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Re: Notice of Violations of the Endangered Species Act and its Regulations Regarding APHIS-Wildlife Services' Beaver Killing and Dam Removal in California

On behalf of the Center for Biological Diversity, I hereby provide notice, pursuant to Section 11(g) of the Endangered Species Act (“ESA”), 16 U.S.C. § 1540(g), that the Wildlife Services program (within the U.S. Department of Agriculture Animal and Plant Health Inspection Service, hereinafter “APHIS-Wildlife Services”), the U.S. Fish and Wildlife Service (“FWS”), and National Marine Fisheries Service (“NMFS”) are in violation of Section 7 of the ESA, 16 U.S.C. § 1536, and the ESA’s consultation regulations, 50 C.F.R. Part 402.¹

Beavers are nature’s engineers, building dams and creating ponds used by and essential to a variety of rare wildlife species in California, including endangered species protected under the ESA. Scientists estimate that beaver populations are only 3 to 10 percent of their historical levels, but programs to kill beavers in California continue unabated. APHIS-Wildlife Services

¹ Collectively, FWS and NMFS are hereinafter referred to as the “Services.”

kills hundreds of beavers in California each year without analyzing impacts to endangered wildlife that use habitats created by beavers, including Chinook salmon, coho salmon, steelhead, southwestern willow flycatcher, tidewater goby, and Oregon spotted frog.

To address this problem, we intend to file a lawsuit challenging (1) APHIS-Wildlife Services' failure to ensure that the Wildlife Damage Management Program in California (the "Program")², including projects and activities that are authorized and implemented through the Program, is not likely to jeopardize the continued existence of listed fish and wildlife; (2) APHIS-Wildlife Services' and/or the Services' failure to initiate, reinstate, and/or complete consultation regarding the impacts of the Program on listed fish and wildlife; and (3) APHIS-Wildlife Services' continued authorization and approval of activities that may irreversibly and irretrievably commit resources, and may foreclose the formulation or implementation of reasonable and prudent alternatives, prior to completing consultation regarding the impacts of the Program on listed fish and wildlife.

The Center for Biological Diversity (the "Center") is a national, nonprofit conservation organization with more than one and a half million members and online activists dedicated to the protection of endangered species and wild places. The Center and its members are concerned with the conservation of imperiled species and the effective implementation of the ESA.

STATUTORY BACKGROUND

When a species has been listed or critical habitat designated under the ESA, all federal agencies—including APHIS-Wildlife Services—must ensure in consultation with the Services that their programs and activities are in compliance with the ESA. 16 U.S.C. § 1536(a)(2). Specifically, section 7(a)(2) of the ESA mandates that all federal agencies "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." *Id.*

Through consultation under Section 7 of the ESA, federal agencies work with the Services to determine whether their actions will jeopardize ESA-listed species' survival or adversely modify designated critical habitat, and if so, to identify ways to modify the action to avoid that result. 50 C.F.R. § 402.14. An agency is required to review its actions "at the earliest possible time" to determine whether the action may affected listed species or critical habitat. 50 C.F.R. § 402.14(a).

The scope of agency actions subject to consultation are broadly defined to 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 (definition of "action"). As such, APHIS-Wildlife

² For the purposes of this notice letter, the "Program" means all authorizations and activities of APHIS-Wildlife Services that result in management or control of wildlife in California. This includes the killing of beavers and destruction of their dams by APHIS-Wildlife Services, as well as contracts and cooperative agreements entered by APHIS-Wildlife Services that involve management of beavers. This includes all management districts in California, including the North, Sacramento, Central, and South and San Luis districts.

Services' killing of beavers and destruction of their dams, and its contracting to kill beavers and destroy their dams, as part of its Program, are "agency actions" subject to consultation.

To begin, APHIS-Wildlife Services must ask the Services whether any listed or proposed species may be present in the area of the agency action. 16 U.S.C. § 1536(c)(1); 50 C.F.R. § 402.12. If listed or proposed species may be present, APHIS-Wildlife Services must prepare a "biological assessment" to determine whether the listed species may be affected by the proposed action. *Id.* The biological assessment must generally be completed within 180 days. 16 U.S.C. § 1536(c)(1); 50 C.F.R. § 402.12(i). The threshold for a "may affect" determination and the required Section 7(a)(2) consultation is low and ensures that listed species are not jeopardized. *Karuk Tribe of Cal. v. U.S. Forest Serv.*, 681 F.3d 1006, 1027 (9th Cir. 2012).

If an agency determines that its action "may affect" but is "not likely to adversely affect" a listed species or its critical habitat, the regulations permit "informal consultation," during which the Services must concur in writing with the agency's determination. 50 C.F.R. § 402.14(a)-(b). If the agency determines that its action is "likely to adversely affect" a listed species or critical habitat, or if the Services do not concur with the agency's "not likely to adversely affect" determination, the agency must engage in "formal consultation," as outlined in 50 C.F.R. § 402.14 ("General Formal Consultation"). 50 C.F.R. §§ 402.02, 402.14(a). An agency is relieved of the obligation to consult on its actions only where the action will have "no effect" on listed species or designated critical habitat. 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").

To complete formal consultation, the Services must provide APHIS-Wildlife Services with a "biological opinion" explaining how the proposed action will affect the listed species or habitat. 16 U.S.C. § 1536(b); 50 C.F.R. § 402.14. Consultation must generally be completed within 90 days from the date on which consultation is initiated. 16 U.S.C. § 1536(b)(1)(A); 50 C.F.R. § 402.14(e). Where the Services conclude that the proposed action "will jeopardize the continued existence" of a listed species, the biological opinion must outline "reasonable and prudent alternatives." 16 U.S.C. § 1536(b)(3)(A). An action is deemed to jeopardize the continued existence of a species if it "reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery" of the species. 50 C.F.R. § 402.02. Thus, an agency is prohibited from taking any action that will reduce appreciably the likelihood of the species' survival *or* recovery. *Nat'l Wildlife Fed'n v. Nat'l Marine Fisheries Serv.*, 524 F.3d 917, 931 (9th Cir. 2008).

In addition, the Services must provide an "incidental take statement" if the Services conclude that an action is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of critical habitat, either as proposed or through the implementation of the reasonable and alternatives described in the biological opinion. The incidental take statement must specify the amount or extent of such incidental taking on the listed species; any "reasonable and prudent measures" that the Services consider necessary or appropriate to minimize such impact; and the "terms and conditions" with which APHIS-Wildlife Services must comply to implement those measures. 16 U.S.C. § 1536(b)(4); 50 C.F.R.

§ 402.14(i). Taking of listed species without the coverage of an incidental take statement is a violation of Section 9 of the ESA. 16 U.S.C. § 1538.

The Services and the action agency must reinitiate consultation on agency actions over which the federal agency retains, or is authorized to exercise, discretionary involvement or control under these circumstances:

- (a) If the amount or extent of taking specified in the incidental take statement is exceeded;
- (b) If 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;
- (c) If 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 the biological opinion; or
- (d) If a new species is listed or critical habitat designated that may be affected by the identified action.

50 C.F.R. § 402.16.

During the consultation process, APHIS-Wildlife Services is prohibited from making any irreversible or irretrievable commitment of resources with respect to the Program that may foreclose the formulation or implementation of any reasonable and prudent alternative measures. 16 U.S.C. § 1536(d). This means that APHIS-Wildlife Services may not proceed in its activities targeting beavers or their dams unless and until it completes Section 7 consultation.

Compliance with the Section 7 consultation process is integral to compliance with the substantive requirements of the Act—that an agency’s action will not jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of habitat.

FACTUAL BACKGROUND

APHIS-Wildlife Services’ Cruel, Harmful, and Unnecessary Killing of Wildlife

APHIS-Wildlife Services and its precursors have specialized in trapping and killing wildlife for more than 100 years, and it is responsible for the eradication of such wildlife as wolves, bears, and other animals from much of the United States, particularly in the West (Robinson 2005). APHIS-Wildlife Services contracts with other federal agencies, non-federal government agencies, and private landowners to manage “wildlife conflicts.”

Today, APHIS-Wildlife Services kills more than a million animals every year. For example, in Fiscal Year 2017, Wildlife Services reports that it killed 357 gray wolves; 69,041 adult coyotes, plus an unknown number of coyote pups in 393 destroyed dens; 624,845 red-

winged blackbirds; 552 black bears; 319 mountain lions; 1,001 bobcats; 675 river otters, including 587 killed “unintentionally;” 3,827 foxes, plus an unknown number of fox pups in 128 dens; and 23,646 beavers (USDA 2019b). These figures almost certainly underestimate the actual number of animals killed, as program insiders have revealed that APHIS-Wildlife Services kills many more animals than it reports (Robinson 2005, p. 25).

APHIS-Wildlife Services also has unintentionally killed thousands of non-target animals, undermining state and federal efforts to conserve and recover the affected species—which, oftentimes, need protection in part due to APHIS-Wildlife Services’ historic and ongoing practices. For example, in Fiscal Year 2017, APHIS-Wildlife Services reports that it killed nearly 3,000 non-target animals (USDA 2019b).

Many of the methods APHIS-Wildlife Services uses—including traps and snares—are fundamentally nonselective, environmentally destructive, inherently cruel, and often ineffective. For example, steel-jaw leghold traps are internationally recognized as inhumane and have been banned in many countries (BornFree USA 2016). Mammals, upon being trapped, frantically struggle to free themselves both by attempting to pull the trapped limb out of the device and by chewing at the trap itself or even their own limbs. The force of the jaws clamping on the animal’s limb and the subsequent struggle can result in severe trauma, including mangling of the limb; fractures; damage to muscles and tendons; lacerations; injury to the face and mouth; broken teeth, loss of circulation; frostbite; and amputation (BornFree USA 2016; Proulx 1999).

APHIS-Wildlife Services Kills Hundreds of Beavers in California Every Year

The Center submitted a request under the Freedom of Information Act (“FOIA”) for information on the killing of beavers by APHIS-Wildlife Services in California. In response, APHIS-Wildlife Services provided a table showing the total number of beavers killed by California county from 2007 – 2017 (USDA 2019a). From 2010 to 2017, the Program killed more than 7,000 beavers across California (*id.*). For the most recent year of available data, in Fiscal Year 2017, APHIS-Wildlife Services killed nearly one thousand beavers in California (USDA 2019c).



APHIS-Wildlife Services trapper poses with a truckload of dead beavers

In California, APHIS-Wildlife Services mostly kills beavers using firearms, snares and traps. For example, in 2017 in California, APHIS-Wildlife Services killed 797 beavers with firearms, 62 with body-gripping traps, 47 with snares, and 36 with cage or suitcase traps (USDA 2019c). Traps set in or near water are often designed to drown aquatic mammals; death by drowning is considered inhumane by the American Veterinary Medical Association and can take up to 20 minutes for some species (Gilbert and Gofton 1982; Ludders et al. 1999).



Beaver killed with body-gripping trap (Conibear trap)

APHIS-Wildlife Services and the Services Fail to Analyze How the Program May Impact Endangered Species in California that Use Beaver Habitat

APHIS-Wildlife Services prepared biological assessments for California's North and Sacramento districts in 1996 and the Central and San Luis and South districts in 1997. The biological assessments provided "no effect" determinations for winter-run Chinook salmon and

the tidewater goby. APHIS-Wildlife Services provided a “not likely to adversely affect” determination for the southwestern willow flycatcher in the San Luis and South District and a “no effect” determination for the Central District. The FWS thereafter concurred on the “not likely to adversely affect” determinations.

APHIS-Wildlife Services then prepared a statewide Biological Assessment in 2004, with amendments in 2007, 2012 and 2015. FWS concurred in 2014 and 2015 with the “not likely to adversely affect” determinations. APHIS-Wildlife Services found no effects on the southwestern willow flycatcher, tidewater goby, or Oregon spotted frog.

Responsive records to the Center’s FOIA requests provided no evidence of consultation between APHIS-Wildlife Services and NMFS on impacts of the Program to coho salmon, Chinook salmon, or steelhead. The only ESA analyses relevant to the salmonids were the “no effect” determinations from 1996 and 1997 for winter-run Chinook salmon.

Other than mentioning that explosives would not be used to remove beaver dams in occupied tidewater goby habitat, the agencies provided *no* analysis of how removal of beavers or their dams could affect any listed species through alteration of their habitats.

APHIS-Wildlife Services Has Analyzed or Has Committed to Analyze Under the ESA its Aquatic Mammal Damage Management Programs in Washington and Oregon

Although APHIS-Wildlife Services has prepared no California-specific analysis of the impacts of beaver killing and dam removal, in contrast, it did prepare an Environmental Assessment and FONSI/DN for the State of Washington on the “Aquatic Mammal Damage Management Program” (USDA 2008a, b). APHIS-Wildlife Services also prepared a Biological Assessment and requested concurrence from NMFS with its finding of “may affect, not likely to adversely affect” for all anadromous salmonid species under NMFS jurisdiction in Washington State (USDA undated). On May 9, 2008, NMFS issued a concurrence letter (Lohn 2008).

In its concurrence letter, NMFS explained that “[t]he most likely form of adverse effect of the action to listed species is the loss of habitat condition and function that could result from the removal of beaver and, in turn, the ponds they create.” NMFS based its concurrence on a number of commitments from APHIS-Wildlife Services. Specifically, APHIS made the following commitments regarding where it can remove beavers and beaver dams:

- Beaver or beaver dam removal will occur only in the developed landscape and only in places where beaver have recently become active (a year or less, usually weeks);
- Beaver dams will not be routinely removed from streams designated as critical habitat for any of the subject species because of the vital role beaver play in retaining perennial flow and pool habitats; and
- Beaver dams will be removed primarily from constructed water conveyance and drainage channels in agricultural landscapes, and will not be removed with explosives except in the previously mentioned portions of the Columbia Basin Project.

Importantly, APHIS-Wildlife Services and NMFS committed to *separately consult* on any individual beaver removal project in Washington that is likely to adversely affect listed species. To that end, NMFS receives notice of any beaver removals (Lohn 2008).³

In Oregon, in response to the Center's notice of intent to sue, APHIS-Wildlife Services has agreed to analyze the impacts of its "Aquatic Mammal Damage Management" program through consultation with NMFS under the ESA. As a first step, APHIS-Wildlife Services will prepare a biological assessment. It agreed to stop all its killing of beaver, river otter, muskrat, and mink in Oregon while the consultation process proceeds (USDA 2017).

APHIS-Wildlife Services' Beaver Killing and Dam Removal Harms Several ESA-Listed Species in California

Beaver dams and ponds adjust stream morphology and in-stream habitat in a variety of ways that are beneficial for many fish species, including federally-protected salmonids (Pollock et al. 2015). In a meta-analysis of more than 100 peer-reviewed research papers, scientists identified numerous positive impacts from beaver on salmonids (Kemp et al. 2012).

Beaver dams create areas of deeper water than would typically be found in small streams (ODFW 2005), and impounded waters upstream of beaver dams cover much greater surface areas than the pre-existing stream channels (Naiman et al. 1986). As a result, beavers give streams a greater carrying capacity to support juvenile salmonids (Hoffman 2013).

Additionally, beaver ponds and dams dissipate stream energy during floods or high flow events and create areas of slow moving or still water in an otherwise moving-water environment (ODFW 2005; Woo & Waddington 1990). As a result, salmonids wintering in beaver ponds and other slack-water habitats do not need to spend the winter swimming against strong currents, but instead, can expend more energy feeding (Hoffman 2013). By slowing water velocities and increasing water depth and storage capacity, beaver dams can contribute to groundwater recharge and thereby help increase summer low flows in streams (Leidholt-Bruner et al. 1992; Pollock et al. 2003).

Beaver ponds and dams also create complex shorelines and in-stream habitats (Naiman et al. 1988). That complexity results in greater aquatic productivity—and thus more food for salmonids—than stream reaches that do not have beaver dams (Leidholt-Bruner et al. 1992; Snodgrass and Meffe 1998; Collen and Gibson 2001; Pollock et al. 2004; Smith and Mather 2013).

³ APHIS and FWS also completed informal consultation on impacts on bull trout from Washington's Aquatic Mammal Damage Management Program (Berg 2008). According to records the Center received through FOIA, APHIS-Wildlife Services in August 2016 again requested informal consultation on its Aquatic Mammal Damage Management program in Washington (Woodruff 2016), but no response from NMFS or FWS was provided with the records.

Beaver dams also provide natural cover that is especially important for rearing sites (Reeves et al. 1989). Removing beavers means fewer dams because of less dam-building and less maintenance of existing dams by beavers. Beaver dams in small streams often wash out during high winter flows, and beavers rebuild them the following summer (ODFW 2005).

Given all the positive benefits of beavers, it is not surprising that researchers have documented that removal of beavers and beaver dams harms salmonids, including populations listed under the ESA.⁴

Salmonids are not the only listed species in California that benefit from beaver. The wetland-dwelling Oregon spotted frog relies on features beavers create. 81 Fed. Reg. 29,355 (May 11, 2016). The southwestern willow flycatcher can be found in “quiet water riparian habitat” created when beavers dam “smaller and steeper creeks.” 60 Fed. Reg. 10,695 (Feb. 27, 1995); *see also* 78 Fed. Reg. 344 (Jan. 3, 2013). And the tidewater goby is “sometimes in beaver-impounded sections of streams” 65 Fed. Reg. 69,693 (Nov. 20, 2000).

Each of following federally listed species use habitats created or improved by the presence of beavers, and therefore may be affected by APHIS-Wildlife Services’ removal of beavers or their dams:

⁴ Reeves et al. (1989) explains that juvenile coho in western Oregon and Washington rear, feed, and shelter most successfully in deep, complex pools and other off-channel habitats with low gradients and low water velocities—precisely the types of habitats created by beaver dams and ponds. Because of these positive impacts on salmonid habitat created by beavers, coho fry in coastal Oregon were three times more abundant in beaver-created habitat than in pools created by other fluvial processes (Leidholt-Bruner et al. 1992). Similarly, Nickelson et al. (1992) found that juvenile coho in coastal Oregon were most abundant in beaver ponds and alcoves during the winter. And in eastern Oregon, on Bridge Creek, a tributary to the John Day River, preliminary data from monitoring efforts indicate that human-facilitated beaver restoration is increasing production of a population of ESA-listed steelhead (Pollock et al. 2011; Pollock et al. 2012). Pollock et al. (2004), in a study of the Stillaguamish River Basin of Washington, found that the greatest reduction in coho smolt production capacity was associated with the extensive loss of beaver ponds. NMFS has explained that “beaver removal” threatens salmonid habitats and requires “special management considerations.” Designated Critical Habitat: Critical Habitat for 19 Evolutionarily Significant Units of Salmon and Steelhead in Washington, Oregon, Idaho, and California. 65 Fed. Reg. 7,764, 7,776 (Feb. 16, 2000), *available at* <https://www.gpo.gov/fdsys/pkg/FR-2000-02-16/pdf/00-3553.pdf#page=1>.

Listed Entity	ESA Status	Listing Date	Critical Habitat Date
SALMONIDS – Steelhead			
South-Central California Coast Steelhead ⁵	T	8/18/1997 1/5/2006 4/14/2014	9/2/2005
Southern California Coast Steelhead	E	8/18/1997 1/5/2006 4/14/2014	9/2/2005
Northern California Coast Steelhead	T	6/7/2000 1/5/2006 4/14/2014	9/2/2005
California Central Valley Steelhead	T	3/19/1998 1/5/2006 4/14/2014	9/2/2005
Central California Coast Steelhead	T	8/18/1997 1/5/2006 4/14/2014	9/2/2005
SALMONIDS – Chinook			
California Coastal Chinook Salmon	E	9/16/1999 4/14/2014	9/2/2005
Central Valley Spring-run Chinook Salmon	T	9/16/1999 4/14/2014	9/2/2005
Sacramento River Winter-run Chinook Salmon ⁶	E	11/5/1990 (T) 1/4/1994 (E)	6/16/1993
SALMONIDS – Coho			
Central California Coast Coho Salmon ⁷	E	10/31/1996 (T) 6/28/2005 (E) 4/2/2012 4/14/2014	5/5/1999
Southern OR / Northern CA Coasts Coho Salmon ⁸	T	5/6/1997 6/28/2005 4/14/2014	5/5/1999
OTHER BEAVER-DEPENDENT SPECIES			
Oregon Spotted Frog ⁹	T	09/29/2014	5/11/2016
Southwestern Willow Flycatcher ¹⁰	E	2/27/1995	1/3/2013
Tidewater Goby ¹¹	E	02/04/1994	11/20/2000

The table attached to this notice shows that APHIS-Wildlife Services kills beavers in California counties occupied by steelhead, Chinook salmon, coho salmon, Oregon spotted

⁵ The Final Rule designating critical habitat for “Seven Evolutionarily Significant Units of Pacific Salmon and Steelhead in California” explains that freshwater rearing sites are a “Principal Constituent Element” of their essential habitats and include beaver dams, as they provide natural cover. 70 Fed. Reg. 52,488 (Sept. 2, 2005), *available at* <https://www.govinfo.gov/content/pkg/FR-2005-09-02/pdf/05-16389.pdf>.

frog, southwestern willow flycatcher, and tidewater goby, or their designated critical habitats. For example, between 2007-2017 approximately one thousand beavers were killed in Placer, Sacramento, and Yolo counties, where protected salmon critical habitat or Evolutionarily Significant Units occur. It also shows dozens of beavers killed in that timeframe in counties where the Oregon spotted frog, southwestern willow flycatcher, and tidewater goby live or have designated critical habitat. Except where noted, the beaver kill data in this table comes from an APHIS-Wildlife Services record titled “Beaver Take Statewide by County CA: 01/01/2010 to 02/15/2017,” which the Center received in response to a FOIA request (USDA 2019a). These data do not include the number of beavers killed for recreational trapping or under deprecation permits issued by California Department of Fish and Wildlife.

Despite the evidence that killing beavers or removing their dams may affect listed species or their critical habitat, APHIS-Wildlife Services has not completed consultation or reinitiated consultation with the Services on the impacts of its killing of beavers or removal of their dams.

⁶ The final recovery plan for the Sacramento River winter-run Chinook salmon, Central Valley spring-run Chinook salmon, and the distinct population segment of California Central Valley steelhead explains that they need freshwater rearing sites like beaver dams that provide natural cover (NMFS 2014b).

⁷ In the Final Rule designating critical habitat for Central California Coast and Southern Oregon/Northern California Coasts coho salmon, NMFS explained, “NMFS agrees with the statements by one commenter that beaver dams and their associated habitat changes (e.g., channel flooding, and flow and siltation changes) often create ideal conditions for coho salmon. Some of the beneficial habitat effects from beaver activity include improved rearing and overwintering habitat, increased water volumes during low flows, and backwater habitat refuge areas during floods. . . . NMFS will identify beaver removal as an activity potentially requiring special management consideration, and encourages landowners and agencies to promote beaver habitation as one means by which to support coho salmon recovery.” 64 Fed. Reg. 24,049, 24,053 (May 5, 1999), *available at* <https://www.westcoast.fisheries.noaa.gov/publications/frn/1999/64fr24049.pdf> .

⁸ In the Final Rule listing the Southern Oregon/Northern California Coast Evolutionarily Significant Unit of coho salmon, NMFS explained that “eradication of beaver have adversely modified fish habitat” and that “beaver trapping” is one of the “major activities responsible for the decline of coho salmon in Oregon and California.” 62 Fed. Reg. 24,588 (May 6, 1997). The “Final Recovery Plan for the Southern Oregon/ Northern California Coast Evolutionarily Significant Unit of Coho Salmon” provides a detailed discussion of the importance of beavers to coho salmon, explaining, for example, “[b]eaver ponds provide high quality winter and summer rearing habitat for coho salmon” (NMFS 2014a).

⁹ The Final Rule designating critical habitat for the Oregon spotted frog explained that removal of beavers and features created by beavers threatens “physical or biological features that are essential to the conservation of this species.” Designation of Critical Habitat for the Oregon Spotted Frog; Final Rule. 81 Fed. Reg. 29,355 (May 11, 2016), *available at* <https://www.gpo.gov/fdsys/pkg/FR-2016-05-11/pdf/2016-10712.pdf>.

¹⁰ In the Final Rule listing the southwestern willow flycatcher, FWS explained, “[b]eavers cut and use willow and cottonwood, but may also be important in creating quietwater riparian habitats by damming smaller and steeper creeks.” 60 Fed. Reg. 10,695 (Feb. 27, 1995), *available at* <https://www.govinfo.gov/content/pkg/FR-1995-02-27/pdf/95-4531.pdf#page=2>. In the Final Rule designating its critical habitat, FWS further explained, “[I]ands with moist conditions that support riparian plant communities are areas that provide flycatcher habitat. Conditions like these typically develop in lower elevation floodplains as well as where streams enter impoundments, either natural (such as beaver ponds) or human-made (reservoirs).” 78 Fed. Reg. 344 (Jan. 3, 2013), *available at* <https://www.govinfo.gov/content/pkg/FR-2013-01-03/html/2012-30634.htm> .

¹¹ The Final Rule designating critical habitat for the tidewater goby explained that the fish are “sometimes in beaver-impounded sections of streams” 65 Fed. Reg. 69,693 (Nov. 20, 2000), *available at* <https://www.govinfo.gov/content/pkg/FR-2000-11-20/pdf/00-29547.pdf#page=1> .

ESA VIOLATIONS

Because beavers create habitat beneficial to numerous endangered species, primarily salmonids and other aquatic or wetland-dwelling species, the APHIS-Wildlife Services' killing of beavers and removal of their dams as part of its Wildlife Damage Management Program in California is an "action" that "may affect" listed species. APHIS-Wildlife Services and the Services have failed, through consultation, to ensure the Program is not jeopardizing the continuing existence of listed species, or adversely modifying or destroying designated critical habitat, in violation of Section 7(a)(2) of the ESA. 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.14. Where APHIS-Wildlife Services and the Services have completed consultation on the Program, new information on the importance of beavers to listed species and new species listings have triggered the need to reinstate consultation. 50 C.F.R. § 402.16(b), (d). Moreover, by allowing, authorizing, and approving projects and activities in conjunction with its Program that may affect listed fish and wildlife in California prior to the initiation, reinstatement and/or completion of consultation with the Services, APHIS-Wildlife Services is also violating Section 7(d) of the ESA. 16 U.S.C. § 1536(d).

CONCLUSION

For the above stated reasons, APHIS-Wildlife Services and the Services have violated and remain in ongoing violation of Section 7 of the ESA and the implementing regulations. If these violations of law are not cured within 60 days, the Center for Biological Diversity intends to file suit for declaratory and injunctive relief, as well as attorney fees and costs. 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, please contact me.

Sincerely,



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LITERATURE CITED
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PRESENCE OF LISTED SPECIES OR DESIGNATED CRITICAL HABITAT AND BEAVER KILLINGS BY CALIFORNIA COUNTY

County	Total Beaver		Chinook Salmon	Coho Salmon	Steelhead	Southwestern		Tidewater Goby
	Killed	2007-				Oregon Spotted Frog	Willow Flycatcher	
ALPINE	37		0	0	0	0	1	0
BUTTE	498		1	0	1	0	0	0
CALAVERAS	1		0	0	1	0	0	0
COLUSA	551		1	0	1	0	0	0
CONTRA COSTA	43		1	0	1	0	0	1
GLENN	6		1	1	1	0	0	0
IMPERIAL	2		0	0	0	0	1	0
KERN	79		0	0	0	0	1	0
LAKE	4		1	1	0	0	0	0
MADERA	76		0	0	0	0	1	0
MERCED	377		0	0	1	0	0	0
MODOC	55		0	0	0	1	0	0
MONTEREY*	10		0	0	1	0	1	1
NAPA	10		0	0	1	0	0	1
NEVADA	48		1	0	0	0	0	0
PLACER	1020		0	0	1	0	0	0
SACRAMENTO	1074		1	0	1	0	0	0
SAN DIEGO	23		0	0	1	0	1	1
SAN JOAQUIN	127		0	0	1	0	0	0
SAN LUIS OBISPO	2		0	0	1	0	1	1
SHASTA	57		1	0	1	1	0	0
SISKIYOU	41		0	1	0	1	0	0
SOLANO	50		1	0	1	0	0	1
SONOMA	7		1	1	1	0	0	1
STANISLAUS	234		0	0	1	0	0	0
SUTTER	783		1	0	1	0	0	0
TRINITY	3		1	1	0	0	0	0
TUOLUMNE	3		0	0	0	0	1	0
YOLO	998		1	0	1	0	0	0
YUBA	733		1	0	1	0	0	0

*Beaver kill data from APHIS-Wildlife Services record titled: "MIS Summary for FOIA Request # 19-02196-F Table 1"