2 MAKING POLICY

THE PROCESS

In 2014, a once-common bumblebee had become so uncommon that it earned the attention of the White House. The rusty-patched bumblebee, one of the insect pollinators essential to production of America's fruit, nut, and vegetable crops, was rapidly disappearing. All 4,000 U.S. bee species appeared in decline but none so severely as the rusty-patched bee. In the previous twenty years, the bumblebee's population had fallen by almost 90 percent, and many scientists predicted that the bee was facing extinction unless the federal government initiated a plan to save it. By 2014, a movement to protect the bee had gathered sufficient political momentum to enlist the support of President Barack Obama. Thus, the fate of the rusty-patched bumblebee arrived on the federal government's policy agenda.

PROTECTING THE BEE: THE PATHWAYS OF POLICY

The prolonged and contentious effort that followed Obama's decision to protect the bee and the multibillion-dollar economy it supports displayed many of the enduring qualities—and provoked many of the conflicts—deeply embedded in the government's environmental policymaking. This chapter concerns the basic design of this policymaking and the fundamentals that shape most public policies. The bumblebee's Washington wayword odyssey is part of that larger story.

Multiple Agencies Deliberate

The decline of the rusty-patched bumblebee resulted in a widely reported presidential policy initiative in mid-2014 to protect America's endangered pollinating insects. "Pollinators contribute more than \$24 billion to the United States economy," emphasized the president, "of which honeybees account for more than \$15 billion through their vital role in keeping fruits, nuts, and vegetables in our diets." Obama then created a task force to investigate the rapid decline of honeybees and other pollinators. The task force originated in the White House, but like many other White House policy initiatives, this required multiagency collaboration. Obama directed two other executive agencies, the Department of Agriculture and the Environmental Protection

Agency (EPA), to lead in discovering why the pollinators were declining and to develop a conservation plan.

More executive departments were soon involved. If the rusty-patched bee faced extinction, it might be protected by the Endangered Species Act of 1973, intended to preserve any species of wild animal or plant in danger of extinction throughout all or a significant portion of its range. This crucial decision rested with the Fish and Wildlife Service (FWS) in the Department of the Interior. If the FWS determined a species was endangered, the FWS could "list" the species, which would then be protected by the federal government. Only the president or Congress could overrule the decision.

After almost two years' research and consultation with other agencies, the FWS proposed in 2016 to list the bee. By this time, however, the bee's fate had incited an intense controversy between politically important stakeholders deeply divided overwhether the rusty-patched bumblebee should be listed. The embattled stakeholders had organized national campaigns to promote or oppose the "endangered" listing, pressured Congress to intervene, and enlisted the support of federal agencies with which they were closely allied—all common strategies in American public policymaking.

Pressure Groups Mobilize

Support for the endangered listing was widespread among organizations representing environmentalists, biological scientists, conservationists, and public health officials, joined by many congressional Democrats and numerous scientists working in the private sector. They were also joined by political leaders in many northern and midwestern states, where the agricultural economies depended heavily on pollinators, and by the commercial bee industry, whose bees were essential to the pollination of major crop production and which had experienced a 44 percent loss of bee population in a single year. These interests looked to government scientists in the EPA, the FWS, the Department of the Interior, and other federal health and conservation agencies for additional support.

Opposition to the bee listing also mobilized a diversity of economically and politically potent interest groups. If the bee were listed, many farmers feared losing income and perhaps their farms because farmers might be forbidden to use powerful pesticides and insecticides that successfully protected crops but unintentionally and predictably killed millions of pollinators like bumblebees.³ The farm protest, led by national organizations such as the American Farm Bureau Federation and the National Association of State Departments of Agriculture, was joined by international chemical corporations such as Syngenta and Dow Chemical, which produced pesticides widely used in the United States to protect wheat, barley, corn, rice, sorghum, and potato crops. Other major interests opposed to the listing included the American Petroleum Institute, National Association of Home Builders, and the National Cotton Council of America. Many congressmen from midwestern and western farm districts also joined the antilisting coalition.

Scientific Controversy Prevails

As often happens in environmental policymaking, conflict prevailed over the quality of the science involved in the Obama initiative. Disagreement intensified among government scientists concerning whether the pesticides suspected of endangering the bees threatened the pollinators with extinction. Scientists in the Department of Agriculture, the EPA, the FWS, and the Department of the Interior, for example, advanced conflicting estimates of the pesticides' potency.

The Courts Intervene

Another predictable result of the bee controversy appeared when the federal courts were drawn into the conflict. Several national environmental organizations successfully petitioned federal judges to compel the FWS to hasten its deliberations about the bee listing. Opponents of the listing were also preparing legal strategies to contest the FWS listing if it occurred. Finally, nearing the end of the Obama administration in late 2016, the FWS finally announced its intention to list the rusty-patched bumblebee in January 2017.⁴ Proponents of the listing, however, had scant time to celebrate. The 2016 elections brought Donald Trump to the White House, much to the satisfaction of the listing opponents, who anticipated that Trump would overturn the FWS endangerment finding.

Contested Policy Is Created

On January 20, 2017, Donald Trump, a fierce advocate for reduced governmental regulation, became president and immediately signed an executive order freezing all pending federal regulations—the bee listing included—for sixty days while the new administration reviewed them. "The Trump administration has put the rusty-patched bumblebee on the path to extinction," warned a senior attorney for a major environmentalist organization that promptly filed suit against the FWS, claiming the agency had illegally delayed its bee listing. In mid-February, however, the FWS ruled that the bee was "balancing precariously on the brink of extinction" and announced its intention, despite White House displeasure, to officially list the bee as endangered by mid-March. And so, the rusty-patched bumblebee became the first American bee to reach the endangered list. 6

The bee might be protected environmentally but not yet politically. In February 2018, Congress joined the bee controversy when Senate Republicans organized a committee to consider "modernizing" the Endangered Species Act, which might make it possible to remove species, like the bee, already listed as endangered by the FWS. When this strategy faltered, the Battle of the Bee returned to the FWS. In September 2020, the FWS determined that the bee was not worthy of "critical habitats" where it could be protected. That announcement "made environmental organizations madder than a hornet and has them preparing for battle," reported an environmentalist newsletter.⁷

Once again, the courts were swept into the conflict when three environmental organizations announced in December 2020 the intent to sue the FWS for refusing to designate a critical habitat for the bee. By the time the Biden administration had settled into Washington, the bee controversy was still alive in the federal courts.

Policymaking Is a Process

The bee controversy exemplifies the multitude of actors and institutions, the complex fabric of decisions, and the sometimes glacial, disjointed, and frequently contentious sequence of events involved in the making of national environmental policy.

Although environmental policies often develop less tumultuously, the bee listing features some characteristics common to environmental policymaking. First, policymaking is a process that involves a number of related decisions originating from different institutions and actors ranging across the whole domain of the federal government and private institutions. Moreover, policymaking is continuous; once made, decisions rarely are immutable. Environmental policy is therefore, in some respects, fluid and impermanent, always in metamorphosis. Second, policymakers—whether of the legislative, White House, or bureaucratic type—can seldom act without restraint. Their discretion is bound and shaped by many constraints: the constitutional separation of powers, institutional rules and biases, statutory laws, shared understandings about the rules of the game for conflict resolution, political realities, and more. These constraints collectively are a given in the policy setting, which means government resolves most issues in a predictable style. Third, environmental policymaking is a volatile mixture of politics and science that readily erupts into controversy among politicians, bureaucrats, and scientists over their appropriate roles in the process, as well as over the proper interpretation and use of scientific data in policy questions.

One useful way to understand public policy, and environmental policy specifically, is to view the process as a cycle of interrelated phases through which policy ordinarily evolves. Each phase involves a different mix of actors, institutions, and constraints. Although somewhat simplified, this approach illuminates particularly well the interrelated flow of decisions and the continual process of creation and modification that characterizes governmental policy development. This chapter continues by describing the significant phases of environmental policymaking and then examines important constitutional and political influences, deeply embedded in U.S. political culture, that continually animate and shape the environmental policies emerging from this policy cycle.

THE POLICY CYCLE

Governmental response to public issues—the business of converting an issue into a policy—customarily begins when an issue can be placed on the governmental agenda. The successful promotion of issues to the agenda does not ensure that public policies

will result, but this step initiates the policy cycle. An environmental issue becomes an environmental policy as it passes through several policy phases.

Agenda Setting

Political scientist Charles O. Jones aptly calls agenda setting "the politics of getting problems to government."8 It is the politics of imparting sufficient importance and urgency to an issue so that the government will feel compelled to place the matter on the official agenda of government—that is, the "set of items explicitly up for the serious and active consideration of authoritative decision-makers." This means getting environmental issues on legislative calendars, before legislative committees, on a priority list for bill introduction by a senator or representative, on the schedule of a regulatory agency, or among the president's legislative proposals. In brief, getting an issue on the agenda means placing it where institutions and individuals with public authority can respond and feel a need to do so. Especially if an environmental issue is technical and somewhat esoteric, its prospects for making the agenda are bleak unless political sponsors are attracted to it. Former EPA assistant administrator and environmental activist Clarence Davies observes, "New technical information by itself does not significantly influence the political agenda. It must be assisted by some type of political propellant," such as an interest group, congressional committee, or the president. 10 Thus, the discovery of the stratospheric ozone hole and the ability of scientists to portray it in the most literal way—scientific photography enabled the public to see a hole—immensely hastened the Montreal Protocol to completion.

Formulation and Legitimation

The governmental agenda also can be a graveyard for public problems. Few issues reaching the governmental agenda reach the phase of policy formulation or legitimation. Policy formulation involves setting goals for policy, creating specific plans and proposals for these goals, and selecting the means to implement such plans. Policy formulation in the federal government is especially associated with the presidency and Congress. The State of the Union address and the avalanche of bills introduced annually in Congress represent the most obvious examples of formulated policies. Policies, once created, must also be legitimated and invested with the authority to evoke public acceptance. Such legitimation usually is done through constitutional, statutory, or administrative procedures, such as voting, public hearings, presidential orders, or judicial decisions upholding the constitutionality of laws—rituals whose purposes are to signify that policies have now acquired the weight of public authority.

Implementation

Public policies remain statements of intention until they are translated into operational programs. Indeed, the impact of policies depends largely on how they are implemented.

What government is doing about environmental problems relates primarily to how the programs have been implemented. Policy analyst Eugene Bardach compares the implementation of public policies to "an assembly process"; according to him,

[It is] as if the original mandate . . . that set the policy or program in motion were a blueprint for a large machine that has to turn out rehabilitated psychotics or healthier old people or better educated children. . . . Putting the machine together and making it run is, at one level, what we mean by the "implementation" process. 11

Policy implementation involves especially the bureaucracy, whose presence and style shape the impact of all public policies.

Impact and Reformulation

All the procedures involved in evaluating the social impact of governmental policies, in judging the desirability of these impacts, and in communicating these judgments to the government and the public can be called impact assessment. Often, the federal courts assume an active role in the process, as do the mass media. The White House, Congress, and the bureaucracy continually monitor and assess the impacts of public policy. As a consequence, once a policy has been formulated it may pass through many phases of reformulation. All major institutions of government may play major roles in this process of reformulation.

Termination

The "deliberate conclusion or succession of specific governmental functions, programs, policies or organizations" amounts to policy termination, according to political scientist Peter deLeon.¹² Terminating policies, environmental or otherwise, is such a formidable process that most public programs, in spite of intentions to the contrary, become virtually immortal. Policies usually change only through repeated reformulation and reassessment.

Policymaking Is a Combination of Phases

Because policymaking is a process, the various phases almost always affect each other, an important reason why understanding a policy often requires considering the whole development pattern. For instance, many problems encountered by the EPA when enforcing the Federal Water Pollution Control Act (1956) arose from the congressional failure to define clearly in the law what was meant by a "navigable waterway," to which the legislation explicitly applied. Congress deliberately built in this ambiguity to facilitate the passage of the extraordinarily complicated legislation. In turn, the EPA sought early opportunities to bring the issue before the federal courts—to compel judicial assessment of the law's intent—so that the agency might have reliable guidance

for its implementation of the provision. Also, many aspects of environmental policy may occur simultaneously. While the EPA was struggling to implement portions of the Superfund legislation allocating grants to the states for cleaning up abandoned toxic waste sites, Congress was considering a reformulation of the law to increase funding authorization to support more state grants.

CONSTITUTIONAL CONSTRAINTS

The design of governmental power intended more than two centuries ago for a nation of farmers still rests heavily on the flow of policymaking in a technological age. Like other public policies, environmental programs have been shaped and complicated by the enduring constitutional formula.

Checks and Balances

The Madisonian notion of setting "ambition against ambition," which inspired the constitutional structure, creates a government of countervailing and competitive institutions. The system of checks and balances disperses power and authority within the federal government among legislative, executive, and judicial institutions and thereby sows tenacious institutional rivalries that are repeatedly encountered in discussions of specific environmental laws. Yet as former presidential adviser Richard E. Neustadt has observed, these are separated institutions sharing power; effective public policy requires that public officials collaborate by discovering strategies to transcend these institutional conflicts.¹³

The U.S. federal system also disperses governmental power by fragmenting authority between the national and state governments. Despite the growth of vast federal powers, federalism remains a sturdy constitutional buttress supporting an edifice of authority—shared, independent, and countervailing—erected from the states within the federal system. "It is difficult to find any governmental activity which does not involve all three of the so-called 'levels' of the federal system." No government institution monopolizes power. "There has never been a time when it was possible to put neat labels on discrete 'federal,' 'state' and 'local' functions." 15

Regulatory Federalism

Federalism introduces complexity, jurisdictional rivalries, confusion, and delay into the management of environmental problems. Authority over environmental issues inherently is fragmented among a multitude of governmental entities. Moreover, almost all new federal regulatory programs since 1970 permit or require implementation by the states. For instance, thirty-five states currently administer water pollution permits under the Clean Water Act. State implementation of federal laws may vary greatly in scope and detail. The federal government often attempts to reduce

administrative complications in programs administered through the states by the use of common regulations, guidelines, and other devices to impose consistency on implementation. However, the practical problems of reconciling so many geographical interests within the arena of a single regulatory program often trigger major problems in implementing the programs.

Federal and state collaboration in environmental regulation is often cooperative but can be contentious. Many state authorities believe that numerous environmental problems now federally regulated would be best managed by state and local governments. Often, as in the emerging national controversy over the environmental impact of fracking to obtain petroleum from oil shale, many states want exclusive authority to regulate and often protest federal plans to assume that responsibility. Many state governments also resent the expense and administrative difficulty they must endure to implement the numerous environmental laws and regulations they believe the federal government has negligently piled on them. In the decade ending in 2010, for example, the EPA's major new environmental regulations imposed a minimum cost upon state governments of at least \$23 billion.¹⁶

Organized Interests

The Constitution encourages a robust pluralism of organized interests. Constitutional guarantees of freedom of petition, expression, and assembly promote constant organization and political activism at all governmental levels among thousands of economic, occupational, ethnic, ideological, and geographical interests. To make public policy in the United States requires public officials and institutions to reconcile the conflicting interests of organized groups who claim not only influence but sometimes even authority in making public policy. The constitutional architecture of the U.S. government also provides numerous points of access to public power for such groups operating in a fragmented governmental milieu. The political influence broadly distributed across this vast constellation of organized private groups clouds the formal distinction between public and private power. The course of policymaking moves routinely and easily between public institutions and private organizations mobilized for political action.

These constitutional constraints have important implications for environmental policy. It is easier to defeat legislation than to enact it and to frustrate incisive governmental action than to create it. Furthermore, most policy decisions result from bargaining and compromise among institutions and actors all sharing some portion of diffused power. Formulating policy usually means coalition building in an effort to engineer consensus by reconciling diverse interests and aggregating sufficient strength among different interests to support effective policies. As economist James V. DeLong observes, agencies "like to achieve consensus on issues and policies. If they cannot bring everyone into the tent, they will try to get enough disparate groups together so as to make the remainder appear unreasonable. If the interested parties are too far apart for even partial consensus, then the agency will try to give everybody something." ¹⁸

Bargaining and compromise often purchase consensus at the cost of disarray and contradiction in the resulting policies. "What happens is not chosen as a solution to a problem but rather results from compromise, conflict and confusion among officials with diverse interests and unequal influence," notes presidential adviser Graham Allison.¹⁹

INCREMENTALISM

Public officials strongly favor making and changing policy incrementally. "Policy making typically is part of a political process in which the only feasible political change is that which changes social states by relatively small steps," writes social analyst Charles A. Lindblom.²⁰ Gus Speth, a former chair of the Council on Environmental Quality and a veteran environmental policymaker, describes incrementalism as "working within the system." He explains:

When today's environmentalism recognizes a problem, it believes it can solve that problem by calling public attention to it, framing policy and program responses for government and industry, lobbying for those actions, and litigating for their enforcement. It believes in the efficacy of environmental advocacy and government action. It believes that good-faith compliance with the law will be the norm. . . . Today's environmentalism tends to be pragmatic and incrementalist—its actions are aimed at solving problems and often doing so one at a time. . . . In the end, environmentalism accepts compromises as part of the process. It takes what it can get. 21

Incrementalism is politically seductive. It permits policymakers to draw on their own experiences in the face of unfamiliar problems and encourages the making of small policy adjustments at the margins to reduce anticipated, perhaps irreversible, and politically risky consequences. But incrementalism also can become a prison of the imagination by inhibiting policy innovation and stifling new solutions to issues. Especially when officials treat new policy issues as if they were familiar ones and deal with them in the customary ways, a futile and possibly dangerous repetition of the past can result in the face of issues requiring fresh approaches.

NEPA (1969), the CAA (1970), and the other innovative legislation of the early 1970s came only after Congress repeatedly failed when dealing with environmental issues incrementally.²² For more than thirty years previously and despite growing evidence of serious environmental degradation, Congress had continued to treat pollution as a "uniquely local problem" requiring a traditional "partnership" between federal and state governments in which Washington gently, and unsuccessfully, prodded the states to deal more effectively with pollution. Finally, Congress put an end to this incrementalism with the avalanche of new, forceful federal environmental laws in the 1970s mandating national pollution standards and regulations that compelled state

compliance and enforcement. To many observers, this was a sudden outburst of environmental reform. In fact, its rise to the national policy agenda had been achieved by years of increasingly skilled, patient, and persistent promotion by a multitude of groups.

INTEREST GROUP POLITICS

It is an implicit principle in U.S. politics, assumed by most public officials as well as those groups seeking access to them, that organized interests affected by public policy should have an important role in shaping those policies. Few special interests enjoy such pervasive and unchallenged access to government as business, but almost all major organized groups enjoy some measure of influence in public institutions. Many officials, in critic Theodore Lowi's terms, conduct their offices "as if it were supposed to be the practice of dealing only with organized claims in formulating policy, and of dealing exclusively through organized claims in implementing programs." ²³

Structuring Groups Into Government

Arrangements exist throughout governmental structures for giving groups access to strategic policy arenas. Lobbying is accepted as a normal, if not essential, arrangement for ensuring organized interests' major roles in lawmaking. More than 1,000 advisory committees exist within the federal bureaucracy to give interests affected by policies some access and voice in agency deliberations. Hundreds of large, quasi-public associations bring together legislators, administrators, White House staff, and private-group representatives to share policy concerns, thereby blurring the distinction between public and private interests. The Atomic Industrial Forum, for instance, pursues the interests of commercial nuclear power corporations. Successful organized groups so effectively control the exercise of governmental power that, in historian Grant McConnell's words, significant portions of the U.S. government have witnessed "the conquest of segments of formal state power by private groups and associations." ²⁴ In effect, group activity at all governmental levels has been practiced so widely that it has become part of the constitutional order.

Business: Secure and Effective Access

No interest has exploited the right to take part in the governmental process more pervasively or successfully than has business. In environmental affairs, the sure access of business to government assumes enormous importance because business is a major regulated interest whose ability to represent itself and secure careful hearing before public agencies and officials often delays or complicates such regulation. During the 2020 congressional session, for instance, business and energy organizations were exclusively represented among the top twenty interest groups in lobbying expenditures. ²⁵

Business weighs especially heavily in the deliberations of public officials because its leaders collectively manage much of the economy and perform such essential economic functions that the failure of these businesses would produce severe economic disorder and widespread suffering. According to Lindblom,

Government officials know this. They also know that widespread failure of business . . . will bring down the government. A democratically elected government cannot expect to survive in the face of widespread or prolonged distress. . . . Consequently, government policy makers show constant concern about business performance.²⁶

So great is this concern that public officials usually give business not all it desires but enough to ensure its profitability. Out of this grows the privileged position of business in government and its widely accepted right to require that government officials often "give business needs precedence over demands from citizens through electoral, party, and interest-group channels."²⁷

Business also enjoys practical political advantages in competition with other interests for access to and influence on government: far greater financial resources, greater ease in raising money for political purposes, and an already existing organization available for use in political action. These advantages in strategic resources and salience to public officials do not ensure the uncompromised acceptance of business's demands on government, nor do they spare business from defeat or frustration by opponents. But business often, if not usually, is able to exploit its privileged status in U.S. politics to ensure that its views are represented early and forcefully in any policy conflicts, its interests are pursued and protected carefully at all policy phases, and its forces are mobilized effectively for long periods of time. These are formidable advantages, often enough to give a decisive edge in competitive struggles with environmental or other interests that do not have the political endurance, skill, or resources to be as resolute in putting pressure on government when it counts.

Environmentalism's Access

Prior to the 1970s, the environmental lobby could claim, with considerable justification, to be political outsiders compared to business. However, environmental groups—along with public-interest groups, consumer organizations, and others advocating broad public programs—were quick to promote a number of new structural and legal arrangements that enlarged their governmental influence. Congress and administrative agencies often created these structural and legal arrangements deliberately for the advantage of environmental interests. These new arrangements, defended ferociously by environmental organizations against continuing assaults by their political opposition, have diminished greatly the disparities in political access and influence that once so conspicuously distinguished environmentalists from their political opponents. Environmental groups, in fact, have acquired the finesse to be formidable adversaries

in traditional political confrontations with well-endowed opponents. In 2015, the ten leading environmental organizations, with a collective membership exceeding 15 million, were estimated to have more than 2,000 staff and a budget of more than \$525 million. During the 2020 presidential election year, the League of Conservation Voters, the most important environmentalist political action committee, spent more than \$13 million to elect favored candidates. ²⁹

However, environmentalists gain no advantage when the skilled legislative advocacy of lobbyists is involved. In 2020, for example, environmental organizations reported spending about \$13 million for lobbying, while energy and natural resource interests, a frequent political adversary, spent \$225 million. Still, environmentalism no longer wears the rags of the politically disadvantaged and the establishment outsider. In the vernacular of Washington, D.C., environmentalists are now major players—so major that a closer look at organized environmentalism and its impact on public opinion is essential to understand the fundamental driving forces of environmental policymaking.

THE ENVIRONMENTAL MOVEMENT: CONFRONTING THE CHALLENGE OF CHANGE

In mid-2012, the EPA sent photographers across the United States to once again photograph some of the most dramatic examples of pollution that inspired the environmental movement and dramatized the environmental crisis during the era of the first Earth Day. However, "the clouds of smoke billowing from industrial smokestacks, raw sewage flowing into rivers that had galvanized public concern were gone." And that creates a problem, observed William Ruckelshaus, the EPA's first administrator, who commissioned those early, powerful photographs. "To a certain extent, we are a victim of our own success," he observed. "Right now, EPA is under sharp criticism partly because it is not as obvious to people that pollution problems exist and that we need to deal with them." However, this is one among several other compelling issues facing environmental organizations as the environmental movement ages into a changing political era.

As a political profile of the environmental movement illustrates, environmentalism's political vitality has been sustained by the continuity and political skill of its organizational base. While this has enabled environmentalists to be major players in U.S. politics, these organizations now confront the considerable challenges in staying politically relevant and effective for a new American generation in an era of political change. Among these important challenges are effectively dramatizing emerging environmental problems to the public, recruiting and retaining organizational membership, confronting growing partisan division within Congress over environmental regulation, resolving sometimes intense conflicts within the movement itself, and competing successfully for financial resources in economically difficult times.

Strategies and Tactics

Organization is the bedrock on which the politics of successful environmental policymaking is built. Estimates of environmentalism's organizational membership vary. About 5 percent of Americans report membership in an environmental organization, and between 15 and 21 percent customarily report they have been active in an environmental group. Accurate estimates are difficult, but perhaps 6,000 organized environmental groups are nationally active, together with thousands more transient state, local, and regional organizations defying enumeration.³³ The thousands of organized national, state, and local groups, collectively enrolling millions of members, arm the movement with absolutely essential political resources that only organized groups provide—dependable, active, informed, and experienced advocacy.³⁴ Organized groups create the kind of constant pressure on policymakers and the continual aggressive surveillance of policy administration required for effective policy influence in government.

Over the years since Earth Day 1970, the number of U.S. environmental and conservation advocacy groups³⁵ has grown steadily. Estimates of their number are elusive, but these groups, regardless of size and resources, probably exceed 26,000.³⁶ Most environmental organizations are quite small in membership and financial resources.³⁷ No more than a few thousand have incomes sufficient to enable significant, national-scale activities, and the political core of environmentalist organizations—those with the political clout and income to be major presences in national or international environmental policymaking—probably does not exceed 100 organizations. Most of these highly influential groups, often characterized as the "environmentalist establishment" or BINGOs (big, influential nongovernment organizations) have been important presences since the first Earth Day.

A politically significant change since that Earth Day has been the continuing growth in number of and activism among environmentalist groups at the state and local governmental levels—in fact, these constitute most of the environmental and conservation groups currently active. This growth in membership has enlarged the political clout of environmental interests at the state and local levels at a time when state and local governments have become increasingly important actors in U.S. environmental policymaking.³⁸ Between 2000 and 2008, for instance, environmental organizations successfully promoted three unprecedented regional agreements to regulate climate change emissions: the Regional Greenhouse Gas Initiative (RGGI) among northeastern states; the Midwest Climate Initiative; and the Western Climate Initiative.³⁹

Ideological Consensus and Cleavage

Environmentalism has never been a church of one creed. To the frustration of some leaders, this pluralism is often politically divisive in legislative infighting, especially with formidable opponents, such as business interests. "Business interests are like the Republican party—they're able to find a message, stay on message and get everyone

to talk on the same page," lamented veteran environmental leader Leon Billings. "Environmental groups are like the Democratic party—50 different states with 50 different messages, and no member who wants to say the same thing more than once." Although pluralism and the conflicts born of it are inherent in environmentalism, this pluralism is still bounded by general values, attitudes, and beliefs—a way of looking at nature, humanity, and U.S. society—widely shared with many nuances by environmental leaders and activists. Although this pluralism lacks the coherence of an ideology, it sets environmentalists apart from mainstream U.S. culture.

Essential Principles

Reduced to essentials, environmentalism springs from an attitude toward nature that assumes humanity is part of the created order, ethically responsible for the preservation of the world's ecological integrity, and ultimately vulnerable, as are all Earth's other creatures, to the good or ill that humans inflict on nature. In the environmentalist perspective, humans live in a world of limited resources and potential scarcities; like the good stewards of an inheritance, they must use their scientific genius to manage global resources. An enlightened approach to managing nature, the environmentalists argue, should stress the interdependency of all natural systems (the ecosystem concept), the importance of ecological stability and resource sustainability, and the enormously long time span in which the impact of ecological change occurs. In its approach to nature, environmentalism emphasizes the sanctity of the created order as a warning against the human assumption that we stand above and apart from the created order by virtue of our intelligence and scientific achievements. All this is summed up for many ecologists in the metaphor of spaceship Earth, the image of a unique and vulnerable ecosystem traveling through space and time, dependent on its crew for survival.

In its cultural stance, environmentalism sharply criticizes marketplace economics generally and capitalism particularly, and it denigrates the growth ethic, unrestrained technological optimism, and the political structures supporting these cultural phenomena. Such an attitude often places environmentalists on a collision course with dominant U.S. values. Environmentalism challenges U.S. confidence in market mechanisms to allocate scarce resources for several reasons. Environmentalists assert that market economics esteem economic growth and material consumption above concern for ecological balance and integrity. Therefore, the market cannot be relied on to signal resource scarcity efficiently enough to prevent possibly catastrophic resource exhaustion.

Environmentalism is less hostile to technology itself than to blind faith in the power of technology to cure whatever ecological ills it begets and to bland confidence in technological expertise to meet humanity's material and spiritual needs. Environmentalists regard the public's confidence in American know-how as responsible for many of the nation's most difficult environmental problems, such as the management of commercial nuclear technologies. The environmental movement's initial political agenda arose

from these attitudes toward the natural world and contemporary culture. From its inception, the movement has expressed an ambivalence toward the nation's dominant social structures that frequently translates into calls for major institutional as well as policy reforms. Many environmentalists believe that the nation's dominant political institutions and processes must be reformed because they are committed to the preservation of ecological, economic, and technological values that are hostile to prudent ecological management. For some, this is summed up as suspicion of the establishment and the traditional institutions and processes associated with it. Political scientist Susan Leeson argues that "if American political ideology and institutions have been successful in encouraging the pursuit of happiness through material acquisition, they appear incapable of imposing the limits which are required to forestall ecological disaster." Many fear the power of an interlocking economic and political structure committed to controlling technology in environmentally reckless ways.

The Ideological Mainstream

Organized environmentalism today is divided into several ideological enclaves. The movement's dominant ideological and political style has been crafted by pragmatic reformers—the largest, most politically active, and publicly visible organizations—represented by national groups such as the Sierra Club and the National Wildlife Federation. These large organizations emphasize political action through government; traditional styles of politics such as bargaining and coalition building; and national environmental agendas focusing on pollution, resource conservation, and land use. Their priorities are "influencing public policy in incremental steps, forging pragmatic alliances issue by issue with those with whom they could agree," explains Michael McCloskey, former executive director of the Sierra Club. McCloskey emphasizes that the pragmatists do not believe "that the entire political or economic system needed to be changed and were confident that environmental protection could be achieved within the framework of existing institutions of governance."

The ideological diversity among the pragmatists, however, makes them appear more an ecumenical movement than a denomination. One important factional conflict pits preservationist groups, such as the Sierra Club and the Wilderness Society, which emphasize the preservation of resources rather than their economic or recreational exploitation, against groups such as the Izaak Walton League and the National Wildlife Federation, which favor prudent resource development for public use and economic growth. Another significant cleavage divides the pragmatists from antiestablishment groups such as Friends of the Earth and Environmental Action, which are impatient with the moderation and slowness of political action among the leading national groups but still committed to traditional forms of political activity. The national leadership in almost all mainstream environmental organizations, in fact, contends with their own grassroots factions, which, in the words of critic Brian Tokar, believe "the voices of 'official environmentalism' [are] hopelessly out of step with the

thousands of volunteers who largely define the leading edge of locally based environmental activism." To these critics, the leaders of official environmentalism have become just another political elite, absorbed in promoting their careers and accommodating the corporate interests that they should be opposing. When the World Wildlife Fund, for instance, selected a former executive of Weyerhaeuser Company, an international timber industry giant, for a major management position, the organization was bitterly flayed by one grassroots environmentalist publication:

The World Wildlife Fund functions more like a corporate enterprise than public interest group. It . . . has made millions upon millions hawking its panda logo, a brand as zealously marketed as Nike's "swoosh." But, of course, it's done almost nothing to save the panda . . . except peddle pictures to trophy wives and innocent third graders. Call it Panda porn. . . . The World Wildlife Fund also rakes in millions from corporations. . . . As a result, WWF's budget has swelled to over \$100 million a year. . . . Most of it goes to pay for plush offices, robust salaries, and a tireless direct mail operation to raise even more money. 44

These critics, who agree on little else, complain about the amount of foundation money flowing into the coffers of pragmatic environmental groups. In 2017, for example, more than eighty foundations, most representing corporate money, contributed to conservation organizations, and sixty foundations funded projects or organizations related to climate change. In the opinion of the critics, corporate largesse encourages mainstream environmentalism to "green wash" the environmental record of the donors and to compromise programs and tactics to suit foundation patrons. Undoubtedly, foundations do prod their environmentalist clientele toward political moderation, but such influence is highly variable. The hard-liners, moreover, have had their own foundation angels, and many odd-couple alliances exist between relatively moderate foundation sponsors and aggressive environmental activists, such as the long-standing alliance between the Ford Foundation and Environmental Defense.

Deep Ecologists

Another highly vocal faction within environmentalism comprises individuals and groups ideologically committed to deep ecology or lifestyle transformation. Deep ecologists believe humans are, at best, only a part of nature—and not necessarily the most significant part. They believe that all forms of life have equal claims on existence; that social, political, and economic institutions should promote the ecological vitality of all created orders; and that fundamental changes in national institutions and lifestyles are essential to preserve global ecological integrity. The fundamental political problem, from the deep ecologists' perspective, is that social institutions have become instruments for the human exploitation of the created order for the primary benefit of humans, often through technologies that threaten to destroy essential aspects of the natural order. Deep ecology inherently challenges the fundamental institutional

structures and social values on which governments, economies, and societies are presently constituted. Thus, between deep ecologists and what they call the shallow ecology of mainstream environmentalism, there abides a profound philosophical tension, nourished by antagonistic principles and a sharply disparate political imagination.⁴⁶

Deep ecologists, lacking the political leverage of organizational or numerical strength, are presently a vocal, aggressive, and dissenting minority within the environmental movement. Many within the movement, preferring social to political action, have adopted individual and collective lifestyles outside conventional U.S. culture. Nonetheless, deep ecologists continue to be politically active, often to greatest effect at the state and local levels.

Radical Environmentalism

Militant and alienated from the movement's organizational mainstream, radical environmentalism emerged in the 1980s among environmentalists disillusioned with establishment styles and accomplishments. According to environmental historian Bill Devall, the radical environmentalists

were discouraged by the compromising attitude of mainstream groups, by the bureaucratization of the groups, by the professionalization of leaders and their detachment from the emerging concerns of grassroots supporters, and by the lack of success of mainstream organizations in countering the Reagan anti-environmental agenda,⁴⁷

Radical environmentalists favor direct-action tactics, including the street politics of civil disobedience, nonviolent demonstrations, and political obstruction. To environmental radicals, the harassment of commercial whaling vessels on the high seas by Greenpeace protest vessels, carefully orchestrated to attract media attention worldwide, was better politics than the inhibited, reformist style of the mainstream organizations.

Radical environmentalists share a common sensibility that all life is mortally threatened by an ecological degeneration created by advanced, modern cultures. Thus, radicals espouse a fundamental cultural transformation that rejects the dominant political and economic institutions of most advanced societies as incompatible with global ecological vitality. This preoccupation with transformational politics usually involves a belief in "bearing witness" through lifestyle changes emphasizing harmony with nature, conservation of resources, and cooperative living in reconstructed, ecologically sensitive societies.⁴⁸

Despite a commitment to nonviolence, radicals betray ambivalence about violence—ecotage and monkey-wrenching are euphemisms—condemned from within and outside the environmental movement. Shadowy groups such as the Animal Liberation Front (ALF) and the Earth Liberation Front (ELF) are suspected of violent property destruction (the ALF website has contained information on making arson devices, and the ELF claimed responsibility for burning down a Boise Cascade Corporation office in Oregon, causing \$1 million in damages).⁴⁹ The small but aggressive movement Earth First! is environmentalism with a fist: "Earth First! has survived attacks by moderates, would-be leaders and the agents of the system, remaining the most diverse, passionate, committed, and uncompromising group of environmental activists," it advertises. "Our direct actions in defense of the last wild places only seem radical compared to an entire paradigm of denial and control, where the individual is convinced they are powerless, and the organizations set up to protect the wilderness continue to bargain it away." Earth First! spokespeople sometimes assert that when defending nature and saving old-growth trees from lumberyards, it may be permissible to spike those trees with metal rods likely to fragment into shrapnel when shattered by commercial logging chain saws.

Other groups, such as Greenpeace and the Sea Shepherd Society, have been accused of nonviolent direct action that provokes violence, such as disabling the nets of commercial fishing vessels whose crews refuse to protect dolphins during deep-sea tuna harvesting. In light of the profound cultural alienation inherent in many radical ideologies, an ambivalence about political violence is inevitable, although radical environmentalism's political strategies still remain—sometimes barely—within the tradition of nonviolent direct action.

Organizational Structures and Strategies

The number and size of environmental organizations fluctuates over time. Nonetheless, the major national organizations retain the numbers and resources needed to ensure their influential presence in national policymaking. By one estimate, the ten leading environmental organizations in 2015 had more than 15 million members and a collective budget exceeding \$525 million. Moreover, to the national membership rolls should be added the thousands of grassroots state and local groups. For instance, one national organization concerned with solid waste identifies 7,000 collaborating state and local groups. Altogether, the number of national, state, and local environmental organizations is estimated to exceed 10,000.

Environmental Group Membership

In mid-2017, 17 percent of a sample of the American public reported to Gallup that they were "active participants" in the environmental movement. Although social approval for environmentalism is broadly based in the United States, the organizational membership is mostly middle to upper class, white, well educated, and well-off. Such a socially select membership exposes environmentalists to the frequent criticism that the so-called greens are too white and too well-off and that they are racists or elitists indifferent to people of color and the economically disadvantaged. To support these accusations, critics argue that environmentalism fights for clean air but not for equal employment opportunities, promotes wilderness preservation for upscale recreationists but not better schools for the disadvantaged, and condemns pollution in national parks

but not inner-city decay. In short, the agenda of environmentalism is largely a wish list from the book of middle-class, white lifestyles. Mainstream environmental organizations, increasingly sensitive to such criticism, have struggled to broaden their social constituencies and policy agendas. A number of national organizations have initiated joint action with labor and underrepresented groups, intended to make environmentalism relevant to the workplace and neighborhood. Most national environmental organizations, responding to initiatives from underserved groups, also have supported the emerging environmental equity movement intended to end discrimination against the economically disadvantaged in environmental policymaking. The emergence of environmental racism as a mainstream environmentalist concern is discussed in Chapter 4.

The Organizational Mainstream

The environmental movement's national leadership is concentrated in a small number of highly visible, politically skilled, and influential organizations. These groups, anointed The Big Green in one survey, typically includes Defenders of Wildlife, Environmental Defense Fund, Greenpeace, National Audubon Society, National Wildlife Federation, Natural Resources Defense Council, the Nature Conservancy, Sierra Club, the Wilderness Society, and the World Wildlife Fund.⁵⁴

These large, mainstream groups, mostly political pragmatists, are thoroughly professionalized and sophisticated in staff and organization. They are armed with the same high-technology tools and modern techniques of policy advocacy as any other powerful national lobby. The large membership rolls of the national organizations demonstrate an aptitude for direct-mail solicitation that is as good as can be found in Washington, D.C.

The economic recession beginning in 2009 created serious funding problems for many environmental organizations. Most of the large "establishment" organizations felt the recession's impact in declining membership numbers, diminished contributions, and reduced income from foundation and government grants.⁵⁵ The election of Donald Trump in 2016, however, produced the "Trump Bump"—a massive surge of new membership and money for mainstream environmental organizations fiercely opposed to Trump's environmental agenda.⁵⁶ The Sierra Club, for instance, reported 11,000 new monthly donors in the weeks following the presidential election, nine times the previous record.⁵⁷

Growing professionalization of the leadership of the mainstream groups also continues to provoke accusations from many environmentalists that the national organizations have lost their fire and vision. The critics charge that the national leadership is more bureaucratic than charismatic and that it has lost touch with the movement's grassroots and has become too preoccupied with bargaining and compromise.

Environmentalists and the Politics of Procedure

Rep. John Dingell, D-MI, a legislator of legendary political skill, once shared a lesson gleaned from thirty years in Congress: "I'll let you write the substance on a statute,

and you let me write the procedures, and I'll screw you every time." Dingell's axiom illuminates a law as fundamental to policymaking as gravity is to physics—the decision-making rules, as much as the policy outcomes, enlarge or diminish group power. The environmental movement, always respectful of Dingell's axiom, has been as aggressive in promoting advantageous policy procedures as in creating substantive environmental laws.

The politics of procedure is always a fundamental consideration in environmentalist political agendas. Indeed, the movement's power flows, in good part, from success in procedural politics, from aggressively exploiting advantages through the intricate manipulation of policy process. Because so many environmental laws are implemented largely through bureaucracy and the courts, environmental organizations have been especially sensitive to the importance of protecting or enhancing decision-making procedures that work to their benefit in these institutions. The success of this strategy depends on securing these procedural advantages through law: statutory, administrative, or judicial. The public politics of environmentalism could not have succeeded so well and perhaps not at all had environmentalism's political power not been anchored in procedural law during the movement's rise to influence in the 1970s. "To a great extent, environmental group power . . . was legal power," observes political scientist George Hoberg, and environmentalism survived because the new legal arrangements "granted environmental groups institutional and legal foundations that to a large extent solidified their power status within the regime." "59

Environmental groups have benefited especially from changes in law and administrative procedure that enhance their access to information and their opportunities to participate in the implementation of environmental laws. A major environmental reform was the enactment of NEPA (National Environmental Policay Act) in 1969, requiring federal agencies to prepare environmental impact statements that have become a major source of substantive information and procedural influence in federal environmental policies. Other important reforms include provisions in almost every major environmental law to greatly expand citizen participation in administrative decision-making and to make it easier for citizens to sue administrative agencies for failure to implement environmental laws.

Environmentalism and Political Engagement

Environmental organizations are an active, highly visible, and politically important presence among the major organized interests in U.S. politics at all governmental levels. Environmental groups seldom match in political resources the magnitude of money, organization, and legislative representation available to powerful economic sectors such as business, labor, and agriculture, but the political skill and resources of environmental advocacy is nonetheless considerable. Environmental organizations rarely claim to be partisan, but the reality is that most of their money invested in partisan elections flows to Democrats. During the 2020 federal elections, for instance,

96 percent of environmental contributions went to Democratic candidates, while 2 percent went to Republicans.⁶⁰

ENVIRONMENTALISM AND ITS CRITICS

Although environmentalist organizations are committed to defending the public interest and public values, they also represent a constituency with its own ideological and material interests. As environmentalism becomes increasingly organized and politicized nationally, critics assert that it has also assumed the narrow, self-interested viewpoint of every other interest group while promoting policies that often serve no public ends.

Public Interest or Self-Interest?

Critics frequently allege that environmentalism is largely the voice of a social elite hostile to U.S. capitalism, distrustful of science inconsistent to its own viewpoint, and obsessed with imagined or exaggerated ecological problems. To fortify such arguments, critics assert that the environmentalists' passion for controlled economic growth will deprive the economically disadvantaged domestically and internationally, that wilderness preservation usually benefits a handful of naturalists but deprives the average American of access to and enjoyment of wilderness resources, and that locking up resources costs jobs and inhibits economic progress. Moreover, continues the indictment, environmentalists often selfishly obstruct valuable public or private projects like power-generating plants, waste landfills, and even apparently environmentally friendly projects when these might threaten their lifestyles or property values. Critics have delightedly seized on events that seem proof of perverse environmentalism, such as the opposition by some environmental spokespeople to a proposed 130-tower wind farm in Horseshoe Shoal, a shallow portion of Nantucket Sound south of Cape Cod, and the vehement environmentalist battle against a vast solar-energy plant in the Mojave Desert, a very remote and reliably sunny location. 61 In these and many similar instances, however, plausible reasons exist for concern about the biological and ecological impacts of such projects, and—as often happens—the environmentalist community itself is often divided over the issues.

Many environmental organizations are striving diligently for greater social diversity in membership and programs. National environmental organizations, for example, are actively seeking, with some success, to build durable alliances with labor unions anchored by a shared concern about workplace safety and worker health, but the stigma of social exclusivity still clings to the movement. In addition, increased professionalization and competition among environmental groups breeds a preoccupation with organizational needs. In additional needs.

Environmental leaders also resort to the rhetoric of crisis so habitually that environmentalism's mother tongue may seem to be the apocalypse. This hyperbolic style begets the kind of misstatements on which critics often seize to demonstrate environmentalism's distorted vision. There have certainly been errors, as the discussion of the controversies over the chemicals diisononyl phthalate (DINP) and dioxin demonstrate (see Chapter 4). Nonetheless, environmentalists have aroused an appropriate sense of urgency about numerous ecological issues such as climate change, air and water pollution, groundwater contamination, radioactive wastes, and surface mining, to cite but a few. The mainstream environmental organizations are sometimes also condemned as shrewd opportunists, promoting policies that enlarge their own political power at public expense. The Superfund program is often cited as a flagrant case in point. The major environmental groups generally insist on the strictest possible standards for all Superfund site cleanups, as required in the original law. Others have suggested that some relaxation of standards would enormously shrink the huge program costs and greatly facilitate site cleanups without significantly increasing risks to public health. But the critics assert that environmentalists insist on the stringent standards because it draws to their side the waste treatment industry and the legal profession, for whom the strictest standards ensure the greatest income.

Pressure Politics: Constructive Opposition and Destructive Obstruction?

It is a political axiom of organized environmentalism that only unremitting pressure on the government will ensure that environmental laws are implemented effectively. This informal ideology of countervailing power is animated by the conviction that government officials cannot be trusted to implement environmental regulations without the coercive force of pressure politics. Distrust of bureaucrats runs so deeply through environmentalism that, next to saving nature for humanity, environmentalists often seem most dedicated to protecting the public from its public servants. This sour assault on environmental regulators, for instance, comes not from regulation's embittered foes, but from Michael McCloskey, the former executive director of the Sierra Club:

[Regulatory programs] need endless follow-through and can go wrong in a thousand places. The relevant bureaucracies have minds of their own and very little loyalty to the ideas of those who lobbied the programs through. Although the bureaucracies are somewhat responsive to presidential direction, they are not very responsive to outside lobbying and are subject to no self-correcting process if they fail to be productive.⁶⁴

The reliance by those within organized environmentalism on countervailing power is manifest in their customary resistance to the relaxation of strict pollution standards, which critics consider to be stonewalling. Countervailing power also means the continual resort to litigation, administrative process, citizen

involvement, and any other procedures that equate with group pressure on government. More than half of all litigation initiated against federal agencies involving compliance with NEPA and the majority of all legal challenges to EPA regulations originate with environmental organizations, often in collaboration with labor unions, consumer groups, and private interests. Environmental organizations are extremely aggressive in challenging federal, state, and local agencies over compliance with Superfund cleanup standards and over the licensing of hazardous waste disposal sites and nuclear utilities, among many other issues.

The skilled exploitation of these and other political processes has invested environmentalists with political power they probably would not otherwise have. Countervailing power can force administrative agencies and their regulated interests to comply with laws they might prefer to ignore and frequently improves the quality of regulatory decision-making. But countervailing power also has produced enormous delays in the implementation of regulations and increased significantly the cost of environmental regulation through litigation and administrative processes. Whether the use of countervailing power is dangerously disruptive to environmental governance is a concern to many within the environmental movement as well as to its critics.

The continuing controversy over environmentalism reveals some political realities—environmentalist organizations have institutional dogmas and self-serving agendas that may not always be compatible with the larger interests of the movement or even with their own professed goals. Although environmental organizations frequently speak in the name of an encompassing public interest, they also speak for a distinctive social and ideological constituency that often does not include the whole public or even a majority of the public. Environmentalism itself is increasingly divided over the goals and social constituencies to which it should be responsive.

THE PUBLIC AND ENVIRONMENTALISM

Whatever its internal dissonances, the environmental movement has been largely responsible for a remarkable growth in public environmental consciousness and acceptance of environmental protection as an essential public policy. These are public assets, essential to the movement's continuing political vitality, and environmental organizations are extremely adept at arousing public concern on environmental matters and turning it into political advantage. How durable and deep this public support may be, especially in times of severe political or economic hardship, is a different matter.

A Core Value

"The transformation of the environment from an issue of limited concern to one of universal concern is now complete," observed opinion analyst Everett Carll Ladd in mid-1996.⁶⁵ The strength of public support for environmental protection early in the

twenty-first century, as measured by most public opinion polls, appears widespread. However, the intensity of this support is variable over time.

Critics sometimes assert that environmental interest groups speak for only a small portion of the public, but most polls seem to suggest otherwise. In general, opinion polls consistently report that substantial majorities in almost all major socioeconomic groups support the environmental movement and governmental programs to protect the environment and have supported them since Earth Day 1970. 66 Environmental activists have been especially gratified that the polls offer little support to the once widespread notion that concern for environmental quality is a "white thing." 67 As long as environmental questions are lofty abstractions, the public's answers can easily imply that environmentalism's roots run deeply as well as broadly across the nation. Certainly, when the political bedrock of environmental regulation seems threatened—when fundamental laws such as the CAA or Clean Water Act seem imperiled—public support for environmentalism has usually been dependable. In early 2020, for example, Figure 2.1 reports public concern about environmental protection shortly preceding the onset of the Covid-19 pandemic.

Environmentalists have also accomplished what amounts to a massive raising of the public's ecological consciousness through public education about environmental issues facing the United States and the world. On the first Earth Day, ecology and the environment were issues foreign to most Americans. Today, most Americans have a rudimentary understanding of many basic ecological precepts, including the importance of resource conservation and the global scale of environmental problems. And the movement has educated the public and itself into embracing a progressively larger conception of the environment.

How Deep and Broad Is Public Environmentalism?

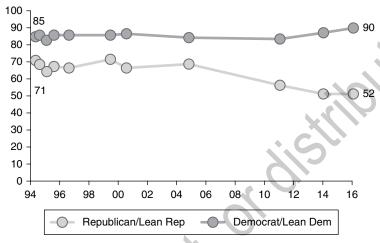
Despite the public's ecological concern, environmentalism's public impact is still restricted in politically important ways. Environmentalism may now be a consensual value in U.S. politics, but it is what public opinion analyst Riley E. Dunlap calls a "passive consensus"—a situation of "widespread but not terribly intense public support for a goal [in which] government has considerable flexibility in pursuing the goal and is not carefully monitored by the public."⁶⁸

By 2020, several durable patterns had emerged, suggesting that the other things to which Americans are turning seldom include sustained interest or reflection about environmental issues at home, at work, or at the voting booth. First, environmental issues have rarely risen to compelling importance or remained among the issues that most concern the public. Thus, while the public often names the environment among issues about which they are concerned in advance of an election, when it comes to voting, the environment seldom ranks among the public's consuming concerns. When the Pew Center, for example, asked a sample of voters in mid-2020 which issues concerned

FIGURE 2.1 Public Concern About the Environment, 2016

Should the country do whatever it takes to protect the environment? Most say yes, but party divisions grow wider

Percentage of U.S. adults who say the country should do whatever it takes to protect the environment



Source: Monica Anderson, "For Earth Day, Here's How Americans View Environmental Issues," Facttank, April 20, 2017, http://www.pewresearch.org/fact-tank/2017/04/20/for-earth-day-heres-how-americans-view-environmental-issues/.

them in the presidential election, climate change—not environmental protection itself or other related issues—ranked only tenth among twelve public priorities.⁶⁹

Second, this low electoral priority for environmental issues prevails even though the public consistently rates Democrats, and especially Democratic presidential candidates, much higher than Republicans on environmental stewardship. In none of the past eight presidential elections, for instance, did more than 11 percent of voters ever state that the environment was the most important issue in casting their ballots.⁷⁰ Third, the disconnect between the voters' environmental values and their candidate preferences, especially in presidential elections, seems to result from several enduring assumptions about environmental issues. Duke University's Nichols Institute concluded from a careful survey of voter behavior that most voters

- believe significant progress has been made in environmental protection,
- perceive the environment as "long-term issues that did not warrant the same priority as more 'immediate' concerns such as jobs and health care," and
- assume that environmental policies would have negative economic impacts such as lost jobs and higher taxes.⁷¹

Sudden surges of public interest or apprehension about the environment predictably rise in the aftermath of widely publicized environmental disasters or emergencies, such as climate change, but public concern is usually evanescent unless the issue is repeatedly dramatized and personalized. At best, deep public engagement with environmental issues is a sometime thing.

Fourth, a deep, apparently growing partisan cleavage now runs like a fault line across public alignments on most domestic environmental matters. On most major issues related to environmental policy—how to regulate, what to regulate, and whether to regulate—Republican and Democratic partisans persistently disagree.⁷² The breadth and depth of this gap is evident in the Pew poll found in Figure 2.2, reflecting voter attitudes early in the 2016 presidential election year concerning environmental regulation.⁷³ This gap is not surprising, considering that Democratic party identifiers attribute much greater importance to environmental issues and to environmental regulation than Republicans.⁷⁴

The 2020 presidential election once again demonstrated the public's preoccupation with the economy as a priority public policy issue and the potency of economic issues in commanding public attention and setting national policy priorities. Does this imply that environmental protection has become a hostage to the economy? Not necessarily. It is not clear how opinions about the economy and the environment translate into decisions by the public and public officials concerning specific policies. In broader perspective, these polls exemplify what most public officials know from experience: the enormous difficulty in persuading the public to accept the substantial costs of environmental management in terms of dollars or lifestyle. (Jimmy Carter, battered by a nasty public backlash after his efforts to manage the 1970s energy crisis with new controls on public energy consumption, compared that struggle to "gnawing on a rock.")⁷⁵ It may sometimes appear to environmental leaders that an environmental equivalent of the 9/11 terrorist attack on New York is required to arouse sustained public attention and acceptance for even modest personal costs that might be involved.

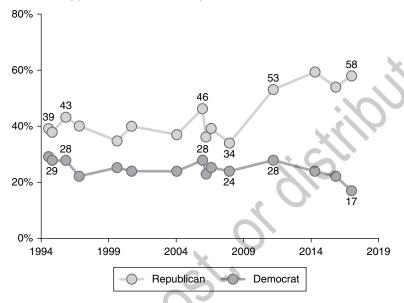
THE SPECIAL PLACE OF SCIENCE IN POLICYMAKING

National environmental governance depends, in large measure, upon the quality and importance of sound scientific information supporting environmental policy. Environmental scientists, their research, and their advisory committees have been an irreplaceable foundation of this policymaking from its inception. While environmental policymaking is sometimes accompanied by controversy over the science supporting policy decisions and by disagreement between scientists, it has been important that scientific criteria rather than partisan political values become the essential metric for determining the credibility of scientific information whenever possible.

FIGURE 2.2 Partisan Differences About Environmental Regulation

Political parties grow farther apart on impact of environmental regulations

Percentage of U.S. adults who say stricter environmental laws and regulations cost too many jobs and hurt the economy



Source: Monica Anderson, "For Earth Day, Here's How Americans View Environmental Issues," Facttank, April 20, 2017, http://www.pewresearch.org/fact-tank/2017/04/20/for-earth-day-heres-how-americans-view-environmental-issues/.

Note: Republicans and Democrats include independents and others who "lean" toward one of the parties. Respondents who do not lean toward a political party, gave other responses, or did not give an answer are not shown.

Science as Law

The range of scientific judgments required of administrative agencies in implementing environmental programs seems to embrace the whole domain of ecological research, as shown by these examples:

- The U.S. Coast Guard is authorized "in order to secure effective provisions
 ... for protection of the marine environment ... to establish regulations for
 ships with respect to the design and construction of such vessels . . . and with
 respect to equipment and appliances for . . . the prevention and mitigation of
 damage to the marine environment." The prevention and mitigation of
 damage to the marine environment.
- The EPA is to set effluent standards for new sources of water pollution so that
 each standard reflects "the greatest degree of effluent reduction . . . achievable
 through application of the best available demonstrated control technology,

process, operating methods, or other alternatives, including, where practicable, a standard permitting no discharge of pollutants."

Congress—and particularly the congressional committees writing legislation—also may have to resolve a multitude of technical issues. When regulating hazardous substances, for instance, what is a reasonable period to specify for chemical manufacturers to produce reliable data on the human effects of potentially dangerous substances? Is it necessary to regulate air emissions from diesel trucks to reduce harmful air pollutants? Is it appropriate to include heavy metals in the list of water pollutants for which standards must be created by the EPA? Eventually, judges will often be compelled to weigh scientific evidence and render judgment on environmental issues.

Science as Politics

In policy conflicts, data become weapons, and science becomes a bastion against critics. Torturing technical data to fit some partisan position has become an art form in policy debates. Environmental issues frequently place scientists in a highly charged political atmosphere in which impartiality and objectivity, among the most highly esteemed scientific virtues, sometimes fail.

Scientists are consulted by public officials in good part because the scientists' presumed objectivity as well as their technical expertise makes them trustworthy advisers. But impartiality can be an early casualty in highly partisan and polarizing policy conflicts. Even if scientists maintain impartiality, they cannot prevent the partisans of one or another policy from distorting the technical information to gain an advantage. Scientists suspect (with justification) that their work will often be misrepresented in political debate and their credibility consequently diminished.

In any case, it is characteristic of environmental policy that scientific evidence and opinion often are divided for political reasons and, thus, that expert disagreements will reinforce political conflicts. Especially when political conflict tends to polarize views and force division over issues, an expert can intentionally or unwittingly shade opinions to fit a favored position or manipulate materials until they fit a simplistic policy position. When scientific disputes erupt in the course of environmental decision-making, one need not assume willful deceit on any side to suggest that political and economic bias might play some part in convincing experts of the truth of a position. Unfortunately, few executives or legislative agencies are innocent of data manipulation, deliberate or not, at some time.

Policy Pressures and the Scientific Method

The politician and the scientist live in fundamentally different decision-making worlds. Significant differences exist in the time frames for problem-solving. "In his search for truth," biologist Roger Revelle observes, "the scientist is oriented toward the future;

the politician's orientation is usually here and now. He desires quick, visible payoffs for which he often seems willing to mortgage the future. For the politician in a democratic society, infinity is the election after the next one." Often, public officials are compelled to act swiftly. The Superfund Amendments and Reauthorization Act, for example, passed in 1986, included among its 150 deadlines a requirement that the EPA issue a plan to implement the act's radon research program, produce an annual report on radon mitigation demonstration programs, and provide a report on its national assessment of the radon problem in less than two years after the legislation was passed. ⁷⁹

If a crisis erupts—a newly discovered, leaking hazardous waste dump or a potentially catastrophic oil spill, for instance—information is needed immediately. But scientific information rarely appears on demand, even in urgent situations and especially when it must be sufficiently accurate to point to a clear direction for policy.

Public officials, moreover, often must craft environmental policies amid continuing disagreement between experts and the public over the degree of risk associated with various environmental problems. For instance, whereas the public rated chemical waste disposal as the highest environmental risk, the experts ranked it considerably lower. In contrast, the experts assigned much greater risk to stratospheric ozone depletion and indoor radon than did the public. Critics of current environmental regulation, pointing to these disparate views of ecological risk, often argue that public opinion has intimidated policymakers into following the wrong environmental priorities.

Still, decisions must be made, thus often confronting policymakers with an unwelcome choice between a scientifically risky decision and a politically risky one.80 Consider, for example, the decision facing EPA Administrator Lisa Jackson and her staff in mid-2012 when confronting a legal requirement that the EPA review the national air quality standard for fine particulates, often called soot, and recommend change from an older standard if more recent scientific research justified it. Particulates are extremely small, solid particles found in air and produced by dust, smoke, fuel combustion, agriculture, and forest cultivation, among other sources. Soot is a recognized public health hazard associated with significant deaths, chronic respiratory illness, infant mortality, and other illness. Confronted with an approaching legal deadline and based upon available EPA research, Jackson had informed the White House that she would recommend that existing permissible particulate levels be reduced—in effect, made more rigorous, a decision the EPA estimated would prevent thousands of premature deaths and other illness. The White House responded to the EPA's recommendation with a suggestion that the particulate requirement be less rigorous but still tougher than the existing standard. Jackson subsequently responded with a new proposal for a less rigorous standard than she had originally advocated.

The EPA's revised decision incited an intense political and scientific controversy. Critics, including many public health organizations, charged that the White House was interfering with EPA science. Environmentalist organizations were almost unanimously opposed to the White House response. In that spirit, the clean air director of the

Natural Resources Council, a major national environmental organization, considered it "obnoxious and untoward that a bunch of economists and politicos in the [White House] evidently told EPA that it had to propose a [weaker standard] as a formally endorsed preference, contrary to EPA's wishes and scientific views." Congressional Republicans, major spokespeople for the petroleum industry such as the American Petroleum Institute, and organizations representing major industries subject to the regulation asserted that the EPA's initial recommendation had been scientifically questionable and economically damaging; many opposing the EPA's new standard asserted that there was no compelling need to change the standard at all, especially at a time when the regulated industries were enduring an economic recession. Moreover, the EPA was aware of concern from political spokespeople from a number of populous urban U.S. counties who expressed displeasure because their counties would be out of compliance with any newly revised standard, resulting in potentially serious political and economic impacts.

As the debate evolved, it became clear that setting the new standard also involved substantial scientific uncertainties. EPA scientists had long acknowledged that setting the particulate standard was difficult because any standard except total elimination of airborne particulates would still create significant public health risks. ⁸² In short, no scientifically "safe" standard could be created, and any decision would have to be made on the basis of how much estimated risk to public health was considered acceptable.

While the EPA had until December 2012 to make a decision and was not necessarily compelled to heed the White House recommendations, as a practical matter the agency would almost certainly have to abide by White House preferences. In the end, whatever decision Jackson and her staff eventually made concerning the final standard, there was no safe harbor from a decision loaded with both scientific and political risk and uncertainty—and the same problem will likely arise when the standard has to be reviewed in the future.

CONCLUSION

In an important sense, environmental degradation is a twenty-first century problem resolved according to eighteenth century rules. Fundamental government arrangements, such as institutional checks and balances, interest-group liberalism, federalism, and much else reviewed in this chapter, are explicitly created by the Constitution or are implicit in its philosophy. The explosive growth of federal environmental legislation and the distinctive role of science in environmental policymaking add distinctly new elements to the federal policy cycle and indicate that environmental management has become a permanent new policy domain within federal and state governments with its own set of institutional and political biases.

SUGGESTED READINGS

Ascher, William, Toddi Steelman, & Robert Healy. (2010). Knowledge and Environmental Policy: Re-Imagining the Boundaries of Science and Politics. MIT Press.

Kraft, Michael E., & Scott R. Furlong. (2017). *Public Policy: Politics, Analysis, and Alternatives* (6th ed.). CQ Press.

Layzer, Judith. (2015). The Environmental Case: Translating Values Into Policy (4th ed.). CQ Press.

Lindblom, Charles A., & Edward J. Woodhouse. (1993). *The Policy-Making Process* (3rd ed.). Prentice Hall.

Marzotto, Toni, Vicky Moshier Burnor, & Gordon Scott Bonham. (2000). *The Evolution of Public Policy: Cars and the Environment*. Lynne Rienner.

Mazur, Alan. (2017). Technical Controversies Over Policy: From Fluoridation to Fracking and Climate Change. Routledge.