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12  
13 **THE UNITED STATES DISTRICT COURT**  
14 **FOR THE NORTHERN DISTRICT OF CALIFORNIA**

15 )  
16 CENTER FOR FOOD SAFETY, )  
PUBLIC EMPLOYEES FOR )  
17 ENVIRONMENTAL RESPONSIBILITY, )  
SIERRA CLUB, and BEYOND )  
18 PESTICIDES, )  
19 ) Case No.

20 *Plaintiffs,* )

21 v. )

22 **COMPLAINT FOR DECLARATORY**  
23 **AND INJUNCTIVE RELIEF**

24 SALLY JEWELL, SECRETARY OF )  
UNITED STATES DEPARTMENT OF )  
25 THE INTERIOR; DANIEL M. ASHE, )  
DIRECTOR OF UNITED STATES FISH )  
26 AND WILDLIFE SERVICE; and UNITED )  
STATES FISH AND WILDLIFE )  
27 SERVICE, AN ADMINISTRATIVE )  
AGENCY OF THE UNITED STATES )  
DEPARTMENT OF THE INTERIOR, )

28 *Defendants.* )

1 **COMPLAINT**

2 Plaintiffs Center for Food Safety, Public Employees for Environmental Responsibility,  
3 Sierra Club, and Beyond Pesticides, on behalf of themselves and their members, allege as  
4 follows:

5 **NATURE OF ACTION**

6 1. This action concerns Defendants’ management and operation of the National  
7 Wildlife Refuges of the National Wildlife Refuge System (NWR System) in U.S. Fish and  
8 Wildlife Service’s (FWS) Midwest Region (Region 3). FWS, acting under Defendants Jewell  
9 and Ashe’s supervision and/or control, entered into Cooperative Farming Agreements (CFAs),  
10 and approved pesticide use applications through Pesticide Use Proposals (PUPs), with private  
11 parties, which allow National Wildlife Refuge (NWR) and Wetland Management District  
12 (WMD)<sup>1</sup> land to be farmed with conventional crops with the use of highly toxic pesticides, and  
13 some of which allow NWR land to be farmed with genetically-engineered (GE) crops. In so  
14 doing, FWS authorized farming absent a review of the refuge-specific impacts that pesticides  
15 and/or GE crops will have on the environment. This suit specifically challenges particular  
16 farming practices authorized by Defendants at each of the following refuges: Crab Orchard  
17 NWR, Cypress Creek NWR, Iowa WMD, Swan Lake NWR, and Detroit Lakes WMD  
18 (hereinafter “Refuges” when referred to collectively).

19 2. Defendants’ decision to permit farming with pesticides and GE crops at these  
20 Refuges violates federal statutes. Defendants’ farming programs lead to approval of CFAs and  
21 PUPs at Refuges, which are subject to National Environmental Policy Act (NEPA) review and  
22 constitute major federal actions with significant impacts on the human environment, without  
23 consideration of how pesticide use and/or GE crops will specifically impact the environment.  
24 These acts violate NEPA and the Administrative Procedure Act (APA). Defendants have also  
25 violated the National Wildlife Refuge System Administration Act (Refuge Act) and its  
26 implementing regulations by failing to complete a Comprehensive Conservation Plan at Iowa

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27 <sup>1</sup> Wetland Management Districts are charged with acquiring, overseeing, and managing the  
28 Waterfowl Production Areas and easements within a specified group of counties. Most  
Districts are large, covering several counties.

1 WMD and failing to revise the Cypress Creek Refuge’s Comprehensive Conservation Plan, as  
2 required by law, to address these harms. Plaintiffs seek a declaration that Defendants are  
3 violating NEPA, the Refuge Act, and the APA. Plaintiffs also seek vacatur of Defendants’  
4 challenged CFAs and PUPs on the Region 3 Refuges, and injunctive relief preventing farming on  
5 such Refuges until Defendants fulfill their statutory obligations under NEPA by engaging in site-  
6 specific analysis regarding the use of GE crops and toxic pesticides on Refuges, as required by  
7 law, and until Defendants fulfill their statutory obligations under the Refuge Act. Plaintiffs also  
8 seek attorneys’ fees and costs pursuant to 28 U.S.C. § 2412(d).

9 **JURISDICTION AND VENUE**

10 3. This Court has jurisdiction over this action pursuant to 28 U.S.C. § 1331 (federal  
11 question), 28 U.S.C. § 2201 (declaratory judgment), and 5 U.S.C. § 702 (APA).

12 4. Venue in this Court is proper under 28 U.S.C. § 1391(e) because Plaintiff Sierra  
13 Club resides in this judicial district. Plaintiffs Center for Food Safety, Public Employees for  
14 Environmental Responsibility, and Beyond Pesticides are headquartered in Washington, D.C.  
15 Center for Food Safety and Public Employees for Environmental Responsibility have field  
16 offices and members in California.

17 **PARTIES AND STANDING**

18 ***Plaintiffs***

19 5. Plaintiff Center for Food Safety (CFS) is a national nonprofit organization with  
20 more than 350,000 members nationwide. CFS has offices in Washington, D.C.; San Francisco,  
21 CA; and Portland, OR, with members in nearly every state, including Illinois, Indiana, Iowa,  
22 Michigan, Minnesota, Missouri, Ohio, and Wisconsin in FWS Region 3. CFS and its members  
23 are being, and will be, adversely affected by FWS’s actions.

24 6. CFS seeks to protect human health and the environment by advocating for  
25 thorough, science-based safety testing of new agricultural products prior to cultivation, and  
26 oversight of such products in a manner that minimizes their negative impacts. A foundational  
27 part of CFS’s mission is to further the public’s fundamental right to know what is in their food  
28 and food production methods.

1           7.       To achieve its goals, CFS disseminates to government agencies, members of  
2 Congress, and the general public a wide array of educational and informational materials  
3 addressing the introduction of pesticides and GE crops into the environment and food supply.  
4 These materials include, but are not limited to, reprints of news articles, policy reports, legal  
5 briefs, press releases, action alerts, and fact sheets. CFS also sends out action alerts to its True  
6 Food Network. These action alerts generate public involvement, education, and engagement  
7 with governmental officials on issues related to genetic engineering and other issues affecting a  
8 sustainable food system. Collectively, the dissemination of this material has made CFS an  
9 information clearinghouse for public involvement and governmental oversight of the use of  
10 genetic engineering and other technologies in our nation's food supply.

11           8.       When necessary, CFS also engages in public interest litigation to address the  
12 impacts of pesticides and GE crops on the environment, its members, and the public interest.  
13 Many of CFS's past lawsuits involved protecting wildlife and the environment of the NWR  
14 System. CFS was a plaintiff in litigation concerning the planting of GE crops on the Prime Hook  
15 NWR, which resulted in a decision enjoining the planting of GE crops until the refuge attained  
16 full compliance with NEPA and the Refuge Act. *Del. Audubon Soc'y, Inc. v. Sec'y of the U.S.*  
17 *Dep't of Interior*, 612 F. Supp. 2d 442 (D. Del. 2009). CFS was also a plaintiff in litigation  
18 concerning the planting of GE crops on Bombay Hook NWR, *Del. Audubon Soc'y, Inc. v.*  
19 *Salazar*, No. C10-162 GMS (D. Del. filed Feb. 25, 2010), which was resolved by a settlement  
20 agreement in February 2011. CFS was also a plaintiff in lawsuits challenging FWS's issuance of  
21 regional Environmental Assessments (EAs) to allow cultivation of GE crops in the Southeast and  
22 Midwest Regions. *Ctr. for Food Safety v. Salazar*, 900 F. Supp. 2d 1 (D.D.C. 2012); *Ctr. for*  
23 *Food Safety v. Salazar*, 898 F. Supp. 2d 130 (D.D.C. 2012).

24           9.       The farming programs at the Refuges injure CFS members by interfering, *inter*  
25 *alia*, with their aesthetic enjoyment of wildlife refuges and their inhabitants. In addition, the  
26 Refuges' farming programs injure CFS members' recreational enjoyment of Refuges within  
27 Region 3 because the programs increase the use of pesticides. As a result, CFS members are at  
28 greater risk of suffering health effects from pesticide use. Additionally, cultivation of GE crops

1 compromises members' enjoyment of Region 3 Refuges because the crops pose risks to native  
2 ecosystems and wildlife, and injure the aesthetic and recreational interests of those who seek to  
3 protect and maintain biodiversity.

4 10. In addition, CFS members grow organic and conventional seed crops, and  
5 consume products made with non-GE materials and without pesticides. CFS members also  
6 regularly eat organic foods and desire foods that are free of GE material and chemical pesticides.  
7 The proliferation of GE crops on refuge lands will contaminate non-GE crops nearby, and reduce  
8 the supply of food containing ingredients that are not contaminated with GE material. FWS's  
9 actions in allowing chemical pesticides and the introduction of GE crops in Region 3 will make it  
10 more difficult for CFS members to produce, sell, and eat foods not contaminated by GE material.

11 11. Plaintiff Public Employees for Environmental Responsibility (PEER) is a national  
12 nonprofit organization based in Washington, D.C., with field offices throughout the United  
13 States, including California. PEER is a national alliance of local, state, and federal scientists;  
14 law enforcement officers; land managers; and other professionals dedicated to upholding  
15 environmental laws and values. Members of PEER retreat to NWRs throughout the Midwest to  
16 partake in their unique birding opportunities and derive aesthetic enjoyment from wildlife  
17 refuges, and have firm plans to do so again in the future. FWS's decision to allow pesticide use  
18 and GE crop cultivation without site-specific analysis harms PEER members' recreational and  
19 aesthetic enjoyment by harming wildlife, the environment, and birding opportunities. In  
20 addition, PEER members who are also FWS professionals are being harmed by having to engage  
21 in practices they believe are detrimental to the Refuges and in violation of NEPA. Further,  
22 PEER members are being harmed by the failure of FWS to comply with environmental laws and  
23 act in accordance with the mission of the NWR System to conserve and manage land and water,  
24 and where appropriate, to provide for the restoration of fish, wildlife, and plants within the NWR  
25 System.

26 12. PEER is active in addressing issues concerning the planting of GE crops on  
27 NWRs. PEER was a plaintiff in litigation concerning GE crop cultivation on the Prime Hook  
28 NWR, which resulted in a decision enjoining GE crop cultivation until full compliance with

1 NEPA and the Refuge Act. *Del. Audubon Soc’y*, 612 F. Supp. 2d at 442. PEER was also a  
2 plaintiff in litigation concerning GE crop cultivation on Bombay Hook NWR, *Del. Audubon*  
3 *Soc’y*, No. C10-162 GMS, which was resolved by a settlement agreement in February 2011.  
4 PEER was also a plaintiff in lawsuits challenging FWS’s issuance of regional EAs to allow GE  
5 crop cultivation in the Southeast and Midwest Regions. *Ctr. for Food Safety*, 900 F. Supp. 2d  
6 at 1; *Ctr. for Food Safety*, 898 F. Supp. 2d at 130.

7 13. Plaintiff Sierra Club brings this action on behalf of itself and its members. Sierra  
8 Club and its members are being, and will be, adversely affected by Defendants’ actions  
9 complained of herein. The Sierra Club is a national nonprofit organization of approximately  
10 600,000 members dedicated to exploring, enjoying, and protecting the wild places of the earth,  
11 like NWRs; to practicing and promoting the responsible use of the earth’s ecosystems and  
12 resources; to educating and enlisting humanity to protect and restore the quality of the natural  
13 and human environment; and to using all lawful means to carry out these objectives. Sierra Club  
14 is incorporated in California and headquartered in San Francisco, CA.

15 14. The Sierra Club’s concerns encompass endangered species, habitat protection,  
16 pollution, genetic engineering, and industrial agriculture, including the use of pesticides, all of  
17 which are at issue in this case. The use of pesticides and the practice’s potential impacts on  
18 endangered species, amphibians, pollinators, and wildlife habitat are of particular concern to  
19 Sierra Club members. The loss of bees and other beneficial insects, and the threats to native  
20 ecosystems and wildlife posed by certain pesticides and insecticides, harm the interests of the  
21 Sierra Club and its members.

22 15. The Sierra Club’s Genetic Engineering Committee educates the public and  
23 advocates for regulatory reform to protect the natural environment and human health from the  
24 threats posed by the release of novel GE organisms. The use of GE crops on NWRs falls within  
25 the scope of diverse concerns that the Sierra Club’s Genetic Engineering Committee has been  
26 raising about GE crops.

27 16. FWS’s actions in allowing pesticide-intensive farming as well as the introduction  
28 of GE crops in Region 3 will make it more difficult for Sierra Club members to produce, sell,

1 and eat foods not damaged by pesticide drift or GE material. Sierra Club members grow organic  
2 seed crops and consume products made without pesticides or GE materials. Planting GE crops  
3 on refuge lands will contaminate non-GE crops nearby, and reduce the supply of food processed  
4 with ingredients that are not contaminated with GE material.

5 17. Plaintiff Beyond Pesticides is a national nonprofit organization based out of  
6 Washington D.C. with members in 44 states and the District of Columbia, including Illinois,  
7 Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio, and Wisconsin in FWS Region 3. Beyond  
8 Pesticides and its members are being, and will be, adversely affected by Defendants' decisions to  
9 permit harmful pesticide use and GE crop cultivation without site-specific analysis. Beyond  
10 Pesticides promotes safe air, water, land, and food, and works to protect public health and the  
11 environment by encouraging a transition away from the use of toxic pesticides.

12 18. With Beyond Pesticides' resources made available to the public on a national  
13 scale, Beyond Pesticides contributes to a significant reduction in unnecessary pesticide use, thus  
14 improving protection of public health and the environment. The risks to public health and the  
15 environment from pesticides are vast.

16 19. Beyond Pesticides and its members also aim to reduce the proliferation of GE  
17 crops designed to be herbicide resistant, because herbicide-resistant crops exacerbate the  
18 herbicide and pesticide treadmill that threatens the health of Beyond Pesticides members. About  
19 85 percent of all GE crops are altered to be herbicide resistant. These herbicide-resistant crops  
20 are the variety of GE crops approved for use on Midwest Refuges. Thus, it is the goal of Beyond  
21 Pesticides to educate on the public health and environmental consequences of this technology,  
22 and generate support for sound ecological-based regulatory and management systems.

23 20. Many Beyond Pesticides members live, work, and recreate in and near Refuges  
24 within Region 3. Pesticide use and GE crop cultivation injures Beyond Pesticides members by  
25 interfering, *inter alia*, with their aesthetic enjoyment of wildlife refuges and their inhabitants. In  
26 addition, the Refuges' farming programs injure Beyond Pesticides members' recreational  
27 enjoyment of Region 3 Refuges because the farming involves the use of highly toxic pesticides.  
28 Certain pesticides used on Refuges decrease biodiversity and impact pollinators and wildlife.

1           21.     GE crop use on Refuges also injures Beyond Pesticides members. GE crops  
2 increase the use of certain herbicides by encouraging the growth of weeds that are resistant to  
3 herbicides. In turn, farmers have to use more, and more toxic, pesticides to stop these cultivated  
4 “superweeds.” As a result, Beyond Pesticides members are at greater risk of suffering health  
5 effects from pesticide use. Additionally, GE crop cultivation compromises members’ enjoyment  
6 of Region 3 Refuges because the crops pose risks to wildlife and reduce biodiversity.

7           22.     Plaintiff organizations have standing to bring this action on behalf of themselves  
8 and their members. Members of Plaintiff organizations live near and enjoy the use of Region 3  
9 NWR System lands where farming is currently approved. The above-described educational,  
10 scientific, aesthetic, conservation, and recreational interests of the Plaintiff organizations and  
11 their members have been and will continue to be adversely affected and irreparably injured by  
12 Defendants’ decision to allow crop cultivation on the five refuges in Region 3 based on an  
13 inadequate NEPA and Refuge Act review that lacks any site-specific analysis of the impacts  
14 from GE crops and pesticides in the Refuges.

15 ***Defendants***

16           23.     Defendant Sally Jewell is the Secretary of the United States Department of the  
17 Interior (the Secretary). The Secretary is the official ultimately responsible for Region 3  
18 management and for compliance with all laws applicable to Region 3 Refuges, including NEPA  
19 and the APA. The Secretary is sued in her official capacity.

20           24.     Defendant Daniel M. Ashe is the Director of FWS. He is legally responsible for  
21 overseeing FWS activities, including FWS agents who enter CFAs at Region 3 Refuges. He is  
22 sued in his official capacity.

23           25.     Defendant United States Fish and Wildlife Service is the federal agency  
24 responsible for NWR management and operation and charged with ensuring NWRs are in  
25 compliance with the regulations and laws that govern them, including NEPA and the APA.  
26 FWS’s mission is to conserve, protect, and enhance fish, wildlife, plants, and their habitats for  
27 the continuing benefit of the American people.  
28



1 **LEGAL BACKGROUND**

2 ***National Environmental Policy Act***

3 26. NEPA sets forth substantive environmental quality goals for the government and  
4 the nation. *See* 42 U.S.C. § 4331. Under NEPA, every agency of the United States Government  
5 must include an Environmental Impact Statement (EIS) in every “recommendation or report on  
6 proposals for legislation and other major Federal actions significantly affecting the quality of the  
7 human environment.” 42 U.S.C. § 4332(2)(C).

8 27. Agencies must apply NEPA’s policies to their other legal authority. *See* 42  
9 U.S.C. § 4332(1) (“[T]he policies, regulations, and public laws of the United States shall be  
10 interpreted and administered in accordance with the policies set forth in [NEPA].”). This  
11 includes using “all practicable means and measures . . . in a manner calculated to foster and  
12 promote the general welfare, to create and maintain conditions under which man and nature can  
13 exist in productive harmony, and fulfill the social, economic, and other requirements of present  
14 and future generations of Americans.” *Id.* § 4331(a). FWS activities that allow for unsustainable  
15 farming practices, depleting natural resources held in trust on behalf of the American people,  
16 without transparency or recognition of the duty to present and future generations, violate this  
17 duty.

18 28. NEPA’s implementing regulations, promulgated by the Council on Environmental  
19 Quality (CEQ), provide that:

20 NEPA procedures must insure that environmental information is available to  
21 public officials and citizens before decisions are made and before actions are  
22 taken. The information must be of high quality. Accurate scientific analysis,  
expert agency comments, and public scrutiny are essential to implementing  
NEPA.

23 40 C.F.R. § 1500.1(b).

24 29. If the action is one that normally requires an EIS, the agency is to prepare an EIS  
25 without first preparing an EA. *Id.* §§ 1501.4(a)-(b), 1501.3(a). When the proposed action is one  
26 that does not normally require an EIS, an agency may prepare an EA to determine whether to  
27 prepare an EIS. *Id.* § 1501.4(a)-(c).

1           30.     An EA must “provide sufficient evidence and analysis” for determining whether  
2 to prepare an EIS, *id.* § 1508.9(a)(1), and “include brief discussions of the need for the proposal,  
3 of alternatives . . . [and] of the environmental impacts of the proposed action and alternatives,”  
4 *id.* § 1508.9(b). If the agency determines on the basis of the EA not to prepare an EIS, it must  
5 prepare a “finding of no significant impact” (FONSI) and make it available to the public. *Id.*  
6 §§ 1501.4(e)(1), 1508.13.

7           31.     The CEQ regulations provide that:

8           (a) Until an agency issues a record of decision [on an EIS] . . . no action concerning the  
9 proposal shall be taken which would:

- 10           (1) Have an adverse environmental impact; or  
11           (2) Limit the choice of reasonable alternatives.

11 *Id.* § 1506.1.

12           32.     The agency must involve the public in EA preparation to the extent practicable.

13 *Id.* § 1501.4(b).

14           33.     NEPA and CEQ regulations require site-specific analysis as part of the NEPA  
15 process. NEPA requires “appropriate consideration” of environmental impacts before an action  
16 occurs. 42 U.S.C. § 4332(2)(B). Regarding the “significance” of a project, which is  
17 determinative of whether an EIS is required, or whether a FONSI can be made, the CEQ  
18 regulations state that “[s]ignificance varies with the setting of the proposed action. For instance,  
19 in the case of a *site-specific* action, significance would usually depend upon the *effects in the*  
20 *locale* rather than the world as a whole.” 40 C.F.R. § 1508.27(a) (emphasis added).

21           34.     CEQ regulations allow “tiering”—where a programmatic environmental  
22 assessment is followed by a subsequent environmental analysis of the ultimate site-specific  
23 impacts of the project that incorporates the general discussions in the programmatic assessment.  
24 *Id.* § 1508.28. These regulations contemplate the need for site-specific analysis following a  
25 programmatic EIS. *Id.* § 1508.28(a).

26           35.     The need for site-specific analysis is also indicated in the regulations addressing  
27 comments by cooperating agencies in reviewing the environmental impact of proposed actions.  
28 *Id.* § 1503.3. Each commenting agency “shall specify any additional information it needs to

1 comment adequately on the draft statement’s analysis of significant site-specific effects.” *Id.*  
2 § 1503.3(c).

3 ***Administrative Procedure Act***

4 36. The APA grants a right of judicial review to “[a] person suffering legal wrong  
5 because of agency action, or adversely affected or aggrieved by agency action.” 5 U.S.C. § 702.

6 37. Under the APA, courts “shall compel agency action unlawfully withheld or  
7 unreasonably delayed,” *id.* § 706(1), and “hold unlawful and set aside agency action, findings,  
8 and conclusions found to be arbitrary, capricious, an abuse of discretion, or otherwise not in  
9 accordance with law,” *id.* § 706(2)(A). Courts may only review a final agency action, *id.* § 704,  
10 and “agency action” includes a “failure to act,” *id.* § 551(13).

11 ***National Wildlife Refuge System Administration Act and the National Wildlife Refuge System***  
12 ***Improvement Act***

13 38. All NWR management is governed by the Refuge Act and the National Wildlife  
14 Refuge System Improvement Act. 16 U.S.C. § 668dd. The Secretary and FWS are responsible  
15 for managing all NWRs. *Id.* § 668dd(a)(1). “The Secretary is authorized . . . to permit the use of  
16 any area within the System for any purpose . . . whenever [s]he determines that such uses are  
17 compatible with the major purposes for which such areas were established.” *Id.*  
18 § 668dd(d)(1)(A).

19 39. The Refuge Act provides that it is “[t]he mission of the [NWR] System . . . to  
20 administer a national network of lands and waters for the conservation, management, and where  
21 appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the  
22 United States for the benefit of present and future generations of Americans.” *Id.* § 668dd(a)(2).

23 40. The Refuge Act requires Comprehensive Conservation Plans (CCPs). A CCP is  
24 “a document that describes the desired future conditions of a refuge or planning unit and  
25 provides long-range guidance and management direction to achieve the purposes of the refuge.”  
26 50 C.F.R. § 25.12. The Secretary must “prepare a comprehensive conservation plan . . . for each  
27 refuge within 15 years after the date of the enactment of the National Wildlife Refuge System  
28 Improvement Act of 1997,” and revise the plans every 15 years thereafter. 16 U.S.C.

1 § 668dd(e)(1)(A), (B). Draft CCPs must be published in the Federal Register, with the  
2 opportunity for public comment. *Id.* § 668dd(e)(1)(A)(ii).

3 41. The Refuge Act expressly requires: “the Secretary shall not initiate or permit a  
4 new use of a refuge or expand, renew, or extend an existing use of a refuge, unless the Secretary  
5 has determined that the use is a compatible use and that the use is not inconsistent with public  
6 safety.” *Id.* § 668dd(d)(3)(A)(i).

7 42. A compatible use is a “wildlife-dependent recreational use or any other use of a  
8 refuge that, in the sound professional judgment of the Director, will not materially interfere with  
9 or detract from the fulfillment of the mission of the System or the purposes of the refuge.” *Id.*  
10 § 668ee(1). Compatible uses are determined in compatibility determinations (CD). The Director  
11 delegates authority to make CDs through the Regional Director to the refuge manager. Sound  
12 professional judgment must be “consistent with principles of sound fish and wildlife  
13 management and administration, [and] available science and resources. . . .” *Id.* § 668ee(3). If a  
14 proposed use is found to be incompatible with the NWR’s purpose then “the conflict shall be  
15 resolved in a manner that first protects the purposes of the refuge, and, to the extent practicable,  
16 that also achieves the mission of the System.” *Id.* § 668dd(a)(4)(D).

17 43. CDs do not constitute NEPA documents and cannot be used to comply with the  
18 requirements of NEPA. 40 C.F.R. § 1508.10.

### 19 ***FWS’s Policy on Integrated Pest Management***

20 44. FWS’s Integrated Pest Management (IPM) policy establishes “policy, procedures,  
21 and responsibilities for pest management activities on and off [FWS] lands.” FWS, 569 FW 1,  
22 1.1(A), Integrated Pest Management (2010). IPM includes biological, cultural, physical, and  
23 chemical methods of managing pests. *Id.* at 1.2(A)(1)-(4). According to this policy, IPM plans  
24 must comply with NEPA:

25 Employees must develop the appropriate level of NEPA documentation (conforming to  
26 the parameters of a categorical exclusion, Environmental Assessment, or Environmental  
27 Impact Statement) and provide public involvement, as needed, when they develop IPM  
28 plans. If you have identified, addressed, and authorized specific pest management  
strategies in a Comprehensive Conservation Plan and fully evaluated these strategies in  
the Comprehensive Conservation Plan’s NEPA document, you do not need further NEPA  
documentation.

1 *Id.* at 1.13.

2 45. In accordance with FWS's IPM policy, FWS is also required to create PUPs. A  
3 PUP is a document intended to identify important considerations related to pesticide application  
4 (e.g., goals, objectives, IPM techniques, best management practices, pesticide application rates  
5 and methods, etc.). PUPs authorize the use of specific pesticide applications on refuges.  
6 However, PUPs are not NEPA documents and cannot be used to comply with NEPA's  
7 provisions. 40 C.F.R. § 1508.10.

8 ***FWS's Policy on Biological Integrity, Diversity, and Environmental Health***

9 46. FWS's agency guidance states: "We do not use genetically modified organisms in  
10 refuge management unless we determine their use is essential to accomplishing refuge purpose(s)  
11 and the Director approves the use." FWS, 601 FW 3, 3.15(C), Biological Integrity, Diversity,  
12 and Environmental Health (2001).

13 **FACTUAL BACKGROUND**

14 47. In a decades-old practice, FWS leases refuge lands to private parties for farming,  
15 which is formalized in a CFA. Where applicable, CFAs permit GE crop cultivation on Refuge  
16 lands. CFAs also incorporate the various toxic pesticides identified in Region 3's PUP Field  
17 Approval Lists. The PUP Field Approval Lists are lists of pesticides approved for use on  
18 individual refuges. Farmers may apply pesticides consistent with the Field Approval Lists, and  
19 Refuges specifically approve pesticide application through PUPs. The number of acres leased  
20 through FWS's cooperative farming program varies annually. In 2013, at least 17,000 acres of  
21 Region 3 lands are leased for cooperative farming.

22 48. Despite the high number of acres leased, FWS fails to provide site-specific NEPA  
23 analysis for any of the CFAs or PUPs that permit the use of specific pesticides or GE crops  
24 within the Refuges.

25 ***Pesticides***

26 49. According to FWS, "[t]he use of pesticides can negatively impact the U.S. Fish  
27 and Wildlife Service's (Service) trust resources, including fisheries resources, threatened and  
28

1 endangered species, migratory birds and their habitats.”<sup>2</sup> When describing pesticide facts, FWS  
2 states:

- 3 • “In recent studies of major rivers and streams, one or more pesticides were  
4 detected more than 90% of the time in water, in more than 80% of fish sampled,  
5 and in 33% of major aquifers.”<sup>3</sup>
- 6 • “Pesticides are one of the 15 leading causes of impairment for streams included  
7 on States’ Clean Water Act section 303(d) lists of impaired waters.”<sup>4</sup>
- 8 • “Pesticides have also been identified as a potential cause of amphibian declines  
9 and deformities.”<sup>5</sup>
- 10 • “Pesticides are one of the potential causes [of] pollinator species’ declines and  
11 declines of other beneficial insects.”<sup>6</sup>

12 50. “By their very nature, most pesticides pose some risk of harm to humans, animals  
13 or the environment because they are designed to kill or adversely affect living organisms.  
14 Significant fish and bird kills have resulted from the legal application of pesticides, with millions  
15 of fish and birds estimated to die from pesticide exposure each year.”<sup>7</sup>

16 51. Refuge pesticide use must comply with federal laws including NEPA.<sup>8</sup> The FWS  
17 policies and refuge manual state that FWS can only use pesticides after full consideration of  
18 management alternatives including chemical, biological, physical, and no action alternatives.  
19 This necessarily includes the “full consideration” of pesticide impacts.

20 52. Region 3’s current PUP Field Approval List authorizes the use of 16 pesticide  
21 active ingredients: 2,4-Dichlorophenoxyacetic acid (amine); 2,4-Dichlorophenoxyacetic acid  
22 (ester); aminopyralid; Clethodim; Clopyralid; Dicamba; Flumiclorac pentyl ester; Glufosinate  
23 ammonium; Glyphosate; Imazethapyr; Imidazolinones; Nicosulfuron; Rimsulfuron; Sethoxydim;

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24 <sup>2</sup> FWS, Environmental Quality, <http://www.fws.gov/contaminants/Issues/Pesticides.cfm> (last  
25 visited Aug. 26, 2013).

26 <sup>3</sup> *Id.* (citing R.J. Gilliom et al., *Pesticides in the Nation’s Streams and Ground Water, 1992-*  
27 *2001*, U.S. Geological Survey, VA. Circular 1291, available  
28 at <http://pubs.usgs.gov/circ/2005/1291/>).

<sup>4</sup> *Id.*

<sup>5</sup> *Id.*

<sup>6</sup> *Id.*

<sup>7</sup> *Id.* (citing Ted Williams, Hard News on “Soft” Pesticides, AUDUBON (1993); P. Pimental, et al., Environmental and Economic Costs of Pesticide Use, 42 *BioScience* 750, 750-759 (1992)).

<sup>8</sup> FWS, Managing Invasive Plants: Concepts, Principles, and Practice, <http://www.fws.gov/invasives/staffTrainingModule/methods/chemical/practice.html> (last visited Aug. 26, 2013).

1 Triclopyr (amine); Triclopor (ester). Some of these pesticide active ingredients are notoriously  
2 dangerous, such as 2,4-Dichlorophenoxyacetic (2,4-D) acid and Dicamba. Other pesticide active  
3 ingredients on the list may be similarly dangerous. Despite FWS's approved use of these  
4 pesticides on the Refuges in the CCPs, CFAs, and PUPs, not a single Refuge listed in this  
5 Complaint conducted NEPA-compliant site-specific impacts analysis for the active ingredients  
6 (or the "inactive" ingredients such as surfactants, which can sometimes cause more harm than  
7 the active ingredients) on wildlife or refuge habitat.

8 *2,4-Dichlorophenoxyacetic acid*

9 53. The World War II-era pesticide 2,4-D is currently approved for use on Refuges.  
10 2,4-D is a systemic herbicide used to control broadleaf weeds. It is one of the most widely used  
11 herbicides in the world, and is the third most commonly used herbicide in North America. Forty-  
12 six million pounds of 2,4-D are applied every year in the United States to lawns, playgrounds,  
13 golf courses, and millions of acres of agricultural land. 2,4-D was also a major ingredient  
14 in Agent Orange.

15 54. As a highly volatile herbicide, 2,4-D is prone to spray drift that damages  
16 neighboring crops and wild plants. Drift from 2,4-D will injure most broadleaf plants, such as  
17 grapes, tomatoes, cottons, soybeans, sunflower, and lettuce, at extremely low levels.

18 55. 2,4-D remains contaminated with dioxins that are toxic to human health. The  
19 Environmental Protection Agency (EPA) has listed 2,4-D as the seventh largest source of dioxin  
20 pollution in the United States.

21 56. Exposure to 2,4-D has been linked to negative effects on hormonal,  
22 developmental, neurological, and immune systems, as well as increased rates of cancer, lowered  
23 sperm counts, liver disease, and Parkinson's disease. "Over the past 40 years, dozens of studies  
24 have been published on the links between 2,4-D and non-Hodgkin's lymphoma, as well as  
25 soft-tissue sarcoma in humans."<sup>9</sup> In 2010, approximately 65,000 people in the United States  
26 were diagnosed with non-Hodgkin's lymphoma. "The rate of this disease in the United States  
27

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28 <sup>9</sup> Natural Resources Defense Council, Chemical Index 2,4-D,  
<http://www.nrdc.org/living/chemicalindex/2-4-d.asp> (last visited Aug. 26, 2013).

1 nearly doubled since the 1970s, even when adjusted for population size and age.”<sup>10</sup> Many  
2 studies have found that 2,4-D products are cytotoxic (i.e., damage and kill cells) and mutagenic  
3 (i.e., trigger genetic mutations).

4 57. 2,4-D may affect threatened and endangered species and their habitat. EPA is  
5 currently undertaking a consultation with the National Marine Fisheries Service (NMFS) on  
6 potential detrimental effects of 2,4-D on endangered and threatened Pacific salmonids.  
7 Critically, in the draft biological opinion that NMFS issued in 2011, NMFS concluded that the  
8 injurious effect of 2,4-D on plants “will have a detrimental effect on riparian vegetation . . . .”<sup>11</sup>  
9 Because riparian vegetation “provides shade, bank stabilization, sediment, chemical and nutrient  
10 filtering, and provides a niche for the terrestrial invertebrates that are also salmon prey items,”<sup>12</sup>  
11 NMFS concluded that the registration of 2,4-D is likely to jeopardize the continued existence of  
12 and destroy critical habitats for endangered and threatened salmonids.<sup>13</sup> Again, many threatened  
13 and endangered aquatic species will have similar habitat requirements for water quality and prey,  
14 including some that reside in habitats near corn fields and thus could be impacted by the use of  
15 2,4-D.

16 *Dicamba*

17 58. Dicamba is a chlorinated broadleaf herbicide of the synthetic auxin class. It is  
18 mobile and persistent, and is thus found in surface and ground water. Plants along rivers and in  
19 wetlands are especially vulnerable to dicamba because the toxin is absorbed by plants from  
20 contaminated water sources. Spray drift and volatilization of dicamba impacts vegetation near  
21 application sites, and also at a distance, so that plants in many types of habitats are at risk. Drift  
22 levels of dicamba may also weaken plants, leading to the fostering of plant pests and pathogens.  
23 Harm to plants also affects the animals that depend on them. Biodiversity may suffer. Studies  
24

25  
26 <sup>10</sup> *Id.*

27 <sup>11</sup> Nat’l Oceanic and Atmospheric Assoc., NMFS, Draft Biological Opinion: EPA Registration  
of Pesticides 2,4-D, Triclophyr BEE, Diuron, Linuron, Captan, and Chlorothalonil 628 (June  
28 2011), *available at* [http://www.nmfs.noaa.gov/pr/pdfs/consultations/pesticide\\_opinion4.pdf](http://www.nmfs.noaa.gov/pr/pdfs/consultations/pesticide_opinion4.pdf).

<sup>12</sup> *Id.*

<sup>13</sup> *Id.* at 771, 775.



1 show that dicamba has adverse reproductive and nervous system effects, suggesting that wild  
2 animals may be directly harmed from increased dicamba use.

3         59. Dicamba is extremely prone to drift. Despite limited use, it is a leading culprit of  
4 herbicide drift-related crop injury episodes. Like all herbicides, dicamba can drift during  
5 application. Unlike most others, dicamba can volatilize from plant surfaces days after  
6 application and move long distances when weather conditions are right. In either case, dicamba  
7 can drift to neighboring fields and cause severe crop damage. Less volatile dicamba  
8 formulations may pose comparable risks to more volatile ones in the field, despite apparent  
9 differences in controlled experiments. Soybeans are injured at one percent of a typical dicamba  
10 application rate, tomatoes at 0.3–0.5 percent. Practically any broadleaf (non-cereal) crop is at  
11 risk of dicamba drift damage, particularly at flowering stage.

12         60. Dicamba application may also impact human health. Epidemiology studies have  
13 tentatively linked exposure to dicamba to increased incidence of colon, lung, and immune system  
14 cancers in pesticide applicators. Other pesticide applicators exposed to dicamba exhibited a 20  
15 percent inhibition of an enzyme critical to brain function. Children who ingest residues of other  
16 pesticides that have this effect exhibit higher rates of attention deficit hyperactivity disorder.  
17 Pregnant mice that ingested water spiked with low doses of a commercial herbicide mix that  
18 includes dicamba had smaller litters, suggesting developmental toxicity. Studies indicate that  
19 dicamba damages DNA at high rates, and is transformed by sprayed plants into forms that are  
20 mutagenic in standard assays.

21         61. Dicamba may also have negative impacts on endangered species that live or grow  
22 near where dicamba is applied. Endangered species are at risk from exposure to dicamba via  
23 drift of particles and vapor, runoff, accidental over-spraying, and recently sprayed plants and  
24 soil. Their habitats will be at higher risk of being altered from changes in plant populations with  
25 attendant impacts. However, the stakes of dicamba exposure are higher for listed species,  
26 especially for plants:

27             Determination of herbicide effects to threatened and endangered plant species in native  
28             plant communities is especially critical. In the U.S., the federal government has listed  
              over 500 plant species as threatened and endangered and the Nature Conservancy

1 considers 5,000 of the 16,000 native species to be at risk. Almost 50% of these species  
2 are annuals that are dependent on seed production or the seed bank for survival, thus any  
3 reproductive effects of herbicides could affect their survival.<sup>14</sup>

4 62. EPA has determined in a preliminary risk assessment for listed species that  
5 dicamba exceeds the lowest level of concern for the following taxonomic groups, at all  
6 application rates considered (lowest rate 0.75 lb a.e./acre):

- 7 • small birds (20 and 100 g) feeding on short grasses, tall grasses, and broadleaf  
8 forage/small insects at all application rates and maximum and mean predicted  
9 residue levels;
- 10 • small birds (20 g) feeding on fruit, pods, seeds/large insects at all application rates  
11 and maximum predicted residue levels;
- 12 • large birds (1000 g) feeding on short grasses, tall grasses, and broadleaf  
13 forage/small insects at all application rates and maximum predicted residue levels;
- 14 • non-target terrestrial plants: monocots and dicots adjacent to treated areas and in  
15 semiaquatic areas at all application rates (all uses modeled) by ground and aerial  
16 spray application; dicots in spray drift at all application rates (all uses modeled)  
17 by ground and aerial spray application, excerpts for all application rates only.

18 63. Critical habitat is also clearly at risk from dicamba use given the potential for  
19 indirect effects via plants, which constitute the base of ecosystems.<sup>15</sup> Summarizing these  
20 findings, EPA concludes:

21 The Agency's screening level ecological risk assessment for endangered species results  
22 in the determination that dicamba will have no direct acute effects on threatened and  
23 endangered freshwater fish, estuarine fish, and aquatic invertebrates. However, the  
24 assessment indicates that dicamba has the potential for causing risk to endangered birds,  
25 mammals, and non-target plants. Further, potential indirect effect to any species  
26 dependent upon a species that experiences effects cannot be precluded from use of  
27 dicamba. These findings are based solely on EPA's screening level assessment and do  
28 not constitute "may effect" findings under the Endangered Species Act. Chronic RQs  
exceeded LOCs for endangered mammals at all application rates modeled. Acute LOCs  
were exceeded for endangered birds at all application rates. LOCs were exceeded for  
terrestrial plants adjacent to treated areas and in semi-aquatic areas at all application  
rates.<sup>16</sup>

#### *Neonicotinoids*

64. On information and belief, a controversial and dangerous class of pesticides—

<sup>14</sup> Olszyk, D.M. et al., Assessing the risks to non-target terrestrial plants from herbicides, 60 J. of Agric. Meteorology 221 (2004).

<sup>15</sup> See EPA, EFED Reregistration Chapter For Dicamba/Dicamba Salts 75 (2005), available at <http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OPP-2005-0479-0008>.

<sup>16</sup> EPA, Reregistration Eligibility Decision for Dicamba and Associated Salts 20 (2006), available at [http://www.epa.gov/oppsrrd1/REDs/dicamba\\_red.pdf](http://www.epa.gov/oppsrrd1/REDs/dicamba_red.pdf).

1 neonicotinoids—are used in Refuge farming programs. Neonicotinoids are systemic insecticides  
2 that enter a plant’s vascular system as it grows and are expressed through its tissues, including  
3 flowers, pollen, and nectar. They share a common mode of action that damages the central  
4 nervous system of insects.

5         65.     Ninety-nine percent of corn seed is treated with neonicotinoids; therefore, it is  
6 likely that farmers are planting neonicotinoid-treated corn on Refuges. Despite the  
7 overwhelming adoption of neonicotinoid treated corn seed, neonicotinoids are not represented on  
8 the Region 3 PUP Field Approval List.

9         66.     When bees forage on pollen or nectar from treated crops, or are otherwise  
10 exposed to even extremely small levels of these compounds, paralysis and death can result. Over  
11 the past decade, the proliferating use of the neonicotinoid class of pesticides has coincided with  
12 mass honey bee population die-offs. The phenomenon, now known as Colony Collapse  
13 Disorder, was documented as early as 2003–2004 in the United States. In addition to chronic  
14 effects of Colony Collapse Disorder such as reduced foraging success and increased disease  
15 susceptibility, hundreds of the nation’s beekeepers and honey producers each spring suffer from  
16 acute effects—bee kills—when their bees come in contact with neonicotinoid-treated corn and  
17 other crops.

18         67.     Neonicotinoids have been shown to adversely impact more than just managed  
19 honey bees—they also impact native bees and beneficial insects, which are critical to supporting  
20 pollination services. Studies show that having native pollinators and managed honey bees in  
21 orchards and on farms makes a significant improvement in pollination services.

22         68.     Clothianidin and its parent compound thiamethoxam—the two most widely used  
23 neonicotinoids—are highly toxic to other bee species like the common Eastern bumble bee,  
24 alfalfa leafcutter bee, and blue orchard bee, all of which are valuable plant pollinators. More  
25 than 15 threatened or endangered insects, ranging from beetles to butterflies to grasshoppers and  
26 other taxa, are potentially directly affected by the use of clothianidin and thiamethoxam  
27 products.  
28

1           69.     Harmful direct, indirect, and cumulative effects on many other non-insect  
2 Endangered Species Act (ESA) listed species, including, but not limited to, birds, crustaceans,  
3 mollusks, fish, mammals, reptiles, and amphibians, are also foreseeable due to the known effects  
4 of clothianidin and thiamethoxam. Listed species may be affected by direct consumption of  
5 clothianidin- and thiamethoxam-treated seeds and plant parts, as well as by food chain and  
6 ecosystem collapses associated with the vast mortality caused by these pesticides to aquatic and  
7 terrestrial invertebrates.

8           70.     In March 2013, the American Bird Conservancy of Washington, D.C., released  
9 “The Impact of the Nation’s Most Widely Used Insecticides on Birds.” It was researched and  
10 written by a recognized independent avian toxicologist, Pierre Mineau, Ph.D. In the report, Dr.  
11 Mineau examines the key EPA risk assessment documents and shows high direct and indirect  
12 mortality risks to a broad suite of birds, as well as to aquatic invertebrates and to ecosystems  
13 generally. The report finds that the observed acute threats to aquatic invertebrates from water  
14 contamination by neonicotinoids “may be totally unprecedented in the history of pesticide  
15 registration.” It also states: “[s]imply put, EPA has not been heeding the warnings of its own  
16 toxicologists.” In the report, Dr. Mineau also examines the EPA-approved product labels and  
17 finds them inadequate to address the risks to birds. It states: “regulators are clearly mistaken in  
18 believing that exposure to [neonicotinoid-] treated seed can be minimized by label statements or  
19 adherence to good agricultural practices.” Agencies contemplating permitting farming on  
20 conservation lands have a duty under NEPA to analyze these unchecked risks.

21           71.     Neonicotinoid pesticides persist in a toxic state in the environment for several  
22 years and increase the risk of cumulative toxic loading, especially after repeat applications at the  
23 same location. Label warnings and use directions are incapable of mitigating these impacts.  
24 Existing warnings and directions are rarely enforced. Farmers and other users are known to  
25 ignore them in many cases, yet federal and state enforcement actions are exceedingly rare.

26           72.     Frequently, the refuge lands adjacent to cooperative farming agricultural fields are  
27 the only viable remaining bee and native insect habitats in the area. Due to the long persistence  
28 of these compounds and the uncontrollable drifting and blowing of contaminated dust and soil,

1 insects are victims of multiple exposure pathways such as residues in pollen and nectar, dust  
2 from treated seeds and soils, planter exhaust, untreated but contaminated non-crop plants  
3 adjacent to treated fields, contaminated puddles in fields and adjacent surface water, guttation  
4 droplets on both treated and untreated-but-contaminated plants, and residues from foliar uses.

5         73. Recent studies, including those by the U.S. Department of Agriculture's (USDA)  
6 lead bee scientists, also confirm that neonicotinoids interact with common bee pathogens and  
7 parasites, making them more vulnerable to the deadly effects of both, leading to further colony  
8 collapse. EPA's internal risk assessments highlight the severe impacts of these pesticides on  
9 insects. Numerous recent peer-reviewed studies and other evidence of both acute and sub-lethal  
10 harm to bees from a variety of exposure pathways across diverse agricultural landscapes support  
11 the need to suspend the uses of clothianidin and thiamethoxam.

12         74. It is FWS's duty to conserve honey bees as well as thousands of other insect  
13 species, including, but not limited to, the rusty patched bumble bee, Franklin's bumble bee,  
14 yellow-banded bumble bee, Western bumble bee, butterflies, ladybugs and lacewings,  
15 dragonflies, and hoverflies. Several of these populations are dying off in numbers comparable  
16 to, or worse than, the honey bees.

17         75. There is intense public interest and scientific controversy surrounding  
18 neonicotinoids, due to the loss of honey bees and other beneficial insects; the resulting economic,  
19 food supply, and ecosystem damages; and the unnecessary persistent toxic pollution of  
20 America's private and public landscapes.

21         76. FWS must assess these substances' environmental impacts on the Refuges. All  
22 five refuges at issue here issued 2013 CFAs and PUPs approving farming with the 2,4-D and/or  
23 dicamba. Three of the five refuges issued some type of CCP and NEPA document for the CCP.  
24 However, these documents do not analyze the refuge-specific impacts of pesticide use. Despite  
25 the likely use of neonicotinoids on Refuges, there exists no approval of its use or an analysis of  
26 its impact on the refuge environment.

27             *Genetically Engineered Crops*

28         77. GE crops are controversial both in the U.S. and abroad. Contentious issues

1 include the growing control of seed supply by biotechnology/pesticide firms, the inability of the  
2 crops to live up to the promises made about them, transgenic contamination of non-GE crops,  
3 and the adverse environmental impacts associated with their use. GE crop use is a significant  
4 change from using conventional crops.

5 78. GE crops such as “Roundup Ready” soybeans and corn are dependent on  
6 herbicide use. These crops, often referred to as glyphosate-resistant, are specifically engineered  
7 to withstand the broad application of the herbicide Roundup (with glyphosate being the active  
8 ingredient) without harming the plant. Ninety-four percent of soybean acres and 88 percent of  
9 corn acres planted in the United States in 2011 were planted with GE varieties.

10 79. Studies show that cultivation of herbicide-resistant GE crops such as “Roundup  
11 Ready” soybeans and corn dramatically increases herbicide use, particularly glyphosate.  
12 Herbicides such as glyphosate degrade the soil ecosystem and pollute nearby wetlands, streams,  
13 lakes, and rivers. Herbicides also harm habitats of wildlife and in many instances, directly harm  
14 plants and wildlife, including listed endangered species.

15 80. Gene flow from GE crops to conventional and organic crops, or transgenic  
16 contamination, is one adverse environmental impact stemming from GE crop cultivation. Gene  
17 flow occurs in numerous ways, including when a crop disperses its seeds or pollen to propagate  
18 itself. Gene flow results in transgenic contamination of related conventional or organic cultivars  
19 or wild species with potentially hazardous or simply unwanted genetically engineered content.  
20 Transgenic contamination can also result from seed mixing, flooding, improper cleaning of  
21 machinery, spillage during transport, and a variety of human errors that may occur throughout  
22 the crop production process.

23 81. There are over 200 documented episodes of transgenic contamination. Among  
24 the most well-known contamination episodes is the incident involving GE StarLink corn.  
25 StarLink was a GE corn approved for animal feed or industrial use, but not for human  
26 consumption, due to the concerns of leading American food allergists that the insecticidal toxin  
27 produced in StarLink grain could trigger food allergies. In 1998, StarLink contaminated the U.S.  
28 corn supply chain, resulting in rejection by foreign markets, the recall of over 300 corn products,

1 the destruction of numerous lines of contaminated corn seed, lawsuits by farmers who  
2 collectively lost hundreds of millions of dollars due to depressed corn prices, and losses to the  
3 food industry as a whole estimated at \$1 billion.

4 82. Additionally, GE corn varieties engineered for herbicide resistance, such as the  
5 “Roundup Ready” corn and soy in Region 3, have resulted in increased herbicide use,  
6 specifically glyphosate use.

7 83. Glyphosate formulations such as Roundup are lethal to many amphibians. They  
8 kill human cells, disrupt formation of sex hormones, interfere with animal embryonic  
9 development in laboratory experiments, and are associated with increased rates of certain cancers  
10 in farmers who apply them. Glyphosate use with “Roundup Ready” crops is also linked to  
11 higher incidence of plant disease, plant nutrient deficiencies, and adverse impacts on soil  
12 microbes. Use of GE crops may also have detrimental effects on wildlife. Numerous studies  
13 document the risks glyphosate herbicides pose to threatened and endangered plants and animals.  
14 In 1996, FWS identified 74 endangered plant species believed to be at risk as a result of  
15 glyphosate use. ESA-listed species harmed or put at further risk by glyphosate specifically  
16 include the California red-legged frog, the Houston toad, and the Valley Elderberry Longhorn  
17 beetle. The Midwest’s “corn belt” is also critical feeding ground for monarch butterflies, which  
18 once found a ready source of milkweed—the monarch’s food supply—growing between the  
19 rows of soybean and corn. The ubiquitous use of herbicide-resistant crops enabled farmers to  
20 wipe out the milkweed, creating a devastating impact on the monarch population. Some studies  
21 also indicate that GE crops adversely affect birds because herbicide-resistant crop farming alters  
22 the plant and weed communities, thus affecting the birds’ diets.

23 84. Widespread adoption of “Roundup Ready” technology in corn and soybeans led  
24 to glyphosate-resistant “superweeds.” These superweeds evolve quickly when “Roundup  
25 Ready” crops are grown year after year, without break, on the same fields; like bacteria exposed  
26 to antibiotics, some weeds naturally resistant to glyphosate will survive exposure, and will then  
27 reproduce and flourish. There are reports of glyphosate-resistant weeds in the states in Region 3.  
28

1           85.     The development of glyphosate-resistant weeds compounds the problem of  
2 increased herbicide use because farmers respond to control the weeds with more applications of  
3 glyphosate or use additional herbicides with relatively greater environmental impacts.

4           86.     Region 3 includes 66 refuges and wetland management districts encompassing  
5 over 1.2 million acres. The five refuges at issue in this case collectively total over 11,000 acres  
6 of the approximate 17,000 farmed acres in Region 3. Row crops are usually cultivated for three  
7 to five years on farmland acquired by Region 3 before it is restored to natural habitat. While GE  
8 corn and soybeans are among the crops planted during those three to five years, they are  
9 typically the only crops planted during the last two years before farmland is restored to natural  
10 habitat.

11           87.     In April 2011, FWS released an EA for the Use of Row Crop Farming and  
12 Genetically-modified, Glyphosate-resistant Corn and Soybeans on Wildlife Refuges and Wetland  
13 Management Districts (hereinafter “Region-wide EA”) and issued a FONSI to allow the  
14 continued use of row crop farming and cultivation of GE corn and soybeans on refuge land in  
15 Region 3. The Region-wide EA allows for continued farming for multiple objectives, and also  
16 permits the continued planting of “Roundup Ready” corn and soybeans for habitat restoration.  
17 As of 2013, GE crops were planted at Iowa WMD, Detroit Lakes WMD, and Cypress Creek  
18 NWR.

19           88.     While the Region-wide EA covers some general impacts of GE crop cultivation  
20 on the environment, the Region-wide EA does not consider or discuss the site-specific impacts  
21 that growing and harvesting GE crops will have on the individual refuges at issue, nor does it  
22 consider the impacts from pesticide use. In a prior lawsuit involving some of the same parties in  
23 this case regarding GE crop cultivation on Midwest refuges, *Ctr. for Food Safety*, 898 F. Supp.  
24 2d 130, FWS represented to the Court that the Region-wide EA did not authorize planting on  
25 specific refuges, that site-specific analysis was required, and that such site-specific analysis  
26 would occur as part of the CCP process.

27           89.     Subsequently, three of the five Refuges at issue here issued CFAs approving GE  
28 crops in 2013. Of these, Cypress Creek and Detroit Lakes issued some type of CCP and NEPA



1 document for the CCP. Iowa WMD issued a draft CCP and NEPA document on August 19,  
2 2013. However, these documents fail to analyze the refuge-specific or site-specific impacts of  
3 GE crop cultivation, and according to the CFAs issued at each refuge, the Refuges continue to  
4 cultivate GE crops in the absence of site-specific NEPA analysis.

### 5 Crab Orchard NWR

6 90. Crab Orchard NWR is located in Illinois, near the northern edge of the Ozark  
7 foothills, and is one of the largest refuges in the Great Lakes/Big Rivers Region. Diverse flora  
8 and fauna populate the Refuge, including hardwood and pine forests, grasslands, wetlands, and  
9 numerous birds and wildlife, including Bald Eagles and Indiana Bats, which is an endangered  
10 and threatened species.

11 91. Crab Orchard NWR's July 2006 EIS/CCP addresses refuge management plans  
12 until 2021, including farming. It states that 4,704 refuge acres are used for row crops and  
13 farming management activities including mowing, disking, planting, herbicide and fertilizer  
14 application, and harvesting. Crab Orchard rotates crops between corn, soybean, hay, and clover  
15 over a five-year rotational period. However, 300 acres of cropland are in continuous rotation of  
16 soybeans and corn. Row croplands at Crab Orchard NWR are currently farmed through one-year  
17 cooperative agreements.

18 92. The EIS/CCP cursorily addresses farming on the refuge without providing the  
19 legally-required site-specific analysis. The EIS/CCP states that pollutants from the Refuge's  
20 agricultural management include sediment, nutrients, and pesticides. Further, the EIS/CCP,  
21 without giving any specifics on percentages or detailed information on sources, states that the  
22 waters in the Refuge are impacted by agricultural runoff. The EIS/CCP does not state the  
23 amounts or variety of herbicides used on the cropland during the farming process, but does admit  
24 that insecticides are used in rare situations. The EIS/CCP states there will be no cumulative  
25 effects from the farming other than the continued existence of the program in the social and  
26 economic culture of the area and that reduction of cropland acres would have a negative  
27 economic impact on the local agricultural community.



1 generally. The 1997 CMP and EA/FONSI do not discuss or address the refuge-specific impacts  
2 of GE crop farming or the concomitant use of herbicides.

3 98. Cypress Creek entered into eight CFAs for the 2013 growing season. The 2013  
4 CFAs permit GE crops and all pesticides listed on FWS's 2011 PUP Approval List. Cypress  
5 Creek produced 14 PUPs for 2013, including one for dicamba and 2,4-D, authorizing use on 175  
6 acres. The refuge-specific impacts of pesticide use and GE crop cultivation have not been  
7 analyzed.

### 8 Iowa WMD

9 99. Iowa WMD covers 35 counties in Iowa, with a management goal of providing  
10 habitat for waterfowl and other wildlife.

11 100. The Iowa WMD has 3,451 acres of cropland according to the Region-wide EA.  
12 Until August 19, 2013, no CCP or NEPA environmental analysis existed for the WMD. The  
13 August 19, 2013, draft does not address the site-specific impacts of GE crops on WMD lands,  
14 nor does it analyze the impacts of the pesticides of which it has permitted use. This lack of  
15 analysis is particularly egregious given that FWS represented to the court in a prior proceeding  
16 that site-specific analysis would occur in the CCPs. Yet, the WMD did not address the  
17 refuge-specific impacts from GE crop cultivation even after FWS stated that it would.

18 101. The Iowa WMD issued a CD for farming in December 2011. The CD states that  
19 glyphosate-resistant corn and soybeans are authorized for use on the WMD and that farming will  
20 be conducted through cooperative agreements. In the Region-wide EA, there is no analysis of  
21 the impacts from GE crop use on the specific refuges and no analysis of the impacts from  
22 pesticides.

23 102. Iowa WMD entered into 13 CFAs for the 2013 growing season, allowing the use  
24 of GE crops and pesticides. Iowa WMD issued 12 PUPs, including ones authorizing 2,4-D and  
25 dicamba for use. Pesticide use is approved on 1,750 crop acres. GE crops and pesticide use is  
26 occurring at Iowa WMD without analysis of the site-specific impacts.

**Swan Lake NWR**

1  
2           103. Swan Lake NWR is located at the confluence of the Grand River and Missouri  
3 River in north-central Missouri. It was established as a breeding ground for migratory birds and  
4 other wildlife. Canada Geese and Mississippi Flyway ducks winter at the Refuge. A number of  
5 endangered and threatened species inhabit the Refuge, including the Least Bittern, Sora,  
6 Common Moorhen, Franklin’s ground squirrel, Interior Least Tern, Indiana Bat, and Eastern  
7 Massasauga Rattlesnake.

8           104. Swan Lake NWR approved a CCP in February 2011 and issued an EA/FONSI at  
9 the same time. According to the Region-wide EA, Swan Lake NWR has 1,115 acres of managed  
10 cropland. However, according to the 2011 CCP, 1,365 acres in the Refuge is farmland.

11           105. The 2011 EA/FONSI states that farming is conducted on the Refuge for habitat  
12 management in line with FWS objectives. The EA/FONSI concluded, without analysis, that  
13 there were no significant cumulative impacts for the Refuge’s preferred alternative, which  
14 included a farming program. It did not specifically address the unique impacts of GE crops or  
15 address the use of herbicides.

16           106. The CCP states the Refuge encourages no-till farming and recognizes that  
17 herbicide-resistant crops are genetically-modified organisms. Rather than analyzing GE crop  
18 effects on the Swan Lake Refuge, the CCP relies on national and regional policy to permit GE  
19 crops, stating that it will cultivate GE crops in line with national policy. There is no further  
20 discussion of current farming practices, information on what GE crops will be used, or  
21 refuge-specific analysis of GE crop cultivation.

22           107. According to the 2011 farming CD, CFAs are entered into every three years and a  
23 percentage of the crop yield will go to the refuge. Corn, milo, wheat, and soybeans are  
24 traditionally grown on the Refuge lands. The CD acknowledges the use of herbicides before  
25 crop planting. There is no discussion in the CD regarding the impacts of pesticide use on the  
26 Refuge.

27           108. Swan Lake NWR entered into four CFAs for the 2013 growing season. The  
28 CFAs state that GE crops will not be used on the Refuge. The CFAs permit all pesticides listed

1 on FWS's PUP Approval List. Swan Lake produced ten PUPs for 2013, including one for 2,4-D.  
2 The PUPs approve 2,4-D application to 1,115 crop acres. Pesticide use is ongoing at the refuge  
3 absent site-specific impacts analysis compliant with NEPA.

#### 4 **Detroit Lakes WMD**

5 109. Detroit Lakes WMD is located in northwest Minnesota. The District, comprised  
6 mostly of prairie wetlands, was established for the production of waterfowl. Detroit Lakes  
7 WMD stretches over five counties and five major watersheds of the following rivers: Red; Upper  
8 Mississippi; Minnesota; Missouri; Cedar; and Des Moines. The District is home to an  
9 abundance of wildlife including 243 species of migratory birds—152 of which are nesting  
10 species—and ever-present waterfowl. Endangered and threatened species known to be present in  
11 the Detroit Lakes WMD include the gray wolf. Endangered species present along the District or  
12 that are reliant on District watershed include the Piping Plover and the Least Tern. Historically,  
13 the prairie pothole region in Minnesota has been recognized as the most important waterfowl  
14 production area in North America.

15 110. Detroit Lakes approved a CCP in 2003 and issued an EA/FONSI at the same time.  
16 The CCP and EA/FONSI described management plans for the next 15 years. According to the  
17 2011 Region-wide EA, Detroit Lakes WMD has 776 acres of managed cropland. Under the  
18 Detroit Lakes WMD CCP's preferred alternative, the Refuge would restore habitat lands to  
19 wetlands, grasslands, and wet prairies for the purpose of waterfowl management by continuing to  
20 acquire waterfowl production areas (WPA) up to the goal for acreage for each county within the  
21 district. The 2003 CCP called for the conversion of present and acquired croplands to  
22 grasslands. The CCP states that cooperating landowners within the District's watershed would  
23 be offered incentives and/or compensated through cost-sharing agreements for applying  
24 conservation and environmental farming practices on their lands and for creating, maintaining, or  
25 enhancing habitat for wildlife. The CCP does not describe the cooperator's conservation and  
26 environmental farming practices. The CCP notes that the prairie lands are ideal for agriculture  
27 and that "the corn and soybean belt overlaps with the southern prairie pothole region."  
28

1           111. The Detroit Lakes WMD CCP acknowledges a threat to waterfowl production  
2 from the increasing use of agricultural chemicals including insecticides and herbicides on  
3 croplands adjacent to the WPAs. The CCP further states that “[r]esearch has identified  
4 agricultural chemicals as important factors in decreasing bird populations directly as well as  
5 affecting their food resources in wetlands.”

6           112. The Detroit Lakes WMD 2003 CCP states that insecticides commonly used for  
7 sunflowers, soybeans, and corn can kill wildlife directly and indirectly, as well as the fact that  
8 herbicides have an indirect effect on food availability for waterfowl. Further, the CCP states that  
9 most herbicide and insecticide applications occur in the spring, which coincides maximum runoff  
10 into surrounding wetlands with waterfowl breeding. The CCP acknowledges a study that found  
11 that agricultural pesticide use had a significant impact in reducing the biological quality of WPA  
12 wetlands. However, the EA/FONSI concludes that the preferred alternative involving the  
13 continued use of cooperative farming provides the best potential for reducing contaminants in the  
14 District because the agreements include incentive-based and cost-sharing programs for the  
15 farmers to apply environmentally-sound farming practices. The EA/FONSI does not conduct  
16 refuge-specific analysis on GE crop farming, nor does it discuss the environmental and wildlife  
17 impacts from GE use on the Refuge.

18           113. The 2011 farming CD allows for agreements for a term of three to five years and  
19 authorizes GE crop use. The CD justifies farming by limiting CFAs to terms of five years or  
20 less. However, eight cooperative agreements are for six or more years and six of those  
21 agreements allow for the use of GE crops during the entirety of the agreement, not just for the  
22 last two years of farming.

23           114. To date there are 13 CFAs in the Detroit Lakes WMD. The cooperative  
24 agreements summarily state that the farming program “will have ‘no effect’ on any federally  
25 listed species or their critical habitat.” The cooperative agreements allow for ground application  
26 of 2,4-D and glyphosate herbicides only. The 2003 CCP states that Detroit Lakes WMD used  
27 15,825 pounds of 20 different pesticides in 1990. The CCP states that a study in 1992 showed  
28 the concentration levels for the most heavily applied pesticide, 2,4-D, were consistently low and

1 at levels not shown to have an adverse effect on aquatic life. The 2011 CD further states that no  
2 habitat or wildlife losses occurred when the District purchased row cropland and allowed it to be  
3 farmed for an additional three to five years. However, the 2011 CD states that the farming of  
4 low-quality to higher-value grassland will result in habitat loss during the farming period. The  
5 2011 CD references no refuge-specific analysis on GE crop farming nor provides detail on GE  
6 farming, environmental, and habitat impacts.

7 115. Detroit Lakes issued two PUPs approving glyphosate and 2,4-D in 2013 and  
8 approved 2,4-D application to 150 crop acres.

9 116. FWS's issuance of the CFAs and PUPs on these Refuges without site-specific  
10 analysis of GE crops and pesticide use is arbitrary, capricious, and not in accordance with the  
11 law, in violation of both NEPA and the APA.

12 117. FWS's failure to analyze all the impacts of GE crop cultivation on each specific  
13 refuge environment is a violation of NEPA and the APA, and FWS's continued allowance of GE  
14 crop growing absent such review is a violation of those laws.

15 118. FWS's failure to analyze all the impacts of dicamba, 2,4-D, and neonicotinoids on  
16 each specific refuge environment is a violation of NEPA, the Refuge Act, and the APA, and  
17 FWS's continued allowance of these pesticides absent such review is a violation of those laws.

18 **FIRST CAUSE OF ACTION**

19 **DEFENDANTS HAVE VIOLATED NEPA AND THE APA BY ALLOWING FARMING**  
20 **ON REFUGES WITHOUT NEPA ANALYSIS OF THE SITE-SPECIFIC IMPACTS OF**  
21 **PESTICIDES ON REFUGE LANDS**

22 119. Plaintiffs hereby incorporate paragraphs one through 118 as set forth herein.

23 120. FWS performed a major federal action by entering into annual CFAs and PUPs  
24 covering thousands of acres of Region 3 lands. The issuance of CFAs and PUPs are final agency  
25 actions under the APA, 5 U.S.C. § 704.

26 121. Defendants' final agency actions described herein violate the APA, *id.* § 706, in  
27 that Defendants acted arbitrarily and capriciously, abused their discretion, and failed to act in  
28 accordance with the law by failing to adhere to NEPA and its implementing regulations.





1 environmental impacts stemming from the planting of GE crops on each of the refuges  
2 challenged herein.

3 128. The decision to allow cultivation of GE crops on the Refuges must be invalidated  
4 because it was made in violation of NEPA, in that it did not adequately consider the site-specific  
5 significant impacts of GE crops on the environment of each Refuge. The EAs prepared by FWS  
6 in connection with its decision to allow GE crops to be planted on the Refuges, including the  
7 region-wide EA issued in 2011, are inadequate and flawed, and FWS's reliance on them to  
8 permit farming on particular refuges was and is arbitrary and capricious, an abuse of discretion,  
9 otherwise not in accordance with law, and without observance of procedures required by law, in  
10 violation of NEPA and the APA.

11 129. Analysis of the impacts of GE crops on particular Refuges in non-NEPA  
12 documents such as CDs or CFAs does not constitute compliance with NEPA. In any event, no  
13 analysis of the impacts of GE crops on these particular Refuges in any existing document meets  
14 NEPA's requirement for a "hard look" at impacts, or could support a FONSI.

### 15 **THIRD CAUSE OF ACTION**

#### 16 **DEFENDANTS HAVE VIOLATED THE REFUGE ACT, THE NATIONAL WILDLIFE 17 REFUGE SYSTEM IMPROVEMENT ACT OF 1997, AND THE APA BY 18 UNLAWFULLY WITHOLDING COMPREHENSIVE CONSERVATION PLANS AT 19 TWO REFUGES**

20 130. Plaintiffs hereby incorporate paragraphs one through 129 as set forth herein.

21 131. Defendants violated § 668dd(e)(1)(A)-(B) of the Refuge Act and its implementing  
22 regulations by failing to complete a CCP at Iowa WMD and failing to revise the CCP at Cypress  
23 Creek NWR.

24 132. The Refuge Act requires that CCPs be in place for each NWR within 15 years  
25 after passage of the National Wildlife Refuge System Improvement Act of 1997; after that, the  
26 plans must be revised at least every 15 years. 16 U.S.C. § 668dd(e)(1)(A)(iv), (B) ("The  
27 Secretary shall not less frequently than 15 years after the date of issuance of a conservation plan  
28 under clause (iii) and every 15 years thereafter, revise the conservation plan as may be  
necessary.").



1 E. Declare that Defendants have violated the APA by allowing the use of pesticides  
2 and the cultivation of GE crops on Refuge lands while failing to complete site-specific  
3 analysis as required by NEPA;

4 F. Declare that Defendants violated the Refuge Act, the National Wildlife Refuge  
5 System Improvement Act, and the APA by unlawfully withholding CCPs at two refuges;

6 G. Enter an order vacating Defendants' decisions to permit the pesticide use and the  
7 growing of GE crops on Refuge lands in Region 3;

8 H. Issue preliminary and permanent injunctive relief barring Defendants from  
9 allowing any cultivation of any crops on Refuges until site-specific analysis of pesticide  
10 use and GE crop use is conducted in compliance with NEPA for each Refuge at issue in  
11 this case and a CCP is completed at Cypress Creek NWR;

12 I. Award Plaintiffs their costs and reasonable attorneys' fees under the Equal Access  
13 to Justice Act or other applicable statute; and,

14 J. Grant Plaintiffs such further relief as the court deems to be just, proper, and  
15 equitable.

16 Respectfully submitted this 27th day of August, 2013.

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