

## AGRICULTURE AND THE ENVIRONMENT: THREE MYTHS, THREE THEMES, THREE DIRECTIONS

*J.B. Ruhl\**

The three themes encompassed in this Conference—water quantity, water quality, and environmental justice—are often studied as discrete subjects. Increasingly, however, we are understanding these and other issues in environmental policy as intricately related, all part of a contextual array of challenges. And, also increasingly, we are focusing our attention on the environmental problems agriculture presents. So, my compliments to the U.C. Davis Law School's Environmental Law Society for having the vision to put all of these topics under the same tent. It is an appropriate and timely subject for a gathering of diverse viewpoints.

Nothing could have driven this point home more for me than my experience as a member of the National Academy of Sciences/National Research Council Committee on Endangered Species in the Klamath River Basin. Located 300 miles north of here—a gorgeous drive through the mountains I just made today—the Klamath River Basin presents an unwieldy intersection of water quantity, water quality, and environmental justice issues, with agriculture at center stage as both alleged cause and potential solution. There seems simply not to be enough water in the basin to serve all the competing interests. What water there is seems increasingly threatened by poor quality, particularly from nutrients but also, because of reduced quantity, by increased temperature. And Native American tribes in the basin have amplified their claims of injustice as, they allege, their cultural interests in the fish and water in the Klamath River are repeatedly given lower priority to agricultural interests. The Klamath River Basin, in other words, is a case study in the topic of this conference. While it will take far more than one conference to solve the problem, this is a step in the right direction.

I will close later with some further observations about the Klamath River Basin. My general comments, as the closing speaker, have to do with how we should open the conversation about agriculture and the environment and the direction in which it should lead us. Three central questions arise: First, what are we talking about? In other words, we

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\* Joseph Story Professor of Law, Florida State University College of Law, Tallahassee, Florida. Many thanks to the U.C. Davis Environmental Law Society for the invitation to speak at its conference and to *Environs* for the opportunity to publish these remarks. Please direct comments to [jruhl@law.fsu.edu](mailto:jruhl@law.fsu.edu).

must define the problem so that the discussion focuses on the relevant factors. Second, what are our objectives? In other words, we need to define goals. Last, how do we get there? In other words, we need to devise an effective policy framework.

On the topic of how we focus the discussion on the relevant topic, my point is that we have allowed the topic to be saddled with the heavy baggage of several myths about agriculture in general. I will attempt to dispel these myths, or at least encourage you to work to do so, so that we can have an honest discussion about issues like water quantity and water quality under the heading of agriculture and the environment. Turning to the goals, I will contend that we must reverse the core principle that has guided agri-environmental policy in this nation for decades—i.e., that agriculture cannot be “harmed” in the name of protecting the environment—if we are to achieve meaningful improvement. Then, I will suggest the policy direction in which I would urge that discussion lead. Conventional approaches to environmental policy, I contend, will not work in the agricultural context. Perhaps the resistance to environmental responsibility the agricultural interests have shown in the past can be ameliorated if we work together to develop more innovative and flexible policy instruments. I’ll close with what I believe to be the take home message of the Klamath River Basin: the alternative to opening an honest discussion about agriculture and the environment and working toward innovative policy solutions is ugly, ugly, ugly.

## I. DEFINING THE PROBLEM

Three very powerful and widely disseminated myths, what I call the Three Myths, have obscured the reality that agriculture is a leading source of environmental harm in our nation.<sup>1</sup> Until we can divorce the dialogue on agri-environmental policy from these myths, the discussion of goals and policy instruments will remain mired.

### A. *Myth One*

The first myth is that farms are “first environmentalists” and “the best stewards of the land.” The agricultural lobby trumpets this sound bite everywhere it can, and it is in fact the official position of our government.<sup>2</sup> It rests on the premise that farmers depend on and love their land

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<sup>1</sup> Elsewhere I have documented the environmental harms farming causes. See J.B. Ruhl, *Farms, Their Environmental Harms, and Environmental Law*, 27 *ECOLOGY L.Q.* 263, 272-93 (2000).

<sup>2</sup> Recently, Secretary of the Interior Gale Norton outlined her approach to the question of western grazing policy and proclaimed that “farmers and ranchers are often the best stewards of the land. We can achieve more by working with them—and capitalizing on their intimate knowledge of the land they depend on—and the land

and therefore will tend to it in such a way that, if left to their own self-interested devices, will naturally turn out on the positive side for the environment as well.<sup>3</sup>

Let's test this claim against the historical record and current experience. First, consider that, on the heels of the relatively minor environmental alterations Native Americans caused for purposes of agricultural development and game management, since the 1600s American agriculture has converted over 900 million acres of this nation's land from generally undisturbed habitat conditions to agricultural uses. We're talking, for example, about the rampant draining of wetlands in many states, about 100 million acres in all, and the near total devastation of the prairie grasslands. Once they wiped all vestiges of undisturbed habitat from that land, farms have proceeded, particularly in the modern context, to expose soils to wind and water erosion, to dump pesticides, chemical fertilizers, and domesticated animal waste on the land, to graze livestock at levels far beyond pre-farm conditions, to suck water from ground and surface water sources to use to irrigate, and to release salts and minerals into the soil column. All this to the land they "love." Now, what do these farmers do with all the left over chemicals, eroded soils, animal wastes, and mineral salts? Do they "tend" to these messy affairs on their own land like good stewards should? Hardly! They simply ship them

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they love." See *Norton Calls for Incentive-Based Species Program*, ENDANGERED SPECIES & WETLANDS REP., Mar. 2001, at 3. And after just 10 minutes of "surfing" farm lobby sites on the web, I found sound-bite, media-ready farm stewardship claims at every turn. One article at the California Farm Bureau site proclaims that "Earth Day is every day on California farms," and that "generations of California's farmers and ranchers have been caring for the environment." California Farm Bureau Federation, *Earth Day is Every Day on California Farms* (2001), available at <http://www.cfbf.com/release/2001/pr-040901.htm>. The Iowa Farm Bureau site claims that "for more than 83 years, Farm Bureau members in Iowa have promoted and conducted efforts that conserve natural resources and safeguard environmental quality." Iowa Farm Bureau, *Because a Quality Environment Benefits Everybody*, available at <http://www.agandenvironment.com>. The American Farm Bureau Federation President recently asked, on the issue of endangered species policy, "with U.S. farmers' and rancher's record in husbandry, who better to enhance a species's future." No site matched the boosterism of the Virginia Farm Bureau's, however, where it claims that "Virginia farmers represent the best example of what environmental stewardship is all about" and are "the original stewards of our environment and open spaces." See Virginia Farm Bureau Federation, *Virginia Farmers Lauded for Helping Clean Bay, Rivers* (Jan. 28, 2000), available at [http://www.vafb.com/news/2000/jan/012800\\_3.htm](http://www.vafb.com/news/2000/jan/012800_3.htm); Virginia Farm Bureau Federation, *Early Announces Support for Cabinet-level Ag Post* (July 27, 2001), available at [http://www.vafb.com/news/2001/July/072701\\_2.htm](http://www.vafb.com/news/2001/July/072701_2.htm).

<sup>3</sup> This is the well-worn mantra of "free-market" environmentalism when it comes to land regulation—i.e., that the self-interest that drives private landowner decisions corresponds elegantly with environmental conservation goals. See, e.g., Jonathan H. Adler, *Free & Green: A New Approach to Environmental Protection*, 24 HARV. J. L. & PUB. POL'Y 653 (2001).

elsewhere via irrigation return flows, stormwater runoff, and the wind. This is no small problem, as agriculture has become the leading cause of water pollution in this nation.

### B. *Myth Two*

Next in line in the arsenal of farm lobby myths is the conception that all “small” farms are good farms in every respect. Again, our government has bought into this myth with all its might.<sup>4</sup> In the environmental context, it is used to deflect attention to the large “industrial” farms which, for primarily structural and economic reasons, have become the enemy of smaller farm interests.

Small farms may represent many positive cultural and economic ideals, but I have yet to find any empirical evidence that “smallness” is universally, even generally, indeed even *sometimes*, an environmental virtue in farming. The vast majority of farms are family owned and small in terms of size and revenue; hence, if farming has become a leading polluter in our nation, how can small farms not be part of the cause? More to the point, except in some contexts, such as concentration of livestock feeding, scale does not matter in this issue. The impact on water supply of 100 farms each irrigating 100 acres is the same as one farm irrigating the same 10,000 acres. The same economic incentives that might lead the small farmers to conserve water use will operate on the larger scale. The same holds true for pesticide use, fertilizer use, flushing of salts through drain tiles, and so on. Indeed, if we might expect anything a priori, it would be that economies of scale might work in favor of greater efficiency in use of chemicals and resources as farms grow larger.

### C. *Myth Three*

The farm lobby would have us believe that environmental regulation of farms will (1) threaten our domestic food supply and (2) unethically limit food supply to the developing world. I won’t argue that increased environmental responsibility won’t increase costs to farms (and I argue below that it should!). But the first contention is a total fiction and has been for decades. Our “food and fiber” industry accounts for 15 percent of our nation’s *exports*, and the economic fortunes of farming depend greatly on these *export* markets. In other words, the marginal market—the one that might suffer loss of supply as costs rise—is the export market, not the domestic market, and there is plenty of buffer before we find ourselves facing a food scarcity at home. But if achieving environment

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<sup>4</sup> See, e.g., National Comm’n on Small Farms, U.S. Dep’t of Agric., *A Time to Act: A Report of the USDA Nat’l Comm’n on Small Farms*, available at <http://www.reeusda.gov/agsys/smallfarm/report.htm>.

responsibility could cost farms enough to cause supply for these exports to diminish, won't that mean we can offer less food to the needy around the world. Perhaps, but I, personally, am not willing to satisfy any ethical demand that we as a nation "feed the World" if it means destroying our domestic environment. Other nations would fill the export gap we might leave behind, and perhaps would do so at the expense of their own domestic environments, but so be it. If we can't compete in the export market without ruining our own natural resources, I'd vote not to try.

## II. DEFINING THE GOAL

The farm lobby's propagation of the Three Myths, and our government's endorsement of them, have led to a policy mandate I call the Rule of No Harm.

Recently, EPA Administrator Christine Whitman summed it up as concisely as I've ever heard in a speech before a forum sponsored by the *Farm Journal*, proclaiming that "We can't harm food production to implement food protection."<sup>5</sup> Substitute "environmental protection" for "food protection" and you have our national environmental policy for agriculture, as well as that of most states. In fact, substitute just about anything in there—worker safety, taxes, antitrust laws, minimum wage laws, labor laws, bankruptcy laws—and that pretty much sums up our policy on the topic for agriculture. And this "no harm" premise has been the bedrock of agriculture policy for decades regardless of which party has been in control of Congress or the White House.

To this I respond, why not? Why can't we ask farms to bear the cost of environmental responsibility? Cynics might suggest that the Rule of No Harm applies to all industry, but one cannot ignore the cost three decades of modern environmental law has imposed on most industries. No other industry enjoys the Rule of No Harm as its explicit policy goal. Indeed, environmental law is littered with specific and implied exemptions for agriculture.<sup>6</sup> Basic norms, such as the polluter pays, simply do not appear in the environmental law of farming.

In short, the goal of agri-environmental policy must be to turn the Rule of No Harm into the Rule of Pay for Your Harm. In other words, farms must be asked to bear the costs of their environmental externalities as much as we ask that of any other industry. To be fair, consumers have benefited from the safe harbor farms have received under environmental law, in the form of lower food prices. And farming has relied on that benign neglect, arguably reasonably so, to its detriment were we suddenly to foist command-and-control regulation on the industry. Thus,

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<sup>5</sup> Susan Bruninga, *Whitman Urges Partnerships to Boost Environmentally Friendly Farm Economy*, 32 Env't Rep. (BNA) 2317 (2001).

<sup>6</sup> See Ruhl, *supra* note 1, at 293-328.

we must turn to the issue of policy tools to devise a reasonable framework for implementing the goal of cost internalization.

### III. DEFINING THE POLICY TOOLS

The Three Myths and the Rule of No Harm lead inevitably to the policy tools the federal and state governments have adopted for many decades: incentives and subsidies. The farm lobby portrays these as the answer to virtually all agri-environmental issues.<sup>7</sup> We've been following this approach, however, for decades. Our farm subsidy program is deeply entrenched. Incentive-based programs, designed to pay farms to do what we ask other industries to do on their own ticket, are widespread. After hundreds of billions of dollars down this path, farms nevertheless have risen to the top of the list in terms of environmental degradation. This suggests there is little reason to believe more of the same policies won't lead to more of the same results.

One alternative is to recognize that a relatively small sector of the farming industry accounts for a disproportionately large share of revenues because it is essentially industrial in every sense of the word. I have in mind large concentrated animal feeding operations and very large crop farms. This is not to suggest that these are disproportionately to blame for the environmental degradation agriculture has caused (see above), but simply that they are amenable to conventional policy tools such as performance standards, discharge permits, and technology-based controls. They are few in number, relatively alike in process, and easier to monitor.

For the rest of farming—the vast majority of farms—these conventional approaches won't be as effective because the operations are numerous, geographically dispersed, and highly varied in terms of process. For this segment of the industry, I suggest three interrelated policy directions.<sup>8</sup>

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<sup>7</sup> The American Farm Bureau, for example, while loudly proclaiming the farmland stewardship claim, unfailingly demands that “[t]he use of regulatory mechanisms would impose excessive cost burdens on producers. . . . Properly funded assistance programs that work with farmers to retain productivity while improving water quality will be more efficient and effective.” American Farm Bureau Federation, *Voluntary Approach to Dealing with Hypoxia is Best* (Jan. 23, 2001), available at <http://www.fb.org/news/nr/nr2001/nr0123.html>. This is the organization's official position with respect to restoring polluted waters, controlling animal waste from concentrated animal feeding operations, protecting endangered species, conserving wetlands, and much more. See, e.g., American Farm Bureau Federation, *Animal Feeding Operations* (Sept. 2001), available at <http://www.fb.org/issues/backgrd/cafo107.html> (“Farm Bureau pointed out the need for voluntary, incentive-based programs to be useful and effective for water quality improvement.”).

<sup>8</sup> For more detail on these prescriptions, see Ruhl, *supra* note 1, at 333-47.

First, impose greater monitoring and information reporting of basic chemical inputs such as pesticides and commercial fertilizers. Presently, only a few states track pesticide applications sufficiently closely and in sufficient detail to allow the public meaningful access to the information. And certainly nothing at the federal level exists to duplicate the information benefits the Toxic Release Inventory has reaped for industries reporting under its toxic chemical program. We can't regulate what we don't know.

Second, use market-based instruments in watershed-based contexts. Once the information contemplated by my prior proposal is available, a blend of taxes (e.g., on pesticide inputs), trading programs (e.g., on fertilizer loads), and other market tools can be used to shape farm behavior in economically efficient manners.

Last, use agricultural subsidies, if at all, to promote agricultural practices that reduce impacts to ecological services. Existing subsidy programs, even those colored "green" in principle such as the Conservation Reserve Program, contain virtually no performance-based component. Subsidies may be necessary to soften the blow of environmental regulation in the context of cyclical export markets and fluctuating consumer demands, but that does not mean they cannot be used at the same time to promote environmental goals.

#### IV. CONCLUSION

Farmers probably won't believe that I'm looking out for them, but it's true. I've lived in or near farm communities for most of my life. I respect farming. I respect a lot of things, though, and don't hesitate to point out when any of them is threatening my well-being. Farming is doing so by harming my water, air, and land.

So how am I looking out for farms, as opposed to just criticizing them? Well, I've seen the alternative to what I've laid out above. It's called the Endangered Species Act (ESA). The longer farming interests hide behind the Three Myths and the Rule of No Harm, the more frequently the ESA, in all its unyielding and uncompromising power, will force them to the table. Resolving agri-environmental policy through the ESA is not pretty, and does not usually lead to inventive solutions. If you don't believe me, ask the farmers in the Klamath River Basin.

