



OUR CHILDREN'S EARTH
Think clearly about the future.



Ecological Rights Foundation

February 25, 2013

Lisa Jackson, Administrator U.S. EPA, Ariel Rios Building 1200 Pennsylvania Avenue, N.W. Mail Code: 1101A Washington, D.C. 20460	Rebecca Blank Acting Secretary of Commerce U.S. Department of Commerce 1401 Constitution Ave., NW Washington, DC 20230
Jared Blumenfeld Regional Administrator U.S. EPA - Region 9 75 Hawthorne Street San Francisco, California 94105	Rodney McInnis Regional Administrator Southwest Region National Marine Fisheries Service 501 West Ocean Blvd. Long Beach, CA 90802-4213
Ken Salazar Secretary of the Interior U.S. Department of the Interior 1849 C Street NW Washington, D.C. 20240	Ren Lohofener Regional Director Pacific Southwest Region U.S. Fish and Wildlife Service 2800 Cottage Way, W-2606 Sacramento, CA 95825

*VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED*

Re: Sixty-Day Notice of Violations of the Clean Water Act and Notice of Intent to File Suit

Dear Ms. Jackson, Blank and Messrs. Salazar, Lohofener, McInnis, and Blumenfeld:

I am writing on behalf of Our Children's Earth Foundation ("OCE") and Ecological Rights Foundation ("ERF") (collectively, "the Environmental Groups") to notify you of the U.S. Environmental Protection Agency ("EPA")'s failure to perform certain mandatory duties under the federal Clean Water Act ("CWA") as well as failure to comply with the Endangered Species Act ("ESA"). In particular, this notice relates to EPA's failure to issue water quality criteria for the State of California made mandatory by CWA §§ 303(b)(2) and 303(c)(3), 33 U.S.C. §§ 1313(b)(2), 1313(c)(3) as well as violations of ESA §§ 7 and 9, 16 U.S.C. § 1536, 16 U.S.C. § 1538. This notice further relates to the failure of EPA, the National Marine Fisheries Service ("NMFS") and the U.S. Fish and Wildlife Service ("USFWS") (collectively, "the Services")¹ to

¹ EPA hereinafter refers to the agency, the Administrator, and the Regional Administrator acting in their official capacities. The Services hereinafter refers to the National Marine Fisheries Service, the Department of Commerce,

reinitiate consultation pursuant to ESA § 7 on EPA's water quality criteria despite the occurrence of events triggering a duty to reinitiate consultation.

The purpose of this letter is further to provide notice of the Environmental Groups' intent to file a CWA and ESA citizen suit sixty (60) days after the date of this letter against the EPA, the EPA Administrator, the Regional Administrator of EPA Region 9, NMFS, the Secretary of Commerce, the Regional Administrator, NMFS Southwest Region; the USFWS, the Secretary of the Interior, and the Regional Director, USFWS Southwest Region for these failures to comply with the CWA and ESA.

I. IDENTITY OF PERSONS GIVING NOTICE AND THEIR COUNSEL

In accord with 40 C.F.R. § 135.3(b), the Environmental Groups hereby give notice of the names, address, and telephone number of the persons giving notice, which are OCE and ERF.

OCE is a non-profit public benefit corporation organized under the laws of the State of California, with members throughout California dedicated to protecting the public, especially children, from the health impacts of pollution and other environmental hazards and to improving water quality for the public benefit. Another aspect of OCE's mission is to participate in environmental decision-making, enforce environmental laws, both federal and state, to reduce pollution, and to educate the public concerning those laws and their enforcement.

OCE's members use waters throughout California for fishing, body contact water sports and other forms of recreation, wildlife observation, aesthetic enjoyment, educational study, and spiritual contemplation. OCE's members particularly enjoy recreational, educational, and/or spiritual pursuits related to the observation, study, and contemplation of anadromous fish migration, including species such as steelhead, salmon, and sturgeon throughout the San Francisco Bay Delta, California's inland rivers and streams, and coastal waters. OCE's members also include avid birdwatchers who visit San Francisco Bay and coastal areas near San Francisco for opportunities to see species such as the California Clapper Rail, Marbled Murrelet, least tern, and Western Snowy Plover among others. OCE's members' enjoyment of California waters for body contact water sports and other forms of recreation is diminished due to the pollution of these waters. These members' enjoyment of wildlife observation (including bird watching and observation of anadromous fish), aesthetic enjoyment, educational study, and spiritual contemplation is further also reduced due to the pollution of these waters which reduces the abundance of wildlife, renders the waters less aesthetically pleasing, and is an insult to OCE's members' convictions that preservation of these waters and the wildlife that depend on these waters is a spiritual imperative. OCE's members would also like to enjoy fishing for all species of steelhead, salmon and sturgeon in California if these fish were abundant. These members' enjoyment of fishing for anadromous fish is greatly impaired, however, one, because of the overall diminished numbers of anadromous fish in California in part due to pollution impacts and two, some anadromous fish species in California are listed under the ESA as threatened and thus

cannot be fished for. OCE's members would also enjoy consuming fish and seafood from the San Francisco Bay Delta and other inland rivers and streams and coastal waters of California but cannot do so because they are concerned about toxic pollutants in fish tissue. These members continue to hope for survival and recovery of anadromous fish in the San Francisco Bay Delta and throughout California's waters that provide habitat for such species. OCE's members believe that EPA's ongoing delay in issuing or revising the water quality criteria and implement the other measures discussed below has resulted in diminished water quality in waters throughout California which in turn causes diminishment in their enjoyment of wildlife observation, aesthetic appreciation, educational study, and spiritual contemplation in and of these waters. This decline in water quality has had and is continuing to have negative impacts on the health and well being of anadromous fish and other aquatic dependent species that OCE members would like to enjoy as resources for fishing, wildlife observation, aesthetic appreciation, educational study, and spiritual contemplation.

ERF is a non-profit organized under the laws of the State of California. To further its environmental advocacy goals, ERF actively seeks federal and state agency implementation of state and federal water quality related laws. ERF's members include residents of Humboldt County and the San Francisco Bay-Delta area who use the waters throughout California for fishing, body contact water sports and other forms of recreation, wildlife observation, aesthetic enjoyment, educational study, and spiritual contemplation. ERF's members also include avid birdwatchers who visit San Francisco Bay and Humboldt Bay for opportunities to see species such as the California Clapper Rail, Marbled Murrelet, least tern, and Western Snowy Plover among others. ERF's members particularly enjoy recreational, educational, and/or spiritual pursuits related to the observation, study and contemplation of anadromous fish migration, including species such as steelhead, salmon, and sturgeon throughout Humboldt Bay, the San Francisco Bay Delta, and other of California's inland rivers and streams, and coastal waters. ERF's members also include avid birdwatchers who visit San Francisco Bay and Humboldt Bay for opportunities to see species such as the California Clapper Rail, Marbled Murrelet, and Western Snowy Plover among others.

ERF's members' enjoyment of California waters for body contact water sports and other forms of recreation is diminished due to the pollution of these waters. These members' enjoyment of wildlife observation (including bird watching and observation of anadromous fish), aesthetic enjoyment, educational study, and spiritual contemplation is further also reduced due to the pollution of these waters which reduces the abundance of wildlife, renders the waters less aesthetically pleasing, and is an insult to ERF's members' convictions that preservation of these waters and the wildlife that depend on these waters is a spiritual imperative. ERF's members would also like to enjoy fishing in California for all species of steelhead, salmon and sturgeon if these fish were abundant. These members' enjoyment of fishing for anadromous fish is greatly impaired, however, one, because of the overall diminished numbers of anadromous fish in California in part due to pollution impacts and two, some anadromous fish species in California are listed under the ESA as threatened and thus not available for fishing. ERF's members would also enjoy consuming fish and seafood from the San Francisco Bay Delta and other inland rivers and streams and coastal waters of California but cannot do so because they are concerned about toxic pollutants in fish tissue. These members continue to hope for survival and recovery of

anadromous fish in the San Francisco Bay Delta and throughout California's waters that provide habitat for such species.

ERF's members believe that EPA's ongoing delay in issuing or revising the water quality criteria and implement the other measures discussed below has resulted in diminished water quality in waters throughout California which in turn causes diminishment in their enjoyment of wildlife observation, aesthetic appreciation, educational study, and spiritual contemplation. This decline in water quality has had and is continuing to have negative impacts on the health and well being of anadromous fish and other aquatic dependent species that ERF members would like to enjoy as a resource for fishing, wildlife observation, aesthetic appreciation, educational study, and spiritual contemplation.

OCE may be contacted at the following address:

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ERF may be contacted at the following address:

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The Environmental Groups have retained the following legal counsel to represent them in this matter:

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All communications should be addressed to legal counsel at the above addresses.

II. LEGAL BACKGROUND

The CWA requires every state must adopt, periodically update, and submit to EPA proposed water quality standards ("WQS") applicable to waters in that state. *See* 33 U.S.C. § 1313(a)-(c). WQS consist of designated uses, i.e. the beneficial uses to which waters are put, and water quality criteria, i.e., the maximum levels of pollutants that a water body can have and still sustain designated uses. 33 U.S.C. § 1313(c). Under CWA § 303(c)(2)(B), states must adopt numeric water quality criteria for the priority toxic pollutants listed under CWA § 307(a) if those pollutants could be reasonably expected to interfere with the designated uses of a state's waters. The CWA imposes a strict schedule pursuant to which EPA must approve or disapprove proposed WQS, and articulates specific steps EPA must take if it either disapproves those standards or undertakes action to promulgate WQS when the states fail to act. CWA § 304 requires EPA to publish what are also known as "water quality criteria," but unlike water quality criteria promulgated pursuant to CWA § 303, CWA § 304 water quality criteria are only national guidance that have no binding legal effect and are to be used by the states and EPA in promulgating the legally binding statewide water quality criteria under CWA § 303.

The ESA requires that each federal agency, using the best scientific and commercial data available, insure that any action authorized, funded, or carried out by the agency is not likely to jeopardize the continued existence of any threatened species or result in the adverse modification of critical habitat. ESA § 7(a)(2), 16 U.S.C. § 1536(a)(2), *Resources Ltd. v. Robertson*, 35 F.3d 1300, 1304 (9th Cir. 1994). In addition, ESA § 7(a)(1) broadly requires that all federal agencies "shall, in consultation and with the assistance of the Secretary, utilize their authorities in furtherance of the purposes of [the ESA] by carrying out programs for the conservation of endangered species and threatened species . . ." 16 U.S.C. § 1536(a)(1). The ESA defines "conservation" to mean ". . . the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this Act are no longer necessary." 16 U.S.C. § 1532(3).

If an agency determines that an action it will undertake or approve may adversely affect listed species or critical habitat, then this agency (known as the "action agency" as the proponent of or authorizer of an action) must initiate formal consultation with the NMFS or the USFWS. 16 U.S.C. § 1536(c); 50 C.F.R. § 402.14(a). The duty to consult applies to "ongoing agency action[s]," such as those actions which "comes within the agency's decision making authority and remains so." *W. Watersheds Project v. Majejko*, 468 F.3d 1099, 1109 (9th Cir. 2006) (internal quotation omitted). To complete formal consultation, the Services must provide the action agency 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. The biological opinion “is required to address both the ‘no jeopardy’ and ‘no adverse modification’ prongs of Section 7,” i.e., to analyze how the action can both avoid jeopardy to a species' survival and recovery and avoid destruction or adverse modification of critical habitat. *Center for Biological Diversity v. Bureau of Land Management*, 422 F. Supp. 2d 1115, 1127 (N.D. Cal. 2006), citing 50 C.F.R. § 402.14(g)(4). An agency's duty under ESA § 7(a)(1) is made more specific when the Services have issued a biological opinion defining what the agency should do to avoid causing jeopardy to an ESA protected species and to minimize take of such species.

If 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” that will avoid jeopardy. 16 U.S.C. § 1536(b)(3)(A); 50 C.F.R. § 402.14(h)(3). Further, the Services must provide an “incidental take statement,” specifying the amount or extent of such incidental taking on the listed species, any “reasonable and prudent measures” that USFWS considers necessary or appropriate to minimize such impact, and setting forth the “terms and conditions” that must be complied with by the action agency to implement those reasonable and prudent measures. 16 U.S.C. § 1536(b)(4); 50 C.F.R. § 402.14(i). The action agency is immunized for taking a species as long as the agency complies with the reasonable and prudent measures and terms and conditions specified by the Service for minimizing the action's impact. 16 U.S.C. § 1536(b)(4)(C)(i)-(ii), *Bennett v. Spear*, 520 U.S. 154, 169-70 (1997). However, the action agency is not free to unilaterally alter either the biological opinion, the final decision of another agency, or the safe harbor created by the biological opinion. *Id.* During the course of the action, the action agency must reinitiate consultation with the Services immediately if: (1) the amount or extent of taking specified in the incidental take statement is exceeded; (2) 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; (3) the action is modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the biological opinion; or (4) a new species is listed or critical habitat designated that may be affected by the identified action. 50 C.F.R. § 402.16. Failure to reinitiate consultation results in the action agency losing its safe harbor protection for incidental takes and the action agency becomes liable for taking species in violation of ESA § 9 until it gets a new biological opinion. *Dow AgroSciences, LLC v. NMFS*, 637 F.3d 259 (4th Cir. 2011).

After the initiation or reinitiation of consultation, the action agency is prohibited from making “any irreversible or irretrievable commitment of resources with respect to the agency action which” may “foreclos[e] the formulation or implementation of any reasonable and prudent alternative measures.” 16 U.S.C. § 1536(d).

ESA § 9 and its implementing regulations prohibit the unauthorized “take” of threatened and endangered species. 16 U.S.C. §§ 1538(a)(1); 1533(d); e.g., 50 C.F.R. § 17.31; 50 C.F.R. § 223.203. “Take” is defined broadly to include harming, harassing, trapping, capturing, wounding or killing of a protected species either directly or by degrading its habitat. See 16 U.S.C. § 1532(19); *Center for Biological Diversity v. Bureau of Land Management*, 422 F. Supp. 2d at 1127 n. 7. Taking that is in compliance with the terms and conditions specified in

a biological opinion is not considered a prohibited taking under ESA § 9. 16 U.S.C. § 1536(o)(2).

III. FACTUAL BACKGROUND

A. CTR Promulgation

In April 1991, California adopted the water quality criteria component of WQS for priority toxic pollutants pursuant to CWA § 303(c) in the State's water quality control plans ("Basin Plans"). However, a California State court ordered California to rescind these water quality control plans in 1994. Due to California's inability to set WQS for toxic pollutants in a timely manner, EPA first published the proposed California Toxics Rule ("CTR") on August 5, 1997 setting water quality criteria for 126 toxic priority pollutants in California's rivers, lakes, enclosed bays, and estuaries.

EPA determined that promulgation of the CTR was necessary for the State of California to meet the requirements of CWA § 303(c)(2)(B). *See* 62 Fed. Reg. 42160 (August 5, 1997). The preamble to the proposed CTR explains that this finding was based on the fact that the water quality criteria adopted by the State had been rescinded, thus leaving California without applicable water quality criteria for numerous toxic pollutants for an extended period. *Id.* The State Water Resources Control Board ("State Board") and California Regional Water Quality Control Boards ("Regional Boards") needed the criteria set forth in the CTR to have water quality standards to use in permit writing, identification of impaired waters, and the development of Total Maximum Daily Loads among other requirements under CWA § 303(c)(2)(B) and (d). The final CTR, published on May 18, 2000, reiterated EPA's authority to promulgate WQS for California and EPA's determination that the CTR's numeric water quality criteria were necessary to protect human health and the environment in California. *See* 65 Fed. Reg. 31682 (May 18, 2000). Although EPA proposed certain water quality criteria for selenium and mercury in its proposed CTR in 1997, EPA's final CTR reserved these criteria for future action.

B. EPA ESA Consultation with the Services and Compliance with BiOp Measures

Between 1997 and 1999, EPA and the Services engaged in an extensive ESA § 7 consultation on EPA's proposed CTR which resulted in numerous modifications to the proposed water quality criteria that were necessary to prevent the CTR from causing jeopardy to ESA-listed species. EPA submitted its final proposed modifications to the CTR on December 16, 1999. On March 24, 2000, the Services completed their biological opinion ("the BiOp") on the CTR which directed EPA to undertake several Reasonable and Prudent Measures ("RPMs") so as to avoid the Services concluding in the BiOp that the CTR is jeopardizing the survival and recovery of ESA-listed species ("a Jeopardy Determination"). The RPMs related to water quality criteria for selenium, mercury, pentachlorophenol, and cadmium and to the CTR's formula based dissolved metals water quality criteria.²

² The BiOp's listing of these RPMs is not quoted herein in full, but instead is incorporated by reference as EPA and the Services are in possession of the BiOp and fully aware of its contents.

1. Selenium RPMs

The BiOp explained that in bird species, selenium poisoning may lead to gross embryo deformities, winter stress syndrome, depressed resistance to disease due to depressed immune system function, reduced juvenile growth and survival rates, mass wasting, loss of feathers (alopecia), embryo death, and altered hepatic enzyme function. Based on their dietary habits, dependence on the aquatic ecosystem, and their limited distribution, the Services indicated that the above impacts are likely to adversely affect the California clapper rail, California least tern, light-footed clapper rail, and the Yuma clapper rail, among others. The BiOp also found that salmonid species (including Chinook and Coho salmon and steelhead trout, among others) are very sensitive to selenium bioaccumulation and exhibit toxic symptoms even when tissue concentrations of selenium are quite low. The BiOp determined that adverse impacts from selenium were likely to adversely affect the aforementioned salmonid species, which are found throughout the San Francisco Bay Delta, North Coast and Southern California. The BiOp further identified numerous other species of fish, mammals, reptiles and amphibians that will suffer adverse impacts from selenium exposure at the levels authorized by the CTR. The BiOp's list, on page 224, is hereby incorporated by reference--as well as the BiOp's discussion of evidence supporting the Services' conclusions concerning the impacts of EPA's actions on these species (quoting this material in full herein is unnecessary as EPA and the Services are in possession of the BiOp and fully aware of its contents).

The Services warned EPA that EPA's selenium water quality criteria would only be adequate if they were low enough to protect aquatic food chains from excessive bioaccumulation. The Services indicated that the selenium chronic criterion should be no more than 2 ug/L and explained that levels as low as 0.2 ug/L would be needed to protect specific species in water bodies where the food chain is already contaminated with selenium.

The BiOp included an Incidental Take Statement ("ITS") with Reasonable and Prudent Measures and Terms and Conditions (collectively, "RPMs") that required EPA to take the following actions: (1) not promulgate EPA's previously proposed selenium acute aquatic criterion,³ (2) revise EPA's recommended CWA § 304(a) acute and chronic aquatic life criteria for selenium by January 2002, (3) propose revised acute and chronic selenium water quality criteria which would be protective of ESA-listed species in California by January of 2003, (4) if EPA's proposed acute or chronic criterion for selenium in California is less stringent than the criteria suggested by the Services (< 2 g/L), provide the Services with a biological evaluation/assessment ("BE/BA") and request formal ESA § 7 consultation with the Services on the revised criteria by January 2003. EPA's "BE/BA" on the revised criteria must specifically address semi-aquatic wild life species; (5), promulgate final acute and chronic criteria for selenium in California no later than June 2004, (6) provide the Services

³ Aquatic criterion/criteria refer to the level of pollutant concentrations that must not be exceeded to secure water quality needed by aquatic wildlife.

with semi-annual reports regarding the status of EPA's revision of the selenium criteria and accompanying draft BE/BA associated with the revision, (7) identify water bodies in California where selenium criteria necessary to protect ESA-listed species are not met (selenium-impaired water bodies), and annually submit to the Services a list of NPDES permits due for review to allow the Services and EPA to identify any potential for adverse effects on ESA-listed species and/or their habitats. EPA must provide a list of selenium-impaired water bodies to the Services and conduct its first NPDES permit review by October 2000. EPA must thereafter annually submit to the Services a list of NPDES permits due for review to allow the Services and EPA to identify any potential for adverse effects on listed species and/or their habitats; and (8) coordinate with the Services on any NPDES permits containing limits for selenium that the Services (or EPA) identify as having potential for adverse effects on ESA-listed species and/or their habitat in accordance with procedures agreed to by the Agencies in the draft Memorandum of Agreement ("draft MOA") published in the Federal Register at 64 Fed. Reg. 2755 (January 15, 1999).

EPA has failed to comply with all but the first of these RPM for selenium. EPA did refrain from promulgating in the CTR EPA's previously proposed selenium acute aquatic criterion. However, EPA failed to revise EPA's recommended CWA § 304(a) acute and chronic aquatic life criteria for selenium by January 2002. EPA proposed a national ambient water quality criterion for selenium in 2004 pursuant to CWA § 304(a), but EPA has never finalized that criterion. EPA has also never proposed revised acute and chronic aquatic life water quality criteria for selenium which would be protective of ESA-listed species in California. EPA has never provided the Services with a BE/BA on actions related to adoption of new and revised selenium criteria and has never requested formal ESA § 7 consultation with the Services on the revised criteria. EPA has not promulgated revised final acute and chronic aquatic life criteria for selenium in California. EPA has been working on CWA § 303 water quality criteria for selenium applicable to the San Francisco Bay-Delta region and has taken some initial steps in developing selenium criteria for California, but progress has been extremely slow given that it has been nearly nine years since EPA issued any formal proposals for a selenium criterion. EPA has not set a deadline for promulgation of selenium water quality criteria for the Bay-Delta. Further, EPA has set no target date for the development of selenium acute and chronic aquatic life water quality criteria that will be applicable to the rest of California. Although EPA initially complied with the Services reporting and permit review RPMs on an intermittent basis, EPA has continuously violated these reporting and permit review RPMs since 2006; EPA has submitted no status or monitoring reports to the Services with respect to the agency's progress on promulgating CWA § 303 selenium water quality criteria since 2006 and has not conducted the NPDES permit reviews required by the RPM.

2. Mercury RPMs

In the BiOp, the Services asked EPA to withhold promulgation of EPA's proposed mercury criteria in the CTR because the Services concluded that EPA's proposed mercury criteria were likely to adversely impact numerous threatened and endangered bird, fish, reptile, amphibian, and mammal species. In birds, acute methyl-mercury poisoning can result in reduced food intake leading to weight loss, progressive weakness in wings and

legs, difficulty flying, walking, standing, plus an inability to coordinate muscle movements and impaired hearing. The Services noted in the BiOp that effects of mercury on avian reproduction are likely occurring in San Francisco Bay populations of birds, including the least tern and California clapper rail, as well as the light-footed clapper rail.

The BiOp found that mercury and methyl-mercury have numerous impacts on fish including adverse changes to behavior, growth, histology, reproduction, development, and survival. Due to the current concentrations of mercury in a number of California water bodies, the BiOp determined that the following listed or proposed fish species are being adversely impacted by mercury at the levels permitted by the CTR: all runs and ESUs⁴ of Coho and Chinook salmon and steelhead trout, Little Kern Golden trout, Paiute cutthroat trout, Lahontan cutthroat trout, bonytail chub, unarmored threespine stickleback, shortnose sucker, Lost River sucker and the Sacramento splittail.

The BiOp further identified numerous other species of fish, mammals, reptiles and amphibians, and invertebrates that will suffer adverse impacts from mercury exposure at the levels authorized by the CTR. The BiOp's list, on pages 225-26, is hereby incorporated by reference--as well as the BiOp's discussion of evidence supporting the Services' conclusions concerning the impacts of EPA's actions on these species (quoting this material in full herein is unnecessary as EPA and the Services are in possession of the BiOp and fully aware of its contents).

The BiOp included RPMs requiring EPA to take the following actions with respect to EPA's mercury criteria: (1) refrain from promulgating the proposed freshwater and saltwater acute and chronic aquatic life criteria for mercury in the final CTR, (2), promulgate a human health criterion of 50 ng/l or 51 ng/l mercury, but only where no more restrictive federally-approved water quality criteria are now in place (i.e., in certain locations outside of San Francisco Bay), (3) revise its recommended CWA § 304(a) human health criteria for mercury by January 2002 to levels sufficient to protect ESA-listed aquatic and aquatic dependent wildlife species. If the revised criteria are less stringent than the range of criteria concentrations suggested by the BiOp (< 2.0 ng/L as total Hg or equivalent methylmercury concentration as determined by site specific data) to protect ESA-listed species or the EPA's mercury report to Congress concerning piscivorous wildlife values, EPA must provide the Services with a BE/BA and request ESA § 7 formal consultation on the revised criteria by the time of the proposal, (4) promulgate revised human health CWA § 303 criterion for mercury in California by January 2003--the revised criterion should be protective of ESA-listed aquatic and aquatic-dependent species, (5) commencing June 30, 2000, provide the Services with semi-annual reports regarding the status of EPA's revision of its mercury criteria and/or any draft BA/BE associated with the revision. EPA must further invite scientists from the Services to jointly evaluate with EPA whether EPA's human health criterion for mercury is also protective of fish and wildlife; (6) by October

⁴ ESU stands for Evolutionarily Significant Unit, and it is a population of organisms that is considered distinct for purposes of conservation. A population (or group of populations) will be considered "distinct" and hence a "species" for purposes of the ESA if it represents an ESU of the biological species.

2000, identify water bodies in California where mercury criteria necessary to protect ESA-listed species are not met and submit to the Services a list of NPDES permits due for review to allow the Services and EPA to identify any potential for adverse effects on ESA-listed species and/or their habitats and thereafter annually submit to the Services such a list of NPDES permits, and (7) coordinate with the Services on issuance of any NPDES permits containing limits for mercury for discharges that the Services (or EPA) identify as having potential for adverse effects on ESA-listed species and/or their habitat in accordance with procedures agreed to by the agencies in the draft MOA.

EPA complied with the first two of these mercury RPMs. EPA also revised its CWA § 304(a) human health criterion for mercury in 2001, but did not set its criterion at the Services' recommended levels of < 2.0 ng/L as total Hg or equivalent methylmercury concentration as determined by site specific data. EPA instead set its criterion at a fish tissue concentration level that does not directly indicate a permissible water concentration of mercury, and the Services' scientists and other experts have found this fish tissue level approach to be insufficiently protective of ESA-listed species. EPA has largely failed to comply with the remainder of the mercury-related RPMs. EPA has failed to propose and finalize a revised CWA § 303 human health mercury water quality criterion for California and has taken no other action to adopt CWA § 303 water quality criteria for mercury that would be protective of ESA-listed species. EPA did provide the Services with some reports regarding the status of EPA's revision of its mercury criteria, but, on information and belief, stopped providing such reports in 2001. EPA has never provided the Services with any draft or final BA/BES associated with adoption of new or revised mercury criteria. EPA has never invited scientists from the Services to jointly evaluate with EPA whether EPA's human health criterion for mercury is also protective of fish and wildlife. EPA has not provided the Services with a list of water bodies in California where mercury criteria necessary to protect ESA-listed species are not met (at least not since 2002) and has not submitted to the Services a list of NPDES permits due for review since 2002. Since 2002 (and perhaps earlier), EPA has not coordinated with the Services on issuance of any NPDES permits containing limits for mercury for discharges that have potential for adverse effects on ESA-listed species and/or their habitat.

EPA claims that the State Board has decided to take the lead on the development of methyl-mercury criteria based in part on EPA's CWA § 304(a) national criterion, but the State Board continues to fail to take action on promulgating mercury water quality criteria-- which ironically is what led to the promulgation of the CTR in the first place. Although the State Board proposed its "Alternatives for Human and Wildlife Health Objectives for Mercury" five years ago, the State Board has failed to take additional action since that time. Further, EPA did not reinitiate ESA § 7 consultation with the Services after deciding to abdicate the promulgation of mercury criteria for California or the remaining RPMs pertaining to mercury set forth in the BiOp.

3. Pentachlorophenol RPMs

As discussed in the BiOp, numerous scientific studies have demonstrated that commercial grade pentachlorophenol ("PCP") adversely affects the reproduction, early life stage survival, growth, and/or behavior of salmonids at concentrations at or below the water quality criteria levels that EPA promulgated in the CTR. In the BiOp, the Services found that EPA did not consider the cumulative and interactive effects of commercial grade PCP toxicity through the critical life-cycle of salmonids, under conditions of elevated temperatures, or reduced dissolved oxygen in developing the PCP criteria. The Services also noted that EPA failed to consider bioconcentration of PCP or its impurities into aquatic organisms and subsequent ingestion by wildlife in promulgating the PCP criteria. The Services stated that the data existing at the time of the BiOp was issued supports a conclusion that a chronic PCP criterion of between 0.2 to 2.0 ug/L PCP would be protective of early life stage ESA-listed salmonid species.

The BiOp further identified numerous other species of fish that will suffer adverse impacts from PCP exposure at the levels authorized by the CTR. The BiOp's list, on page 226, is hereby incorporated by reference--as well as the BiOp's discussion of evidence supporting the Services' conclusions concerning the impacts of EPA's actions on these species (quoting this material in full herein is unnecessary as EPA and the Services are in possession of the BiOp and fully aware of its contents).

In response to their concerns over the CTR's PCP water quality criteria, the Services included in the BiOp RPMs requiring EPA to take the following actions with respect to these criteria: (1) by March of 2001 review, and if necessary, revise its CWA § 304(a) chronic aquatic life criterion for PCP sufficient to protect ESA-listed species and/or their critical habitats. In reviewing this criterion, EPA must generate new information on PCP regarding the toxicity of commercial grade PCP and the interaction of temperature and dissolved oxygen on sublethal acute and chronic toxicity to early life stage salmonids, by, *inter alia*, performing toxicity tests on at least one anadromous fish species and producing data on chronic toxicity of PCP to ESA-listed species; (2) if as a result of these new studies EPA revises its CWA § 304(a) chronic aquatic life criterion, propose a revised CWA § 303 PCP criterion for California by March 2002. If EPA's revised PCP CWA § 303 criterion is less stringent than the range of criterion concentrations suggested by the Services to protect ESA-listed species (0.2 to 2.0 ug/L at pH of 7.8) or if EPA determines that a PCP criterion revision is not necessary, EPA must provide the Services with a BE/BA and a request for formal ESA § 7 consultation by March 2002; (3) If EPA proposes a revised PCP criterion by March 2002, EPA must promulgate a final PCP criterion as soon as possible, but no later than 18 months, after proposal, (4) provide the Services with semi-annual reports concerning the status of EPA's review of the PCP chronic aquatic life criterion and any draft BA/BE associated with the review, (5) identify to the Services the water bodies into which there are discharges of PCP authorized by NPDES permits and where there are Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA") and Resource Conservation and Reclamation Act ("RCRA") sites that potentially contribute PCP to surface waters. By October 2000, EPA must also review information concerning PCP discharges to determine the potential for the discharge to impact ESA-listed species and/or critical habitats. In this review, EPA must give priority to review data for fresh water bodies

within the range of ESA-listed salmonids that currently lack a municipal ("MUN") designation as specified in the Regional Boards' Basin Plans; and (6) If EPA identifies PCP discharges that have the potential to adversely affect ESA-listed species and/or critical habitat, work with the Services and the State of California to address the potential effects to these species, including by imposing stricter NPDES permit limits on PCP discharges.

EPA has failed to comply with any of these BiOp's PCP RPMs. In 2004, EPA first informed the Services that it would not be revising either the CWA § 304(a) or § 303(c) PCP criterion. The Services replied to EPA and questioned this determination, further pointing out that EPA had failed to comply with the BiOp's requirement to generate new research on PCP toxicity. In response, EPA pointed out that some of the literature EPA staff had reviewed was generated after the date of the BiOp, but EPA did not respond to the Services' point that EPA itself had not performed the research directed by the BiOp on the chronic sub-lethal toxicity of commercial grade PCP, and the interaction of temperature and dissolved oxygen on PCP toxicity, to protect early life-stage salmonids. In 2007, EPA informed the Services that EPA would not be revising the CWA § 303(c) PCP water quality criteria applicable to California, and that the State and Regional Boards would instead determine where conditions of low dissolved oxygen and high temperatures exist in the State and adopt the appropriate PCP water quality criteria during the next triennial review of each Regional Board Basin Plan.

Before making this determination in 2007, EPA again failed to generate *new* information on the toxicity of commercial grade PCP under the environmental conditions specified in the BiOp and further urged by the Services in November 2004. Further, EPA also failed to reinitiate consultation with the Services when it determined that it would not revise the PCP criteria even though the BiOp clearly instructed EPA to reinitiate consultation under these circumstances. Finally, based on information and belief, EPA has not complied with the BiOp's requirements to review PCP discharges authorized by NPDES permits or associated with CERCLA or RCRA sites, to determine the potential for PCP discharges to impact ESA-listed species and/or ESA-designated critical habitats. EPA has also not taken any steps to reduce the impacts of such discharges, including imposing more stringent PCP limits in NPDES permits. EPA has provided no semi-annual reports or other information regarding PCP permitted discharges to the Services after 2006.

4. Cadmium RPMs

The Services concluded in the BiOp that salmonid species are particularly sensitive to cadmium, and even low concentrations of cadmium have been shown to reduce growth, survival, and fecundity in many salmonid species. In the BiOp, the Services determined that all ESUs and runs of Coho and Chinook salmon and steelhead trout, Lahontan cutthroat trout, Paiute cutthroat trout, Little Kern golden trout, along with the unarmored threespine stickleback are likely to be adversely affected by concentrations of cadmium at or below the criteria in the CTR.

In response to their concerns over the CTR's cadmium water quality criteria, the Services included in the BiOp RPMs requiring EPA to take the following actions with respect to these

criteria: (1) by no later than January 2001, revise the CWA § 304(a) chronic aquatic life criterion for cadmium such that it will be protective of salmonids and sticklebacks, and by January 2002, propose a revised CWA § 303 chronic aquatic life criterion for cadmium for California, and then promulgate a final CWA § 303 chronic aquatic life criterion as soon as possible, but no later than 18 months, after proposal; (2) if EPA's revised cadmium criterion is less stringent than the range of protective criteria concentrations proposed by the Services in the BiOp (0.096 ug/L to 0.180 µg/L), EPA must provide the Services with a BE/BA and request for formal ESA § 7 consultation on the revised criterion by the time of the proposal, (3) provide the Services with semi-annual reports regarding the status of EPA's revision of the cadmium chronic aquatic life criterion and any draft BE/BA associated with the revision, (4) continue to consult with the Services under ESA § 7 on revisions to WQS for cadmium contained in Basin Plans submitted by California to EPA under CWA § 303 and affecting waters of California containing ESA-listed species and/or their habitats, (5) submit to the Services a list of NPDES permits due for review that authorize cadmium discharges and RCRA and CERCLA sites where cadmium discharges are a concern. EPA, in cooperation with the Services, must review these discharges to identify any potential for adverse effects on ESA-listed species and/or their habitats. EPA will coordinate with the Services on any permits that the Services or EPA identify as authorizing discharges that have the potential for adverse effects on ESA-listed species and/or their habitats. By December 2000, EPA must identify all cadmium discharges from point sources and cadmium-contaminated RCRA or CERCLA sites in California that may affect ESA-listed species and provide a corresponding report to the Services by December 31, 2000; (6) if EPA identifies cadmium discharges that have the potential to adversely affect ESA-listed species and/or critical habitat, EPA must work with the Services and the State of California to address the potential effects to the species, including, where appropriate, imposing more stringent limits in NPDES permits on cadmium discharges.

EPA has largely failed to comply with the RPMs for cadmium and take action to adopt water quality criteria for cadmium that are protective of designated beneficial uses of California's waters. Although EPA revised its national recommended CWA § 304(a) human health criteria for cadmium in 2001, EPA has failed to propose and finalize a cadmium CWA § 303 human health water quality criterion for California. EPA has further failed to revise the existing water quality criteria for cadmium in the CTR to levels that are protective of ESA-listed species. Thus, California still lacks statewide CWA § 303 water quality criteria for cadmium that are protective of ESA-listed species and human health. EPA also claims that the State Board has decided to take the lead on the promulgation of the cadmium criteria, but the State Board continues to fail to take action on adopting cadmium water quality criteria. The State Board proposed initial scoping on the adoption of hardness-based equations for freshwater cadmium objectives derived by the United States Geological Survey and EPA's 304(a) criteria in 2008, but the State Board has failed to follow through on completing this adoption. Further, EPA did not reinstate ESA § 7 consultation with the Services after deciding to abdicate its requirement to promulgate the new and revised CWA § 303(c) cadmium criteria. Based on information and belief, EPA has also failed to comply with the other cadmium RPMs in the BiOp. Since 2006, EPA has not provided the Services with semi-annual reports regarding the status of EPA's revision of the cadmium chronic aquatic life criterion and any draft BE/BA associated with the revision. EPA has not consulted with the Services under ESA § 7 on revisions to water quality standards for cadmium

contained in Basin Plans submitted by California to EPA under CWA § 303 and affecting waters of California containing ESA-listed species and/or their habitats. EPA has not submitted to the Services a list of NPDES permits due for review that authorize cadmium discharges and RCRA and CERCLA sites where cadmium discharges are a concern. EPA has also not, in cooperation with the Services, reviewed these discharges to identify any potential for adverse effects on ESA-listed species and/or their habitats. EPA has not coordinated with the Services on any NPDES permits that the Services or EPA identify as authorizing discharges that have the potential for adverse effects on ESA-listed species and/or their habitat. EPA has not identified all cadmium discharges from point sources and cadmium-contaminated RCRA or CERCLA sites in California that may affect ESA-listed species and provided a corresponding report to the Services. EPA has not worked with the Services and the State of California to reduce the potential effects to ESA-listed species from cadmium discharges, including, where appropriate, imposing more stringent limits in NPDES permits on cadmium discharges.

5. Dissolved Metals RPMs

In the CTR, EPA promulgated water quality criteria for dissolved levels of the metals arsenic, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, and zinc. However, these criteria for metals are "formula-based," meaning that when the State Board or Regional Boards implement the criteria for these metals to a given water body, they have to consider site-specific data about that water body and input it into a formula to generate the final numeric water quality criteria that are then used, for example, to set effluent limitations in NPDES permits. In the BiOp, the Services found the formula-based method used by EPA in promulgating the water quality criteria for the metals listed above does not sufficiently consider the environmental fate, transport, and transformations of these metals in natural environments.

The BiOp found that the CTR criteria for these metals as adjusted by the CTR's formula would adversely affect all ESUs and runs of Coho and Chinook salmon and steelhead trout if the concentrations of particulate and/or dissolved metals were at or below those that were applied using EPA's existing implementation guidance. Further, the Services determined that numerous species of reptiles and amphibians including the California red-legged frog, San Francisco garter snake, and virtually all species of fairy shrimp (found in Central Valley vernal pools) are impacted by the potentially improper implementation of the dissolved metals criteria into NPDES permits. The BiOp's list of ESA-listed species that will be adversely impacted from exposures to pollutants authorized by the CTR's approach to metals criteria is on page 226-27 and is hereby incorporated by reference--as well as the BiOp's discussion of evidence supporting the Services' conclusions concerning the impacts of EPA's actions on these species (quoting this material in full herein is unnecessary as EPA and the Services are in possession of the BiOp and fully aware of its contents).

In response to their concerns over the CTR's formula-based dissolved metals water quality criteria, the Services included in the BiOp RPMs requiring EPA to take the following actions with respect to these criteria: (1) by December of 2000, in cooperation with the Services,

develop sediment criteria guidelines for cadmium, copper, lead, nickel and zinc, and by December of 2002, for chromium and silver. After completing the sediment guidance for cadmium, copper, lead, nickel and zinc, EPA must, in cooperation with the Services, draft implementation guidelines for California to protect ESA-listed species and critical habitat in California. Commencing in June 2000, EPA must submit semi-annual reports to the Services on the status of sediment guideline development; (2) before the end of 2000, in cooperation with the Services, issue two clarifications to the Interim Guidance on the Determination and Use of Water-Effects Ratios for Metals concerning the use of calcium-to-magnesium ratios in laboratory water and the proper acclimation of test organisms prior to testing in applying water-effects ratios (WERs). EPA must also allow the use of WERs only when the site specific LC50 (i.e., the "Lethal Concentration 50%," meaning the concentration of effluent causing 50% mortality in tested organisms) and the laboratory LC50 are significantly different using a 95% confidence interval; (3) by June of 2003, develop, in cooperation with the Services, a revised criteria calculation model based on best available science for deriving aquatic life criteria on the basis of hardness (calcium and magnesium), pH, alkalinity, and dissolved organic carbon (DOC) for metals. EPA must develop this model in conjunction with certain additional RPMs labeled as "Other Actions" and further discussed below. Commencing in June 2000, EPA must submit semi-annual reports to the Services on the status of the development of the revised criteria calculations model for metals; (4) whenever California's State Board or Regional Boards use site specific translators (i.e., the ratio of dissolved metal to total recoverable metal in the receiving water downstream from a discharge) to set effluent limits in NPDES permits and ESA-listed species or critical habitat is present downstream from the discharge in issue where a State developed translator will be used and the conditions listed below exist, EPA must work, in cooperation with the Services and the State of California, to use available ecological safeguards to ensure protection of ESA-listed species and/or critical habitat. Ecological safeguards include: (a) sediment guidelines; (b) biocriteria; (c) bioassessment; (d) effluent and ambient toxicity testing; or (e) residue-based criteria in shellfish. The conditions requiring this use of ecosystem safeguards are:

- i. A water body is listed as impaired on the CWA section 303(d) list due to elevated metal concentrations in sediment, fish, shellfish or wildlife; or,
- ii. A water body receives mine drainage; or,
- iii. Where particulate metals compose a 50% or greater component of the total metal measured in a downstream water body in which a permitted discharge (subject to translator method selection) is proposed and the dissolved fraction is equal to or within 75% of the water quality criteria;

(5) Whenever an ESA-listed species is present downstream from a discharge where the State Board or Regional Boards will use a site specific translator to set NPDES permit effluent limits, work with the State Board or Regional Boards to ensure that appropriate information to calculate the site specific translator is obtained and used, including:

1. Ambient and effluent acute and chronic toxicity data;
2. Bioassessment data; and/or

3. An analysis of the potential effects of the metals using sediment guidelines, biocriteria and residue-based criteria for shellfish to the extent such guidelines and criteria exist and are applicable to the receiving water body;

(6) Review, in cooperation with the Services, NPDES permitted discharges of metals and associated monitoring data and permit limits, to determine the potential for the discharges to impact ESA-listed species and/or critical habitats. If discharges of metals are identified that have the potential to adversely affect ESA-listed species and/or critical habitat, EPA must work with the Services and the State of California to address these adverse impacts in accordance with procedures agreed to by the agencies in the draft MOA. Among other options to resolve the issue, the EPA may make NPDES permit limits for these discharges more stringent.

EPA has failed to comply with many of these RPMs. Although EPA did eventually develop sediment criteria guidelines for cadmium, copper, lead, nickel, zinc, chromium, and silver⁵, EPA failed to draft and finalize implementation guidelines for California to protect ESA-listed species and ESA designated critical habitat in California. Instead, EPA indicated that it would wait for the State Board to develop this guidance instead of completing it as the BiOp directed EPA to do.

EPA also decided not to revise the Interim Guidance on the Determination and Use of Water-Effect Ratios for Metals as required by the BiOp. Based on the information available to the Environmental Groups, EPA also failed to complete the remainder of the metals-related RPMs in the BiOp discussed above. Thus, EPA has not developed, in cooperation with the Services, a revised criteria calculation model for metals based on best available science. Since at least 2006, EPA has failed to submit semi-annual reports to the Services on the status of the development of the revised criteria calculations model for metals. EPA has not worked with the Services to evaluate all pertinent permit limits in NPDES permits issued by California's State Board or Regional Boards to ensure that limits set using site specific translators are protective of ESA-listed species and that appropriate information was used to set the limits. EPA has not reviewed, in cooperation with the Services, NPDES permitted discharges of metals and associated monitoring data and permit limits, to determine the potential for the discharges to impact ESA-listed species and/or species' critical habitats.

6. Other Actions

The BiOp imposed an additional two general RPMs that the BiOp labeled as "Other Actions." These required EPA to take the following actions: (1) initiate a process to develop a national methodology to derive site-specific criteria to protect ESA-listed species in accordance with the draft MOA and (2) work with the State of California pursuant to CWA § 303(d) to promote and develop strategies (including the adoption of Total Maximum Daily Loads, "TMDLs") to identify sources of selenium and mercury contamination to the impaired water bodies where ESA-listed species exist, and use existing authorities and

⁵ i.e. "Procedures for the Derivation of Equilibrium Partitioning Sediment Benchmarks (ESBs) for the Protection of Benthic Organisms: Metal Mixtures (Cadmium, Copper, Lead, Nickel, Silver and Zinc)", EPA Document No. EPA/600/R-02-011, EPA Office of Research and Development, January, 2005.

resources to identify, promote, and implement measures to reduce selenium and/or mercury loading into their habitat (e.g., San Joaquin River, Salton Sea, Cache Creek, Lake Nacimiento, Sacramento - San Joaquin Delta etc.). Information available to the Environmental Groups indicates that EPA has not fully complied with either of these RPMs. EPA has not adopted the required national methodology for protection of ESA-listed species required by the first of these RPM. While the several Regional Boards have promulgated several TMDLs for mercury and selenium, EPA has also not secured the adoption of TMDLs for selenium and/or mercury loading into the habitat referred to in the BiOp (e.g., Salton Sea, Lake Nacimiento, or the Sacramento - San Joaquin Delta).

7. Conservation Recommendations

The BiOp points out that ESA § 7(a)(1) directs Federal agencies to utilize their authorities to further the ESA's purposes by carrying out conservation programs for the benefit of endangered and threatened species. The BiOp lists several actions that EPA should take to meet this ESA § 7(a)(1) duty, including the following:

1. The EPA should quantify the toxic effects of selenium and mercury individually and in combination to listed reptiles and amphibians using appropriate surrogate species. Research should include the most toxic forms of selenium and mercury and include full life cycle exposure protocols including dietary routes of exposure and maternal transfer as a route of embryonic exposure.
2. The EPA should conduct research on mercury residues in amphibian tissues which would allow prediction of adverse effects from mercury residues found in field collected frogs.
3. The EPA should consider developing a tissue based criteria for mercury and selenium protective of reproduction of aquatic dependent species of fish and wildlife in California.
4. The EPA should, in cooperation with the Service and USGS, conduct research on the toxic effects of selenium and mercury, individually and in combination, to the reproduction of fish-eating birds using appropriate surrogate species. Research should include the most toxic forms of selenium and mercury and include sensitive life stages and exposure protocols that include dietary routes of exposure to females and maternal transfer as a route of embryonic exposure.
5. The EPA in conjunction with the San Francisco Bay Regional Water Quality Control

Board and Central Valley Regional Water Quality Control Board should assess the influx, fate, and transport of mercury into the San Francisco Bay Estuary to facilitate the development of mercury control strategies.

6. The EPA should conduct toxicity tests in waters where particulate concentrations are great and dissolved metal concentrations are low. These studies should ideally include a dietary exposure component (*in situ* studies) to determine the effects of these discharges on the growth, survival, and reproduction on listed fishes and crustaceans.

Information available to the Environmental Groups indicates that EPA has not fully implemented any of these actions and mostly has ignored the Services' recommendations concerning these actions.

IV. VIOLATIONS OF THE FEDERAL CLEAN WATER ACT AND ENDANGERED SPECIES ACT

This letter provides notice of the Environmental Groups' intent to sue for the CWA and ESA violations identified below.

A. EPA's Violations of the CWA

The CWA imposes a strict, mandatory schedule pursuant to which EPA must approve or disapprove proposed WQS. In particular, CWA § 303(c)(4) requires EPA to act promptly when the agency has determined that a revised or new WQS is necessary and promulgate a final WQS within ninety days of proposing a given WQS unless the State has already adopted a WQS in accord with the requirements of the CWA. 33 U.S.C. § 1313(c)(4). When taking action pursuant to CWA § 303(c)(4), the EPA "is subject to the same policies, procedures, analyses, and public participation requirements established for States in [the EPA] regulations." 40 C.F.R. § 131.22(c).

EPA proposed a maximum freshwater aquatic life criterion and human health water quality criteria components of WQS for selenium and maximum and chronic freshwater and saltwater aquatic life criteria for mercury for California on August 5, 1997, but more than 15 years have passed without EPA finalizing those water quality criteria. Although EPA promulgated a national ambient water quality criteria for mercury in 2001 (and proposed a national selenium water quality criteria in 2004) pursuant to CWA § 304(a), EPA's national criteria are simply guidance, have no binding legal effect, and are not a substitute for promulgating legally binding water quality criteria pursuant to CWA § 303(c).

Given that the State of California still has not adopted its own WQS for selenium or mercury to date, EPA is required to follow the timeline set forth in 33 U.S. C. § 1313(c)(4) for

final promulgation of maximum aquatic life freshwater criterion and human health water quality criteria for selenium and maximum and chronic freshwater and saltwater aquatic life criteria for mercury. EPA has clearly failed to either act "promptly" or publish revised or new water quality criteria for these parameters within 90 days of initially proposing them. EPA's ongoing inaction has caused the State of California to go without numeric water quality criteria for these priority toxic pollutants as required by the CWA.

Additionally, EPA has stated in a formal letter (dated December 16, 1999) to the Services indicating that as part of the agencies' ESA § 7 consultation, EPA was committing to revise its CWA § 303 acute and chronic aquatic life criteria for selenium. EPA further indicated in this letter its commitment to revise its CWA § 303 human health criterion for mercury. EPA thus indicated that, in agreement with the Services, it had found that EPA needed to promulgate appropriately stringent water quality criteria for these parameters. EPA has also agreed in writing that that the existing water quality criteria in the CTR for PCP is insufficiently stringent to protect ESA-listed aquatic species in California under certain conditions. Protection of such aquatic species are part of the designated uses of the waters that these species inhabit. CWA § 303(c) requires WQS to include water quality criteria sufficiently stringent to protect designated uses. Thus, EPA has effectively acknowledged that the CTR is insufficiently stringent to protect the designated uses of California waters and that revised more stringent water quality criteria is needed to comply with the CWA. CWA § 303(c)(4) requires EPA to promptly adopt final revised water quality criteria whenever EPA finds that new or revised water quality criteria are needed to comply with the CWA. EPA has not acted promptly to adopt new water quality criteria for selenium, mercury, and PCP as it has been more than 15 years since EPA effectively found that revised water quality criteria for these pollutants are needed, but EPA has not adopted revised water quality criteria for these pollutants.

By thus failing to act, EPA has violated its mandatory CWA duties and is subject to citizen suit enforcement litigation under CWA § 505(a)(2), 33 U.S.C. § 1365(a)(2).

B. EPA's and the Services' Violations of the ESA

Because EPA has failed to comply with many of the RPMs set forth in the BiOp, EPA has violated and is in on-going violation of ESA § 9. EPA has further failed to implement the BiOp's Conservation Recommendations or otherwise used its authorities to further the ESA's purposes by carrying out conservation programs (including but not limited to the measures specified as RPMs in the BiOp) for the benefit of ESA-listed species. EPA has thus violated and is on-going violation of ESA § 7(a)(1). EPA has also further failed insure that its actions in issuing the CTR are not likely to jeopardize the continued existence of any ESA-listed species or result in the destruction or adverse modification of habitat of such species by not complying with the RPMs or implementing the Conservation Recommendations. EPA has thus violated and is on-going violation of ESA § 7(a)(2). EPA's prolonged delay in complying with the RPMs contradicts the requirements of the BiOp and the presumptions in the ITS on which the Services based their decision to issue a "No Jeopardy" opinion, i.e., a biological opinion finding that the CTR would not jeopardize the survival and recovery of ESA-listed species. Further, EPA has failed to reinitiate ESA § 7 consultation with the Services despite several key developments since

the BiOp was issued that have triggered an EPA duty to reinitiate such consultation: (1) EPA's failure to promulgate or revise the various water quality criteria discussed above as the BiOp directed, (2) EPA substantively changing the scope of the proposed actions addressed in the BiOp, and (3) the Services listing for protection under the ESA several new aquatic species in California since the BiOp was issued which could be affected by the incomplete or inadequate CTR criteria, including several anadromous fish runs of steelhead, salmon, and sturgeon added to NMS's list of threatened species in 2005 and 2006.

1. EPA Has Failed To Comply With the Terms and Conditions Required by the BiOp and ITS, and Is Therefore Unlawfully Taking Species in Violation of ESA § 9.

By failing to adopt certain CWA § 303(c) criteria for selenium or mercury and revised PCP, cadmium, and formula based dissolved metals criteria that are protective of ESA-listed species, EPA is causing the taking of ESA-listed species in violation of ESA § 9. Take of a listed species means, *inter alia*, to harass, harm, kill, trap or capture the species. 16 U.S.C. § 1532(19). Taking further includes causing significant habitat modification or degradation which actually kills or injures fish or wildlife by significantly impairing essential behavioral patterns, including, breeding, spawning, rearing, migrating, feeding or sheltering. 50 C.F.R. § 222.102. A regulatory agency such as EPA causes take when it authorizes activity that results in the death or injury to a member of an ESA-listed species or significant habitat modification or degradation which kills or injures a member of the species or significantly impairs essential behavioral patterns of the species. *E.g.*, *Defenders of Wildlife v. Env'tl. Prot. Agency*, 882 F.2d 1294, 1301 (8th Cir. 1989); *Or. Natural Desert Ass'n v. Tidwell*, 716 F. Supp. 2d 982, 1005 (D. Or. 2010); *Loggerhead Turtle v. County Council of Volusia County*, 896 F. Supp. 1170, 1180-81 (M.D. Fla. 1995).

EPA's delay and non-compliance with all of the required RPMs is causing significant habitat modification or degradation that impairs behavioral patterns, including spawning, rearing, migrating, feeding, and sheltering. CWA § 301(b)(1)(C) requires that all NPDES permits issued to discharges of pollutants include effluent limitations sufficient to meet applicable WQS. By failing to adopt water quality criteria components of WQS for mercury, selenium, cadmium, and PCP and formula for translation of water quality criteria for metals into NPDES permit limits for metals that are sufficiently stringent to protect ESA-listed species, EPA has effectively authorized issuance of NPDES permits which in turn authorize the discharge of these pollutants at levels that will kill or injure ESA-listed species and which modifies or degrades the habitat of ESA-listed species in a fashion that kills or injures or significantly impairs essential behavioral patterns of ESA-listed species. In addition, EPA's failure to monitor the issuance of NPDES permits authorizing the discharge of these pollutants has led to the issuance of NPDES permits with insufficiently stringent limits needed to protect ESA-listed species--and thus has effectively authorized the discharge of pollutants at levels that will kill, injure or otherwise harm ESA-listed species and harm ESA-designated critical habitat.

The Services' conclusions in the BiOp that the CTR would not cause jeopardy if EPA were to comply with the RPMs in the BiOp underscore that EPA's adherence to these RPMs is needed to avoid take of ESA-listed species:

(1) adverse effects associated with the modified proposed action will be sufficiently minimized by NPDES permit evaluation and early coordination and consultation with the Services on all other CWA programs subject to section 7 consultation; (2) the time frames and procedural commitments proposed by EPA in their December 16, 1999, letter provide assurance that future criteria will be adequately protective of listed species and critical habitat; and (3) that EPA will promulgate such criteria in a manner that will provide protection to listed species and/or critical habitat ...

See BiOp at page 220-221. The ITS portion of the BiOp specifies that if EPA fails to meet the RPMs set out in the BiOp, the level of anticipated take allowed for in the ITS will be exceeded. Because EPA failed to complete all the RPMs as set forth in the BiOp, resulting in the lack of statewide water quality criteria for selenium, mercury, PCP, cadmium, and other metals that are protective of ESA-listed species as well as the lack of the guidance and implementation actions related to dissolved metals criteria needed to ensure protection of ESA-listed species, EPA has taken itself out of the safe harbor the BiOp provided. Without any protection under ESA § 7, EPA's delay in promulgating these water quality criteria is in violation of ESA § 9, which commands that it is unlawful for any person to take any ESA-listed species. 16 U.S.C. § 1538(a). EPA's delay in promulgating these water quality criteria, by leading to inadequate regulatory restrictions on the discharge of the relevant toxic pollutants and thus exposures to these toxic pollutants at elevated levels, is causing the take of the ESA-listed species set out in Table 3 set forth at pages 242-44 of the BiOp. Therefore, EPA is hereby put on notice of its past and ongoing violations of ESA § 9 as a result of its failure to comply with the RPMs in the ITS.

2. EPA and the Services Are Violating the ESA By Failing To Reinitiate Consultation.

ESA regulations require reinitiation of formal ESA § 7 consultation when the action is modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the biological opinion or a new species is listed or critical habitat designated that may be affected by the identified action. 50 C.F.R. § 402.16. Both the action agency and the consultation agency have a duty to reinitiate consultation for any one of these reasons. *Id.* The Services must then issue a new biological opinion before the action agency can continue with its action. Neither the Services nor EPA have reinitiated consultation despite EPA's alteration and/or abandoning of the RPMs pertaining to selenium, mercury, PCP, cadmium and dissolved metals required by 50 C.F.R. § 402.16 and the Services' listing of new species in California under the ESA.

As described above, EPA has failed to comply with the BiOp's RPMs with respect to criteria for selenium, mercury, PCP, cadmium, and dissolved metals. In particular, EPA has failed to (a) propose and finalize certain selenium criteria for California and complete all the related RPMs set forth in the BiOp, (b) propose certain mercury criteria for California and complete all the related RPMs set forth in the BiOp, (c) failed to promulgate the revised CWA § 304(a) criteria for cadmium in California and complete all the related RPMs set forth in the BiOp, (d) failed to complete the research associated with PCP and comply with the RPMs set

forth in the BiOp, and (e) failed to issue the implementation on the sediment criteria guidelines and revised WER and hardness guidance documents as required and complete all of the RPM "Other Actions" as directed by the BiOp. EPA has also notably failed to continue ongoing oversight and review of NPDES permits and other discharges for each of these criteria as set forth in the BiOp as well as failed to provide the required status reports to the Services since at least 2006. Instead of complying with the RPMs associated to each criterion, EPA has instead changed the scope of its actions dramatically from the course set forth in the BiOp.

For instance, EPA's action with respect to selenium has been greatly altered from the proposed action described in the BiOp. EPA decided to bifurcate the promulgation of these criteria, with plans to issue criteria for the San Francisco Bay Delta possibly within the next two years and at a future unknown date promulgate selenium criteria applicable to the rest of the state. EPA has proceeded to work informally with the Services on the development of a selenium criteria for San Francisco Bay and the rest of California, but this work has transpired without EPA providing a BE/BA to the Services, any formal amendment to the BiOp and ITS, or any other ESA § 7 consultation.

With respect to PCP, EPA decided not to revise its recommended CWA § 304(a) chronic aquatic life criterion. However, EPA made this determination without having completed the BiOp's requirement to "generate new information on the toxicity of commercial grade PCP and the interaction of temperature and dissolved oxygen on sublethal acute and chronic toxicity to early life stage salmonids." These tests were to include at least one anadromous species and produce data on chronic toxicity of PCP to listed species. In coming to its conclusion that the existing criterion was protective of ESA-listed species, EPA basically reviewed the same pre-2000 literature that the agency had previously reviewed and refused to generate any new data testing the specifications set forth in the BiOp. EPA wrote to the State Board in 2007 and essentially pushed the responsibility of promulgating the Services recommended criteria for PCP onto the State.

With respect to the mercury, cadmium, and the formula based dissolved metals criteria, EPA appears to have determined that compliance with all the BiOp's RPMs is unnecessary. Instead, EPA informally and without the benefit of any public process, has decided to wait and see if the State Board takes action with respect to promulgating a statewide mercury and cadmium criterion and implement guidelines on the use of EPA's sediment criteria to protect ESA-listed species in California. These changes to the proposed action not only contradict the BiOp's directive to reinstate consultation if the criteria are not issued or revised in line with the recommendations of the BiOp - they also violate ESA § 7's duty to reinstate consultation. Further, EPA's decision to turn promulgation of the criteria or guidance documents over to the State Board, which showed itself incapable of issuing its own WQS after several years of political indecisiveness thus necessitating EPA to step in and promulgate the CTR, is not only imprudent but a clear violation of the agency's duties under the ESA. EPA is hereby put on notice of these violations as described above.

EPA and the Services further failed to reinstate consultation despite new information on various ESA-listed species affected by the CTR's proposed or adopted selenium, mercury, PCP,

cadmium, and formula based dissolved metals criteria. NMFS listed several new species of anadromous fish as threatened under the ESA in 2005 and 2006 and USFWS has added other aquatic dependent species to the list of ESA-protected species since the BiOp's issuance that obviously could not have been included in the consideration of the March 2000 BiOp⁶. Despite these new listings, EPA did not reinitiate consultation on its selenium, mercury, PCP, cadmium, and formula based dissolved metals criteria. Furthermore, although the BiOp included review of the CTR's effects on several proposed threatened or endangered ("PT" or "PE") species,⁷ the Services clearly stated that the BiOp could "be converted to a biological opinion for those species/critical habitats, provided EPA formally requests such a conversion and the reinitiation criteria at 50 CFR § 402.16 do not apply." The BiOp also indicates that there will be no incidental take for the PT or PE species, until the species are listed and the conference opinion is adopted as the biological opinion. Based on information and belief, EPA has not formally requested the BiOp apply to the PT or PE species, nor has EPA reinitiated consultation due to the listing of several threatened or endangered salmonids in 2005 and 2006 and other species.

Thus, by failing to reinitiate ESA § 7 consultation despite the occurrences of the events discussed above that triggered a legal obligation to reinitiate such consultation, EPA and the Services are all in violation of their duties to reinitiate ESA § 7 consultation imposed by the ESA and 50 C.F.R. § 402.16.

3. EPA Is Violating Its Substantive ESA § 7 Duties.

ESA § 7 imposes on EPA substantive duties that are independent of its duty to avoid unlawful take of species prohibited by ESA § 9 or its procedural duties under ESA § 7 to consult with the Services on actions that will likely affect ESA-listed species. Specifically, ESA § 7(a)(1) imposes on EPA a duty to use its authorities to further the ESA's purposes by carrying out conservation programs for the benefit of ESA-listed species. ESA § 7(a)(2) imposes on EPA a duty to EPA to insure that its actions are not likely to jeopardize the continued existence of any ESA-listed species or result in the destruction or adverse modification of habitat of such species.

In the BiOp, the Services provided formal guidance concerning what EPA needs to do to fulfill its ESA § 7(a)(1) duties as the BiOp listed several Conservation Recommendations that the Services expressly identified as measures EPA should implement to fulfill its ESA § 7(a)(1) duties. However, EPA has failed to implement the BiOp's Conservation Recommendations or otherwise used its authorities to further the ESA's purposes by carrying out conservation programs (including but not limited to the measures specified as RPMs in the BiOp) for the benefit of ESA-listed species and has thus violated and is on-going violation of ESA § 7(a)(1). Most notably, the entire substantive thrust of the BiOp was that EPA should issue in California

⁶ The newly listed aquatic dependent species include the Green sturgeon – southern DPS, Chinook salmon-Winter-run, Chinook salmon-California coastal ESU, Chinook salmon-Spring-run, Coho salmon-Central California Coast ESU, Coho salmon-So. Oregon/No. Calif ESU, Steelhead-Central California Coast DPS, Steelhead-South/Central Calif Coast DPS, Steelhead-Southern California DPS, and the Steelhead-Central Valley DPS.

⁷ These include the Northern California ESU (Evolutionarily Significant Unit) of the steelhead trout(PT), Santa Ana sucker (*Catostomus santaanae*) (PT), the Southern California Distinct Population Segment of the Mountain Yellow-legged Frog (*Rana muscosa*)(PE), and the Santa Barbara County Distinct Population Segment of the California Tiger Salamander (*Ambystoma californiense*)(PE), and critical habitat for the Tidewater goby.

more stringent CWA § 303 water quality criteria and secure more stringent NPDES permit limits for the discharge of selenium, mercury, PCP, cadmium, and certain dissolved metals than reflected in the approach authorized by the CTR. Thirteen years later, EPA has entirely failed to implement this mandate in any respect. The CTR remains in its same unduly lax state as before the BiOp was issued, the State of California has not promulgated its own more stringent water quality criteria, and EPA has not required any NPDES permits to have more stringent limits on selenium, mercury, PCP, cadmium, and certain dissolved metals than authorized by the CTR. Such a total abdication of meeting its responsibility to implement conservation programs to benefit ESA-listed species constitutes a failure to comply with ESA § 7(a)(1).

In the BiOp and related documents, the Services expressly indicated that the CTR as currently framed was jeopardizing the survival and recovery of numerous ESA-listed species in California. The Services only issued a "no jeopardy" biological opinion to EPA based on express EPA commitments to amend the CTR and adopt more stringent water quality criteria and perform numerous other steps toward securing more effective control of the discharge of toxics into California waters. As discussed at length above, however, EPA has failed to implement the RPMs that the Services expressly found were needed for EPA's action in adopting the CTR not to jeopardize ESA-listed species or adversely modify such species' habitat. Accordingly, in failing to comply with the RPMs, EPA has necessarily failed to insure that its actions in issuing the CTR are not likely to jeopardize the continued existence of any ESA-listed species or result in the destruction or adverse modification of habitat of such species in violation of ESA § 7(a)(2). EPA is further in violation of ESA § 7(a)(2) by not implementing the BiOp's Conservation Recommendations or otherwise taking effective action to ensure that its actions are not jeopardizing ESA-listed species and has thus violated and is on-going violation of ESA § 7(a)(2).

By thus failing to act as described above, EPA has violated ESA requirements and its mandatory ESA duties and is subject to citizen suit enforcement litigation under ESA § 11, 16 U.S.C. § 1540.

V. NOTICE OF INTENT TO SUE EPA FOR VIOLATIONS OF THE CLEAN WATER ACT AND ENDANGERED SPECIES ACT

The Environmental Groups believe that EPA has failed in the respects set forth above to comply with the requirements imposed by the CWA to promulgate revised water quality criteria. CWA § 505(b), 33 U.S.C. § 1365(b), requires that sixty (60) days prior to the initiation of a civil action under CWA § 505(a), a citizen must give notice of his/her intention to sue. 40 C.F.R. § 135.2 provides that, if a citizen suit is based on the failure of the EPA Administrator to perform a nondiscretionary duty, service of notice shall be accomplished by certified mail addressed to, or by personal service upon, the Administrator of the Environmental Protection Agency. This section further provides that a copy of the notice shall be mailed to the Attorney General of the United States. Accordingly, this notice is being sent to you as the head and Administrator of the EPA. In addition, a copy of this notice is being sent to the Attorney General. We are also sending a copy of this notice to the Administrator of EPA Region 9.

EPA and the Services have also failed in the respects set forth above to comply with the requirements imposed by the ESA. ESA § 11(g), 16 U.S.C. § 1540(g), requires a citizen to give notice to the Secretary and to any alleged violator of his/her intent to file suit sixty (60) days prior to the initiation of a civil action under ESA § 11(g).

Thus, by this letter, pursuant to 33 U.S.C. §1365(a) and (b) of the CWA and 16 U.S.C. § 1540(g) of the ESA, the Environmental Groups hereby put you on notice that after the expiration of sixty (60) days from the date of this Notice of Intent To File Suit, the Environmental Groups intend to file an enforcement action in federal court against EPA and the Services for their violations of the CWA and ESA described above. In addition to the violations set forth above, this notice covers all ongoing violations of the CWA, ESA, and violations evidenced by information that becomes available to the Environmental Groups after the date of this Notice of Intent to File Suit.

The Environmental Groups intend to seek declaratory and injunctive relief preventing further violations of the CWA pursuant to CWA §§ 505(a) and (d), 33 U.S.C. § 1365(a) and (d), ESA § 11(g)(1), 16 U.S.C. § 1540 (g)(1), and such other relief as is permitted by law. Lastly, the Environmental Groups will seek to recover their attorneys, expert fees and costs pursuant to CWA §505(d) and ESA § 11(g)(4).

The Environmental Groups are interested in discussing effective remedies for the violations noted in this letter. If you wish to pursue such discussions in the absence of further litigation, we suggest that you initiate those discussions within the next 20 days so that they may be completed before the end of the 60-day notice period. Although the Environmental Groups are always interested in avoiding unnecessary litigation, we do not intend to delay the filing of a complaint in federal court if discussions are continuing when the notice period ends.

Sincerely,



Christopher Sproul

Attorney for Our Children's Earth Foundation and
Ecological Rights Foundation

CC: Eric H. Holder, Jr., U.S. Attorney General
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