August 31, 2020

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VIA EMAIL AND CERTIFIED MAIL

Re: Notice of Intent to Sue for Failure to Consult on the Pesticide Consultation "Revised Method" Under Section 7(a)(2) of Endangered Species Act

On behalf of the Center for Biological Diversity, we hereby provide notice of our intent, pursuant to Section 11(g) of the Endangered Species Act, to sue the Environmental Protection Agency ("EPA") for issuing its final *Revised Method for National Level Listed Species Biological Evaluations of Conventional Pesticides* ("Revised Method") without consulting with the two expert wildlife agencies as required by law in the development of the Revised Method.[1] This arbitrary policy rollback by the Trump administration violates the clear requirements of the Endangered Species Act.

By putting the interests of the pesticide industry before the protection of the environment and our nation's most imperiled wildlife and plants, and by failing to properly consult with the U.S. Fish and Wildlife Service and National Marine Fisheries Service (collectively the "Services"), the EPA has created a fatally flawed process that will not properly protect our nation's most endangered species from the dangerous impacts of pesticides.

Congress was clear when it passed the Endangered Species Act that the Section 7 consultation process is designed to give species the benefit of the doubt.[2] The reason was simple. Extinction is forever, and no agency can put temporary expediency ahead of the existence of any species that is part of this nation's heritage. Unfortunately, EPA's Revised Method were developed with a predetermined goal at the outset, to develop a process that industry would not feel is too "conservative" or would "result in an overestimate" of the impacts to threatened and endangered species.

Virtually every aspect of the Revised Method is designed to wrongly exclude each threatened and endangered species from a more rigorous, real-world assessment of how a pesticide causes harm. Indeed, the goal of the Revised Method is not to have an accurate result, but instead to create a perception that a pesticide is not harmful, and therefore no change to the status quo is

[1] 16 U.S.C. § 1540(g)(2)(A)(i).
[2] *See*, H.R. Conf. Rep. No. 96-697, 96th Cong., 1st Sess. 12, reprinted in 1979 U.S. Code Cong. & Admin. News 2572, 2576; *Conner v. Burford*, 848 F. 2d 1441 (1988).

warranted regarding the use of that pesticide. As a result, countless impacts to wildlife and plants will go undetected and hundreds of endangered species will silently slip closer to extinction.

LEGAL BACKGROUND

1. The Endangered Species Act

The Endangered Species Act ("ESA" or "Act") was enacted to provide a "means whereby the ecosystems upon which endangered species and threatened species depend may be conserved…[and] a program for the conservation of such endangered species and threatened species."[3] As the Supreme Court has unequivocally summarized, the ESA's "language, history and structure" make clear and "beyond doubt" that "Congress intended endangered species to be afforded the highest of priorities," and endangered species should be given "priority over the 'primary missions' of federal agencies."[4] Simply put, "[t]he plain intent of Congress in enacting this statute was to halt and reverse the trend toward species extinction, whatever the cost."[5] 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."[6]

To fulfill the substantive purposes of the ESA, each federal agency is required to engage in consultation with the Services to "insure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the adverse modification of habitat of such species . . . determined . . . to be critical. . . ."[7] The obligation to "insure" against a likelihood of jeopardy or adverse modification requires the agency to give the "benefit of the doubt" to endangered species and to place the burden of risk and uncertainty on the agency taking the proposed action.[8]

Section 7 "consultation" is required for "any action [that] may affect listed species or critical habitat."[9] Agency "action" means "all activities or programs of any kind authorized, funded or carried out in whole or in part by Federal agencies . . ."[10] This definition is meant to be expansive and includes, but is not limited to, "(a) actions intended to conserve listed species or habitat; (b) the promulgation of regulations; (c) the granting of licenses, contracts, leases, easements, rights-of-way, permits, or grants-in-aid; or (d) actions directly or indirectly causing modifications to the land, water, or air."[11]

Under the Services' joint regulations implementing the ESA, an action agency such as the EPA must initiate consultation under Section 7 whenever its discretionary action "may affect" a listed

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[3] 16 U.S.C. §§ 1531-1544; 16 U.S.C. § 1531(b).
[4] *Tenn. Valley Auth. V. Hill*, 437 U.S. 153, 174-75 (1978).
[5] *Id.* at 184.
[6] *Id.* at § 1532(3).
[7] *Id.* § 1536(a)(2).
[8] *See Sierra Club v. Marsh*, 816 F.2d 1376 1385 (9th Cir. 1987).
[9] 50 C.F.R. § 402.14
[10] *Id.* at § 402.02.
[11] *Id.*

species or critical habitat.[12] Only where the action agency determines that its action will have "no effect" on listed species or designated critical habitat is the consultation obligation lifted.[13]

Section 7(a)(2) requires that the action agency determine at the earliest possible time whether the action "may affect" listed species, or else issue a "no effect" determination.[14] The "may affect" threshold is "relatively low" to ensure that "actions that have any chance of affecting listed species or critical habitat—even if it is later determined that the actions are not likely to do so—require at least some consultation under the ESA."[15] If the "may affect" threshold is met, the agency must determine if the action is "likely to adversely affect" (LAA) or "not likely to adversely affect" (NLAA) listed species and obtain concurrence from the Services. When a LAA determination is made, formal consultations with the Services are required.

FACTUAL BACKGROUND

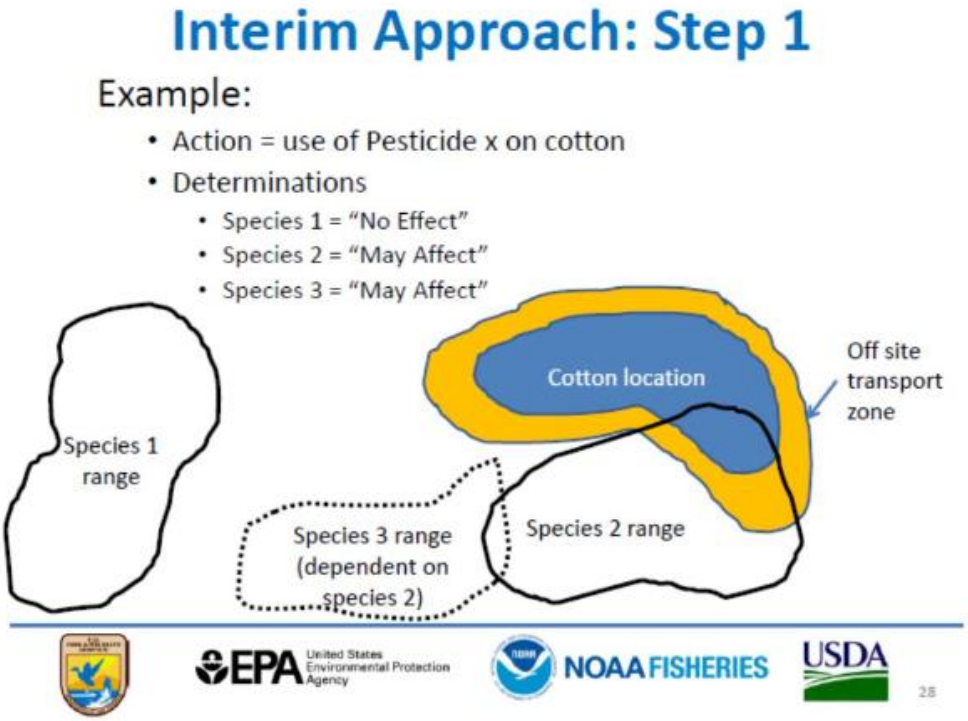
Despite the clear and unambiguous command of the Endangered Species Act, the EPA has never implemented a nationwide pesticide consultation with the Services on the registration of any pesticide. Indeed, absent litigation forcing the EPA to comply with the law, the EPA has never voluntarily consulted on the impacts of any pesticide or pesticide product.[16]

To overcome the unprecedented intransigence of the EPA, in 2011 the National Academy of Sciences was tasked with reviewing the ESA consultation process and prepare recommendations to the federal agencies on how to complete consultations on pesticides. The National Academy of Sciences presented its conclusions to the federal agencies in 2013,[17] highlighting many of the analytical and scientific shortcomings of the EPA's 2004 Ecological Risk Assessment process.[18]

After two years of collaborative work, including multiple public stakeholder meetings to develop new assessment methods, in 2015, the Services, EPA and USDA Agencies published their *Interim Approaches for National-Level Pesticide Endangered Species Act Assessments Based on the Recommendations of the National Academy of Sciences April* ("Interim Approaches"). The

[12] 50 C.F.R. § 402.14(a); *See also Ass'n of Home Builders v. Defenders of Wildlife*, 551 U.S. 644 (2007).
[13] 50 C.F.R. § 402.14(a).
[14] 50 C.F.R. § 402.14(a).
[15] *Karuk Tribe of Cal. v. U.S. Forest Serv.*, 681 F.3d 1006, 1028 (9th Cir. 2012).
[16] EPA has voluntarily implemented conservation measures for four listed species over the past 50 years: (1) measures to protect Attwater's prairie chicken from thiram, (2) measures to protect the Delmarva fox squirrel from carboxin, (3) measures to protect the Karner blue butterfly from methoxyfenozide, and (4) measures to protect the Hine's emerald dragonfly from methoxyfenozide.
[17] National Academy of Sciences. 2013. *Assessing Risks to Endangered and Threatened Species from Pesticides*, Committee on Ecological Risk Assessment under FIFRA and ESA Board on Environmental Studies and Toxicology Division on Earth and Life Studies National Research Council (April 30, 2013).
[18] U.S. Environmental Protection Agency, 2004, *Overview of the Ecological Risk Assessment Process in the Office of Pesticide Programs* ("2004 Ecological Risk Assessment Process"). Endangered and Threatened Species Effects Determinations Office of Prevention, Pesticides and Toxic Substances Office of Pesticide Programs Washington, D.C. (January 23, 2004), available at: https://www.epa.gov/sites/production/files/2014-11/documents/ecorisk-overview.pdf.

Interim Approaches laid out a three-step process to complete pesticide consultations.[19] At Step One, EPA would make a "may affect" determination if there was any overlap between a species and the use of a pesticides, including considerations of impacts on dependent-species such as pollinators and prey species, using a one in a million threshold for screening impacts:



At Step Two under the Interim Approaches, EPA again used the one in a million threshold to assess whether a pesticide would cause take of any listed species or impact critical habitat. To assess those harms, the Interim Approaches included new aquatic models and other analytical tools that the EPA had failed to develop on its own initiative over its entire 50-year history, and addressed key analytical shortcomings of the EPA pesticide review process. For example, the agencies collaboratively developed new methods for assessing pesticide impacts in water bodies like wetlands, streams, rivers, and estuaries. Prior to this, EPA's 2004 Ecological Risk Assessment only modeled pesticide impacts to a "generic pond," a body of water that drains a 10-hectare field, that holds 20,000-liter (5200 gallons) water volume and is 2-meter deep.[20] Despite the ludicrously arbitrary model of the generic pond, in all of EPA's history, it never developed any other model to assess aquatic impacts to pesticides in realistic bodies of water.

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[19] *National Marine Fisheries Service Biological Opinion Issued under Endangered Species Act: Chlorpyrifos, Diazinon, and Malathion*, ENVT'L PROT. AGENCY 1-3 (Jul. 23, 2018), https://www.regulations.gov/document?D=EPA-HQ-OPP-2018-0141-0001.

[20] U.S. Environmental Protection Agency, 2004, Overview of the Ecological Risk Assessment Process in the Office of Pesticide Programs ("2004 Ecological Risk Assessment Process"). Endangered and Threatened Species Effects Determinations Office of Prevention, Pesticides and Toxic Substances Office of Pesticide Programs Washington, D.C. (January 23, 2004), available at: https://www.epa.gov/sites/production/files/2014-11/documents/ecorisk-overview.pdf.

Vitally, the Interim Approaches adopted a precautionary approach that insured all potential harms to listed species were accounted for by the EPA during the preparation of their Biological Evaluations (BEs) on pesticide active ingredients. The Interim Approaches were designed to minimize "Type II" errors — e.g. the new methods would avoid a false negative conclusion wherein impacts to species *are* occurring in the real world, but the EPA fails to identify them in its review of a pesticide.

This approach was a sea-change from EPA's 2004 Ecological Risk Assessment Process which was biased to avoid "Type I" errors — EPA sought to minimize regulatory burdens on the pesticide industry by inadvertently restricting the use of pesticides where impacts are not occurring in the real world.[21] EPA has long been criticized for biasing its assessments to avoid Type I errors, and in fact has long violated the Endangered Species Act, which by design represents the "institutionalization of caution" to save endangered species from extinction.[22]

Between 2015 and 2017, the Services and EPA piloted the Interim Methods on three organophosphate pesticides: chlorpyrifos, diazinon and malathion. EPA released its BEs for all three pesticides on January 17th, 2017, finding that chlorpyrifos and malathion were "likely to adversely affect" approximately 97 percent of all threatened and endangered species, while diazinon was "likely to adversely affect" approximately 78 percent of all listed species.

In January 2017, Dow Chemical[23] gave one million dollars to the Trump Inauguration Committee. On April 12, 2017, the EPA completed its second round of draft BEs for carbaryl and methomyl, and prepared to send its findings to the Federal Register for public comment. One day later, Dow Chemical and two other pesticide companies sent a letter to Administrator Pruitt, Interior Secretary Zinke, and Commerce Secretary Ross requesting that the EPA and Services halt all work on the biological opinion for chlorpyrifos, diazinon and malathion, and scrap the Interim Methods.[24]

On May 4, 2017 at the Pesticide Programs Dialogue Committee public meeting, the EPA stated that the draft BEs for methomyl and carbaryl would soon be published for public review and the Services announced that they were close to completing the draft biological opinions for chlorpyrifos, malathion and diazinon and expected to release it for public comment by summer. The next day, Nancy Beck former Deputy Assistant Administrator in the Office of Chemical Safety and Pollution Prevention — appointed by President Trump and former senior director at the American Chemistry Council — emailed Administrator Pruitt's top policy advisor Samantha Dravis and said in that email: "Because we think the Services are likely to release the BiOps in the end of May, we will need to engage quickly." After this, further progress was on the carbaryl and methomyl BEs was halted for several years, and within several months the Fish and Wildlife Service was told to stop work on its biological opinions, purportedly until comprehensive usage data could be developed.

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[21] *Wash. Toxics Coal. v. United States DOI*, 457 F. Supp. 2d 1158 (W.D. Wash. 2006).
[22] Tenn. Valley Auth. V. Hill, 437 U.S. 153, 174-75 (1978).
[23] Dow Chemical merged with DuPont and then spun off its agribusiness activities to a new company called Corteva Agriscience, which until 2020 manufactured chlorpyrifos.
[24] *See* Appendix A.

October 25, 2017, Gary Frazer, assistant director for endangered species at the U.S. Fish and Wildlife Service briefed Deputy Secretary of Interior David Bernhardt on impacts of Chlorpyrifos on listed species. Mr. Frazer explains that chlorpyrifos is jeopardizing 1399 listed species, malathion is jeopardizing 1284 listed species, and diazinon is jeopardizing 175 listed species. Secretary Bernhardt intervened and stopped the work on the biological opinion. The Fish and Wildlife Service then requested more information from the EPA on usage data for the three pesticides, which EPA agreed to provide.[25]

On December 31, 2017, the National Marine Fisheries Services released its final biological opinion for chlorpyrifos, malathion, and diazinon.[26] The opinion found that chlorpyrifos and malathion were likely to jeopardize 38 of 77 listed species and diazinon was likely to jeopardize 25 of 77 listed species. As required by the ESA, the biological opinion provided reasonable and prudent alternatives ("RPAs") to minimize take and avoid jeopardy to listed species. Upon publication of the biological opinion, the EPA rejected it and refused to comply with its terms.

On January 4, 2018, political appointees at the Department of the Interior, Commerce and EPA developed a draft Memorandum of Agreement addressing endangered species consultations for pesticides. As requested by Dow Chemical in 2017, the three agencies agreed to scrap the Interim Methods and develop a new process for assessing pesticides. In May 2019, the EPA released a draft of its Revised Method for a period of public comment. As was revealed at that time, the EPA developed its draft unilaterally, without any input from the Services. And unlike the Interim Methods, EPA held no public stakeholder meetings to guide the development of this policy, providing only a cursory public meeting to take feedback from the public after the fact.

On March 12, 2020, the EPA released the *Revised Method for National Level Listed Species Biological Evaluations of Conventional Pesticides*.[27] While the Interim Approaches followed the clear requirements of the Endangered Species Act, the Revised Method reverts to the mindset and approach found within the 2004 Ecological Risk Assessment Process, and eliminates key processes and safeguards designed to ensure that all impacts to listed species are captured during the assessment process. Just a few of the most egregious aspects of the Revised Method[28] that violate the Endangered Species Act include:

- The Revised Method only evaluates listed species that directly overlap with pesticide usage or immediate drift. Ecosystem relationships including the loss of pollinator species or the loss of prey species will no longer be evaluated as part of EPA's "simplification" of the process.[29]

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[25] *Id*.
[26] *See* BIOLOGICAL OPINION ON THE ENVT'L PROT. AGENCY'S REGISTRATION OF PESTICIDES CONTAINING CHLORPYRIFOS, DIAZINON, AND MALATHION, NAT.'L MARINE FISHERIES SERVICE (Dec. 29, 2017).
[27] REVISED METHOD FOR NATIONAL LEVEL LISTED SPECIES BIOLOGICAL EVALUATIONS OF CONVENTIONAL PESTICIDES, EPA, Mar. 12, 2020, https://www3.epa.gov/pesticides/nas/revised/revised-method-march2020.pdf
[28] Out of an abundance of caution, we expressly provide notice that we are challenging *every* aspect of the Revised Notice based on violations of Section 7.
[29] REVISED METHOD at 24.

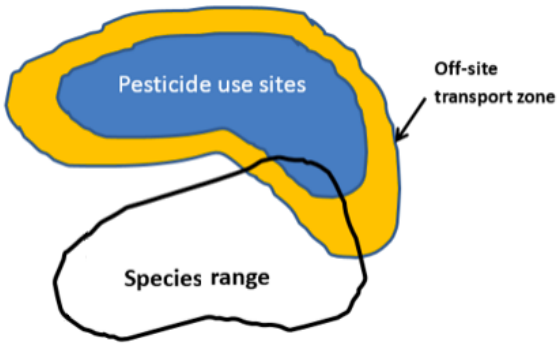

Figure 3. Listed Species Range and Action Area (*i.e.*, Pesticide Use Site Plus Off-site Transport Zone) Overlap

- The Revised Method allows for a NLAA determination for any listed species or designated critical habitat whose range overlaps <1% with the pesticide-treated area. This threshold fails to take into consideration the nature of the portion of the range that is pesticide-treated or the percentage of the population that lives there. For example, some fish species have vast ranges, but impacts to their spawning grounds, which constitute a tiny portion of their range, would severely harm their ability to reproduce. Thus, as long as pesticides harm listed species in 1% chunks, then that is ok regardless of how important that particular piece of habitat or portion of the population actually is. Nothing in the Endangered Species Act sanctions such an approach.
- The Revised Method creates an arbitrary standard of "reasonably certain to occur" for the LAA stage of EPA assessments that does not conform to the Endangered Species Act.[30] Formal consultations must occur when any level of impact occurs, not an arbitrary likelihood that impacts to a listed species achieve some threshold level of harm.
- The Revised Method attempts to rely on pesticide "usage data" to revise downwards the impacts of pesticides on listed species despite usage data being unreliable and still only at the scale of state-level data despite numerous years of wasted effort to develop more granular usage data.

On the same day that the EPA released its final Revised Methods, it also released the long anticipated yet still error ridden draft biological evaluations for carbaryl and methomyl. Using the revised methods, the EPA's biological evaluations found that carbaryl is likely to adversely affect 1,542 protected species, or 86% of all endangered plants and animals. It found that methomyl is likely to adversely affect 1,114 of all protected species, or 62%. Species adversely affected include the highly endangered whooping crane, San Joaquin kit fox and all species of salmon. While the sheer volume of likely to adversely affect calls was high, this was not because the revised methods allowed the EPA to properly capture the scope of effects, but rather because these specific pesticides are so unquestionably dangerous, as more fully explained in the Center's comments on those draft biological evaluations.[31]

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[30] *Id.* at 11.
[31] *See* Appendix B.

ESA VIOLATIONS

As noted above, discretionary agency actions are subject to the Section 7(a)(2) consultation requirement. This includes programmatic actions like the development of regulations and other agency policies.[32] The Revised Method represents a programmatic action that sets forth binding procedures for every pesticide consultation that the EPA conducts in the future. If the Revised Method themselves underestimate the harm to listed species across the board — through incorrect "no effect" and "not likely to adversely affect" determinations — then EPA must consult at this stage because pesticide-specific consultations will not capture the full scope of EPA's mistakes that compound in implementing the process.

The clearest way the programmatic, nationwide impacts to endangered species will occur is when the EPA makes incorrect "no effect" determinations under the Revised Method. Under the ESA and its regulations, an action agency like the EPA is *not* required to receive concurrence from the Services when it determines that its actions will have no effect on listed species.[33] Nor do the Services possess a legal mechanism to force an action agency to either reconsider or revisit an improper "no effect" determination. Thus, when a "no effect" determination is made, that is the end of the inquiry, and no further review of the possible harms to listed species occurs by either the action agency or the Services. If the EPA routinely — and incorrectly — determines for each pesticide that, in each case, a specific pesticide will have no effect on hundreds of listed species, then those harms may never get addressed. In short, the Revised Method will impact every endangered and threatened species because the methods will lead to systematically underestimate the harm to threatened and endangered species over time.

Likewise, a determination that a pesticide is "not likely to adversely affect" a particular threatened or endangered species means that there will not be a formal consultation process, if the Services concur with the judgment of EPA. While the concurrence process provides the Services an opportunity to correct the errors of the EPA, because the Revised Method are designed specifically to curtail the information available to assess a pesticide, there is a greater risk that the Services too will incorrectly concur that a pesticide is "not likely to adversely affect" a pesticide.

The EPA consistently fails to appreciate the fundamental purpose of the consultation process. When a species enters the formal consultation process, the Services assess whether or not it will be jeopardized by the agency action. But just as importantly, even when a pesticide does not jeopardize a listed species, the Services must set forth "reasonable and prudent measures that …minimize such impact" from the agency action. In other words, the consultation process is designed to minimize take, it is not a paperwork exercise like the FIFRA registration process. By tipping the scales in a way to maximize incorrect NLAA determinations, hundreds of

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[32] *See*, 80 FR 26,832, 26833 ("The proposed rule stated that the key distinguishing characteristics of programmatic actions for purposes of the rule are: (1) They provide the framework for future, site-specific actions that are subject to section 7 consultations, but they do not authorize, fund, or carry out those future site-specific actions; and (2) they do not include sufficient site-specific information to inform an assessment of where, when, and how listed species are likely to be affected by the program.").

[33] *See* REVISED METHOD at 11.

endangered species will wrongly be harmed because they never enter formal consultations and receive any reasonable and prudent measures to minimize harm.

For these reasons, EPA must complete a programmatic consultation on the Revised Methods to address the harms that will accrue due to the inevitable incorrect "no effect" and "not likely to adversely affect" determinations that will repeatedly occur in the future.

CONCLUSION

The Endangered Species Act requires that the Service and the action agencies follow the best available science during the consultation process. It does not require that the data be perfect, complete, or exhaustive. Likewise, it does not allow an action agency to arbitrarily ignore the best available science based on arbitrary screening processes. Perhaps most importantly, the Act does not require that the results of a biological evaluation or biological opinion be perfect or free from every conceivable error. Indeed, no biological opinion has likely ever met that standard. EPA has fabricated an arbitrary and capricious policy that ignores many of the real world harms to pesticides in order to further a pretense that their new approach is more accurate.

It is vital to observe the EPA's abysmal track record regarding its past assessments of pesticide impacts on listed species. For example, over the past 20 years, the National Marine Fisheries Service has completed a number of regional biological opinions on the impacts of pesticides on endangered species. In 116 out of 669 separate instances, or nearly one out of five times, the National Marine Fisheries Service found jeopardy and/or adverse modification of critical habitat to listed salmon and steelhead where the EPA had earlier made a "no effect" or "NLAA" determination.[34] In other words, EPA believed there would be either no take or no effect from a pesticide, while the Fisheries Service concluded based on the same evidence that the impacts from pesticides were so severe that they would accelerate the extinction of the species.

If EPA makes an error in its assessments, the consequences could result in the extinction of a species. That plant or animal will be lost forever. And despite the arrogance of the EPA, the fact remains that "catastrophes occur at unexpected times and in unforeseen places."[35] The entire point of the consultation process is to minimize the risk to listed species. This includes not only avoiding jeopardy, but implementing measures to minimize all incidental take to listed species. This is not a paperwork exercise, or a rubber stamp designed to enrich pesticide industry, but a vital safeguard to give the nation's most imperiled species a path towards recovery.

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[34] This figure is based on a comparison of EPA No Effect, NLAA and LAA conclusions, and NMFS jeopardy calls in NMFS Biological Opinions 3 through 7. *See* NMFS ESA Section 7 Consultation Biological Opinion re: EPA Registration of Pesticides Containing Azinphos methyl, Bensulide, Dimethoate, Disulfoton, Ethoprop, Fenamiphos, Naled, Methamidophos, Methidathion, Methyl parathion, Phorate and Phosmet, d. 8/31/2010 (BiOp3), at pp. 25-26, 772-773; NMFS ESA Section 7 Consultation Biological Opinion re EPA Registration of Pesticides 2,4-D, Triclopyr BEE, Diuron, Linuron, Captan, and Chlorothalonil, d. 6/30/2011 (BiOp 4), at pp. 24, 773; NMFS ESA Section 7 Consultation Final Biological Opinion re EPA Registration of Pesticides Oryzalin, Pendimethalin, Trifluralin, d. 5/31/2012 (BiOp5), at pp. 32, 640; NMFS EPA Section 7 Consultation re: EPA Registration of Thiobencarb, d. 6/30/2012 (BiOp6), at pp. 17, 307; and NMFS ESA Section 7 Consultation, Conference and Biological Opinion re: EPA Registration of Pesticides Containing Diflubenzuron, Fenbutatin Oxide, and Propargite, d. 1/7/2015 (BiOp7), at pp. 4, and 559. NMFS pesticide biological opinions can be found at: https://www.fisheries.noaa.gov/national/consultations/pesticide-consultations.

[35] *Harris Stanley Coal & Land Co. v. Chesapeake & Ohio Railway Co*., 154 F.2d 450 (6th Cir. 1946).

The EPA has violated Section 7(a)(2) of the Endangered Species Act by finalizing the Revised Method without completing consultations with the Services. If the EPA does not act within sixty days to correct the violations described within this letter, we may pursue litigation. If you would like to discuss this matter, please contact us.

Sincerely,

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