

Appendix J: Response to Comments

Editor's Note: All "comments" are presented verbatim as received by the U.S. Fish and Wildlife Service (FWS, Service).

Comment 1: you did not use the words nwr anywhere in the federal register title. why is that? is this a sneaky nwr? what is the purpose here? you said every nwr has a purpose - what have the almighty fws decided is the purpose here. please send me a paper copy of the ea, which should be an eis, asap. i believe all human slime murder of innocents birds and animals should be prohibited in this site since their numbers are precipitously declining from climate change, human predation, oil and gas drilling extremes, etc. your population numbers that you use are so out of whack they are complete frauds. Jean Public

Response 1: This particular management plan is for a Wetland Management District (WMD, district). While it is a part of the National Wildlife Refuge System (NWRS, Refuge System) and does require a comprehensive conservation plan (CCP), it is a little different from a National Wildlife Refuge (NWR, refuge) in terms of land acquisition funding, some of the management, and public use regulations. As described in the environmental assessment (EA) and Draft CCP, the purposes for the Iowa WMD are based upon its land acquisition authority, which is the Migratory Bird Hunting and Conservation Stamp Act of 1934:

“ . . . as Waterfowl Production Areas subject to . . . all of the provisions of such Act [Migratory Bird Conservation Act of 1929] . . . except the inviolate sanctuary provisions . . . ” 16 U.S.C. § 718(c) “ . . . for any other management purpose, for migratory birds.” 16 U.S.C. § 715d

Land for the district is primarily acquired with federal “duck stamp” money, most often originating from duck hunters. Therefore, the overall primary purpose of the district is waterfowl production for the overall primary use of waterfowl hunting.

Comment 2: these sites are not for the birds. they are for the human slime killing and murdering the birds, that is who they are for. that needs to be stopped. this is not 1929 have you noticed that this is not 1929? IT IS TIME TO UPDATE 1929 LAWS THAT ARE COMPLETELY OUT OF SYNC WITH 2013. Jean Public

Response 2: The Migratory Bird Conservation Act of 1929, which established the Migratory Bird Conservation Commission, along with the Migratory Bird Hunting and Conservation Stamp Act of 1934 (also known as the Duck Stamp Act) have been very important for wetland and waterfowl conservation since their inception and remain so today. Federal Duck Stamps are vital tools for wetland conservation. Ninety-eight cents out of every dollar generated by the sale of federal Duck Stamps goes directly to purchase or lease wetland habitat for protection in the National Wildlife Refuge System. Understandably, the federal Duck Stamp has been called one of the most successful conservation programs ever initiated and is a highly effective way to conserve America's natural resources.

Since 1934, sales of federal Duck Stamps have generated more than \$800 million, which has been used to purchase or lease over six million acres of wetlands habitat in the United States. These lands are protected in the Service's Refuge System.

Waterfowl are not the only wildlife to benefit from the sale of federal Duck Stamps. Numerous other bird, mammal, fish, reptile, and amphibian species that rely on wetlands have prospered. Further, an estimated one-third of the nations endangered and threatened species find food or shelter on refuges established using federal Duck Stamp funds.

People, too, have benefited from the federal Duck Stamp. Hunters have places to enjoy their sport, and other outdoor enthusiasts have places to hike, watch birds, photograph, and explore. Moreover, these protected wetlands help purify water supplies, store floodwater, reduce soil erosion and sedimentation, and provide spawning areas for fish important to sport and commercial anglers.

Comment 3a: i do not support this unnatural plan to turn our national land into grasslands and believe letting the land grow naturally is much more important for natural biological diversity which is essential for safe and healthful birds and animals. this plan and site uses NATIONAL TAXPAYER FUNDS SO IT SHOUDL BE A PLAN THAT ENHANCES THE LAND FOR NATIONAL CITIZENRY/TAXPAYERS. this shoudl not be a specific plan to grow birds to shoot to death for local wildlife murderers. that is a misuse of national tax dollars. you are settiing up an unnatural producin system of growing birds to kill them. is that because dan ashe, a known wildlife killer is now in charge of fws that every animal and bird is grown to be murdered by slime human beings with a blood lust to kill. the majority of america and our taxpayer citizens are not of that ilk. this plan also seems to have elements of iowa factory farms - growing in profusion instead of in the natural ecological system. All americans have had their fill of those factory farms situations. this unnatural plan and maulling of the land does not help natural biodiversity.

Response 3a: Most of the land acquired for the Iowa WMD is land that has been farmed and drained with no natural cover left. The goal for the acquired land is to put it back into some form of natural cover, preferably native cover.

Duck hunters provide the primary source of funding for acquiring land for the district through their purchase of a federal Duck Stamp. Therefore, the primary purpose of the district is for waterfowl production, and thereby the primary use of the district is waterfowl hunting.

With the approval of this plan, the district has a goal of converting all the existing land in agriculture to a natural/native cover and converting any new acquisitions into natural/native cover within two years of purchase (unless there is some outstanding circumstance such as a legal farming lease, etc.).

Comment 3b: pg 10 - i do not support "farming" which is diametrically different than natural systems. this is also not a "state" project so tell teh iowa dnr to butt out. This plan needs to satisfy nnational taxpayers, whose money/tax dollars you plan to tax them for.

NO GMO corn should be grown on this national site. Fact is use of glyphosate by agribusiness is killing birds. I do not support national tax dollars going to private farms or lands because the opportunity for huge corruption is present in that. much corruption takes place when govt has "pals" they pay money to. private property owners love to get tax dollars for doing nothing. there is no "improved water quality" when agribusiness is loading the land with glyphosate, nitrogen etc. why is this agency writing such lies?

Response 3b: In 2011, the Service's Midwest Region completed an EA for row crop farming and the use of genetically-modified, glyphosate-tolerant (GMGT) corn and soybeans on refuge/district land (FWS, 2011c). Under the selected alternative, and having begun in calendar

year 2012, the use of GMGT corn and soybeans on Refuge System land in the Midwest Region will continue only for the purpose of habitat restoration. According to the EA, the use of GMGT corn and soybeans will be limited to five years on any individual tract being prepared for habitat restoration. Farming could continue to be used as a management tool for achieving multiple objectives; however, it will be limited to non-GMGT crops for objectives other than habitat restoration. Multiple objectives include but are not limited to the following:

- Habitat restoration
- Habitat management
- Supplemental food for wildlife
- Providing lure crops on public lands to reduce wildlife depredation on private lands
- Enhancing opportunities to hunt, view, and photograph wildlife for the visiting public

Similarly, the Service's ecological integrity policy specifies that GMGT crops cannot be used on Refuge System land unless they are "essential to accomplishing refuge [district] purposes." Habitat restoration is a core objective of most refuges (districts) in achieving their purpose and in some circumstances, the use of GMGT crops could be essential. However, habitat management, supplemental food, and wildlife viewing objectives can more readily be accomplished without the use of GMGT seeds, and thus, their use is not likely essential.

Improved water quality will come from seeding down the existing bare soil in the agricultural fields. Regardless of what is applied to the soil, if it is held in place, other nutrients and chemicals will stay with the soil and not be as likely to run-off to a water supply.

Comment 3c: the conservation reserve program is a "crap" program which is useless. the employees in this agency do nothing and get paid for doing nothing and the waste from this program is enormous. it needs to be shut down. it is bankrupting national taxpayers for producing zero results. Iowa is a rich state. If they have the only input, they should put up 100% of the entire money for this project instead of bankrupting national taxpayers and giving them no voice.

Response 3c: This comment is beyond the scope of this project. While the Conservation Reserve Program (CRP) is mentioned in this plan as providing additional natural/native cover and thereby habitat for wildlife, this plan does not serve to address the CRP program itself.

Comment 3d: You cannot assume the birds are gone only because of loss of habitat when climate change, hunters killign everything in sight, huge use of toxic chemicals by agribusiness, and aphis killing animals and birds with abandon and sneakiness also has an effect on birds among other impacts like prescribed burning which is major air contamination for all of America. Lead kills birds, as does mercury. Contamination is a major factor and saying land change is the only factor is stupid. The assumptions for bird population decline is one sided as if nature exists in a vacuum for one thing only. Ban all use of lead shot and lead sinkers. This failure to act shows negligence on the part of this agency for 40 years! the lead shot is killing the birds yet you continue to allow it while gouging taxpayers to grow birds. makes no sense.

Response 3d: All of these other stressors (pesticide use, hunting, climate change, etc.) on the environment and its associated wildlife are recognized and discussed in the plan. Many of these stressors lead to loss or deterioration of habitat for wildlife.

Currently the only hunting in the district that is not required by law to use non-toxic shot is turkey hunting and slug deer hunting. A ban on the use of lead shot for waterfowl hunting was phased-in starting with the 1987–88 hunting season. The ban became nationwide in 1991. Many refuges and, per state regulations, most counties within the Iowa WMD also ban the use of toxic shot for upland game hunting for such species as squirrel, rabbit, quail, pheasant, and/or partridge. The Service continues to look at options and ways to reduce the direct and indirect impacts of toxic shot to scavengers and other wildlife. The Service is and has been phasing out the use of lead shot by hunters on Refuge System land. This plan proposes to eliminate the use of lead shot for turkey hunting in the following manner:

Within two years of CCP approval, it will be proposed through the federal rulemaking process to implement the following regulation on the Service's fee title property within the Iowa WMD: "You may only use or possess approved nontoxic shot shells while in the field, including shot shells used for hunting wild turkey." This requirement would be in line with current regulations at 50 CFR 32.2(k).

As for fishing tackle, there are nontoxic fishing weights, such as split shots, for use in nontidal waters that are readily available on the marketplace. Many anglers use fishing tackle made from nontoxic materials such as tin, bismuth, steel, and tungsten alternatives, which are found in all 50 states. Many refuges/districts have banned lead sinkers for years. The issue of using all nontoxic shot and tackle for all hunting and fishing in the district is a larger agency decision that is beyond the scope of this EA.

Comment 3e: why is iowa dnr making rules for this land when they pay zero on it and you gouge national taxpayers to pay for this land? decisions on this are essential to this project.

Response 3e: In Iowa, with the signing of a Memorandum of Understanding (MOU) in 1978, it was decided that while the Service would provide federal Duck Stamp funds for land acquisitions, the Iowa Department of Natural Resources (DNR) would supply the personnel necessary to restore and manage those acquisitions (Waterfowl Production Areas [WPAs]). Therefore, the Iowa DNR works in close partnership with the Service to acquire, restore, and manage the land for the district.

Comment 3f: pg 36 - less "mgt" should be the goal for this land. the public sees no improvement in the land when there is intense "mgt" when the "mgt" is the problem.

pg 37 that awful picture of prescribed burning loading the air with fine particulate matter shows stupid mgt at work killing everything. this burning causes lung cancer, heart attacks, strokes, allergies, pneumonia, and asthma - you are contaminating the air. no living thing that breathes can stand that assault. Plans for sites should come from the public. the employees at fws seem to make up plans that enhance their jobs or their influence. this "mgt" seems to regard itself as the lord of the manor and the public as "serfs" who they can disrespect in planning.

Response 3f: Prairie vegetative productivity declines and extensive invasion of woody and other invasive plant species occur in the absence of disturbances such as prescribed fire, grazing, haying, or mowing (Herkert, 1994). In addition, there is evidence that there is a positive relationship between plant species diversity and ecological stability in response to climatic stressors like drought, flooding, and climate change (Tillman and Downing, 1994). Various management tools must be used to manipulate grasslands to achieve the mosaic of habitat conditions needed to attract a diversity of grassland bird species. Management actions such as

hay, mowing, burning, grazing, tree removal, and rest will all have positive influences for some bird species while simultaneously having negative influences for other bird species. The careful application of these management actions across the lands in the Iowa WMD will help to ensure that a wide variety of grassland-dependent bird species can find appropriate habitat throughout the Iowa prairie pothole landscape.

The public was given ample opportunity to be involved in the development of this plan. Initial conversations about comprehensive planning for the district began mid-year of 2009; however, the official kick-off was in December 2011. The public scoping period began on January 30, 2012 and lasted for 30 days. The public was contacted through letters, news releases, and four open house meetings. The open houses gave the public an opportunity to discuss issues with district and Iowa DNR staff and regional planners. Thirty-nine people attended the open houses, and 25 written comments were received during the public scoping period. All of this input was considered during the development of the plan. The public was also given 30 days to review and comment on the EA and Draft CCP document. This review period began on Monday August 19th, 2013 and was announced through postcards, news releases, and two open house meetings.

Comment 3g: alt c is best with banning hunting/trapping/new roads and catering to the majority of visitors who come for passive safe enjoyment of these lands.

Response 3g: WPAs differ from refuges in that they are open to hunting, fishing, and trapping in accordance with state law. Therefore, WPAs are "open until closed" by state or federal law for hunting, fishing, and trapping. Refuges on the other hand are "closed until opened" to these uses. However, WPAs can be opened to other uses if determined to be appropriate and compatible with the mission of the Refuge System and the purposes of the district.

Hunting, in particular, has a long history with WPAs. When Congress amended the Duck Stamp Act in 1958, it authorized the acquisition of wetlands and uplands as WPAs and waived the usual "inviolable sanctuary" provisions. Thus, WPAs were intended to be open to waterfowl hunting, in part because waterfowl hunters, through the purchase of federal Duck Stamps and support for price increases of the stamp, played a major role in acquisition of these areas. Hunting, for both waterfowl and resident game species accounts for more than half of the visits to WPAs.

Alternative C does not ban hunting, trapping, and new roads. Alternative C would include the following:

- Public use facilities (kiosks, trails, pull-offs, etc.) would be provided at three locations across the district
- Other recreational opportunities would be provided in addition to hunting, fishing, and trapping

Since migrating waterfowl are better suited for observation, strategically located additional public use facilities (i.e., kiosks, trails, pull-offs) and opportunities are appropriate for such a focus. The public has requested additional wildlife-dependent and non-wildlife-dependent use opportunities in the district. Alternative C would allow for many of these uses to occur, which have been found to be appropriate and compatible. Environmental education, interpretation, and outreach, however, would remain at current levels with public use information being

provided through Union Slough NWR and Iowa DNR offices and websites. More effort would be placed on distributing a consistent message for the entire district.

Comment 3h: pg 108 i am very much opposed to paying private farmers for grassland mowing. The value of what they provide is highly suspect and also subject to corruption.

Response 3h: The Iowa WMD does occasionally use private entities to complete mowing of grasslands for habitat management. This is typically done due to the constraints and logistics and infeasibility of moving large equipment great distances. The Iowa WMD contains fee title lands currently in 18 Iowa counties, creating difficulty in using station equipment at remote locations. For this reason contractors are used in some cases to complete the prescribed habitat management. Mowing by contractors is done to manage new native tallgrass seedings, reducing the burden of annual weeds that prohibit the grassland establishment.

Comment 3i: The bibliography you used to plan is antique and obsolete and represents a complete loss of taxpayer dollars and time. ten years ago is an eternity in this rapidly changing world. no references from 1974 have any impact on what is going on with this land. Jean Public

Response 3i: Nearly all of the literature cited in the bibliography of the CCP is from peer-reviewed scientific publications. Other citations are for well-respected agency publications and policies. The year of publication is usually irrelevant to an article's merit once it clears the peer-review process. Many basic principles of ecology and biology published decades ago are still very relevant today.

Comment 4a: On behalf of Public Employees for Environmental Responsibility (PEER) and Center for Food Safety (CFS), I submit the following comments on the Iowa Wetland Management District (Iowa WMD) Environmental Assessment and Draft Comprehensive Conservation Plan (Draft EA/CCP). The preferred alternative in the Draft EA/CCP is Alternative D, which combines the alternatives and primarily focusses on breeding waterfowl and restoring cropland to perennial grassland and wetlands in order to accomplish the breeding goal. While PEER and CFS support the Draft EA/CCP's focus on converting croplands to grasslands and wetlands, as explained below, it inadequately addresses the use of genetically engineered (GE) crops and pesticides, particularly neonicotinoids.

By way of overview, it should also be noted that the Iowa WMD has been operating without a CCP or an EA that appropriately evaluates the myriad of impacts from refuge farming operations. PEER and CFS appreciate that the WMD has now attempted to come into compliance with the National Wildlife Refuge System Administration Act, National Wildlife Refuge Improvement Act and National Environmental Policy Act, but these commenters believe that more work needs to be done before WMD operations are compliant with federal law.

Response 4a: Thank you for your support of the preferred alternative for the Iowa WMD. Further responses regarding the use of genetically engineered (GE) crops and pesticides in the Iowa WMD can be found under the [Cooperative Farming](#) section in chapter 2 and in appendix K in the Iowa WMD Environmental Assessment and Draft Comprehensive Conservation Plan available online at <http://www.fws.gov/midwest/planning/iowawetlands/index.html>.

Comment 4b: 1. FWS Improperly Considered Its Own Biological Integrity Policy. The Draft EA/CCP properly recognizes that FWS's own policy on Biological Integrity, Diversity and Environmental Health for the National Wildlife Refuge System states that the use of GE crops is only permitted when "essential" to the wildlife refuge. The Merriam-Webster

dictionary defines essential as “necessary” or indispensable.” Even if it could be shown for argument’s sake that GE crops may have certain advantages over non-GE crops, it cannot be shown that GE crops are necessary or indispensable to accomplishing a legitimate refuge purpose that could not be accomplished by other means. This is especially true when the purpose the use of manmade GE crops is to serve is restoring natural habitat.

In fact, FWS has conceded that GE crops are used because they are more available and cheaper for cooperative farmers than farming with non-GE crops. Thus, FWS’ justification for GE crops is not necessity but cheapness – hardly a sufficient justification for subverting the biological integrity of refuges or agency policy. Because of litigation, the Southeast Region ceased farming with GE crops in 2013 and is currently farming with conventional seed. Southeast farming reports indicate that significant acreage is planted with conventional corn and soybeans undercutting FWS’ claim that farming without GE seed is impractical. Cultivating GE crops due to farmers’ convenience rather than essentiality to a refuge purpose cannot meet the Service policy. If the WMD plans to restore habitat through GE crop farming, it should carefully consider these factors in the Draft EA/CCP as to whether GE crops are “essential” for accomplishing refuge goals.

Response 4b: See the [Description of the Farming Program for the Iowa Wetland Management District section](#) and bullet number 3 under the Site-specific Effects Analysis for the Farming Program for the Iowa Wetland Management District section in appendix K of the Iowa WMD Environmental Assessment and Draft Comprehensive Conservation Plan available online at <http://www.fws.gov/midwest/planning/iowawetlands/index.html>.

Comment 4c: 2. The Draft EA/CCP fails to include site-specific analysis of GE crops impacts. The Draft EA/CCP briefly mentions that GE corn and soybeans cultivation was addressed in 2011 when the Midwest Region completed an EA for GE row crop farming and that GE corn and soybeans cultivation could continue on Refuge lands only for the purpose of habitat restoration. Draft EA/CCP at 10. In the context of litigation challenging the Midwest Programmatic by these commenters, FWS stated that the Programmatic EA does not itself authorize planting on refuges and that site-specific analysis would occur at the CCP level. However, this Draft EA/CCP does not analyze the refuge specific impacts of GE crops and GE crop cultivation continues on the WMD

While it is unclear from the Draft EA/CCP the extent to which GE crops will be used to convert cropland to grasslands, presumably GE crops will be used in the habitat restoration process. Draft EA/CCP at 121; 132 (noting intent to acquire more land). The WMD hopes to accomplish converting row crops to grassland by planting native grasses. Planting native grasses is limited however by budget and resources and thus the likely default will be using GE crops for habitat restoration.

In order for GE crops to be used on the WMD, the WMD must analyze the myriad of impacts from GE crop cultivation in the EA/CCP. The Draft EA/CCP only engages in a cursory discussion of GE crops and appears to punt site specific analysis to cooperative farming agreements or other processes like Pesticide Use Proposals or Compatibility Determinations. However, such documents are not NEPA documents and cannot be used to comply with NEPA. Moreover, despite purported reliance on such documents for environmental analysis, CFAs, PUPs and CDs do not actually contain the level of analysis required by NEPA, and in fact often contain little or no analysis of the environmental impacts of the use of GE crops on specific refuge environments. FWS must consider the refuge specific environmental impacts at the

outset of the process because beginning to cultivate GE crops without conducting site specific analysis violates NEPA.

Response 4c: See bullet number one under the Site-specific Effects Analysis for the Farming Program for the Iowa Wetland Management District section in appendix K of the Iowa WMD Environmental Assessment and Draft Comprehensive Conservation Plan available online at <http://www.fws.gov/midwest/planning/iowawetlands/index.html>.

Comment 4d 3. The Preferred Alternative has significant environmental impacts that the Draft EA/CCP failed to analyze and that warrant the preparation of an environmental impact statement (EIS). The National Environmental Policy Act of 1969 sets forth substantive environmental quality goals for the government and the nation. See 42 U.S.C. §4331. Under NEPA, every agency of the United States Government must include an EIS in every “recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment.” 42 U.S.C. § 4332(2)(C).

NEPA’s implementing regulations, promulgated by the Council on Environmental Quality (CEQ), provide that if the action is not covered by a categorical exclusion from NEPA, the agency must prepare an EA to determine whether or not an EIS is required. 40 C.F.R. § 1501.4(a)–(c). If the action is one that normally requires an EIS, the agency is to prepare an EIS without first preparing an EA. Id., § 1501.4(a) and (b); §1501.3(a).

The CEQ regulations define the term “significantly” as used in NEPA to determine when an EIS is required, to require consideration of the unique characteristics of the geographical area impacted, such as park lands, wetlands, ecologically critical areas, or prime farmland, id. § 1508.27(b)(3); “the degree to which the effects on the quality of the human environment are likely to be highly controversial,” id. § 1508.28(b)(4); “the degree to which the possible effects on the environment are highly uncertain or involve unique or unknown risks,” id. § 1508.27(b)(5); and “whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.” Id. § 1508.28(b)(10).

NEPA requires that agencies “study, develop, and describe alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources,” even where an EIS is not required. 42 U.S.C. § 4332(E); 40 C.F.R. § 1508.9(a)(3)(b).

NEPA’s implementing regulation at 40 C.F.R. §§ 1500.1(b) provides in part that:

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

The CEQ regulations at 40 C.F.R. § 1506.1 further provide that:

- (a) Until an agency issues a record of decision [on an EIS] ... no action concerning the proposal shall be taken which would:
 - (1) Have an adverse environmental impact; or
 - (2) Limit the choice of reasonable alternatives.

The Draft EA/CCP failed to address a number of significant environmental impacts at the refuge level regarding GE crop cultivation, including transgenic contamination and volunteers,

increased weed and insect resistance, adverse impacts on threatened and endangered species and increased pesticide use. An EIS is required when, as here, an activity may have significant environmental impacts. 42 U.S.C. § 4332(C).

1. **Transgenic Contamination & Volunteers:** Transgenic contamination is a critical risk arising from GE crops that FWS biologists acknowledge may adversely affect refuges, and that two federal courts have found to be a legally cognizable and significant environmental risk. Transgenic contamination is the process by which genes from GE crops transfer to natural and wild plants, resulting from both human error and natural events, including pollen drift, seed mixing, flooding, seeds in machinery, and seed spillage. Unlike other forms of pollution, there is no way to prevent transgenic contamination or to stop it once it has begun. As a living form of pollution, it is self-propagating and pollutes both non-GE crops and natural ecosystems. A single incident of transgenic contamination can cost farmers hundreds of millions of dollars nationwide.

Because a main purpose of wildlife refuges is to preserve functioning ecosystems to conserve wildlife and to create native grassland suitable for bird breeding habitat, FWS must carefully consider the effects of transgenic contamination by GE crops and that the harms associated with it are unavoidable and virtually irremediable. FWS should also consider transgenic contamination on the surrounding private farmers cultivating conventional and organic crops.

Volunteers—GE seeds that have re-germinated—are another threat posed by GE crops on wildlife refuges. Indeed, on the thirty-four wildlife refuges in the Southeast Region that planted GE crops in 2012, fourteen reported volunteers in the following season. Volunteers may interfere with management of the wildlife refuge by extending the effects of GE crops past their planting season and into places not intended for crops. Moreover, they are increasingly harder to manage with herbicides. The Draft EA/CCP failed to analyze these impacts on the WMD.

2. **GE Crops Foster Evolution of Resistant Weeds and Insects:** FWS should consider that GE glyphosate resistant and Bt crops have spurred the evolution of herbicide resistant weeds and Bt-toxin resistant insects.

The major current use of genetic engineering in agriculture is to make crops herbicide-tolerant, primarily to the weed-killing chemical glyphosate and Monsanto's proprietary formula, Roundup. Extensive evidence, including warnings from FWS biologists, demonstrates that greatly increased reliance on glyphosate associated with Roundup Ready crops has fostered a dramatic increase in acreage infested with glyphosate-resistant and glyphosate-tolerant weeds.

Many experts in the field recognize the escalating problem of weed resistance, and at least nine different weed species have been confirmed as glyphosate-resistant in 20 states. For example, glyphosate-tolerant horseweed has been reported in annual row crops in 13 states, including Arkansas, Mississippi, Kentucky and Tennessee.

Farmer response to glyphosate-resistant weeds is often to spray them with higher concentrations of glyphosate, more often; and to mix in other potent herbicides, with attendant impacts to wildlife. The response of biotechnology companies has been to develop a score of "next-generation" GE crops that are resistant to glyphosate as well as one to several other herbicides, like glufosinate, 2,4-D and/or dicamba. These new GE crops – likely to be introduced soon – will facilitate much greater use of these additional herbicides to kill glyphosate-resistant weeds, together with continued heavy spraying of glyphosate. Non-target organisms are at particular risk from drift with dicamba and 2,4-D, volatile herbicides that cause harm to wildflowers and other organisms a long ways from where they are applied.

FWS has stated in the Southeast Region that its GMC policy requiring that farmed acres are to be rotated to non-Glyphosate GMC/non-GMC crop seed every four years will reduce weed resistance. However, there are no studies that this policy actually reduces weed resistance or that the policy is enforced at each refuge or applied in the Midwest Region. We encourage FWS to specifically analyze the efficacy of this policy if it intends to rely on it to mitigate environmental impacts.

It is unclear from the Draft EA/CCP the extent to which Bt crops are used on WMD land (or if they are allowed due to the WMD's policy of no insecticide use), but FWS should consider that GE Bt crops have led to the rapid development of insects resistant to Bt in just a few years and will likely spawn new pesticide development to deal with this problem. Cry proteins in GE crops are made in most cells of the plants, and are expressed throughout the growing season. Constant exposure of insects to these Cry proteins in GE corn elevates the risk of target insects developing resistance to the insecticide, leading to more use of insecticides.

For example, Bt corn engineered to resist Western corn rootworm (WCR) is rapidly losing effectiveness as Bt-resistant WCR populations develop in response to the engineered Cry protein.³ This is already leading to increased use of insecticides in addition to the Bt within the corn plants⁴ and portends what will happen when insect pests eventually become resistant to other Cry proteins in corn.

3. Threatened and Endangered Wildlife in the Iowa WMD: The Iowa WMD is home to many threatened and endangered species, including: Indiana bat (*Myotis sodalists*), Topeka shiner (*Notropis topeka*), prairie bush clover (*Lespedeza leptostachya*), western prairie fringed orchid (*Platanthera praeclara*), as well as other state listed species. FWS should consider at the WMD the specific impacts of GE crops and concomitant herbicide use on each of these threatened and endangered species. 40 C.F.R. § 1508.27(b)(9). Because GE crops and concomitant herbicide use alter the weed and plant communities, they may also impact the habitat and feeding patterns of threatened and endangered species. For example, studies have shown that consumption of soybeans on wildlife refuges is actually harmful to migratory fowl.⁵ Furthermore, threatened and endangered aquatic wildlife may be impacted by the increased water pollution that results from greater herbicide use.

Response 4d: See the concluding paragraph under the Site-specific Effects Analysis for the Farming Program for the Iowa Wetland Management District section in appendix K of the Iowa WMD Environmental Assessment and Draft Comprehensive Conservation Plan available online at <http://www.fws.gov/midwest/planning/iowawetlands/index.html>.

Comment 4e: 4. The Draft EA/CCP fails to include an analysis concerning the effects of pesticides. Despite discussing the impacts of pesticides used on neighboring lands, the Draft EA/CCP fails to analyze the effects of pesticides used on the WMD through cooperative farming. Rather, the draft EA/CCP merely states “[c]hemicals used on food plots must be approved through the pesticide use proposals. No insecticides will be allowed on food plots.” Draft EA/CCP at 130. Not only does this provide no analysis of the impacts of pesticides, it only applies to use of pesticides for food plots and not for other activities like GE crop farming for habitat restoration. FWS should consider the significant environmental impacts from pesticide applications at the WMD.

1. The Draft EA/CCP recognizes the harm posed by pesticides, but fails to analyze their effects when used on Refuge lands. In its section entitled “Drainage and Pesticides,” (Draft EA/CCP at

68) the Draft EA/CCP acknowledges the adverse effects that pesticides applied on neighboring lands have on Waterfowl Protection Areas (WPAs). FWS should consider that these same effects will occur when the pesticides are applied directly to WPAs through cooperative farming or food plots.

2. Increased Use of Herbicides and Associated Impacts Harm Refuge Wildlife.

FWS should also consider that GE crops cause a significant increase in the use of herbicides. Since GE crops were introduced in 1996, herbicide use increased by 527 million pounds.⁶ Increased herbicide use harms the very wildlife that refuges were created to protect.

Iowa issued twelve PUPs in 2013, including ones authorizing 2,4-D, dicamba, and glyphosate. 2,4-D and dicamba are particularly harmful pesticides. 2,4-D is a World War II-era pesticide and is the third most commonly used herbicide in North America. Forty-six million pounds of 2,4-D are applied every year in the United States. 2,4-D was also the major ingredient in Agent Orange. It is highly volatile and prone to spray drift that damages neighboring crops and wild plants. 2, 4-D remains contaminated with dioxins that are toxic to human health and is listed by the EPA as the seventh largest source of dioxin pollution in the United States. Exposure is linked to many negative health impacts including cancer, liver disease, reduced sperm count and Parkinson's disease, as well as other health problems.⁷ 2,4-D has also been linked to adverse impacts on threatened and endangered species.

Dicamba is a mobile and persistent herbicide and is thus found in surface and groundwater. Wetland plants are especially vulnerable to dicamba and spray drift and volatilization of dicamba impacts vegetation near application sites and also distant sites. Dicamba can volatilize from plant surfaces days after application and move long distances, damaging neighboring fields and plants. Dicamba has been tentatively linked to a variety of cancers, developmental and mutagenic problems. Endangered species and their habitat are particularly at risk¹ from dicamba because of its high drift and volatile capacity.

Glyphosate resistant GE crops can harm and kill amphibians. Studies show that certain amphibian species exposed to low, field-relevant usage rates of the glyphosate-based Roundup herbicide experience much higher mortality than unexposed amphibians. Studies also indicate an adverse effect of GE crops on birds because the farming system associated with herbicide tolerant GE crops alters the plant and weed communities in farmed areas, thus affecting the diets of birds. Herbicides also harm aquatic ecosystems by killing some algae and water plants, with effects that can ripple through the food web.

Such impacts will only increase with the dramatically rising use of herbicides in GE crops. For example, from 1994 to 2005 USDA data demonstrates that aggregate use of glyphosate on soybeans, corn and cotton has risen from 7.9 million lbs. to 119.1 million lbs. – a 15-fold increase. Dramatically increased herbicide exposure to wildlife and the ecosystems contravenes the purpose of the refuge system to protect the ecosystem. In the past, FWS has relied on outdated studies by other agencies like APHIS and EPA to find that glyphosate does not harm wildlife. Reliance on old studies does not meet NEPA's hard look requirement nor does it negate FWS' duty to analyze the current impacts itself. Despite approving pesticides for use on the WMD, the Draft EA/CCP fails to analyze their impacts on the refuge.

3. Mitigation Premised on Compliance with Other Processes is Unrealistic.

In other FWS regions where cooperative farmers are permitted to use GE crops, FWS states that the array of harms associated with GE crop cultivation is mitigated by cooperative farmers following pesticide label instructions to the letter and obeying all conditions laid out in the FWS

cooperative farming agreement. FWS further states that FWS Pesticide Use Proposals are faithfully executed, that its Integrated Pest Management Policy is implemented and that Integrated Pest Management Plans are designed and implemented for each refuge unit. In the Southeast Region, FWS has already stated its intent to rely on its crop rotation policy to mitigate herbicide resistance.

Such statements presuppose that this complete array of requirements and protocols will be carried out on every refuge unit without a lapse. This presupposition is not backed by any information about whether these measures are currently being implemented as envisioned. In addition, FWS policy does not lay out clear enforcement mechanisms to make sure that safeguards in cooperative agreements, IPM plans or refuge Pesticide Use Proposals are enforced. Without enforcement, confidence in compliance is misplaced. Any assertion that crop rotation will greatly reduce the development of resistant weeds must be supported by proven effectiveness and enforcement if it is to be relied upon as a mitigation measure. The WMD failed to address any of this and should consider these facts if it includes mitigation measures to limit environmental impacts from pesticides.

Response 4e: See bullets number 2, 4 and 5 under the Site-specific Effects Analysis for the Farming Program for the Iowa Wetland Management District section in appendix K of the Iowa WMD Environmental Assessment and Draft Comprehensive Conservation Plan available online at <http://www.fws.gov/midwest/planning/iowawetlands/index.html>.

Comment 4f: 4. The Draft EA/CCP fails to consider the impacts of Neonicotinoids. The Draft EA/CCP claims that insecticides are not used on the WMD. Draft EA/CCP at 130. However, almost all of the corn seed planted in North America, except for the 0.2% of total corn seed used for organic production, is coated with neonicotinoids. While the Draft EA/CCP does not specify that corn planted on NWR lands is treated with neonicotinoids, its pervasiveness leads PEER and CFS to conclude that, if, as the Draft EA/CCP permits, non-organic corn is used, the insecticides neonicotinoids are being used at the WMD. The Draft EA/CCP fails to acknowledge or address neonicotinoids despite their likely use on the WMD. Indeed, in order to comply with the no insecticide rule, the WMD should institute a policy of not growing corn at all.

Neonicotinoids insecticides may be causing a decline in pollinators. Neonicotinoids are systemic, that is, they are taken up by the plant's vascular system as the seed grows and get expressed through its tissues, including flowers, pollen and nectar.¹¹ Essentially, the whole plant is poisonous to insects. Once treated with neonicotinoids, a plant can become highly toxic to invertebrates such as bees. Furthermore, the damage caused by neonicotinoids are not limited to the treated plant. Neonicotinoids are persistent with extremely long half-lives that vary widely according to soil type and weather conditions, ranging from 148 days to 1,155 days. The main exposure pathways for neonicotinoids are residues in pollen and nectar, dust from treated seeds and soils, planter exhaust, untreated but contaminated non-crop plants adjacent to treated fields, guttation droplets on both treated and untreated but contaminated plants and residues from foliar uses.

Neonicotinoids have been shown to adversely impact the survival, growth and health of pollinators vital to U.S. agriculture and the rising use of neonicotinoids coincides with dying honey-bee populations in a phenomenon known as Colony Collapse Disorder.¹⁵ Clothianidin and its parent compound thiamethoxam—the two most widely used neonicotinoids—are documented to be highly toxic to other bee species like the common Eastern bumble bee, alfalfa leafcutter bee, and blue orchard bee, all of which are valuable plant pollinators. More than fifteen threatened or endangered insects, ranging from beetles to butterflies to grasshoppers

and other taxa, are potentially directly affected by the use of clothianidin and thiamethoxam products. A recent study also found that neonicotinoids adversely impact a broad suite of birds and aquatic invertebrates.

Although neonicotinoids are extensively used in corn seed, FWS has not examined their impact on the refuge environment nor are they listed as an approved pesticide on the Pesticide Use Proposal Field Approved lists. Nor are they banned from use as they should be.

Response 4f: The Chief of Refuges in Region 3 has directed refuge managers to start the transition away from neonicotinoid treated seed in calendar year 2014 and be "neonicotinoid seed free" in calendar year 2016.

Comment 4g: 5. The Draft CPP/EA improperly permits farming on refuge lands as farming will not meet the WMD's stated purposes. The Preferred Alternative's purpose is to encourage waterfowl breeding and restoring native grasslands. GE crops and farming generally are not required for either of these purposes. Indeed, the Draft EA/CCP seems to recognize this by setting goals of planting native grasses as a means to restore habitat. As noted previously, it is unclear the extent to which the WMD plans to rely upon GE crops for habitat restoration because the Draft EA/CCP does not discuss it. However, if the WMD plans to use GE crops at all for restoring grasslands, it must carefully consider alternatives that would be much better at accomplishing this purpose at the WMD specific level.

The Draft EA/CCP states that the WMD is a haven for wildlife in a sea of row crops and notes the impacts surrounding row crop farming has had on the grasslands and wetlands needed for breeding and habitat, noting that row-crop farming decreased grassland habitat for birds resulting in a decrease in bird populations and suitable habitat for nesting birds (Draft EA/CCP at 33). Given this admittance regarding the unsuitability of farmed land for refuge purposes, the WMD should consider alternatives to farming in the CCP. Such alternatives should include no farming at all.

Response 4g: See the [Description of the Farming Program for the Iowa Wetland Management District section](#) and bullet number 5 under the Site-specific Effects Analysis for the Farming Program for the Iowa Wetland Management District section in appendix K of the Iowa WMD Environmental Assessment and Draft Comprehensive Conservation Plan available online at <http://www.fws.gov/midwest/planning/iowawetlands/index.html>.

Comment 4h: 6. Refuge Crops Illegally Bait Birds.

Furthermore, the Draft EA/CCP characterizes some harmful effects of farming, such as the baiting effect of cooperative farming, as positive effects. The draft EA/CCP states that food plots encourage activities such as hunting, but fails to discuss the underlying, harmful effects of farming that cause food plots to encourage hunting or that such baiting practices could violate the Migratory Bird Treaty Act, which makes it illegal to bait birds.

FWS should consider that the cooperative farming practices condition ducks and other waterfowl to feed on the bait of waste crops and then allow hunters to shoot them. Hunters refer to birds exposed to bait as "daffy ducks," so blinded by the quest for food that these wild creatures ignore instinct by acting tame. Ducks have been known to fly into buckshot to reach grain to which they have become hooked.

Under the Migratory Bird Treaty Act, baiting is the illegal practice of using feed to attract game. A baited area is essentially no different than a bird feeder. As hunting is allowed, FWS should

analyze the impact on migratory birds which become hooked on “high-calorie” crops in the range of refuge-based hunters.

Response 4h: The EA and Draft CCP for the Iowa WMD contains a “Food plot Cultivation for Wildlife” Compatibility Determination. One of the stipulations included in that determination is: “Food plot farming and maintenance will comply with the Migratory Bird Treaty Act 16 U.S.C. 703–712 P.L. 105–312 and 50 CFR 20.11–21 and not constitute baiting.” Furthermore, the Iowa WMD project leader works closely with both state and federal law enforcement officers to ensure food plot practices on WPAs comply with state and federal hunting regulations. Food plots have the intent of providing fall and winter food resources and will be left standing or un-manipulated until harvested in early spring.

Comment 4i: CONCLUSION: NEPA requires a “hard look” at the environmental impacts of a proposed action before it is taken. And, where an action may significantly impact the environment, an environmental impact statement is required. PEER and CFS urge FWS to withdraw this Draft EA/CCP and engage in a robust, rigorous and high-quality scientific analysis to decide whether GE crops are essential to accomplishing refuge purposes and should be permitted at the Iowa WMD. FWS should also draft an EIS rather than an EA as it is evident that the Preferred Alternative may significantly impact the human environment. Kathryn Douglass, Public Employees for Environmental Responsibility (PEER)

Response 4i: See the concluding paragraph under the Site-specific Effects Analysis for the Farming Program for the Iowa Wetland Management District section in appendix K of the Iowa WMD Environmental Assessment and Draft Comprehensive Conservation Plan available online at <http://www.fws.gov/midwest/planning/iowawetlands/index.html>.

Comment 5: This letter responds to your request for comments concerning the Draft Environmental Assessment (EA) and Comprehensive Conservation Plan (CCP) for the Iowa Wetland Management District (WMD), which covers 35 counties in north-central and northwest Iowa. Thank you for involving the Environmental Protection Agency (EPA) during the consideration of environmental impacts either to or from this project.

The Draft EA adequately outlines the purpose, need, and general conservation plan. The overall benefit of implementing an adaptive management plan to the WMD and Prairie Pothole Region (PPR) is sufficiently stated in this document. Though environmental impacts included in the EA & CCP were overall minimal, EPA offers the following comments for additional considerations of potential environmental impacts and a focus on minimization and mitigation of these impacts:

We would like to thank you for addressing the potential direct, indirect, and cumulative effects, as well as providing specific measurable objectives for the life of the CCP. EPA continues to support avoiding and minimizing adverse impacts to air, land, and water quality, including wildlife and their habitat. We would like to suggest that any potential effects or disturbance of fish and wildlife species be minimized to the extent possible through the use of BMPs for such activity.

We commend your coordination efforts with various other agencies and entities throughout the development of this project. We would encourage continued coordination with local, state, and federal agencies to ensure that all laws, ordinances, and regulations are followed and all necessary permits acquired. Amber Tucker, US Environmental Protection Agency Region 7

Response 5: Thank you for your comment and support of the EA and Draft CCP. Great effort will be invested to assure that coordination with local, state, and federal agencies continues into implementation of the Final CCP. Best management practices will be applied whenever and wherever possible during plan implementation.

For example, as properties are acquired in the Iowa WMD, WPA plans will be developed by the unit managers in coordination with the project leader. These plans will make every effort to use restoration practices that reduce soil erosion and disturbance to wildlife and habitat. These practices include habitat management such as haying, burning, grazing, and farming. Timing of these activities can reduce the disturbance and displacement of wildlife. For example with haying and mowing, the nesting period from April 1 to July 15 is avoided.

Typically the lands that are acquired in the Iowa WMD are in need of restoration to be completed by contractors or staff. Requirements that reduce pollution are stipulated in contracts including silt barriers and buffer zones.

Farming is used on the Iowa WMD to accomplish habitat and wildlife goals and purposes. Both the Service and Iowa DNR strive to use the best management practices when implementing farming as a habitat management strategy. Examples of items that are considered in habitat management plans include: slope, distance to wetlands and ground water, habitat buffers, and disturbance of wildlife. When farming is used to prepare the seed bed of a newly acquired property (typically in row crop agriculture), both the Service and the Iowa DNR typically use farming cooperators and Habitat Management Lease Agreements or Special Use Permits. In these documents the Service articulates through stipulations the best management practices that will be used on the district property. Examples of agreement stipulations include the following:

Note: These stipulations may change over time to reflect new information.

- Use of chemicals must be approved through a Pesticide Use Proposal.
- Manure applications are prohibited.
- Fall tillage is prohibited unless its use is specified in the management plan for the year of prairie seeding.
- Habitat management plan must be followed.
- Glyphosate tolerant corn and soybean seed may only be used for habitat restoration purposes.
- Farming for wildlife food production or other purposes will utilize non-genetically modified crop seed.
- No insecticides may be used.

Best management practices are also used when applying herbicides to district properties. They include the following:

- Allow pesticide application buffers around sensitive areas,
- Follow pesticide labels,

- Spray only when winds are 12 mph or less (but not inversions),
- Control drift through use of low pressure and nozzles that create larger droplets,
- Monitor current and predicted winds,
- Monitor predicted rainfall,
- Be cautious around shallow groundwater, and
- Maintain a buffer around water and wetlands.