

Testimony HOUSE BILL 3441

House Committee on Agriculture and Natural Resources

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I appreciate the opportunity to provide some background concerning the Oregon Hatchery Research Center as well as express some confusion regarding this bill. While I am testifying regarding my personal beliefs, I have a strong professional background in the area of fish biology and hatchery science, with nearly 40 years' experience in this area on the faculty at OSU and as a Senior Scientist with the U.S. Geological Survey. My prior experience was with the U.S. Fish and Wildlife Service and serving on the faculty of Virginia Polytechnic Institute and State University. Much of my life has been devoted to the study of aquaculture, fish in the wild, and how to conduct experiments. I can see that many elements of the bill are well intentioned but could benefit from knowledgeable input.

PERCEPTION OF OSU "VIEW" ON AQUACULTURE IS INACCURATE--I've heard that some believe that there is a bias at OSU against hatcheries and/or hatchery fish. This is clearly not the case, and I am confused as to where this perception came from. I have also never heard anyone associated with the OHRC express anything negative about hatcheries. Yes, there are results stemming from research conducted at OSU that suggests negative effects that hatchery fish may have on wild populations. But these findings are what they are; having disagreements with them is fine. Science is about checking contrary opinions. Applied science is about finding solutions to problems. OSU has been strongly involved as a partner with aquaculture, and the OHRC is doing research to resolve these issues relevant to fish husbandry.

The OSU Department of Fish and Wildlife is a world leader in the field of shellfish culture, having developed procedures practiced on our coast and around the world today. Two faculty members started commercial salmon ranching in our state, and my department hired a commercial aquaculturist to run one of our fish labs. On the personal front, I've worked with state, federal and private hatcheries my entire career. I've developed rearing density protocols, treatment for hatchery diseases, and spawning procedures, to name a few. Many of my nearly 300 scientific publications address topics relevant to public and commercial hatcheries. I served on the Editorial Board of Aquaculture, the leading scientific journal in the field of fish culture for ~20 years. I am a frequent invited speaker at local as well as international fish culture conferences. I have also served on the U.S. Fish and Wildlife Service's Hatchery Review Team tasked with assessing and improving federal hatchery operations in the Columbia Basin. I like to think that none of this has biased me or my colleagues against hatcheries.

MY QUALIFICATIONS CONCERNING COMMENTING ON THE OHRC--I feel particularly well qualified to provide background on the OHRC. I am in my third term serving on Oregon's Independent Multidisciplinary Science Team (IMST), as co-chair during much of this time. When ODFW came to the IMST to request guidance concerning construction and operation of what was to become the OHRC, I chaired a workshop that led to the design and operational plan for a facility that was expressly designed to serve the mission of the Center. Please recall that this was motivated at first by the

conviction that Oregon must devise its own homegrown response to listings of coho and other salmon species under the federal Endangered Species Act.

IMST WORKSHOP HELPED FORMULATE THE DESIGN AND OPERATION OF THE OHRC--The workshop included experts in science, experimental facilities, and conductance of government research. Participants included numerous OR state staff (including the governor's office), numerous departments OSU, scientists and managers from the Washington Department of Fish and Wildlife, faculty of the University of Washington, several federal scientists from the National Marine Fisheries Service (the agency responsible for salmon under the ESA), and representative from three consulting firms. The workshop led to a facility design and operation concept that in retrospect has proven to have been very successful. It included the recommendation that ODFW partner with OSU in the operation of the facility, both because of the expertise at the university and to ensure scientific credibility of the work. Hence, selection of a location for the facility was in part based on the fact that the OHRC would be 1 hour from the OSU main campus and 1 hour from the HMSC. The workshop also formulated research questions for the Center to address. Last, it suggested a governance structure and advisory committee with scientifically sound credentials.

THE OHRC HAS BEEN AN OPERATIONAL SUCCESS-- As judged by research productivity relevant to its mission, the OHRC has clearly been a success story. In addition, much of this research has been relevant to Oregon hatcheries in general. Just for example from studies in which I have been involved: The first, and now published, study done at the OHRC concerned transportation of hatchery fish. A second study proved that adult hatchery steelhead without reproductive capability would contribute to the recreational fishery as much as those that could spawn. Other ongoing studies are in partnership with the U.S. Fish and Wildlife Service and the USDA that have developed diets to meet specific hatchery needs. A completed study provided very important findings for recovery planning of ESA-listed stocks that estuaries are nearly as important as the ocean as sites of mortality of steelhead and likely other salmonids.

RESEARCH FUNDING IS BROUGHT IN BY THE SCIENTISTS AND IS OPPORTUNISTIC--Please recognize that the OHRC has had to be opportunistic about obtaining research funding. The nature of the funding obviously drives what research questions the Center could address. Other than some monies for operations, research at the Center has been conducted on extramural outside funding brought in by Center leadership and other researchers. This is money that comes into Oregon and the community mainly from the outside. The current draft of the bill would require the issuance of "requests for research proposals". Unless the legislature was to provide some funding to help conduct the work proposed, I do not understand why anyone with the ability to carry out such work would bother to submit a proposal.

OHRC PROVIDES OTHER BENEFITS--The OHRC also provides huge educational benefits. I see it in terms of university students, but I know that it serves K – 12 as well. It has also afforded a venue for the hosting of meetings. For example, I held a workshop there with researchers from around the world. Such gatherings obviously bring a significant amount of money into our state.

THE CURRENT OHRC ADVISOR BOARD ALREADY DOES EVERYTHING SUGGESTED FOR A BOARD IN THE BILL, AND MORE-- I wonder why given that the OHRC is doing what it was designed to do, this bill is suggesting a new governance system. I am unclear as to how a trade of an Advisory Committee with scientific credibility for governance board without one would improve operations. I am also unclear on what the bill proposes regarding the staffing of the Center, both in terms of support and scientific directorship. The Advisory Committee consists of members from the federal government, resource producers (agriculture, timber, gravel), local government, watershed councils, conservation, Education (K-121), sport fishing commercial fishing, public-at-large, and science-at-large. The membership of the Committee has scientific, resource or educational background or interest. One of the functions of the Advisory Committee is to help determine the science that is done at the center. The rigorous review process for scientists to follow who wish to propose research to be conducted at the OHRC is described on the Center's website

(<http://www.dfw.state.or.us/fish/OHRC/docs/2008/OHRCCallForResearch2008.pdf>). Essentially all of the studies that have been conducted there also have provided progress reports and final results to the Committee in a timely fashion for their input. The membership of the bill's proposed Board is based on special interest groups, not expertise—something that would not serve science well.

Regarding any OHRC Advisory Committee or board, OSU needs to be involved in any appointment process because it is an equal partner in the Center. Also, while the bill suggests that the Board meet twice per year, this number is insufficient given the amount of work involved and the need to provide timely review of proposals.

THERE IS NO ROOM IN SCIENCE FOR CENSORSHIP--The reason why the workshop that formulated the operational concept for the OHRC suggested an Advisory Committee rather than a controlling board is the strong belief that there is no room in science for censorship or even the perception of censorship. It is also my very strong personal belief that ultimately the decision regarding what science is to be done and how it is to be done needs to rest with the scientists themselves. My feeling is that the role of the Advisory Committee is to help them make an informed decision. This relates well to the fact that, other than the operational money that ODFW provides, the scientists bring the money with them to do their science. The present draft of the bill makes provision for censorship; that must be altered.

AN OHRC RESEARCH FUND IS A GREAT IDEA--I think that it is a great idea for the establishment of an "Oregon Hatchery Research Fund". It would be clearer if this section of the bill were to state that this fund is a separate entity from the operational funds for the Center that ODFW routinely provides and will continue to provide. This money from ODFW is critical to the function of the Center. It would be a simple thing for OSU to create such a research fund through one of its Foundation systems.

I appreciate your committee's attention to optimizing the function of the OHRC for Oregon-- I would leave you with the consideration "If it isn't broken, why fix it?" That would only lead to lost productivity and cost inefficiency. But perhaps there could be ways of making this highly productive center even more productive and efficient. I suggest that the bill call for a periodic review of all aspects of the OHRC, perhaps every six to ten years (this duration is suggested to encompass two life cycles of salmon or steelhead, thus covering long-term studies). Such a review should consider OHRC governance,

including performance of its advisory board, its science, its facilities, and other functions such as education and outreach. I believe that a bill requiring ODFW and OSU to conduct such a review would serve Oregonians well. It would have positive effects rather than the disruptive consequences that would result from certain aspects of the current draft of the bill.

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