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## Western Environmental Law Center

Via Registered Mail and Email

December 19, 2018

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Re: Notice of Violations of the Endangered Species Act Related to Wildlife Services'  
Killing or Management of Beavers in California

Pursuant to Section 11(g) of the Endangered Species Act ("ESA"), 16 U.S.C. § 1540(g), the Environmental Protection Information Center ("EPIC") hereby respectfully provides notice that the Wildlife Services program within the U.S. Department of Agriculture Animal and Plant Health Inspection Service ("Wildlife Services") has violated and is in violation of Section 7 of the ESA, 16 U.S.C. § 1536, for failing to consult with the National Marine Fisheries Service ("NMFS") as to the effects on ESA-listed salmonids of Wildlife Services' killing or management

of beavers in California.

#### Notifier

EPIC is a nonprofit conservation group with more than 15,000 members and supporters. EPIC's mission is to promote the science-based protection and restoration of Northern California's wildlife and wild places.

#### Beavers in California

The North American beaver (*Castor canadensis*) is native to habitat from the taiga in Canada south to the northern deserts of Mexico, including in California. Beavers are nature's engineers, creating ponds and maintaining or restoring natural hydrological processes. Beavers create off channel habitat for salmonids, and their ponds can raise the water table, store spring runoff for late season release into streams, and cool the water downstream of beaver dams (Parker 1986, Pollock et al 2003). Beaver ponds have been shown to expand riparian forests and decrease erosion (Pollock et al 2007, Parker 1986). Beaver ponds slow high velocity stream flows and trap sediments behind dams, which speeds up the recovery rate of down-cut stream channels and reduces turbidity downstream (Naiman et al 1988). In a meta-analysis of more than 100 peer-reviewed research papers, scientists identified numerous positive impacts for salmonids from beavers (Kemp et al. 2012).

Beaver populations in California are currently estimated to range from three to ten percent of historic levels. Nonetheless, in northern California, beavers are present in at least the Smith River, Klamath River, Redwood Creek, Little River, Widow White Creek, Strawberry Creek, Mad River, and Eel River basins. (Lannan et al. 2013; Riverbend Sciences 2014). All of these river basins provide habitat for coho salmon, as well as other salmonids.

#### Beavers and ESA-Listed Salmonids

In 1997, NMFS listed coho salmon in the Southern Oregon/Northern California Coast ("SONCC") evolutionarily significant unit as threatened with extinction under the ESA. 62 Fed. Reg. 24,588 (May 6, 1997). NMFS identified degraded habitat as a primary factor in the decline of SONCC coho. *Id.* at 24,592. NMFS identified "beaver trapping" as one of the "major activities responsible for the decline of coho habitat." *Id.*

In 1999, NMFS designated critical habitat for SONCC coho. 64 Fed. Reg. 24,049 (May 5, 1999). Critical habitat encompasses all rivers (including estuarine areas and tributaries) between the Mattole River in California and the Elk River in Oregon that are accessible to SONCC coho. *Id.*

In 2014, NMFS issued a Recovery Plan for SONCC coho. 79 Fed. Reg. 58,750 (Sept. 30, 2014). NMFS found that "[u]nconstrained reaches of low gradient rivers provide complex slow water habitats, including side-channels, lakes, backwaters, alcoves, sloughs, and beaver ponds that are essential for juvenile salmonid survival and rearing success." Recovery Plan at 3-14 (citation omitted). NMFS noted that "[b]eaver ponds provide high quality winter and summer rearing habitat for coho salmon." *Id.* at 3-25. NMFS noted that "[t]he historical decline

in beaver (*Castor canadensis*) populations has [] contributed to lack of floodplain and channel structure.” *Id.* NMFS noted that “[t]he effect of decreased beaver abundance on coho populations was likely very significant.” *Id.* NMFS cited a study from the Stillaguamish River basin in Washington that compared current and estimated historical conditions in the basin and concluded that the loss of beaver ponds accounted for “most of the estimated 86 percent reduction in smolt production potential” of winter habitat for salmonids, and “most of the 61 percent reduction” of potential for summer habitat. *Id.*<sup>1</sup>

In its Recovery Plan, NMFS found that “[c]limate change poses a serious threat to the viability of SONCC coho salmon populations.” *Id.* at 3-45. NMFS noted that “Beechie et al. (2012) recommended restoring stream flow, re-connecting floodplains, and regrading incised channels as the best strategies to mitigate the anticipated effects of climate change on salmonids. Protecting beaver populations in watersheds vulnerable to climate change may help buffer some of the effects of climate change by reconnecting the floodplain, slowing and storing water in the basin, extending summer flows and restoring perennial flows to some streams.” *Id.* NMFS found that “[b]eaver restoration can be an effective solution for many types of climate related issues in aquatic and riparian ecosystems, and it is generally far less expensive than alternatives.” *Id.* (citations omitted).

#### Wildlife Services’ Actions

Each year, Wildlife Services kills hundreds of beavers in California, including beavers in habitat for SONCC coho and other ESA-listed salmonids. Data for 2017 alone indicates that Wildlife Services killed 956 beavers in California. [https://www.aphis.usda.gov/wildlife\\_damage/pdr/PDR-G\\_Report.php?fy=2016&fld=state&fld\\_val=CA](https://www.aphis.usda.gov/wildlife_damage/pdr/PDR-G_Report.php?fy=2016&fld=state&fld_val=CA) (read Nov. 24, 2018). Wildlife Services’ methods to kill beavers include firearms, body-gripping traps, foothold traps, and neck snares. *Id.*

#### ESA Consultation Requirement

Under Section 7 of the ESA, Wildlife Services must consult with NMFS if its actions “may affect” an ESA-listed species under NMFS’s jurisdiction, or adversely modify or destroy the species’ critical habitat. 16 U.S.C. § 1536(a)(2). The scope of agency actions subject to consultation encompass “all activities or programs of any kind authorized, funded, or carried out, in whole or in part, by Federal agencies.” 50 C.F.R. § 402.02. Wildlife Services is required to review its actions “at the earliest possible time” to determine whether they may affected listed species or critical habitat. 50 C.F.R. § 402.14(a).

The Ninth Circuit has held that “may affect” is “a ‘relatively low’ threshold for triggering

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<sup>1</sup> Similarly, one study in coastal Oregon found that coho fry were three times more abundant in beaver-created habitat than in pools created by other fluvial processes (Leidholt-Bruner et al. 1992). A separate study found that juvenile coho in coastal Oregon were most abundant in beaver ponds and alcoves during the winter (Nickelson et al. (1992).

consultation.” *Karuk Tribe of California v. U.S. Forest Service*, 681 F.3d 1006, 1027 (9th Cir. 2012) (en banc) (citation omitted). “Any possible effect, whether beneficial, benign, adverse or of an undetermined character triggers the requirement.” *Cal. ex rel. Lockyer v. U.S. Dep’t of Agric.*, 575 F.3d 999, 1018 (9th Cir. 2009) (quoting 51 Fed. Reg. 19,926, 19,949 (June 3, 1986) (emphasis omitted). A federal agency is not required to consult only where its action will have “no effect” on a listed species or its critical habitat.<sup>2</sup> Consultation is required so that Wildlife Services complies with its substantive duty to “insure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of [critical] habitat of such species.” 16 U.S.C. § 1536(a)(2).

Finally, during consultation, Wildlife Services is prohibited from making any irreversible or irretrievable commitment of resources that may foreclose the formulation or implementation of any reasonable and prudent alternative measures. 16 U.S.C. § 1536(d).

Wildlife Services’ management and killing of beavers in California may affect and are likely to adversely affect ESA-listed salmon and steelhead, including SONCC coho. However, Wildlife Services has unlawfully failed to consult with NFMS as to the effects of its actions on these species and their critical habitat. *Cf.* 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.14. Further, Wildlife Services has violated the ESA by allowing, authorizing, approving or undertaking the management and killing of beavers in habitat for ESA-listed salmonids in California. 16 U.S.C. § 1536(d). If these violations of law are not cured within sixty days, EPIC intends to file suit for declaratory and injunctive relief. 16 U.S.C. § 1540(g).

If you believe that any of the foregoing is inaccurate or otherwise would like to discuss this notice letter in the period before any lawsuit is filed, please contact me or Tom Wheeler of the EPIC at (707) 822-7711 or [tom@wildcalifornia.org](mailto:tom@wildcalifornia.org).

Sincerely,

Peter M. K. Frost  
Attorney for EPIC

#### Literature Cited.

Beechie et al. 2012. Restoring salmon habitat for a changing climate. *River Research and Applications*. doi: 10.1002/rra.2590.

Leidholt-Bruner et al. 1992. Beaver dam locations and their effects on distribution and abundance of coho fry in two coastal Oregon streams. *Northwest Science* 66: 218-223.

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<sup>2</sup> Effects determinations are based on the direct, indirect, and cumulative effects of the action when added to the environmental baseline and other interrelated and interdependent actions. 50 C.F.R. § 402.02 (definition of “effects of the action”).

Kemp, P.S. et al. 2012. Qualitative and quantitative effects of reintroduced beavers on stream fish. *Fish and Fisheries* 13: 158-181.

Naiman, R.J. et al. 1988. Alteration of North American Streams by Beaver. *Bioscience* 38: 753, 753-62.

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Parker, M. 1986. Beaver, water quality and riparian systems. Pages 88-94 in: *Proceedings of the Wyoming Water and Stream-side Zone Conference*. Wyoming Water Research Center, University of Wyoming, Laramie 1.

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USDA APHIS-Wildlife Services. 2008a. Environmental Assessment for Reducing Aquatic Mammal Damage in Washington, *available at* <https://www.aphis.usda.gov/regulations/pdfs/nepa/WA%20-%20Aquatic%20Mammal%20Damage%20Management%20EA.pdf>.

USDA APHIS-Wildlife Services. 2008b. FONSI/DN for Aquatic Mammal Damage Management in Washington State, *available at* <https://www.aphis.usda.gov/regulations/pdfs/nepa/WA%20-%20Aquatic%20Mammal%20Damage%20Management%20Decision.pdf>.