

UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration NATIONAL MARINE FISHERIES SERVICE West Coast Region 1201 NE Lloyd, Blvd., Suite 1100 Portland, OR 97232

October 19, 2018

Refer to NMFS No: WCR-2018-10687

Chris Yates Assistant Regional Administrator Protected Resources Division 501 West Ocean Blvd, Suite 4200 Long Beach, CA 90802

Re: Endangered Species Act Section 7(a)(2) Concurrence Letter for the National Marine Fisheries Service's authorization pursuant to section 120 of the Marine Mammal Protection Act permitting the state of Oregon to lethally remove certain individually identifiable California sea lions that are having a significant negative impact on Upper Willamette River spring-run Chinook salmon and Upper Willamette River winter steelhead in the vicinity of Willamette Falls.

Dear Mr. Yates:

The National Marine Fisheries Service (NMFS) proposes to authorize, pursuant to section 120 of the Marine Mammal Protection Act (MMPA), the state of Oregon (state) to lethally remove certain individually identifiable California sea lions (CSL) that are having a significant negative impact on Upper Willamette River (UWR) spring-run Chinook salmon and UWR winter steelhead in the vicinity of Willamette Falls, and includes any funding, permitting, or support of active lethal and non-lethal activates, e.g., trapping, capture and marking of CSL in the vicinity of Willamette Falls under section 109(h) of the MMPA<sup>1</sup>. The NMFS determined that the proposed action is not likely to adversely affect (NLAA) species listed as threatened or endangered or critical habitat designated under the Endangered Species Act (ESA) pursuant to section 7(a)(2) of the ESA, implementing regulations at 50 CFR 402, and agency guidance for preparation of letters of concurrence.

We also reviewed the proposed action for potential effects on essential fish habitat (EFH) designated under the Magnuson-Stevens Fishery Conservation and Management Act (MSA). This review was pursuant to section 305(b) of the MSA, implementing regulations at 50 CFR 600.920, and agency guidance for use of the ESA consultation process to complete EFH consultation. In this case, we concluded that the action would not adversely affect EFH. Thus, consultation under the MSA is not required for this action.

<sup>&</sup>lt;sup>1</sup> Section 109(h)(1)(C) of the MMPA authorizes non-lethal removal of nuisance marine mammals by state and federal officials.

This letter underwent pre-dissemination review using standards for utility, integrity, and objectivity in compliance with applicable guidelines issued under the Data Quality Act (section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001, Public Law 106-554). The concurrence letter will be available through NMFS' Public Consultation Tracking System (PCTS) (https://pcts.nmfs.noaa.gov/pcts-web/homepage.pcts).<sup>2</sup> A complete record of this consultation is on file at NMFS Protected Resources Division Office, Portland, Oregon.

## **Proposed Action**

The proposed action is NMFS' approval of the states' application and authorization pursuant to section 120 of the MMPA permitting the state to lethally remove certain individually identifiable CSL that are having a significant negative impact on UWR spring-run Chinook salmon and UWR winter steelhead in the vicinity of Willamette Falls. Under the proposed action, these activities would occur annually for a period of five years, i.e., 2018 through 2023. The core period of operation would take place from November 1 through August 15 of any year, but removal of individually identifiable CSL, as proposed by the state in their application, and authorized by NMFS under section 120 of the MMPA, may occur at any time. The subject animals would be removed from the action area by (1) catching them in a trap (a floating dock-like structure),<sup>3</sup> and (2) either transferring them to a zoo or aquarium or killing them by lethal injection.

The estimated CSL population is 257,631 animals.<sup>4</sup> With authorization, the state would be allowed to remove, i.e., place in permanent captivity or kill, up to 1 percent of the CSL<sup>5</sup> potential biological removal (PBR) each year. The PBR is the maximum number of animals, not including natural mortalities, that may be removed from a marine mammal stock while allowing that stock to reach or maintain its optimum sustainable population.<sup>6</sup> The PBR for CSL is 9,200 animals. Therefore, 1 percent of the PBR would be 92 animals that could be removed each year by the state under the proposed action. This level of removal would not prevent the CSL stock from maintaining its optimum sustainable population.

# **Action Area**

For the purposes of this proposed action, program activities would take place in the Willamette River within the 2.5 mile long reach between Willamette Falls and the mouth of the Clackamas

<sup>&</sup>lt;sup>2</sup> Once on the PCTS homepage, use the following tracking number within the Quick Search column: WCR-2018-10687.

<sup>&</sup>lt;sup>3</sup> Similar to on-going pinniped management activities in the vicinity of Willamette Falls that the state has implemented under their MMPA section 109(h) authority. Section 109(h)(1)(C) of the MMPA authorizes non-lethal removal of nuisance marine mammals by state and Federal officials.

<sup>&</sup>lt;sup>4</sup> Laake et al. 2018. Population growth and status of California sea lions. Journal of Wildlife Mgt. DOI:10.1002/jwmg.21405.

<sup>&</sup>lt;sup>5</sup> California sea lions are not listed under the ESA, nor are they a depleted or strategic stock under the MMPA. <sup>6</sup> The term "potential biological removal level" (PBR) means the maximum number of animals, not including natural mortalities, that may be removed from a marine mammal stock while allowing that stock to reach or maintain its optimum sustainable population. The potential biological removal level is the product of the following factors: (A) The minimum population estimate of the stock, (B) One-half the maximum theoretical or estimated net productivity rate of the stock at a small population size, and (C) A recovery factor of between 0. 1 and 1. 0.

River (Figure 1). However, most program activities would take place between the primary CSL haul-out area and the boat launch near the northern end of Sportcraft Landing/Marina.



Figure 1. Map showing Willamette Falls to the mouth of the Clackamas River. Inset map shows location of Willamette Falls relative to Columbia River including Bonneville Dam and the haul-out area at the East Mooring Basin in Astoria.

Adult and juvenile (yearlings/sub-yearlings) UWR spring-run Chinook salmon and UWR winter steelhead occur in the action area, including the primary CSL haul-out area (Figure 1). However, the haul out area is highly industrialized and is primarily a migration corridor where individuals are unlikely to spend much time.

## Listed Salmonids and Critical Habitat

The NMFS determined that two ESA-listed species<sup>7</sup> – Upper Willamette River (UWR) springrun Chinook salmon and UWR winter steelhead spring-run Chinook salmon may be affected by the proposed action.

## Upper Willamette River Spring-run Chinook Salmon

The UWR Chinook salmon ESU was listed as threatened on March 24, 1999 (64 FR 14308). When NMFS re-examined the status of these fish in 2005, 2011, and 2016, we determined that they still warranted listing as threatened (70 FR 37160; 76 FR 50448; 81 FR 33468). The UWR Chinook salmon ESU includes naturally spawned spring-run Chinook salmon originating from the Clackamas River and from the Willamette River and its tributaries above Willamette Falls, and includes seven demographically independent populations of spring-run Chinook salmon in the UWR Chinook salmon ESU: Clackamas, Molalla, North Santiam, South Santiam, Calapooia, McKenzie, and the Middle Fork Willamette. Also, spring-run Chinook salmon from six artificial propagation programs: the McKenzie River Hatchery Program (ODFW Stock #23); Marion Forks Hatchery/North Fork Santiam River Program (ODFW Stock #21); South Santiam Hatchery Program (ODFW Stock #24) in the South Fork Santiam River and Molalla River; Willamette Hatchery Program (ODFW Stock #22); and the Clackamas Hatchery Program (ODFW Stock #19) (79 FR 20802).

*Abundance*—Abundance estimates of UWR spring-run Chinook salmon for the past 10 years is listed in Table 1.

Table 1. Annual fish passage counts of UWR	spring-run Chinook salmon at Willamett
Falls, 2008-2017.	

YEAR	ADULT	JACKS	MINIS	TOTAL
2008	14,151	521	9,973	14,672
2009	25,795	2,719	7,487	28,514
2010	65,293	1,766	4,567	67,059
2011	43,748	1,399	3,586	45,147
2012	35,899	1,314	3,877	37,213
2013	27,897	1,664	12,748	29,561
2014	30,071	1,598	6,840	31,669
2015	51,046	2,042	5,678	53,088
2016	30,317	2,161	3,727	32,478
2017	34,186	2,442	1,624	36,628

Critical habitat for UWR Chinook salmon was designated on September 2, 2005, 70 FR 52630).

<sup>&</sup>lt;sup>7</sup> The ESA defines a "species" to include any distinct population segment (DPS) of any species of vertebrate fish or wildlife. For Pacific salmon, NMFS considers an evolutionarily significant unit, or ESU, a "species" under the ESA.

#### Upper Willamette River Winter Steelhead

The UWR steelhead DPS was listed as a threatened species on August 18, 1997 (62 FR 43937). When NMFS re-examined the status of this species in 2006, 2011, and 2016 we determined that it still warranted listing as threatened (71 FR 834, 76 FR 50448). The UWR steelhead DPS includes all naturally spawned populations of winter-run steelhead in the Willamette River, Oregon, and include four demographically independent populations of steelhead: Molalla, North Santiam, South Santiam, and Calapooia. Run-timing typically takes place from November through May. No artificially propagated steelhead stocks are considered part of the listed species. The hatchery summer-run steelhead in the basin are an out-of-basin stock and not considered part of the DPS.

*Abundance*—Abundance estimates of UWR winter steelhead for the past 10 years is listed in Table 2.

YEAR	EARLY	LATE	TOTAL
2008	2,327	2,588	4,915
2009	703	2,110	2,813
2010	2,481	4,856	7,337
2011	2,771	4,670	7,441
2012	2,917	4,699	7,616
2013	1,322	3,622	4,944
2014	839	4,510	5,349
2015	1,905	2,603	4,508
2016	2,023	3,755	5,778
2017	279	543	822

Table 2. Annual fish passage counts of UWR winter steelhead at Willamette Falls, 2008-2017.

Critical habitat for UWR steelhead was designated on September 2, 2005 (70 FR 52630).

## **ENDANGERED SPECIES ACT**

## **Effects of the Action**

Under the ESA, "effects of the action" means the direct and indirect effects of an action on the listed species or critical habitat, together with the effects of other activities that are interrelated or interdependent with that action (50 CFR 402.02). The applicable standard to find that a proposed action is not likely to adversely affect listed species or critical habitat is that all of the effects of the action are expected to be discountable, insignificant, or completely beneficial. Beneficial effects are contemporaneous positive effects without any adverse effects to the species or critical habitat. Insignificant effects relate to the size of the impact and should never reach the scale where take occurs. Discountable effects are those extremely unlikely to occur.

The state currently operates two authorized floating traps<sup>8</sup> at Sportcraft Landing/Marine (Figure 1). The state does not have plans to add additional traps, but if they were to, they would add one more trap at this location. This trap would be built on the existing walkway. Therefore, there would be no additional over-water infrastructure associated with the proposed action. As such, the effects of the proposed action considered herein focus on effects generated from trapping and removal procedures and boat operations.

Trapping and removal procedures and boat operations would be similar to existing activities carried out by the state under their MMPA section 109(h) authority in the vicinity of Willamette Falls. The only change resulting from the proposed action is captured CSLs would not be returned to the water. There may also be a minor increase in activity associated with capturing and handling CSLs at the trap site if the trapping effort is increased. An increase in removals would likely result in a corresponding minor increase in incidences that produce sound levels (decibel – dB) and boat traffic. The activities at the traps would add, at most, two boat trips a day above the state's current use, and given that dozens to over a hundred boats can be in the area on any given day - and all adult and juvenile salmonids would be moving rapidly through in any case - the additional noise created by the proposed action is unlikely to be detectable above background. A background that includes boat use of the marina where the traps are located and other industrial sources in the area. Therefore, the effects of additional boat traffic associated with removal activities are likely to be insignificant.

For similar reasons, we expect increases in sound levels (dB) on UWR spring-run Chinook salmon and UWR winter steelhead critical habitat physical and biological features (PBFs) to be too low and short in duration to affect the conservation value of the PBF freshwater migration corridors in the action area. Therefore, we expect the likelihood of effects on critical habitat PBFs for UWR spring-run Chinook salmon and UWR winter steelhead would be too small to meaningfully measure, detect or evaluate, and therefore are likely to be insignificant.

*Estimated beneficial effects of the proposed action*—implementation of the proposed lethal removal program is expected to reduce pinniped predation on UWR spring-run Chinook salmon and UWR winter steelhead. Table 3 provides a summary of the benefits expected to be realized from the removal program in the Willamette River on UWR spring-run Chinook salmon and UWR winter steelhead.<sup>9</sup> The expected benefits analysis is based on CSL bioenergetics and empirical CSL residency data in the vicinity of Willamette Falls. Two predatory CSL removal scenarios were analyzed: (1) 0.5 percent of PBR, or currently 46 animals, and (2) at 1.0 percent of PBR, currently 92 animals.

<sup>&</sup>lt;sup>8</sup> The state operates the existing floating traps under their MMPA section 109(h) authority.

<sup>&</sup>lt;sup>9</sup> Email from Bryan Wright, Oregon Department of Fish and Wildlife, to Robert Anderson, NMFS, July 26, 2018.

n = 46 CSL					
Run	Chinook	Chinook	Steelhead	Steelhead	Total
	Hatchery	Wild Total	Summer	Winter Total	
	Total		Total		
Min	2,102	472	473	411	3,458
Max	4,833	1,085	1,088	945	7,592
n = 92 CSL					
Run	Chinook	Chinook	Steelhead	Steelhead	Total
	Hatchery	Wild Total	Summer	Winter Total	
	Total		Total		
Min	4,953	1,112	1,115	968	8,148
Max	8,646	1,941	1,947	1,690	14,224

Table 3. Range of CSL predation at Willamette Falls and expected benefits on salmon and steelhead stocks in the Willamette River under two CSL removal scenarios.

The estimated total number of listed adult salmonids that could be consumed by 46 CSL per year ranges from 843 to 2,030 fish. If 46 CSL were removed annually, the expected benefits to wild listed spring-run Chinook salmon would range from 472 to 1,085 fish per year, and the expected benefits to wild listed winter steelhead would range from 411 to 945 fish per year. These numbers represent approximately 1.3 to 3.0 percent of the average total return of listed spring-run Chinook salmon and 11.2 to 25.8 percent of the average total return of listed winter steelhead from 2014 to 2018 in the Willamette River, respectively.

The estimated total number of listed adult salmonids that could be consumed by 92 CSL per year ranges from 2,080 to 3,631 fish. If 92 CSL were removed annually, the expected benefits to wild spring-run Chinook salmon would range from 1,112 to 1,941 fish per year, and the expected benefits to wild listed winter steelhead would range from 968 to 1,690 fish per year. These numbers represent approximately 3.1 to 5.4 percent of the average total return of listed spring-run Chinook salmon and 26.5 to 46.2 percent of the average total return of wild listed winter steelhead from 2014 to 2018 in the Willamette River, respectively. Therefore, quantifiable effects of the proposed action are reasonably certain to be positive and beneficial to UWR spring-run Chinook salmon and UWR winter steelhead.

# Conclusion

Based on this analysis, NMFS has determined that the proposed action is not likely to adversely affect the subject listed species or their designated critical habitat.

## **Reinitiation of Consultation**

Reinitiation of consultation is required and shall be requested by NMFS, where discretionary Federal involvement or control over the action has been retained or is authorized by law and (1) new information reveals effects of the action that may affect listed species or critical habitat in a

manner or to an extent not previously considered; (2) the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this concurrence letter; or if (3) a new species is listed or critical habitat designated that may be affected by the identified action (50 CFR 402.16). This concludes the ESA portion of this consultation.

Please direct questions regarding this letter to Robert Anderson with the Protected Resources Division, Portland, Oregon at 503.231.2226.

Sincerely,

54 Barry A. Thom Regional Administrator

cu: Administrative File: 151416WCR2017PR00255