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Pro Se

THE HONORABLE MICHAEL H. SIMON

UNITED STATES DISTRICT COURT
DISTRICT OF OREGON, PORTLAND DIVISION

AMERICAN RIVERS, et al.,

Plaintiffs,

and

STATE OF OREGON, et al.,

Intervenor-Plaintiffs,

v.

NATIONAL MARINE FISHERIES SERVICE, et al.,

Defendants,

and

PUBLIC POWER COUNCIL, et al.,

Intervenor-Defendants.

No. 3:01-cv-00640-SI

DECLARATION OF KENNETH BALCOMB III IN SUPPORT OF AMICUS CURIAE BRIEF OF JAMES WADDELL

I, KENNETH BALCOMB III, hereby state and declare as follows:

Education and Relevant Experience

1. I obtained my Bachelor's degree in Zoology in 1963 from UC Davis and soon after was employed by the US government as Field Biologist GS5-7, first in Eastern Pacific large whale research and later in Central Pacific marine bird research.
2. Whales have been the focus of my life since 1963.
3. During the Vietnam era, I was a commissioned US Navy pilot and oceanographic specialist. The Navy assigned me to be an operations officer for oceanographic work in the Pacific, with a specialty in underwater sound. I received commendations from the Chief of Naval Operations, and the Commander of Antisubmarine Warfare Forces Pacific for technical excellence and outstanding performance of my duties during a high threat situation, respectively.
4. After my time in the Navy, I did my graduate studies at UC Santa Cruz with Dr. Ken Norris, the world-famous marine mammal biologist.
5. While a graduate student, I conducted Humpback whale research in the North Atlantic from 1976 to 1985 with colleague Dr. Steve Katona and taught marine biology aboard r/v Regina Maris for Dr. George Nichols of ORES and Harvard University.
6. I am a pioneer in photo-identification of cetaceans and founder of Orca Survey (1976) -- a study of Pacific Northwest Southern Resident killer whales (also known as "orcas", the "Southern Residents", and "SRKWs").
7. I founded the non-profit Center for Whale Research in 1985 and serve as its volunteer Executive Director and as the Principal Investigator of Orca Survey on contract with the Northwest Fisheries Science Center ("NWFSC"), NOAA. I am a Charter Member of the international Society for Marine Mammalogy.

8. I can be considered a naturalist and a population scientist – a keen observer of natural phenomena and documenter of demographic information that I then correlate with status of other species and ecosystems. Attention to detail was my forte in the Navy and government service, and in spite of my advancing age I have still have some left.
9. I have personally observed whales, and, in particular, the Southern Residents for over 45 years.
10. My first job out of the Navy was working for the National Marine Mammal Laboratory under a federal contract to document the number of killer whales in Puget Sound, a task that my immediate boss on his deathbed recently told me he considered impossible at the time (April 1976). Nonetheless, by the end of October 1976, I determined that there were 70 Southern Residents left after about 50+ having been captured/removed primarily for sale to the entertainment industry (the accounting for those remaining was far better than those removed). I have documented virtually every birth and death in this SRKW population since then, and continue to do so. A federal court agreement citing our findings in late 1976 effectively banned killer whale captures henceforth in Washington State waters.
11. I also spent a lot of time observing the behavior and travels of the Southern Residents. Different pods were in particular geographic locations more frequently than others. I observed that in May – September, J pod was often in the Salish Sea, and K and L pods would come in episodically, roughly every fortnight. K and L pods clearly spent more time in the coastal waters than J pod, and they now spend almost all of the days of the year there.

12. We soon found that the SRKW's food supply was salmon, particularly Chinook. This was quickly apparent from a tight correlation with salmon catches by sport fishers, who largely fished for Chinook salmon. The number of fish caught in a particular area highly correlated with the number of days per week that the whales were present in said particular area. No fish, no blackfish.
13. By 1990, prey remains and scat studies by our team in collaboration with DFO and NMFS at the entrance of the strait of Juna De Fuca and inside Puget Sound confirmed that the SRKWs were primarily eating adult Chinook salmon. Chinook were at least 80-85% of their diet during May to September.
14. To figure out where and what they were eating the rest of the year, we asked people up and down the coast, from Alaska to California to report sightings of killer whales and take photographs. We received photographs from all along the coast that we were able to match with our photographs of the SRKWs to confirm their identification. It became clear that the SRKWs mostly stayed within a few to a dozen miles of shore, mostly in corridors of salmon, primarily Chinook. We recommended prey and scat studies of SRKW in coastal waters be conducted.
15. The National Marine Fisheries service subsequently conducted satellite tag studies of killer whales, in part based on this recommendation.
16. All of these observations and satellite studies further confirmed that the SRKWs spent a lot of time near the mouth of Columbia river, particularly in March, during the spawning time for the remnant Chinook returning to the Snake/Columbia river system.
17. Evidence of the strong connection between SRKWs and salmon continues. We are finding that where salmon are depleted, the whales are infrequently visiting those habitats

and their body condition is deteriorating. They are starving, or "nutritionally challenged" in Government jargon. This is now happening in all seasons, leading to high mortality.

18. All the SRKWs are connected to the abundance of Chinook salmon from the Columbia and Snake River system, but K and L pods -- the pods that spend most of their time along the coast -- are faring the worst, illustrating their close correlation with that system.

19. The total current SRKW population must catch a minimum equivalent of 1,400 twenty-pound salmon daily to sustain their needs; this means that the Southern Resident community needs to capture at least half a million adult salmon a year. If the salmon are of smaller size, more are required to provide equivalent prey biomass. For the population to grow to 140 whales, an allowance of one million adult salmon a year will be required.

20. Decline in prey abundance has forced the SRKW to "metabolize their blubber"—rather than the nutrients from the prey—which then "mobilizes" toxins which were stored in their fat. Increasing toxins in the orcas' system leads to a rise in reproductive failures and immunosuppression. In addition to these failures to flourish, decline in prey abundance and size is correlated with diminished SRKW body condition (peanut head – a reduction of nucchal fat), reduced growth rate of juveniles, reduced overall length at maturity, reduced social cohesion, and reduced survival in the SRKW population.

21. The SRKW were listed under the Endangered Species Act in 2005, citing our data, when the population consisted of 88 whales. Now—even after years of work to revitalize their numbers—the SRKW population size has fallen to a total of 73 whales (as of October 1, 2021). This decline has coincided with years of low salmon abundance.

22. Unfortunately, the whales do not have a voice in this ongoing litigation. Politicians and bureaucrats have been fighting over the Snake River for decades, since before the dams

KWS

were built when I was still in high school and college. The fights were about political gain, and for economic reasons amongst shareholders. Meanwhile, the iconic species who face the greatest risk were minimized in the discussions, and the relevant biological science was being neglected, along with common sense. All animals need to eat, and salmon need rivers. Now, we are at serious risk of losing salmon and the SRKWs altogether, and it is very likely that we have driven the SRKW to biological extinction already with what we are witnessing as a demonstrated failure to reproduce.

23. This is why I became an advocate from breaching the lower Snake River dams. It is potentially the single most important measure we can take to get the SRKWs the quantity of food they need before it is too late.

24. Breaching the lower Snake River dams would open the gateway to a vast, 5,500-mile expanse of largely intact spawning and rearing stream that run through millions of acres of wilderness. This will subsequently revitalize salmon populations, leading to an increase in critical food source for the Southern Resident orcas.

25. Now is the time to act. Endless studies and political debates will not change the fact that the SRKWs are well along the road to biological extinction. We don't need more words. As I pointed out to Governor Inslee's Orca Task Force – whales don't eat words. They eat salmon. No matter how lofty our speech, if we are not recovering natural wild salmon, we are not recovering these whales. It is that simple. Salmon hatchery supplementation is clearly not working as these salmon stocks continue to decline. Give the salmon rivers!

26. How do we tell future generations that there are no more SRKWs. That we had a solution, but failed to implement it.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Executed on 19 October 2021.

KENNETH BALCOMB III