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Testimony on H.R. 946— Endangered Salmon Predation Prevention Act
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Mr. Chairman and members of the Subcommittee, my name is Sharon Young and I am the Marine Issues Field Director for the Humane Society of the United States (HSUS) . On behalf of the HSUS and its more than 11 million members and constituents, I am grateful for the opportunity to present our views on H.R. 946, the Endangered Salmon Predation Prevention Act.

I am an appointed member of the Bonneville Dam Pinniped Task Force that has met pursuant to Section 120 of the Marine Mammal Protection Act (MMPA). As such, I am very familiar with the interactions between salmon and sea lions in the Columbia River and with the data and science surrounding salmon management and recovery.

Salmon stocks along the west coast struggle to recover from habitat loss and degradation and decades of poor management. Although sea lions and other marine mammals eat salmon, their impact pales in comparison to that of other unaddressed and ongoing impacts. These ongoing threats include competition with hatchery fish and with non-native introduced fish. Not only is predation a lesser impact than that of fisheries that incidentally kill the very same salmon stocks, but killing sea lions will not prevent their predation, as this bill's title contends. Expediting the approval of killing sea lions will not speed recovery. We fear, instead, that it will simply undermine important environmental legislation and lead to a form of vigilante response not seen since the passage of the Marine Mammal Protection Act in 1972.

Background on Predation in the Columbia River

No one disputes that sea lions eat salmon. For millennia sea lions have eaten salmon. Lewis and Clark documented their presence in their exploration of the Columbia River valley. Sea lions journeyed from the sea up to Celilo Falls, which was the first great hurdle for salmon prior to construction of any dams. It was at Celilo Falls that they, and the tribes, gathered to take advantage of the seasonal salmon runs. Celilo Falls was subsumed with the construction of Bonneville Dam, which is now the place where salmon queue as they move further inland to spawning grounds. Far from being an invasive species that is out of habitat, sea lions are merely returning to an area that was part of their original hunting ground.

Populations of a number of seals and sea lions were decimated in the wake of heavy hunting and overharvest. Only with the passage of the Marine Mammal Protection Act in 1972 did they begin to recover and gradually return to historic foraging areas. It may be that there are more sea lions off the coasts of Washington and Oregon now as their southern distribution shrinks in response to changes in oceanic temperatures and habitat suitability wrought by human-caused climate change; but they are not strangers to the Pacific Northwest.

The National Marine Fisheries Service (NMFS), the states of Oregon and Washington, and the Army Corps of Engineers (Army Corps) started documenting sea lion predation at Bonneville Dam almost 10 years ago. Since that time, the picture of predation is more varied than is implied in the findings of H.R. 946.

In a 2011 supplemental report that accompanied a renewed lethal taking authorization, the NMFS stated that the "overall abundance of Chinook and steelhead potentially impacted by pinniped predation [has] increased or stayed the same since the last status review was conducted prior to 2005." The spring run is not declining, as some have alleged. In fact, in each of the past three years, the run sizes have been near record. As of its final report for the season on May 27th 2011, the Army Corps concluded that this year's run was on track to be the third largest since 2002. Approximately 30 percent of that run is comprised of salmon listed as threatened or endangered under the Endangered Species Act (ESA); the remaining 70 percent of fish in the run is not ESA-listed.

In 2007, when the states first requested authorization to kill sea lions at the Dam, predation ranged from 0.4 to 4.2 percent of the spring salmon run. The Army Corps' observed predation rate at the Dam (which is an expanded estimate that attempts to account for some unseen predation) has steadily declined from 4.2 percent in 2007 when the states first applied to kill sea lions. This decline has occurred independently of lethal removal of sea lions. According to the Army Corps reports from Bonneville Dam, in 2008, the predation rate was 2.9 percent of the run; in 2009 it was 2.4 percent of the run; and in 2010 it was only 2.2 percent of the run. The Army Corps' May 27th preliminary wrap-up report for 2011 that summarized predation, states that an estimated 1.4 percent of the run was consumed. We point out that the government initially stated that the goal was to reduce predation to 1 percent of the run and that is indeed what it was this year—and this was a year in which no killing of sea lions took place.

Although the "findings" section of the bill avers that the percentage of salmon eaten has increased seven fold since 2000, in fact, although raw numbers consumed have increased, the percentage of the run consumed is the lowest since 2002.

The Real Problem Still Facing Salmon Recovery

Although sea lions eat them, predation by sea lions is among the least of the problems facing the fish in the Columbia and thus should be among the lowest priorities when taking action to assist recovery.

The causes of the decline of salmon are directly attributable to impacts resulting from what are often called the "Four H's": habitat, hatcheries, harvest and hydroelectric. As the findings in the bill point out, the government has likely spent a billion dollars or more to address some of these issues including habitat restoration and the deaths of countless salmon smolt and adults as they were attempting passage through the Dams.

But it would be incorrect to assume that the impacts of the "Four H's" that are the major factors retarding recovery are being adequately addressed. I will focus on impacts from hatcheries and harvest as two examples of significant threats to recovery that remain inadequately addressed.

Competition between wild run salmon and hatchery raised fish is well known. Research has documented competition for spawning habitat and food. It has also shown that hatchery-raised fish do not spawn as effectively as their native relatives. Nonetheless, most of these adverse impacts from the hatchery programs remain unaddressed. Since 2000, the U.S. Congress appropriated funds through the U.S. Fish and Wildlife Service to address hatchery reform. In doing so, Congress recognized that the system was in need of comprehensive reform because fish were being produced for harvest rather than for conservation of at-risk populations. Further, hatchery programs were not taking into account the effects of hatchery-spawned fish on naturally spawning populations. In fact, hatchery programs as currently operated constitute a barrier to recovery of the wild runs. In 2009 The Congressionally-established Hatchery Scientific Review Group, issued its Report to Congress on Columbia River Basin Hatchery Reform. It determined that both hatchery and harvest reforms were needed. They found that traditional hatchery practices are "not consistent with today's conservation principles and scientific knowledge." The Scientific Group recommended changes in current practices that would:

• Manage hatchery broodstocks to achieve proper genetic integration with, or segregation from, natural populations;
• Promote local adaptation of natural and hatchery populations
• Minimize adverse ecological interactions between hatchery- and natural-origin fish;
• Minimize effects of hatchery facilities on the ecosystem in which they operate; and
• Maximize the survival of hatchery fish.

Yet the vast majority of these recommendations remain unaddressed. Current hatchery practices continue to hamper optimal recovery of the salmon.

The Scientific Review Group also criticized the management of harvest. The Group pointed to problems with non-selective harvest of listed Columbia River Chinook both in the in-river fisheries and in ocean harvests from Alaska through Oregon. While harvest management has been touted by the NMFS and the states as a controllable impact on the ESA-listed fish, the Science Group criticized harvest practices. The NMFS' own reports acknowledge that in-river fisheries regularly exceed their quota for incidental killing of ESA-listed fish.

The Court-approved Joint Columbia River Management Report for Oregon and Washington stipulates flexible incidental harvest quotas for the listed fish in the spring run. Depending on the size of the run, this percentage of incidental harvest ranges from 5 percent of the run to 17 percent of the run. In its Supplemental Information report accompanying the 2011 authorization for lethal removal of sea lions, the NMFS acknowledged that in 2008, the in-river fisheries incidentally killed 16 percent of the listed fish in the spring run despite an allowance of incidental kill of 11 percent. In 2009, the in-river fisheries stayed within the allocation (taking 10.2 percent of the ESA listed run. In 2010, the fisheries were allocated 13% of the run in a mid-season adjustment, yet they killed 17 percent—substantially over the quota. At the same time in 2008, 2009 and 2010, the NMFS' estimate of the sea lion predation rates was less than 3 percent each year. Fisheries not only exceeded their allocations, but they took up to eight times as many ESA-listed fish as sea lions ate and yet this level of fishery impact was deemed by the states to be a "negligible" impact.

In addition to the unaddressed issues of harvest and hatchery reform, other unaddressed issues plague the recovery of salmon.

A 2010 report by NMFS scientists documented the threat posed by the continued stocking of non-native sport fish in the Columbia. These fish would be deemed a harmful, invasive species but for the fact that they are being deliberately introduced into the Columbia for the benefit of sport fishermen. The 2010 report by NMFS scientists found that non-native walleye alone eat up to three *million* juvenile salmon each year. The NMFS itself has recognized that this predation poses a serious threat to the salmon, likely exceeding the habitat impacts, and yet NMFS acknowledges that nothing is being done about it at this time.

The impact of sea lion predation on the spring run salmon pales in comparison to the significant impacts of these unaddressed human-related impacts that need to be remedied. Since they were first granted authorization to kill sea lions at Bonneville Dam, the states have increased the amount of salmon that fishermen are allowed to take each year as run sizes have increased, and the fishery quotas are far larger than the impact of observed predation. Prior to the authorization to kill sea lions, the incidental harvest quota for in-river fisheries was 9 percent and had risen to 13 percent by 2010. Moreover, fishermen in the river regularly exceed these incidental harvest quotas, with 17 percent of the run incidentally killed in fisheries in 2010, despite a quota of 13 percent. Poorly conceived, and repeatedly criticized, hatchery programs are interfering with recovery of wild run fish. The introduction of non-native fish such as bass and walleye continues to pose a serious threat to the survival of juvenile salmon even though increasing juvenile salmon survival rates is one of the top goals in the salmon recovery plan. Killing sea lions merely distracts from the fact that these more significant problems remain unaddressed.

Consequences of this Bill on the Marine Mammal Protection Act and the National Environmental Policy Act

Prior to 1972, it was open season on sea lions. The state of Oregon even paid a shooter to kill seals and sea lions in the Columbia. With the passage of the MMPA, intentional killing stopped. The moratorium on killing remained in place until 1994 when a narrow exception to its strictures was put in place. I was part of a Congressionally-sanctioned multi-stakeholder negotiating group that met from 1992-1994 to advise on amendments to the MMPA to address fishery interactions. Our group devised the framework for what became Section 120 of the MMPA that permitted pinnipeds to be killed in narrow circumstances.

Far from sanctioning a "cull" of sea lions, Section 120 required that a limited number of identifiable individuals be having a "significant negative impact" on the decline or recovery of listed salmonids. The issue of predation at the Ballard Locks in Washington was also incorporated because, even though not ESA-listed, the steelhead run had declined to only one hundred or so fish and a small handful of sea lions had developed a unique strategy to eat the fish. These steelhead were not harvested by fishermen and the proximal threat to the fish appeared to be the sea lion predation. In stark contrast to the situation at Ballard locks, the majority of fish that run in the Columbia River are not ESA-listed and even the listed runs

number in the tens of thousands of fish and are generally increasing in size. Fishing that results in the death of the listed fish is still permitted and the proximal threat is not predation.

When Congress put Section 120 in place, the predecessor of this sub-committee stated that it "recognize[d] that a variety of factors may be contributing to the declines of these stocks" and made it clear that "the current levels of protection afforded to seals and sea lions under the Act should not be lifted without first giving careful consideration to the other reasons for the decline." H.R. Rep. No. 103-439 (1994).

Section 120 was crafted to assure that any killing that might result would have a meaningful impact on the recovery of fish. It requires that pinniped predation be having a "significant negative impact" on recovery and that there be measurable criteria for judging success. Consistent with this narrow limitation on the take of marine mammals, Section 120 sets a forth specific procedure and a series of determinations the Secretary must make, before permitting the lethal take of pinnipeds to ensure the limited exception is adequately justified. In establishing these procedures, Congress made it clear that public input was an important and required part of the decision making process. The legislative history affirmed that "there are numerous opportunities for public comment and safeguards in this provision to ensure a careful and thoughtful deliberation of the request to remove a nuisance animal." 140 Cong. Rec.S.3288, S3300.

In contrast to the transparent and deliberative process that was put in place in 1994, HR 946 seeks to prevent public comment in all but a narrow window of time when the Secretary is considering whether or not non-lethal measures have been successful. Further, it would exempt killing sea lions from review under the National Environmental Policy Act (NEPA).

NEPA is America's "basic national charter for protection of the environment." 40 C.F.R. § 1500.1(a). NEPA has a critical purpose in "insur[ing] that environmental information is available to public officials and citizens before decisions are made and actions are taken," and "help[ing] public officials make decisions that are based on understanding of environmental consequences. *Id.* § 1500.1(b)-(c). "Public scrutiny [is] essential to implementing NEPA." *Id.* § 1500.1(b). NEPA not only requires that there be alternatives presented for consideration and that environmental consequences be considered, 42 U.S.C. § 4332(2)(C); 40 C.F.R § 1502.14, but that "[a]gencies shall ensure professional integrity, including scientific integrity, of the discussion and analyses in environmental statements." 40 C.F.R. § 1502.24.

In place of a process designed to be transparent and to encourage public involvement, this bill would allow decisions made with little or no public scrutiny and no consideration of either alternatives or consequences. However, it is just this type of action—a controversial wildlife management program with controversial environmental impacts—for which NEPA's implementing regulations mandate comprehensive environmental analysis. *Id.* § 1508.27(b)(4). The bill's simple assertion that Section 120 is "protracted and will not work" in a timely manner is hardly a sufficient reason to exempt the killing of otherwise federally protected marine mammals from the careful, deliberative procedures of NEPA and the MMPA. The deliberative process that should accompany such a dramatic change in how we manage and conserve marine mammals would be swept aside in the interest of speed. Are we to exempt projects, one after the

other, from NEPA simply because a sponsor considers environmental protection cumbersome? Are we to deny the public a right to involve itself in the management of a public trust resource comprised of some of the more beloved creatures in the marine world simply because involving them would slow the juggernaut?

The Section 120 process that Congress put in place in 1994 was transparent and deliberative for a reason that is no less relevant today. The public has a right to be involved. The issues at stake should see the light of day. As the House sub-Committee found in 1994, "the current levels of protection afforded to seals and sea lions under the Act should not be lifted without first giving careful consideration to the other reasons for the decline." H. Rep. No. 103-439. Indeed, the reasons for the decline or slow recovery of salmon in the Columbia are many and manifold but sea lion predation is one of the least of them.

The Evidence That This Bill Cannot Accomplish Its Objectives

Although HR 946 promises through its title to prevent predation, it cannot succeed. Only if the predation is confined to a few animals will eliminating them provide relief. In this case, as the bill acknowledges in its findings, there are approximately 1,000 sea lions in and around the Columbia River. It is not the case that only a few of them trouble themselves to swim 140 miles up to the Dam to eat fish, rather there is a constant flux of sea lions. The reports from the Army Corps that were provided to the Bonneville Dam task force document that between 30 percent and 70 percent of sea lions seen in any year have not been identified from a previous year. The Army Corps reports that there are 50-80 sea lions seen at the Dam in any given season yet, on average, 20 or fewer are there on any given day. They come and go.

The apparent futility of killing sea lions to halt predation was acknowledged by the National Marine Fisheries Service in their 2008 Environmental Assessment that stated that "it is likely that other sea lions would eventually replace the sea lions that were lethally removed" and went on to acknowledge that this made it difficult to "support a reliable estimate of any decrease in pinniped predation (and corresponding increase in salmonid survival)." [EA at 4-11]. The lethal program that was authorized has substantiated this prediction. As mentioned above, there are new sea lions coming and going constantly whether or not killing is taking place. As recently as 2010, the Army Corps reported up to 70 percent of sea lions seen at the Dam had not been previously identified, even as they were removing some sea lions, others arrived. In 2011, when no removals were taking place, the Army Corps reports that 28 of the 50 sea lions at the Dam (only around half of them) had been identified in previous years. Killing 85 sea lions will not prevent predation. It will not increase salmonid survival. It will simply kill sea lions to no purpose other than to satisfy the frustration of fishermen who would like to see the sea lion killed that stole what they see as "their" fish.

There are a number of unclarities in the bill. It does not specify a season in which killing would be confined. It does not confine killing to a previously identified individual. As written, any sea lion seen with a fish in its mouth could be shot by an individual with permission to kill. If killing begins early in the spring, it is highly likely that the entire authorization (85 sea lions) could be killed within a month or so, with no ability to address predation later in the season.

There may be another troubling side effect to this proposed legislation as well. Under the authority that NMFS granted in 2008, sea lions could be shot only from land or dam structures and only by state or Army Corps personnel. As proposed in this bill, shooting is not limited to the vicinity of the Dam. Further, not only could government employees dispatch sea lions, but tribal members from several tribes may be authorized to kill them as can other individuals who are contracted by one of the entities eligible to obtain permits. There is also no stipulation as to the distance from which sea lions can be shot or the platforms from which shooting can take place. It appears they could be shot from boats, a practice that the NMFS declined to authorize as providing too unstable a shooting platform to result in a predictable and humane death.

Further, given the difficulty of differentiating California from Steller sea lions that plagues most members of the public, what assurance is there that ESA-listed Steller sea lions are not also killed? This is particularly difficult to ascertain if carcass recovery is not mandated and personnel are shooting from a distance and not highly experienced in speciation.

This broadening of who may kill sea lions is likely to result in members of the public seeing what appear to be other members of the public in plain clothes shooting sea lions along the river from a river bank or from boats. They may be unaware that these shooters are not just other fishermen or hunters taking revenge on a sea lion that ate a fish, but have a special authorization that is unavailable to members of the general public. At one meeting of the Bonneville Dam task force an employee of an authorized Oregon marine mammal stranding response group stated that incidents of sea lion shootings had spiked since the NMFS authorized the states to kill sea lions. Media reports of dead shot sea lions in Washington and Oregon were more frequent as well in 2009 and 2010. If frustrated fishermen see others shooting sea lions in and along the river, it is highly likely that this will simply encourage more illegal killing. This presents an enforcement nightmare. It also harks back to vigilante days prior to 1972 when sea lions were shot at will and their bodies washed up along shorelines or floated to the sea even as salmon continued to decline from the real threats that remained unaddressed.

In Conclusion

In closing, we believe that this proposed legislation is not only unnecessary but potentially dangerous. It is unnecessary because the number of sea lions at the Dam is down. Their residency time at the Dam is reduced. The percentage of fish in the run that are eaten has declined each year for the past four years even as the percentage of the same fish killed by fishermen has risen. Moreover, other sources of salmon mortality, such as hydropower operations, ocean fisheries and the management of hatchery programs, have not been adequately addressed. In some cases, such as the stocking of non-indigenous fish for recreational purposes, the severe negative impacts to salmon have not been addressed at all. Sea lions come and go throughout the river throughout the season—it is not a situation in which there is only a handful of predators that can easily be eliminated and thus eliminate predation. As the lethal program of the past 3 years has shown, the percentage of predation-related salmon mortality and the size of salmon runs remain independent of sea lions were killed in a given year. Killing sea lions wastes time and money and lives and does little to benefit the salmon. But we are also concerned that this bill has less apparent dangers inherent in its language. It would sacrifice public involvement and transparency in the name of speed. It sets a dangerous precedent of exempting a

controversial wildlife management program from NEPA analysis. It also sets the stage for a return to the vigilante action against sea lions that existed prior to the 1972 passage of the MMPA when the states employed professional shooters in the river and members of the public killed seals and sea lions out of frustration or for sport. We oppose H.R. 946 and urge you to vote against it.