Domestic and Global Environmental Policy Institutions and Actors

INTRODUCTION

An inquiry into environmental policy must involve identification of the main actors and stakeholders. This chapter will identify both the key global actors and the important domestic ones. At the domestic level, the main federal institutions and actors include the president, the Congress, and the courts. The powers of each and how they may impact the making of environmental policy is discussed. Several executive agencies are central players in environmental policy including the Environmental Protection Agency, the Department of Interior and its various departments, the Department of Energy, the Forest Service, and the Army Corps of Engineers. At the domestic level, consideration also needs to include the states and the role they play in a system dominated by regulatory federalism. Domestically as well as internationally, the role of the nonprofits sector and environmental interest groups is important. Finally, the role the media plays both in setting the nation's environmental agenda and framing the narrative of environmental issues is discussed.

On the international level, the main player is the United Nations (UN) System which includes the General Assembly of Nations, the Security Council, and several UN organizations that function to

support human health and the environment. United Nations conferences, held since 1972, that focused on the environment as well as sustainable development have been important not only in setting the international agenda but also in creating a further subset of environmentally focused international organizations and international environmental regimes. Nongovernmental organizations are also important actors for global environmental issues because they play a critical role in the complex network of organizations that are vital to the making of global environmental policy.

U.S. ENVIRONMENTAL POLICY INSTITUTIONS AND ACTORS

The United States has many institutions and actors that deal with environmental policy at the federal and state and local levels. Of key importance at the federal level are the president and the executive branch agencies, the Congress, and the courts. Each state also has a structure that mirrors the federal structure, to some extent, although states may differ in how they organize their efforts. Finally, nonprofit organizations and the media play important roles. Each of these will be discussed below.

The Chief Executive

The president of the United States has several powers that make the chief executive a key player in environmental issues. These powers allow the president several ways to set or influence the environmental policy agenda. First, the president is required by the Constitution to provide Congress with an address on the state of the nation from time to time. This has become what today is the annual State of the Union Address. It is through this address that the president can inform Congress and the nation of executive priorities for the coming year including policies that concern the environment. While the Constitution does not require the president to submit an annual budget, the Budget and Accounting Act of 1921 does. This act requires the

president to submit a budget message to Congress at the beginning of the congressional session. Although there is no legal mandate to provide a statement of policy agenda priorities in the federal budget, the chief executive typically includes a policy message at the beginning of the budget document to announce the administration's policy objectives. Additionally, the chief executive indicates policy priorities in the budget by suggesting to Congress what level of funding the executive branch would like to see for agencies and programs.² Presidents, as managers of the federal government agencies, have the power to issue Executive Orders to agency personnel that may specify procedures and policies to follow in daily operations. This power influences the behavior of agencies. For instance, when President Clinton issued an executive order instructing all executive agencies to take environmental justice into consideration, he was able to use this managerial power of the president to influence environmental policy. The chief executive is given power in the Constitution to veto legislation. If Congress passes environmental laws that the president does not approve of, this power allows the president to stop that legislation unless Congress has enough votes to override the veto. The president also has the power to appoint the heads of cabinet-level and other executive agencies, with the advice and consent of the Senate, and to create White House advisory commissions. This authority allows the president to put in place the political heads of said agencies under the assumption that those selected will be loyal to the chief executive's policy framework. Finally, the president has the authority to negotiate international treaties. Since most transboundary environmental issues must be negotiated among a group of nations, the power of negotiation is important in environmental policy.3 Together, all of these powers make the chief executive a critical player in environmental politics and policy.

Congress

Congress possesses many powers that make it a key player in environmental policy. First and foremost, Congress crafts and passes

legislation. This lawmaking can be specific environmental legislation, or it may be law that impacts the agencies that have a heavy role to play in environmental policymaking. The most important of this type of legislation would be the annual budget of the United States which determines the funding level of all government agencies. Through the authorization-appropriation process, Congress establishes, modifies, or continues programs or policies and then funds them.⁴ While the president can suggest a budget, it is Congress that ultimately votes for a budget and determines funding levels.

Both the House of Representatives and the Senate organize themselves into numerous committees. Table 1.1 shows the standing committees for the second session of the 114th Congress. As Table 1.1 shows, many committees have some say in environmental affairs. This fragmentation creates considerable complexity for the many environmental agencies in the federal government as each of these committees will have some sway over environmental legislation as well as oversight of the specific executive agency charged with implementing and enforcing U.S. environmental statutes. Oversight activities of the committees include holding hearings, conducting investigations, and issuing reports. Congressional oversight focuses the attention of the media and the public on the specific issues under consideration.

Table 1.1
Committees of the U.S. Congress

House	Senate
Agriculture	Agriculture, Nutrition, and Forestry
Appropriations	Appropriations
Armed Services	Armed Services
Budget	Banking, Housing, and Urban Affairs

Education of the Workforce	Budget
Energy and Commerce	Commerce, Science, and Transportation
Ethics	Energy and Natural Resources
Financial Services	Environment and Public Works
Foreign Affairs	Finance
Homeland Security	Foreign Relations
House Administration	Health, Education, Labor, and Pensions
Judiciary	Homeland Security and Government Affairs
Natural Resources	Judiciary
Oversight and Government Reform	Rules and Administration
Rules	Small Business and Entrepreneurship
Science, Space, and Technology	Veterans' Affairs
Small Business	
Transportation and Infrastructure	
Veterans' Affairs	
Ways and Means	

Source: Library of Congress, "Standing Committees of the U.S. Congress," accessed February 1, 2017, https://www.congress.gov/committees.

The Courts

The federal courts that have some engagement with environmental policy include the district courts, the court of appeals,

and the Supreme Court. Decisions of the U.S. Supreme Court affect the entire nation, but the decisions made in other courts affect environmental policy as well. Decisions made in federal district courts provide the initial frame for many environmental policy issues. As these cases move forward, key arguments are developed, special interests are organized, and baseline judicial decisions are made that will provide the foundation for subsequent reviews, if any, by appellate courts.⁵

An important role of the courts in environmental policymaking involves the use of citizen suits. Most environmental laws allow environmentally minded individuals or groups to sue to compel enforcement actions when governments fail to act. Under citizen suit provisions, individuals and organizations can sue anyone or any organization thought to be in violation of an environmental law. Under citizen suit provisions individuals or groups can also sue the Environmental Protection Agency administrator or other government officials who are not carrying out a non-discretionary legal obligation.⁶

The Executive Office of the President

There are two important organizations within the Executive Office of the President that have a good deal to do with environmental policy. The first is the Council on Environmental Quality (CEQ). CEQ was created by the National Environmental Policy Act of 1969. It is headed by three members appointed by the president and its function is to advise the president and others in the Executive Office of the President regarding environmental issues of importance. CEQ, however, can provide no more advice to the president than the president wishes to get, therefore, CEQ's influence varies based upon the environmental stance of the president. The second unit to consider is the Office of Management and Budget (OMB). As its name suggests, OMB is responsible for management and budgeting, giving it considerable power. Since the Reagan administration, the OMB has also been the organization responsible for reviewing required Cost Benefit Analyses for potential new regulations that might have a major impact on the economy. OMB also houses the Office of Information

and Regulatory Affairs (OIRA) which reviews draft and final regulations coming from agencies.⁷

The Environmental Protection Agency (EPA)

As the nations of the world began to become concerned over the state of the environment in the 1960s and 1970s, the American public shared that concern. Accordingly, in 1970 EPA was created through a reorganization of the federal government undertaken by then President Richard Nixon. The circumstance that the agency was cobbled together from pieces of other agencies and the fact that Congress has passed many environmental laws which necessitate that EPA be organized in ways that emphasize programs developed to implement those laws, has led some to conclude that EPA is not a well-integrated organization.⁸

EPA also suffers from fragmentation due to the heavy role that regulatory federalism plays in environmental policy. Many environmental laws allow the states to share in, if not lead, the implementation of environmental policy. EPA also exists within the wider system of separation of powers. While EPA's authority is established by Congress through the passing of laws, EPA is an executive agency and therefore is directly accountable to the president. If a president has an anti-environmental perspective, this can put EPA career staff directly in conflict with leadership.9

EPA's headquarters is located in Washington, D.C. but EPA also has ten regional offices located in Boston, New York, Philadelphia, Atlanta, Chicago, Dallas, Kansas City, Denver, San Francisco, and Seattle. Both the headquarters and the regional offices are organized in separate offices that reflect its programmatic organization, including the offices of air and radiation, chemical safety and pollution prevention, land and emergency management, and water. ¹⁰ As of 2016, EPA had a budget of over \$8 billion and a workforce of 15, 376. ¹¹ EPA's budget and resources are typically strained, a perennial problem stretching back to the Reagan administration when the then president,

believing he had an anti-regulatory and anti-environmental mandate, used resource restriction as a means to constrain the agency.

EPA's mission is "to protect human health and the environment." They do this by enforcing the nation's environmental laws and by creating regulations written to provide critical details necessary for enforcement. EPA is responsible for enforcing all or parts of many laws, as shown in Table 1.2.

Table 1.2

Major Environmental Laws EPA Enforces

Law	EPA's Responsibility
Atomic Energy Act (AEA) (1946)	When EPA was formed, it was given the responsibility to issue environmental radiation standards.
Beaches Environmental Assessment and Coastal Health (BEACH) Act (2000)	Amended the Clean Water Act to authorize EPA to give grants to eligible states, territories, tribes, and local governments to support testing, monitoring, and notification of the public of disease-causing microorganisms in coastal waters.
Clean Air Act (CAA) (1970)	EPA to establish air emission standards and regulate stationary and mobile sources of air pollution.
Clean Water Act (CWA) (1972)	EPA to regulate the discharge of pollutants into the waters of the United States and establish quality standards for surface waters.

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA, or Superfund) (1980)	EPA to oversee a federal "Superfund" to clean up uncontrolled or abandoned hazardous waste sites.
Emergency Planning and Community Right-to-Know Act (EPCRA) (1986)	EPA to help local communities protect themselves from chemical hazards through local planning and data made available in the Toxic Release Inventory (TRI).
Energy Policy Act (2005)	EPA to regulate underground storage tanks to prevent releases and leaks.
Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) (1947)	When EPA was formed, EPA was given control over distribution, sale, and use of pesticides through registration (licensing).
Food Quality Protection Act (FQPA) (1996)	Amended FIFRA and the Federal Food, Drug, and Cosmetic Act to allow EPA to set risk-based standards for pesticides.
Ocean Dumping Act (1988)	EPA to develop ocean dumping criteria to be used in permitting.
National Environmental Policy Act (NEPA) (1969)	EPA to review Environmental Impact Statements prepared by other federal government agencies.

Noise Control Act (1972)	EPA to coordinate the programs of all federal agencies related to noise research or control.
Oil Pollution Act (1990)	EPA to regulate aboveground storage facilities to prevent and respond to oil spills.
Toxic Substances and Control Act (TSCA) (1976)	EPA to regulate toxic substances.
Frank R. Lautenberg Chemical Safety Act for the 21st Century (2016)	Amended TSCA to strengthen EPA's ability to control toxic substances.

Source: EPA, "Major Laws and Executive Orders," accessed October 31, 2016 https://www.epa.gov/laws-regulations/laws-and-executive-orders#majorlaws.

The Department of the Interior (DOI)

DOI has a large role to play in natural resources. Its mission is "protecting America's great outdoors and powering our future." Included within DOI are several subdivisions that have specific authority and jurisdiction. Under the Assistant Secretary for Fish, Wildlife and Parks are the National Park Service (NPS) and the U.S. Fish and Wildlife Service (FWS). Under the Assistant Secretary for Land and Minerals Management are the Bureau of Land Management (BLM); the Office of Surface Mining, Reclamation and Enforcement (OSMRE); the Bureau of Ocean Energy Management (BOEM); and the Bureau of Safety and Environmental Enforcement (BSEE). Under the Assistant Secretary for Water and Science are the U.S. Geological Survey (USGS) and the Bureau of Reclamation (USBR).

Established in 1916, NPS is responsible for the National Park System which is made up of the many national parks, national preserves, national heritage areas, national monuments, national historic trails, and national historic parks in the U.S. NPS employs about 22,000 people and in 2016 had a budget of about \$3 billion.¹³

FWS, along with the National Oceanic and Atmospheric Administration (NOAA) Fisheries Service, have the responsibility of implementing the Endangered Species Act of 1973. FWS is also involved with fish and aquatic conservation, migrating birds, climate change, invasive species, and landscape conservation. Under its International Affairs program, FWS has responsibilities under many treaties, such as the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). FWS employs about 9,000 people and had a 2016 budget of about \$3 billion. FWS manages the 150 million-acre national Wildlife Refuge System and operates 70 National Fish Hatcheries, 65 fishery resource offices and 86 ecological services field stations. Fig. 15 per people and 15 per people and 86 ecological services field stations.

BLM has control over more than 245 million surface acres of U.S. federal lands and 700 million acres of sub-surface mineral estate owned and managed by the federal government. BLM was given authority by Congress under the Federal Land Policy and Management Act of 1976 and its amendments to control this land by using the policies of multiple use and sustained yield. Accordingly, BLM leases rights to energy, minerals, timber, and grazing lands. They also offer recreational opportunities for the public interested in using these public lands for that purpose. BLM has an annual budget of more than \$1 billion and a workforce of 10,000 employees. BLM also generates revenue through its activities. For example, in FY 2012 it produced nearly \$5 billion in revenue most of which came from onshore oil and gas development. 17

The Office of Surface Mining, Reclamation and Enforcement is responsible for regulating surface coal mines and dealing with the restoration of abandoned coal mines. It was created in 1977 when Congress passed the Surface Mining Control Reclamation Act. OSMRE works with the states to protect the land during surface mining of coal and to safely restore the land after mining is done. A small agency, OSMRE had a 2016 budget of just over \$150 million,

although it has access to funds exceeding \$1 billion through the Abandoned Mine Reclamation Fund, which OSMRE can use to assist communities affected by abandoned mines. OSMRE employs only about 500 people.¹⁹

The Bureau of Ocean Energy Management manages the development of the U.S. Outer Continental Shelf energy and mineral resources. Much of this work involves the leasing of offshore oil and gas wells. ²⁰ The Bureau of Safety and Environmental Enforcement was created in aftermath of the Deepwater Horizon oil spill to separate regulatory efforts from promotion efforts. BOEM now functions to promote energy development while BSEE is the regulatory arm that works to assure environmental safety of offshore drilling. ²¹ BOEM, a small agency, had a 2016 budget of just over \$170 million and employed 574 people. ²² BSEE had a 2016 budget of just under \$190 million and employed 785 people. ²³

USGS, created by Congress in 1879, is the only science agency in the Department of Interior. The nation's largest mapping agency, its mission is "providing reliable scientific information to describe and understand the Earth; minimize loss of life and property from natural disasters; manage water, biological, energy, and mineral resources; and enhance and protect our quality of life."²⁴ In 2016, USGS had a budget of just over \$1 billion and employed just over 8,000 people.²⁵

The Bureau of Reclamation is responsible for managing water in America's arid West. Established in 1902, USBR is famous for its many dams and power plants, including Hoover Dam and Grand Coulee Dam. It provides water to many millions, generates energy, and provides many recreational opportunities for the public.²⁶ In 2016, USBR had a budget of \$1 billion and employed 5,300 people.²⁷

The Forest Service (FS)

Located within the Department of Agriculture, the Forest Service manages 154 national forests and 20 national grasslands in the U.S. The first leader of the FS was Gifford Pinchot, who established the mission of multiple use for the national forests and grasslands.²⁸ Pinchot was an advocate of conservation and "wise use." With the help of his friend and supporter, Theodore Roosevelt, Pinchot's influence expanded as did the amount of forest land set aside for conservation under the authority of the FS. Today the FS has jurisdiction over 191 million acres of land. It has a 2016 budget over \$2 billion and employed 38,000 people.²⁹

The Department of Energy (DOE)

Established as a cabinet-level agency in 1977 by President Carter, DOE was supposed to become the focus of national energy policy. DOE was established at a time when the nation was confronting a global energy crisis and was seen as necessary to coordinate national energy efforts including energy production, distribution, research and development (R&D), regulation, and conservation. While most of the efforts of DOE are focused on nuclear material safety and security, DOE does have a large role to play in environmental issues. DOE must address the cleanup of the DOE facilities that were part of the nuclear weapons complex and DOE continues to run the country's national laboratories where a great deal of R&D is done. DOE also promotes energy efficiency and the development of emerging clean energy technologies that may be critical to dealing with climate change.³⁰ In 2016, DOE had a budget of \$29.6 billion and employed more than 13,000 federal employees and over 90,000 contractors.³¹

Army Corps of Engineers (USACE)

The Army Corps of Engineers is one of the two large water managers in the federal government, the Bureau of Reclamation being the other. USACE began in the Revolutionary War and has continued as an engineering unit ever since. In 1794, it was split into civilian and military branches. Its civilian branch, the larger of the two, is charged with a variety of activities. To assist the nation to accommodate water traffic, USACE dredges rivers. Flood control is another role, and this is done through building levees, dikes, and reservoirs.³² Many of these

reservoirs now also provide recreation sites. USACE employs about 37,000 civilians and military personnel and had a 2016 civil works budget exceeding \$4.6 billion.³³

National Aeronautics and Space Administration (NASA)

Established by President Dwight D. Eisenhower in 1958, NASA's mission expanded from satellite technology to space exploration after President Kennedy established the goal of astronauts landing on the moon. NASA is a government agency with a R&D mission and a scientific base. NASA is headquartered in Washington, D.C. but has ten field centers spread across the United States. NASA contributes to environmental policy in several ways. It studies the Earth and is helping to answer critical questions regarding climate change, sea-level rise, freshwater resources, and extreme weather events. NASA had a 2016 budget of \$18.5 billion and employed approximately 19,000 government workers along with about 60,000 contractors.³⁴

National Oceanic and Atmospheric Administration (NOAA)

Located in the Department of Commerce, NOAA is a science agency. NOAA monitors climate and weather, assists with the building of resilient communities, and participates in fisheries management. NOAA is a central science agency player in providing data to monitor climate change and to track severe weather events. NOAA had a 2016 budget of nearly \$6 billion and employed over 12,000 people.³⁵

The Role of the States

Almost all environmental laws include a special role for the states that is based in the U.S. system of regulatory federalism. Since the earliest federal environmental laws were passed, stress has been placed on the states creating their own implementation mechanisms that will bring the state into compliance with federal standards set by law. To

accomplish this, most states have established a state-based environmental agency. While the names of these agencies vary state by state, they share the common responsibility of being the state-level focus for environmental issues.³⁶

The states vary in their commitment to environmentalism. Some states have a very strong environmental ethos while other states do not. Research suggests that states with substantial economic dependency on extractive industries and manufacturing tend to have a lower commitment to high environmental standards than do states with an economy based on tourism and white-collar jobs.³⁷ Studies have also shown that states with liberal public opinion, strong environmental groups, and liberal state legislatures are the most committed to environmentalism.³⁸ States with a strong commitment environmentalism include Oregon, Vermont, Washington, California. States that lead in opposition to environmentalism include Texas, Louisiana, Wyoming, and Oklahoma.

Environmental Interest Groups

There are many environmental interest groups functioning both in the United States and worldwide. Their missions vary as do their strategies and tactics. Major environmental interest groups include: Defenders of Wildlife, Ducks Unlimited, Environmental Defense Fund, Greenpeace, National Audubon Society, National Resources Defense Council, National Wildlife Federation, Nature Conservancy, Sierra Club, Wilderness Society, and the World Wildlife Fund.

Nonprofit environmental interest groups engage in an array of activities and actions to promote the issues and solutions to which they are committed. Some specialize in taking legal action, like the Sierra Club. Others prefer to engage in non-violent direct action, like Greenpeace. Some hold demands for environmental protection without regard to the cost of solutions or the preservation of the capitalist system while others, like Environmental Defense Fund, seek

solutions that are cost effective and within the frame of western market-based systems.³⁹

In addition to these large national groups, there are numerous local groups that form around particular local issues. Examples include such groups as the Texas-based AGUA that seeks to protect the large Edwards Aquifer which underlies part of south central Texas⁴⁰ or Environment California which focuses on issues of importance to the state.⁴¹

The Media

The media is an influential actor in environmental policy and politics. It often carries stories that promote environmental action by creating awareness on the part of the public to issues that may affect their health or well-being. The media can also be a powerful force in inhibiting environmental action when, under the excuse of presenting the audience with a balanced narrative, they provide undue time and credit to views that do not represent legitimate scientific perspectives. Opponents of taking action to confront climate change, for instance, have been successful in distributing their message in this way. The wide array of media outlets includes social media, broadcast media, news magazines, and newspapers. They provide many paths for environmental issues to gain salience. Media coverage has the power to focus the public's and politicians' attention on an issue which may result in some action or response, thus influencing agenda setting. The media also has a powerful role to play in framing issues and constructing narratives through which the public and politicians will view issues.42

GLOBAL ENVIRONMENTAL POLICY INSTITUTIONS AND ACTORS

By the late 1960s, worldwide concern with growing levels of pollution and environmental deterioration had emerged. Awareness of the devastating effects of some chemicals on animal and human life grew after Rachel Carson published *Silent Spring* in 1962, a book which detailed the impacts of pesticides (particularly DDT) on bird populations. The 1968 book, *The Population Bomb*, raised the issue of the growth of human populations and the dire consequences that might occur if population growth continued unchecked. These two American-based publications had global reach. A 1972 European study, *Limits to Growth*, also raised the issue of population increases and consumption patterns in a world with finite resources. Together these books are credited with raising awareness and setting the stage for the modern global environmental movement.

The United Nations System

The United Nations and key actors within it are central players in world environmental issues. The UN was created in the aftermath of the Second World War as a global security institution. It is organized into a General Assembly, representing the 193-member states, and the Security Council, which consists of representative from 15 states including the permanent representatives from China, France, Russia, the United States, and the United Kingdom. From its foundation, and through the Cold War, the UN focused primarily on keeping world peace. In the 1950s, 1960s, and early 1970s the UN began to focus on global scientific concerns that moved it closer to a direct interest in the environment. For instance, the World Meteorological Organization (WMO) got involved with the 1956–7 International Geophysical Year as well as the Global Atmospheric Research Program.⁴³ The Food and Agricultural Organization (FAO) was concerned with scientific issues surrounding food production. The World Health Organization (WHO) maintained an interest in human health and was concerned with correlation between exposure to pollution and heath affects. In 1972, the UN turned to a direct interest in the environment.

UN Conferences

The world's first major meeting that focused on the environment, the United Nations Conference on the Human Environment, was held

in Stockholm, Sweden in 1972. A Declaration resulted from the Stockholm Conference elaborating many fundamental principles that would become central to the emerging environmental movement. These include: the idea that humans are both a "creature and molder" of the environment, that human well-being depends on our environment, that humans have an obligation to protect the environment, that in developing countries most environmental problems emerge from lack of development therefore the primary obligation of developing countries is to develop, that in developed countries most environmental problems result from industrial processes and technology so developed countries have an obligation to reduce pollution, and that developed countries should devote efforts to assisting developing nations to progress in a sustainable manner. The Declaration spoke to the need to protect and improve the environment for current populations and future generations, that humans have the responsibility to protect wildlife and habitat, that the discharge of toxic substances must be controlled, that steps must be taken to protect the seas from pollution, and that environmental education, science, and technology should be widely deployed.⁴⁴ Many of these key principles would be revisited in future UN conferences. The Stockholm Conference also underscored the important role that the United Nations institutions would play in global environmental governance.

Since the Stockholm Conference, the UN has hosted a series of global environmental conferences. These conferences have served as a critical mechanism to bring together world governmental and civil sector leaders to discuss policy on specific environmental issues or regimes. These conferences have resulted in elaboration of international expectations often expressed as conference declarations. These meetings have also resulted in the creation of specific UN institutions focused on the environment and development. The first of these institutions, the United Nations Environment Programme (UNEP), was created by the Stockholm Conference. Since 1972, the UN environmental conferences and agencies have been key players in the making of multilateral environmental agreements (MEAs).⁴⁵

Major UN conferences on the environment and sustainable development have been held since the UN Conference on the Human Environment in 1972. In 1987, the World Commission on Environment and Development drafted a report to the General Assembly called Our Common Future, also known as the Brundtland Report, which created a definition of sustainable development. The UN Conference on Environment and Development, also called the Earth Summit, was held in Rio de Janeiro in 1992. It created the Commission on Sustainable Development (CSD). The Earth Summit also created the Rio Declaration which, like the Stockholm Declaration, contained a list of principles and obligations for states to adopt and follow. Another product of the Rio meeting was Agenda 21, a global action plan to stimulate sustainable development. Two very important MEAs were created by the Rio meeting: the UN Framework Convention on Climate Change (UNFCCC) and the Convention on Biological Diversity (CBD). Under the direction of the secretariat of the UNFCCC and various other working groups, a series of conferences have been held to address the issue of climate change since the UNFCCC took effect in 1994 (after ratification by enough parties to the agreement). The two major agreements negotiated have been the Kyoto Protocol in 1997 and the Paris Agreement in 2015. The CBD, also signed at Rio, promotes the conservation of biological diversity and the sustainable use of Earth's biological resources. Rio's Agenda 21 was reviewed at the World Summit on Sustainable Development held in Johannesburg, South Africa in 2002. This meeting was also known as Rio+10. The UN Conference on Sustainable Development, also known as Rio+20, held again in Rio de Janeiro in 2012 produced a paper called The Future We Want, reformed UNEP's institutional form, and set up a process to replace CSD with a High-Level Political Forum (HLPF) for sustainable development.46

United Nations Environment Programme

UNEP was supposed to be the anchor organization in the UN system for environmental issues. However, the design of the UNEP

did not structure it as an organization well-equipped for centralized administration of environmental issues. Rather, the designers of UNEP saw it more as a flexible integrative body that would influence the already functioning UN organizations that had control over traditional UN policy areas including agriculture, health, labor, transportation, and industrial development. UNEP also ended up receiving inadequate funding and, for political reasons, was located in Nairobi, Kenya. The Nairobi location worked against UNEP fulfilling its role of integration as the other organizations with overlapping policy jurisdictions were not similarly located. UNEP's founders tasked it with a progression of functions to use to grapple with the world's environmental problems. Its mandate is fourfold: problem identification using scientific data, establishing policy goals and methodology, coordinating environmental action within the UN system, and building national institutional capacity. UNEP was generally seen as unsuccessful at fulfilling this mandate fully. Rather than becoming the single leading environmental organization in the UN system, UNEP was often viewed as just one of many actors in a fragmented system.⁴⁷ These failings were addressed to some extent in Rio+20. At that conference, UNEP's Governing Council was expanded to include all the member nations of the UN, in essence transforming it into the UN Environmental Assembly. This change is likely to give its actions more legitimacy. Rio+20 also put UNEP in a better financial position by increasing its budget. Together these changes greatly enhanced UNEP's ability to become the central coordinating body for environmental issues in the UN system.⁴⁸

The Commission on Sustainable Development and the High-Level Political Forum

CSD was created by the Rio Earth Summit to implement the outcomes of the conference. After some early successes, CSD became increasingly unable to accomplish its mission of turning discussions into actions. Dissatisfaction with CSD led to the establishment of HLPF after much discussion regarding other possibilities such as creating an independent sustainable development council. Efforts to

develop such a council failed. At the suggestion of the G77/China, a state-led forum in which developing countries would have control was considered. In the end, compromises resulted in the HLPF's organizational form. It is an inter-state forum that meets under the auspices of the UN General Assembly, at the head of state level, every 4 years. It also meets annually at the ministerial level under the auspices of the United Nations Economic and Social Council (ECOSOC). This hybrid structure and 'forum' status forces HLPF to adopt an orchestration strategy—a mode of indirect or soft governance in which the orchestrator (HLPF) enlists intermediary actors (nongovernmental organizations and other UN organizations) to bring a third set of actors (the world's nations) in line with its goals. HLPF has been given ambitious goals including providing political leadership for action on sustainable development, setting the sustainable development agenda, coordinating the agenda across the UN system, and following up on the progress in implementing UN sustainable development goals. HLPF does this with modest resources. While HLPF has legitimacy and political prestige which puts it in a good position to bring leadership within the UN system, it also must compete with many other UN system organizations that deal with sustainable development.⁴⁹

The Global Environment Facility

Other international environmental organizations exist. For instant, the Global Environmental Facility (GEF), established just before the Earth Summit, is a unique organization that works with many partners to deal with pressing global environmental issues. Partners of the GEF include developed and developing nations, nongovernmental organizations (NGOs), and agencies of the United Nations. GEF is administered jointly by the UNEP and the United Nations Development Programme (UNDP) with funding coordinated by the World Bank. One important role of GEF is to make funds available to developing nations and to provide capacity building so that they can fulfill their requirements under several international environmental agreements, such as: the Minamata Convention on

Mercury, the Stockholm Convention on Persistent Organic Pollutants, the United Nations Convention on Biological Diversity, the United Nations Convention to Combat Desertification, and the United Nations Framework Convention on Climate Change.⁵⁰

Environmental Regime Secretariats and Environmental Departments in Non-Environmental Organizations

A good way to envision the organization of environmental programs in the United Nations is to consider each major area of environmental concern, for which an international treaty has been negotiated, a regime. For instance, there are regimes for ozone, hazardous waste, toxic chemicals, ocean pollution, climate, transboundary air pollution, global biodiversity, endangered species, wetlands, desertification, and whaling. Each environmental regime has its own secretariat, which is a permanent international governmental body with a permanent staff that reports to the regime's Conference of Parties. Many of the secretariats are located within UNEP, but some, like the secretariat for the UNFCCC, are managed directly by the UN. Others, such as the toxic waste regime secretariat exist outside of the UN completely (for example, the Ramsar Convention secretariat). Many treaty-based environmental regimes have scientific and technical support organizations. For instance, the UNFCCC has the Intergovernmental Panel on Climate Change (IPCC), which advises the climate change regime on new scientific findings periodically.⁵¹

In addition to the secretariats of international environmental treaties, there are other international governmental institutions to consider. Specifically, these include environmental departments located within international organizations that do more than just environmental policy. These would include such units as environmental departments and subdivisions of the World Bank, the environmental department of the secretariat of the International Maritime Organization, and the environmental directorate of the

Organization for Economic Cooperation and Development (OECD) secretariat.⁵² It is also important to remember that many groups with a wider mission, such as the International Monetary Fund (IMF) or the World Trade Organization (WTO), have enormous influence on environmental issues whether or not they have set up a dedicated bureaucracy within their organizations to handle specific environmental issues.

Nongovernmental Organizations

In addition to the formal governmental institutions in the international network system, there are many NGOs that play an important role. The UN formally recognizes NGOs as official observers for its processes and many NGOs without official observer status take part in UN environmental proceedings. Most NGOs are advocacy organizations that work to advance policy outcomes they desire. These groups can work to represent the interests of the environment, business and industry, trade unions, local governments and municipal authorities, and indigenous peoples. NGOs play a prominent role in UN side events which are officially sanctioned discussions and panels held at the periodic meetings of the Conference of Parties organized around an environmental regime.⁵³

Together these groups form a complex network at the global, regional, and sub-regional levels. The growing number of these groups with an environmental focus and the lack of a yet fully functional centralized coordination mechanism create a major challenge for international environmental policymaking.⁵⁴

CONCLUSION

This chapter has introduced the main players for both global and domestic environmental policymaking. How well these institutions and actors function determines the outcomes of policy for natural resources and the environment.

From the domestic context, these include the president, the Congress, the courts, several executive agencies, the states, environmental interest groups, and the media. The president is a key player in setting the environmental agenda. Presidential administrations use a variety of powers to do this including providing clear priorities in the State of the Union, the budget message of the president and proposed funding for environmental activities and agencies, nomination of agency heads, and representing the U.S. at international environmental meetings. Congress passes environmental laws and provides funding for the implementation of those laws through annual appropriations. Congressional committees play a critical role by exercising oversight. The courts play a key role in environmental policy because they ultimately decide questions of enforcement, including cases brought by citizen suits allowed by many environmental statutes. Many executive agencies have a role to play in environmental policymaking, but EPA is by far the most influential as it has the responsibility to enforce most of the nation's environmental statutes. Critical roles are also played by the land management agencies including BLM, FWS, FS, and NPS. Other agencies have a more limited role including NOAA, NASA, USBR, OSMRE, BSEE, DOE, USACE, USGS, OMB, and CEQ. The sheer number of agencies involved with environmental issues in the U.S., however, shows the extent of fragmentation of policy efforts. The system of regulatory federalism whereby states exercise considerable autonomy further adds to policy division and complexity. Finally, domestic environmental policymaking cannot be understood without consideration of the wide array of environmental interest groups and the role played by the media.

From the global perspective, the United Nations System and its various conferences and subgroups are key global policymakers. Beginning in 1972, the UN has held summits on the environment and sustainable development. These various summits and their subsequent meetings have created a variety of environmental groups including the UNEP, the Commission of Sustainable Development and the High-Level Political Forum, the Global Environment Facility, and UNDP.

Each of these actors makes up part of the complex and intricate network of institutions and organizations that provide the basis for global environmental policymaking. Since 1972, global multilateral agreements have emerged to deal with ozone, hazardous waste, toxic chemicals, ocean pollution, climate change, transboundary air pollution, global biodiversity, endangered species wetlands, desertification, and whaling.

Norman J. Vig, "Presidential Leadership and the Environment," in Environmental Policy: New Direction for the Twenty-First Century, eds. Norman J. Vig and Michael E. Kraft (Washington,

D.C.: CQ Press, 2006), 102-103.

² John L. Mikesell, Fiscal Administration: Analysis and Applications for the Public Sector (Boston: Wadsworth Cengage Learning, 2014), 198.

³ Walter A. Rosenbaum, Environmental Politics and Policy (Thousand Oaks, CA: Sage/CQ Press, 2017), 85–86.

⁴ Walter J. Oleszek, *Congressional Procedures and the Policy Process* (Washington, D.C.: CQ Press, 2007), 42.

⁵ Christopher E. Smith, Courts and Public Policy (Chicago: Nelson-Hall Publishers, 1995),
3.

⁶ James Salzman and Barton H. Thompson, Jr., *Environmental Law and Policy* (St. Paul, MN: Foundation Press, 2014), 99.

⁷ Rosenbaum, Environmental Politics and Policy, 90.

⁸ Daniel J. Fiorino, "Environmental Protection Agency," in *A Historical Guide to the U.S. Government*, ed. George T. Kurian (Oxford: Oxford University Press, 1998), 203–204.

⁹ Fiorina, "Environmental Protection Agency," 204.

[&]quot;EPA Organizational Chart," EPA, accessed November 7, 2016, https://www.epa.gov/aboutepa/epa-organizational-chart.

¹¹ "Planning Budget Results," EPA, accessed August 10, 2018, https://www.epa.gov/planandbudget.

¹² "Who We Are," DOI, accessed October 31, 2016, http://www.doi.gov/whoweare/Mission-Statement.

^{13 &}quot;Frequently Asked Questions," NPS, accessed November 7, 2016, https://www.nps.gov/aboutus/faqs.htm.

[&]quot;Conserving the Nature of America," FWS, accessed October 31, 2016, https://www.fws.gov.

¹⁵ "About the U.S. Fish and Wildlife Service," FWS, accessed August 10, 2018, https://www.fws.gov/help/about_us.html.

[&]quot;The Federal Land Policy and Management Act of 1976: As Amended," BLM, accessed August 10, 2018, https://www.blm.gov/or/regulations/files/FLPMA.pdf.

¹⁷ "About the BLM," BLM, accessed August 10, 2018. https://www.blm.gov/about.

^{18 &}quot;Office of Surface Mining Reclamation and Enforcement," OSMRE, accessed October 31, 2016, http://www.osmre.gov.

"Budget and Planning," OSMRE, accessed November 7, 2016, http://www.osmre.gov/budget/docs/FY17_Proposed_Budget.pdf.

- ²⁰ "About BOEM," BOEM, accessed October 31, 2016, http://www.boem.gov/About-BOEM/.
- ²¹ "History," BSEE, accessed October 31, 2016, http://www.bsee.gov/who-we-are/history.
- ²² "Office of Budget and Program," BOEM, accessed November 7, 2016, https://www.boem.gov/BOEM-FY-2017-Budject-Justification/.
- ²³ "Budget Justification," BSEE, accessed November 7, 2016, https://www.bsee.gov/sites/bsee.gov/files/budget-justifications//bsee-fy-2017-budget.pdf.
- ²⁴ "Who We Are," USGS, accessed October 31, 2016, http://usgs.gov/about/about-us/who-we-are.
- 25 "Budget Justification," USGS, accessed August 10, 2018, https://www.doi.gov/sites/doi.gov/files/migrated/budget/appropriations/2016/upload/FY2016_USGS_Greenbook.pdf.
 - ²⁶ "About Us," USBR, accessed August 10, 2018, https://www.usbr.gov/main/about/.
- ²⁷ "Budget Justification," USBR, accessed November 7, 2016, https://www.usbr.gov/budget/2017/fy2017_budget_justifications.pdf.
- ²⁸ "About the Agency," FS, accessed October 31, 2016, http://www.fs.fed.us/aboutagency.
 - ²⁹ Rosenbaum, Environmental Politics and Policy, 324.
 - 30 "Mission," DOE, accessed October 31, 2016, http://www.energy.gov/mission.
- ³¹ "Department of Energy: FY 2017 Congressional Budget Request," DOE accessed November 7, 2016, http://www.energy.gov/sites/prod/files/2016/02/f29/FY2017Budgetin Brief_0.pdf.
- 32 Marc Reisner, Cadillac Desert: The American West and Its Disappearing Water (New York: Penguin Books, 1993), 172–173.
- ³³ "President's Fiscal 2017 Budget for U.S. Army Corps of Engineers Civil Works Released," USACE, accessed November 7,2016, http://www.usace.army.mil/Media/News-Releases/News-Release-Article-View/Article/652668/presidents-fiscal-2017-budget-for-us-army-corps-of-engineers-civil-works-releas/.
- ³⁴ "About NASA," NASA, accessed November 16, 2016, www.nasa.gov/about/index. html.
- ³⁵ "About our Agency," NOAA, accessed November 16, 2016, www.noaa.gov/about-our-agency.
 - ³⁶ Rosenbaum, Environmental Politics and Policy, 119–121.
- ³⁷ Samuel P. Hays, A History of Emironmental Politics Since 1945 (Pittsburgh: University of Pittsburgh Press, 2000), 109–119.
- ³⁸ Scott P. Hays, Michael Esler, and Carol E. Hays, "Environmental Commitment among the States: Integrating Alternative Approaches to State Environmental Policy," *Publius* 26, no.2 (1996): 41.
 - ³⁹ Michael Kraft, Environmental Policy and Politics (Boston: Pearson, 2015), 116.
- ⁴⁰ "Welcome to AGUA," Aquifer Guardians in Urban Areas, accessed November 16, 2016, www.aquiferguardians.org.

- ⁴¹ "About Us," Environment California, accessed November 16, 2016, www.environment california.org.
- ⁴² Deserai A. Crow and Andrea Lawlor, "Media in the Policy Process: Using Framing and Narratives to Understand Policy Influences," Review of Policy Research 33, no. 5 (2016): 472.
- ⁴³ Kate O'Neill, "Architects, Agitators, and Entrepreneurs," in *The Global Environment: Institutions, Law, and Policy* eds. Regina S. Axelrod and Stacy D. VanDeveer (Los Angeles: Sage, 2015), 27–28.
- ⁴⁴ "Declaration of the United Nations Conference on the Human Environment," United Nations Environment Programme, accessed August 10, 2018, http://legal.un.org/avl/ha/dunche/dunche.html.
- ⁴⁵ Steinar Andresen, "The Effectiveness of UN Environmental Institutions," *International Environmental Agreements: Politics, Law and Economics* 7, no. 4 (2007): 317–336.
- ⁴⁶ "Conferences and Reports on the Environment," United Nations, accessed Sep 8, 2016, http://research.un.org/en/docs/environment.
- ⁴⁷ Maria Ivanova, "UNEP in Global Environmental Governance: Design, Leadership, Location," *Global Environmental Politics* 10, no.1 (2010): 31–45.
- ⁴⁸ Maria Ivanova, "The Contested Legacy of Rio+20," *Global Environmental Politics* 13, no.4 (2013): 4–6.
- ⁴⁹ Kenneth W. Abbott and Steven Bernstein, "The High-Level Political Forum on Sustainable Development: Orchestration by Default and Design," *Global Policy* 6, no.3 (2015): 222–225.
 - ⁵⁰ O'Neill, "Architects, Agitators, and Entrepreneurs," 34.
 - ⁵¹ O'Neill, "Architects, Agitators, and Entrepreneurs," 33.
- Frank Biermann and Bernd Siebenhuner, "The Role and Relevance of International Bureaucracies," in *Managers of Global Change: The Influence of International Environmental Bureaucracies*, eds. Bernd Siebenhuner and Frank Biermann (Cambridge, MA: The MIT Press, 2009), 9–10.
 - ⁵³ O'Neill, "Architects, Agitators, and Entrepreneurs," 38.
- ⁵⁴ Jacqueline Peel, "International Law and the Protection of the Global Environment," in *The Global Environment: Institutions, Law, and Policy*, eds. Regina S. Axelrod and Stacy D. VanDeveer (Los Angeles: Sage, 2015), 56.