

Subcommittee on Water, Power and Oceans

John Fleming, Chairman

Hearing Memorandum

February 8, 2016

To: All Subcommittee on Water, Power and Oceans Members

From: Majority Committee Staff
Subcommittee on Water, Power and Oceans (x58331)

Subject: Oversight Hearing on *“The Costly Impacts of Predation and Conflicting Federal Statutes on Native and Endangered Fish Species.”*

On **Wednesday, February 10, 2016 at 10:00 a.m. in 1334 Longworth House Office Building**, the Water, Power and Oceans Subcommittee will hold a one-panel oversight hearing on *“The Costly Impacts of Predation and Conflicting Federal Statutes on Native and Endangered Fish Species.”*

Policy Overview:

- Federal, tribal, state and local governments and other entities have spent billions of dollars to recover fish species listed under the federal Endangered Species Act (ESA).
- Federal agencies have downplayed or ignored the importance of addressing the impacts of non-native species on fish recovery efforts on the West Coast and elsewhere.
- Some federal laws even encourage such predation, setting up statutory and regulatory conflicts and confusion that make recovery of these listed fish species much more difficult and continue to harm tribal communities and water and power users, among others.
- These conflicting laws also have resulted in perpetual litigation, which also interferes with federal, state and tribal efforts to effectively control predation on ESA-listed fish species.

Invited Witnesses *(listed in alphabetical order)*

Mr. Dan Ashe

Director

U.S. Fish and Wildlife Service

Washington, DC

Mr. Doug Demko

President

FishBio

Chico, California

Dr. Gary Grossman
Professor of Animal Ecology
University of Georgia
Athens, Georgia

The Honorable Leotis McCormack
Commissioner
Columbia River Inter-Tribal Fish Commission (CRITFC)
Lapwai, Idaho

Mr. Will Stelle
Administrator, West Coast Region
National Oceanic and Atmospheric Administration
U.S. Department of Commerce

Background

The United States West Coast is home to a number of native and endangered/threatened fish species. The latter includes, but is not limited to the Delta smelt, and 28 subpopulations of steelhead and salmon in California and the Pacific Northwest that have been listed under the ESA. Although some salmon runs have experienced record and near record returns in certain areas, many continue to face a number of “stressors” that complicate their survivability, recovery and eventual delisting.¹ The focus of this hearing is on one such major stressor: predation of these fish species on the West Coast. Subsequent hearings will focus on other stressors.

According to the National Marine Fisheries Service (NMFS), non-native species are the cause of endangerment for **48 percent** of the species listed under the federal ESA, while costing the domestic economy more than \$120 billion in 2005.² Caspian terns, the northern pikeminnow, cormorants, sea lions and striped bass are a few of the native and non-native predatory species on the West Coast that prey on salmon fisheries.

Striped bass, which are indigenous to the East Coast of the United States, were first introduced into California’s Sacramento-San Joaquin Bay-Delta (Bay-Delta) in 1879 for sport and recreational fishing purposes.³ This species poses a direct predatory threat to ESA-listed species in the Bay-Delta.⁴ The California Department of Fish and Wildlife (DFW) has estimated that striped bass may consume upwards of 25-50 percent of winter and spring run Chinook salmon.⁵ As part of the Federal Energy Regulatory Commission’s relicensing of Don Pedro Dam, a February 2013 report found that **93 percent** of juvenile salmon smolts perished on the Tuolumne River from striped bass predation.⁶ In its 2009 Recovery Plan for winter and spring run Chinook salmon, NMFS found predation of juvenile salmon to be one of the most specific stressors to these species and advocated for reducing the population of striped bass to “prevent

¹ https://www.usbr.gov/mp/cvo/OCAP/sep08_docs/Appendix_V.pdf

² http://www.nmfs.noaa.gov/stories/2014/07/7_21_14invasive_species_and_salmon.html

³ http://www.dfg.ca.gov/fish/Resources/Striped_Bass/History.asp

⁴ <http://www.prnewswire.com/news-releases/invasive-striped-bass-identified-as-major-threat-to-salmon-85535482.html>

⁵ <http://www.sustainabledelta.com/predation.html>

⁶ http://www.donpedro-relicensing.com/Documents/P-2299_DP_ISR_W-AR-07_PredationStdyRept_130117.pdf

extinction or to prevent the species from declining irreversibly.”⁷ The health of these protected species has a profound impact on the allocation of water for different purposes in California. Witnesses will discuss the effects of striped bass predation in the Bay-Delta.

Federal, tribal, state and local governments, water and power utilities and other organizations have made significant investments to recover listed species. However, rival federal and state protections for some of their predators have made it increasingly more difficult to achieve this goal. For example, the Central Valley Project Improvement Act’s⁸ (CVPIA or P.L. 102-575) statutory goal is to at least double the natural production of anadromous fish, which includes both striped bass and salmon under the law’s definition. Some have argued that this federal statutory goal of producing more non-native striped bass directly conflicts with recovering native endangered salmon under the federal ESA⁹.



Picture 1 Juvenile salmon removed from the stomach of a striped bass. Source: Hanson Environmental, Inc.

Moreover, in May 2010, NMFS sent a letter to California Fish and Game Commission’s (FGC) acknowledging striped bass predation as an impediment to salmon species recovery and requested the adoption of an amendment to the State’s striped bass fishing regulations that would eliminate bag and size limits for the species. FGC rejected the proposal.¹⁰ The State’s current recreational fishery restrictions include daily bag and possession limits of two fish and a size limit of eighteen inches.¹¹ Implementation of similar regulations to assist salmon recovery is not unprecedented. In 2013, the State of Washington implemented a policy that removed the daily catch limit for channel catfish and the daily catch and size limits for bass and walleye in portions of the Columbia and Snake Rivers to assist recovery efforts for listed salmon and steelhead.¹²

Similar conflicts arise when federal protections under the Marine Mammal Protection Act (MMPA) or the Migratory Bird Treaty Act (MBTA) are given to identified bird and mammal predators of listed species. The impacts of conflicting federal statutes is evident in the Lower Columbia River, which is home to multiple species of salmon listed under the ESA, including the Lower Columbia River chinook, steelhead, coho, and chum salmon.¹³ A 2013 ESA recovery plan for these species released by the National Oceanic and Atmospheric Administration (NOAA) cited marine mammal predation, specifically by sea lions, as a factor in the initial species listings and a hurdle to their recovery.¹⁴ In addition, testimony submitted by a NOAA

⁷ National Marine Fisheries Service. 2009. Public Draft Recovery Plan for the Evolutionary Significant Units of Sacramento River Winter-run Chinook Salmon and Central Valley Spring-run Chinook Salmon and the Distinct Population Segment of Central Valley Steelhead. Sacramento Protected Resources Division, October 2009.

⁸ http://www.usbr.gov/mp/cvpia/title_34/public_law_complete.html

⁹ <http://sustainabledelta.com/sites/default/files/DeltaWatch2015-2-2.pdf>

¹⁰ http://farmwater.org/images/stories/nmfs_stiped_bass_letter1.pdf?e0aaee

¹¹ <https://www.wildlife.ca.gov/Fishing/Ocean/Regulations/Fishing-Map/sf-bay#bass>

¹² <http://wdfw.wa.gov/news/mar0513a/>

¹³ [National Oceanic and Atmospheric Administration – Lower Columbia River Salmon and Steelhead ESA Recovery Plan Executive Summary. June 2013.](#)

¹⁴ [Id.](#)

official to the Committee on Natural Resources during the 113th Congress stated that “sea lion species continue to prey on fish stocks in the Columbia River basin including ESA protected salmon.”¹⁵

According to NOAA, California sea lions consumed approximately **46,000** salmonids, including ESA-listed salmon, within a quarter-mile of the Bonneville Dam between 2002 to 2015.¹⁶ Testimony from the Columbia River Inter-Tribal Fish Commission (CRITFC) affirmed that slightly over 30 percent of spring salmon passing through Bonneville Dam’s fish ladder have suffered some form of injury caused by marine mammals.¹⁷ These predators in the Lower Columbia River are protected by the MMPA, which prohibits, with certain exceptions, the lethal take of any marine mammal in United States waters and by United States citizens on the high seas.¹⁸



California sea lion swimming up a fish ladder.
Source: CRITFC

NOAA, the agency that implements and enforces the MMPA as well as the ESA, defines a “marine mammal” as any species of dolphin, porpoises, whales, seals, and sea lions.¹⁹ According to Mr. Guy Norman, Regional Director of Washington State’s Department of Fish and Wildlife:

“The effects of certain natural predators of salmon in the [Lower Columbia River] basin has increased dramatically from historic levels...due to increased numbers of predators due to various protection measures, including the Marine Mammal Protection Act...The U.S. California sea lion population has rebounded since the MMPA was enacted and is now estimated at nearly 310,000 animals.... Male California sea lions have learned a new behavior, with many of the animals swimming 145 miles up the Columbia River in the winter and spring to prey on threatened adult salmon...”²⁰

Section 120 of the MMPA allows States to apply to the U.S. Secretary of Commerce for intentional lethal taking of specific “individually identifiable” predator seals and sea lions that have a significant negative impact on ESA listed salmon stocks.²¹ However, many – including the States of Oregon, Washington, and Idaho,²² and Columbia River tribes – point to growing sea lion predation on salmon as evidence that the current federal application process needs an update. According to the Washington Department of Fish and Wildlife: “the conditions

¹⁵ [Submitted testimony of Rear Admiral Gerd Glang, Director of Office and Coast Survey for the National Oceanic and Atmospheric Administration, to the House Committee on Natural Resources, 113th Cong. Legislative Hearing on H.R. 1308, June 13, 2013.](#)

¹⁶ [Testimony of Barry Thom, West Coast Deputy Regional Administrator for National Marine Fisheries Service to the Committee on Natural Resource, 114th Congress, July 23 2015.](#)

¹⁷ [Testimony of The Honorable Virgil Lewis, Sr. on behalf of the Yakama Nation and CRITFC to the House Committee on Natural Resources on H.R. 946, June 14, 2011.](#)

¹⁸ <http://www.nmfs.noaa.gov/pr/laws/mmpa/>

¹⁹ <http://www.nmfs.noaa.gov/pr/species/mammals/>

²⁰ [Submitted testimony of Mr. Guy Norman, Regional Director - Washington Department of Fish and Wildlife, to the House Committee on Natural Resources, 113th Cong. Legislative Hearing on H.R. 1308, June 13, 2013.](#)

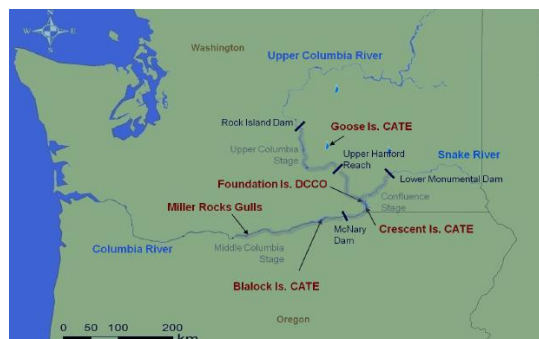
²¹ [16 U.S.C. 1389](#)

²² James Unsworth, Curt Melcher, Virgin Moore letter to the Northwest Congressional Delegation, July 1, 2015.

associated with the current requirements of Section 120 of the Marine Mammal Protection Act (MMPA) are challenging and expensive to implement, limited in scope, and legal challenges have slowed the progress in reducing impacts to salmon.”²³ A tribal witness will discuss sea lion and other predation on Columbia River salmon runs.

In an effort to reform this permit process and to stem the history of litigation challenges by certain groups surrounding issuance of these permits,²⁴ Congresswoman Jamie Herrera-Beutler (R-WA) and Congressman Kurt Schrader (D-OR) introduced H.R. 564, the “Endangered Salmon and Fisheries Predation Prevention Act of 2015.” This bipartisan bill clarifies the authority and streamlines the process afforded to the Secretary of Commerce under Section 120 of the MMPA to allow for lethal take of sea lion populations that are decimating ESA-listed salmon, steelhead and other non-listed species, such as white sturgeon, in the Lower Columbia River. The Subcommittee on Water, Power and Oceans held a legislative hearing on this bill in July 2015,²⁵ which included testimony from tribal and state entities in support of the bill. Some have criticized the bill’s National Environmental Policy Act (NEPA) exemption.²⁶ However, a Columbia River Inter-Tribal Fish Commission witness testified that “the [NEPA] exemption is necessary to give the fishery managers the ability to respond swiftly to avoid extraordinary delay that puts the species, our investments, and our livelihood at risk.”²⁷

Federal protections for predatory birds under the MBTA similarly frustrate recovery of ESA-listed fish species. Under the MBTA, it is illegal to take, possess or transport any migratory birds, their nests, or their eggs.²⁸ Caspian terns and cormorants prey upon millions of ESA-listed salmon smolts in the Columbia River watershed. According to the Army Corps of Engineers (Corps), predation on juvenile salmonids as they make their migration to the Pacific Ocean by these birds is a limiting factor in the species’ recovery under ESA.²⁹ NOAA estimates that cormorants eat an average of **12 million juvenile salmonids** annually, many of which are ESA-listed.³⁰ The Corps attempts to control this predation through population reduction efforts for these MBTA-protected species through special federal permits issued by the U.S. Fish and



Map of Caspian tern and cormorant colony sites along the Columbia River.

Source: U.S. Army Corps of Engineers

²³ [Submitted testimony of Mr. Guy Norman, Regional Director - Washington Department of Fish and Wildlife, to the House Committee on Natural Resources, 113th Cong. Legislative Hearing on H.R. 1308, June 13, 2013.](#)

²⁴ http://www.humanesociety.org/news/press_releases/2012/03/HSUS_file_suit_sea_lion_031912.html

²⁵ [Subcommittee on Water, Power and Oceans Legislative Hearing on H.R. 564, H.R. 1772, H.R. 2168, 114th Congress, July 23, 2015.](#)

²⁶ [Dissenting views on H.R. 1308;](#)

http://thomas.loc.gov/cgi-bin/cpquery/?&dbname=cp113&sid=cp113b23IJ&refer=&r_n=hr330.113&item=&&sel=TOC_20726&

²⁷ [Testimony of The Honorable Virgil Lewis, Sr. on behalf of the Yakama Nation and CRITFC to the House Committee on Natural Resources on H.R. 946, June 14, 2011.](#)

²⁸ <http://www.fws.gov/birds/policies-and-regulations/laws-legislations/migratory-bird-treaty-act.php>

²⁹ U.S. Army Corps of Engineers: *Benefits to Columbia River Anadromous Salmonids from Potential Reductions in Avian Predation on the Columbia River*, Donald Lyons et al, September 7, 2011.

³⁰ [Northwest Fishletter #351, November 2, 2015.](#)

Wildlife Service.³¹ In 2015, the Corps applied for a permit to lethally take well over half of the breeding pairs of cormorants that reside on East Sand Island.³² As with the years of litigation associated with efforts to control sea lion predators, third party litigants have threatened to stop these efforts as well.³³

Predators not only impact native and endangered fish species, but they also significantly impact American taxpayers, water and power ratepayers and tribes trying to sustain fisheries for food and sustenance. For example, many of the costs of predation control are ultimately passed on to the ratepayer and a listed species can have impacts on dams and reservoir operations. Such operations can include lost hydropower and decreased water diversions for irrigation and municipal water consumers. In fiscal year 2014, the total fish and wildlife costs including forgone revenue and power purchases for Bonneville Power Authority was reported to be **\$782.3 million**. Much of that cost involves ESA-listed salmon.³⁴ At a 2013 House Water and Power Subcommittee hearing, Mr. Scott Corwin, Executive Director of the Public Power Council which represents consumer-owned utilities in the Pacific Northwest, testified:

“These efforts cost around \$700 million per year (about 25 to 30 percent of the wholesale power cost), and some of the measures impose large constraints on the production of clean hydropower.”³⁵

While also experiencing financial burden from predation, tribes in the Columbia River Basin experience “unique and unmitigated damage” to ceremonial, subsistence, and commercial fishing.³⁶ According to CRITFC, the tribal salmon fishery revolves around the spring run, when sea lion predation is the greatest.³⁷ To further the burden on tribes, special predator take permits like those issues under Section 120 of the MMPA are not available as tribes are not an eligible entity, despite the real and direct impacts felt by predation.

The role predation plays in the recovery of ESA-listed species has led to several legislative proposals in both the House and Senate in the 114th Congress. H.R. 2898 (Rep. Valadao, R-CA), the west-wide drought relief bill that passed the House of Representatives in July 2015, contained a provision which created a non-federally financed program to remove non-native predator species of fish from the Stanislaus River in California.³⁸ A similar provision is in S. 1894 (Sen. Feinstein, D-CA).³⁹ Witnesses will discuss predation’s impacts on native and endangered fish species and ways to reduce such predation.

³¹ [Final EIS: Double-chested Cormorant Management Plan to Reduce Predation of Juvenile Salmonids in the Columbia River Estuary. U. S. Army Corps of Engineers, February 6, 2015.](#)

³² [Final EIS: Double-chested Cormorant Management Plan to Reduce Predation of Juvenile Salmonids in the Columbia River Estuary. U. S. Army Corps of Engineers, February 6, 2015.](#)

³³ [Northwest Fishletter #344, April 3, 2015.](#)

³⁴ <https://www.nwcouncil.org/media/7149305/2015-06.pdf>, p. 6

³⁵ Testimony of Mr. Scott Corwin before the House Water and Power Subcommittee, June 26, 2013, p. 5.

³⁶ Testimony of the Honorable Leotis McCormack, Nez Perce Tribe, on behalf of the Columbia River Inter-Tribal Fish Commission to the Subcommittee on Water, Power and Oceans, July 23, 2015.

³⁷ Id

³⁸ H.R. 2898, Sec. 203

³⁹ S. 1894, Sec. 202