UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

INTERNATIONAL CENTER FOR TECHNOLOGY ASSESSMENT, *et al.,*
Plaintiffs,

v.

MIKE JOHANNS, Secretary, United States Department of Agriculture, *et al.,*
Defendants,

and

THE SCOTTS COMPANY,
Defendant-Intervenor.

Civil Action 03-00020 (HHK)

MEMORANDUM OPINION

Before the court are the parties' motions for summary judgment [#66, #67, #69] and plaintiffs' motions to strike declarations submitted by defendant The Scotts Miracle-Gro Company ("Scotts") [#73] and by the federal defendants [#72]. Upon consideration of the motions, the oppositions thereto, and the record of the case, the court denies the motions to strike and concludes that the competing motions for summary judgment must be granted in part and denied in part.

I. BACKGROUND

Plaintiff organizations International Center for Technology Assessment ("CTA"), Center for Food Safety ("CFS"), and Klamath Siskiyou Wildlands Center ("Wildlands Center"), along with five individual plaintiffs, bring this action for declaratory and injunctive relief against Mike Johanns, Secretary ("Secretary") of the United States Department of Agriculture ("USDA"),

Bobby Acord, Administrator of the USDA Animal Plant Health and Inspection Service ("APHIS"), and Dr. Alan Tasker, the Noxious Weed Program Manager at APHIS, in their official capacities.[1] Plaintiffs' second amended complaint challenges defendants' denial of a petition submitted by plaintiffs CTA and CFS to have certain genetically engineered ("GE") varieties of grasses listed as noxious weeds under the Plant Protection Act ("PPA"), 7 U.S.C. § 7701 *et seq.* The complaint also alleges that defendants violated the PPA, the National Environmental Policy Act ("NEPA"), 42 U.S.C. § 4321 *et seq.*, and the Administrative Procedure Act ("APA"), 5 U.S.C. § 701 *et seq.*, when they permitted a variety of field tests of GE creeping bentgrass to be conducted across the country, without (1) adequately determining whether GE creeping bentgrass was a "plant pest," pursuant to PPA implementing regulations, or (2) preparing an Environmental Impact Statement ("EIS") or Environmental Assessment ("EA"), pursuant to NEPA. Scotts, which conducted many of the field tests at issue and has petitioned APHIS to deregulate certain GE grasses at issue here, has intervened as a defendant.

Central to this case are two species of turfgrasses: creeping bentgrass (*Agrostis stolonifera*) and Kentucky bluegrass (*Poa pratensis*). Creeping bentgrass is a "fast-growing perennial [grass] species which is biologically and ecologically very variable, adaptable, and robust." AR 359. It spreads both vegetatively and via "reproduction by stolons (horizontal above-ground stems or runners), wind-pollinated flowers, and tiny seeds dispersed by wind, water and animals." *Ibid.* Used commonly for lawns and athletic fields, it is also a popular species for use on golf course greens and fairways. AR 103. Kentucky bluegrass, also a robust

[1] Under Rule 25(d)(1) of the Federal Rules of Civil Procedure, Secretary of Agriculture Mike Johanns has been substituted for former Secretary Ann Veneman.

perennial, is primarily used for lawns, and is characterized by a recognizable boat-shaped leaf tip. AR 66–67. Both species have been categorized by a variety of organizations, including a consortium of ten federal agencies and 145 non-federal cooperators, as either invasive weeds or, more colorfully, as "alien plant invaders." AR 53, 60, 169; 2nd Am. Compl. ¶ 34.

This controversy arises in part from field tests of a genetically engineered strain of creeping bentgrass. In recent years, researchers and the grass industry have been developing GE species which are resistant to glyphosate, the active ingredient in the popular herbicide Roundup. Such new grasses, which have not been approved for commercial use by APHIS (the federal agency with oversight responsibility over turfgrasses), would have obvious market appeal: lawns and golf courses planted with them could be managed using glyphosate without harm occurring to the grass itself. In contrast, managers applying Roundup to areas planted with currently-available non-glyphosate-resistant turfgrasses risk killing both the grass and the unwanted weeds.

As part of its efforts to develop these "Roundup-ready" grasses, defendant-intervenor Scotts applied to APHIS for a series of open air field test permits between May 2002 and July 2003.[2] These tests, once approved, were conducted on sites across the nation. The largest test conducted during this period (permit number 02-198-01N) took place near the town of Madras, Oregon, and covered approximately 421 acres. The second-largest test (permit number 03-090-07N) was conducted in Canyon County, Idaho, and covered approximately 23 acres.[3]

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[2] Technically, the tests were allowed via a relatively informal notification-and-acknowledgment procedure. *See* 7 C.F.R. § 340.3. Formal permits were not issued.

[3] Scotts later planted 100 acres of test plots in Canyon County pursuant to permits 04-070-02N and 05-080-01R. Other field trials have also been approved for GE creeping bentgrass since the filing of this lawsuit in mid-2003, which trials have covered at least 2,000 acres.

Plaintiffs challenge these permit decisions on grounds that (1) APHIS failed to adequately consider whether glyphosate-resistant creeping bentgrass is a "plant pest," as defined in the implementing regulations of the PPA, and that (2) APHIS failed to correctly determine the significance of the potential environmental impacts associated with the field trials, in violation of NEPA.

Scotts submitted a petition to APHIS to deregulate glyphosate-resistant creeping bentgrass ("GTCB") in May 2002. 2nd Am. Compl. ¶ 14. That petition was withdrawn in October 2002 and re-submitted in April 2003. *Ibid.* The petition is pending, and APHIS is conducting an EIS regarding the petition, pursuant to NEPA. Environmental Impact Statement; Petition for Deregulation of Genetically Engineered Glyphosate-Tolerant Creeping Bentgrass, 69 Fed. Reg. 57,257 (Sept. 24, 2004). This petition and the expected EIS are not at issue in this litigation.

The effort to develop Roundup-ready grasses has elicited considerable concern from environmental groups, land managers, federal agencies, and other organizations and individuals. AR 76–82, 161–85, 187–94, 1687, 1693, Suppl. Docs. A–G. The concerns these groups have raised include worries about gene flow (a process in which a genetic mutation (here, glyphosate tolerance) appearing in a GE plant spreads through reproduction with sexually compatible wild relatives and then persists in the environment), enhanced weediness (creeping bentgrass is considered by many to be a problematic weed that poses management concerns, which will only increase if the species cannot be managed with Roundup), and an increase in the use of other herbicides more toxic than glyphosate.

After Scotts' first petition, plaintiffs CTA and CFS filed their own petition requesting that APHIS place GTCB and GE glyphosate tolerant Kentucky bluegrass on the Federal Noxious Weed List. AR 161–85; *see also* 7 U.S.C. §§ 7712(f)(1), (f)(2) (granting authority to create a noxious weed list and providing that "[a]ny person may petition the Secretary to add a plant species" to the list). Had the petition been granted, it would have enabled defendants to prohibit or restrict movement of these plants to prevent their introduction into the United States and their use in interstate commerce. *Id.* § 7712(f)(1). APHIS, however, denied the petition. By this lawsuit, CTA and CFS challenge both that denial and the aforementioned field test permits.

II. ANALYSIS

A. Standing

Before reaching the merits of plaintiffs' claims, the court must determine whether plaintiffs have standing. The party invoking federal jurisdiction bears the burden of demonstrating standing. *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 561 (1992). To meet this burden under Article III, a plaintiff must establish (1) that she has suffered an "injury in fact;" (2) that the injury is "fairly . . . trace[able] to the challenged action of the defendant;" and (3) that the injury will "likely" be "redressed by a favorable decision." *Id.* at 560–61 (citations and internal quotation marks omitted); *see also Animal Legal Defense Fund, Inc. v. Glickman*, 154 F.3d 426, 431 (D.C. Cir. 1998) (en banc).

The only criterion at issue here is whether plaintiffs have suffered injury in fact. To qualify as an injury in fact, the alleged harm must be concrete, particularized, and actual or imminent. *Defenders of Wildlife*, 504 U.S. at 560. Additionally, where an organization brings claims on behalf of its members, the organization must also demonstrate that at least one of its

members "would have standing to sue in [her] own right, [that] the interests at stake are germane to the organization's purpose, and neither the claim asserted nor the relief requested requires the participation of individual members in the lawsuit." *Friends of the Earth, Inc. v. Laidlaw Envtl. Servs.*, 528 U.S. 167, 181 (2000). Finally, where a plaintiff's alleged injuries are probabilistic or constitute "increases in risk," the likelihood of the injuries occurring must be substantially probable, such that the risk is "non-trivial" or "sufficient to take a suit out of the category of the hypothetical." *Natural Resources Defense Council v. EPA*, 464 F.3d 1, 6 (D.C. Cir. 2006) ("*NRDC II*").

1. The Field Tests

The court turns first to plaintiffs' claims regarding the Scotts bentgrass field tests. These claims are brought by the individual plaintiffs and by the organizational plaintiffs on behalf of their members. The interests at stake are germane to the organizations' purposes and the claims asserted and relief requested do not require the participation of the organizations' members. The standing question, therefore, turns on whether the individuals, either standing alone or as members of the plaintiff organizations, have adequately demonstrated standing. Though these tests occurred in various locations across the nation, plaintiffs only provide affidavit evidence alleging injury resulting from the field tests in Jefferson County, Oregon, Canyon County, Idaho, and Richmond, Virginia. *See Sierra Club v. EPA*, 292 F.3d 895, 899 (D.C. Cir. 2002) (at summary judgment, a plaintiff "must support each element of its claim to standing 'by affidavit or other evidence'" (quoting *Defenders of Wildlife*, 504 U.S. at 561)).[4] Defendants argue that

[4] The court will dismiss the claims of the plaintiffs who have failed to support their claims by such evidence. These plaintiffs include Heather Burns, Faith Campbell, and Claire Watkins.

even as to the tests in these locations, the evidence submitted fails to establish that plaintiffs have suffered or will suffer injury in fact from the tests.[5]

a. The Oregon Tests

Between 2002 and 2005, Scotts conducted a large field test of GTCB in a 11,000 acre control area established by the Oregon Department of Agriculture. Bodey Decl. ¶ 15. The control area is situated immediately northwest of the town of Madras and within a few miles of the Crooked River National Grassland (the office of the Crooked River National Grassland is located in the town of Madras). Third Gurian-Sherman Decl., Fig. 1; Katroscik Decl. ¶ 3. The Deschutes River runs in a northeasterly direction along the control district's northwest edge. Notification 02-198-01N, which was acknowledged (i.e., approved) by APHIS, authorized the planting of 600 acres of GTCB in the district, and Scotts planted approximately 421 acres of GTCB under this notification. Bodey Decl. ¶¶ 15–17.

In 2004, EPA's National Health and Environmental Effects Research Laboratory published a study regarding the potential escape and establishment outside the Control District of the glyphosate-tolerant gene appearing in the GTCB planted by Scotts. Pls.' Mot. for Prelim. Inj., Decl. Mendelson, Ex. 1; Def.-Intervenor's Opp'n and Mot. for Summ. J., Ex. 1 (the "Watrud Study"). That study documented significant gene flow from the control district to surrounding native and "sentinel" (deliberately planted, for purposes of the study) bentgrass and other plants. It recommended that "studies should continue over the next few years within resident plant

[5] The evidence submitted by the parties for purposes of summary judgment is relevant only to standing. The court's review of the agency's decisions on the merits is limited to the administrative record.

populations to monitor" GTCB growth and the "potential effects" thereof on "ecological fitness of progeny and plant community structure in various, largely nonagronomic habitats." *Id.* at 5.

Plaintiffs submit the following evidence regarding the alleged injuries they either fear or have suffered from the Oregon tests: Lesley Adams, a member of plaintiff Wildlands Center, resides in Bend, Oregon, and recreates in areas near the Madras control district, including areas in and around the Crooked River National Grassland and the Deschutes River. Decl. of Lesley Adams ¶¶ 2–4. Aware of the Watrud Study, Adams alleges that the escape and potential establishment of GTCB threatens her recreational and aesthetic interests in viewing native plant species, which species are themselves threatened by the possible invasion of and hybridization with GTCB. *Id.* at 5–6. Plaintiff Joe Katroscik, also a Bend resident, recreates in areas around Bend, Prineville, and Madras, Oregon, including the Crooked River National Grassland, which he visits "regularly." Katroscik Decl. ¶¶ 3–5. He is also concerned about GTCB establishment and potential GTCB invasion of and hybridization with his lawn in Bend. *Id.* at ¶ 7. Finally, Shannon Clery, another member of Wildlands Center, is a field botanist who works in central and southern Oregon. Clery Decl. ¶ 2. She recreates and leads educational trips in national forests and public lands throughout Oregon, and she alleges injury both to her recreational and occupational interests arising from the threat of GTCB invasion and establishment outside the Control District. *Id.* ¶¶ 3–5.

Defendants raise a number of challenges to the Oregon plaintiffs' standing. Most prominently, defendants argue that the risk that the plaintiffs' alleged injuries will actually occur are so improbable that the requirement of actual, imminent injury has not been met. Scotts in particular provides voluminous statistical evidence and calculations regarding the likelihood of

GTCB establishment outside the Control District in the "areas of concern" identified by plaintiffs (e.g., the Deschutes River, Crooked River National Grassland, Madras, Prineville, Bend, the Ochoco Mountains, Newberry Crater National Volcanic Monument, and plaintiff Katroscik's lawn), for the purpose of showing that the likelihood the plaintiffs will be harmed by the sight of GTCB in the areas of concern is minuscule.

(1) Applicable Standards

While evidence regarding the likelihood of GTCB establishment in the areas of concern is crucial to the standing inquiry, Scotts' arguments are misleading in one central respect: for injury to plaintiffs' aesthetic interests to occur, it is not essential that plaintiffs actually encounter a GTCB plant. To the contrary, the mere "*desire* to use or observe [a plant] species, even for purely esthetic purposes, is undeniably a cognizable interest for purposes of standing." *Defenders of Wildlife*, 504 U.S. at 562–63 (emphasis added). Thus, where plaintiffs "aver that they use the affected area and are persons 'for whom the aesthetic and recreational values of the area will be lessened' by the challenged activity," adequate injury has been shown. *Laidlaw Envtl. Servs.*, 528 U.S. at 183 (quoting *Sierra Club v. Morton*, 405 U.S. 727, 735 (1972)). Accordingly, whether standing has been shown here (i.e., whether the aesthetic and recreational values of the areas of concern here have been or will be lessened by the effects of the field trials) depends on some, but not all, of the facts about which the parties vigorously debate. The most important consideration is whether GTCB establishment and/or hybridization with native plants in the areas of plaintiffs' interest is likely to occur, if it has not done so already. To the extent the injuries alleged to arise from invasion by GTCB are best characterized as "increases in risk" (a

questionable proposition), the court's obligation here is to determine whether the risk of GTCB invasion is at least nontrivial. *NRDC II*, 464 F.3d at 6.[6]

(2) Likelihood of GTCB Establishment in the Areas of Concern

(a) Approaches for Assessing Risk

The parties offer evidence from dueling experts regarding the likelihood of GTCB establishment in the areas of concern. Based upon that evidence, Scotts argues that the probability of GTCB affecting plaintiffs' aesthetic and recreational enjoyment of these areas is smaller than five in ten million. For their part, plaintiffs argue that the likelihood of establishment is one percent or higher in some areas. All parties appear to agree, however, at least for the sake of these motions, on two things: (1) the reliability of the Watrud Study, which

[6] In *Laidlaw*, the Supreme Court addressed standing in the context of alleged recreational and aesthetic harms resulting from illegally excessive discharge of pollutants into a river. 528 U.S. at 180–85. Emphasizing that "[t]he relevant showing for purposes of Article III standing . . . is not injury to the environment but injury to the plaintiff," *id.* at 181, the Court held that the plaintiffs' "concerns" about the discharges, and their decisions not to recreate in the area thereof, adequately documented injury in fact, *id.* at 181–85. Citing its prior decision in *Los Angeles v. Lyons*, 461 U.S. 95 (1983), wherein a plaintiff lacked standing to seek an injunction against police use of a chokehold because he could not demonstrate a realistic possibility that the hold would be used on him in the future, the Court identified the relevant issue at play in *Laidlaw* as being the reasonableness of the plaintiffs' concerns. *Id.* at 184. By so doing, the Court appears to have perceived that the plaintiffs' injuries were not entirely probabilistic; indeed, their existence was in some respects beyond dispute. The plaintiffs were concerned about the pollutants, had viewed the area as having diminished aesthetic value, and had modified their recreational activities accordingly. As in *Lyons*, the question was not strictly whether the alleged injuries occurred, but rather whether those subjective injuries were reasonably connected to the defendant's nonsubjective actions so as to be deemed in-fact. *Ibid.* In that sense, the injuries were not "increases in risk." In any event, the pivotal question to be answered here may be the same regardless of the rubric used to answer it: there may be no practical difference between the question of whether, under *Laidlaw*, (a) plaintiffs' already-suffered injuries are reasonable in their connection to defendants' actions such that they may be deemed injuries in fact, and the "increase in risk" question of whether (b) the probability that GTCB spread has lessened or will lessen the aesthetic value of the areas of concern is substantial enough that the risk is nontrivial.

documented GTCB gene flow outside the control district, and (2) the acceptability of certain risk analysis formulae—if not their application—used by Scotts' expert Dr. Louis Anthony Cox, Jr.[7] Though the court expresses some skepticism regarding whether the use of the Watrud Study data and Dr. Cox's forumlae adequately take into consideration all the factors in evidence that bear on the question of GTCB establishment risk in the plaintiffs' areas of concern, the court will utilize them here to frame a simplified explanation of the court's reasoning for its decision regarding plaintiffs' standing.

Dr. Cox applies his risk analysis formulae to the Watrud Study data to generate the probability of persistence of the GTCB gene in areas outside the control district. His approach is to calculate the risk per acre of one or more GTCB plants becoming established, that is, the risk that a GTCB plant may become established in any single given acre in an identified area. Cox

[7] The court has considered and denies plaintiffs' motion to partially strike the declarations submitted by the Scotts company or, in the alternative, for leave to take discovery. *See Groobert v. President and Dirs. of Georgetown College*, 219 F. Supp. 2d 1, 6–13 (D.D.C. 2002) (on a motion for summary judgment, evaluating a series of arguments, paralleling those raised here, regarding expert testimony admissibility). The court has assessed the reliability and foundation of the Scotts declarations and deems them admissible to a sufficient extent that striking the declarations is unwarranted. *Canady v. Erbe Elektromedizin GmbH*, 384 F. Supp. 2d 176, 180 (D.D.C. 2005) ("The decision to grant or deny a motion to strike is vested in the trial judge's sound discretion."). While the court agrees with plaintiffs that certain minor aspects of the *application* of Scotts' experts' methods are questionable, and while the factual bases of some of their conclusions may be debated, the testimony is nonetheless for the most part admissible. Where the court has concluded that certain relevant aspects and conclusions of Scotts' declaration evidence are either unsupported by the record or unreliable, the discussion that follows will make those conclusions apparent.

The court also denies plaintiffs' motion to strike the government's declarations. These declarations are almost exclusively explanatory and do not improperly seek to supplement the record by providing post-hoc rationalizations or new bases for its actions. *See Nat'l Oilseed Processors Ass'n v. Browner*, 924 F. Supp. 1193, 1204–05 (D.D.C. 1996) (discussing the difference between prohibited post-hoc rationalizations and permitted post-hoc explanations of previously-articulated rationales).

Decl. ¶¶ 7–8. He states that "[t]his number can then be multiplied by the number of acres considered to be at risk to obtain an approximate upper-bound risk estimate for the probability of one or more resistant *A. stolonifera* becoming established in the areas of concern." *Id.* ¶ 8.[8]

Unsurprisingly, the probability of GTCB establishment varies from location to location, depending on such variables as GTCB seed density (that is, the concentration of seeds carrying the GTCB gene in a given location) and native creeping bentgrass plant density. Data from the Watrud Study indicate a wide variety of GTCB seed density in different areas around the control district, with concentrated densities occurring in areas immediately northwest and south/southeast of the district (in the areas of the Deschutes River and the town of Madras, respectively). The court will address these varied densities (and their impact on GTCB establishment probability) in the discussion below. Native creeping bentgrass plant density also varies, depending on such factors as the soil and the existence or absence of water sources. Cox Decl. ¶ 9; Watrud Study at 2, Fig. 1. Though the court has thoroughly considered the issue of plant density as it applies to GTCB establishment in making its decision, for clarity, the court

[8] The formula he sets forth is: total risk for A acres = 1 – exp(-r x A), where r is the risk per acre and A is the total number of acres at risk. Cox Decl. ¶ 8. To calculate the risk per acre (r), Dr. Cox applies two formulae: First, he calculates the probability (Pr) that a GTCB plant will be *created* in a given acre (assuming that all the native *A. stolonifera* plants in the acre have died and have been replaced by plants that have been affected by GTCB gene flow) by multiplying the estimated number of plants in the acre by the density of GTCB seeds in the area (the seed density is drawn from the Watrud Study): Pr(creation of at least one GTCB plant) = 1 – Pr(no resistant plants), where Pr(no resistant plants) = (non-GTCB seed density) ^ (number of plants per acre). He then calculates the probability that a created GTCB plant will become *established* in a given acre by using an apparently standard formula for estimating the probability that a single (existing) gene will persist in the environment. This formula is expressed as 1/(2N), where N = the number of plants in the community in a single generation.

will use Dr. Cox's estimate of four bentgrass plants per acre in assessing the debated probabilities in this opinion.[9]

(b) Application

Applying Dr. Cox's formulae to the data from the Watrud Study, the probabilities of GTCB plant creation (Table 1) and establishment (Table 2) in a single acre are set forth below. The letter-designated "density levels" (A through E) correspond to GTCB seed density ranges observed during the Watrud Study and represented in a spatial map appearing in that study

[9] The four-plants-per-acre estimate derives from observations by Scotts employees, who on two occasions walked along the bank of the Deschutes River, looking for creeping bentgrass. Cattani Decl. ¶¶ 2–7. The first survey, which found 22 plants, covered an area twenty feet wide and 5.25 miles long, beginning at a point a short distance west of the northern section of the control district and heading downstream (north and east). *Id.* ¶ 3. Dr. Cox's 95% confidence level for this observed density (2.75 plants per acre) is 3.75 plants per acre, which, to be conservative, he rounded up to 4 plants per acre. Cox Decl. ¶ 9. (The most southern portion of this surveyed area is where some of the highest densities of GTCB gene flow were observed in the Watrud Study.) The second, which began at the same point and headed upstream, found 18 plants and covered an area wider than twenty feet and approximately one mile long. Cattani Decl. ¶ 6. The observed density for this survey is 7.425 plants per acre, and the 95% confidence level for this observed density would apparently be significantly higher. Cox Decl. ¶ 9. Based on these two surveys, it appears that at least for areas close to the control district along the banks of the Deschutes River, four plants per acre may be a conservative estimate.

The parties have not provided abundant data regarding creeping bentgrass plant density in other areas of concern, such as Madras and the Crooked River National Grassland, but the density in Madras proper could be higher than four plants per acre, given (1) the presence of residential properties, parks and the like, where bentgrass would be expected to be found, (2) the higher plant density observed along the upstream stretch of the Deschutes River (observed at 7.425 plants per acre, in contrast to 2.75 plants per acre along the downstream section), which suggests four plants per acre may be a conservative value, and (3) data from the Watrud Study showing a relatively high concentration (in comparison to the Deschutes River area) of observed and tested resident *Agrostis* plants in the town and immediate environs. *See* Watrud Study at 2, Fig. 1 (providing a spacial graphic of the observed resident plants and identifying them as being "located primarily along waterways and in moist soils"). In more arid areas of the National Grassland, the density may be lower.

(Figure 4(B)), with A-level areas having the lowest density (and the lightest shading in the figure), and E-level areas having the highest density (and the darkest shading in the figure):

Table 1

GTCB Creation Probability (one acre)			
Density Level	**Seed Density Range** (% positives per km^2)	**Pr(no resistant plants)** = Pr(no resistant plants) = (non-GTCB seed density) ^ (number of plants per acre)	**Pr(at least one GTCB plant)** = 1 – Pr(no resistant plants)
A	0.00 to 0.001	0.99996 to 1	0 to 0.0000399994 **(0% to 0.004%)**
B	0.001 to 0.01	0.9996 to 0.99996	0.0000399994 to 0.00039994 **(0.004% to 0.04%)**
C	0.01 to 0.10	0.996 to 0.99996	0.00039994 to 0.003994 **(0.04% to 0.4%)**
D	0.10 to 0.20	0.99202 to 0.996	0.003994 to 0.007976 **(0.4% to 0.8%)**
E	0.20 to 0.30	0.98805 to 0.99202	0.007976 to 0.01195 **(0.8% to 1.2%)**

Table 2

GTCB Establishment Probability (one acre)		
Density Level	**Pr(at least one created GTCB plant)** = 1 – Pr(no resistant plants)	**r = Pr(establishment of one GTCB plant)**[10] = Pr(at least one created GTCB plant) x (1/(2N))
A	0 to 0.0000399994 **(0% to 0.004%)**	0 to 0.000005 **(0% to 0.0005%)**
B	0.0000399994 to 0.00039994 **(0.004% to 0.04%)**	0.000005 to 0.00005 **(0.0005% to 0.005%)**
C	0.00039994 to 0.003994 **(0.04% to 0.4%)**	0.00005 to 0.0005 **(0.005% to 0.05%)**
D	0.003994 to 0.007976 **(0.4% to 0.8%)**	0.0005 to 0.000997 **(0.05% to 0.09%)**
E	0.007976 to 0.01195 **(0.8% to 1.2%)**	0.000997 to 0.00149 **(0.09% to 0.15%)**

[10] Perplexingly, neither Scotts nor Dr. Cox assigns a value of four to N, despite the fact that all Dr. Cox's calculations are on a per-acre basis. Instead, they assign a value of 40, corresponding to the presumed number of plants to be found in an imagined plant community. Cox Decl. ¶ 16. Since the risk is being calculated per acre in the first instance, the plant community must be presumed to consist only of the plants in a single acre. Here, that number is presumed to be four.

With these per-acre probability calculations as a backdrop, the probability of GTCB establishment may be estimated for various areas in which plaintiffs have alleged aesthetic and recreational interests. As noted above, Scotts' expert Dr. Cox instructs that once the risk per acre (r) of GTCB has been estimated for a given area, "[t]his number can then be multiplied by the number of acres considered to be at risk to obtain an approximate upper-bound risk estimate for the probability of one or more resistant *A. stolonifera* becoming established in the areas of concern." Cox Decl. ¶ 8.

One area of concern is the Deschutes River, which runs northward through central Oregon and, near Madras, runs roughly parallel to the northwest boundary of the control district, at an apparent distance of a half mile. Pls.' Opp'n/Reply at 8 n.9; 3rd Gurian-Sherman Decl., Fig. 1. Approximately three miles of the river lie within an area where the Watrud Study observed elevated GTCB seed density (predominantly density level C, with a small area at density level D). Assuming that plaintiffs only assert interests in the immediate riparian areas of the river, the number of acres of concern along this section of the river may be safely assumed to be at least 14.[11] The resulting upper-bound risk of GTCB establishment (assuming C-level seed density) in this area of concern is approximately 0.7 percent (r x A = 0.0005 x 14 = 0.007).

The Watrud Study researchers also observed elevated GTCB seed levels in Madras, where the findings showed a central area of approximately two square miles with level-E seed density, surrounded on the Study's spacial map by co-centric rings of decreasing density (D, C, and B-level densities, respectively). Watrud Study at Fig. 4(B); 3rd Gurian-Sherman Decl.,

[11] (Three miles of river) x (20-foot width on each side of the river) x (two river banks) = 14.54 acres.

Fig. 1. Assuming that only five percent of the acreage in the level-E-density area of Madras (approximately 60–70 acres) contains suitable soil for and/or populations of bentgrass (despite the apparent high concentration of existing bentgrass plants in that area, *see* n.10, *supra*), the upper-bound risk of GTCB establishment in this area of concern is approximately 8.9 percent to 10.43 percent (r_1 x A = 0.00149 x 60 = 0.0894; r_2 x A = 0.00149 x 70 = 0.1043).

It is not clear whether elevated GTCB density levels were observed in the Crooked River National Grassland, though the boundary of the Grassland appears to run extremely close (i.e, less than a mile) to level-C- and level-D-density areas of Madras, where near-term GTCB establishment risk may fall somewhere between 0.7 and 8.9 percent. *Compare* Watrud Study, Fig. 4(B) *with* 3rd Gurian-Sherman Decl., Fig. 1. Given this proximity, the risk is certainly nontrivial that GTCB could establish itself either (2) in the Grassland itself or (2) in Madras, and then over time spread at least to nearby areas of the Grassland.

Having articulated these estimated risk probabilities, and having thoroughly considered the myriad reasons why the risk of GTCB establishment may be higher or lower than these estimates in the various areas of concern, the court concludes that the risk of GTCB establishment along the Deschutes River, in Madras, and in the Crooked River National Grassland is nontrivial, and therefore that the Oregon plaintiffs have standing. In making this determination, a few considerations warrant brief mention.

As an initial matter, the court notes that the risk probabilities articulated above, standing alone, would establish standing. *See Sierra Club v. Mainella*, 459 F. Supp. 2d 76, 93 (D.D.C. 2006) (concluding, "[o]n a purely quantitative level . . . that a risk of . . . 1 in 10,000 . . . would qualify as a 'non-trivial' risk sufficient to take the risk out of the category of the hypothetical").

In any event, the probability of GTCB establishment over time in the areas of concern is likely greater than these calculations suggest, for a number of reasons: First, the evidence shows that Roundup is used as a control mechanism in parts of the areas of concern, thus favoring GTCB over already-present bentgrasses. *See* Watrud Study at 5. Second, the calculations above do not fully consider the likelihood of progressive GTCB spread over time. Third, Watrud Study data collected from sentinel plants (bentgrass plants artificially planted by researchers) suggests the possibility of dramatically higher establishment risk: the Watrud Study observed much higher GTCB seed density rates among sentinel plants than among resident plants. *Ibid.* The study postulates that this difference is due not to greater sentinel fitness, but rather due to the fact that during the 2003 flowering season, native *A. stolonifera* plants flowered two to three weeks later than the test plot grasses. *Ibid*. This may not have been the case in 2004, when the test plots were still active. Bodey Decl. ¶ 16. Fourth, the calculations above do not take into account GTCB hybridization with resident *A. gigantea*, which was also documented in the Watrud Study, and which could also threaten plaintiffs' aesthetic and recreational interests. Fifth, the Watrud Study itself suggests that the risk of GTCB establishment is at least nontrivial. Watrud Study at 1, 5. Finally, new evidence submitted post-briefing by plaintiffs (and responded to by defendants) appears to confirm the significance of that risk. Jay R. Reichman, et al., *Establishment of transgenic herbicide-resistant creeping bentgrass (Agrostis solonifera L.) in nonagronomic habitats*, Molecular Ecology (2006), Pls.' First Notice of Suppl. Auth., Ex. 2 (observing GTCB establishment in areas of concern, including the Crooked River National Grassland); *see also Vais Arms, Inc. v. Vais*, 383 F.3d 287, 292 & n.10 (5th Cir. 2004) (countenancing the submission of new evidence on reply, as long as the opposing party has had

an opportunity to respond, and collecting cases); *Quiban v. U.S. Veterans Admin.*, 724 F. Supp. 993, 1004–05 (D.D.C. 1989) (no prejudice from late-presented evidence where the opposing party is given an opportunity to respond to new evidence).[12]

Defendants argue that even if GTCB were established in areas of concern, plaintiffs would suffer no aesthetic harm, because unless they encountered a bentgrass plant and sprayed it with Roundup, they would not be able to tell the difference between a genetically-engineered plant and a resident plant. But whether a difference in appearance exists between glyphosate-tolerant bentgrass and resident bentgrass is not the question. Plaintiffs' alleged interest is in viewing native fauna, and the relevant inquiry is whether injury to *that* interest is probable or has occurred, regardless of whether the injury is visible. If GTCB spread increases the threat to native fauna—and it does increase that threat here—standing exists.[13]

For the foregoing reasons, the court concludes that the risk of GTCB establishment in at least three areas of concern to plaintiffs (the Deschutes River, Madras, and the Crooked River National Grassland) is significant. As a result, the aesthetic and recreational value of these areas is diminished, and plaintiffs have standing to bring their claims.

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[12] Though the court has reviewed the new study submitted by plaintiffs, the court determines that standing exists regardless of its findings. The court also notes that the authority to which defendants cite in opposition to plaintiffs' submission deals with Federal Rule of Appellate Procedure 28(j), which is not applicable to summary judgment submissions to a district court.

[13] The court also rejects defendants' arguments that plaintiffs' areas of concern are too vast to establish standing with the required specificity. *See Lujan v. Nat'l Wildlife Fed'n*, 497 U.S. 871, 889 (1990) (allegations insufficient where plaintiffs alleged interests in "unspecified portions of an immense [two-million-acre] tract of territory").

b. The Idaho and Virginia Tests

The plaintiffs in Idaho and Virginia, however, have failed to establish standing. Idaho declarant Gledhill (a member of plaintiff organization Center for Food Safety) alleges a threat to her property, which is located in Payette County, Idaho, and to her recreational interests in that county, arising from 23 acres of Scotts bentgrass field tests in neighboring Canyon County. Gledhill Decl. ¶¶ 2–3; Bodey Decl. ¶ 9. Virginia plaintiff Beck alleges a threat to her property and recreational interests from a 200-square-foot test plot on a golf course in Richmond, Virginia. Beck Decl. ¶¶ 2–3; Bodey Decl. ¶ 4. Taking into account the drastically reduced source strength of the test plots in these two areas as compared to that in Oregon, as well as the distance between the areas of interest in Idaho and the field tests there (in Virginia, Beck alleges interests in areas throughout the city of Richmond, which encompasses the golf course where the test was conducted), plaintiffs have not shown that the probability of harm to their interests is nontrivial.

2. Procedural Injury Alleged By The Organizational Plaintiffs

Finally, the federal defendants argue that organizational plaintiffs CTA and CFS lack standing to bring claims of procedural injury on their own behalf regarding the denial of their noxious weed petition. They assert that standing is lacking because neither NEPA nor the petition provisions of the PPA were "designed to protect some threatened concrete interest of the plaintiff[s]." Defs.' Mem. in Supp. of Summ. J. at 17–18 (quoting *Florida Audubon Soc'y v. Bentsen*, 94 F.3d 658, 664 (D.C. Cir. 1998)). The court is not persuaded.

First, plaintiffs do not claim any procedural violations of the PPA's petition process for noxious weed listings. Their PPA claims are substantive and are brought pursuant to the APA.

Similarly, plaintiffs' NEPA claims arise not from the denial of the noxious weed petition, but rather from the issuance of the GE bentgrass field test permits, and are brought not by the organizations on their own behalf, but rather on behalf of their members. As for these claims, the court notes that in *Florida Audubon Society*, the case upon which defendants primarily rely, it was beyond dispute that the alleged injuries (environmental harm to recreational areas of interest)—identical injuries to those asserted here—were "of the sort that NEPA was 'specifically designed' to protect." *Id.* at 665. Accordingly, that case turned on "traditional" standing questions (specifically, causation and injury in fact), and not on questions of procedural design. *Ibid*.

B. Mootness

Standing questions aside, both Scotts and the federal defendants argue that the court lacks the ability to grant plaintiffs the relief they request, primarily because the field trials at issue have concluded. Plaintiffs respond by arguing that this is essentially a mootness argument, one which these defendants previously raised unsuccessfully before the United States District Court for the District of Hawaii in another case involving GE crop field trials. *See Ctr. for Food Safety v. Veneman*, 364 F. Supp. 2d 1202, 1209–10 (D. Haw. 2005). For the same reasons articulated by that court, this court likewise rejects them. Plaintiffs' claims regarding the field tests, even if they are moot, are capable of repetition but evade review. *Ibid.*; *Am. Cargo Transport, Inc. v. Natsios*, 429 F. Supp. 2d 139, 144 n.4 (D.D.C. 2006). The permitting and testing processes here were too short to be fully litigated prior to cessation, and there is a reasonable expectation that the same complaining parties may be subjected to the same actions again. *Ibid.* Plaintiffs' claims regarding their noxious weed petition are not moot.

C. Summary Judgment Review of Plaintiffs' Claims

Having addressed the questions of standing and mootness, the court will now address the merits of the plaintiffs' claims.[14]

1. The Noxious Weed Petition

Plaintiffs CTA and CFS first allege that APHIS acted arbitrarily and capriciously, in violation of the APA, when it denied their petition to list GTCB and glyphosate-tolerant Kentucky bluegrass as "noxious" weeds pursuant to the PPA. The PPA grants authority to the Secretary to publish "a list of noxious weeds that are prohibited or restricted from entering the United States or that are subject to restrictions on interstate movement within the United States." 7 U.S.C. § 7712(f)(1). A "noxious weed" is "any plant or plant product that can directly or indirectly injure or cause damage to crops (including nursery stock or plant products), livestock, poultry, or other interests of agriculture, irrigation, navigation, the natural resources of the United

[14] The court will grant a motion for summary judgment under Rule 56(c) "if the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(c). When ruling on a summary judgment motion, courts must view the evidence in the light most favorable to the nonmoving party. *Bayer v. Dep't of Treasury*, 956 F.2d 330, 333 (D.C. Cir. 1992); *see also Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 255 (1986) (holding that courts must draw "all justifiable inferences" in the nonmoving party's favor and accept the nonmoving party's evidence as true). "[T]he nonmoving party 'must do more than simply show that there is some metaphysical doubt as to the material facts,'" *Bias v. Advantage Int'l., Inc.*, 905 F.2d 1558, 1561 (D.C. Cir. 1990) (quoting *Matsushita Elec. Indus. Co. v. Zenith Radio*, 475 U.S. 574, 586 (1986)), but rather must "provide evidence that would permit a reasonable [fact-finder] to find" in the non-moving party's favor. Laningham v. U.S. Navy, 813 F.2d 1236, 1242 (D.C. Cir. 1987). Under Rule 56, "if a party fails to establish the existence of an element essential to that party's case and on which that party will bear the burden of proof at trial," summary judgment is warranted. *Hazward v. Runyon*, 14 F. Supp. 2d 120, 122 (D.D.C. 1998) (citing *Celotex Corp. v. Catrett*, 477 U.S. 317, 322 (1986)). Finally, in considering a motion for summary judgment, "the court . . . may not make credibility determinations or weigh the evidence." *Reeves v. Sanderson Plumbing Prods., Inc.*, 530 U.S. 133, 150 (2000).

States, the public health, or the environment." *Id.* § 7702(10). The PPA also provides that "[a]ny person may petition" to have a plant species added to or removed from the Secretary's noxious plant list. *Id.* § 7712(f)(2). The Secretary's response to such a petition must be timely and "based on sound science." *Id.* § 7712(f)(3).

APHIS responded to plaintiffs' petition by following a step-by-step protocol for "pest risk assessments," established for the purpose of making noxious weed listing decisions. AR 20; 278–86. That protocol purports to "harmonize" the noxious weed determination with the United States' plant importation obligations as a member of the North American Plant Protection Organization ("NAPPO") and the International Plant Protection Convention (IPPC) of the United Nations Food and Agriculture Organization. Applying that protocol to plaintiffs' petition, APHIS first concluded that no biological basis existed for treating glyphosate-resistant strains of bentgrass and bluegrass differently from their nonresistant counterparts. AR 20. APHIS then applied the next step in the protocol, which determines whether the subject plant species warrants "quarantine pest status" (as defined according to the United States' international obligations). This step involves application of a "geographic criterion" which requires that the subject weed be "new or not known to be widely prevalent." AR 21. Because neither Kentucky bluegrass nor creeping bentgrass are "new or not known to be widely prevalent," APHIS concluded that listing was not warranted. AR 21.

Plaintiffs challenge this decision on two grounds: First, they argue that the decision improperly borrowed the "new or not known to be widely prevalent" standards from inapplicable international agreements in making its decision. In their view, the noxious weed definition and

listing provision of the PPA do not consider questions of newness or nonprevalence. Second, they argue that the decision was not based on "sound science."

The court agrees with plaintiffs that whether a plant species is "new or not known to be widely prevalent" is not a required consideration for purposes of reviewing a noxious weed petition. Three PPA provisions are relevant to this determination. First among these is the Act's definition of "noxious weed." 7 U.S.C. § 7702(10). The definition is broad, and includes both new and established and prevalent and nonprevalent plants. *Ibid.* ("The term 'noxious weed' means *any* plant or plant product that can directly or indirectly injure or cause damage to crops (including nursery stock or plant products), livestock, poultry, or other interests of agriculture, irrigation, navigation, the natural resources of the United States, the public health, or the environment." (emphasis added)). The provision for promulgating a list of noxious weeds is likewise broad. It allows the Secretary to publish a "list of noxious weeds that are prohibited or restricted from entering the United States or that are subject to restrictions on interstate movement within the United States." *Id.* § 7712(f)(1). Under basic principles of statutory construction, the term "noxious weed" as used here should be read according to its articulated statutory definition, i.e., as "any" plant that can injure crops, livestock, or other agricultural or environmental interests. Whether a plant is new or not known to be prevalent does not appear in either section.

It does appear, however, in a separate provision which deals with the Secretary's specific authority to respond to threats posed by plants that are "new or not known to be widely prevalent" in the United States. *Id.* § 7714(a). This section does not, as defendants argue, circumscribe the Secretary's authority as to all noxious weeds. Rather, it simply grants particular

authority, separate and apart from the general authority to regulate noxious weeds, to "hold, seize, quarantine, treat, apply other remedial measures to, destroy, or otherwise dispose" of new and/or nonprevalent pests and weeds. *Ibid.*

This interpretation of the PPA is supported by the Act's legislative history. The PPA was designed to streamline various prior plant regulation statutes, including the Plant Quarantine Act, the Federal Pest Act, and the Federal Noxious Weed Act. National Plant Board, *Safeguarding American Plant Resources: A Stakeholder Review of the APHIS-PPQ Safeguarding System* 7 (1999), http://www.aphis.usda.gov/ppq/safeguarding/MainReport.PDF. Prior to the PPA's enactment, the Federal Noxious Weed Act defined a "noxious weed" as any plant part "of foreign origin" that "is new to or not widely prevalent in the United States" and that can cause injury to agricultural and environmental interests. 7 U.S.C. § 2802 (1999). That provision was deliberately expanded in the PPA, and the "new to or not widely prevalent" language was removed. *See* H.R. Rep. No. 106-639 (2000) (Conf. Rep.), *reprinted in* 146 Cong. Rec. H3763, H3803 (daily ed. May 24, 2000)) (stating that the definition of "noxious weed" "has been expanded from existing law").[15]

[15] APHIS itself appears to have recognized this expansion. *See The Plant Protection Act: Plant Protection and Quarantine*, http://www.aphis.usda.gov/lpa/pubs/fsheet_faq_notice/fs_phproact.html ("The PPA expands the definition of noxious weed from the definition in the Federal Noxious Weed Act, which included only weeds that were of foreign origin, new to, or not widely prevalent in the United States. The PPA now defines a noxious weed as a weed that could bring harm to agriculture, the public health, navigation, irrigation, natural resources, or the environment. Under the PPA, noxious weeds are regulated similarly to plant pests."); AR 291 (the PPA "eliminat[ed] the criteria that noxious weeds must be 'of foreign origin' and 'new to or not widely prevalent in' the United States" and "offers . . . a much wider and more flexible set of criteria for identifying and regulating noxious weeds."); *see also* 7 C.F.R. § 360.200 (promulgating the list of noxious weeds and referring only to Sections 403 and 412 of the PPA (7. U.S.C. §§ 7702, 7712), and not to Section 414 (7 U.S.C. § 7714)).

The United States' international obligations do not limit the scope of the PPA's noxious weed provisions. IPPC limits the United States' ability to restrict *importation* of regulated pests, but does not curtail the nation's ability to regulate pests in the first instance, at least not in the manner urged by defendants.[16] In denying plaintiffs' petition, APHIS took the position that the nation's IPPC obligations required that only plant species meeting the IPPC definition of "quarantine pests" are eligible for listing. AR 21. This is not a reasonable interpretation of IPPC. Under IPPC, import regulations may be imposed on two kinds of pests: quarantine pests and regulated non-quarantine pests. IPPC art. II, § 1; art. VI. The former are controlled pests either not yet present or not widely distributed, and the latter are regulated pests which are "non-quarantine," i.e., present and/or widely distributed. *Ibid.* The statutory definition of "noxious weeds" in the PPA falls within the treaty definition of regulated non-quarantine pests. AR 294 (draft APHIS document reaching this conclusion). Hence, under IPPC, the United States is free to regulate noxious weeds, regardless of whether they are new or not widely prevalent. The central restriction imposed by IPPC as to such weeds is that the United States can only restrict importation of them in a manner that is "no more stringent than measures applied to the same pests" already within the country's borders. IPPC art. VI, § 1(a).[17] That is, the Secretary may regulate noxious weeds as per the PPA, but the regulatory measures taken thereunder place a cap on the importation restrictions that may be applied to foreign specimens of those weeds.

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[16] Apart from IPPC, defendants do not identify any other relevant substantive restrictions on the United States' authority to regulate weeds.

[17] The import restrictions must also be justified by legitimate concerns about plant health and the environment. IPPC art. VI, § 1(b).

Defendants have the PPA/IPPC relationship backwards: the reach of the United States' justifiable domestic regulations dictates the scope of available import restrictions under IPPC, and not the other way around. APHIS's insistence that international obligations require that plants be new to or not widely prevalent in the United States to be eligible for listing as noxious weeds was arbitrary and capricious and contrary to law.

As for APHIS's choice to assess the petition at the species level (rather than at the glyphosate-resistence trait level), the court cannot conclude that this decision violated the PPA or APA. The statute allowing for the submission of petitions specifically contemplates that the noxious weed list will be species-based, 7 U.S.C. § 7712(f)(2) ("Any person may petition the Secretary to add a plant species to, or remove a plant species from, the regulations issued by the Secretary under this subsection."), and the evidence does not support the conclusion that APHIS's categorization of both glyphosate-resistant and non-glyphosate-resistant grasses as members of the same species was scientifically unsound.

For the foregoing reasons, the court will vacate the denial of the noxious weed petition and remand it to APHIS. *PPG Indus. v. United States*, 52 F.3d 363, 365 (D.C. Cir. 1995). In so doing, the court notes that APHIS retains considerable discretion. While its decisions must be "based on sound science" and must meaningfully assess the weed's capability to cause harm to the interests enumerated in the statute, it need not add to the list every plant that fits the statutory definition of a "noxious weed." To the contrary, the statute only requires the Secretary to publish a list of "noxious weeds that are . . . subject to [importation and/or interstate movement] restrictions." 7 U.S.C. § 7712(f)(1). Decisions as to which noxious weeds present the greatest prospective threats, and therefore should be subject to restriction, are left to the Secretary's

discretion. Of course, that vesting of discretion is not a *carte blanche*: among other things, APHIS may not simply re-incorporate the "new or not widely prevalent" criterion into its decisionmaking process. Congress's intent in passing the PPA was plainly to provide for regulation of all dangerous noxious weeds, whether new or old, or whether prevalent or not. Nor may APHIS render a decision without providing a reasoned explanation, based on sound science, that is responsive to the underlying petition. *See* § 7712(f)(3); *Cactus Corner LLC v. USDA*, 346 F. Supp. 2d 1075, 1106-09 (E.D. Ca. 2004).

2. Compliance With APHIS Regulations

Plaintiffs' second claim is that APHIS failed to comply with its own regulations when it granted the field test permits. The relevant regulation creates an applicant-driven notification process by which genetically engineered organisms and products are allowed to be "introduced" into the environment without a permit being issued. 7 C.F.R. § 340.3. Under the regulation, entities wishing to move in interstate commerce, import, or release a "regulated article" into the environment must notify APHIS of their intent to do so. *Ibid.* A series of requirements must be met for introduction to be allowed, including satisfaction of a weediness criterion, which mandates that the organism or product (1) not be listed as a noxious weed under APHIS's PPA regulations and (2) "is not considered by the Administrator to be a weed in the area of release into the environment." *Id.* § 340.3(b)(1). If the article satisfies the enumerated requirements, APHIS provides an "acknowledgment" that introduction will be allowed. *Id.* § 340.3(e)(2)–(4). If permission to release the article is denied, the applicant may then apply for a formal permit. *Id.* § 340.3(e)(5).

Plaintiffs allege that APHIS violated this regulation when it approved the GTCB field trials at issue by failing to meaningfully consider evidence that GTCB is, in fact, a weed in the areas of release, and, more broadly, by failing to make a localized weediness determination at all. Plaintiffs point to a purported absence in the record of evidence that APHIS took any steps to determine whether GTCB should have been deemed a weed in the areas of the field trials, and argues that the notification process for the trials (which involved sending notifications to various state agencies and inviting optional comment from those agencies) improperly passed off the weediness determination to the states.

Defendants counter by arguing that APHIS fully complied with its regulations, which explicitly include the state-agency notification process it used for each of the field trials. *See* § 340.3(e)(1) (as a part of the agency's "action in response to notification, . . . APHIS will provide copies of all notification to appropriate State regulatory official(s) for review").[18] Defendants argue that this process is itself in large measure the method by which APHIS determines whether an organism is considered to be a weed in the area of release. That is, if local or state authorities consider the organism to be a weed, APHIS does likewise. If the authorities do not, APHIS likewise does not. This approach, in defendants' view, is simply a manifestation of "the important role that States have played in considering local factors with respect to field trials." Genetically Engineered Organisms and Products; Simplification of Requirements and Procedures for Genetically Engineered Organisms, 62 Fed. Reg. 23,945, 23,951 (May 2, 1997).

[18] The regulation itself does not explicitly connect the state-notification process set forth in § 340.3(e)(1) to the weediness inquiry set forth in § 340.3(b)(1).

The court is troubled that APHIS has essentially ceded to state authorities the task of considering whether a given organism is a weed in the area of release. One could easily read the regulation to require that APHIS make an independent determination for each notification, rather than simply borrowing determinations from other entities. Moreover, since the local entities are not required to respond to the notifications, in many cases, the acknowledgment is given and the release is permitted despite the fact that no affirmative determination has been made by any entity. But the scope of the court's review here is limited, and the court must give "great deference to an agency's interpretation of its own regulation: under well-recognized precedent, [the court] can reject the [agency's] interpretation only if it is plainly erroneous or inconsistent with the regulation." *Sec'y of Labor v. Twentymile Coal Co.*, 411 F.3d 256, 260 (D.C. Cir. 2005) (quotation marks omitted). As APHIS's interpretation of the regulatory language here is not plainly erroneous, the court grants summary judgment in favor of defendants as to Count II.

3. Violations of NEPA

Finally, plaintiffs allege a series of NEPA violations. Under NEPA, federal agencies must "examine the environmental effects of proposed federal actions and . . . inform the public of the environmental concerns that were considered in the agency's decisionmaking." *Citizens Against Rails-to-Trails v. Surface Transp. Bd.*, 267 F.3d 1144, 1150 (D.C.Cir. 2001). NEPA requires a federal agency to prepare an EIS for all "proposals for . . . major Federal actions significantly affecting the quality of the human environment." 42 U.S.C. § 4332(2)(C).[19] An EIS

[19] The EIS must include, among other things, "a detailed statement describing the reasonably foreseeable environmental impact both of the proposed federal action and of any feasible alternative(s) to the proposed federal action." *Wyoming Outdoor Council v. U.S. Forest Serv.*, 165 F.3d 43, 49 (D.C. Cir.1999) (internal quotations omitted).

is not required if the agency makes a determination, based on a more limited EA, that the proposed action would not have a significant impact on the environment. 40 C.F.R. §§ 1501.4, 1508.13.[20] In some instances, agency regulations categorically determine that certain actions do not require preparation of an EA or EIS. 40 C.F.R. § 1508.4. These "categorical exclusions" are "categor[ies] of actions which do not individually or cumulatively have a significant effect on the human environment." *Ibid.* The Supreme Court has explained that "it is now well-settled that NEPA itself does not mandate particular results, but simply prescribes the necessary process." *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989). Thus, "NEPA merely prohibits uninformed—rather than unwise—agency action." *Id.* at 351.

Plaintiffs' first claim is that APHIS's regulations dealing with field trials are inconsistent in their treatment of what it means for a trial or environmental release of a plant species to be "confined." As defendants rightly point out, however, nowhere in the second amended complaint do plaintiffs make such a claim: the complaint alleges violations of the regulations themselves, but does not allege that the regulations are in any way improper. The argument has not, therefore, been properly presented to the court.

Plaintiffs next argue that APHIS violated NEPA by failing to adequately determine whether the GTCB field trials qualified as categorically exempt from APHIS's traditional obligation to conduct an EA or EIS. Generally, APHIS's regulations require EA preparation for field trials. 7 C.F.R. § 372.5(b)(5)(i). The regulations also set forth, however, a series of "categorically excluded actions" that do not require the preparation of an EA or EIS.

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[20] "The EA is to be a 'concise public document' that '[b]riefly provide[s] sufficient evidence and analysis for determining whether to prepare an [EIS].'" *Dep't of Transp. v. Public Citizen*, 541 U.S. 752, 757 (2004) (quoting 40 C.F.R. § 1508.9(a)).

Id. § 372.5(c). These excluded actions include "[p]ermitting, or acknowledgment of notifications for, confined field releases of genetically engineered organisms and products." *Id.* § 372.5(c)(3)(ii). The parties agree that APHIS treated the trial notifications as exempt under this provision, but disagree (1) as to whether APHIS was obligated to make an individual determination on the record for each notification that the exemption applied, and (2) as to whether the determinations reflected an adequate assessment of the environmental risks posed by the trials.

The record contains no explicit findings that the GTCB field trials fell under this exemption, but the court concludes that such findings were not necessary. Both the language and promulgation history of the exemption make it clear that it was created specifically to cover all (and only) permits and acknowledgments resulting from the PPA notification process. § 372.5(c)(3)(ii); National Environmental Policy Act Implementing Procedures, 60 Fed. Reg. 6000, 6001 (Feb. 1, 1995). That is, any field test of GE organisms and/or products allowed (i.e., acknowledged or permitted) by APHIS pursuant to the PPA inherently falls under the "confined field release" NEPA exemption. No further determination is required.[21]

That the exemption applies, however, does not end the court's inquiry. Even where APHIS has determined that an action falls under one of the enumerated exemptions, it must nonetheless determine whether an *exception* to the exemptions applies. The regulation provides for such an exception, stating that where "a categorically excluded action may have the potential to affect 'significantly' the quality of the 'human environment,' . . . an environmental assessment

[21] *But see Ctr. for Food Safety v. Johanns*, 451 F. Supp. 2d 1165, 1184 (D. Haw. 2006) (concluding that a field test acknowledged or permitted under § 340 may not necessarily be "confined" for purposes of § 372.5(c)(ii)).

or an environmental impact statement will be prepared." 7 C.F.R. § 372.5(d). It then lists four non-exhaustive examples of actions warranting EA/EIS preparation, including "[w]hen a confined field release of genetically engineered organisms or products involves new species or organisms or novel modifications that raise new issues." § 372.5(d)(4).

The record is devoid of any evidence that APHIS made determinations that the field tests at issue involved either "new species or organisms or novel modifications that raise[d] new issues." Likewise, there is no evidence that APHIS considered whether the field tests, notwithstanding the initial application of the "confined field release" exemption, "may have [had] the potential to affect 'significantly' the quality of the 'human environment." This absence manifests arbitrary and capricious agency action which is inconsistent with the terms used in APHIS's own regulations, and which violates NEPA. *Ctr. for Food Safety*, 451 F. Supp. 2d at 1183–86 (reviewing similar field test permits and reaching the same conclusion); *see also Back Country Horsemen of Am. v. Johanns*, 424 F. Supp. 2d 89, 99 (D.D.C. 2006) (recognizing that an agency's interpretation of the scope of its own categorical exclusions is "given controlling weight unless plainly erroneous or inconsistent with the terms used in the regulation" (quoting *Alaska Ctr. for Env't v. U.S. Forest Serv.*, 189 F.3d 851, 857 (9th Cir. 1999))). The record contains substantial evidence that the field tests may have had the potential to affect significantly the quality of the human environment, and that the tests may have involved, at the least, novel modifications (if not "new organisms") that raised new environmental issues. APHIS failed,

however, to consider any of these possibilities.[22] The court will grant summary judgment in plaintiffs' favor as to this aspect of their NEPA claims.

III. CONCLUSION

For the forgoing reasons: (1) the parties' motions for summary judgment [#66, #67, #69] are **GRANTED** in part and **DENIED** in part, with judgment granted in favor of plaintiffs and against defendants as to Counts I and III, and with judgment granted in favor of defendants and against plaintiffs as to Count II.;(2) the claims of plaintiffs Burns, Campbell, Beck, and Watkins are **DISMISSED**; (3) plaintiffs' motions to strike [#72, #73] are **DENIED**; (4) defendants' denial of plaintiffs' noxious weed petition is **VACATED** and **REMANDED**; (5) defendants are permanently **ENJOINED** from processing any acknowledgment or permit pursuant to § 340.3 and § 340.4 of Title 7 of the Code of Federal Regulations, without inquiring,

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[22] On remand, any consideration of the application of § 372.5(d)(4) to an otherwise-exempt field test should consider the impact of the test's size on (1) the test's capacity to affect the environment and/or on (2) the test's presentation of "new issues" warranting consideration of EA preparation. Apart from being required as a matter of simple logic, such a consideration appears to have been already contemplated (if not undertaken here) by APHIS. In its announcement of the "confined field release" exemption, APHIS repeatedly described the exemption (and the PPA rules justifying its creation) as applying only to "small-scale" field tests. 60 Fed. Reg. at 6001. (Indeed, APHIS appears to have defined the entire concept of "confinement" as being related to scale. *Ibid.* ("[H]undreds of permits that have been issued to conduct small-scale (or 'confined,' as expressed in current biotechnology literature) field tests of genetically engineered plants.").) Thus APHIS impliedly stated that "large-scale" field tests may require the preparation of an EA or EIS, presumably under the aegis of the exception in § 372.5(d)(4).

If scale is not relevant to § 372.5(d)(4), it should be relevant to § 372.5(c)(3)(ii), lest APHIS's own statements regarding scale be rendered meaningless. That is, large-scale confined field tests may warrant preparation of an EA or EIS, either because of their potential to affect the environment or because they present new issues (notwithstanding the initial application of § 372.5(c)(3)(ii)), or because the exemption in § 372.5(c)(3)(ii) does not apply to them in the first instance. 60 Fed. Reg. at 6001 (stating that "this action" (i.e., "small-scale" field tests of genetically engineered plants) "will be described separately [in the final rule] as an example of categorical exclusions under a retitled paragraph (c)(3)").

in a manner consistent with this Opinion, whether the exception articulated in § 372.5(d) of that same title applies to the acknowledgment or permit to an extent that categorical exclusion is not warranted, and that an environmental assessment should be prepared.

An appropriate order accompanies this Memorandum.

Henry H. Kennedy, Jr.
United States District Judge

Dated: February 5, 2007