into compliance. With these proposed rules, Ecology has effectively written away the basic water quality protections of the Clean Water Act.

Ecology should not settle for this outcome. Ecology must go back to the drawing board and propose a fish consumption rate that is in-line with tribal survey data and that will ensure strong protections for the highest fish consuming populations in the state. Likewise, Ecology should not use a higher cancer risk rate to undo the step forward in a more protective and accurate fish consumption rate and Ecology must adopt EPA's best-science recommendations for all components of the standards equation. The current proposal includes unacceptable and arbitrary games with math that will not result in on the ground protections. Lastly, Ecology should abandon plans to expand existing loopholes and off-ramps, especially where Ecology has acknowledged that its new rules are unlikely to change anything in practice for polluters. We reiterate our request that Ecology abandon its current efforts to tinker with the math to reach less-protective, industry-appeasing results and put forth scientifically supported water quality

ED_002991_00014508-00049

standards that protect the people who eat fish and shellfish from Washington's waters.

Respectfully submitted this 23rd day of March, 2015.

Earthjustice

Janette Brimmer
Matthew Baca

On behalf of :

Puget Soundkeeper Alliance
Columbia Riverkeeper
Spokane Riverkeeper
North Sound Baykeeper
Pacific Coast Federation of Fishermen's Associations
Institute for Fisheries Resources

ED_002991_00014508-00050