

Small Things Matter in Environmental Law

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- Dave Owen, [Critical Habitat and the Challenge of Regulating Small Harms](#), 64 **Fla. L. Rev.** 141 (2012).
- David E. Adelman, *Environmental Federalism: When Numbers Matter More than Size*, U. Texas Working Paper Series (2013), available at [SSRN](#).

Most people, when they think of environmental pollution, think of large, industrial factories pumping out noxious fumes into the air, putrid liquids into the water, and barrels of toxic wastes into the soil. For instance, almost every newspaper article, blog post, or television story about climate change has as an image of the smokestack of a major power plant or factory.

Most people's perceptions are wrong. It has long been the case that much of the degradation of our natural environment is the result of the accumulation of thousands, millions, even billions of individual actions by people across the United States and around the world. Climate change, for example, is the result of the decision of each of us to drive a car powered by fossil fuels, eat meat, fly in planes, heat our house with fossil fuels, and other similar, seemingly trivial actions. Moreover, these misconceptions are not limited to the general public or general journalists—environmental law scholars and policy makers have fallen into this trap as well. Even when scholars and policy makers have recognized the importance of small harms for environmental law and policy, there is often little information about how important they are, or what, exactly the implications are for our current legal and regulatory systems.

Two recent articles—[Dave Owen's](#) piece, *Critical Habitat and the Challenge of Regulating Small Harms*, and [David E. Adelman's](#) article, *Environmental Federalism: When Numbers Matter More than Size*—are welcome efforts to address the gaps in our understanding of how small harms matter to environmental law and why they matter. Moreover, they both are outstanding examples of a recent trend in environmental law to jump on the empirical legal studies bandwagon—both collect and use substantial amounts of data in their analyses.

Owen's piece looks at a controversial, but underappreciated, provision of the Endangered Species Act (ESA): critical habitat. The agencies in charge of implementing the ESA (the U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS)) are supposed to designate critical habitat for all species listed for protection under the Act. Historically, those agencies have resisted critical habitat designation, arguing that it adds minimal additional regulatory protection for listed species, but with substantial administrative and political costs. Owen first establishes that, properly understood, critical habitat should provide substantial additional regulatory protection for listed species on top of the other ESA provisions—and that those protections are most important for the accumulation of small harms to the habitat for listed species. Small harms to habitat include, for example, the paving over of lands within a watershed for residential and commercial development; each individual bit of development worsens the water quality of the streams within the watershed by a small, incremental amount. These small harms are not individually enough to trigger other provisions of the Act, but cumulatively might matter a lot for listed species. Another key example of this kind of harm is climate change.

Owen then undertakes some heroic empirical research. He compiled over 4,000 individual regulatory documents from FWS and NMFS to explore whether, in practice, critical habitat designation affects regulatory decision-making and whether the agencies are doing anything else about the accumulation of small harms to habitat for listed species. He finds that critical habitat designation appears to be making little difference for decision-making—even where the evidence is clear that in a particular situation a proposed development project will have small, but meaningful, impacts on the habitat of a listed species. He also—more surprisingly—finds evidence that the agencies are trying to use a range of other creative tools to address the problem of small habitat harms. Finally, he notes that small habitat harms are incredibly important, with the vast majority of the regulatory decisions involving individually small, potentially cumulatively important, harms to habitat for listed species.

Complementing Owen’s narrow but deep focus on a particular statutory provision, Adelman’s project is an effort to take a large-scale view at the problem of air pollution. Adelman marshals a range of data provided by the Environmental Protection Agency (EPA) and other sources to demonstrate that large, industrial sources contribute only a small fraction of the overall problem of air pollution in the United States, particularly in the large urban areas where air pollution problems are most severe. Adelman then shows how the current legal structure of the federal Clean Air Act purports to give states substantial leeway to reduce air pollution in a “cooperative federalism” framework, but in fact gives states little power overall. Adelman notes that much of the pollution in urban areas comes either from sources primarily under direct federal regulation (motor vehicles and electric power plants) or from the accumulation of many small sources that are extremely difficult to manage or regulate (e.g., wood-burning stoves, backyard barbeque grills, dry cleaners, and the choices by millions of individuals about whether and how to undertake their daily commutes).

On one level, Owen and Adelman reach very different conclusions from their surveys. Owen believes that the current ESA implementation process, while it has substantial problems and needs some reforms, is the correct general framework. Adelman, by contrast, calls for substantial revisions in the Clean Air Act.

But, on another level, their overall messages are very consistent. Both argue that to address the increasing importance of small, individual actions for environmental law, what is needed is a wide mix of regulatory tools (e.g., command-and-control or market-based mechanisms)—from all different scales of government (local, state, federal). For instance, Owen notes that the case-by-case implementation of the ESA by various FWS field offices allows for careful tailoring of regulatory choices to on-the-ground political and economic reality. Adelman argues that rigid divisions between federal, state, and local jurisdiction in environmental law will interfere with the messy process of changing the patterns of individual behavior that are so fundamental to environmental problems today.

I’m not sure I agree with all of the normative recommendations in both of these pieces. But in the end, the most important contribution of both is highlighting how important the accumulation of small harms is for the future of environmental law, and providing some insights about how we might go about addressing this challenge.

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