



BEYOND PESTICIDES

701 E Street, SE ■ Washington DC 20003
202-543-5450 phone ■ 202-543-4791 fax
info@beyondpesticides.org ■ www.beyondpesticides.org

STATEMENT OF
SHAWNEE HOOVER, SPECIAL PROJECTS DIRECTOR
BEYOND PESTICIDES
ON
H.R. 1749
PEST MANAGEMENT AND FIRE SUPPRESSION ACT
TO AMEND THE
FEDERAL WATER POLLUTION CONTROL ACT (33 U.S.C. 1342(1))
aka CLEAN WATER ACT
BEFORE THE
SUBCOMMITTEE ON WATER RESOURCES AND ENVIRONMENT
U.S. HOUSE OF REPRESENTATIVES

SEPTEMBER 29, 2005

Mr. Chairman and members of the Subcommittee. Thank you for the opportunity to appear before the Subcommittee today. I am Shawnee Hoover, Special Projects Director of Beyond Pesticides, formerly known as the National Coalition Against the Misuse of Pesticides (NCAMP). Beyond Pesticides is a national, environmental health organization with a grassroots membership base that represents thousands of diverse people seeking to improve protections from pesticides and promote alternative pest management solutions that reduce a reliance on pesticides. Our membership spans the 50 states with partners around the world.

We are here today to discuss legislation that seeks to remove from the purview of the *Clean Water Act* (CWA) potentially harmful pesticide uses registered under the *Federal Insecticide, Fungicide, and Rodenticide Act* (FIFRA). The bill seeks to redefine “point source” under CWA to exclude public health protection, pest management, and silvicultural activities. We feel that neither

pesticide users, the public nor the environment are well-served or better protected by this bill.

There are 3 main reasons why reliance on FIFRA alone does not adequately protect users, water, the environment, and the community.

1. Under FIFRA, EPA does not take into account unique local conditions when regulating risk and designing labels.
2. Direct deposition of pesticides to water occurs even when the label is properly followed.
3. The risk assessment process used to register pesticides under FIFRA has admitted limitations that create the need for complimentary laws.

Before proceeding I would like the members of the Subcommittee to keep in mind that I am but a messenger. I speak on behalf of my organization, but my views are representative of a much larger network of stakeholders that include community residents, health professionals, scientists, farmers, sport fish and bee associations, some public health officials, and of course, water groups, and environmentalists.

At the heart of this critical issue is the question of whether or not FIFRA, through its registration and labeling process of pesticides, can adequately replace the role of the Clean Water Act and its regulatory and enforcement mechanism, the National Pollutant Discharge Elimination System (NPDES) permit process. More than three decades after the CWA was enacted, the Nation's waters continue to be polluted. Pesticides are one of the main sources of this pollution. (Clean Water Act § 303(d) 2000, 2002 listings nationwide.)

There have been five federal court cases concerning this precise issue. Two ruled in favor of NPDES permits, one ruled that a NPDES permit would be

required if the application left pesticide residues or had unintentional effects, and the other two are still pending. My testimony today will demonstrate how, in various cases, brought before a court or not, FIFRA alone is ill-equipped to carry out the essential functions and protections afforded by CWA and NPDES permits. In fact, the statutes are complementary and together address issues regarding the impacts of pesticides on users, water, the environment, and the community.

I. LIMITATIONS OF FIFRA ARE COVERED BY CWA

FIFRA regulates the distribution, sale, use and licensing of pesticides. Its mandate is to protect human health and the environment from unreasonable adverse effects of pesticides. Unreasonable is essentially defined by considerations of the economic, social and environmental costs and benefits of the use of any pesticide. The U.S. Environmental Protection Agency (EPA) does this by using probabilistic modeling of national use, and toxicology data supplied by the manufacturer. It then establishes a nationally uniform labeling system. Once the label is determined, there are no further monitoring and reporting requirements under FIFRA.

The mandate of CWA is to “restore and maintain the chemical, physical, and biological integrity of the Nation’s water.” It does this by primarily using the NPDES permit process, which evaluates if a discharge of pollutants will harm the specific water body in question and at what amount. It is highly local and specific. It also includes monitoring and reporting requirements that can track which pesticide applications may occur when.

As the Court in the Headwaters v Talents case explains, “...a FIFRA label and a NPDES permit serve different purposes. FIFRA establishes a nationally uniform labeling system to regulate pesticide use, but does not establish a system

for granting permits for individual application of pesticides. The CWA establishes national effluent standards to regulate the discharge of all pollutants...but also establishes a permit program that allows, under certain circumstances, individual discharges. FIFRA's labels are the same nationwide, and so the statute does not and cannot consider local environmental conditions. By contrast, the NPDES program does just that." Headwaters (9th Cir. 2001).

Clearly stated, the FIFRA label has a national scope based on national averages. CWA NPDES permits consider local environmental conditions and specific impacts to water bodies, which the FIFRA label inherently does not.

EPA itself has stated that compliance with a FIFRA label does not ensure compliance with all other laws, such as the CWA. In its Amicus Brief filed in the Headwaters case, the agency stated, "[A] person who seeks to discharge a pesticide into the water of the United States from a point source must comply with both statutes by following instructions on the pesticides labels and by obtaining an NPDES permit when required by the CWA. The district court erred in concluding that compliance with the approved instructions on a pesticide label satisfies both statutes." Headwaters, 243 F.3d at 531. (9th Cir. 2001).

The EPA tried to reconcile its recent guidance removing the need for NPDES permits with its earlier Amicus brief stating both NPDES and label compliance are necessary by later issuing a memo. According to the Congressional Research Service (CRS) report on this issue dated April 25, 2005, the memo, "...acknowledged that there could seemingly be inconsistencies in previous government positions but that, on detailed examination, differences are based on the specific facts of that litigation, not the general policies now being addressed." (Pesticide Use and Water Quality: Are the Laws Complimentary or in Conflict, April 25, 2005. RL32884, p. 11.)

That explanation however does not add up given our understanding of the specific facts of that litigation. The facts of the case are not any different from precisely the kind that are proposed by this bill. If anything, the Headwaters case may be demonstrative of exactly how a NPDES permit can thwart major harm. The Headwaters case arose because an aquatic pesticide, used according to its FIFRA label, resulted in an estimated death of 92,000 juvenile steelhead fish in a canal. Either way, the EPA's reversal of its prior position remains unjustified.

Relying solely on FIFRA labels and registration does not necessarily work in favor of farmers either. Farmers depend on good water quality as much as anyone in the community.

The CWA statute, with its local orientation, seeks to prevent contamination of non-target waterways. To do that, CWA § 301 establishes a "zero discharge" standard, meaning *any* amount of pollutant discharge, without a permit, constitutes a violation. (Natural Resources Defense Council v Costle, 568 F.2d 1369, 1374 (1972)). EPA's risk assessment process under FIFRA, on the other hand, operates in a national context that averages risk factors and assumes full label compliance that does not include non-target impacts. In cases of public health pesticide uses, EPA, under FIFRA, does not generally evaluate the health and environmental impacts of pesticide exposure in its risk assessments. In addition, the agency has not in practice evaluated the efficacy of the public health use.

Under the jurisdiction of the CWA, changes in the chemical composition of specific waterways are monitored, measured, and generally protected from adverse effects from the application of pesticides. FIFRA, on the other hand, has little information or power over the actual use of a pesticide once it is registered, except that its use must comply with the warnings and instructions on the label. The warnings on the label certainly do not address in any way, specific water

quality issues, accumulations of toxins specific to a certain site, concerns for the local habitat or sensitive population species that may be being monitored locally. There is simply no feedback loop within FIFRA like there is in CWA that helps inform local and state officials of immediate or long-term situations that may be of concern to a locality.

The CRS report plainly stated that the NPDES permits under CWA are undertaken by states to protect water quality, "...because the federal government lacks the resources for day-to-day monitoring and enforcement." (Pesticide Use and Water Quality: Are the Laws Complimentary or in Conflict, April 25, 2005. RL32884, p. 4.)

II. SUPREME COURT RULES THAT FIFRA IS NOT THE FINAL WORD ON PESTICIDE PROTECTION

The Supreme Court ruling in April 2005 in Bates v Dow, supports the underlying premise that FIFRA is not and should not be the only and final mechanism for evaluating and, if necessary, restricting pesticides. In other words, FIFRA does not occupy the entire field on pesticides.

In the Bates case, the court addressed the question of whether farmers harmed by pesticides could use state courts to seek redress. The Supreme Court states, "The long history of tort litigation against manufacturers of poisonous substances adds force to the presumption against preemption [of law suits by farmers harmed by pesticides]..." Implicitly, the Supreme Court recognizes that FIFRA and the risk assessment review process by definition does not consider all aspects of potential harm from pesticides and therefore as the sole instrument is not adequately protective of users, the community, or waterways. In this context, the CWA provides an incredibly important locally-based evaluation taking into

account issues and impacts that are of concern to pesticide users, farmers, and the communities they share.

III. FIFRA LABELS BASED ON THE RISK ASSESSMENT PROCESS ARE INSUFFICIENT TO PROTECT WATERWAYS

The risk assessment process by nature is insufficient to protect waterways for five main reasons.

1. The label for the vast majority of chemicals do not address off-site non-target, sublethal effects or pesticidal drift that can be more deleterious over time than the lethal concentrations stated on the label. EPA has recognizes these limitations of the risk assessment process. Additionally, the U.S. Fish and Wildlife Service, notably concerning silvicultural activities among others, and several courts have also openly recognized these limitations of the risk assessment process. These are limitations that can be overcome with the enforcement of other statutes such as the CWA.
2. The EPA risk assessment considers only the effects of the active ingredient. It does not consider the synergy of the multiple ingredients in a pesticide formulation, or between two pesticides used in conjunction, or between pesticides and pharmaceuticals and other chemicals. This critical data gap results in considerable uncertainty when predicting the risks posed by a pesticide and has been recognized by the U.S. Fish and Wildlife Service. In contrast, by nature of its monitoring and reporting provision, CWA can assess the effects of the actual pesticide formulation on water body ecosystems.
3. The reregistration of pesticides under FIFRA is a lengthy and ongoing process with outstanding and missing health and environmental data associated with a pesticide's review that fails to fully assess the short and long-term impacts

on human health, particularly on children, and the environment for hundreds of pesticides. Case in point is the lack of EPA evaluation of a pesticide's capacity to cause endocrine (hormonal) disrupting effects. Scientific studies are increasingly finding endocrine effects at extremely low doses (as low as 1 part per billion, see Appendix C, Go, et al.). These effects are also being discovered in wildlife.

4. EPA does not track pesticide poisonings, including short- and long-term adverse effects, as pointed out by the U.S. General Accounting Office (GAO) among others. (GAO, *Pesticides: Use, Effects, and Alternatives to Pesticides in Schools*, November 1999, p.6.) Under the former federal Pesticide Incident Monitoring System (PIMS), dismantled in the early-1980s, pesticide poisonings used to be an important indicator of real world applications and inform the agency of problems with uses. Without such a monitoring system, the agency is reliant on industry to volunteer when there are label/use issues.
5. EPA under FIFRA presumes that if the label is complied with, there will not be any unintentional pesticide exposure to water. The risk assessment process therefore does not evaluate terrestrial pesticides for their impact on water quality. It attempts to broadly evaluate an active ingredient's toxicity to fish based on one or two types of sensitive species and its capacity to leach into surface and ground water and thereby contaminate drinking water. Beyond toxicity to fish and contamination of drinking water, there are no further evaluations of the realities that arise from pesticide use. U.S. Geological Survey (USGS) makes clear that pesticides, presumed to be used properly, are getting into waterways via run off and drift, and from there must be examined. NPDES permits on the other hand can assess the realities of pesticide run off, drift, harm to specific local species and ecosystems (not tested by manufacturers) and other issues central to overall water quality.

FIFRA is by nature ineffective at making fast changes on the ground. Scientific studies must be collected and evaluated and the whole issue must go through a rather lengthy rereview process. Such delays can cause serious problems. In Washington Toxics v EPA, August 14, 2003, the U.S. Federal District Court in Seattle found the EPA has a legal obligation under ESA to review the impacts of pesticide use and curtail uses that are harmful to endangered salmon. This ruling underscores EPA's limitations through the pesticide registration process under FIFRA to consider effects of pesticides in specific waterways.

IV. NPDES PERMITS DO NOT CREATE UNNECESSARY BURDENS

This bill is asking Congress to put at stake this Nation's hard-fought complimentary laws that help to protect water, ecosystems and human health from pesticide exposure. The argument for this bill is that the NPDES process is too much of a burden for pest managers and will present costs, operational difficulties, and delays to applicators. At the same time, the bill is put forth in the context of mosquito control when in fact it includes a wide range of pest management activists, if not all. As the two statutes demonstrate their usefulness and purpose as originally intended, so perhaps it is important to weigh the real risks of sole FIFRA reliance by comparing pest managers' perceived or actualized costs with the costs to localities and society as a whole of losing water quality, ecosystems, species, and health.

A recent case concerning two blueberry farmers in Maine perfectly demonstrates several of the issues I am raising today.

Two blueberry farms regularly applied pesticides by plane that drifted into the nearby waterway containing endangered Atlantic Salmon. For years, townspeople complained to the company and to the State Board of Pesticides Control in charge of upholding FIFRA to no avail. So much concern was raised

that one town, Addison, even passed a local ordinance prohibiting aerial crop-dusting in its jurisdiction but came under pressure from the State Department of Agriculture.

Finally, the townspeople joined with state and national environmental and environmental health groups that threatened to sue the companies under the CWA for not obtaining a NPDES permit. A NPDES permit, they argued, would have at least determined if the pesticides were or were not a concern to the local aquatic ecosystem. The process would have also saved the companies from intense contention with the community and a lot of bad press. Threatened with a lawsuit, both companies eventually agreed to switch to ground-based spraying and to date, there has been no evidence or complaint by the companies that the change in practice resulted in crop loss or major difficulties.

There are several issues this case brings out:

The case was to be filed under CWA, not the Endangered Species Act. Why? Because it was unknown what effects if any the pesticides were actually having on the aquatic environment or the species without an assessment provided by the NPDES permit process. The bill being discussed today would make it so that serious damage would have to occur before solutions could be implemented. It just so happens that this case involved endangered species and perhaps therefore was monitored more closely, but overall it shows how NPDES permits address a range of water quality issues that can prevent the escalation of a problem.

Also, compliance with the FIFRA label was not at issue but rather the effects from drift, which are not adequately covered by the FIFRA label. In this case, EPA, under FIFRA, assumed that drift would never occur. Not only did it occur, but it had the potential to kill off the last of the U.S. Atlantic salmon.

Lastly, and perhaps most importantly, the change in practices did not appear result in major costs or operational difficulties to the growers.

V. THE IMPORTANCE OF QUALIFIED OVERSIGHT

We recognize that the push for this bill originates in the EPA's laudable effort to ease the burden for mosquito control officials to combat mosquito-borne disease such as West Nile virus (WNV). While we do not underestimate the importance of addressing mosquito-borne disease, we believe there are many ways to do this without removing the vital protections afforded by NPDES permits that are not afforded under FIFRA alone. (See Appendix A.)

The Centers for Disease Control and Prevention (CDC) make clear that there are numerous instruments available to mosquito control officials. CDC states that "spraying adulticides, pesticides intended to kill adult mosquitoes, is usually the least efficient mosquito control technique." (Centers for Disease Control and Prevention. 2001. Epidemic/Epizootic West Nile Virus in the United States: Revised Guidelines for Surveillance, Prevention, and Control. Atlanta, GA. (accessed 7/1/04).)

Although the uses of adulticides have low efficacy rates (See APPENDIX B), we do not argue that they should never be used. Rather, as stop-gap measures, their use should be considered locally on a case-by-case basis. Something the FIFRA label cannot provide. CWA protections nationwide are critical to public policy in that they help to maintain a balanced approach to the management of mosquito-borne diseases and the short and long-term effects to public health and the environment from pesticide exposure.

Without oversight of water quality experts, can water quality really be protected? At a 2001 mosquito control conference, EPA noted that, “[T]he goal of aquatic hazard statements is not to prevent absolutely any residues from ever reaching water and possibly harming some aquatic organisms. Rather the purpose is to enable the user to recognize and minimize risks, in the context of carrying out an effective public health pest control program.” (EPA 2001 Region II Inter-Regional Mosquito Control Conference Issue III, Recommendation 3.)

Central to this statement is the notion that the pesticide applicator has the capacity to make a determination of risks to the local waterway without actually knowing the details that may exist around that waterway. The NPDES permit process offers the expert analysis necessary to determine how to minimize risks.

If NPDES permit delays in emergency situations are at the heart of the matter, then that is what should be discussed. But that is not what this bill proposes. This bill extends far beyond the issue of public health mosquito control and simply assumes that permits for all pesticide applications are unwarranted. An assumption clearly not substantiated by case law.

VI. EPA LABEL CHANGES LESSEN FAITH IN FIFRA

As this bill is being proposed, it should be noted that the EPA has issued guidance (“Labeling Statements on Products Used for Mosquito Control” PR Notice 2005-1, March 9, 2005) to change the labels to harmonize them without regard to the toxicities and hazards identified in the pesticide’s last risk assessment. This guidance further weakens the label protection of human health and the environment from exposure to pesticides.

In the guidance, EPA claims that mosquito spraying protects public health “while ensuring that use of these products [pesticides] will not pose

unreasonable risks to the environment.” The statement is an assumption however, and is made without the fulfillment of the agency’s legal obligation to evaluate the impacts of use patterns using sound science.

Such assumptions are dangerous. Consider the mounting scientific evidence that synthetic pyrethroids, increasingly the most popular mosquito pesticide, are capable of disrupting the endocrine (hormonal) system in both wildlife and humans at extremely low doses, (1 part per billion in some cases). (See Appendix C.) Endocrine disruption in both wildlife and humans can adversely affect the proper development and function of the neurological, respiratory, reproductive, and immune systems, cause cancer, as well as changes in behavior. Consider also a recent peer-reviewed study out of U.C. Berkeley showing that synthetic pyrethroids are not breaking down as assumed by the EPA but are instead accumulating in creek sediments to levels that are toxic to freshwater bottom dwellers. (See Appendix D.)

On this issue, lastly, Section 2 of FIFRA provides the definition of “unreasonable adverse effects on the environment” and denotes that EPA may consider the risks and benefits of public health pesticides separate from the risks and benefits of other pesticides. It must be made clear that, to date, the agency has never done such an assessment. Again, the agency is acting on assumptions devoid of the use of sound science, which would at minimum require a call for more data from both manufacturers and the independent, peer-reviewed scientific community. Granted, the agency is in process of creating an evaluation protocol. However, I understand it is still an estimated five or more years away.

Thank you for the opportunity to testify today. We value the exploration of the Subcommittee to seek improvements in public health and pest management approaches. I appreciate your consideration of my points that this bill has fatal flaws. Relying on FIFRA as the sole protector of water quality and

the monitor of deposition of pesticides into local waterways would result in the opposite of this bill's intention.

##