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IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF OREGON
PORTLAND DIVISION

NATIVE FISH SOCIETY,
MCKENZIE FLYFISHERS,

Plaintiffs,

v.

Case No.: 3:12-cv-431-HA

SECOND DECLARATION OF
JAMES A. LICHATOWICH

NATIONAL MARINE FISHERIES
SERVICE, REBECCA BLANK, Acting
Secretary of Commerce, **WILLIAM STELLE,**
Regional Administrator, NMFS, **OREGON**
DEPARTMENT OF FISH & WILDLIFE,
ROY ELICKER, Director, ODFW,
BRUCE McINTOSH, Acting Fish
Division Administrator, ODFW, **CHRIS**
WHEATON, Northwest Region Manager,
ODFW,

Defendants.

I, James A. Lichatowich, declare the following matters are personally known to me and to which I am competent to testify under penalty of perjury of the laws of the United States:

1. My name is James A. Lichatowich. I am the same James A. Lichatowich who submitted a first declaration in this case. My qualifications are described in that declaration.

2. In Paragraph 29 of his declaration, Mr. Turner attributes this statement to me regarding the purpose of hatcheries: they were “designed to replace natural salmon sustaining ecosystems.” But that is not what I said. Here is the actual statement as it appears in my declaration: “*He[Spencer Baird] drew that conclusion before there was even the most basic understanding of the salmon’s biology and ecology or any evidence that hatcheries could replace natural salmon-sustaining ecosystems.*” Mr. Turner tried through his misquote to disagree with the idea that hatcheries were intended to replace natural salmon-sustaining ecosystems. In taking that position Mr. Turner takes a unique view of history, one that apparently only goes back to the 1970s.

3. Here’s my rebuttal. In 1875, individuals in the Pacific Northwest wrote to the US Fish Commissioner, Spencer Baird, and asked how they could protect the salmon canning industry and avoid subjecting Pacific salmon to the same fate as the depleted Atlantic salmon. In his response, which was published in the Oregonian on March 3, 1875, Baird correctly identified the problems facing salmon as overharvest, habitat degradation and dams. He went on to state that regulating fisheries and protecting habitat is very difficult and can create “ill feelings.” He recommended instead a small investment in hatcheries to maintain the supply of salmon and even increase it if that were desirable. It is clear that Baird was proposing the replacement of

natural production systems, which he believed could not be protected, with artificially propagated fish. Nine years later in a report of the U.S. Fish Commission, George Brown Goode reiterated Baird's recommendation with this, "Here the fish culturists comes in with the proposition' that it is cheaper to make fish so plenty by artificial means, that every fisherman may take all he can catch, than to enforce a code of protection laws.'" Goode went on to say that the aim of fish culture is to bring desirable species under human control. Clearly the original intent of fish culture was to replace natural production systems.

4. But if your view of history only goes back to the 1970s, this may not convince you. Here is what was said in 1977 about improvements in fish passage at dams and the use of hatcheries in the Snake River Mitigation Plan, "After the Snake River Mitigation Plan is approved by Congress, it seems possible that we can establish adult runs of both steelhead trout and salmon in far greater numbers than existed before (Ebel 1977)." Biologists believed it was possible to replace the natural salmon sustaining ecosystem in the lower Snake River with hatcheries and improved passage at the dams. The purpose of the mitigation hatcheries built in the 1940s to 1970s was to replace at least part of the salmon's natural production systems that were blocked or destroyed by dams.

5. Mr. Turner is correct that the goals of hatchery have changed in recent years. They are now being asked to assist recovery of of natural populations. But a look at hatcheries with a longer term view reveals that hatchery advocates have been very effective in ignoring the failure of hatcheries to meet their goals by reinventing their purpose over and over again for the past 130 years. Looking back over the history of hatcheries reminds me of the old saying, "if the only tool you have is a hammer every problem looks like a nail."

6. In his rebuttal to paragraph 18 of my declaration, Mr. Turner states that salmon and steelhead are malleable and cites two examples: the introduction of salmon to rivers in New Zealand and the U.S. Great Lakes. These are poor examples. The introduction of nonnative species into foreign ecosystems is not the way to defend the acclimatization of a hatchery stock in a river containing a listed population. Rather than cherry-pick examples from distant, foreign ecosystems, Mr. Turner should look at stock transfers in the Pacific Northwest. For example Reisenbichler examined the survival of coho salmon transplanted various distances from their natal stream to foreign streams in the Pacific Northwest. He found the relative recovery rate of coho salmon significantly declined as the distance from the home stream increased. That relationship helps explain this statement by Fedorenko and Shepord in their review of salmon transplant procedures:” Numerous transplant attempts involving Pacific salmon have been undertaken since the 1800s. These attempts, generally aimed at establishing natural self propagating runs in depleted or barren areas, have failed in most cases.“ Obviously Pacific salmon are not as malleable as Mr. Turner suggests. To treat them as though they are malleable as in the Sandy River spring Chinook hatchery program is a mistake, which could result in detrimental consequences to the wild spring Chinook population in the Sandy River.

7. Mr. Turner objects to my statement in paragraph 19 that the Sandy River Spring Chinook hatchery program is not biologically-based. I reached that conclusion in part because I cannot recall a single wild spring Chinook populations whose juvenile life history comes close to the convoluted one being imposed on the juvenile spring Chinook in the Sandy River hatchery program. This conclusion applies to the revised HGMP as well. As I stated in my first declaration, the convoluted rearing schedule for Sandy River Hatchery spring Chinook, is more like an industrial process than a biologically-based program.

8. Araki et al. 2008 does state that hatchery programs that use brood stocks derived from wild local fish do better in the wild than nonlocal stocks as Mr. Turner asserts in paragraph 32 of his declaration. But Mr. Turner did not include the additional statement from Araki that once local fish are taken into the hatchery they often perform worse than wild stocks. The spring Chinook hatchery stock in the Sandy River was derived from local, naturally produced fish beginning in 2002. From 2011 and beyond until the wild population becomes viable, no naturally produced spring Chinook will be used for hatchery production. Christie et al. 2011 found that in a single generation in the hatchery, steelhead can acquire traits that are beneficial in the hatchery but maladaptive in the wild. For the Sandy River spring Chinook, the isolated hatchery stock, even though originally derived from the wild could rapidly begin adapting to the hatchery environment and become less adapted to the natural habitat. This is especially worrisome given the convoluted juvenile rearing process. And it is true even for the revised HGMP. It is impossible to predict what changes the hatchery stock will undergo. But there should be enough concern that the possibility of problem shouldn't be simply dismissed by an assumption.

9. In his rebuttal to paragraph 31 of my declaration, Mr. Turner misinterprets what I actually said. I did not say there should be an explicit zero impacts threshold as Mr. Turner asserts. Here is what I said: "... use of the word minimize can be interpreted in two ways: The impact of some aspect of the hatchery operation on wild salmon and steelhead will be reduced to zero or so close to zero the difference is negligible, or it will be reduced not to zero, but relative to the level of tradeoffs (cost to wild salmon) that is deemed acceptable." Use of the word minimize is meaningless and transfers no useful information to the reader unless what is meant by the promise to minimize is explicitly defined. Clearly I was not trying to impose a zero threshold.

10. It is still my opinion that the Sandy River spring Chinook HGMP is seriously flawed and should not have been approved. The hatchery program for spring Chinook in the Sandy River should be suspended until a competent HGMP is prepared and approved. This is needed to prevent harm to the naturally produced spring Chinook in the Sandy River. To let the approval of the current HGMP stand will degrade a potentially useful tool into a hollow bureaucratic farce.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct.

DATED this 15th day of March 2013.

s/ James A. Lichatowich

James A. Lichatowich

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