Essay

Human Nature, the Laws of Nature, and the Nature of Environmental Law

Richard J. Lazarus*

The panel's approach in this case leads to the result that regulating the taking of a hapless toad that, for reasons of its own, lives its entire life in California constitutes regulating "Commerce ... among the several States." U.S. Constitution, art. I, § 8, cl. 3.


Judge, now Chief Justice, John G. Roberts, Jr., does seem to have a point, even if “for reasons of [his] own,” he makes it obliquely. It is, at the very least, not immediately obvious to those not steeped in constitutional law, let alone Supreme Court Commerce Clause precedent, that persons engaging in the “taking” of toads are necessarily engaging in “Commerce” let alone “Commerce * * * among the several States.”

Of all of his judicial writings, moreover, hardly any appear to have stirred as much controversy during his recent Senate confirmation process as this single sentence included in a dissent from a denial of rehearing en banc. Four Senators questioned him at length about his reference to the “hapless toad” and several of the witnesses at the hearings offered their competing interpretations of the opinion’s significance. Many commentators, including some

* Professor of Law, Georgetown University Law Center. This preliminary draft does not include the accompanying footnotes. I apologize for any inconvenience this may cause, but also take credit for not unduly burdening the reader at this stage with the kind of lengthy footnote citations and textual asides that find favor in law review scholarship. Please note that because this draft is being submitted prior to the full Senate vote on whether Judge Roberts should be confirmed as Chief Justice, I am taking the liberty here of assuming that Roberts will be sworn in as Chief Justice by the First Monday of October (October 3, 2005), immediately prior to the Conference.
environmentalists, sharply condemned then-Judge Roberts. They predicted that these words portended his inclination to strike down not only the federal Endangered Species Act (ESA) as unconstitutional, which was the legal issue raised in the *Rancho Viejo v. Norton* case, but much federal civil rights law and modern welfare legislation. Supporters of Roberts, on the other hand, including a few environmentalists, disputed these claims. They stressed that Judge Roberts’s discussion of the “hapless toad” was included in an opinion that did no more than dissent from denial of rehearing en banc in a case raising the constitutionality of the ESA and never purported to address the merits of that constitutional claim. The dissent concluded only that the full court should decide the legal issue, rather than just a three-judge panel.

The purpose of this essay is not to address the merits of the controversy concerning what constitutes the fairest reading of Chief Justice Roberts’ words as an appellate judge. Nor is it to address the underlying legal issue itself concerning the constitutionality of the ESA as a valid exercise of congressional Commerce Clause authority. This essay is differently directed. It addresses a broader issue about environmental law well highlighted by the toad controversy: why is it that environmental law is so frequently mired by legal disputes wherein the legal issues being debated seem so far afield from what is truly important?

Why does the constitutionality of the ESA turn on the notion that preventing species’ extinction is regulation of commerce? Yet, that is the common ground of all the judges and opposing advocates in *Rancho Viejo* and the several other federal courts of appeals cases addressing the ESA’s constitutionality. Why does the ability of an environmentalist to bring a lawsuit to prevent the extinction of a species in another part of the world turn, as the Supreme Court held in *Lujan v. Defenders of Wildlife* in 1992, on whether the citizen-plaintiff environmentalist can
produce a plane ticket showing that she has recently visited the species or has discrete plans to visit the species in the very near future? And why does the Clean Water Act strictly regulate the discharges of pollutants into navigable waters to protect their physical, chemical, and biological integrity, but fail to regulate withdrawals from those same waters notwithstanding their equal potential to destroy the waters’ essential aquatic character?

Environmental law is full of these seemingly nonsensical riddles. They share, however, a common answer rooted in the challenges presented for environmental law by human nature, the laws of nature, and the nature of the nation’s lawmaking institutions. This essay explores the role that all three play in environmental law and how the interrelated difficulties presented by each are reflected in the kinds of legal issues that surround environmental lawmaking.

The essay is divided into three parts. Part I considers the ways in which the need for environmental law derives from the tendency of human nature to cause adverse environmental consequences and the ways in which the laws of nature make it more difficult to prevent those consequences absent the imposition of external legal rules. Part II describes how our nation’s lawmaking institutions are similarly challenged by the laws of nature. This includes a discussion of how the kinds of laws necessary to bridge the gap between human nature and the laws of nature are systematically difficult for our lawmaking institutions to develop in the first instance and to maintain over time. Part III takes a closer look at one of the nation’s most important legal institutions – the United States Supreme Court – and briefly discusses both its past shortcomings in environmental lawmaking and its potential in the future. This part of the essay includes some analysis of the Court’s deliberations in specific environmental cases, as revealed by the recently disclosed official papers of Justice Harry Blackmun.
I. Human Nature and the Laws of Nature

“To enjoy freedom, we have to control ourselves.”

Virginia Wolff

Some environmental pollution is, of course, unavoidable. Basic human life requires the consumption of the surrounding natural environment. And, although the First Law of Thermodynamics provides for the conservation of energy (and classical physics for the conservation of mass), the Second Law provides for the inevitable increases in entropy that result from human activity. The term “entropy” refers to the degree of disorder in a system. For instance, as energy is transformed from one form to another, some energy is lost as heat; as the energy decreases, the disorder in the system, and hence the entropy, increases.

Natural resource destruction and environmental contamination is a form of entropy. Disorder in the ecosystem is increased when common resources such as air and water are polluted. Disorder is likewise increased whenever complex natural resources are broken down into the smaller parts.

In consuming natural resources to provide the basic necessities of energy, food, shelter, and clothing, humankind necessarily increases entropy in parts of the ecosystem in the form of polluted global resources and destroyed natural resources. Fundamental human biological processes compel it. Human life depends, as life does in many animals, on a series of chemical reactions within the cells of the human body capable of breaking down complex chemical compounds such as glucose into its component parts, of carbon dioxide, and water. The technical name of the necessary biochemical process for the breakdown of glucose is called carbohydrate catabolism, which itself consists of three major stages: glycosis, citric acid cycle (known as the “Krebs cycle”) and
phosphorylation. For the purposes of this essay, however, what is important for the nonscientific reader to understand is how these many biochemical processes ultimately depend on the breaking down of more complex and ordered chemical compounds into less complex and more disordered chemical elements. Some natural resource destruction and environmental pollution are necessarily implicated by such processes. As energy is transformed from one form to another, natural resources are consumed and contamination of existing natural resources results.

To the extent, moreover, that it is human nature to seek to survive, it is human nature to undertake activities that cause such natural resource destruction and environmental pollution. That central threshold proposition should be noncontroversial. What is no doubt more controversial is whether it is similarly human nature to consume the natural environment in a nonsustainable fashion.

Garrett Hardin’s classic article “The Tragedy of the Commons,” published in Science in 1968, offers a disturbing answer to that question. Although Hardin’s central thesis is well known, it is worth emphasis here by repetition:

*The tragedy of the commons develops in this way. Picture a pasture open to all. It is to be expected that each herdsman will try to keep as many cattle as possible on the commons. Such an arrangement may work reasonably satisfactorily for centuries because tribal wars, poaching, and disease keep the numbers of both man and beast well below the carrying capacity of the land. Finally, however, comes the day of reckoning, that is, the day when the long-desired goal of social stability becomes a reality. At this point, the inherent logic of the commons remorselessly generates tragedy.*

*As a rational being, each herdsman seeks to maximize his gain. Explicitly or implicitly, more or less consciously, he asks, "What is the utility to me of adding one more animal to my herd?" [T]he rational herdsman concludes that the only sensible course for him to pursue is to add another animal to his herd. And another. . . . But*
this is the conclusion reached by each and every rational herdsman sharing a commons. Therein is the tragedy. Each man is locked into a system that compels him to increase his herd without limit -- in a world that is limited. Ruin is the destination toward which all men rush, each pursuing his own best interest in a society that believes in the freedom of the commons. Freedom in a commons brings ruin to all.

Hardin describes his thesis in the limited context of human nature faced with a pasture for animal grazing, but it all too easily extends with potentially catastrophic results to many contemporary environmental settings. The expansive reach of modern technology has turned the once seemingly infinite into the finite. Populations of oceans fisheries can be irreversibly destroyed. Underground aquifers of drinking water supplies can be forever lost. And, of course, potentially destructive global climate change may occur from increased loadings of carbon to the atmosphere from anywhere in the globe.

Modern technology also has its limits, as the nation was tragically reminded in the aftermath of Hurricane Katrina this past year. Modern technology allowed for the development of a major metropolitan area where nature, standing alone, would have precluded any such possibility. New Orleans was largely below sea level and existed only by grace of a complex series of levees designed to keep water from flowing along its natural course. Even when properly constructed, such levees are no match, however, for the enormous force of hurricanes like Katrina, especially when thousands of acres of surrounding wetlands, which might have otherwise provided some natural protection from flood waters, are filled to satisfy ever-rising demands for residential, commercial, and industrial development. The upshot: the devastation of a city, the loss of human life, and the destruction of an invaluable aquatic ecosystem by floodwaters laden with toxic contaminants.

Hardin’s central insight regarding the implications of human nature for the natural
environment extends much further, however, than to just the potential tragic destruction of resource commons. Each of the individual actors in Hardin’s proffered tragedy cause the ruin to all because of their inability to look beyond the here and now. They perceive well their own, present short-term needs. They are unable to apprehend and take into account the longer-term implications for individual persons at other times or in other places. Even if presented by information detailing those broader spatial and temporal impacts, they would be unable on their own to temper their own immediate actions as necessary to avoid the resource common’s tragic destruction. Knowledge of the risks New Orleans faced have been well known for decades. Yet, short-term needs always trumped government’s willingness and ability to expend the massive resources necessary to guard against long-term, low-risk events, even if of potentially catastrophic consequences.

More recent research into behavioral psychology and human cognitive biases offer contemporary confirmation of Hardin’s basic thesis. Experimental research shows that humans strongly favor avoidance of immediate costs over the risk of less immediate, longer-term, and distant risks. Dubbed by some a “myopia” bias, some scientists argue that a strong basic desire to avoid immediate costs is present throughout nature and is deeply rooted in evolutionary biology.

Others similarly argue that human genetic evolution has systematically favored consumerism and materialism, i.e., the so-called “selfish gene.” When, over thousands of years ago, human beings relied on hunting and gathering to get their next meal, long-term planning was of little value. After all, without a means of preserving food, there was little reason to plan. It was better to consume what one found when one found it, especially when there was no assurance that more would be found tomorrow. “Our brains were built for a world in which the currency of the day did lose value over time. Put simply, food rots.” “[N]ature created within us a short-sighted set of moral
Selfish shortsightedness and materialism became dominant tendencies in the competition with other species for survival. “Rather than leave some precious energy lying around to mold or be stolen, put it in your stomach and have your body convert the food into an energy savings account.” The drive for survival arguably extended to the production of heirs – survival by the passing of genes to one’s children – and the accumulation of material wealth often seen as a necessary prerequisite for successful reproduction. And, “even though wealth may no longer relate to babies in an industrialized world, our instincts come from a time when concerns over material possession were crucial.” One commentator has gone so far as to suggest, provocatively, that “[h]uman failings, such as those that some call the Seven Deadly Sins, may all derive from our evolutionary traps.”

But, whatever the origins of humanity’s limited spatial and temporal horizons, the laws of nature, however, do not limit their potentially tragic consequences to classic resource commons or to guarding against catastrophic events such as hurricanes. The laws of nature constantly spread out ecological cause and effect over spatial and temporal manner that poses analogous problems for humankind. Global and local wind patterns push the consequences of activities in one place to other increasingly distant locations. The natural movement of water does the same. But so too do the host of chemical cycles that link together through chemical processes seemingly disparate aspects of the ecosystem. The hydrologic cycle (water) is simply the best known of many. There are a host of such chemical cycles throughout: in addition to the carbon cycle related to questions about global climate change, there are nitrogen, sulfur and phosphorous cycles. The implication of each is that individual activities in one place has consequences in other places and at other times.
The need for environmental law can be seen as arising from the persistent gap between the spatial and temporal horizons of human nature and the much wider and longer spatial and temporal dimensions of the consequences of human activities because of the laws of nature. Within the narrower context of “The Tragedy of the Commons,” Hardin referred to the need to “legislate temperance.” He contended that freedom, ironically, necessitated “mutual coercion mutually agreed upon.”

That is, of course, modern environmental law’s central mission. Environmental law seeks to regulate activities that occur in the here and now to temper their potentially tragic consequences for the there and then. Human nature will not do it on its own, which is why formal legal rules become necessary. The rules are, moreover, inherently coercive to the extent that they seek to cause people to act in ways contrary to their natural tendencies.

Environmental law’s challenge, therefore, is to realize Hardin’s vision of “mutual coercion mutually agreed upon.” Hardly an attractive, aspirational objective. Nor is it easy to accomplish. It is not easy to pass laws that regulate human activities at one time and place for the benefit of human activities (let alone nonanthropocentric and ecocentric values) at another time and place. It is especially difficult because the further that the laws of nature spread cause and effect out over time and space, the more scientific uncertainty there will be regarding whether the adverse environmental effects projected in the future will in fact ever happen and whether the adverse environmental effects perceived today were in fact caused by specific activities in distant locations and times.

It is not easy for any lawmaking system to agree upon laws that are mutually coercive under
such circumstances. As discussed below, the United States is no exception.

II. The Nature of the Nation’s Lawmaking Institutions

Environmental law seeks to fill gaps created by the differing spatial and temporal horizons of human nature and the laws of nature, but the challenge of environmental lawmaking is further increased by the nature of the nation’s lawmaking institutions. Most simply stated, those lawmaking institutions make it systematically very hard to enact laws that fill the necessary gaps. The various challenges are rooted in the structure of those institutions, constitutional limitations on government lawmaking, and electoral politics.

A. Structure of Lawmaking Institutions

The defining characteristic of our nation’s lawmaking institutions is fragmentation. By deliberate design, our lawmaking institutions are fragmented to avoid the concentration of lawmaking power and thereby reduce the risk of its abuse and corruption. Lawmaking authority is fragmented horizontally between branches of government – executive, legislative, and judicial – with “checks and balances” designed to allow each branch some ability to guard against excesses in the others.

The horizontal fragmentation, moreover, does not end at the border of each of the three branches. Within each branch, there is further fragmentation. For instance, while the President is the Chief Executive, executive branch lawmaking authority is, often as a matter of law and even more often as a practical matter, the responsibility of different cabinet agencies and departments. These agencies approach issues from very different policy perspectives related to their competing, and sometimes opposing, missions.
The Environmental Protection Agency and the Office of Management Budget (OMB) are, for instance, both within the executive branch and both report to the President. But their views on environmental protection issues have tended to begin from different policy premises, use different analytic frameworks, and seek to further different substantive ends. OMB is more naturally concerned with more immediate, short-term economic costs and more willing to discount costs in distant times and places, especially those not readily subject to monetization.

Lawmaking authority is also fragmented vertically, with lawmaking authority allocated between federal, state, tribal, and local governmental authorities. Here too the design is deliberate and largely intended to avoid the potential abuses of undue concentration of lawmaking power in a centralized authority. The Constitution does not confer general lawmaking authority on the federal government, but instead limits the government to discrete categories of lawmaking power while reserving the remainder to the States, whose essential sovereignty the Constitution in turn seeks to safeguard. For instance, Congress has lawmaking authorities under Article I of the Constitution related to spending, managing property, raising revenues, and regulating commerce between Indian tribes, States, and foreign nations. But the Supreme Court has long held that Congress lacks general police power authority to enact laws designed to promote the health, safety, and welfare of the American people. The Tenth Amendment expressly reserves general lawmaking authorities to the States, which the Supreme Court has interpreted to further limit federal governmental encroachment on essential attributes of state sovereignty, including a prohibition on federal commandeering of state lawmaking authority.

The historic reasons for such fragmentation are well known: to guard against a repeat of the kind of centralization of lawmaking authority by distant governments against which the nation
rebelled in its founding. But no matter how meritorious the reasons, the implications for environmental lawmaking are no less substantial.

All fragmentation makes it more difficult to enact comprehensive laws and to make ongoing revisions to legal rules in light of new information. Because of the way that the laws of nature ensure that cause and effect in the ecosystem is spread out over time and space, moreover, fragmented lawmaking authorities are not likely to have the necessary jurisdiction over both the cause and effect. As a consequence, those concerned about the adverse effects may have no jurisdiction over the cause and those with jurisdiction over the cause may have no political accountability to those suffering the adverse effects.

Downstream and downwind jurisdictions invariably approach environmental protection matters from a different perspective than upstream and upwind jurisdictions. Neither is well situated to determine the applicable environmental protection rules for the other. It is true when “down” and “up” refer to their relative spatial location and the simple mechanics of an upstream source of pollution causing adverse consequences in downstream locations. It is no less true when, given the expansive scope of modern industrial technology, the “down” and “up” refer increasingly to relative temporal dimensions and activities today can have devastating, irreversible effects realized only in the distant future.

B. Constitutional Limitations on Governmental Lawmaking

The Constitution’s concern with excessive governmental overreaching extends beyond its assignment of lawmaking authority between the three branches in the first three Articles and its general reservation of authority to the States. The Bill of Rights is exclusively directed to limitations on the exercise of governmental authority: the federal government in the first instance
and, by way of the Fourteenth Amendment selectively applied to state government as well. To the extent that each of these constitutional amendments makes lawmaking more difficult, they also make environmental lawmaking more difficult. For instance, criminal enforcement of environmental protection laws must, like all criminal prosecution, work within the constitutional bounds established by the Fourth Amendment prohibition on unreasonable searches and seizures and the Fifth Amendment’s right against self-incrimination.

But, apart from this generic effect, there are several specific amendments within the Bill of Rights that raise heightened challenges for environmental lawmakers in particular. The Fifth Amendment’s protections against deprivation of property without due process of law and its ban on takings of private property for public use without just compensation are two obvious examples. Environmental protection laws, whether aimed at preventing species extinction, water degradation, or air pollution, frequently restrict the exercise of property rights in natural resources because of the impact of that exercise at other times and places.

Here too, the laws of nature do not confine the impacts of an owner’s use of her property to the property itself or the owner’s own lifetime. Quite the opposite. Wind, water, and the many chemical cycles that make up the ecosystem ensure that there will be temporal and spatial spillover effects. Yet, for that same reason, efforts to guard against those effects through environmental regulations tend to generate claims of government deprivations of private property or, in especially harsh circumstances, regulatory “ takings” of property. It is no coincidence that the legal founta inhead of the modern regulatory takings doctrine, Pennsylvania Coal v. Mahon, decided by the Supreme Court in 1922, arose in a case where a property owner challenged the constitutionality under the Fifth Amendment Takings Clause and the Fourteenth Amendment of a restriction on coal
mining that is a regulatory precursor to the kinds of restrictions found throughout environmental protection law today.

Finally, there are distinct features of our political process that render environmental lawmakers problematic, again because of the ways that the laws of nature ensure a spreading out of cause and effect in the ecosystem. We elect our President to a four-year term and members of what are supposed to be our nation’s most important lawmakers (Congress and state legislatures) to serve relatively short terms (e.g., six, four, two years). The reason for the relatively short length is straightforward: to increase their accountability and therefore their possible responsiveness to the current voters in their relevant legislative district.

But such short-term and more narrowly defined electoral responsiveness necessarily places environmental protection concerns at a disadvantage. An elected representative is held accountable for things happening right now affecting constituents in a discrete place. In short, the “here” and “now” are the voters, which makes it hard for elected representatives to focus on the “there” and the “then.” Not only are the voters necessarily limited to the here and now, so too tend to be those monied interests that fund political campaigns. To be sure, there are eleemosynary organizations that possess the longer-term and broader perspectives, but the resources available to those organizations can be fairly expected to be far less than those concerned with more immediate needs.

Environmental lawmaking within this constitutional framework and through these political processes is, accordingly, systematically disadvantaged. It constantly runs into obstacles, sometimes pitting one branch of government against another, sometimes prompting conflicts between different parts of the same branch, and just as often generating conflicts between competing sovereigns: between the federal and state government; between state governments; or between state, tribal, and
local governments. Indeed, the past several decades of environmental lawmaking is littered with such cases. Returning to scientific analogies for a moment, it is akin to the phenomenon known as “friction” in classic Newtonian mechanics: physical movement cannot occur in absent some friction. It requires a contact, whether to a greater or lesser extent, between at least two competing surface areas.

The making of environmental law also depends on movement, albeit of a different kind. To get a law enacted through the legislative process requires a host of distinct steps: a proposed bill moves through the committee process, is considered by both chambers, is subject to further debate and amendment in conference committee and/or on the floor, and is finally sent to the President for signature or possible veto. The promulgation of a rule within a federal agency requires its own kind of movement: a rule is formally proposed and published in the federal register, public hearings may be held, public comments are considered, the rule is revised, and the final is rule ultimately published.

Relations between competing sovereigns present similar analogies. Congressional passage of a federal statute or a federal agency’s promulgation of a rule is typically one of the first of several subsequent steps that must take place, most often by state and local government agencies and officials, before the relevant federal statutory provision or regulation has any actual legal effect. Each distinct step creates an opportunity for, analogous to Newtonian mechanics, friction, as the various parts of the nation’s lawmaking apparatus grind out a law. The conflicts that surrounded the statute’s initial enactment or a rule’s promulgation follow it through each implementing stage.

Modern environmental law’s evolution in the United States during the past several decades is, accordingly, dominated by the political equivalent of heat in classical mechanics: conflict and
Many of the resulting disputes, when formally expressed in lawsuits brought to the federal judiciary, arise out of conflicts between lawmaking authorities within and between competing branches of government and sovereign authorities. As opposing interest groups enlist different branches to champion their concerns, the two branches clash. The same occurs when opposing interests enlist different sovereigns as their champions.

While environmental concerns (primarily the distributional consequences of environmental protection laws) underlie the disputes, the legal issues formally raised are rarely distinctly “environmental” in character. They instead concern jurisdictional disputes – “separation of powers” between branches and “federalism” between sovereigns – as the courts try to sort out which branch or sovereign’s position should prevail. Nor is there a consistent pattern in terms of whether the resolution of those jurisdictional disputes favors one set of environmental interests or another. Just the converse.

At various times in the nation’s history, greater executive branch autonomy has favored stronger environmental protection laws, as the legislative branch sought to promote the interests of those favoring their relaxation. But at other times, environmentalists have favored more assertion of legislative control and a tightening of the reins on the executive branch. Similar themes are evident in the area of federalism: defining the lawmaking border between the federal and state government and between competing state governments. Sometimes environmentalists favor a stronger federal government, overriding state autonomy, and other times they trumpet the sovereign authority of states to impose more environmentally protective requirements. While the precise source of the difference in viewpoint can often be explained by whether a state is downstream or downwind rather than upstream or upwind, the federalism legal issues are the same, making it
impossible to find any consistently principled legal view of federalism being advocated by anyone in environmental disputes.

Although the docket of the United States Supreme Court is infinitesimally small (only about 80 cases a year) relative to the huge number of cases heard by federal and state trial courts, the Court’s docket illustrates the jurisdictional character of the environmental cases most likely to be before the High Court. For instance, during the political imbroglio surrounding Anne Gorsuch’s tenure as EPA Administrator during the Reagan Administration in the early 1980s, the issue reaching the Supreme Court in *Morrison v. Olson* concerned the constitutionality of a federal statute authorizing the creation of an Independent Counsel to investigate and potentially to prosecute wrongdoing by high-ranking executive branch officials. In that instance, the Independent Counsel was investigating possible criminal violations associated with the executive branch’s refusal to turn over certain agency documents Congress sought in order to determine whether EPA had committed malfeasance in its enforcement (or alleged lack thereof) of federal environmental laws.

The vast majority of environmental law cases before the Supreme Court are similarly focused on jurisdictional disputes between competing lawmaking authorities. There have been a host of cases considering whether state laws designed to limit the disposal of waste within their borders are unconstitutional on the ground that they amount to undue burdens on interstate commerce outside the scope of state lawmaking authority under the federal Constitution. There have likewise been many cases concerned with the federal government’s ability to oversee state implementation of environmental law, ranging from cases in which the federal government seeks to enlist state aid in the implementation of federal law, cases in which states seek to impose more stringent requirements on commercial activities than those imposed by federal law, and cases in which the federal
government seeks to oversee or override state implementation of federal environmental law. Finally, there are many cases raising separation of powers issues: the legislative branch seeking to oversee the work of the judicial or executive branch; conversely, the legislative branch seeking to delegate lawmaking authority to the executive branch; and the judicial branch seeking to ensure that the executive branch’s implementation of a federal environmental statute is consistent with congressional intent.

Because, however, so many environmental legal controversies arise in a context in which the environmental character of the legal issue presented is not front and center, there is a related risk that the courts deciding these issues fail to apprehend that character and its possible relevance to the issue’s resolution. Indeed, as discussed below, the Supreme Court itself has failed in that precise way. The Court seizes on the kinds of jurisdictional disputes that dominate much of environmental law without any appreciation for how and why the disputes are raised. And, as a result, the Court’s rulings all too often fall short.

III. Environmental Law in the Supreme Court

As I have contended recently elsewhere at greater length, my own view is that much of the Supreme Court’s recent environmental law precedent reflects a lack of appreciation of the special challenges presented by environmental lawmaking. The Court’s fundamental failure in this respect has prompted individual members of the Court to make a series of mistakes both at the jurisdictional stage and on the merits. In deciding whether to accept a case for plenary review, the Court has been too willing to grant petitions filed by parties who claim that environmental protection laws are overreaching, which has led to an unfortunate skewing of the Court’s docket. Even to the extent that
the Court’s rulings on the merits are more balanced than the grants of jurisdiction, the Court has largely stood ready to correct lower court errors of only one kind: regulatory overreaching and not regulatory underreaching.

The gravamen of the error lies in the Justices’ overreacting to the legal issues generated by the process of environmental lawmaking. Rather than recognizing these lawmaking issues as a healthy byproduct of an important evolutionary process of environmental lawmaking that requires accommodation and reconciliation of jurisdictional disputes within and between branches and competing sovereign authorities, the Justices perceive environmental law, especially the pressures it places on other intersecting areas of law, as a destabilizing threat that needs cabining. As a result, the Court has been more apt to retard from the outside rather than to engage constructively from within the necessary evolutionary process being triggered by the demands for environmental lawmaking.

Claims that environmental protection laws amount to unconstitutional takings of private property, that environmental citizen-plaintiffs lack the “concrete” injuries necessary for Article III standing, or that federal environmental agencies are trampling upon the sovereign prerogatives of the States, are all variants on a common and related theme. Each of these disputes arises from the way that the laws of nature make it difficult for our lawmaking institutions to fashion environmental law. Wholly missing from the Court’s decisionmaking in such cases is any appreciation of the broader legal evolutionary context.

Justice Scalia’s opinion for the Court in *Lucas v. South Carolina Coastal Council* is illustrative. That opinion invokes “background principles” of the common law of tort and property law as the ultimate measures of the constitutionality of a environmental land use restriction that
deprives a landowner of all economically viable use. The ruling thereby ignores the underlying reasons for why the law has needed to evolve away from those background principles in light of contemporary understanding of the need for stronger environmental protection law.

The precise environmental restrictions at issue in *Lucas* barred new coastal development in too close physical proximity to the shore. The state law was enacted in response to a nationwide effort, triggered by federal coastal zone management policies, to promote more careful development of coastal properties because of their ecological fragility and their potential exposure to destructive storms. Indeed, the kind of catastrophic damage caused recently by Hurricane Katrina was one of the justifications cited by the South Carolina Coastal Council in *Lucas* for the need to bar new residential development in especially exposed locations.

The Supreme Court in *Lucas* lacked, however, the perspective necessary to appreciate the justifications for a prospective change in the rights of property owners to build homes in certain places. The Court failed to see beyond the simple fact that the landowner wanted to do nothing more than build a home as the others before him had been allowed. The majority displayed no appreciation of the propriety of rethinking private property rights in light of the very real dangers created when fragile coastal zone ecosystems, intensive residential development, and ocean storms are combined.

A recent dissent written by Justice Kennedy similarly reflects the absence of the necessary broader perspective. Ever since joining the Court in 1987, Justice Kennedy has been the most significant Justice in environmental cases, at least to the extent that he has been in the majority more often than any other Justice, often providing the decisive fifth vote. The Court’s recent Clean Air Act decision in *Alaska v. EPA*, however, was one of those extremely rare circumstances when
Kennedy found himself on the dissenting side.

In *Alaska*, Justice Kennedy wrote for four Justices dissenting from the majority’s ruling that EPA possessed the authority under the Clean Air Act to second guess a state agency determination of what amounts to “best available control technology” applicable to a stationary source of pollution. While the precise legal issue was highly technical and narrowly applicable, Justice Kennedy’s dissent struck much broader themes and relied on remarkably strident rhetoric. The dissent accused the majority of taking “a great step backward in Congress's design to grant States a significant stake in developing and enforcing national environmental policy.” The dissent further accused the Court of embracing an unwarranted “presumption that state agencies are not to be trusted to do their part is unwarranted.”

Justice Kennedy’s mistake was that he perceived an inroad on federalism and a lack of trust of state sovereign authorities without stepping back to consider the possible reasons for that inroad or such distrust. The Clean Air Act, like most federal environmental statutes, is deliberately and pervasively riddled with distrust. Its provisions don’t fully trust state governments just like they don’t fully trust industry or the federal government.

There is, moreover, a reason for such congressional distrust. Congress understood the powerful political and economic pressures that would be placed on agencies to compromise away environmental protection objectives during the implementation of aspirational environmental laws such as the Clean Air Act that sought to address diffuse interests. The legislators responded by creating a multiplicity of checks and balances within the statutory scheme. They provided for EPA to review and approve State implementation of the federal statute, and they authorized States to sue EPA for failing to abide by the Clean Air Act’s requirements, including the federal agency’s
regulation (or lack of regulation) of upwind States. And, of course, Congress included powerful citizens suit provisions in the Clean Air Act and virtually all of the other federal environmental laws even to allow for some citizen (and thereby judicial) oversight of the government’s exercise of its enforcement authority. In short, what Justice Kennedy perceived as a problem may have been better understood as a solution.

Finally, the recently released papers of Justice Harry Blackmun offer additional insight into the narrow nature of the Court’s thinking and the need for the Justices to develop a broader theoretical understanding of the nature of environmental lawmaking and the demands of legal evolution.

When Justice Blackmun died in March 1999, his will provided that the Library of Congress could make public his papers five years after his death, which the Library did in March 2004. The papers are voluminous in their number and even more extraordinary in terms of their revealing nature. They include more than 1,500 meticulously organized boxes of files containing documents related to Blackmun’s entire life, including his 23 years on the Supreme Court from 1971 to 1994. The Library of Congress table of contents for the files is 362 pages in itself.

The documents related to his time on the Court tell a much fuller story about the Court’s decisionmaking process in individual cases than ever before. While other Justices have previously released their papers, none provided as much detail so quickly. Justice Blackmun not only kept copies of all written memorandum prepared within his own chambers, but also copies of all memoranda received from other chambers and docket sheets recording all votes at all stages in every case. Even more remarkably, he took notes, purportedly verbatim, of what the Justices said at their Conference deliberations on cases being decided on the merits. Those conferences are, by strict
tradition, the most confidential of the Court’s proceedings. Only the Justices themselves are in attendance. Other Court personnel and law clerks to individual Justices are not permitted in the room.

The Blackmun papers reveal Justices often discussing their own views of the policy implications of an environmental ruling even when those policy preferences should arguably be irrelevant to their disposition of the legal issue before them. Many of those individual policy preferences appear to be a reflection of the Justices’ own life experiences, both personal and professional. The papers therefore confirm the commonsense notion that a Justice’s own life experiences affect their perception of a case, even if not always their ultimate vote. Justices’ life experiences inevitably affect their appreciation of the impacts of alternative rulings in the real world. That, too, is human nature. And, judges, even Supreme Court Justices, are human.

Justice Powell’s vote in *Penn Central Transportation Co. v. City of New York* is illustrative. In *Penn Central*, the Supreme Court in 1978 rejected a takings challenge to New York City’s historic landmark designation of Grand Central Terminal. While on the Court, Justice Powell was generally a stalwart advocate of business interests and was concerned about the burdens that environmental regulation placed on private property rights in particular and American business in general. Yet, in *Penn Central*, Powell joined Justice Brennan’s opinion for the majority rejecting a regulatory takings claim based on the extent to which the City’s historic landmark designation prevented greater economic development of Grand Central Station. What the Blackmun Papers reveal is that at the Conference, Justice Powell acknowledged a personal bias favoring historic preservation laws based on his work in support of Colonial Williamsburg in his home state of Virginia.
To similar effect is Justice Byron White’s vote in *United States v. New Mexico*. Justice White was a westerner from Colorado, where water can be scarce and water law, for that reason, is both important and complex. At issue in *United States v. New Mexico* was whether the federal government’s reservation of a land for the establishment of a national forest included a reservation of those waters necessary to maintain the general forest ecosystem. The federal government, supported by environmentalists, claimed that the reservation extended to such expanded water rights, while the State of New Mexico resisted that federal claim, leaving more water available for allocation to private commercial interests. The Court, in an opinion written by then-Justice Rehnquist, sided with New Mexico that no such water rights were impliedly reserved on behalf of the federal government. Justice White, along with two other Justices, joined Justice Powell’s dissent from that ruling, which described at length the environmental harm to the forest ecosystem that would result from a failure to provide adequate water to maintain the forest’s ecosystem.

According to the Blackmun Papers, however, Justice White originally voted at Conference with the majority in favor of affirming the lower court’s ruling in favor of New Mexico. White characterized the case as “little water law” and just a matter of “statutory construction.” At the same time, he acknowledged that it “hurts to affirm a bit” because the “States are dependent on tourism [and] would cut their own throats if they let streams dry up.”

It is impossible to know for sure whether the latter policy concerns are in fact what prompted Justice White subsequently to switch his vote from the Rehnquist majority to the Powell dissent. But White’s letter to Justice Powell, formally joining the dissent, certainly leaves that impression, albeit in tongue-in-cheek fashion: “You have sold me on the birds and bees. Please join me in your partial dissent.”
Notably, however, most of the occasions when Justices expressed concern with the policy implications of a particular ruling were when their votes were inconsistent with those concerns. The Justices, therefore, did not permit their policy preferences to dictate their assessment of the legal issue before the Court. For instance, Justice O’Connor voiced strong concern with the policy implications of her initial vote at Conference in one of environmental law’s most famous cases, *Chevron v. Natural Resources Defense Council*. The *Chevron* case involved the validity of EPA’s decision to interpret the term “source” in the Clean Air Act in a way that provided air pollution sources more flexibility in meeting the Act’s requirements. At Conference, O’Connor decried that “[i]ndustry is suffering” and admitted that it was “very painful for me.” She also described what EPA was seeking to do as a policy that “made sense as a concept.” Yet, she nonetheless voted at Conference for NRDC, presumably because she understood that her own policy preferences could not trump her assessment of the merits of the legal arguments. (Because of the death of the Justice O’Connor’s father a few weeks later and a related conflict of interest that arose in the administration of his estate, she subsequently recused herself from the case.);

The same law/policy juxtaposition is evident in the Blackmun papers relating to the Supreme Court’s decision in *TVA v. Hill*, often referred to as the “snail darter” case. At issue in *TVA v. Hill* was the validity of issuing an injunction to prevent the completion of a dam that everyone agreed would cause the extinction of a species of snail darter. The Court upheld the injunction in a ruling often widely touted as a great victory for environmentalists in the Supreme Court.

The Blackmun Papers reveal, however, a Court persuaded that the relevant statutory language compelled the result, but strikingly hostile to the policy implications of upholding the injunction. The author of the opinion for the Court, Chief Justice Burger, originally voted to
summarily reverse in favor of lifting the injunction. In a handwritten note to Justice Blackmun, the Chief Justice described the case in strictly result-oriented terms: “Snail Darter vs. Elec. Power.” During the Conference deliberations on the cases, two of the Justices voting in favor of the injunction – Justices Marshall and Stevens – were nonetheless sharply critical of the statutory policy. Justice Marshall said that “Congress can be a jackass” and expressed the “hope” that “Congress will do something about it.” Justice Stevens characterized the statute as “stupid” and the injunction as “ridiculous.”

Chief Justice Rehnquist similarly displayed an ability to divorce his views on the meaning of a particular statute from his views on whether that same law was expressed sound policy. In *Union Electric v. EPA*, the issue before the Court was whether EPA could reject a state plan to implement the Clean Air Act on the ground that the state plan imposed too great an economic burden on sources of air pollution in a state. The Court ruled that EPA lacked authority under the federal statute to reject a state implementation plan on the ground that it was unduly harsh. Then-Justice Rehnquist joined the majority opinion. At Conference, he described the federal statutory scheme as “harsh and draconian,” but concluded that the result was mandated because the statute was “not confused on this point.”

In all of the thousands of pages in the Blackmun Papers relating to environmental law cases, the Justice shown to be most influenced in his legal reasoning by his own policy views was Justice Blackmun – perhaps for no other reason than the Papers inevitably revealed the most about their own author. For instance, in *Ruckelshaus v. Sierra Club*, the issue before the Court was whether the Clean Air Act of 1970 required EPA to prevent significant deterioration in the air quality in those areas of the nation that otherwise met clean air standards necessary to protect public health and
welfare. The federal court of appeals had ruled in favor of the Sierra Club’s claim that the Act included such a mandate and the Supreme Court ended up affirming, without opinion, by an equally divided four to four vote (Justice Powell was recused from the case).

The Blackmun Papers for the case include the Justice’s own notes to himself in preparation for the oral argument in the case. The notes list the various policy considerations supporting the Sierra Club legal argument, which the notes describe as the Justice’s “gut reaction.” The policy considerations include:

- “We have a problem”
- “States would compete downwind”
- “Pollution is no respecter of state boundaries”
- “This would force Industry”
- “Need to preserve some decent areas”
- “Only by national action can we have effective action”
- “Doubt if the answer is to be found in balancing”
- “If affirmation is wrong, Congress can correct - resolve the doubts in that direction”
- “Promote and enhance’ is general language but it is significant and has clear meaning, despite its being in the preamble”

Blackmun’s notes include his summary of the competing considerations: “Policy for me is all one way.” He accordingly joined three other Justices (Douglas, Brennan, and Marshall) voting in favor of the Sierra Club, which allowed the environmental group to preserve its victory by an equally divided Court. Justice Blackmun’s reasoning, if accurately reflected in his notes in the case, would certainly seem to amount to the kind of judicial activism frequently condemned in
contemporary times: a judge deciding the meaning of a federal statute based on his own consideration of the competing policy considerations rather than exclusively on indicia of congressional intent. In the early 1970s, however, such judicial reasoning was, unlike today, far closer to the mainstream.

Regardless of the propriety of a judge (or Justice) using his or her own policy preferences as a guidepost for resolving a legal issue before a court, the most striking thing about the Blackmun Papers is what is not present in any thousands of pages of documents. The Papers reveal tremendous detail about the internal deliberations within the Court on hundreds of environmental cases decided between 1971 and 1994: a time period covering the emergence and evolution of modern environmental law over the United States for more than two decades. Yet, wholly absent from both the public and now private documents is any significant awareness by any member of the Court of the distinctive nature of environmental law and the import for its emergence on other intersecting areas of law.

More particularly, there is little to suggest that the Justices saw environmental law as a new, emerging area of law requiring their careful attention and stewardship. The environmental law cases were instead more often described as a highly technical, complex, and even somewhat tedious area of law to be shunted. This at least this appears to have been the dominant view of Justice Blackmun who, ironically, was a Justice more favorably inclined than many others to the positions advanced by environmentalists.

In the *Union Electric v. EPA* case, for example, Blackmun commented in a note to himself that it would “not be a bad opinion to take on” but also added the damning caveat “if I have to have one in this general area.” Blackmun’s oral argument notes on several Clean Water Act cases
repeatedly made clear his lack of engagement. In *International Paper Co. v. Ouellette*, Blackmun stated “I am sleepy,” a comment he repeated during the argument in *Gwaltney v. Chesapeake Bay Foundation* (“I am getting sleepy”); while in *Chemical Manufacturers Assn v. Natural Resources Defense Council*, the Justice was more blunt: “What a dull case.” The federal Resource Conservation and Recovery Act fared not better. He described the oral argument in *City of Chicago v. Environmental Defense Fund (EDF)* (in which I presented the oral argument for EDF) as “[a]ll very dull”; in another RCRA case, *City of Burlington v. Dague*, the Justice’s fatigue was apparently even greater still: “On & on. This has been a struggle today. I fight fatigue.”

The clerks echoed the same theme. Blackmun’s clerks opined that a National Environmental Policy Act case, in which the Court was ruling against the environmentalists, “is not one, it seems to me, to make a fuss about. * * * I don’t think this is a case worthy of any separate writing.” On whether the Court should grant review in a Clean Water Act case pending before the Court on petition for a writ of certiorari, another Blackmun clerk disparagingly wrote: “I don’t know what to advise you about these petitions. The clerks all call them ‘those horrible EPA cases.’”

In sum, the development of environmental law during the second half of the twentieth century in the United States may, as I have argued elsewhere, represent one of the nation’s greatest success stories in law: a legal revolution that redefined the relationship between humankind and the natural environment and prevented, within our own borders, the kind of environmental devastation witnessed elsewhere. The nation’s highest Court, however, was largely a bystander, buried in case by case analysis that lacked any appreciation of the constructive significance of environmental law for domestic law in general and, accordingly, for the many related legal issues finding themselves before the Court.
Conclusion

The riddles posed at the outset of this essay share a common answer. The anomaly posited by Judge, now Chief Justice, Roberts concerning the now famous hapless toad is just a more recent instance of the kind of challenge facing environmental lawmaking in the United States. The precise problem is that congressional authority to enact such a law depends on the exercise of congressional Commerce Clause authority. As mentioned above, Congress does not possess general police power authority to enact laws designed to promote public health and welfare. Instead, consistent with the Framers’ intention to fragment authority and limit the centralization of lawmaking authority, congressional lawmaking authority is expressly confined to several specific functions, one of which is regulation of interstate commerce.

That is why the courts are now struggling to develop a coherent legal theory for why protection of endangered species can be fairly described as regulation of interstate commerce. The propriety of such regulation is clear, as is the necessity for the federal government playing a leading role. The individual States alone cannot be relied upon to address an issue where the small numbers of species and their natural defiance of state borders requires a sovereign authority possessing broader jurisdiction. Yet, those same small numbers and the simple fact that the public interest in species protection is not necessarily tied to their commercial value, renders the Commerce Clause’s analytical framework awkward at best. Chief Justice Roberts in the Rancho Viejo case was simply acknowledging the extent of the resulting confusion in the lower courts and the concomitant propriety of further judicial inquiry into possible bases for upholding the Endangered Species Act’s constitutionality.

The second riddle, also described at the article’s outset, finds similar origin. Article III of
the Federal Constitution provides for federal court jurisdiction only over “cases and controversies,” which the Supreme Court has ruled requires that the party bringing the lawsuit establish a “concrete” and “imminent” injury. The nature of cause and effect within the ecosystem, however, makes it very hard for environmental plaintiffs to establish that their injury is “concrete” or “imminent.”

The expansive temporal and spatial dimensions of ecological cause and effect defy traditional notions of concreteness and imminence as defined by the Court’s precedent. Environmental plaintiffs can harbor sincere, strong feelings about species that they may in fact never physically visit, but the injury they suffer from their extinction is no less intense or legitimate. Justice Scalia may, as he did writing the opinion for the Court in *Lujan v. Defenders of Wildlife*, mock such a connection as based on a “Linnean leap.” But, for many Americans whose life experiences demonstrate such a connection with distant species, it is no leap at all.

The real disconnect is instead between the Court’s precedential touchstone for identifying the requisite injury for Article III standing and the kinds of injuries causal connections sought to be vindicated by modern environmental protection law. It is incumbent upon the Court itself to bridge that gap, return to Article III’s basic requirement of ensuring an adequately adversarial judicial proceeding, lest the Constitution be unfairly read as presenting an insurmountable obstacle to the enforcement of important federal environmental mandates.

The final riddle introduced by the essay concerned the Clean Water Act’s regulation of discharges into navigable waters, but its lack of regulation of withdrawals of navigable waters. Both may have dramatic impacts on the chemical, physical, and biological integrity of those waters that the Act seeks to safeguard, yet only the former is subject to a per se prohibition absent a permit, and the latter is left wholly unregulated by the federal statute. Here again, the answer is found in the
nature of the nation’s lawmaking institutions, in particular the heavy emphasis the Constitution importantly places upon maintaining the essential sovereign authority over the States. State governments have historically been preeminent on questions regarding water allocation authority – no doubt because of their enormous distributional implications – and jealously guarded against perceived federal governmental inroads. While the combined effect of a patchwork of federal laws like the Endangered Species Act and Federal Power Act have no doubt significantly eroded State monopoly over water allocation matters, the federal Clean Water Act still largely reflects that once sharp division of authority. Traditional jurisdictional divides in lawmaking authority compete with the nation’s ability to fashion a potentially more coherent and comprehensive environmental protection policy.

Chief Justice Roberts represents the first Justice, let alone the first Chief Justice, of a generation of lawyers who literally came of age in the dawning of modern environmental law in the United States. They witnessed firsthand the emergence of environmental protection laws and its eventual settling into the legal landscape. Only time will tell whether the Supreme Court under Chief Justice Roberts will prove able to develop a coherent jurisprudence of environmental law that reflects its nature, including its reflection of human nature and the laws of nature. The focus may at times seem exceedingly narrow – “the taking of a hapless toad that, for reasons of its own, lives its entire life in California” – but the stakes for the nation and the world are increasingly large.