Power, Politics, and Poison: The Story Behind *National Cotton Council of America v. U.S. EPA*

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Editors' Summary

For nearly 40 years, EPA allowed application of pesticides directly to or over waters of the United States without an NPDES permit and instead relied on the FIFRA registration process to regulated such pesticide use. Following mixed results from the courts regarding the legality of this practice, the pesticide industry filed a petition for rulemaking and obtained a favorable rulemaking outcome. Nonetheless, the pesticide industry challenged the results of its own rulemaking petition in hopes of obtaining an even more generous rule. The industry's plan backfired when the Sixth Circuit overturned EPA's rule, thereby requiring NPDES permitting, and the U.S. Supreme Court refused to hear the industry's appeal. The pesticide industry is running a full-court press in Congress to pass legislation that would undo the Sixth Circuit decision and return to the old status quo.

Pesticide manufacturers, formulators, distributors, sellers, and applicators are holding their breath in hopes that the 112th U.S. Congress will succumb to their long-sought wish to continue certain types of unchecked chemical applications throughout the United States. For years, the U.S. Environmental Protection Agency (EPA) has failed to close a major gap in environmental protection laws and has allowed the pesticide industry to apply chemicals without adequate accountability. With mounting scientific evidence of the harmful effects of chemicals on human health and the environment, this industry practice can no longer be tolerated, but in the interest of preserving market share and profits, the pesticide industry (Industry)[1] continues to fight change. The Industry's effort to obtain a legislative right to apply certain pesticides from Congress is only its latest campaign at the tail end of a 13-year court battle. In 2010, the Industry lost a major lawsuit when the U.S. Supreme Court denied its petitions for certiorari in *National Cotton Council of America v. U.S. EPA*,[2] *CropLife America v. Baykeeper,*[3] and *American Farm Bureau Federation v. Baykeeper*[4] (collectively, hereinafter *National Cotton*). In *National Cotton*, the Industry sought expansion of a Final Rule issued by EPA; this Final Rule had been issued in response to the Industry's Petition for Rulemaking. Seemingly, this would have been the end of the story. The full story, however, provides a tale of power, politics, and poison.

Dissatisfied with its inability to muscle its way through the court system and unhappy with the gamble it took regarding jurisdiction, within months of the Supreme Court's 2010 decision in *National Cotton*, the Industry backed several pieces of national legislation in an effort to achieve legislatively what the courts refused to grant.[5] The Industry's request for a legislative exception to pollute should not be countenanced by Congress.

The issue the Industry is so assiduously fighting is not extraordinarily legally complicated: should the application of pesticides *directly to* or *over* waters of the United States

1. The Industry's efforts are spearheaded by chemical manufacturers and users, namely CropLife America and the American Farm Bureau Federation (AFBF). CropLife is a trade group of pesticide developers, manufacturers, formulators, and distributors whose members currently include, for example, Dow AgroSciences LLC, DuPont Crop Protection, Monsanto Co., SePRO Corp (specializing in aquatic pesticide products), Syngenta Crop Protection, Inc., and Scotts Miracle-Gro Co. *See* CropLife America Members, http://www.croplifeamerica.org/ about/association-members (last visited Sept. 1, 2011). The AFBF is a farmers and ranchers lobbying group.
2. 553 F.3d 927, 39 ELR 20006 (6th Cir. 2009), *reh'g denied* (2009), *cert. denied* 130 S. Ct. 1505 (Feb. 22, 2010) (Nos. 09-533 and 09-547).
3. *Id.*
4. *Id.*
5. *See, e.g.*, To Amend the Federal Insecticide, Fungicide, and Rodenticide Act to Improve the Use of Certain Registered Pesticides, H.R. 6087, 111th Cong. §2 (2010); A bill to Amend the Federal Insecticide, Fungicide, and Rodenticide Act to Improve the Use of Certain Registered Pesticides, S. 3735, 111th Cong. §2 (2010).

be regulated under the Clean Water Act (CWA),[6] thereby requiring a national pollutant discharge elimination system (NPDES) permit to discharge pollutants, or are the broad, pesticide registration-based Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)[7] label instructions alone sufficient to protect human health and the environment from the detrimental health and environmental effects of pesticides applied to or over our waters?[8] Until the first lawsuit of its type was brought in 1998, the law was not interpreted to prohibit such applications of pesticides, and, despite a now decade-old decision requiring NPDES permits, EPA has thus far failed to close this gap.

Under the current framework, the Industry has no legal or financial incentive to stop poisoning people and the environment, despite the damning effects pesticides have on the human endocrine and reproductive systems, groundwater supplies, and wildlife. In 2007, U.S. expenditures accounted for 32% of total worldwide sales of pesticides, and at the user level, the United States spent $12.5 billion on pesticides.[9] It is a financially and politically powerful industry that favors any result that maintains "business as usual," and has repeated the greatly exaggerated claims that NPDES permits will place undue administrative and financial burdens on pesticide applicators and farmers, will cost an already struggling U.S. unemployment market additional jobs, and will be a significant blow to the U.S. economy. Industry has taken the position that FIFRA alone is sufficient to protect human health and the environment from exposure to pesticides that are applied directly to or over the waters of the United States. The truth is quite the opposite. NPDES permit requirements can, in fact, spur the effective use of nonpesticide or reduced pesticide alternatives.[10] Most of the applicators that will be subject to the NPDES permitting requirements are municipal irrigation entities, not farmers. Many agricultural practices and facilities are already exempt from the CWA, so the degree to which U.S. farmers and the agricultural industry will change as a result of the *National Cotton* decision will be minimal. Most farmers apply pesticides to land, not to waters, and *National Cotton* does not even apply to terrestrial applications. Where farmers do apply pesticides to crops, the vast majority of discharges from these applications are exempt from permitting as agricultural stormwater and irrigation return flows.

Thus far, the courts that have heard this issue have refused to fall to the Industry's arguments or tactics. Members of Congress in industrial agricultural areas, however, have been hoodwinked by the Industry's desire to maintain the status quo of the past 40 years of minimally restricted pesticide use.

I. Implementation After 25 Years of Ignorance

We begin this story in 1996. The Talent Irrigation District (Talent), located in south central Oregon, operates a system of irrigation canals and provides water to its members during the irrigation season (from May until September or October). The canals' waters originate as surface streams and water bodies from the snowpacks of the Cascade Mountains, and Talent diverts the water to streams throughout the south central Oregon region for mostly agricultural and small farm use.

To control the growth of aquatic weeds and vegetation in its irrigation canals, which can hinder water flow by clogging canal structures,[11] Talent used an aquatic herbicide called Magnacide H, manufactured by Baker Petrolite Corporation. Hundreds of irrigation systems use Magnacide H at concentrations of 6-10 parts per million (ppm), which translates to 6,000-10,000 parts per billion (ppb). Acrolein is a 92% component of Magnacide H. Acrolein is "a clear or yellow liquid with a disagreeable odor,"[12] and it is acutely toxic to humans, fish, and other wildlife.[13] Because of its toxicity, EPA requires that an application of Magnacide H be "held" before irrigation water can be discharged to natural water systems.[14] Magnacide H will kill fish at concentrations less than those required for aquatic weed control.[15] EPA recommends that for aquatic organisms, acrolein concentration in water should not exceed 2.7 ppb; but if it is applied as the FIFRA label recommends, at

6. Federal Water Pollution Control Act (FWPCA) Amendments of 1972, Pub. L. No. 92-500, 86 Stat. 816 (codified as amended at 33 U.S.C. §§1251-1376).
7. 7 U.S.C. §§136-136y, ELR Stat. FIFRA §§2-35.
8. Typically, applications of pesticides "to" or "over" waters are for the purposes of mosquito control or weed control in irrigation canals, and the applications are performed by local, state, or federal agencies.
9. *See* Press Release, U.S. EPA, Pesticide News Story: EPA Releases Report Containing Latest Estimates of Pesticide Use in the United States (Feb. 17, 2011), http://epa.gov/oppfead1/cb/csb_page/updates/2011/sales-usage06-07.html (last visited Sept. 1, 2011), and Arthur Grube et al., U.S. EPA, 2006 and 2007 Market Estimates 4, 6 (tbl. 2.3) (Feb. 2011), *available at* http://www.epa.gov/opp00001/pestsales/07pestsales/market_estimates2007.pdf. Note that EPA's information is based on *user* data, and not gross sales.
10. *See, e.g., infra* Section VI, discussing examples of Gem County Mosquito District and National Cotton Council.
11. Magnacide H Herbicide Application and Safety Manual, Baker Petrolite Corp., §II.A (July 2001), *available at* http://www.epa.gov/espp/litstatus/effects/magnacide-safety-manual.pdf.
12. Agency for Toxic Substances and Disease Registry (ATSDR), Toxicological Profile for Acrolein, Public Health Service, U.S. Department of Health and Human Services, Atlanta, Georgia (2007). http://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=555&tid=102 (last visited Sept. 1, 2011).
13. *See* EPA Reregistration Eligibility Decision, Acrolein 12, 24 (Sept. 2008), *available at* http://www.epa.gov/oppsrrd1/REDs/acrolein_red.pdf. Acrolein is also so potent that has killed exposed workers.
14. *Id.* at 7.
15. Magnacide H Herbicide FAQ, Baker Hughes, *available at* http://www.bakerhughes.com/products-and-services/other-chemical-services/agriculture/magnacide-h-herbicide-faq.

6,000 ppb, it will take over 11 half-lives before concentrations reach 2.7 ppb. The half-life of acrolein is anywhere from 10 hours to 20 days, depending on environmental conditions for acrolein volatilization rates, which in turn depend on water depth, temperature, pH, and turbulence.[16] *None* of these factors are considered in a FIFRA label, but they are considered in NPDES permits. If environmental conditions are extremely favorable, acrolein can remain present and harmful to aquatic organisms for a minimum of 22 days.[17] As a result, even if it is applied in accordance with FIFRA requirements, acrolein will have long-lasting and highly detrimental effects on a particular ecosystem. Furthermore, according to Baker Petrolite, one of the "big advantages" of using Magnacide H "is the long distances an application can travel."[18]

To apply Magnacide H, every two weeks from late spring to early fall, Talent injected its canals with a hose attached to a tank of the herbicide sitting on the bed of a truck. The canals leaked and seeped pesticide-contaminated water into nearby connected natural waterways, causing lower level impacts on fish and wildlife. These intermittent, interconnected waterways were also steelhead spawning grounds.[19] Massive fish kills followed Talent's 1983 and 1996 applications; the day after the May 1996 application of Magnacide H, the Oregon Department of Fish and Wildlife discovered over 92,000 dead juvenile steelhead in a five-mile area of Bear Creek downstream from one of Talent's leaking canal waste gates. Bear Creek is a tributary to the famous Rogue River fishery in Oregon.[20]

On January 5, 1998, Headwaters, Inc. (now Geos Institute) and Oregon Natural Resources Council Action (now Oregon Wild) filed a CWA citizen suit under 33 U.S.C. §1365 in the Federal District Court of Oregon.[21] The complaint alleged that Talent violated 33 U.S.C. §1311 by discharging a toxic chemical into the canals and Bear Creek without an NPDES permit. Headwaters sought, inter alia, declaratory judgment, an injunction prohibiting Talent from discharging pollutants under the CWA without a permit, and requiring Talent to allow Headwaters to monitor Talent's discharges.

The district court held that while the irrigation canals were "waters of the United States" subject to the CWA, and Magnacide H was a "pollutant" under 33 U.S.C. §1362(6) of the CWA, nevertheless an NPDES permit was not required. The district court reasoned that because FIFRA adequately regulated and controlled the application of acrolein, EPA approved the FIFRA label on Magnacide H, and Talent's application of Magnacide H complied with the FIFRA label, an NPDES permit was not required.

On appeal in 2001, the U.S. Court of Appeals for the Ninth Circuit reversed, agreed with Headwaters, *and agreed with the amicus-EPA*, by concluding that the EPA-approved FIFRA label did not obviate the need to obtain an NPDES permit.[22] The Ninth Circuit analyzed the "different, although complementary, purposes" of the CWA and FIFRA and found that "[e]ven this cursory review of the statutes reveals that a FIFRA label and an NPDES permit serve different purposes."[23] The court held that Talent indeed violated the CWA because, at a minimum, the *residual* application was (1) a discharge (2) of a pollutant (3) to navigable waters (4) from a point source.[24] The court declined to decide whether the actual *intended* application constituted a "pollutant" under the CWA. Of note, the court observed that because the active ingredient in Magnacide H is acrolein,

> a toxic chemical that is lethal to fish at a concentration at and below the level required to kill weeds in the irrigation canals, and which takes at least several days to break down into a nontoxic state . . . . [i]t would seem absurd to conclude that a toxic chemical directly poured into water is not a pollutant. . . .[25]

The court also observed that "[t]he NPDES permit requirement under the CWA [. . .] provides the local monitoring that FIFRA does not."[26]

While the Ninth Circuit decision was a victory for preserving the public's right to be protected from unregulated chemical exposures and in upholding the CWA, the Industry saw the requirement of obtaining and complying with NPDES permit requirements as a threat to their sales and ability to operate as they always had. Thirteen years later, legal, administrative, and legislative battles involving citizen groups, industry, and EPA are still ongoing, with the Industry using all the tricks it can muster to get legislation passed to prevent NPDES permitting.

II. Industry Turns Up the Heat

Shortly after the Ninth Circuit's decision in *Headwaters*, counsel for Baker Petrolite, purveyor of Magnacide H, came to the office of Headwaters' counsel (co-author of this Article) and threatened that if Headwaters did not "withdraw [their] victory," that Baker Petrolite and its

16. *See* Decl. of Glenn Miller, ¶ 3 (July 1998) and Responsive Decl. of Glenn Miller, ¶¶ 3-5 (Oct. 1998) Headwaters v. Talent Irrigation Dist. (No. 98-6004-AA) (D. Or.).
17. *Id.*
18. *Id.* To further demonstrate strength of Magnacide H, Baker Hughes' website estimates that "in a good flowing canal with a velocity greater than 0.5 miles per hour and aquatic weeds 24 inches or less in length, one can expect control for 8-12 miles." *Id.*
19. *See Streams Useful to Steelhead During State's Rainy Periods*, The Register-Guard (Dec. 24, 2008), B3.
20. *See* Headwaters, Inc. v. Talent Irrigation District, 243 F.3d 526, 528 (9th Cir. 2001).
21. Headwaters, Inc. et al. v. Talent Irrigation District, Docket No. CV-98-06004-ALA (D. Or. filed Jan. 5, 1998).
22. *Headwaters*, 243 F.3d at 528; Headwaters (No. 99-35373) Brief for the United States as Amicus Curiae in Support of Appellants (July 26, 1998) [hereinafter EPA Amicus Brief].
23. *Headwaters*, 243 F.3d at 531.
24. *Id.* at 532-35.
25. *Id.* at 532-33 (italics added).
26. *Id.* at 531 (citing Wisconsin Pub. Intervenor v. Mortier, 501 U.S. 597, 614, 21 ELR 21127 (1991) (FIFRA does not preempt entire field of pesticide regulation, but instead leaves room for local ordinances requiring permit before pesticide use)). This distinction that the CWA can provide local monitoring that FIFRA cannot is essential to why NPDES permitting is essential. *See, e.g., infra* Section VI.

industry cohorts would go to Washington and get the case overturned. Headwaters rightly refused, and the Industry put into place its powerful lobbying machine. CropLife America commissioned a "White Paper on the Exclusion of Application of Pesticides From NPDES Requirements" that came to light only incident to a Freedom of Information Act (FOIA) request submitted to EPA in 2006 for records and information pertaining to EPA's rulemaking for pesticide exemption.[27] Unhappy with the growing body of federal case law against its desired outcome and failing to instigate EPA to action, a coalition of pesticide industry groups lobbied EPA for a more lenient rule. Using the same "White Paper" information, the American Mosquito Control Association (AMCA) submitted a Petition for Rulemaking to EPA in January 2003.[28] The 2006 EPA Final Rule contained virtually all provisions requested in the 2003 AMCA Petition. Despite the fact that they got what they asked for, the Industry nonetheless filed suit in eight different federal circuit courts seeking to overturn EPA's rule, because it did not go far enough in providing the Industry with the unregulated freedom it desired. Citizen groups responded to EPA's rule and the Industry's lawsuits by filing complaints in three different federal circuit courts. Together, these cases became the *National Cotton* case.

During the post-*Headwaters* and pre-*National Cotton* decision timeframe from 2001-2009, a body of case law emerged encouraging EPA to take a position on the issue. The case law produced varied results, depending on whether decisions were rendered before or after EPA's 2003 Interim Guidance or the 2006 Final Rule. Some decisions, particularly those acting in response to the 2003 Interim Guidance, held that NPDES permits were not required. These decisions were effectively invalidated by *National Cotton*'s holding that the 2003 Interim Guidance could not stand.[29]

III. In Response to Pesticide Industry Lobbying and the Change in Administration, EPA Does Pesticide Industry's Bidding

The AMCA's Petition for Rulemaking requested that applications of mosquito larvicides or adulticides registered for mosquito control purposes under FIFRA not require NPDES permits, because such applications did not involve the discharge of pollutants into waters of the United States. This request was built off of the *Altman v. Town of Amherst, N.Y.*[30] district court decision (later vacated by the U.S. Court of Appeals for the Second Circuit). Specifically, the AMCA sought amendment of 40 C.F.R. §§122.2(a) and (b), which further define "pollutant" and "discharge of a pollutant" under the CWA, and the addition of a subsection (c) to exempt pesticides approved under FIFRA for mosquito control and that are used "for such purpose in substantial compliance with all provisions of its approved label and labeling that are relevant to protection of waters of the United States."[31]

The Industry's efforts soon bore fruit. In response to the Petition and the growing body of case law calling for EPA action, in July 2003, EPA issued an "interpretation" of the CWA to address jurisdictional issues under the CWA pertaining to pesticides registered under FIFRA (2003 Interim Guidance).[32] EPA solicited comments on the 2003 Interim Guidance.[33] The 2003 Interim Guidance stated that if applied consistent with a FIFRA label, a pesticide applied *directly to* or *over* waters of the United States resulting in deposits of pesticides into waters would not be a "waste" and therefore would not require an NPDES permit. If a pesticide were applied in such a manner to constitute a "waste," then an NPDES permit would be required. The George W. Bush EPA's 2003 Interim Guidance was an about-face from the position it took in the EPA Amicus Brief[34] it filed in the *Headwaters* case in 1999.[35]

On February 1, 2005, EPA published for comment an even broader proposed rule in its "Interpretive Statement and Notice of Proposed Rulemaking on the Application of Pesticides to Waters of the United States in Compliance With FIFRA" (2005 Interpretive Statement).[36] The 2005

27. One of the principal authors of the White Paper was Kenneth Weinstein of Latham & Watkins (counsel for the industry petitioners in the *National Cotton Council* case in the U.S. Courts of Appeal for the Seventh Circuit, the U.S. Court of Appeals for the Tenth, and the U.S. Court of Appeals for the District of Columbia (D.C.) Circuit, discussed below). *See* Decl. of Charles M. Tebbutt in Support of Environmental Petitioners' Motion to Dismiss, ¶ 3, Apr. 24, 2007, *National Cotton*, 553 F.3d 927 (2009) (Nos. 06-4630, 07-3182, 07-3185, 07-3180, 07-3183, 07-3186, 07-3181, 07-3184, 07-3187).
28. *See* Petition for Rulemaking Under the Clean Water Act Submitted to the EPA by AMCA (Jan. 16, 2003), *available at* http://www.prep-gov.net/2003/WDC99_705584_2.DOC [hereinafter AMCA Petition].
29. *See, e.g.*, Altman v. Town of Amherst, N.Y., 47 Fed. Appx. 62 (2d Cir. 2002) (unpublished opinion), *remand* 98 CV 237, Memorandum of Decision and Order (W.D.N.Y. Feb. 13, 2008) (unpublished opinion), and Peconic Baykeeper, Inc. v. Suffolk Co., 585 F. Supp. 2d 377 (E.D.N.Y. 2008), *aff'd in part, vacated in part*, 600 F.3d 180, 40 ELR 20098 (2d Cir. 2010).
30. Altman v. Town of Amherst, N.Y., 190 F. Supp. 2d 467 (W.D.N.Y. 2001), *order vacated by* Altman v. Town of Amherst, N.Y., 47 Fed. Appx. 62 (2d Cir. 2002).
31. AMCA Petition, *supra* note 28, at 1.
32. *See* EPA Memorandum from G. Tracy Mehan III, Assistant Administrator for Water et al., "Interim Statement and Guidance on Application of Pesticides to Waters of the United States in Compliance With FIFRA" (July 11, 2003), *available at* http://www.epa.gov/npdes/pubs/pesticide_interim_guidance.pdf.
33. *See* Interim Statement and Guidance on Application of Pesticides to Waters of the United States in Compliance With FIFRA, 68 Fed. Reg. 48385-88 (proposed Aug. 13, 2003).
34. *See Headwaters*, 243 F.3d at 531; EPA Amicus Brief at 14-15 (arguing case law holds compliance with FIFRA does not obviate need to comply with other environmental laws).
35. Separate from the 2003 Interim Guidance, 2005 Interim Statement, and 2006 Final Rule, yet worth mentioning, EPA also sought to limit the reach of case law on the issue of pesticides drifting into water bodies. In September 2003, EPA issued a Memorandum indicating that it would only acquiesce to the *League of Wilderness Defenders v. Forsgren*, 309 F.3d 1191, 33 ELR 20107 (9th Cir. 2002) decision within the Ninth Circuit. *See* EPA Memorandum referenced in EPA's 2006 Final Rule, *infra* note 37 n.3. In *Forsgren*, the U.S. Forest Service sprayed pesticides from an airplane without an NPDES permit directly into rivers. The Ninth Circuit held that the airplane was a point source, and an NPDES permit was required. EPA's Memorandum (issued during the Bush Administration) was an attempt to minimize the environmental protection gains won in *Forsgren*.
36. *See* Application of Pesticides to Waters of the United States in Compliance With FIFRA, 70 Fed. Reg. 5093-5100 (proposed Feb. 1, 2005) (to be codi-

Interpretive Statement superseded the 2003 Interim Guidance, but its language and analysis mirrored that of the 2003 Interim Guidance.

Finally, in November 2006, EPA issued its Final Rule (2006 Final Rule).[37] The 2006 Final Rule, codified at 40 C.F.R. §122.3(h), stated that an NPDES permit would *not* be required (1) for "the application of pesticides directly to waters of the United States in order to control pests," or (2) for "[t]he application of pesticides to control pests that are present over waters of the United States, including near such waters, where a portion of the pesticides will unavoidably be deposited to waters of the United States in order to target the pests effectively."[38] The Industry therefore got almost exactly what it wanted with the 2006 Final Rule: unfettered ability to apply pesticides directly to or over the waters of the United States without an NPDES permit for applications consistent with FIFRA. What the Industry did not like about the 2006 Final Rule was that where a pesticide was applied *not* in conformance with FIFRA, the application could be deemed a "discharge of a pollutant" and subject to NPDES permitting requirements.

IV. Pesticide Industry's Unsuccessful Attempt to Broaden EPA's Exemption: *National Cotton Council of America v. U.S. EPA*

Unsatisfied, the Industry began a full-scale, multidistrict litigation attack in eight federal courts to secure its goal, seeking an even broader exemption from the NPDES program for more types of pesticide applications than the 2006 Final Rule encompassed.[39] The Industry's litigation backfired. In 2009, the U.S. Court of Appeals for the Sixth Circuit declared the 2006 Final Rule invalid in the *National Cotton* decision. The court ordered EPA to require NPDES permits for applications directly to or over waters of the United States, and held that residual applications could also be pollutants under the CWA.

The legal basis for the Industry's claim in *National Cotton* was marginal at best. The filings were sometimes by the same law firm with different named clients in different circuits, and appeared to be a thinly veiled attempt to determine the appellate forum that the Industry desired to hear the case. Industry plaintiffs included, for example, Agribusiness Association of Iowa, American Farm Bureau Federation, American Forest & Paper Association, BASF Corporation, Bayer CropScience, CropLife America, Delta Council, Eldon C. Stutsman, Inc., FMC Corporation, Illinois Fertilizer and Chemical Association, the National Cotton Council of America, Responsible Industry for a Sound Environment, Southern Crop Production Association, and Syngenta Crop Protection, Inc. Different environmental and organic farm petitioners filed petitions for review in three different circuit courts, seeking that the 2006 Final Rule be vacated because it was inconsistent with the plain language of the CWA.[40]

Under the multidistrict litigation procedural rules,[41] the Sixth Circuit, a forum chosen by Industry (an important fact to keep in mind in light of CropLife America's recent claims to Rep. Darrell Issa (R-Cal.) that "activist courts" issued the decision the Industry is now attempting to override through legislation),[42] was selected by lottery as the jurisdiction to hear all of the cases and was captioned as *National Cotton Council of America v. U.S. EPA* (Case No. 06-4630).[43]

The Sixth Circuit decision held that certain types of pesticides discharged into, over, or near waters of the United States in fact required NPDES permits and *could not be exempted from the CWA through regulation*, and vacated EPA's 2006 Final Rule.[44] The court initially granted EPA a stay of the mandate until April 2011, recently extended until October 31, 2011, to allow the Agency to promulgate an NPDES permit program to address these pesticide discharges. EPA's permit will form the floor for states to follow for all such NPDES permits nationwide.

Dissatisfied with the Sixth Circuit's decision, the Industry heavily lobbied for EPA to request rehearing en banc. Furthermore, the Secretary of the U.S. Department of Agriculture (USDA) wrote a letter requesting that EPA seek further judicial review of this decision. The Secretary's request was based upon purported "significant adverse effects" that the Sixth Circuit opinion would have upon farmers and USDA agencies that engage in pesticide applications.[45] EPA refused to seek rehearing, and Industry was forced to file requests on its own, which were denied[46]

The Industry then filed two petitions for certiorari to the Supreme Court, and even obtained from certain farming-

fied at 40 C.F.R. pt. 122) (2005 Interpretive Statement).

37. *See* Application of Pesticides to Waters of the United States in Compliance With FIFRA, Final Rule. 71 Fed. Reg. 68483-92 (Nov. 27, 2006) (to be codified at 40 C.F.R. pt. 122) (2006 Final Rule).
38. *Id.* at 1.
39. Industry filed in the U.S. Court of Appeals for the Third Circuit (Dec. 16, 2006), U.S. Court of Appeals for the Fourth Circuit (Dec. 18, 2006), U.S. Court of Appeals for the Fifth Circuit (Dec. 14, 2006), U.S. Court of Appeals for the Sixth Circuit (Dec. 18, 2006), Seventh Circuit (Dec. 12, 2006), U.S. Court of Appeals for the Eighth Circuit (Dec. 12, 2006), Tenth Circuit (Dec. 13, 2006), and the D.C. Circuit (Dec. 12, 2006).
40. Environmental groups and organic farms filed in the U.S. Court of Appeals for the First Circuit (Dec. 19, 2006), Second Circuit (Dec. 15, 2006), and the Ninth Circuit (Dec. 11, 2006).
41. *See* Multidistrict Litigation Rules, 28 U.S.C. §§1407 and 2112(a)(3).
42. *See, e.g.*, Anne C. Mulkern, *Chemicals: Pesticide Industry Ramps Up Lobbying in Bid to Pare EPA Rules*, Greenwire (Feb. 24, 2011), http://www.eenews.net/public/Greenwire/2011/02/24/3 (last visited Sept. 1, 2011).
43. As further evidence of its disingenuousness, multiple industry entities, including the AMCA, also filed as intervenors in support of EPA's rulemaking. Thus, both the producers and users of the chemicals at issue were fully represented both attacking and supporting the Rule.
44. *See* National Cotton Council of America v. U.S. EPA, 553 F.3d 927, 940, 39 ELR 20006 (6th Cir. 2009).
45. *See* Letter from Thomas J. Vilsack, Secretary, USDA, to Lisa P. Jackson, Secretary, U.S. EPA 1-2 (Mar. 6, 2009) (and warning of "profound implications" for farmers).
46. Order Denying Rehearing at 1, Doc. No. 00615630471, National Cotton (Aug. 3, 2009).

state members of Congress an amicus brief in support of their petitions.[47] Both petitions for certiorari were denied.[48]

V. EPA's Response to *National Cotton*: The Pesticide General Permit

In response to *National Cotton*, EPA indicated that during the stay it would issue a general permit (Pesticide General Permit) for covered pesticide applications consistent with the Sixth Circuit's opinion, but a pre-publication draft Pesticide General Permit was not even issued until more than two years later. Part of the delay in issuing the draft Pesticide General Permit was the Industry's unsuccessful appeal to the Supreme Court and EPA's request for an extension of time to prepare the permit. As a result, the pollution continues. On June 4, 2010, EPA finally published its draft Pesticide General Permit in the *Federal Register*.[49] The Pesticide General Permit is now to become effective on October 31, 2011. Not coincidentally, another whole pesticide application season has been missed by the lack of a permit.

Additional factors must be considered by EPA before it finalizes the Pesticide General Permit, namely Endangered Species Act (ESA)[50] consultations.[51] On June 17, 2011, the National Marine Fisheries Service (NMFS) issued its draft Biological Opinion and concluded that the Pesticide General Permit in its current form is likely to jeopardize the continued existence of 33 endangered or threatened species and result in the destruction or adverse modification of designated critical habitat for 29 of those species.[52] The NMFS is seeking a stronger permit with stricter conditions, simply requesting that EPA identify pesticides covered by the Pesticide General Permit that are causing the most severe adverse impacts to endangered species, requiring additional protective measures for these pesticides, mandatory reporting of discharges, and developing a monitoring plan.[53] The Department of Fish and Wildlife is also to complete a consultation, and it may find additional impacts on species.

VI. Using Common Sense—Applying "Needs Analysis"

One of the arguments advanced by the Industry is that without chemicals, or by reducing our use of chemicals, pest issues will overwhelm the agriculture industry, and diseases like West Nile virus will run rampant. Industry ignores examples where aquatic pesticide use can be reduced without sacrificing human or environmental health interests.

In *Saint John's Organic Farm v. Gem Co. Mosquito Abatement Dist. (GCMAD)*,[54] an organic farmer sued over the county's failure to obtain an NPDES permit to apply pesticides aerially and aquatically. The resulting settlement agreement was a progressive and prudent outcome for human health, the environment, the county, and the farmer. Specifically, the relevant portions of the settlement agreement provided for GCMAD to undertake the following responsibilities:

1. Make a concerted effort to substantially reduce over five years its use of adulticides by meeting yearly targets;
2. Not engage in aerial spraying except in declared health emergencies;
3. Not engage in truck fogging within 300 feet of river or wildlife management areas, or 150 feet of irrigation canals;
4. Conduct surveillance for mosquitoes and apply threshold standards before fogging;
5. Contribute funds to the soil and water conservation district to improve drainage and thereby reduce unnatural mosquito habitats; and
6. Work with landowners to reduce man-made mosquito habitats.

As a result of the settlement agreement, GCMAD began to implement an integrated pest management program. Integrated pest management is, essentially, an approach that:

> [R]elies to the greatest possible extent on biological rather than chemical measures, and emphasizes the prevention of pest problems with crop rotation; the reintroduction of natural, disease-fighting microbes into plants/soil, and release of beneficial organisms that prey on the pests. Once a particular pest problem is identified, responses include the use of sterile males, biocontrol agents like ladybugs. Chemical pesticides are only used as a last resort.[55]

GCMAD is still in the process of implementing its integrated pest management approach, but even its ini-

47. *See* Brief of Members of Congress as *Amici Curiae* Supporting Petitioners, CropLife America et al. v. Baykeeper et al. (Case No. 09-533), and American Farm Bureau Federation et al. v. Baykeeper et al. (Case No. 09-547) (Dec. 4, 2009), *available at* http://www.scotusblog.com/wp-content/uploads/2010/02/09-53347_Amicus-brief-of-members-of-Congress.pdf.
48. *See* CropLife et al. v. Baykeeper et al., No 09-533 and American Farm Bureau Federation et al. v. Baykeeper et al., 130 S. Ct. 1505 (Feb. 22, 2010).
49. Draft National Pollutant Discharge Elimination System (NPDES) Pesticide General Permit for Point Source Discharges From the Application of Pesticides, 75 Fed. Reg. 31775-85 (June 4, 2010).
50. 16 U.S.C. §§1531-1544, ELR Stat. ESA §§2-18.
51. *See* 16 U.S.C. §1536(a)(2).
52. Draft Endangered Species Act Section 7 Consultation Biological Opinion on the U.S. Environmental Protection Agency's Proposed Pesticides General Permit, U.S. National Marine Fisheries Service (Doc. No. EPA-HQ-OW-2010-0257-0945) 154 (June 17, 2011), http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OW-2010-0257-0945 (last visited Sept. 1, 2011).
53. *See, e.g.*, *id.* at 150-51 and Letter from U.S. Reps. Edward J. Markey (D-Mass.) and Grace Napolitano (D-Cal.) to Lisa Jackson, EPA Administrator, (Aug. 9, 2011), *available at* http://markey.house.gov/docs/080911_letter_to_epa_on_nmfs_biop_pgp1.pdf.
54. 574 F.3d 1053, 1057, 39 ELR 20156 (9th Cir. 2009).
55. *See* Fact Sheet, Sustainable Agriculture Techniques, Union of Concerned Scientists (Aug. 24, 2008), *available at* http://www.ucsusa.org/food_and_agriculture/science_and_impacts/science/sustainable-agriculture.html (typographical errors original).

tial efforts have enabled it to make "substantial" time and money-saving changes to its mosquito surveillance program while simultaneously improving its capacity to provide real-time information, make appropriate and timely control applications, and use smaller amounts of pesticides.[56] Even though GCMAD has increased its surveillance activities, its 2010 surveillance cost was only $6,289, of which $2,007 was reimbursed.[57] Increased surveillance resulted in decreased adulticide use and consequently decreased chemical costs.[58] Moreover, in 2010, none of the mosquitoes tested by GCMAD tested positive for West Nile virus, there were no confirmed human cases of West Nile virus, and no horses tested positive for West Nile virus.[59]

Concomitantly with efforts like those in Gem County, pest resistance to chemicals is lessened by avoiding unnecessary uses. Aerial spraying, known to be the least efficacious means of mosquito control and to create the widest route of human exposure, has also been eliminated. Instead, application of better science, not to mention good old-fashioned common sense, has led to a greater emphasis on less toxic larvicides to control mosquito populations in the first instance, and then improved mosquito population surveys to determine whether, where, and when pesticides should be applied.

GCMAD is also fully aware of the pending need to obtain NPDES permits under the *National Cotton* decision, is prepared to apply for such permits, and "is confident that the permit will not impede the district's ability to provide outstanding mosquito control services to its constituency."[60]

This type of management improvement has been brought about by adopting "needs analysis." Needs analysis is the simplest form of best available technology and should be present in all NPDES permitting. In other words, do the chemicals need to be used, are there alternatives, and if no alternatives are available, how can the chemicals be more effectively applied? By going through this process in the *GCMAD* case, pesticide use has been reduced by 50% or more, while pest control has remained at least equally, if not more, effective.[61]

Another real-life example comes from the results following the *Headwaters* case, where by applying a needs analysis format, Talent switched from a chemical herbicide to mechanical means for controlling aquatic vegetation, thus eliminating *entirely* its aquatic chemical applications and avoiding the need for an NPDES permit altogether. Simultaneously, the environmental quality of the waterways in the irrigation district has improved.[62]

VII. The Legal Framework Contemplates Technology-Forcing Provisions to Eliminate Discharges to Our Nation's Waters

Nearly 40 years ago, Congress revolutionized U.S. environmental laws by seeking to control, and ultimately eliminate, water pollution, when in 1972 it enacted wide-ranging reforms to the FWPCA. The vision of the 92nd Congress in enacting what is commonly known as the CWA stands as one of the legislative pinnacles in the history of this Congress and of the United States. Based upon decades of experience, Congress recognized that reliance on states to fund, implement, and enforce effective water pollution control (and resource protection) policies, without the financial, technical, and political assistance of a strong federal program, was doomed to continued failure. Congress created a broad but flexible federal "floor" of clean water safeguards, a mandatory but innovative system for protecting the nation's waters and the public's health. As the legislative history of the CWA reflects:

> [s]ection [301] clearly establishes that the discharge of pollutants is unlawful. Unlike its predecessor program which permitted the discharge of certain amounts of pollutants under the conditions described above, this legislation would clearly establish that no one has the right to pollute—that pollution continues is because of technological limits, not because of any inherent right to use the nation's waterways for the purpose of disposing of wastes.[63]

Under the CWA, the discharge of pollutants is generally prohibited, but EPA may establish a uniform national limitation on the discharge of an identified pollutant from categories of sources (called a General Permit), or EPA may also issue permits on a case-by-case basis taking into account local environmental conditions.[64]

Great advances have been made in reducing water pollution since 1972. Of course, the successes have been fewer, and slower in coming, than the 92nd Congress envisioned. This is due to several factors, including recalcitrance and opposition of powerful regulated industries to strong implementation and enforcement of the provisions of the CWA to achieve the law's goal of restoring and maintaining the chemical, physical, and biological integrity of the nation's waters. Since the CWA's shift in focus, technologies and scientific knowledge have continued to progress

56. *See* GCMAD Annual Report 16 (2010), *available at* http://gcmad.org/Annual_Reports/2010_Year_End_Report_Final.pdf.
57. *Id.* at 12.
58. *See id.* at 12-15.
59. *Id.* at 9, 12.
60. *Id.* 3, 16.
61. In contrast, the pesticide industry has offered no concrete examples of increased threats to public health resulting from NPDES permitting. The fears fomented are myth, not reality. Recent history also shows this fear to be unfounded. Four states—California, Nevada, Oregon, and Washington—issued general NPDES permits covering many pesticide applications to waters after the 2001 *Headwaters* decision. And, as EPA has noted, "twenty-three states have developed permits to cover some types of pesticide discharges." Decl. of James A. Hanlon, Director, Office of Wastewater Management, EPA Office of Water, ¶ 37 (Apr. 8, 2009) *National Cotton* (No. 06-4630 and consolidated cases). In none of these situations were pest control efforts substantially impeded, or a public health threat caused, by the imposition of a permitting requirement.
62. *See* Decl. of Tonya Graham in Opposition to EPA's Motion to Stay Mandate ¶¶ 4-8 (May 12, 2009); *National Cotton* (No. 06-4630 and consolidated cases).
63. S. Rep. No. 92-414 (1st Sess.) at 42 (1971).
64. *See* 33 U.S.C. §1342.

with respect to all pollution sources, thus contributing to a more evolved commonsense approach of how to best use, or avoid or reduce use of, man-made chemicals to address pest issues.

While one would hope that common sense translated into sensible action, unfortunately that has not been the case with the pesticide industry. The Industry's administrative, legal, and legislative campaign has thus far been framed by an industry that is hell-bent on maintaining sales and dealing with problems in ways that are no longer the smartest, safest, and most efficacious methods of managing pest problems in light of what we now know about chemicals. The CWA cannot be ignored simply because the Industry has made use of regulatory black holes for so long that it now claims that filling these holes will create an economically or administratively inconvenient problem for them. Smarter environmental regulation is necessary for the use of these chemicals, and cases such as *Headwaters* and *Saint John's Organic Farm* are but two examples of how this can be achieved. Upholding the *National Cotton* decision by requiring NPDES permits for certain pesticide applications will reinvigorate the CWA to its intended strength, and enable FIFRA to function as Congress intended.

The Supreme Court has held that "when two statutes are capable of co-existence, it is the duty of the courts [and by implication the executive branch], absent a clearly expressed congressional intention to the contrary, to regard each as effective."[65] That is exactly the result of the *National Cotton* decision; the CWA will permit certain applications of pesticides with appropriate alternatives analysis and restrictions to protect people and the environment, and FIFRA will direct the actual use of the pesticide. The *National Cotton* result is also consistent with other cases finding that FIFRA must co-exist with, and does not preempt, other statutes.[66]

FIFRA is a very general statute that requires certain chemicals used as pesticides to be registered by EPA. The goal of FIFRA is *not* to prevent introduction of any chemicals into the environment, but to direct the registration of chemicals satisfying EPA's cost-benefit analysis, and the creation of a label governing the use of the chemical. While FIFRA labels are chemical-specific, they do not provide site-specific guidance on usage, which is precisely one of the gaps that CWA NPDES permitting fills.[67] When a pesticide enters the waters of the United States, FIFRA provides no method for analyzing the local impact and regulating the discharge from a particular point source, but the CWA provides for, in addition to determination of whether chemicals are necessary in the first place, analysis of site-specific conditions, such as water quality monitoring, buffers based on local conditions, needs of endangered species, existence of CWA §303 impaired waters, allocation pursuant to watershed total maximum daily loads (TMDLs), and numerous other factors that were not envisioned, and cannot be accounted for, by FIFRA. The CWA is therefore necessary to provide site-specific guidance on chemical usage.

Relying on FIFRA alone is doomed to perpetuate a flawed system. While EPA has registered chemicals under FIFRA, in fact, it has not fully examined them. In registering a chemical, EPA does not, for instance, assess the impacts of so-called inert ingredients in pesticides, and it currently is not doing so despite acknowledgements of these flaws.[68] NPDES permitting provides EPA with a mechanism to determine site-specific concerns related to these chemicals that are otherwise still unknown to the public.[69]

EPA does not (and cannot) warrant a user's compliance with FIFRA, that complying with FIFRA satisfies all other federal environmental laws,[70] or that inert ingredients will not harm the environment. Since EPA cannot

65. Ruckelshaus v. Monsanto Co., 467 U.S. 986, 1018, 14 ELR 20539 (1984).
66. *See, e.g.,* Washington Toxics Coalition v. EPA, 413 F.3d 1024, 35 ELR 20138 (9th Cir. 2005). In 2001, nonprofit groups sued EPA for its failure to consult under the ESA with the NMFS prior to approving 54 pesticide active ingredients. EPA argued that because it complied with FIFRA, it did not have a duty to consult. The pesticide industry responded en masse by intervening in the case. The intervenors included CropLife America, Washington State Farm Bureau, and 35 groups representing pesticide manufacturers, formulators, distributors, sellers, and applicators (some of which were also plaintiffs in the *National Cotton* cases). The district and appellate courts agreed that EPA was required to comply with the ESA *as well as with* FIFRA. *Id.* at 1030 (italics added). This outcome is consistent with other holdings. *See also* Northwest Coalition for Alternatives to Pesticides v. Lyng, 844 F.2d 588, 18 ELR 20738 (9th Cir. 1988); Save Our Ecosystems v. Clark, 747 F.2d 1240, 14 ELR 20241 (9th Cir. 1984); Oregon Envtl. Council v. Kunzman, 714 F.2d 901, 13 ELR 20901 (9th Cir. 1983) (registration under FIFRA is inadequate to address environmental concerns under the National Environmental Policy Act, 42 U.S.C. §§4321-4370d).
67. The CWA's purpose of restoration and maintenance of the nation's water quality is required to fill the void that exists once FIFRA stops. In the U.S. environmental statutory framework, there are other statutes that similarly fill other FIFRA gaps, for example the Food Quality Protection Act of 1996 (Pub. L. No. 104-170, 110 Stat. 1489), which requires EPA to reevaluate the potential health risks to children of exposure to pesticides found in food. *See* 21 U.S.C. §346a.
68. FIFRA "inert" ingredients are simply non-target chemicals added to the compound and often are more toxic than the active pesticide ingredient itself. Many hazardous chemicals that are used as pesticide inert ingredients are already designated by EPA as hazardous substances through statutory programs other than FIFRA. These chemicals are regulated under these statutes because EPA has made individual determinations that each of them is toxic, flammable, explosive, hazardous, or otherwise dangerous to human and environmental health. *See, e.g.,* EPA Response to Northwest Coalition for Alternatives to Pesticides et al. Petition for Rulemaking "To Require Disclosure of Hazardous Inert Ingredients on Pesticide Product Labels," at 3 (Sept. 30, 2009) ("By embarking on such rulemaking, EPA intends to effect sea change in how inert ingredient information is made available to the public.") (on file with co-authors). The fact that other statutory programs regulate so many chemicals used as inert ingredients demonstrates the extent to which many of these chemicals present an unreasonable risk of injury to human health and the environment.
69. At least 16 inert ingredients are identified as toxic under the CWA as listed in EPA's Substance Registry Services (SRS), http://iaspub.epa.gov/sor_internet/registry/substreg/home/overview/home.do. At least 96 inert ingredients have been evaluated for carcinogenicity by the International Agency for Research on Cancer (IARC), according to the SRS. Of these, two inert ingredients are classified as carcinogenic to humans, and 17 are classified as possibly carcinogenic to humans. *See* Agents Reviewed by the IARC Monographs, Vol. 1-88 (on file with co-authors). EPA has "long known and acknowledged that some inert ingredients are not benign to human health or the environment. The 'inert' ingredients in some products may be more toxic or pose greater risks than the active ingredient." EPA's Pesticide Registration Notice 97-6, http://www.epa.gov/PR_Notices/pr97-6.html (last visited Sept. 1, 2011).
70. *See* Headwaters, Inc. v. Talent Irrigation District, 243 F.3d 526, 531 (9th Cir. 2001) (citing EPA Amicus Brief at 12).

make blanket determinations through its FIFRA label approval process of whether, or under what conditions and what amounts, it is safe to discharge a particular pesticide into a particular body of water, the CWA's purposes of zero tolerance for pollution, and restoration and maintenance of the nation's water quality, is clearly required to fill this void. For decades, however, EPA has ignored the potential conflict between the scope of the CWA, FIFRA, and other laws. Industry has taken advantage of EPA's failure to close this gap. Now, at risk of losing a profitable loophole because of the *National Cotton* decision, the Industry is hoping to legislatively obtain the right to continue to ignore the CWA's zero-discharge tolerance levels in favor of a FIFRA-only approach, thereby sacrificing the protection of the environment and human health for its financial security.

VIII. Pesticide Industry Interests Continue Lobbying Congress

Since the 107th Congress, immediately after the *Headwaters* decision, no fewer than eight bills have been introduced seeking to exempt pesticide applications from the NPDES permitting requirements.[71] Four of these bills have been introduced since the Supreme Court denied the petition for certiorari in *National Cotton* in the 111th and 112th Congress.[72] All of these bills attempt to legitimize continued pollution of U.S. waters.

H.R. 872 (112th Cong. 1st Session), the Reducing Regulatory Burdens Act of 2011, passed the U.S. House of Representatives on March 31, 2011, and was sent to the U.S. Senate. Very swiftly, H.R. 872 was assigned to the Senate Agriculture Committee and passed via voice vote. As evidence of the Industry's efforts to push the legislation through without public involvement, according to Govtrack.us, "[t]he vote [for H.R. 872] was held under a suspension of the rules to cut debate short and pass the bill, needing a two-thirds majority. This usually occurs for noncontroversial legislation."[73] Recent press indicates, however, that H.R. 872 is far from noncontroversial in its content and in the procedures by which it was pushed through the House and the Senate Committee.[74, 75] Furthermore, the Committee hearings have only permitted government and Industry interests to testify in person; the U.S. Geological Survey was unable to testify regarding its report, *Pesticides in the Nation's Streams and Groundwater*, because of short notice of the hearing, and counsel for *Headwaters* and *National Cotton*, despite an invitation from the Democratic minority, was only allowed to submit written testimony for the Committee's file.[76]

On July 6, 2011, one of the lowest forms of legislative methods, the appropriations rider, was used to insert the Reducing Regulatory Burdens Act of 2011 in its working draft.[77]

What passage of the Industry's legislation prior to October 31 would do is to gut almost every environmental law applicable to this issue; the bill would prohibit the NPDES permit requirements under the CWA and eliminate any ESA consultations.[78] Industry hopes that it can succeed in passing its bill before the public, and your representatives in Washington, become aware of what protections America is losing out on by not insisting that existing environmental laws be followed.

IX. Public Health Unnecessarily at Risk

Pesticide exposure is a very serious national health concern. Children already have high body burdens of industrial chemicals, many of which are pesticides, at birth.[79] Based in large part on this growing body of knowledge, Congress unanimously passed the Food Quality Protection Act of 1996, which required EPA to reevaluate the potential health risks to children of exposure to pesticides found in food.[80] After conducting research, EPA was required to establish, modify, or revoke tolerances for pesticide chemical residues on food products. Tolerances under the Food

71. *See* Presentation of Bart Kempf, Counsel to Senate Agriculture, Nutrition and Forestry Committee, Congressional Response to *National Cotton Council v. EPA*, ABA Webinar (Apr. 27, 2011) at 3-13 (PowerPoint presentation slides on file with co-authors).
72. *See* To Amend the Federal Insecticide, Fungicide, and Rodenticide Act to Exempt the Application of Pesticides Subject to That Act, When Applied in Conformance With That Act, From Certain Permit Requirements Under the Federal Water Pollution Control Act, and for Other Purposes, H.R. 6273, 111th Cong. (2d Sess. 2010); A Bill to Amend the Federal Insecticide, Fungicide, and Rodenticide Act to Improve the Use of Certain Registered Pesticides, S. 3735, 111th Cong. §2 (2010); A Bill to Amend the Federal Insecticide, Fungicide, and Rodenticide Act to Improve the Use of Certain Registered Pesticides, S. 718, 112th Cong. §1 (2011); Reducing Regulatory Burdens Act of 2011, H.R. 872, 112th Cong. §1 (2011).
73. Bill Overview, H.R. 872, Reducing Regulatory Burdens Act of 2011, http://www.govtrack.us/congress/bill.xpd?bill=h112-872 (last visited Sept. 1, 2011).
74. *See* Jeremy P. Jacobs, *After Markup, Dems Ramp Up Concerns About Permitting Bill*, E&E Daily (June 24, 2011).
75. H.R. 872 Committee hearing transcripts indicate that the only witnesses permitted to testify before the Committee in person were from federal or state government agencies, or from industry interest groups (namely AMCA, who filed the petition for rulemaking), and the only submitted materials recognized were from the American Farm Bureau Federation, Chemical Producers & Distributors Association, CropLife America, Responsible Industry for a Sound Environment, the Pesticide Policy Coalition, and the USGS. *Hearing to Consider Reducing the Regulatory Burdens Posed by the Case,* National Cotton Council v. EPA *(6th Cir. 2009) and to Review Related Draft Legislation*, 112th Cong., Serial No. 112-3 and 112-10 v (2011).
76. *See id.* at 9-10.
77. *See* Jeremy Jacobs, *House Republicans Trying to Use Appropriations Process to Move Pesticide Permitting Bill*, N.Y. Times (July 8, 2011), http://www.nytimes.com/gwire/ 2011/07/08/08greenwire-house-republicans-trying-to-use-appropriations-68495.html (last visited Sept. 1, 2011).
78. Simultaneous with the pesticide industry's efforts to encourage EPA to carve out exemptions for pesticide applications under the CWA, the industry has also been seeking relief from its obligations under the ESA. In 2005, the Ninth Circuit ruled that compliance with FIFRA for streamside pesticide use did *not* exempt EPA from complying with §7(a)(2) consultations under the ESA. *See* Washington Toxics Coalition v. EPA, 413 F.3d 1024, 1035-36, 35 ELR 20138 (9th Cir. 2005).
79. *See, e.g.,* Environmental Working Group, Body Burden—The Pollution in Newborns (July 14, 2005), *available at* http://www.ewg.org/reports/bodyburden2/execsumm.php.
80. *See* 21 U.S.C. §346a.

Quality Protection Act are the maximum amount of pesticides allowed to remain on food products.

Organophosphorus pesticides are among the most widely used pesticides in the United States and are often used in the types of applications subject to NPDES permitting. According to EPA sales data, organophosphorus pesticides account for over one-third of all insecticides used in the United States. In a study conducted by the National Center for Environmental Health, researchers found that children ages 6-11 had significantly higher levels of organophosphorus residuals in their bodies than the rest of the population.[81] A similar study found that, out of the 110 children living in the Seattle metropolitan area that were sampled, 99% had measurable quantities of residual organophosphorus pesticides in their bodies.[82] Data from the Centers for Disease Control and Prevention (CDC) indicates that sampled children had particularly high body burdens of chlorpyrifos, a common organophosphorus pesticide used to control insects.[83]

The negative effects that these pesticides have on children are well-documented. For instance, researchers have linked pesticide use with an 11-fold increase in the risk of childhood leukemia and a 10-fold increase in the risk of childhood brain cancer.[84] Children with high levels of pesticides in their blood will have an increased likelihood of developing lymphoma.[85] Pregnant women who are exposed to pesticides suffer an increased risk of having children with numerous birth defects, including cleft lip/palate, limb-reduction defects, and neural tube defects.[86] Just this spring, the results of three separate studies financed by EPA and the National Institute for Environmental Health Sciences made strikingly similar conclusions connecting even low-level prenatal exposure to organophosphate pesticides and low IQ in children.[87] These are but a few of the examples supported by studies showing pesticide impacts on human health.

The public health implications of pesticide exposures were anticipated, if not fully understood, 40 years ago when the CWA was being discussed. During debate, Sen. Robert Dole (R-Kan.) pointedly observed that some pesticides "retain their potency for virtually unlimited periods after application, their residues are introduced into the complicated food chains at work in nature, and, ultimately, they become concentrated at levels which are hazardous to both animal and human life."[88]

The Industry argues that NPDES regulation will be unnecessarily financially and administratively burdensome. What about the burdens pesticides impose on children's health? Any future disruption to food production or disease control is purely speculative, but impacts to children's health are real and are happening right now. The pesticides that would be subject to NPDES control are often potent neurotoxins that impair intellectual and physical development. And many of these pesticide ingredients, as previously cited, are also known or suspected carcinogens.[89]

Industry's arguments of gloom and doom are, as usual, greatly exaggerated. The vast majority of the nation's agricultural activities were unaffected by the rule in the first place, and will remain unaffected by the NPDES process, both because the CWA exempts agricultural stormwater and irrigation return flows from NPDES regulation, and because most agricultural pesticide use does not involve discharges "to" or "over" waters. Even EPA's own estimates, questionable as they may be, indicate that more than 80% of the permit requests will be coming from local, state, and federal agencies. Despite CropLife's and the American Farm Bureau Federation's attempts to instill fear that farmers and ranchers will bear the brunt of additional permitting, the truth is that farmers and ranchers are not the entities who are targeted by the permitting requirements.[90]

Other issues also need to be pointed out. For instance, unlike the CWA, FIFRA imposes no requirements for site-specific analysis of the presence of endangered species, or of whether certain waterways need special protections because of extraordinarily pure conditions, e.g., in wilderness areas, or because they are already polluted at levels toxic to fish and wildlife.[91] Thus, the state of California, in

81. Dana B. Barr et al., *Concentrations of Dialkyl Phosphate Metabolites of Organophosphorus Pesticides in the U.S. Population*, 112 Envtl. Health Persp. (2003), *available at* http://ehp03.niehs.nih.gov/article/fetchArticle.action?articleURI=info%3Adoi%2F10.1289%2Fehp.6503.
82. Chensheng Lu et al., *Biological Monitoring Survey of Organophosphorus Pesticide Exposure Among Pre-School Children in the Seattle Metropolitan Area*, Envtl. Health Persp., *available at* http://ehp03.niehs.nih.gov/article/citationList.action;jsessionid=92E1792C5124C09C553A5735008C9B8F?articleURI=info%3Adoi%2F10.1289%2Fehp.01109299.
83. Centers for Disease Control, Fourth National Report on Human Exposure to Environmental Chemicals 135-36 (2009).
84. Janice M. Pogoda & Susan Preston-Martin, *Household Pesticides and Risk of Pediatric Brain Tumors*, 105 Envtl. Health Persp., 1214-20 (1997).
85. Shelia Hoar Zahm et al., *A Case-Control Study of Non-Hodgkin's Lymphoma and the Herbicide 2,4-Dichlorophenoxyacetic Acid in Eastern Nebraska*, 1 Epidemiology 349-56 (1990).
86. *See* J.E. Gordon & C.M. Shy, *Agricultural Chemical Use and Congenital Cleft Lip and/or Palate*, 36 Arch. Envtl. Health 213-21 (1981); David A. Schwartz & James P. LoGerfo, *Congenital Limb Reduction Defects in the Agricultural Setting*, 78 Am. J. Pub. Health 654-57 (1988); Gary M. Shaw et al., *Maternal Pesticide Exposure From Multiple Sources and Selected Congenital Anomalies*, 10 Epidemiology 60-66 (1999); Andrew E. Czeizel, *Pesticides and Birth Defects [Letter]*, 7 Epidemiology 111 (1996); Erin M. Bell et al., *A Case-Control Study of Pesticides and Fetal Death Due to Congenital Anomalies*, 12 Epidemiology 148-56 (2001).
87. *See* Virginia Rauh et al., *Seven-Year Neurodevelopmental Scores and Prenatal Exposure to Chlorpyrifos, a Common Agricultural Pesticide,* Envtl. Health Persp. (2011), *available at* http://ehp03.niehs.nih.gov/article/info:doi/10.1289/ehp.1003160; Stephanie M. Engel et al., *Prenatal Exposure to Organophosphates, Paraoxonase 1, and Cognitive Development in Childhood,* Envtl. Health Persp. (2011), *available at* http://ehp03.niehs.nih.gov/article/info:doi/10.1289/ehp.1003183; Maryse Bouchard et al., *Prenatal Exposure to Organophosphate Pesticides and IQ in 7-Year-Old Children*, Envtl. Health Persp. (2011), *available at* http://ehp03.niehs.nih.gov/article/info:doi/10.1289/ehp.1003185.
88. S. Rep. No. 92-414, *supra* note 63, at 99.
89. *See* EPA SRS and IARC references, *supra* note 69.
90. *See* Draft NPDES Application and Applicator Estimates and Information Sources, EPA at 1-2 (Sept. 23, 2009), *available at* http://www.epa.gov/pesticides/ppdc/2009/october/session1-npdes.pdf.
91. In one nationwide study, "[m]ore than one-half of the agricultural and urban streams sampled had concentrations of at least one pesticide that exceeded a guideline for the protection of aquatic life," despite regulation by FIFRA, with most samples containing multiple pesticides. U.S. Geological Survey (USGS), The Quality of Our Nation's Waters, Nutrients,

its comments opposing the now-vacated EPA rule, noted that 27% of its waters were impaired by pesticides and that NPDES permitting gave it an important tool to address point source discharges of pesticides.[92]

Studies on health and surveys on water quality all indicate greater protections are needed for human health and the environment, and these protections are needed *now*. The health of our children should never be sacrificed for the sake of expediency.

X. Conclusion

Requiring NPDES permits for the application of pesticides to or over the waters of the United States will have a positive impact on our nation's overall environmental and economic health. NPDES permitting would also be consistent with the original goals of the CWA. In the 1971 CWA Senate Report, Senator Dole emphasized the importance of "develop[ing] *alternative means* of pest, weed and fungal control," reducing "[o]ff-target applications," and developing "pesticides which *degrade after application* and *leave no toxic or hazardous after-products*."[93] It is not in the public interest to create a new exemption in the CWA for the pesticide industry. Instead, EPA should be supported in its efforts to provide improved protections through the NPDES process, which, if properly implemented, should eliminate the need for NPDES permitting altogether.

and Pesticides 6 (USGS Circular 1225, 1999), *available at* http://pubs.usgs.gov/circ/circ1225/pdf.

92. *See* California State Water Resources Control Board, Comments on the Proposed Rulemaking and Notice of Interpretive Statement on Application of Pesticides to Waters of the United States in Compliance With FIFRA (Mar. 29, 2005).

93. S. Rep. No. 92-414, *supra* note 63, at 99 (emphasis added).