Testimony Before
Committee on Natural Resources
Concerning HR 1308
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Section 120 of the Marine Mammal Protection Act (MMPA) is appropriate as it is currently written to address the concern about pinniped predation of salmonids in the Columbia River. HB 1308 would unnecessarily eliminate the requirement to employ objective biological criteria to determine the level of predation impacts on salmonid Evolutionarily Significant Units (ESUs) and their component populations that should be required in order to justify removal actions. It contains no provisions for measuring the effect of removals on the survival or recovery of any affected ESU or their component spawning populations. Absent a scientifically credible measure of success there would be no way for either a management agency or the public to evaluate the effectiveness of removal actions. This considerably increases the likelihood that ineffective actions will be undertaken at public expense, a circumstance that has characterized salmon recovery efforts in the Columbia Basin for too long. Of equal concern, HB 1308 eliminates the opportunity for public review and comment that is fundamental to securing environmental justice in democracy.

There is little, if any, convincing evidence that predation by California sea lions and other pinnipeds on salmon and steelhead in the Columbia River is having a measurable effect on the survival or recovery of the ESA-listed spring/summer Chinook and steelhead ESU's that are at issue in the recent application for lethal removals under Section 120 of the MMPA. Estimated levels of predation are well below the levels of mortality on members of the listed ESUs due to dam passage and fisheries that are permitted by the National Marine Fisheries Service (NMFS) under past and current Biological Opinions (BiOps). In addition, high levels of predation on downstream migrating listed juvenile salmon by non-native warm water species, such as walleye, are unaddressed.

Tribal net fisheries in the mainstem of the Columbia River upstream of Bonneville Dam are permitted levels of incidental mortality on endangered and threatened spring and summer Chinook of between 5 and 17% depending on run size, while predations rates of California sea lions in the vicinity of Bonneville Dam have only approached 5% in one year (2007) and over the period from 2002 to 2012 have averaged 2.0% of the total numbers reaching Bonneville Dam. Moreover, the overwhelming numbers of salmon actually consumed by pinnipeds are hatchery fish that are not parts of the listed ESUs. To my knowledge, no effort has been made by federal, state, or tribal management agencies to estimate the numbers of ESA-listed salmon from each ESU that might be lost due to pinniped predation and to relate

such an estimate to the survival and recovery needs of the ESUs or their component spawning populations.

From a biological point of view, it makes no difference to the survival and recovery of an ESU what the source of mortality is. It is the *total* level of mortality that is critical. In order to evaluate sources of impacts and balance remedies, it is critical to identify the total level of mortality that each ESU and each key component population within each ESU can sustain and still retain viability and the potential for recovery. No biologically sound and cost-effective suite of recovery actions can be adequately identified or evaluated until this is done. And it is only with respect to this total mortality that meaning can be attached to the phrase "significant negative impact" in the context of Section 120 of the MMPA. As the responsible agency under the ESA, NMFS has failed to do identify these fundamental levels of total mortality for any of the ESUs.

We need to know, for each key spawning population within each ESA-listed ESU, the minimum number of wild spawners required to maintain the population above an acceptable level of risk of extinction, and what level of annual increase is needed in order to put and keep the ESU on a path to recovery. Ultimately, it is the impact of all of the factors causing mortality across the several life stages of salmon that affects this bottom line metric of numbers of wild spawners. Consequently, each potential source of mortality needs to be measured and evaluated in terms of how it affects the numbers of wild adults that succeed in making it onto their home spawning grounds.

In the case of any of the proposed lethal or non-lethal removals of California sea lions, the public should expect NMFS and the parties requesting a Section 120 permit to be able to tell, within reasonable levels of estimation accuracy, how many additional wild spawners will make it onto the spawning grounds as a result of the proposed removals. And, of course, the same must be done when other levels of mortality – especially fisheries and dam passage – are permitted.

The real challenges to accomplishing the recovery of Columbia basin salmon and steelhead have little to do with pinniped predation. Recovery requires a comprehensive and transparent evaluation of all of the H's: hydropower, hatcheries, harvest, and habitat. To date, tributary habitat has garnered most of the attention. It should come as no surprise to members of this Committee or the public at large that a tremendous amount of public and private dollars have been expended in the Columbia basin over the past several decades with little to show for it in terms of measurable increases in numbers of wild spawners. Millions of dollars have been thrown at tributary habitat improvement projects with little adequate monitoring funded that could evaluate the return on investment.

So-called "hatchery reform" has hardly begun in earnest on the ground. Most importantly, the public is owed a rigorous independent economic performance audit of all Columbia basin mitigation hatchery programs and facilities.

Tribal and non-tribal commercial harvest in the mainstem are a major problem, evidenced by the large percentages of incidental mortality on listed ESUs that NMFS has found it necessary to permit, despite talk from harvest managers about how well they are able to manage in-river fisheries through time and area restrictions. The problem is that the fishing gear – gill nets – are not selective and are not required to be. Yet, there are alternative selective fishing gears and techniques that are capable of capturing most upstream-migrating salmon and steelhead without harming them, removing hatchery fish that are the ostensible targets of the fisheries, and releasing wild salmon unharmed to continue their migration to their natal spawning grounds. Salmon recovery in the Columbia would be considerably furthered if public funds were expended in a systematic re-fitting of the fisheries with selective fishing gears, and helping fishers to develop marketing schemes touting the environmental benefits of sustainably-caught hatchery salmon that would secure a value-added return to the fishers. This is very low-hanging fruit!

A transition to selective fishing gears and fully mark-selective fisheries would also allow hatchery production to be re-balanced so that only enough fish are produced that could be caught plus escape to the hatcheries to perpetuate production, and reducing the numbers of stray hatchery fish on the wild spawning grounds to the very low levels recommended by recent hatchery reviews.

The public and the recovery of Columbia River salmon would be well served if the Committee would devote its considerable resources to furthering these kinds of genuine conservation efforts. The potential impact of pinniped predation on Columbia River salmon and steelhead is readily addressed under current regulations. There is no need to weaken fundamental provisions for sound scientific evidence and timely public involvement secured by extant statutes.

Thank you for your consideration of these comments.