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Testimony before

The Senate Committee on Health Care

Oregon State Capitol

900 Court Street NE, Room 453, Salem, Oregon 97301

Public Hearing - HB 4122 A: Would require labeling of genetically engineered fish sold or offered for sale for human consumption.

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Thank you, Chairman Anderson, and Members of the Committee, for the opportunity to testify before you today.

Proponents of HB 4122 A have cited several concerns for the health of wild salmon populations as justification for this legislation. I am completely in accord with their desire to safeguard the health of our wild salmon stocks. They are a significant economic asset and a cultural treasure of international importance. In my opinion, it should be a high priority of state and federal policy to protect and sustain them for future generations. Unfortunately, this legislation would undermine such efforts, and thus I urge you to reject it.

Wild salmon populations face many threats. We have a good idea as to what those threats are.[1] At the top of the list is the degradation or destruction of spawning habitats in the upper reaches of their riverine ecosystems, followed closely by impediments to their access. Lower down on the list of threats, but still important, are a number of risks we have sometimes seen that originate in the practice of salmon farming, particularly in sea pens. These include the potential for disease or parasites to spread from farmed salmon, and the potential for escapees to compete either for food or breeding opportunities. It is these potential threats from farmed salmon that have been cited to justify the legislation before you today. But the truth is exactly opposite, as the AquAdvantage salmon that has been accused of posing these threats in fact delivers solutions that would protect wild salmon from them.

The farmed salmon targeted in this legislation has been improved so that it reaches market size in about half the time of conventionally farmed salmon, and on 10-20 percent less feed. If on the day the salmon was approved by FDA, November 19, 2015, the company began to produce eggs with the intent to raise and sell the fish in U.S. markets as soon as possible, it would take at least 18 months before they would have product available, and most likely longer. It is not feasible, therefore, that any would be available until sometime in late 2017, at the very earliest.

This fish will be grown in what the Monterrey Bay Aquarium Seafood Watch program calls "recirculating aquaculture systems." These are contained, concrete tanks in terrestrial locations, secured and isolated from any connection to waterways that could provide access to wild salmon habitat. It is for this reason that the Seafood Watch program, recognized around the world as setting the gold standard for sustainable fisheries, ranks salmon grown this way as a "Best Choice" – the only domestic, farmed Atlantic salmon to receive this designation.[2]

Critics have claimed that they might still escape. This is extremely unlikely, but perhaps not impossible. But if any of these salmon were to escape, and find their way to a waterway that could allow contact with wild salmon, the result would be no harm to the wild salmon. Not only are these Atlantic salmon generally unable to breed with the Chinook, Coho, Steelhead, and others of the seven species native to the northern Pacific, they are also sterile. They possess neither the mating behaviors required to breed, nor the physiological capability to reproduce even with fertile members of their own species. They also lack the behaviors required for survival in the wild, and should they manage the non-trivial task of

escaping, they would be far more likely to be killed and eaten by predators than to survive in the wild. If they survived for any length of time they would be certain to starve to death in their first winter, because unlike wild salmon, which cease to grow in the colder months when food is absent, these salmon must eat constantly to sustain the growth rates that allow them to reach market size in half the time of conventionally farmed salmon.

If all existing sea pens were dedicated to growing these AquAdvantage salmon, their sterility and reproductive incompetence would result in a dramatic reduction in the present level of risk wild salmon face today. But unfortunately for wild salmon, the recent FDA approval limits them (at the company's request) to be grown in only two facilities: one on Prince Edward Island in Canada's Atlantic Maritime Provinces, and the other in the highlands of central Panama. The odds of any escapees are low – in 25 years there have been none. The odds of an escapee making its way to Oregon waters are infinitesimal. There is no hazard here.

With regard to food labels, FDA has had in place for decades an ironclad requirement that all food imported into and/or sold in the United States must be safe, with criminal penalties attached to any violations. The FDA has also had in place for decades a legal requirement that food labels must convey all material information relevant to health, safety or nutritional value in a way that is accurate, informative, and not misleading. All these conditions apply to this salmon. Further, FDA has found that in regards to all characteristics relevant to health, safety or nutrition, this salmon is indistinguishable from other salmon: it is a healthful and nutritious food that nutritionists advise us to eat more of. FDA has therefore concluded no special label is justified.

Some claim this creates a risk that consumers might mistake it for wild salmon and buy something other than what they expect. But given that most sales of wild salmon are conspicuously marked with labels announcing "wild" this seems unlikely, and the legislative remedy here proposed inefficient. Except for the fact that it is already almost universally done, would it not make more sense to mandate wild salmon be labeled wild than to demand a label for AquAdvantage salmon its opponents have publicly shown they intend to use to mislead and deceive consumers?

No other fish in the history of aquaculture has been subjected to more lengthy, rigorous, and detailed scrutiny. U.S. regulatory agencies, led by the Food and Drug Administration, have spent more than two decades in this process. Not only has every legitimate question been considered in detail, but so also a host of imaginative, speculative, and fanciful scenarios have been examined. There have been numerous opportunities for public review and comment, and the entire exercise has taken place under the Notice and Comment provisions of the Administrative Procedure Act, and fully documented in the public record.[3]

In addition to the clear federal preemption flowing from Article 1, Section 8, clause 3 of the Constitution, the "interstate commerce clause," affirmed through substantial court precedent, Congress is presently moving on further legislative measures at the federal level designed explicitly to preempt and avoid measures like that before you, with the intention of preventing exactly the sort of patchwork of confusing and redundant State level requirements to which it would unhelpfully contribute.[4]

The facts in the public record show clearly that the concerns driving this legislation are without merit or foundation. It should be set aside.

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[1] Richard N. Williams, "Return to the River: Restoring Salmon to the Columbia River," Elsevier Academic Press, San Francisco, 2006, 699pp., ISBN 13: 978-0-12-088414-8.

[2] Monterey Bay Aquarium Seafood Watch, Ranking of Domestic Atlantic Salmon, http://www.seafoodwatch.org/seafood-recommendations/groups/salmon?type=atlantic&location=domestic.

[3] U.S. Food and Drug Administration, Animal and Veterinary, AquAdvantage Salmon, 19 November 2015, http://www.fda.gov/AnimalVeterinary/DevelopmentApprovalProcess/GeneticEngineering/GeneticallyEngineeredAnimals/ucm280853.htm.

[4] Lydia Wheeler, "GOP senator unveils bill to block state GMO label laws," The Hill, February 20, 2016, http://thehill.com/regulation/270140-gop-senator-unveils-bill-to-block-state-gmo-label-laws; Wade H. Hargrove, III, Deputy Attorney General of Hawaii, Letter to the Honorable Rosalyn H. Baker, March 12, 2013, "Re: Your inquiry dated February 28, 2012 , Regarding H.B. No. 174, H.D. 2 ("HB 174") – Genetically Engineered Organism; Produce; Labeling; Import," at http://docslide.us/documents/attorney-generals-opinion-letter-on-gmo-labeling-bill.html.