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15 **THE UNITED STATES DISTRICT COURT**  
16 **OF ARIZONA**

17 Center for Biological Diversity,

18 Plaintiff,

19 v.

20 United States Fish and Wildlife Service;  
21 and Deb Haaland, in Her Official Capacity  
22 as Secretary of the United States  
23 Department of the Interior,

24 Defendants.

25 Case No. CV-22-00090-TUC-JCH

26 **FIRST AMENDED AND**  
27 **SUPPLEMENTAL COMPLAINT FOR**  
28 **DECLARATORY, MANDATORY**  
**AND INJUNCTIVE RELIEF**

**INTRODUCTION**

1. The U.S. Fish and Wildlife Service (“FWS”) has disregarded its duties for ~~more than five~~ *more than five* years to complete consultation on ~~two~~ *six* harmful pesticides to protect endangered species and their habitats, as Congress required under the Endangered Species Act (“ESA”). Specifically, Plaintiff, Center for Biological Diversity (“Center”) challenges

1 FWS's unreasonable delay to complete the required consultation process under Section 7  
2 of the ESA. On January 18, 2017, the U.S. Environmental Protection Agency ("EPA")  
3 initiated ESA formal consultation with FWS on the effects of its authorizations of uses of  
4 the pesticides chlorpyrifos and diazinon. On March 31, 2021, EPA initiated ESA formal  
5 consultation with FWS on the effects of its authorizations of uses of the pesticides carbaryl  
6 and methomyl. On November 12, 2021, EPA initiated ESA formal consultation with FWS  
7 on the effects of its authorizations of uses of the pesticides atrazine and simazine. FWS has  
8 a procedural duty to formulate an opinion ("biological opinion") whether the Federal  
9 EPA's action "is likely to jeopardize the continued existence of listed species or result in  
10 the destruction or adverse modification of critical habitat." 50 C.F.R. § 402.14(g). To date,  
11 FWS has not issued a biological opinion for chlorpyrifos, ~~and~~ diazinon, carbaryl,  
12 methomyl, atrazine, or simazine. These unreasonable delays are in violation of and  
13 actionable pursuant to the Administrative Procedure Act ("APA"), 5 U.S.C. § 555(b); 5  
14 U.S.C. §706(1).

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19 2. Harm to species and critical habitats that should be protected under the ESA  
20 will continue until FWS's unreasonable delays are remedied. In its January 2017 Biological  
21 Evaluation initiating consultation on registered uses of chlorpyrifos, EPA determined that  
22 these uses are *likely to adversely affect* 1,778 of the total protected species analyzed (97%  
23 of species) and 780 of the total critical habitats analyzed (98% of critical habitats).  
24 Similarly, for diazinon, EPA determined that registered uses are *likely to adversely affect*  
25 1,437 of the total protected species analyzed (78% of species) and 385 of the total critical  
26 habitats analyzed (48% of critical habitats). In October 2017, FWS had developed draft  
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1 biological opinions that concluded that the continued use of chlorpyrifos would result in  
2 jeopardy to 1,399 species (88% of species) and adverse modification to 169 species' critical  
3 habitat (23% of critical habitats analyzed); for diazinon FWS concluded jeopardy for 175  
4 species (12% of species) and adverse modification of 20 species' critical habitat (3% of  
5 critical habitats analyzed). Yet, five over six years have passed and FWS has not moved  
6 expeditiously to ensure the registered uses of chlorpyrifos and diazinon will not drive any  
7 species to extinction or adversely modify critical habitat by completing final biological  
8 opinions for each pesticide. During the same period, FWS's sister agency charged with  
9 implementing the ESA for marine life, the National Marine Fisheries Service ("NMFS"),  
10 completed several final biological opinions for pesticide active ingredients, including a  
11 biological opinion for chlorpyrifos, diazinon, and malathion on June 30, 2022. NMFS  
12 found that the continued use of chlorpyrifos would result in jeopardy to 37 species (47%  
13 of species analyzed) and adverse modification to 36 species' critical habitat (73% of critical  
14 habitats analyzed); for diazinon, NMFS concluded jeopardy for 26 species (33% of species)  
15 and adverse modification of 18 species' critical habitat (37% of critical habitats analyzed).

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20 3. In its March 2021 Biological Evaluations initiating consultation on registered  
21 uses of carbaryl and methomyl, EPA determined that these uses are likely to adversely  
22 affect 1,640 and 1,098 of the total protected species analyzed (91% and 61% of species),  
23 respectively, and 736 and 281 of the total critical habitats analyzed (93% and 36% of  
24 critical habitats). In March 2023, EPA and NMFS released a draft biological opinion  
25 concluding that the continued use of carbaryl and methomyl would result in jeopardy to 37  
26 and 30 species (61% and 50% of species analyzed), respectively, and adverse modification  
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1 of 36 and 29 species' critical habitat (67%, and 55% of critical habitats analyzed). Yet over  
2 two years have passed and FWS has not moved expeditiously to ensure the registered uses  
3 of carbaryl and methomyl will not drive any species to extinction or adversely modify  
4 critical habitat by completing final biological opinions for each pesticide.

6 4. In its November 2021 Biological Evaluations initiating consultation on  
7 registered uses of atrazine and simazine, EPA determined that these uses are likely to  
8 adversely affect 1,013 and 993 of the total protected species analyzed (56% and 55% of  
9 species), respectively, and 328 and 317 of the total critical habitats analyzed (41% and 40%  
10 of critical habitats). Yet over two years have passed and FWS has not moved expeditiously  
11 to ensure the registered uses of atrazine and simazine will not drive any species to  
12 extinction or adversely modify critical habitat by completing final biological opinions for  
13 each pesticide.

16 5. These six pesticides are believed to imperil such a broad array of species and  
17 habitats due to their significant and toxic presence in the environment. Chlorpyrifos and  
18 diazinon are organophosphate chemicals considered by FWS to be highly toxic to all  
19 animals because they can directly kill exposed organisms, impair critical life functions like  
20 growth, reproduction, and behavior, and cause indirect harm by killing food sources. They  
21 are used widely and travel on air currents, sometimes appearing in samples far from any  
22 application site. The carbamate chemicals carbaryl and methomyl, like organophosphates,  
23 attack organisms by inhibiting the acetylcholinesterase enzyme, which all animals share.  
24 The triazine chemicals atrazine and simazine, some of the most heavily applied herbicides  
25 in North America, have effects on species that range from sublethal to highly toxic.  
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1 Furthermore, these pesticides can have synergistic and additive effects. Atrazine, for  
2 example, has been shown to make organophosphates including chlorpyrifos, diazinon, and  
3 malathion much more toxic, while having cumulative interactions with pesticides like  
4 simazine that have a similar mode of action.

5  
6 6. Because EPA has indicated that it will not be implementing species or critical  
7 habitat-specific mitigation measures to address its ESA consultation obligations until  
8 consultation is complete, FWS's persistent delay in failing to complete the required  
9 consultations allows these toxic pesticides to continue to harm the species and contaminate  
10 their habitats.

11  
12 7. This lawsuit seeks an order compelling FWS to complete the consultations  
13 and comply with the ESA by dates certain, no later than six months following this Court's  
14 order, and other relief.

### 15 **JURISDICTION AND VENUE**

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17 8. This Court has jurisdiction pursuant to 28 U.S.C. § 1331 (federal question),  
18 28 U.S.C. § 1346 (United States as defendant), 28 U.S.C. §§ 2201-02 (declaratory relief),  
19 and 5 U.S.C. § 702 (APA).

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21 9. Venue properly lies in this Court pursuant to 28 U.S.C. § 1391(e)(1)(c)  
22 because the Center resides in this district.

23  
24 10. Arizona is among the states where EPA has authorized uses of chlorpyrifos,  
25 ~~and~~ diazinon, carbaryl, methomyl, atrazine, and simazine. Numerous members of the  
26 Center reside in or visit Arizona, and, thus, are exposed to uses of chlorpyrifos, ~~or~~ diazinon,  
27 carbaryl, methomyl, atrazine, or simazine, and their professional and personal interests in  
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1 endangered and threatened plants, insects, birds, and other wildlife are injured by FWS's  
2 unreasonable delay, as alleged more fully below.

### 3 **PARTIES**

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5 11. Plaintiff CENTER FOR BIOLOGICAL DIVERSITY ("Center") is a non-  
6 profit corporation with its headquarters in Tucson, Arizona, and an office in Flagstaff,  
7 Arizona, offices throughout the United States, and an office in Mexico. The Center was  
8 founded in 1989 to fight the growing number of threats to biodiversity. The Center's  
9 mission is to secure a future for all species, great and small, hovering on the brink of  
10 extinction through science, policy, education, and environmental law. The Center has a  
11 full-time staff of scientists, lawyers, and other professionals who work exclusively on  
12 campaigns to save species and their habitats. The Center is actively involved in species and  
13 habitat protection issues throughout the United States, including the U.S. territories, as well  
14 as outside of the United States and works to secure protections for all species. One of the  
15 Center's flagship programs is its environmental health program, which focuses on the  
16 adverse impacts of pesticides, including chlorpyrifos and diazinon. The Center has  
17 approximately 89,610 members that live throughout the United States, including Arizona.  
18 The Center's members rely on the Center to represent their interests in protecting  
19 biodiversity and conserving threatened and endangered species and their habitats.  
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24 12. Center members regularly work in, reside in, visit, observe, recreate, and  
25 otherwise enjoy areas across the nation that would be impacted by chlorpyrifos, ~~or~~  
26 diazinon, carbaryl, methomyl, atrazine, or simazine, and intend to continue doing so in the  
27 future. Plaintiffs' members regularly derive professional, aesthetic, spiritual, recreational,  
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1 economic, conservation, educational, and other benefits from the endangered and  
2 threatened species that live in these areas and would be impacted by the pesticides  
3 ~~chlorpyrifos or diazinon~~ at issue and intend to continue doing so in the future. The interests  
4 of Plaintiffs' members in the species and areas impacted by the pesticides chlorpyrifos, ~~or~~  
5 diazinon, carbaryl, methomyl, atrazine, and simazine, are and will be directly, adversely,  
6 and irreparably affected by Defendants' violations of the law.  
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8  
9 13. For example, Center member Brett Hartl lives in Arizona and is an avid  
10 birder and photographer of wildlife. He is concerned about the effects of chlorpyrifos, ~~and~~  
11 diazinon, carbaryl, methomyl, atrazine, and simazine on the California condor,  
12 Southwestern willow flycatcher, yellow-billed cuckoo, black-footed ferret, and Chiricahua  
13 leopard frog in Arizona. Specifically, he regularly enjoys hiking and recreating throughout  
14 Arizona and observing and photographing these species in their natural environment. He  
15 is concerned about use of chlorpyrifos, ~~and~~ diazinon, carbaryl, methomyl, atrazine, and  
16 simazine in Arizona. He also travels widely to observe and photograph birds and other  
17 wildlife. He regularly visits southern Texas to observe the whooping crane and Florida to  
18 observe the Florida scrub-jay and the Everglades snail kite. He is concerned about the  
19 effects of ~~chlorpyrifos and diazinon~~ the pesticides in this suit on these ESA-protected birds  
20 as well. EPA determined that chlorpyrifos, ~~and~~ diazinon, atrazine, and simazine are each  
21 "likely to adversely affect" each ~~the~~ species mentioned here; carbaryl and methomyl are  
22 each "likely to adversely affect" all but the California condor.  
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27 14. Additionally, Center member Jeff Miller regularly visits California Central  
28 Valley rivers and riparian areas about three to four times a year to observe and enjoy spring

1 run chinook salmon and steelhead trout, green sturgeon (southern DPS), and valley  
2 elderberry longhorn beetle in their habitats, which are near many agricultural operations  
3 likely to use diazinon, carbaryl, methomyl, atrazine, and simazine. He also regularly  
4 observes and enjoys San Joaquin kit fox and California tiger salamander in their natural  
5 habitats, which are also near many agricultural operations likely to use diazinon, carbaryl,  
6 methomyl, atrazine, and simazine. He is concerned about the use of diazinon, carbaryl,  
7 methomyl, atrazine, and simazine in California and its effects on these species, all of which  
8 EPA determined diazinon, carbaryl, methomyl, atrazine, and simazine ~~is~~ are “likely to  
9 adversely affect.”

12 15. The above-described interests of the Center’s members have been and are  
13 being adversely affected by FWS’s failure to complete consultation on the impacts of  
14 continued registrations of chlorpyrifos, ~~and~~ and diazinon, carbaryl, methomyl, atrazine, and  
15 simazine. If FWS completed consultation as required, FWS would detail how the pesticides  
16 are affecting endangered and threatened species and their critical habitats and, if necessary,  
17 would suggest reasonable and prudent alternatives to protect species.

20 16. Unless the requested relief is granted, the Center’s members’ interests will  
21 continue to be adversely affected and injured by FWS’s failure to complete the  
22 consultations, as well as by the ongoing harm to ESA-protected species and their critical  
23 habitats. The injuries described above are actual, concrete injuries that are presently  
24 suffered by the Center and its members and will continue to occur unless relief is granted  
25 by this Court. These injuries are directly caused by FWS’s failure to complete the  
26 consultations to ensure that EPA’s pesticide registrations do not jeopardize protected  
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1 species or their critical habitats. The relief sought herein—an order compelling completion  
2 of consultation—would redress the Center and its members’ injuries. The Center has no  
3 other adequate remedy at law.  
4

5 17. In addition, FWS’s unreasonable delay in completing formal consultations  
6 on chlorpyrifos, ~~and~~ diazinon, carbaryl, methomyl, atrazine, and simazine also adversely  
7 injures the Center’s organizational interests. The Center’s mission is dedicated to  
8 protecting ESA-protected species and their habitats from adverse impacts of pesticides,  
9 among other threats. FWS’s unreasonable delay in completing consultations by issuing  
10 biological opinions has caused the Center to continue to divert resources from addressing  
11 other pesticides to focus on the harms caused by chlorpyrifos, ~~and~~ diazinon, carbaryl,  
12 methomyl, atrazine, and simazine.  
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15 18. Defendant UNITED STATES FISH AND WILDLIFE SERVICE is an  
16 agency of the United States Government within the Department of the Interior. Under the  
17 ESA, FWS is the federal agency delegated responsibility from the Secretary of the Interior  
18 for completing consultation with federal agencies to ensure that agency actions do not  
19 jeopardize the survival and recovery of species protected by the ESA or destroy or  
20 adversely affect their critical habitat. 16 U.S.C. § 1536(a)(2).  
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23 19. Defendant, DEB HAALAND, is the Secretary of the United States  
24 Department of the Interior and, among other duties, is charged by Congress to consult with  
25 agencies, such as the EPA here, to ensure that agency actions do not jeopardize the survival  
26 and recovery of species protected by the ESA or destroy or adversely affect their critical  
27 habitat. 16 U.S.C. § 1536(a)(2). Secretary Haaland oversees FWS and is ultimately  
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1 responsible for FWS’s completion of ESA consultation. In this action, the Center is suing  
2 Secretary Haaland in her official capacity as Secretary of the Interior.

### 3 4 **LEGAL BACKGROUND**

#### 5 **I. The Administrative Procedure Act**

6 20. Pursuant to the Administrative Procedure Act (“APA”), a reviewing court  
7 “shall compel agency action unlawfully withheld or unreasonably delayed.” 5 U.S.C. §  
8 706(1). The APA requires that all federal agencies address matters “within a reasonable  
9 time,” and “[w]ith due regard for the convenience and necessity of the parties or their  
10 representatives.” 5 U.S.C. § 555(b). Where an agency action is unreasonably delayed the  
11 court shall compel the agency to act in a reasonable time. 5 U.S.C. § 706(1).  
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#### 14 **II. The Endangered Species Act**

15 21. Congress enacted the ESA, in part, to provide a “means whereby the  
16 ecosystems upon which endangered species and threatened species depend may be  
17 conserved . . . [and] a program for the conservation of such endangered species and  
18 threatened species . . .” 16 U.S.C. § 1531(b). The Supreme Court observed that “[t]he plain  
19 intent of Congress in enacting this statute was to halt and reverse the trend toward species  
20 extinction, whatever the cost,” and that in passing the law, Congress “intended endangered  
21 species to be afforded the highest of priorities.” *Tenn. Valley Auth. v. Hill*, 437, U.S. 153,  
22 174, 184 (1978).  
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25  
26 22. The Secretaries of Commerce and the Interior are charged with administering  
27 and enforcing the ESA, but they have delegated this responsibility to FWS and the National  
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1 ~~Marine Fisheries Service~~ (“NMFS”). 50 C.F.R. § 402.01(b).

2           23. Under Section 7 of the ESA, all federal agencies have a substantive duty to  
3 “insure that any action authorized, funded, or carried out by such agency . . . is not likely  
4 to jeopardize the continued existence of any endangered species or threatened species or  
5 result in the destruction or adverse modification of [critical] habitat of such species . . . .”

6 16 U.S.C. § 1536(a)(2).

7  
8           24. To fulfill the substantive purposes of the ESA, federal agencies have a  
9 procedural duty under section 7(a)(2) to engage in consultation with FWS (and/or NMFS)  
10 before authorizing, funding, or engaging in any “action” that could “jeopardize the  
11 continued existence” of any listed species or “result in the destruction or adverse  
12 modification of habitat of such species ... determined ... to be critical.” *Id.* § 1536(a)(2).  
13 The determination of whether a pesticide registration may affect ESA-protected species is  
14 referred to as an “effects determination” or “biological evaluation” in EPA parlance.  
15

16  
17           25. If the agency determines that its action is “likely to adversely affect” a listed  
18 species or critical habitat, the agency must engage in “formal consultation,” as outlined in  
19 50 C.F.R. § 402.14 (“Formal Consultation”). *Id.* § 402.14; see also *id.* § 402.02. Through  
20 consultation, FWS details how the agency action affects the listed species and their habitats  
21 and, if necessary, suggests reasonable and prudent alternatives to protect the species. 16  
22 U.S.C. § 1536(b)(3).

23  
24           26. FWS has a mandatory procedural duty under the ESA to complete formal  
25 consultation on chlorpyrifos, ~~and~~ diazinon, carbaryl, methomyl, atrazine, and simazine by  
26 issuing a biological opinions. 16 U.S.C. § 1536(b)(3); (50 C.F.R. §§ 402.14(g),(h), 402.46.  
27  
28

1 The ESA establishes timelines for the consultation process to occur prior to agency action.  
2 16 U.S.C. § 1536(a)(3) (consultation required “on any prospective agency action”); *Karuk*  
3 *Tribe of Cal. v. United States Forest Serv.*, 681 F.3d 1006, 1020 (9th Cir. 2012) (“duty to  
4 consult...before engaging in discretionary action”). Consultation shall be concluded within  
5 90 days of the date on which it is initiated, or within such other period as mutually agreeable  
6 to the consulting and action agencies. 16 U.S.C. § 1536(b)(1)(A). When the action under  
7 review involves a permit or license applicant, the consulting agency and the action agency,  
8 must seek consent of the applicant for periods exceeding 150 or more days after the date  
9 on which consultation was initiated. *Id.* § 1536(b)(1)(B).

12  
13 27. The result of formal consultation is the issuance of a biological opinion. If  
14 FWS concludes in its biological opinion that a proposed action is not likely to jeopardize  
15 the continued existence of a threatened or endangered species or result in the destruction  
16 or adverse modification of critical habitat, but may result in an “incidental take” of such  
17 species, then FWS determines whether to authorize the take of listed species through the  
18 issuance of an incidental take statement. 16 U.S.C. § 1536(b)(4). An incidental take  
19 statement must: (1) specify the impact of the incidental take on the listed species; (2)  
20 specify “reasonable and prudent measures” the agency considers necessary to minimize  
21 that impact; and (3) set forth mandatory terms and conditions. *Id.*

24 28. If FWS concludes in its biological opinion that a proposed action is likely to  
25 jeopardize the continued existence of a threatened or endangered species or result in the  
26 destruction or adverse modification of critical habitat, it must propose reasonable and  
27 prudent alternatives, if any, that would avoid the jeopardy or destruction or adverse  
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1 modification of critical habitat in order to meet the Section 7 substantive duty to avoid  
2 jeopardy or adverse modification. 16 U.S.C. § 1536(b)(3)(A); 50 C.F.R. § 402.14(h)(2).

3  
4 **III. The Federal Insecticide, Fungicide, and Rodenticide Act**

5 29. EPA is responsible for the oversight of pesticide registration and use in the  
6 United States. Specifically, the Federal Insecticide, Fungicide, and Rodenticide Act  
7 (“FIFRA”) charges EPA with registration, review, and ongoing oversight of chemicals for  
8 use as insecticides, herbicides, fungicides, rodenticides, fumigants, and other pesticides  
9 (collectively “pesticides”) in the United States. 7 U.S.C. §§ 136-136y.

10  
11 30. EPA must register pesticide active ingredients and individual pesticide  
12 products offered for distribution or sale. 7 U.S.C. § 136a(a); 40 C.F.R. § 152.15. A FIFRA  
13 registration is a license describing the terms and conditions under which the product can  
14 be legally distributed, sold, and used. FIFRA also requires that EPA periodically review  
15 registrations of pesticides. 7 U.S.C. § 136a(g)(A)(i). EPA must complete initial registration  
16 review of older pesticides by October 1, 2022. 7 U.S.C. § 136a(g)(A)(iii)(I).

17  
18 **FACTUAL BACKGROUND**

19  
20 **Chlorpyrifos and Diazinon**

21 31. Chlorpyrifos and diazinon are organophosphate insecticides, used as active  
22 ingredients in pesticide products designed to kill insects systemically and on contact.  
23 Organophosphates are a class of chemicals that are neurotoxins that inhibit normal brain  
24 and muscle function in exposed organisms. Organophosphates are toxic to all animals  
25 because they inhibit the enzyme acetylcholinesterase, which every kind of animal uses to  
26 regulate nerve and muscle function. Exposed animals can be killed or suffer impairment to  
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1 their behavior, reproduction, or growth, and even more organisms are indirectly harmed by  
2 the loss of their food sources or symbiotic partners (such as pollinators). Furthermore, these  
3 chemicals have been recorded in samples far from any application site, suggesting that they  
4 are being transported by air.

5  
6 32. One animal that FWS has studied, the federally endangered San Joaquin kit  
7 fox, is vulnerable to diazinon exposure through skin contact and by consuming  
8 contaminated food items. It lives in fragmented grassland habitat surrounded by intensive  
9 agriculture. The effects of diazinon exposure on these kit foxes are estimated to include  
10 10-13% direct mortality each year from consuming diazinon, a decline in food resources,  
11 and effects to growth, reproduction, and behavior in 16% of kit foxes.

12  
13  
14 33. In March 2009, EPA formally initiated registration review for chlorpyrifos  
15 when it opened the registration review docket. EPA Dkt. #EPA-HQ-OPP-2008-0850-0001  
16 (posted Mar. 17, 2009). In 2009, EPA anticipated completing registration review for  
17 chlorpyrifos in 2015. Chlorpyrifos Final Work Plan at 5, EPA Dkt. #EPA-HQ-OPP-2008-  
18 0850-0020.

19  
20 34. EPA notes in its Chlorpyrifos Proposed Interim Registration Review  
21 Decision that “FWS has not yet issued a [Biological Opinion] on chlorpyrifos.”  
22 Chlorpyrifos Proposed Interim Registration Review Decision at 9, EPA Dkt #EPA-HQ-  
23 OPP-2008-0850-0971 (posted Dec. 8, 2020). EPA states further that it “plans to address  
24 risks to [ESA] listed species and critical habitats from use of chlorpyrifos as part of the  
25 final registration review decision, pending completion of the nationwide consultation  
26 process.” *Id.* In other words, EPA will not implement protections for these species and  
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1 critical habitats until FWS completes a biological opinion.

2 35. Chlorpyrifos registered uses include a variety of non-food sites, including  
3 golf course turf, ornamental plants in nurseries, ear tags for cattle, wood treatments,  
4 industrial sites, greenhouses, sod farms. Chlorpyrifos is also registered for aerial and  
5 ground-based fogger treatments to control mosquitos, and residential uses for ant and roach  
6 bait products and fire ant mound treatments.  
7

8 36. Chlorpyrifos is also currently registered for use on many agricultural crops,  
9 with highest uses on corn, soybeans, alfalfa, oranges, wheat, and walnuts. However, in  
10 2021, the Court of Appeals for the Ninth Circuit ordered EPA to revoke all chlorpyrifos  
11 tolerances of residues of chlorpyrifos or modify tolerances that EPA determined could meet  
12 the safety standard of the Federal Food, Drug, and Cosmetic Act (“FFDCA”). *League of*  
13 *United Latin Am. Citizens v. Regan*, 996 F.3d 673 (9th Cir. 2021).  
14

15 37. EPA issued a rule revoking all tolerances for residues of chlorpyrifos,  
16 including tolerances on food and feed crops, because it could not conclude that the risk  
17 from exposure from the use of chlorpyrifos meets the safety standard of the FFDCA. 86  
18 Fed. Reg. 48315 (Aug. 30, 2021). The rule became effective on October 29, 2021, with the  
19 tolerances expiring on February 28, 2022. *Id.* The revocation of tolerances effectively  
20 ~~eliminates~~ eliminated use of chlorpyrifos on food and feed. However, the 8<sup>th</sup> Circuit  
21 vacated the EPA’s chlorpyrifos tolerance rule on November 2, 2023, holding that EPA had  
22 acted arbitrarily and capriciously in promulgating it. *Red River Valley Sugarbeet Growers*  
23 *Ass’n v. Regan*, 85 F.4th 881, 883 (8th Cir. 2023). ~~some agricultural interests petitioned for~~  
24 ~~review of EPA’s rule. Petition, (Doc #5126162) *Red River Valley Sugarbeet Growers Ass’n*~~  
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1 ~~*et al. v. Regan*, No. 22-1294 (8th Cir. Filed Feb. 9, 2022). Petitioners in that matter moved~~  
2 ~~for a partial stay of EPA's rule including for the following crops: alfalfa, apple, asparagus,~~  
3 ~~cherry (tart), citrus, peach, soybean, strawberry, sugar beet, and wheat. *Id.*, Petitioners'~~  
4 ~~Motion for a Partial Stay Pending Review (Doc #5126280). As of the filing of this~~  
5 ~~Complaint, Petitioners' motion for a partial stay is fully briefed, but the Eighth Circuit has~~  
6 ~~not ruled on it.~~

8  
9 38. On December 19, 2023, EPA confirmed that all chlorpyrifos tolerances  
10 would automatically take effect again in response to the Eighth Circuit's ruling. EPA  
11 Update on Next Steps for Chlorpyrifos (Dec. 19, 2023),  
12 <https://www.epa.gov/pesticides/epa-update-next-steps-chlorpyrifos>. EPA also confirmed  
13 that it intends to promulgate a new rule revoking tolerances for all but the 11 crops for  
14 which the Eighth Circuit held that EPA should have considered modification of tolerances.

15 *Id.*

16  
17  
18 39. In June 2008, EPA formally initiated registration review for diazinon when  
19 it opened the registration review docket. EPA Dkt. #EPA-HQ-OPP-2008-0351-0001  
20 (posted June 24, 2008). EPA has not made a proposed or final interim registration review  
21 decision for diazinon. In 2008, EPA anticipated completing registration review for diazinon  
22 in 2014. Diazinon Final Work Plan at 4, EPA Dkt. #EPA-HQ-OPP-2008-0351-0020.

23  
24 40. Diazinon is registered for restricted use on a select number of fruits,  
25 vegetables, nuts, ornamentals, and in cattle ear tags.

26  
27 41. On October 23, 2022, EPA announced that it had received requests from  
28 diazinon registrants to voluntarily cancel the registrations for nine registered diazinon



1 products. EPA Dkt. #EPA-HQ-OPP-2008-0351-0127.

2 42. The most recent meeting notes on the public docket between EPA and FWS  
3 (and registrants) concerning the ESA consultation on chlorpyrifos, diazinon, and malathion  
4 is dated April 19, 2018. EPA Dkt. #EPA-HQ-OPP-2008-0351-0108 (posted Dec. 15,  
5 2020).  
6

7 43. EPA and FWS have long had difficulty in implementing the ESA's  
8 consultation requirements when registering pesticides under FIFRA. To address this  
9 deficiency, in 2011, EPA and the Departments of the Interior, Commerce, and Agriculture  
10 requested that the National Academy of Sciences convened a committee of independent  
11 experts to examine topics pertaining to approaches for assessing the effects of proposed  
12 FIFRA pesticide registration actions on endangered and threatened species and their critical  
13 habitats.  
14  
15

16 44. In 2013, the National Academy of Sciences issued a report ("2013 Academy  
17 of Sciences Report") detailing the best approaches to be taken by federal agencies in  
18 assessing the risk of pesticides under the ESA.  
19

20 45. Following the 2013 Academy of Sciences Report, EPA, FWS, and NMFS  
21 held five interagency workshops between August 2012 and September 2016 to develop the  
22 technical analyses included in the Biological Evaluations. During these workshops, EPA  
23 and FWS reached agreement on information required in the Biological Evaluation to  
24 support development of the Biological Opinion.  
25  
26

27 46. In 2014, EPA, FWS, and NMFS represented to Congress that they intended  
28 to address ESA obligations for pesticide registrations "by conducting nationwide scale

1 effects determinations” and that the agencies worked with litigants “to align lawsuits so  
2 that the agencies could focus on national level consultations on all ESA-listed species  
3 rather than focus on single species, or a small subset of species in smaller geographical  
4 areas.” EPA and FWS agreed to complete the first three, pilot nationwide consultations on  
5 pesticide products containing chlorpyrifos, diazinon, or malathion.  
6

7 47. In 2014, EPA began to prepare its Biological Evaluations (“BE”) to  
8 determine the effects of then actively-registered products containing chlorpyrifos,  
9 diazinon, or malathion.  
10

11 48. On April 11, 2016, EPA provided notice that its draft BEs for the registration  
12 review of all uses of chlorpyrifos, diazinon, and malathion were available for public  
13 comment until June 10, 2016. 81 Fed. Reg. 21341 (April 11, 2016).  
14

15 49. On January 18, 2017, EPA transmitted the three BEs to the FWS and NMFS  
16 to initiate the formal consultation process under Section 7(a)(2) of the ESA for species and  
17 critical habitat within each of the FWS’ and NMFS’ respective jurisdictions. Letter from  
18 EPA to FWS and NMFS initiating ESA formal consultation for chlorpyrifos, diazinon, and  
19 malathion (~~Dec~~ Jan. 18, 2017); see, e.g., EPA Dkt. #EPA-HQ-2008-0850-0933; see also  
20 EPA notice of “Availability of Final Biological Evaluations for Chlorpyrifos, Diazinon,  
21 and Malathion” (~~Dec~~ Jan. 18, 2017), EPA Dkt. # EPA-HQ-2008-0850-0934.  
22

23 50. In its BE for chlorpyrifos, EPA determined that registered uses of  
24 chlorpyrifos as authorized on pesticide labels are likely to adversely affect 1,778 of the  
25 total species analyzed (97% of species) and 780 of the total critical habitats analyzed (98%  
26 of critical habitats). EPA Consultation Letter at 2.  
27  
28

1           51. In its BE for diazinon, EPA determined that registered uses of diazinon as  
2 authorized on pesticide labels are likely to adversely affect 1,437 of the total species  
3 analyzed (78% of species) and 385 of the total critical habitats analyzed (48% of critical  
4 habitats). *Id.*

6           52. FWS, NMFS, and EPA had agreed to complete biological opinions on the  
7 three pilot nationwide consultations on the adverse effects of registered uses of pesticide  
8 products containing chlorpyrifos, diazinon, and malathion by December 2017. FWS and  
9 EPA further agreed to provide the draft biological opinions on chlorpyrifos, diazinon, and  
10 malathion to the public in May 2017 and to provide a 60-day period to comment on those  
11 draft biological opinions. FWS and EPA did not provide the draft biological opinions for  
12 public comment in May 2017.

15           53. As of October 17, 2017, or earlier, FWS had completed draft Biological  
16 Opinions on the effects of chlorpyrifos, diazinon, and malathion as authorized for uses of  
17 each pesticide respectfully, as described on pesticide product labels. FWS planned to  
18 transmit the Biological Opinions to EPA in mid- to late-October 2017. FWS expected EPA  
19 to provide public notice that the draft Biological Opinions would be available for a 60-day  
20 public comment period.

23           54. In the October 2017 draft Biological Opinions, FWS determined that the uses  
24 of chlorpyrifos, diazinon, and malathion, as authorized by EPA, are likely to jeopardize the  
25 continued existence of certain endangered or threatened species and adversely modify  
26 critical habitats. A summary of FWS's draft conclusions stated that: chlorpyrifos would  
27 jeopardize 1,399 species (88% of species in FWS jurisdiction) and adversely modify 169  
28

1 critical habitats (23% of critical habitats in FWS jurisdiction); diazinon would jeopardize  
2 175 species (12% of species in FWS jurisdiction) and adversely modify 20 critical habitats  
3 (3% of critical habitats in FWS jurisdiction); malathion would jeopardize 1,284 species  
4 (81% within FWS jurisdiction) and adversely modify 163 (22% of critical habitats in FWS  
5 jurisdiction).  
6

7 55. The October 2017 draft Biological Opinions included Reasonable and  
8 Prudent Alternatives (“RPAs”) that would avoid jeopardy to species and destruction or  
9 adverse modification of critical habitat through reasonable modifications to how and where  
10 chlorpyrifos, diazinon, and malathion were used. The RPAs in the October 2017 draft  
11 Biological Opinions include revising pesticide label language: to restrict pesticide usage in  
12 localized areas where certain listed species occur; to eliminate areas where pesticides are  
13 not anticipated to be used; to establish or increase buffers to reduce spray drift into areas  
14 where listed species may occur; and to improve required pesticide application equipment.  
15 The October 2017 draft Biological Opinions were never released to the public for  
16 comment.  
17

18 56. FWS did not complete final biological opinions to complete consultation on  
19 chlorpyrifos, diazinon, or malathion by December 2017.  
20

21 57. Pursuant to a court-ordered deadline, on December 29, 2017, NMFS  
22 completed a final biological opinion on EPA’s registration of chlorpyrifos, diazinon, and  
23 malathion.  
24

25 58. Not until April 2021, did EPA open a 60-day public comment period on  
26 FWS’s then-current Draft Biological Opinion on Malathion. EPA Dkt. #EPA-HQ-OPP-  
27  
28

1 2021-0001 (posted Apr. 19, 2021). This draft biological opinion did not include assessment  
2 of effects of chlorpyrifos or diazinon.

3 59. Pursuant to litigation solely concerning malathion, FWS stipulated to a court-  
4 ordered deadline to issue its Final Biological Opinion and conclude the ESA Section  
5 7(a)(2) Malathion Consultation no later than February 28, 2022, unless certain  
6 contingencies occur. Order approving Stipulated Partial Settlement Agreement, ECF No.  
7 112, *Ctr. for Environmental Health, et al. v. Regan*, Case No. 4:18-cv-03197-SBA (N.D.  
8 Cal. Entered Jan. 4, 2022).

9  
10  
11 60. On February 28, 2022, FWS released its final biological opinion on the  
12 proposed registration of malathion.<sup>1</sup> With it, FWS issued an incidental take statement  
13 requiring EPA to implement reasonable and prudent measures to minimize the take of  
14 ESA-protected species caused by the continuing authorization of malathion, including  
15 label changes instituting general, species-specific, and critical habitat-specific conservation  
16 measures.  
17

18  
19 61. On March 2, 2022, EPA opened a 60-day public comment period on NMFS’s  
20 Draft Revised Biological Opinion on Chlorpyrifos, Diazinon, and Malathion. EPA Dkt.  
21 #EPA-HQ-OPP-2008-1117.  
22

23 62. On June 30, 2022, NMFS gave EPA its final revised biological opinion on  
24 the potential effects of chlorpyrifos, diazinon, and malathion on ESA-protected species &  
25

26  
27 <sup>1</sup> FWS, “Biological and Conference Opinion on the Registration of Malathion” (Feb.  
28 28, 2022) <https://www.fws.gov/media/biological-and-conference-opinion-registration-malathion> (last accessed Oct. 24, 2023).

1 their critical habitats.<sup>2</sup> Unless conservation measures are implemented, NMFS found that  
2 chlorpyrifos registered uses are likely to jeopardize 37 ESA-protected species (47% of  
3 species analyzed) and adversely modify 36 critical habitats (73% of critical habitats  
4 analyzed). *Id.* at 812, 1061. It found that diazinon registered uses are likely to jeopardize  
5 26 ESA-protected species (33% of species analyzed) and adversely modify 18 critical  
6 habitats (37%% of critical habitats analyzed). *Id.* at 903, 1125.

7  
8  
9 63. Upon information and belief, as of the filing of this complaint, FWS has not  
10 released draft or final biological opinions for the nationwide consultations on the adverse  
11 effects of registered uses of pesticide products containing chlorpyrifos or diazinon to  
12 complete the consultations that EPA initiated on January 18, 2017.

13  
14 64. Five Over six years have passed since EPA initiated these consultations on  
15 chlorpyrifos and diazinon. Since then, FWS has not completed any biological opinion or  
16 recommended any measures necessary to ensure that the continued registrations of uses of  
17 pesticide products containing chlorpyrifos or diazinon do not jeopardize the continued  
18 existence of endangered or threatened species or result in the destruction or adverse  
19 modification of designated critical habitat of these species.

## 20 **Carbaryl and Methomyl**

21  
22  
23 65. Carbaryl and methomyl are N-methylcarbamate (“NMC”) insecticides used  
24 as active ingredients in pesticide products designed to kill insects systemically and on  
25

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26  
27 <sup>2</sup> NMFS, “Biological Opinion on Chlorpyrifos, Diazinon, and Malathion” (June 30,  
28 <https://www.fisheries.noaa.gov/resource/document/biological-opinion-chlorpyrifos-diazinon-and-malathion> (last accessed Oct. 13, 2023)).

1 contact. NMCs are a class of neurotoxic chemicals that, like organophosphates, are toxic  
2 to animals because they target the ubiquitous enzyme acetylcholinesterase, inhibiting  
3 normal brain and muscle function in exposed organisms.

4  
5 66. In September 2010, EPA formally initiated registration review for carbaryl  
6 when it opened the registration review docket. EPA Dkt. #EPA-HQ-OPP-2010-0230-0001  
7 (posted Sep. 22, 2010). In 2011, EPA anticipated completing registration review for  
8 carbaryl in 2016. Carbaryl Final Work Plan at 8, EPA Dkt. #EPA-HQ-OPP-2010-0230-  
9 0021.

10  
11 67. In 2022, EPA identified carbaryl and methomyl as pilot pesticides for  
12 incorporating early mitigation measures to protect ESA-protected species.<sup>3</sup>

13  
14 68. In its December 2022 Carbaryl Proposed Interim Registration Review  
15 Decision, EPA suggested risk mitigation measures including protections for two pilot ESA-  
16 protected species. Carbaryl Proposed Interim Registration Review Decision at 29, EPA  
17 Dkt. #EPA-HQ-OPP-2010-0230-0120 (posted Dec. 1, 2022). It noted that it “will complete  
18 its ongoing consultation with the Services and address any additional necessary mitigation  
19 identified in any Biological Opinions before issuing a final registration review decision for  
20 carbaryl.” *Id.* at 5. In other words, EPA will not implement protections from carbaryl for  
21 the remaining ESA-protected species and critical habitats, if any, until FWS completes a  
22  
23  
24

25  
26 \_\_\_\_\_  
27 <sup>3</sup> EPA, “Balancing Wildlife Protection and Responsible Pesticide Use: How EPA  
28 Will Meet its Endangered Species Act Obligations” at 48 (2022)  
<https://www.epa.gov/endangered-species/epas-workplan-and-progress-toward-better-protections-endangered-species#workplan> (last accessed Oct. 13, 2023).

1 biological opinion.

2 69. Carbaryl is registered for a wide variety of turf applications such as  
3 agricultural, retail, and residential settings, along with golf courses. Carbaryl is also  
4 currently registered for use on many agricultural crops, with highest uses on asparagus,  
5 cantaloupes, and apples. It is also used on tomatoes, squash, cucumbers, olives, pecans,  
6 and watermelons.

7  
8  
9 70. In September 2010, EPA formally initiated registration review for methomyl  
10 when it opened the registration review docket. EPA Dkt. #EPA-HQ-OPP-2010-0751-0001  
11 (posted Sep. 22, 2010). In 2011, EPA anticipated completing registration review for  
12 methomyl in 2016. Methomyl Final Work Plan at 8, EPA Dkt. #EPA-HQ-OPP-2010-0751-  
13 0013.

14  
15 71. In its September 2022 Proposed Revisions to the 2020 Methomyl Proposed  
16 Interim Registration Review Decision, EPA suggested risk mitigation measures including  
17 protections for three pilot ESA-protected species. Proposed Revisions to the Methomyl  
18 Proposed Interim Registration Review Decision at 2, EPA Dkt. #EPA-HQ-OPP-2010-  
19 0751-0055 (posted Sep. 29, 2022). It noted that “[d]uring consultation, the Services will  
20 develop Biological Opinions (BiOPs), which will include their official determinations of  
21 whether a pesticide is likely to jeopardize each relevant listed species or adversely modify  
22 its critical habitat ... EPA will then implement any necessary mitigation measures to  
23 protect listed species.” *Id.* In other words, EPA will not implement protections from  
24 methomyl for the remaining ESA-protected species and critical habitats, if any, until FWS  
25 completes a biological opinion.  
26  
27  
28



1           72. Methomyl is registered for restricted use on field crops, vegetable crops,  
2 orchard crops, and as a fly-bait.

3           73. Pursuant to litigation, EPA stipulated to a court-ordered deadline to issue its  
4 final BEs for carbaryl and methomyl and initiate consultation as necessary no later than  
5 February 14, 2021. Order Entering Stipulated Partial Settlement Agreement, *Ctr. For*  
6 *Biological Diversity, et al. v. EPA*, Case No. 3:11-cv-00293-JCS (N.D. Cal. Entered  
7 October 22, 2019).  
8

9           74. On March 17, 2020, EPA provided notice that its draft BEs for the  
10 registration review of all uses of carbaryl and methomyl were available for public comment  
11 until May 18, 2020. 85 Fed. Reg. 15168 (March 17, 2020).  
12

13           75. EPA completed the final carbaryl and methomyl BEs on March 31, 2021,<sup>4</sup>  
14 and transmitted them to the FWS and NMFS to initiate the formal consultation process  
15 under Section 7(a)(2) of the ESA for species and critical habitat within each of the FWS’  
16 and NMFS’ respective jurisdictions. Letter from EPA to FWS and NMFS initiating ESA  
17 formal consultation for carbaryl and methomyl (March 31, 2021).  
18

19           76. In its BE for carbaryl, EPA determined that registered uses of carbaryl as  
20 authorized on pesticide labels are *likely to adversely affect* 1,640 of the total species  
21   
22

23  
24  
25           <sup>4</sup> EPA, “Final National Level Listed Species Biological Evaluation for Carbaryl”  
26 (March 31, 2021) <https://www.epa.gov/endangered-species/final-national-level-listed-species-biological-evaluation-carbaryl> (last accessed Oct. 12, 2023); EPA, “Final National  
27 Level Listed Species Biological Evaluation for Methomyl” (March 31, 2021)  
28 <https://www.epa.gov/endangered-species/final-national-level-listed-species-biological-evaluation-methomyl> (last accessed Oct. 12, 2023).

1 analyzed (91% of species) and 736 of the total critical habitats analyzed (93% of critical  
2 habitats. Carbaryl BE at 4-3.

3 77. In its BE for methomyl, EPA determined that registered uses of methomyl as  
4 authorized on pesticide labels are likely to adversely affect 1,098 of the total species  
5 analyzed (61% of species) and 281 of the total critical habitats analyzed (36% of critical  
6 habitats. Methomyl BE at 4-3.

7  
8  
9 78. On June 28, 2021, FWS wrote to carbaryl registrants requesting their  
10 agreement to an extension for completing the consultation on carbaryl. FWS “estimate[d]  
11 that a draft biological opinion will be provided to EPA for its review and release for public  
12 comment on December 31, 2023, and that a final biological opinion will be issued on  
13 December 31, 2024.” Letters from FWS to Tessengerlo Kerley, Inc., Bayer CropScience,  
14 and Drexel Chemical requesting consultation extensions for carbaryl (June 28, 2021).

15  
16 79. Also on June 28, 2021, FWS wrote to methomyl registrants requesting their  
17 agreement to an extension for completing the consultation on methomyl. FWS “estimate[d]  
18 that [it would] submit the draft biological opinion to EPA for review on December 31,  
19 2023, with completion and issuance of the final biological opinion by December 31, 2024.”  
20 Letters from FWS to Corteva Agriscience, Sinon Corporation, and Rotam Agrochemical  
21 Company requesting consultation extensions for methomyl (June 28, 2021).

22  
23  
24 80. FWS, the pesticide registrants, and EPA subsequently agreed to the requested  
25 extensions for carbaryl and methomyl.

26  
27 81. On March 9, 2023, 2023, NMFS completed a draft biological opinion for  
28 carbaryl and methomyl. It found that carbaryl was likely to cause jeopardy to 37 species

1 (61% of species analyzed) and adverse modification of 36 species' critical habitat (67% of  
2 critical habitats analyzed). NMFS Draft Biological Opinion on Carbaryl and Methomyl at  
3 tables 141, 143 (March 9, 2023). NMFS found methomyl was likely to cause jeopardy to  
4 30 species (50% of species analyzed) and adverse modification of 29 species' habitats  
5 (55% of critical habitats analyzed). *Id.* at tables 142, 144.

7 82. On March 16, 2023, EPA provided notice that the NMFS draft biological  
8 opinions for carbaryl and methomyl were available for public comment until May 15,  
9 2023.<sup>5</sup>

11 83. Upon information and belief, as of the filing of this complaint, FWS has not  
12 released draft or final biological opinions for the nationwide consultations on the adverse  
13 effects of registered uses of pesticide products containing carbaryl or methomyl to  
14 complete the consultations that EPA initiated on March 31, 2021.

16 84. Over two years have passed since EPA initiated these consultations on  
17 carbaryl and methomyl. Since then, FWS has not completed any biological opinion or  
18 recommended any measures necessary to ensure that the continued registrations of uses of  
19 pesticide products containing carbaryl or methomyl do not jeopardize the continued  
20 existence of endangered or threatened species or result in the destruction or adverse  
21 modification of designated critical habitat of these species.

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26  
27 <sup>5</sup> EPA, “EPA Posts Draft Biological Opinion for Carbaryl and Methomyl for Public  
28 Comment” (March 16, 2023) [https://www.epa.gov/pesticides/epa-posts-draft-biological-](https://www.epa.gov/pesticides/epa-posts-draft-biological-opinion-carbaryl-and-methomyl-public-comment)  
opinion-carbaryl-and-methomyl-public-comment (last accessed Oct. 12, 2023).

1 **Atrazine and Simazine**

2 85. Atrazine and simazine are chlorotriazine herbicides used as active  
3 ingredients in pesticide products that kill plants by inhibiting photosynthesis. They vary  
4 from slightly to highly toxic to animals and can cause mortality, impairment to animals'  
5 growth and reproduction, and indirect harm from the loss of food sources and symbiotic  
6 partners.

7  
8 86. Researchers have found a consistent pattern of additive and synergistic  
9 toxicity when organisms are exposed to atrazine in mixtures with other chemicals.  
10 Organophosphates like chlorpyrifos, diazinon and malathion became much more toxic  
11 when mixed with atrazine, for example, while simazine and atrazine are cumulatively toxic  
12 due to their common mode of action.

13  
14  
15 87. From 2013 to 2017, an annual average of 72 million pounds of atrazine were  
16 applied on an average of 75 million acres of crops, and 2.9 million pounds of simazine  
17 were applied on an average of 2.5 million crop acres.

18  
19 88. In June 2013, EPA formally initiated registration review for atrazine when it  
20 opened the registration review docket. EPA Dkt. #EPA-HQ-OPP-2013-0266-0001. In  
21 2013, EPA anticipated completing registration review for atrazine in 2016. Atrazine Final  
22 Work Plan at 7, EPA Dkt. #EPA-HQ-OPP-2013-0266-0308.

23  
24 89. On September 18, 2020, EPA finalized an interim registration review  
25 decision implementing voluntary risk mitigation measures for atrazine, including  
26 prohibiting all uses of atrazine in Hawaii, Alaska, and the U.S. territories to protect species  
27 there. Atrazine Interim Registration Review Decision, EPA Dkt. #EPA-HQ-OPP-2013-  
28

1 0266-1605.

2 90. On October 20, 2020, the Center and other groups challenged EPA’s issuance  
3 of the atrazine interim decision based on a lack of substantial supporting evidence. *Rural*  
4 *Coalition, et al. v. EPA, et al.*, No. 20–73220 (9th Cir. filed Oct. 20, 2020). On December  
5 14, 2021, the court partially remanded the matter to EPA to reconsider its determination  
6 regarding the appropriate concentration of atrazine for requiring monitoring and/or  
7 mitigation. Order for Partial Remand, *id.* (Entered Dec. 14, 2021).  
8  
9

10 91. On July 5, 2022, EPA opened a 60-day public comment period on proposed  
11 revisions to the atrazine interim decision based on its determination that the concentrations  
12 used in the interim decision were inadequately supported by science and inadequately  
13 protective of aquatic plant communities. 87 Fed. Reg. 39822, 39823 (July 5, 2022). In these  
14 proposed revisions, EPA stated that “[a] final decision on the atrazine registration review  
15 case will occur after ... an endangered species determination under the ESA and any  
16 needed § 7 consultation with the Services.” Proposed Revisions to the Atrazine Interim  
17 Registration Review Decision at 17, EPA Dkt. #EPA-HQ-OPP-2013-0266-1625 (posted  
18 June 30, 2022). In other words, EPA will not implement specific protections from atrazine  
19 for ESA-protected species and critical habitats until FWS completes a biological opinion.  
20  
21  
22

23 92. Atrazine is registered for use on several agricultural crops, with the highest  
24 use on field corn, sweet corn, sorghum, and sugarcane. Other registered uses for atrazine  
25 include wheat, macadamia nuts, and guava, along with non-agricultural uses including  
26 ornamental plants and turf.  
27

28 93. In June 2013, EPA formally initiated registration review for simazine when

1 it opened the registration review docket. EPA Dkt. #EPA-HQ-OPP-2013-0251-0001. In  
2 2013, EPA anticipated completing registration review for simazine in 2016. Simazine Final  
3 Work Plan at 6, EPA Dkt. #EPA-HQ-OPP-2013-0251-0029.

4  
5 94. On September 18, 2020, EPA finalized an interim decision implementing  
6 voluntary risk mitigation measures for simazine, including prohibiting all uses of simazine  
7 in Hawaii, Alaska, and the U.S. territories to protect species there. Simazine Interim  
8 Registration Review Decision, EPA Dkt. #EPA-HQ-OPP-2013-0251-0174. In the  
9 Simazine interim decision, EPA noted that it “is currently working with [the Services]  
10 improve [sic] the consultation process for [listed] species for pesticides in accordance with  
11 the [ESA] § 7” and “will complete its listed species assessment and any necessary  
12 consultation with the Services for simazine prior to completing the simazine registration  
13 review.” *Id.* at 4. In other words, EPA will not implement specific protections from  
14 simazine for ESA-protected species and critical habitats until FWS completes a biological  
15 opinion.

16  
17  
18  
19 95. Simazine is registered for agricultural uses including caneberries, grapes,  
20 strawberries, citrus fruits, nut crops, pome fruits, stone fruits, artichokes, corn, asparagus,  
21 kale, cabbage, kohlrabi, Brussel sprouts, blueberries, alfalfa, avocado, and olives. It is also  
22 registered for non-agricultural uses such as forest trees, ornamentals, ornamental and golf  
23 course turf, nurseries, farm buildings, and shelterbelt plantings.

24  
25  
26 96. Pursuant to litigation, EPA stipulated to a court-ordered deadline in October  
27 2019 to issue its final BEs for atrazine and simazine and initiate consultation as necessary  
28 no later than August 14, 2021. Order Entering Stipulated Partial Settlement Agreement,

1 *Ctr. For Biological Diversity, et al. v. EPA*, Case No. 3:11-cv-00293-JCS (N.D. Cal.  
2 entered October 22, 2019).

3 97. On November 5, 2020, EPA provided notice that its draft BEs for the  
4 registration review of all uses of atrazine, simazine, and propazine were available for public  
5 comment until January 5, 2021. 85 Fed. Reg. 71071 (Nov. 6, 2020).

7 98. On June 8, 2021, the propazine registrations were voluntarily cancelled by  
8 the registrants, obviating the need for ESA consultation on propazine. Cryolite and  
9 Propazine; Product Cancellation Order for Certain Pesticide Registrations, 86 Fed. Reg.  
10 30460 (June 8, 2021).

12 99. On November 12, 2021, EPA released final BEs for atrazine and simazine,<sup>6</sup>  
13 and transmitted them to the FWS and NMFS to initiate the formal consultation process  
14 under Section 7(a)(2) of the ESA for species and critical habitat within each of the FWS’  
15 and NMFS’ respective jurisdictions. Letter from EPA to FWS and NMFS initiating ESA  
16 formal consultation for atrazine, simazine, and glyphosate (November 12, 2021).

18 100. In its BE for atrazine, EPA determined that registered uses of atrazine as  
19 authorized on pesticide labels are likely to adversely affect 1,013 of the total species  
20 analyzed (56% of species) and 328 of the total critical habitats analyzed (41% of critical  
21 habitats).

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23  
24  
25 <sup>6</sup> EPA, “Final National Level Listed Species Biological Evaluation for Atrazine”  
26 (Nov. 12, 2021) <https://www.epa.gov/endangered-species/final-national-level-listed-species-biological-evaluation-atrazine> (last accessed Oct. 13, 2023); EPA, “Final National  
27 Level Listed Species Biological Evaluation for Simazine” (Nov. 12, 2021)  
28 <https://www.epa.gov/endangered-species/final-national-level-listed-species-biological-evaluation-simazine> (last accessed Oct. 13, 2023).

1 habitats). Atrazine BE at 4-3.

2 101. In its BE for simazine, EPA determined that registered uses of simazine as  
3 authorized on pesticide labels are likely to adversely affect 993 of the total species analyzed  
4 (55% of species) and 317 of the total critical habitats analyzed (40% of critical habitats.  
5 Simazine BE at 4-3.

6  
7 102. In February 2022, FWS wrote to EPA requesting its agreement to an  
8 extension for completing the consultations on atrazine, simazine, and glyphosate. Letter  
9 from FWS to EPA requesting consultation extensions for atrazine, simazine, and  
10 glyphosate (Feb. 2022). In this letter, FWS “estimate[d] submitting the draft biological  
11 opinions for simazine and atrazine to EPA for review by March 31, 2025, with completion  
12 and issuance of the final biological opinions by March 31, 2026.” *Id.*

13  
14  
15 103. FWS, the pesticide registrants, and EPA subsequently agreed to the requested  
16 extensions for atrazine and simazine.

17  
18 104. Upon information and belief, as of the filing of this complaint, FWS has not  
19 released draft or final biological opinions for the nationwide consultations on the adverse  
20 effects of registered uses of pesticide products containing atrazine or simazine to complete  
21 consultations that EPA initiated on November 12, 2021.

22  
23 105. Over two years have passed since EPA initiated these consultations on  
24 atrazine and simazine. Since then, FWS has not completed any biological opinion or  
25 recommended any measures necessary to ensure that the continued registrations of uses of  
26 pesticide products containing atrazine or simazine do not jeopardize the continued  
27 existence of endangered or threatened species or result in the destruction or adverse  
28



1 modification of designated critical habitat of these species.

2 **FIRST CLAIM FOR RELIEF**

3 **FWS IS UNREASONABLY DELAYING COMPLETION OF FORMAL**  
4 **CONSULTATION FOR CHLORPYRIFOS IN VIOLATION OF THE APA**

5 106. All allegations set forth above in this Complaint are incorporated herein by  
6 reference.

7  
8 107. The APA dictates that agencies conclude a matter presented to it “within a  
9 reasonable time.” 5 U.S.C. §555(b). Accordingly, APA section 706(1) authorizes  
10 reviewing courts to “compel agency action unlawfully withheld or unreasonably delayed.”  
11 *Id.* § 706(1).

12  
13 108. FWS has a mandatory procedural duty under the ESA to complete formal  
14 consultation on chlorpyrifos by issuing a biological opinion. 16 U.S.C. § 1536(b)(3); (50  
15 C.F.R. § 402.14(g),(h). The ESA establishes timelines for the consultation process to occur  
16 prior to agency action. 16 U.S.C. § 1536(a)(3). Generally, consultation shall be concluded  
17 within 90 days of the date on which it is initiated. 16 U.S.C. § 1536(b)(1)(A).

18  
19 109. In January 2017, EPA requested formal consultation with FWS for  
20 chlorpyrifos after determining that this pesticide was likely to adversely affect numerous  
21 listed species and critical habitats.

22  
23 110. Chlorpyrifos products continue to be sold and used in the United States.

24  
25 111. FWS’s failure to complete ESA consultation on EPA’s registration of the  
26 uses of pesticide products containing chlorpyrifos constitutes unreasonable delay of  
27 discrete, mandatory agency action, in violation of and as remedied by the APA. 5 U.S.C. §  
28

1 555(b); 5 U.S.C. § 706(1).

2 **SECOND CLAIM FOR RELIEF**

3 **FWS IS UNREASONABLY DELAYING COMPLETION OF FORMAL**  
4 **CONSULTATION FOR DIAZINON IN VIOLATION OF THE APA**

5 112. All allegations set forth above in this Complaint are incorporated herein by  
6 reference.

7  
8 113. The APA dictates that agencies conclude a matter presented to it “within a  
9 reasonable time.” 5 U.S.C. §555(b). Accordingly, APA section 706(1) authorizes  
10 reviewing courts to “compel agency action unlawfully withheld or unreasonably delayed.”  
11 *Id.* § 706(1).

12  
13 114. FWS has a mandatory procedural duty under the ESA to complete formal  
14 consultation on diazinon by issuing a biological opinion. 16 U.S.C. § 1536(b)(3); (50  
15 C.F.R. § 402.14(g),(h). The ESA establishes timelines for the consultation process to occur  
16 prior to agency action. 16 U.S.C. § 1536(a)(3). Generally, consultation shall be concluded  
17 within 90 days of the date on which it is initiated. 16 U.S.C. § 1536(b)(1)(A).

18  
19 115. In January 2017, EPA requested formal consultation with FWS for diazinon  
20 after determining that this pesticide was likely to adversely affect numerous listed species  
21 and critical habitats.

22  
23 116. Diazinon products continue to be sold and used in the United States.

24  
25 117. FWS’s failure to complete ESA consultation on EPA’s registration of the  
26 uses of pesticide products containing diazinon constitutes unreasonable delay of discrete,  
27 mandatory agency action, in violation of and as remedied by the APA. 5 U.S.C. § 555(b);  
28

1 5 U.S.C. § 706(1).

2 **THIRD CLAIM FOR RELIEF**

3 **FWS IS UNREASONABLY DELAYING COMPLETION OF FORMAL**  
4 **CONSULTATION FOR CARBARYL IN VIOLATION OF THE APA**

5 118. All allegations set forth above in this Complaint are incorporated herein by  
6 reference.

7  
8 119. The APA dictates that agencies conclude a matter presented to it “within a  
9 reasonable time.” 5 U.S.C. §555(b). Accordingly, APA section 706(1) authorizes  
10 reviewing courts to “compel agency action unlawfully withheld or unreasonably delayed.”  
11 Id. § 706(1).

12  
13 120. FWS has a mandatory procedural duty under the ESA to complete formal  
14 consultation on carbaryl by issuing a biological opinion. 16 U.S.C. § 1536(b)(3); (50 C.F.R.  
15 § 402.14(g),(h). The ESA establishes timelines for the consultation process to occur prior  
16 to agency action. 16 U.S.C. § 1536(a)(3). Generally, consultation shall be concluded within  
17 90 days of the date on which it is initiated. 16 U.S.C. § 1536(b)(1)(A).

18  
19 121. In March 2021, EPA requested formal consultation with FWS for carbaryl  
20 after determining that this pesticide was likely to adversely affect numerous listed species  
21 and critical habitats.

22  
23 122. Carbaryl products continue to be sold and used in the United States.

24  
25 123. FWS’s failure to complete ESA consultation on EPA’s registration of the  
26 uses of pesticide products containing carbaryl constitutes unreasonable delay of discrete,  
27 mandatory agency action, in violation of and as remedied by the APA. 5 U.S.C. § 555(b);  
28

1 5 U.S.C. § 706(1).

2 **FOURTH CLAIM FOR RELIEF**

3 **FWS IS UNREASONABLY DELAYING COMPLETION OF FORMAL**  
4 **CONSULTATION FOR METHOMYL IN VIOLATION OF THE APA**

5 124. All allegations set forth above in this Complaint are incorporated herein by  
6 reference.

7  
8 125. The APA dictates that agencies conclude a matter presented to it “within a  
9 reasonable time.” 5 U.S.C. §555(b). Accordingly, APA section 706(1) authorizes  
10 reviewing courts to “compel agency action unlawfully withheld or unreasonably delayed.”  
11 Id. § 706(1).

12  
13 126. FWS has a mandatory procedural duty under the ESA to complete formal  
14 consultation on methomyl by issuing a biological opinion. 16 U.S.C. § 1536(b)(3); (50  
15 C.F.R. § 402.14(g),(h). The ESA establishes timelines for the consultation process to occur  
16 prior to agency action. 16 U.S.C. § 1536(a)(3). Generally, consultation shall be concluded  
17 within 90 days of the date on which it is initiated. 16 U.S.C. § 1536(b)(1)(A).

18  
19 127. In March 2021, EPA requested formal consultation with FWS for methomyl  
20 after determining that this pesticide was likely to adversely affect numerous listed species  
21 and critical habitats.

22  
23 128. Methomyl products continue to be sold and used in the United States.

24  
25 129. FWS’s failure to complete ESA consultation on EPA’s registration of the  
26 uses of pesticide products containing methomyl constitutes unreasonable delay of discrete,  
27 mandatory agency action, in violation of and as remedied by the APA. 5 U.S.C. § 555(b);  
28

1 5 U.S.C. § 706(1).

2 **FIFTH CLAIM FOR RELIEF**

3 **FWS IS UNREASONABLY DELAYING COMPLETION OF FORMAL**  
4 **CONSULTATION FOR ATRAZINE IN VIOLATION OF THE APA**

5 130. All allegations set forth above in this Complaint are incorporated herein by  
6 reference.

7  
8 131. The APA dictates that agencies conclude a matter presented to it “within a  
9 reasonable time.” 5 U.S.C. §555(b). Accordingly, APA section 706(1) authorizes  
10 reviewing courts to “compel agency action unlawfully withheld or unreasonably delayed.”  
11 Id. § 706(1).

12  
13 132. FWS has a mandatory procedural duty under the ESA to complete formal  
14 consultation on atrazine by issuing a biological opinion. 16 U.S.C. § 1536(b)(3); (50 C.F.R.  
15 § 402.14(g),(h). The ESA establishes timelines for the consultation process to occur prior  
16 to agency action. 16 U.S.C. § 1536(a)(3). Generally, consultation shall be concluded within  
17 90 days of the date on which it is initiated. 16 U.S.C. § 1536(b)(1)(A).

18  
19 133. In November 2021, EPA requested formal consultation with FWS for  
20 atrazine after determining that this pesticide was likely to adversely affect numerous listed  
21 species and critical habitats.

22  
23 134. Atrazine products continue to be sold and used in the United States.

24  
25 135. FWS’s failure to complete ESA consultation on EPA’s registration of the  
26 uses of pesticide products containing atrazine constitutes unreasonable delay of discrete,  
27 mandatory agency action, in violation of and as remedied by the APA. 5 U.S.C. § 555(b);  
28

1 5 U.S.C. § 706(1).

2 **SIXTH CLAIM FOR RELIEF**

3 **FWS IS UNREASONABLY DELAYING COMPLETION OF FORMAL**  
4 **CONSULTATION FOR SIMAZINE IN VIOLATION OF THE APA**

5 136. All allegations set forth above in this Complaint are incorporated herein by  
6 reference.

7  
8 137. The APA dictates that agencies conclude a matter presented to it “within a  
9 reasonable time.” 5 U.S.C. §555(b). Accordingly, APA section 706(1) authorizes  
10 reviewing courts to “compel agency action unlawfully withheld or unreasonably delayed.”  
11 Id. § 706(1).

12  
13 138. FWS has a mandatory procedural duty under the ESA to complete formal  
14 consultation on simazine by issuing a biological opinion. 16 U.S.C. § 1536(b)(3); (50  
15 C.F.R. § 402.14(g),(h). The ESA establishes timelines for the consultation process to occur  
16 prior to agency action. 16 U.S.C. § 1536(a)(3). Generally, consultation shall be concluded  
17 within 90 days of the date on which it is initiated. 16 U.S.C. § 1536(b)(1)(A).

18  
19 139. In November 2021, EPA requested formal consultation with FWS for  
20 simazine after determining that this pesticide was likely to adversely affect numerous listed  
21 species and critical habitats.

22  
23 140. Simazine products continue to be sold and used in the United States.

24  
25 141. FWS’s failure to complete ESA consultation on EPA’s registration of the  
26 uses of pesticide products containing simazine constitutes unreasonable delay of discrete,  
27 mandatory agency action, in violation of and as remedied by the APA. 5 U.S.C. § 555(b);  
28

1 5 U.S.C. § 706(1).

2 **PRAYER FOR RELIEF**

3 WHEREFORE, Plaintiff respectfully requests that the Court enter judgment for the  
4 following relief:

5  
6 1. Declare that Defendants FWS and Secretary Deb Haaland are in violation of  
7 Section 555(b) of the APA by failing to complete the consultations, as required by the ESA,  
8 for chlorpyrifos, ~~and/or~~ diazinon, carbaryl, methomyl, atrazine, and/or simazine within a  
9 reasonable time;

10  
11 2. Issue an order compelling Defendants FWS and Secretary Deb Haaland to  
12 complete the required consultations, in accordance with Section 706(1) of the APA, within  
13 six months;

14  
15 3. Award Plaintiff its attorneys' fees and costs pursuant to 28 U.S.C. § 2412;  
16 and

17  
18 4. Grant Plaintiff such additional and further relief as the Court may deem just  
19 and appropriate.

20 Respectfully submitted this ~~24th~~ 1st day of February, ~~2022~~ 2024.

21 /s/ Jonathan Evans  
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