

Part 1
TOOLS OF THE TRADE

Chapter 1

AN INTRODUCTION TO ENVIRONMENTAL LAW AND POLICY

I. Why Study Environmental Law?

The simplest definition of “environmental law and policy” might read: “the use of public authority to protect the natural environment and human health from the impacts of pollution and development.” While accurate, this definition suffers from two fatal flaws—(1) it’s deadly boring and (2) it fails to capture why environmental law matters.

Instead of laboring over a precise definition, pick up today’s newspaper and see if you find any of the following types of headlines—“3,000 Scientists tell Government to ‘Act Now’ on Climate Change,” “Grizzly Bear Defenders Fight Logging Projects,” “Environmental Protection Agency Tangles with California Over Car Emissions,” “Are Pesticides Poisoning Our Children?”, “Fracking Causes Local Concern for Drinking Water.” Environmental law and policy are a part of everyday life, no matter where you live. It is more than protecting cuddly pandas or clamping down on Dickensian factories that belch smoke and churn out barrels of waste. Indeed the field cuts a remarkably broad swath—taking in climate change, water pollution, wetlands conservation, wildlife protection, green spaces, ozone depletion, smog alerts, recycling, and international trade, and the list goes on.

While every field jealously claims for itself primacy as “the most important area of the law,” environmental law has as good a claim on that title as any. Why should we care about environmental law? Because, taken together, the challenges to environmental quality have a critical influence on where we live, our quality of life and, perhaps most important, the kind of world our children and their children will live in. These things matter. Consider how sea level rise will affect a coastal community, what soil erosion means to a farming community, what the collapse of a fishery does to a fishing community, and how long it will take to reverse these impacts, if they even can be reversed.

Not only does environmental law matter, it’s also difficult, controversial, and fascinating. Our regulation of endangered species, to take an example, challenges deeply held convictions across the political spectrum. Do endangered species have rights that we should respect? How do we balance the benefits of saving an endangered

salamander against the costs of an industrial development that can provide jobs to an economically depressed town? Do some species deserve more legal protection than others? We may be willing to protect a bald eagle, but who really cares about the Delhi Sands flower loving fly?

The long-time debate over drilling for oil in the Arctic National Wildlife Refuge is no less challenging. On the one hand are the arguments that drilling could bring much needed economic development to impoverished Eskimo communities, that it will reduce America's dependence on foreign oil and that, with modern technology, it may be possible to drill with little impact on the landscape. Opposed are those who counter that drilling will threaten the Porcupine Caribou Herd and, even with best efforts and technology, despoil one of America's great remaining natural areas. How can the law mediate between these opposing views? And why do opponents of drilling care so much, given the fact that it's unlikely they'll ever meet someone who has been to the Refuge, much less go themselves?

This is not to suggest that opposition to drilling (a position shared by most Americans) is irrational but, rather, that whatever drives this view resonates widely and defies simple explanation. Indeed it may seem odd to describe the environmental field as contentious at all, given the fact that virtually all Americans consider themselves environmentalists. Poll after poll shows that 80% and more of those surveyed believe that environmental protection should be a high governmental priority. Scratch the surface beneath the trite phrase that "environmental protection is good," though, and this seeming consensus dissolves into difficult questions of how much environmental harm we should accept, how much we as a society are willing to pay for certain levels of environmental protection, and who should bear these risks and costs. This chapter and the next provide a series of frameworks through which to consider these questions—historical, economic, ethical, equitable, etc. While these perspectives and modes of analysis may not provide definitive solutions, they will explain why so many people find the field exciting, important, and difficult.

Before proceeding further, it is worth noting that the broad subject of environmental law is often viewed as comprising two quite distinct fields—pollution law and natural resources law. In some respects, these really are different. Laws such as the Clean Air Act and Clean Water Act focus primarily on sources of pollutants, threats to human health, and risk levels, for example, while wildlife conservation, forest management, and wetlands protections

concentrate more on land use and ecological concerns.¹ As Chapter 2 makes clear, however, despite their differences in emphasis, both fields share fundamental similarities and can usefully be viewed as protecting different aspects of the environment, whether clean air and water or species and their habitat.

II. A Short History of Environmental Protection

One cannot understand current conflicts over allocation and protection of our nation's natural resources—whether water, timber, wilderness, or rangelands—and potential solutions without some grasp of the changing values of those resources over the course of our nation's history. Nor do the approaches taken in our pollution statutes make sense unless understood in their historic context. While the histories of natural resource protection and pollution control are interwoven in places, as the stories below explain they have important differences, as well.

A. Natural Resources

Wilderness holds a special place in the American consciousness. The stillness of a remote forest lake or the imposing crags of a mountain peak provide for many both a sense of connection to a larger world and a sense of inner wonder. Wilderness is also big business. It primes our economy through eco-tourists paying top dollar for trips to Antarctica, backpackers buying high-tech gear for hiking the Appalachian Trail, families enjoying Disneyworld's Jungle Cruise, and even kids having birthday parties in the Rainforest Café. The environment holds a strong grip on our collective imagination and, as the above examples make clear, the marketplace provides a dizzying number of ways for us to enjoy a range of "wilderness experiences."

Our love affair with things wild, however, is quite recent. To the Europeans who first came to America, eagerly seeking out the wilderness would have been incomprehensible. Indeed for most of the last two millennia, wilderness has been viewed more often with repugnance, as something dangerous and even an affront to civilization. The roots of this view go back to the Bible and earlier. After Adam and Eve have tasted the forbidden fruit, for example, their punishment is exile from the Garden of Eden into the wilderness. This is the same harsh, inhospitable region where Moses and the tribes of Israel must wander for forty years, where Jesus is sorely tempted by the Devil for forty days. The Biblical wilderness is

¹ Those interested in an introduction to the field may enjoy reading the Concepts and Insights primer, *Natural Resources Law and Policy* (J. Eagle, B. Thompson, J. Salzman 2018).

unforgiving, a wasteland of physical hardship and spiritual testing that forges iron faith.

The later folk traditions in Europe reflected this harsh view. In many of the fairy tales of the Brothers Grimm, for example, when the protagonists leave the village bad things surely follow. For Hansel and Gretel, the forest is a place of monstrous beasts and creatures, surely no place for innocent children to wander. In the same manner, William Bradford, the first governor in Plymouth Plantation, described the surrounding forests as “hideous and desolate.” To be fair, he had his reasons. The world outside his settlements posed very real threats to survival, hiding wild animals and potentially hostile and, to his eyes, heathen tribes. Faced with this absence of morality and civilization, the Pilgrims and their successors felt both a religious and practical compulsion to “civilize” the wilderness.

This is not to say, however, that the natural environment had no positive characteristics for early Americans. The goal of conquering the wilderness was usually not to convert it into cities but, rather, to a rural, pastoral state—a controlled, managed nature. Thus was wasteland converted to garden. One could have too much civilization as well as too little. The city—a pure civilized state—was viewed equally by many as immoral and disconnected from God. To the degree that the earliest Americans did admire the unspoiled landscape, these were either areas that reminded them of cultivated landscapes in England, or particular aspects of the landscape—birds, flowers—that could be incorporated into a garden view.

To the early settlers, it seemed that much of Europe had gone too far toward the pole of civilization to achieve the ideal pastoral state. But it wasn't too late for America. Thus early American writers, such as Crèvecoeur, despised wild areas but praised the improved, managed nature of the rural landscape. As he described, “I will revert into a state approaching nearer to that of nature, but at the same time sufficiently remote from the brutality of unconnected savage nature.” Thomas Jefferson's ideal citizens were those yeoman farmers who labored on the earth (unlike city dwellers and industrial laborers). They were virtuous, close to God, independent—the moral center of democratic society.

In the Westward expansion and development that long accompanied America's growth, the frontier mantra was largely one of taming the environment. Wilderness posed a barrier to progress and prosperity. It was an obstacle, something to be conquered. As naturalist Aldo Leopold later wrote of the 1930s, “A stump was our symbol of progress.” But the era of frontier settlement coincided with the rise of a broader appreciation for wilderness. In 19th century art and literature, the presence of a grand and ancient wilderness came

to assume a role as a distinctive source of American identity and superiority. This nationalist embrace of wilderness as a replacement for the long history of European culture was evident in the poetry of William Cullen Bryant, the novels of James Fenimore Cooper, the art of Thomas Cole, Asher Durand, Albert Bierstadt, and, most famously, in the writings of Henry David Thoreau.

The best known of the Transcendentalists, Thoreau's writings sprang from his belief that God could be found in nature through intuitive contemplation. For Thoreau, modern industrial society, by cutting people off from nature, was cutting them off from God. The commercial spirit of civilization kept people from contemplation of the divine. Nature was a source of vigor, inspiration, and strength. It stripped life down to its essentials. As Thoreau simply stated, "In Wildness is the preservation of the world." Yet Thoreau's terrifying account of climbing Mount Katahdin in Maine leaves little doubt that he believed one could experience too much wilderness as well as too little. In fact, Thoreau's ideal was really a middle landscape rather than pure wilderness, a life alternating between wilderness and civilization or residence in "partially cultivated country." This middle landscape is the essence of *Walden*, a subsistence farming existence just a few miles outside of Concord, Massachusetts.

Thoreau was not particularly influential in his day, however, and the notion of preserving wilderness was not a serious option. Indeed the opposite was true. Throughout most of the Nineteenth Century, federal policies sought to settle the western wilderness with Jefferson's virtuous yeoman farmers. A series of preemption and donation acts followed by the Homestead Act of 1862 and a variety of other statutes gave successive waves of settlers title to millions of acres of public lands. Often the statutes required some effort to cultivate the land before title would vest. It's important to note that despite publicizing these lands as "virgin" and "uninhabited," that was rarely the case; rather, the Native Americans already living there were often forced off the land.

To the extent there was federal supervision of the often chaotic process, it was to assure that wilderness was being tamed, not protected. And if wilderness could not necessarily be turned to farmland, particularly in the arid lands between the 100th Meridian and the Sierra Nevada and Cascade mountain ranges, its natural resources could at least be developed and exploited. Cattle were allowed freely to graze the public grasslands and miners were promised exclusive control of minerals they were able to discover on the public lands. At the same time that public lands were being granted for agriculture, mining, and other development, Congress was granting railroads millions of acres of alternating checkerboard sections of public lands in an effort to speed the process along.

While this mass transfer of land from public to private ownership was taking place, halting steps toward preserving wilderness began, albeit from very modest beginnings. George Catlin, a painter of Native Americans and prairie life, had proposed in 1832 the concept of preserving Indians, buffaloes, and their wilderness home in a park. And there was some early action. In 1832, Arkansas Hot Springs was set aside as a national reservation; in 1864, the federal government granted Yosemite Valley to California as a park "for public use, resort, recreation"; in 1872, President Grant signed an act creating Yellowstone "as a public park or pleasuring ground for the benefit and enjoyment of the people"; and, in 1885, New York State created a huge forest reserve in the Adirondacks "to be forever as wild lands." Yet few of these acts were motivated by the aesthetic, spiritual, or cultural values of wilderness. The Adirondacks forest reserve was created to ensure clean water for New York City. Arkansas Hot Springs and Yellowstone were given protection primarily to prevent commercial exploitation of curiosities such as geysers. These were museum for freaks of nature.

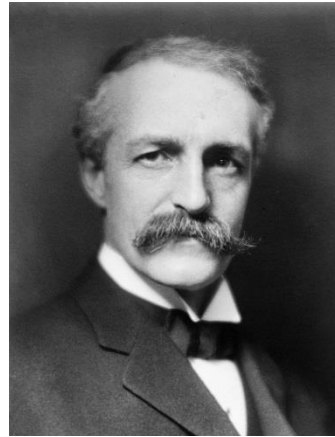
As the Nineteenth Century drew to a close, though, public attitudes began to change about wilderness preservation. As Frederick Jackson Turner famously observed in 1893, "The frontier has gone, and with its going has closed the first period of American history." To Turner and many others, wilderness in American history had served as a fundamental source of democracy and rugged individualism. Ironically, the success of the frontier movement had raised the fear that wilderness, and the prized social values it had come to represent, might be lost. If the frontier were vanishing, preservation of the remaining wild areas was now a valid public concern.

The dominant personality of the "preservationist" movement was a remarkable Scot named John Muir. Like Thoreau, Muir celebrated the presence of the divine in wilderness. It was not trite for him to proclaim that forests were temples on earth and mountains their steeples. He and other preservationists praised wilderness as a source of toughness and ethical values. Indeed he argued that many of the nation's difficulties could be attributed to *too much* civilization and the effete, corrupt urban culture. Unlike the earlier transcendentalists, however, Muir had no ambivalence about pure wilderness. He was the first great public defender of wilderness for its own sake. When asked what a rattlesnake is good for, Muir famously replied, "It is good for itself." Founder of the Sierra Club, Muir was enough of a pragmatist to realize that the public and politicians needed to be persuaded of the wisdom of preserving wilderness.

An early and important ally of Muir was the equally impressive figure, Gifford Pinchot. The first American professionally trained as a forester in Europe, Pinchot became the consummate Washington insider. He was made the first Chief of the U.S. Forest Service by Teddy Roosevelt and later helped found the Yale School of Forestry, the first of its kind in America. Like Muir, Pinchot opposed the wholesale exploitation of public lands, but for very different reasons. While Muir championed the preservation of the nation's sublime landscapes, Gifford Pinchot's views rested on a philosophy of "wise use"—the view that expert management should ensure the optimal use of natural resources. The key words here are "management" and "use." Pinchot recognized that there would always be competing demands for natural resources, and thus supported the strategy of multiple use. From this "conservationist" perspective, the natural resource expert might manage parts of the public lands for their wilderness values (as Muir would demand) or, equally, for forestry, grazing, hunting, or water power. The guiding principle in this decision was ensuring the greatest good for the greatest number of people.



John Muir (1838–1914)



Gifford Pinchot (1865–1946)

The great battle that catapulted the preservationist and conservationist movements into national prominence involved the Hetch Hetchy Valley in Yosemite National Park. From 1901 through 1913, there were repeated calls for damming the Tuolumne River in Hetch Hetchy Valley to increase San Francisco's water and electricity supply. From a conservationist perspective, there seemed a pretty good argument in favor of damming the river if one weighed the water needs of a city of 400,000 against the interests of those few who would benefit from Hetch Hetchy's preservation. Despite support of the dam by the President, Congress, and Pinchot, however, Muir led

a more effective opposition campaign than anyone anticipated. Against the claims of dam supporters praising the beauty and potential recreational uses of a reservoir, Muir and grassroots supporters denounced as wasteful and sinful this “destruction” of a valley they claimed was more sublime than Yosemite Valley. In response, the pro-dam *San Francisco Chronicle* ridiculed Muir’s supporters as “hoggish and mushy esthetes,” setting the tone for the many similar battles that have followed. The preservationists lost and Hetch Hetchy was dammed, but through the process of a sustained political campaign preservationists gained many supporters and popularized the wilderness ethic.

Following World War II, the growth of America’s middle class, and construction of the interstate highway system, America’s public lands became both more familiar and cherished. While there had been only a handful of conservation groups at the time of the Hetch Hetchy dispute, by the early 1950s there were over 300. Thus when the battle of dams was rejoined, the results were different. In 1954, a dam was proposed at Echo Park that would threaten Dinosaur National Monument on the Colorado-Utah border. This time, the far larger preservation movement enjoyed greater support and created an unprecedented grassroots campaign against development. Mail to Congress was almost eighty-to-one against the dam. After five years, the dam proponents gave up.

The first great preservation victory behind them, environmental groups continued to organize and keep up their pressure on Congress. The 1960s saw passage of landmark laws such as the Wilderness Act of 1964, the Land and Water Conservation Act of 1965, the National Historic Preservation Act of 1966, and the National Wild and Scenic Rivers System in 1968. Totally unlike earlier laws that had encouraged disposal of the public lands, this new wave of legislation took the opposite approach of retention and preservation. Recent conversion of public lands into national monuments is only the latest example of this counter-trend.

In the 1970s, the nation turned its attention to the importance of preserving environmentally valuable lands and waters that are in *private* hands or part of the more general public domain. In 1973, Congress passed the Endangered Species Act, which both constrains those federal actions, such as the construction of dams and highways, that might jeopardize the continued existence of endangered species and restricts private land development that might kill or harm endangered species. This remains the strongest legal protection of biodiversity in the world. Then, in 1977, Congress amended the Clean Water Act to strengthen protections of privately held wetlands. Unlike prior federal laws that focused on the spectacular (e.g., national parks such as Yellowstone) and the special (e.g., wilderness

areas), these laws recognized that even lands that appear to many humans to be relatively “ordinary” can provide valuable habitat for biodiversity and other important ecosystem services such as water purification and flood control.

Application of these laws has proven controversial, often pitting environmentalists against property rights advocates who argue that restrictions on the use of their property should be compensated. Nor has passage of these laws resolved the conflict between conservationists and preservationists. The decade-long debates over oil drilling in the Arctic National Wildlife Refuge and logging in private, old growth forests are proof of that.

Today our natural resource policies must continue to ford the raging confluence of distinct historical perspectives—the view of wilderness and nature as obstacles to human welfare and resources to be developed and managed for society’s benefit, in one stream, and the role of wilderness and nature as sacred, essential to defining who we are as a people, and providing important ecosystem services, in the other. As Wallace Stegner succinctly described, our position is unique. “No other nation on Earth so swiftly wasted its birthright; no other, in time, made such an effort to save what was left.”

B. Pollution

Ever since the rise of farming and settled populations, pollution has been a concern of human society. The classic method of managing waste was one of dilution. Population densities were low and the environment could generally assimilate the largely organic wastes. As city populations rose, however, the harms from pollution and its links to public health became clearer in the public’s eye. Thus a London proclamation in 1306 threatened those responsible for air pollution from coal burning with “grievous ransoms.” Forty years later, Londoners could be fined two shillings if they did not remove waste from outside their homes. It’s fair to say, though, that even up to the turn of the 20th century, despite the construction of city sewers and early attempts at controlling air and water pollution, London still had “killer fogs” and Chicago’s rivers still congealed from the run-off of its slaughterhouses. As a practical matter, pollution regulation simply didn’t exist.

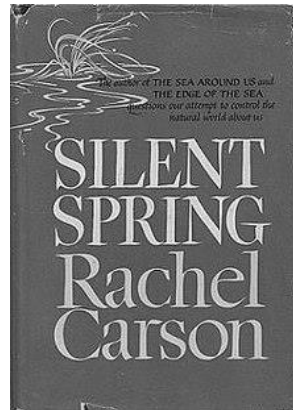
Instead, legal responses to pollution relied on the common law doctrines of trespass and nuisance. As described in Chapter 3, however, these legal remedies were retrospective, compensated only property losses, and required proof of proximate causation, often difficult to come by in pollution cases. Despite the obvious weaknesses of relying on the common law to protect the environment, there was very little national political concern over pollution through the first half of the 20th century. Following World War II, though,

the nature of pollution began to change. In particular, the field of organic chemistry took off, with mass distribution and use of synthetic compounds such as plastics and many modern pesticides. Viewed as technological wonders (which these new compounds truly were), there was little understanding of their impacts on the environment or human health. While worth a chuckle when viewed in retrospect, there were serious proposals in the early 1960s to use (small) nuclear bombs to build canals. If a single event can be linked to triggering doubts of this naive acceptance, it would be the publication and uproar that surrounded publication of Rachel Carson's book, *Silent Spring*, in 1962.

Known for her wonderful writings about the natural history of the ocean and seashore, Carson, a marine biologist with the U.S. Fish and Wildlife Service, was an unlikely pioneer of the environmental movement. Well aware that attacking a popular chemical product would be controversial, Carson spent four years of research prior to publication of *Silent Spring* carefully documenting the health and environmental effects of the pesticide DDT. The magazine, the *New Yorker*, published *Silent Spring* in a three-part series. Even prior to publication, the chemical industry mounted a high-profile attack on the book and its author, dismissing Carson as a nature-nut and unscientific. Ironically, the strength and hostility of the attacks on *Silent Spring* caught the interest of President Kennedy, who formed an advisory group to investigate the use and control of pesticides. This, in turn, spurred Congressional studies on pesticide regulation. Suffering from cancer at the time her book was published, Carson died in 1964, but the concerns aroused by *Silent Spring* continued to grow, spawning new advocacy-based organizations.



Rachel Carson (1907–1964)



The group Scenic Hudson, for example, was formed in 1963 and, in an early grassroots victory, successfully opposed plans to develop Storm King Mountain in the Hudson Valley into the world's largest pumped-storage hydroelectric plant. The case, *Scenic Hudson Preservation Conference v. Federal Power Commission*,² marked the first time environmental groups had been granted standing, the ability to bring a lawsuit before a court. The Environmental Defense Fund, another grassroots organization, was founded in 1967 to ban use of the pesticide DDT in Long Island.

SCENIC HUDSON PRESERVATION CONFERENCE V. FEDERAL POWER COMMISSION

354 F.2d 608 (2d Cir. 1965)

In March 1965, the Federal Power Commission granted a license to Consolidated Edison Company of New York, Inc. to construct a hydroelectric power plant on the west side of the Hudson River at Storm King Mountain in Cornwall, NY. Intended to provide additional electricity to New York City during peak use periods, the proposed project would have included a storage reservoir, a powerhouse, and transmission lines. Building the plant, however, threatened to remove part of the mountain near the river and flood an adjacent forest for the reservoir. Several local residents, as well as hikers' groups and conservation groups, opposed the project, fearing that it would destroy the natural beauty of the region and decimate the fish populations in the Hudson. These groups banded together to form the Scenic Hudson Preservation Conference and, along with several towns that would be impacted by the project, sued the Commission to stop the project and force consideration of alternative plans.

In a hearing before the Second Circuit, the court granted standing to Scenic Hudson and the towns. Noting that Section 10(a) of the Federal Power Act required all projects licensed by the Federal Power Commission be adapted to serve beneficial public uses, including "recreational purposes," the court found that the Federal Power Commission had not adequately studied alternatives or compiled a sufficient record to support its decision. Thus the court remanded the case, sending it back to the agency to conduct the license process properly. At the rehearing in 1971, the court held that the Federal Power commission had adequately considered the environmental and recreational impacts of the project.

The circuit court decision had three major consequences. First, despite winning its case in 1971, Consolidated Edison continued to face opposition to the Storm King project and, in 1979, ultimately

² 407 U.S. 926 (1972).

abandoned plans to construct even a scaled-down plant. Second, the case provided a clear example of the benefit of forcing agencies to consider the environmental impacts of their decisions, inspiring passage of National Environmental Policy Act in 1969. Third, by granting standing to the local groups comprising Scenic Hudson and allowing them to sue on behalf of the public interest, the court opened the door for environmental groups to challenge agency decisions and laid the foundation for the development of citizen suits.

Over 20 million people participated in the first Earth Day in 1970, and pollution control was firmly set on the national political scene. Creation of the Environmental Protection Agency and enactment of the Clean Air Act in 1970 was closely followed by the Clean Water Act in 1972, as President Richard Nixon and presidential candidate Senator Edmund Muskie competed with one another for the newly important environmental vote. The Resource Conservation and Recovery Act followed in 1976 and Superfund in 1980. Events such as Love Canal and the nuclear accident at Three Mile Island ensured that the public interest in environmental issues remained high. Taken together, these laws and those that have followed are known as the era of “modern environmental law.” In contrast to earlier regulation of pollution, all of these laws established uniform, tough, national standards.

The same era witnessed the birth of international environmental law. The UN-sponsored Stockholm Conference on the Human Environment in 1972 was the first gathering of the world’s heads of state for environmental protection. Creating the United Nations Environment Program, the Stockholm Conference launched two-decade wave of international agreements, including the Convention on International Trade in Endangered Species (1972), the moratorium on whaling (1982), The Montreal Protocol on Ozone Depleting Substances (1987), and the Basel Convention on the Transfrontier Movement of Hazardous Wastes (1989), to name just a few.

When looking back to 1970 from today’s vantage, it is easy to point out flaws in these laws. Congress was consistently over-ambitious, setting goals that could not be met, such as clean water or air within a decade, and shifting pollution from one medium to another (e.g., burning solid waste to reduce landfill pressure but increasing air pollution). Nonetheless, the modern era of environmental law stands out as a great success. Despite a larger population and greatly increased levels of economic activity, most of our nation’s air and water are far cleaner than four decades ago. Our

rivers no longer burn and the mountains around Denver and Los Angeles are clearly visible to residents.

Environmental interest has ebbed and flowed over this period, as has opposition to environmental protection. Indeed, environmental law has undergone constant change since the 1970s. Growing partisanship over environmental issues slowed the pace of new federal legislation in the late 1990s and the first decade of the 20th century. The result has been legislative stagnation. Congress refused to ratify the Kyoto Protocol or pass domestic climate change legislation. When Donald Trump took his oath of office in January 2017, over two decades had passed since the last significant amendments to major federal environmental legislation—the 1990 Clean Air Act Amendments (which reduced emissions of sulfur dioxide contributing to acid rain), the 1996 Food Quality Protect Act (which strengthened the Federal Insecticide, Fungicide, and Rodenticide Act), and the 1996 Safe Drinking Water Act Amendments.

Opposition to environmental law has become increasingly strident and partisan. In the 2016 presidential campaign, candidate Donald Trump vowed to cut EPA’s budget so that only “little tidbits” would be left. Many Republican members of Congress, as well as some Democrats, have successfully campaigned on platforms opposed to environmental laws, criticizing them as “job-killing,” too costly, or otherwise ill conceived. Environmental groups are forcefully pushing back through lawsuits. Liberal states are also suing and strengthening their own environmental laws to substitute for reduced federal regulation. However the current political dynamic plays out, environmental law and policy will surely remain at the forefront of the public debate, an exciting, important, and complex field.

QUESTIONS AND DISCUSSION

1. Do you consider yourself an environmentalist? Do you have stronger views on environmental protection when thinking about pollution, threats to natural areas, or threats to endangered species? Why do you think most people hold different views about pollution and nature conservation?
2. John Muir, Gifford Pinchot, Aldo Leopold, and Rachel Carson have rightfully taken their place as recognized heroes of the environmental movement. A more modern list might include people like Lisa Jackson (former EPA Administrator and head of environment at Apple), Bill McKibben (author and founder of the group, 350.org), Jane Lubchenco (marine ecologist and former head of NOAA), or Scott Harrison (founder of the nonprofit, Charity: Water), among others. Whom would you include in a list of today’s environmental heroes and why?
3. The popular conception of wilderness has evolved throughout American history—from a threatening untamed force, to an abundant economic

resource, to an inspiring spiritual resource, to a basic part of our American identity. Is the conception of wilderness still evolving? How would you describe the popular conception of wilderness today? How is this reflected in popular images and in the marketplace?

4. In considering the recent debates over climate change, how would you characterize the environmentalist position? How would you describe the industry position? Which aspects of these positions do you support and why?

5. In recent years, a much larger percentage of registered Democrat voters has viewed climate change as a serious threat than registered Republicans. Why do you think that is the case?

6. If you were Administrator of the U.S. EPA today, what would be your highest priorities? Why?