

Lawmaking and Water Pollution Policy

Can Congress Clean the Water?

In September of 2009, the *New York Times* released the results from an in-depth study of the enforcement of federal water pollution laws (Duhigg, 2009). The results were not good. The study identified more than a half million violations of the Federal Water Pollution Control Act (FWPCA), commonly called the Clean Water Act (CWA).¹ It also pointed out that no more than 3 percent of these violations resulted in fines or other significant punishments by state regulatory agencies or the United States Environmental Protection Agency (USEPA). The *Times*' newspaper coverage of the study also highlighted the human consequences of these violations, as children in West Virginia were described as suffering from premature dental decay as a result of ingesting improperly managed and polluted waters. The quotation from the *Times*' story on the opening page of this section of the book reflects some of the story's key conclusions. While the *Times*' study appropriately focuses on very real problems and key components of the overall solution, the conclusions it reaches are not in and of themselves sufficient to guide future efforts to address the nation's water pollution problems.

In fact, portions of the conclusions reached in the *New York Times*' story are somewhat typical. Like many journalistic accounts of public policy issues (and some academic accounts too), the *Times*' story focuses on only a portion of the water pollution problem. It also focuses particularly on a portion of the problem that is highly quantifiable and easily explained—the enforcement of existing regulations. Similar studies have been conducted periodically over the past several decades (see PennEnvironment Research and Policy Center, 2002, for example), and they typically reach somewhat similar conclusions. These studies often conclude that water pollution policy enforcement is weak. They also tend to note, sometimes almost in passing, that budgetary resources are insufficient for the enforcement

task at hand. And, almost without fail, they admonish Congress and the states to “hold the bureaucrats accountable!”

As these stories and findings are made public, politicians call attention to the problem of inadequate water pollution enforcement and seek solutions that demonstrate concern and at least some form of limited response. The problem is that this is where the response typically ends. Limited enforcement of CWA requirements is a concern and more resources for enforcement is a part of the solution. Even so, Congress has frequently failed to follow up on its criticisms with the additional resources that are needed. More importantly, however, the solutions offered by more vigorous enforcement address only a small part of the efforts that are needed to tackle the nation’s water pollution problems. Solving these problems requires not only improved enforcement and bureaucratic accountability, but also an improved understanding of current water pollution problems, adequate resources, restructured congressional mandates, and a good dose of political will.

Unfortunately, in spite of increases in the USEPA’s budget and funding for water quality programs for the Great Lakes during the first years of the Obama administration, Congress has paid only sporadic attention to water pollution policy for more than twenty years. If the United States is to address its water pollution problems, Congress must play a central role—not only in “holding bureaucrats accountable” but also in exercising the political will that is necessary to enable significant change. Indeed, the federal CWA has not experienced a full-scale reauthorization since 1987. This book makes a case for more active congressional involvement and statutory change in water pollution policy. It looks underneath the enforcement problem highlighted by the *New York Times* and others to the laws that are being enforced, as well as at the historical development of federal and state water pollution policies. It also describes the structure and content of current federal water pollution law, and the manner in which this law is implemented in the fifty states. Based on the findings presented, this book makes recommendations regarding major areas of focus for legislative changes in federal water pollution policies.

Purposes

As may be evident from the foregoing remarks, this book is about the relationship between federal and state water pollution policies and the protection of our streams, lakes, and coastal waters. The book serves three purposes. First, it reasserts the importance of Congress’s lawmaking power and explores its influence on water pollution policymaking and implementation in the United States (U.S.). In so doing, it suggests that scholars should

focus greater attention on the laws enacted by Congress and the manner in which they are actually implemented at the federal *and* state levels. Second, the book analyzes relationships between the water pollution laws passed by Congress and federal and state policymaking and implementation. It suggests that a major revision of the federal CWA is now long overdue, and argues that such a revision is important if we are to maintain and improve the quality of our nation's most important resource (and no, it is not oil) in a cost-effective fashion. And finally, the book documents the development and current design of American water quality protection policies and seeks to establish some key areas of focus for their reform.

In pursuing an analysis of water pollution policies in the United States, the book also explores fundamental questions of governance. Do American water pollution policymaking processes respond to top-down statutory directions from Congress? How does the water pollution policymaking process respond to influences at the state level? Or, more generally, has the "runaway" American bureaucracy envisioned by Theodore Lowi (1979) several decades ago given way to a wide-ranging responsiveness in American public policymaking? Some analyses would have us believe so. They suggest that the American policymaking process is more responsive than ever before, and they identify both heightened bureaucratic responsiveness to legislative and electoral influences (Wood & Waterman, 1994; Erikson et al., 1993) and increasingly decentralized policy responsiveness through various forms of shared governance (Leiginger, 2006). Assessments of environmental policymaking have gone even further, suggesting that we now live in an era of congressional micro-management (Rosenbaum, 2002), as well as decentralized efforts to achieve sustainability and civic environmentalism (Portney, 2003; John, 1994). In spite of these scholarly assessments, it is not clear how American policymaking can be simultaneously responsive to both directions from Congress at the national level and a wide range of state and local influences.

This book delves into this apparent contradiction using an approach that is different from those used in the past, many of which have focused on "principal-agent" relationships between congressional policymakers (the "principals") and implementation "agents" at the federal level (MacDonald, 2007; Shipan, 2004; Epstein & O'Halloran; Wood & Waterman, 1994). Unlike these approaches, which tend to view "congressional control" as a continuing struggle between principals who seek to control their agents in the executive branch of the federal government, the approach used in this book is institutional in foundation (Peters, 1999; March & Olsen, 1984; Weber, 1922). It views congressional efforts to influence public policy as embodied in the passage of laws, through which Congress seeks to establish institutional patterns of policy creation and implementation that are consistent with its wishes. While this is not a new perspective,

it is one that has been underutilized by scholars since the “behavioral revolution” in the social sciences began in the 1950s, more than a half a century ago.

The Institutional Approach

Scholarly literature in political science and public administration has undergone some major upheavals over the past century. In the early part of the twentieth century, the politics-administration dichotomy (Wilson, 1885) and dual conceptions of American federalism dominated scholarly thinking about government and public policy. As a result, politics and administration were often thought to be separable from one another, as were the activities of federal and state governments. There was relatively little concern about political control of policy implementation because institutional roles and legal responsibilities were thought to ensure that bureaucratic actions would comply with political directions from Congress and the president. Congress was to pass laws, and bureaucrats existed to implement these laws as Congress authorized and the president directed. State governments and federal bureaucracies were thought to take on different kinds of problems, and they were thought to address these problems independently of one another.

By the 1950s, this line of thinking was called into question. The behavioral revolution in the middle of the twentieth century pointed out that the conduct of policymakers and administrators was influenced by political interests in ways that did not always coincide with institutional directives (Truman, 1951; Dahl, 1961). During the same general time period, both scholars and practitioners came to realize that federal and state actions could no longer be separated easily from one another, as dual conceptions of federalism gave way to the New Deal’s legacy of interlinking federal and state efforts to achieve policy goals (Grodzkins, 1961). The development of rational choice theory in the 1960s and 1970s added further depth to the individually oriented analyses spawned by the behavioral revolution because it pointed out that political actors often behave rationally in pursuit of their own ends (Downs, 1957). All of these influences added to the depth of scholarly understandings regarding political behavior. However, they also tended to foster scholarly work that underemphasized the continuing effects of institutional influences, which had been the hallmark of thinking about politics and public policy in the early decades of the twentieth century.

Over the past quarter century, however, new institutional scholarship has reminded observers that not all behavior is rational and that behavior is often determined by patterns of institutional action and

expectation rather than individually calculated wants and needs (Peters, 1999; March & Olsen, 1984). This reinvigoration of institutional thought is important because it is fostering the development of needed context to add to the mathematically oriented work of behaviorist and rational choice thinkers. Greater use of institutionally oriented analyses holds particular promise for policy-related studies because these studies depend on situational context to enable both depth of understanding and the actual application of research findings to help improve public policies and the results that flow from them. From this kind of institutional perspective, the central questions become, how strong are institutional influences in producing desired policies and what factors disrupt their influence? These same questions are relevant to debates about “runaway bureaucracies” (Lowi, 1979; Dodd & Schott, 1979; Ogul, 1976) and the steps that can and are taken to reassert congressional control of the policymaking process (Shipan, 2004; Huber & Shipan, 2002; Epstein & O’Halloran, 1999; Wood & Waterman, 1994). This book addresses these kinds of broad questions of governance as they apply to American water pollution policy.

Institutional Influences and Policy Design

When Congress passes a law, it sets in motion a series of actions within the federal agencies that are assigned to administer the law that Congress has passed. By virtue of the fact that agencies owe both their existence and their budgets to the actions of Congress, many (if not most) of these agency actions seek to comply with the steps and requirements set forth in the law. These actions vary with the law to be administered, but they may include budgeting resources for implementation, producing guidance documents and plans that define the steps to be taken in administering the law, and implementing the steps that are defined in the guidance and planning documents. Over time, many of these actions are repeated and become patterned responses that occur throughout the agency and in state governments in cases where states also play roles in the administration of a federal program. With time, state reactions to these federal actions can also repeat themselves and become institutional patterns for implementing the federal law. When Congress passes a law, its implicit hope and expectation is that these institutional patterns will be established and will lead to the accomplishment of the goals and objectives in the law.

These kinds of institutional influences apply to federal and state processes for implementing the CWA. Since the late 1940s, the development and implementation of water pollution policy has become an exercise in “cooperative” federalism, as it has come to rely on federal

policy direction and resources *as well as* state policy leadership and implementation. Shortly after World War II, the U.S. Congress began to legislate specifically on matters relating to water pollution control. Federal agencies, in turn, were asked to respond to the laws that Congress had passed. As a result, these agencies and their staffs began to interact regularly with state agencies that had already begun to develop policies and programs to address water pollution concerns within their borders. Thus, as was the case in many policy areas during the post-World War II period, federal-state interactions came to be guided by Congress through the design² of laws that influence policy implementation at both the federal and state levels.

Laws can be designed in a variety of ways. Statutory goals can be ambitious or modest, multifaceted or singular in purpose, or vague or clear. The *policy instruments*, or types of legitimate actions authorized by Congress for use by agencies to achieve public sector goals, can also vary, as can the scope of their application (McCubbins, 1985). The policy instruments (or *policy tools*)³ authorized by Congress can come in a wide variety of forms. In fact, books have been written that seek to classify different kinds of policy instruments in a whole range of ways (Salamon, 2002; Peters & Van Nispen, 1998; Hood, 1986). In this book, a rather simple distinction is made between *directive* policy instruments that require action, such as mandatory federal regulations, and *supportive* provisions like financial subsidies or technical assistance that authorize federal agencies to assist external actors in accomplishing particular goals and objectives. We find that Congress has authorized different kinds of policy instruments for different kinds of water pollution sources, and our interest is in ascertaining whether and how this selection of instruments may affect policy implementation at the federal and state levels.

Policy instruments are also characterized by a scope of applicability, which refers to the audiences and behaviors that the policy instrument seeks to influence. Congressionally enacted policies—whether directive or supportive in nature—may apply to states or citizens; or to some kinds of activities and not to others. The point is that Congress decides these issues of policy instrumentation and scope of applicability through the legislative process and structures statutory authorities in ways that adhere to their decisions. The focal point of this analysis is to investigate the manner in which varying congressional directions, as expressed in the design (or structure) of the law (policy instruments and scope of applicability), affect subsequent policymaking and implementation at both the federal and state levels.

National water pollution control goals and procedures are established by Congress in statute, and they include policy tools that authorize federal agencies to take specific kinds of actions. These federal agencies, in

turn, administer these statutes in ways that are consistent with the policy tools and scopes of application that are authorized to them by Congress. These administrative practices then guide federal agency interactions with state governments that manage water pollution programs on a day-to-day basis. State agencies, in turn, produce ongoing policies that may be influenced by the nature of these federal-state interactions. These broad institutional processes apply to federal and state implementation of many kinds of policies, including the CWA.

The Design and Implementation of American Water Pollution Policy

The CWA is the nation's most important water pollution law. It is a relatively clear statute with respect to its substantive goals. It possesses a goal of restoring the biological, chemical, and physical integrity of the nation's waters, and the law also includes a clear focus on fostering aggressive federal and state water pollution programs in order to fulfill this goal. However, the CWA is a bifurcated statute in the sense that its design envisions different kinds of processes and controls for *point sources* (which flow from pipes and conveyances) and *non-point sources* (which flow diffusely across land, primarily during and after rain falls). For point sources, the CWA requires the use of directive policy tools that *regulate* discharges of wastewaters to surface waters throughout the United States. For these pollution sources, federal law also allows for the delegation of federal wastewater permitting and enforcement responsibilities to states, as well as supportive policies that provide grant funds and technical assistance. For non-point sources, however, the CWA relies primarily on supportive policies, such as the provision of grant funds and technical assistance. Releases of pollutants to waters of the United States from *diffuse, non-point, sources are not subject to federal regulation*. Policies for both point and non-point sources of water pollution are implemented by the USEPA, although responsibilities for administering these different types of policies lie in different divisions within the USEPA's Office of Water.

The USEPA Office of Water develops guidance and plans for implementing Congress's laws for reducing water pollution from point and non-point sources. Its guidance and plans, in turn, influence state governments and their water quality programs. The regulatory provisions of the CWA for point sources require that state controls on wastewater discharges be consistent with federal law. Because the federal CWA calls for the elimination of all point source discharges to the waters of the United States, the fidelity of state programs to Congress's statutory directions can be assessed in terms of the extent to which these programs pursue

and achieve this goal. For point sources, which are regulated by water pollution control permits, this means that substantive compliance with Congress's directions can be evaluated on the basis of the stringency of the water pollution discharge permits they issue, as well as the extent to which these permits are enforced. To encourage the issuance of stringent state permits, the federal EPA can take advantage of a range of policy tools. These tools include grant funds, technical assistance, delegation processes to enable state implementation of federal regulations, and ongoing federal oversight.

For non-point sources, by contrast, the federal government relies primarily on grant funds and technical assistance to influence state water pollution policies. Federal oversight is therefore more limited, as states are provided with wide latitude in determining the mix of policies needed to address non-point sources of water pollution within their borders. As a result, the aggressiveness of state non-point source water pollution programs should be assessed using a wider set of criteria that relate to the extent to which the state programs actively seek to reduce contamination from non-point sources.

Studies of water pollution control that focus exclusively on enforcement address only portions of federal and state water quality programs relating to compliance with regulatory requirements. Such studies do not address the growing portion of national and state water pollution problems that are attributable to non-point sources (the changing nature of water pollution problems is discussed in more detail in chapter 2). The fundamental difference in federal statutory structure for point and non-point sources creates differing sets of institutional influences that affect both state water quality programs and the aggressiveness of policies that they implement. Thus, to understand water pollution programs and policies at the state level, it is necessary to understand the statutory frameworks enacted by Congress and the ways in which they establish conditions that help federal agencies define and steer state policy choices.

Figure 1-1 identifies the key institutions involved in the design and implementation of American water pollution policies and displays the flow of influences affecting their patterns of interaction. The chapters that follow assess the extent to which the policies resulting from the differing sets of federal and state interactions associated with point and non-point sources of water pollution are consistent with Congress's will and directions. In assessing the compliance of federal and state policy implementation with Congress's directions, one could use a range of criteria. The chapters that follow make use of both procedural and substantive criteria. *Procedural* criteria refer to the steps (or procedures) that the law requires of federal agencies and state governments that carry out

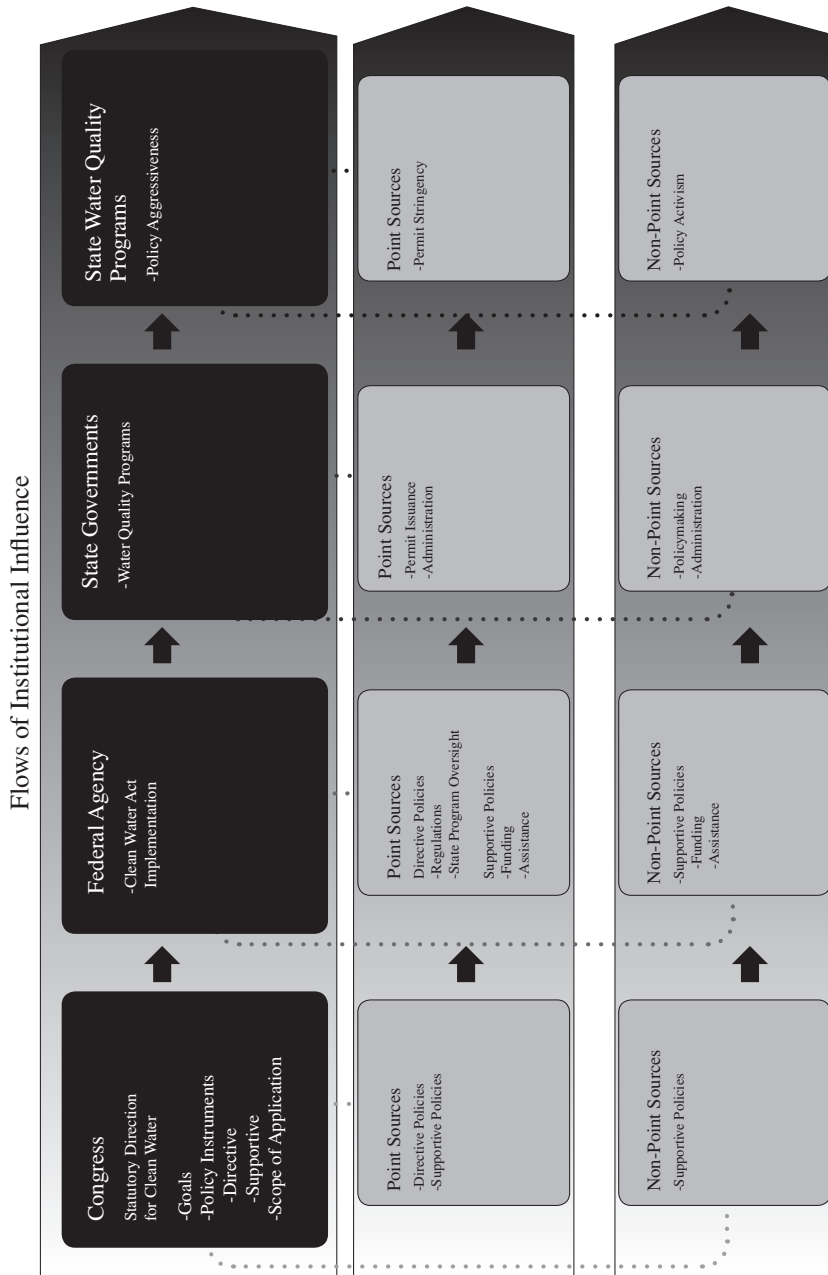


Figure 1-1. Congressional Influence on Federal and State Water Pollution Policies: An Institutional Approach

its provisions. In the historical analyses in part 2, these criteria focus on policy outputs, or the activities of government, that reflect what Congress has asked federal and state agencies to do in order to implement the law. In the contemporary analyses in part 3, the assessments of procedural compliance are made similarly, as they again focus on determining whether federal and state governments actually carry out the activities that they are directed to carry out by law.

By contrast, *substantive* criteria refer to the content of government actions or their effects. The application of substantive criteria to *policy outputs* requires an assessment of the content of the activities that are undertaken or the decisions that are made, as occurs when one looks at how stringent a water pollution permit is rather than merely whether or not a permit (of any kind) is issued. *Policy outcomes* can also be evaluated using substantive criteria. However, in the field of water pollution policy, *policy outcomes* relate to the state of either the environment or human behaviors after policy outputs are produced, rather than whether certain government activities are conducted. And finally, substantive criteria may also be applied to *policy impacts* that, according to Gormley (2000), “measure the effects of outputs on outcomes.”

What are policy outputs, outcomes, and impacts?

Throughout this book, the terms policy outputs, outcomes, and impacts are used to describe the results of policy implementation. For some readers, these terms may be unfamiliar. Each of these terms has a unique meaning, as described below:

Policy outputs—a measure of “an agency’s activities, such as inspections, the issuance of permits, the provision of technical assistance, or the imposition of monetary penalties”;

Policy outcomes—a measure of environmentally relevant behavior (of regulated firms or citizens) or changes in environmental conditions or human health; and

Policy impacts—a measure of the “effects of outputs on outcomes.”

Note: These definitions draw heavily from definitions developed by William Gormley (2000).

In the chapters that follow, substantive criteria are applied to measure the aggressiveness of state water pollution policies. They are also applied on a preliminary basis to policy impacts and outcomes associated with major changes in water pollution policies in the historical analyses presented in part 2. It is important to note, however, that this latter application of substantive criteria to policy impacts and outcomes is made based on a review of existing literature on American water pollution policy, rather than through independent empirical observations. In this context, the assessments of water pollution policy impacts and outcomes made in part 2 should be viewed as hypotheses, or educated conventional wisdom, rather than as independently verified observations.

However, regardless of the criteria chosen to assess federal and state compliance with Congress's directions, it is appropriate to recognize that there are alternative explanations for water pollution policies that are not based on patterns of institutional influence established by Congress in law. To the extent that these alternative explanations are actually valid and operating, they may disrupt institutional patterns of compliance with Congress's wishes. These potential sources of disruption, in turn, can give rise to 'bottom up' processes of policy implementation that stray from Congress's 'top down' statutory directions. This is true in policy processes associated with water pollution control, as well as in other areas of public policy.

Alternative Explanations for Public Policies: Sources of Disruption

By assessing whether federal and state agencies adhere to statutory directions provided by Congress in the CWA, the analyses in this book gauge the strength of institutional patterns established by Congress in law for the implementation of federal water pollution policies. They also identify ways in which these institutional patterns for policy implementation can be disrupted, and ascertain the likely sources of these disruptions. The existing literature on policy implementation and state policymaking yields insights about alternative explanations for water pollution policy outputs, and these alternative explanations may also shed light on the reasons why federal and state agencies may "slip" or "shirk" away from adherence to the statutory directions established by Congress in statute (McCubbins, 1985).

Explanations Deriving from the Literature on Policy Implementation

Past scholarly work on policy implementation can help identify factors that may lead federal agencies to stray from the institutional patterns

that Congress seeks to establish in statute. More than twenty-five years ago, Daniel Mazmanian and Paul Sabatier (1983) highlighted the nature of Congress's statutory directions as a potential source of failure in the implementation of public policies. Because Congress consists of many different legislators and committees with differing interests, it may pass laws that use vague or unworkable language to assure passage of a law in a given area of public policy. Vague and unworkable language can lead subsequently to implementation problems for agencies. This same kind of dynamic is evident when Congress passes laws that require strong actions on the part of federal agencies, but does not appropriate the resources needed to adequately administer the law that it enacts. Both unworkable legislative directions and inadequate monetary resources are therefore potential sources of disruption for the establishment of institutional patterns of compliance with Congress's directions for the implementation of federal water pollution policies.

Other scholarly studies relevant to policy implementation identify additional factors that can affect whether federal agencies adhere to the statutory directions provided by Congress as they implement water pollution control policies. Accepting a principal-agent framework for evaluating political influence on the administration of public policy, Aberbach and Rockman (1988) highlight the competing roles of the president and Congress in directing federal agencies as a potential source of friction in the administration of federal laws. While Aberbach and Rockman focus on the president and Congress, the effects of competing principals can take numerous forms. Contradictory political directions can stem not only from the president and Congress as a whole, but also from a variety of other sources such as congressional committee chairpersons, agency heads, and high-ranking White House officials, among others. Conflicts among competing political principals are thus another potential source of disruption in the implementation of water pollution policies.

Technical complexity (Gormley, 1986 & 1989) can also affect the implementation of laws passed by Congress. And, because of the inherently technical nature of water pollution control, one might expect technical complexity to be a source of disruption in the establishment and maintenance of institutional patterns of implementation that are consistent with Congress's statutory directions. Technical complexity may be particularly problematic when time frames for policy implementation are short, as has often been the case in federal environmental policy. And, indeed, a review of the implementation of federal water pollution policies since the middle of the twentieth century reveals cases in which technical complexity appears to have limited the ability of federal agencies to comply with Congress's statutory directions in a full and timely fashion.

All four of these factors—unworkable statutes, resource limitations, conflicts or competition among political leaders, and technical complexity—emerge from the historical analyses presented in part 2 as potential sources of disruption in the establishment of institutional patterns of compliance with Congress's statutory directions.

Explanations Deriving from the Literature on State Policymaking

Existing literature on state policymaking also reveals potential sources of disruption in the administration of federal water pollution policies by state governments. In fact, studies of state policymaking identify a range of variables that may affect state water pollution policies. These variables, in turn, can yield state-level disruptions in institutional patterns established in law at the federal level by Congress. In general, the variables highlighted by the state policymaking literature are grounded in three major theories of state policymaking processes. These theories relate to policy responsiveness (Erikson et al., 1993; Elazar, 1984, among others), state capacities (Bowman & Kearney, 1986 & 1988; Dye, 1967), and the interplay of groups in the policy process (Truman, 1951; Hrebendar & Thomas, 1987, 1992, & 1993A and B).

Explanations of state policies that are based on *policy responsiveness* focus on the importance of variables that reflect government responsiveness to objective conditions, popular opinions, and cultural practices within their jurisdictions. They include variables such as the severity of the problem being addressed (Lester, 1994), public opinion (Erikson et al., 1993), political party strength and the tendency of Democratic Party governance to support more aggressive environmental initiatives (Schattschneider, 1960; Lester, 1980; Calvert, 1989), and moralistic cultural patterns that encourage activist government (Elazar, 1984). All of these explanations reflect the workings of “healthy” state political systems that identify problems and conflicts and address them in an effort to improve the correspondence between state policies and the needs and desires of state citizenries. In cases where states believe there are few water pollution problems or little need to address them, responsiveness to these beliefs may disrupt faithful implementation of Congress's water pollution policy directions.

The variable *capacities* of state governments can also lead to disruptions in the institutional influence engendered by Congress in statute because states without sufficient capacities may not have the ability to administer policies consistent with Congress's directions. Capacity-based conceptions of state policy processes generally suggest that states with greater capabilities will enact and implement more sophisticated and aggressive

policies. These theories of state policymaking have taken both economic (Dye, 1967) and institutional forms (Bowman & Kearny, 1986 & 1988). The economically oriented conceptions of state policymaking suggest that state policy outputs are largely a function of wealth (Dye, 1967), and past studies have supported the idea that wealth fosters more aggressive state environmental policies (Lowry, 1992; Ringquist, 1994). Economies of scale relating to the size of the state, as expressed in population, have also been used to explain water pollution policy outputs (Hunter & Waterman, 1996).

Another variant on these capacity-based conceptions of state policymaking focuses on institutional capabilities, and particularly on the development of modern environmental policymaking institutions. Research in this area has suggested that states with modern Environmental Protection Agencies (EPAs) and Departments of Natural Resources (DNRs) tend to be more aggressive in addressing environmental problems than states with more traditional health departments taking the lead in addressing environmental problems (Lester, 1980; Hunter & Waterman, 1996). In short, capacity-based theories tend to suggest that states with greater levels of wealth, economies of scale, and modern institutions tend to produce more sophisticated and aggressive policies than states without these capacities. As a result, insufficient state capacities are a potential source of disruption in the flow of institutional influences on state policymaking relating to water pollution control.

Varying patterns of *interest group strength* can also explain state policies and may disrupt the fidelity of state policies to institutional influences engendered by Congress through the exercise of its lawmaking powers. Group based theories seek to explain state policies as by-products of the relative strength of differing groups in the policymaking process. They suggest that state policies are best viewed as reflecting the strength of the interests that seek to influence state policies. These kinds of group-based variables have also been found to influence state environmental policies in some cases (Lowry, 1992; Ringquist, 1993 & 1994). Here, the general suggestion has been that states with strong polluter groups may diminish the aggressiveness of state environmental policies, while strong environmental groups may foster stronger state environmental policies. Groups with economic interests in clean water, such as the tourism industry, may also lead to state policies that are protective of water quality. In all of these cases, strong group influences of differing kinds may affect state water pollution policies in ways that disrupt institutional tendencies toward compliance with statutory directions provided by Congress.

The analyses presented in part 3 of this book assess the influence of variables drawn from each of these three theoretical perspectives on state policymaking in an effort to explain why state water pollution poli-

cies may stray from Congress's direction in statute. Historically, there has been substantial concern about state policymaking processes and their potential to derail the accomplishment of national policy goals. These concerns have been grounded in all three of the theories of state policymaking outlined above. During the first two-thirds of the twentieth century, states were often viewed as unresponsive to many of the groups and interests within their borders—most particularly racial and ethnic minorities. States were also viewed as amateurish and often lacking in the capabilities necessary to respond in technically oriented policy areas relating to the environment generally, and water pollution, in particular. There have also been continuing concerns about the inordinate power of groups of economic elites within the states, and their ability to insulate themselves from effective regulation at the state level.

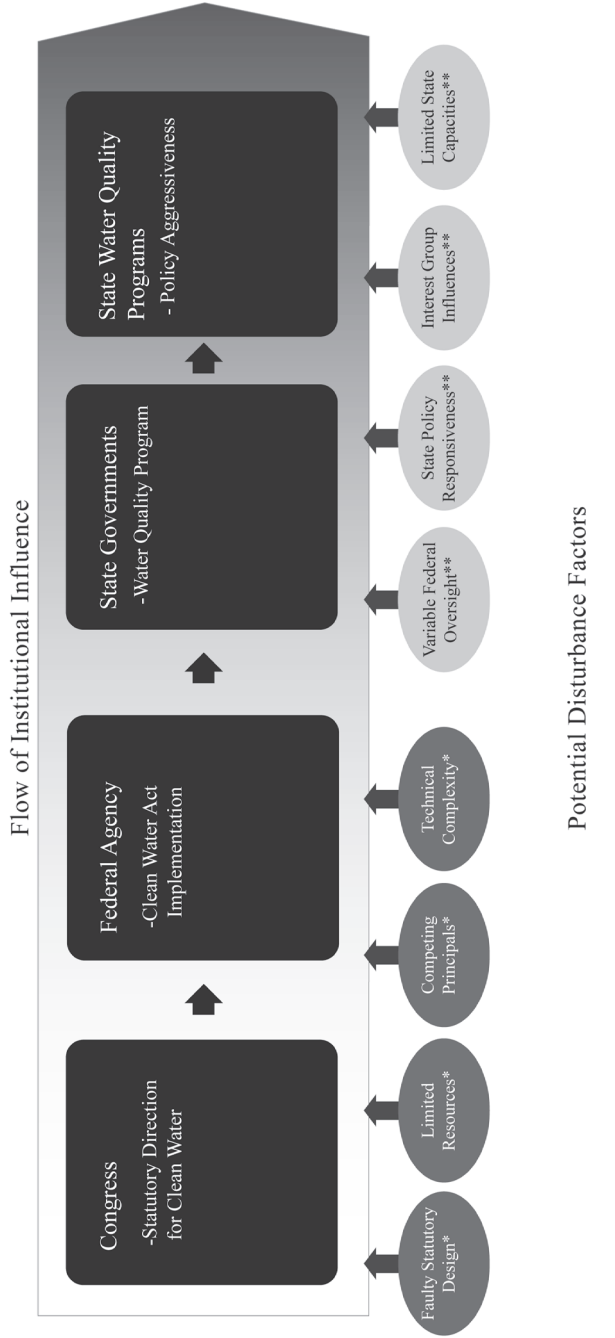
Over the last two decades or so, however, analysts have suggested that state policymaking processes are becoming “more capable, representative, and democratic” (Gray, 1999; Conlan & Riggle, 1999; Van Horn, 1996). According to these studies, states are becoming more responsive to important variations in political conditions, socioeconomic circumstances, and broad interest group influences, as well as more capable of handling the governance challenges that this responsiveness requires (Bowman & Kearney, 1986 & 1988). As a result, many scholars believe that states are now more capable of taking on the challenge of a “devolution agenda” than in previous decades (Gray et al., 1999). These same studies, one might surmise, would tend to predict that states are becoming less likely to disrupt patterns of policy responsiveness emanating from Congress's directions, except in cases where this disruption is justified by the need to respond to legitimate variations in conditions and public opinions within their borders (i.e., the variations emphasized as legitimate and appropriate by the responsive theories of state policymaking discussed earlier).

This general optimism is also apparent in recent literature on state environmental policy. Here, scholars are pointing out that state efforts are not limited to accepting devolved responsibilities, as states are now focusing on forcing more aggressive federal action to protect the environment through judicial action (Scheberle, 2005). Other scholars have argued for an increased state role in environmental policy based on broad support for environmental policies among the general public and the breadth of state innovations in environmental policy (John, 1994; NAPA, 1995; Graham, 1999; NAPA, 2000), as well as the general improvements in state policymaking capabilities just noted. In recent years, for example, both California and a number of northeastern states initiated a campaign to allow states to regulate greenhouse gas emissions more aggressively than has been done by the USEPA at the federal level.

However, the view that states are the proper units of government to shepherd American environmental policy is still far from unanimous—particularly in water pollution control. For example, Oliver Houck, in an analysis that is quite critical of state water pollution control policies, suggests that USEPA efforts to strengthen the federal water pollution program will “come down to the will of a majority of states to do hard things that they have never been willing to do before, that will alienate powerful constituencies, and that will require in some cases changing state laws through legislatures long captured by forest, farm, and construction industries and in no mood to change” (Houck, 1999, p. 147). Clearly, there are still concerns about who and what state environmental policies respond to—and these concerns extend to water pollution control.

Figure 1-2 summarizes the previous discussion. It highlights the kinds of factors that may yield disruptions in patterns of institutional influence established by Congress through its design of water pollution laws. The four factors highlighted by the policy implementation literature—unworkable statutes, insufficient resources, disagreements among key political principals, and technical complexity—all tend to operate at the national level, although they may also influence policymaking at subnational levels. In all four cases, they may have the effect of disrupting the timely establishment of institutional patterns of compliance with Congress’s wishes within the federal agencies in which they have impact. By contrast, the factors growing out of the three major strands of state policymaking literature—responsiveness theories, capacity-based theories, and group strength-based theories—all tend to operate at the state level. In water pollution control, their effects are likely to influence the aggressiveness of state water pollution policies, and the distribution of this policy aggressiveness among the states.

One other factor that may affect state fidelity to Congress’s intentions, as well as the transmission of institutional patterns that encourage it, relates to the influence of federal agencies on state policy implementation. Federal agencies that delegate regulatory powers to state agencies have an obligation to assure that these state agencies implement federal policy faithfully. They may fulfill this obligation by providing oversight of state implementation of federal regulatory policies. In cases where oversight is carried out regularly and effectively, it is likely to foster state compliance with Congress’s statutory directions. However, in cases where oversight is lacking, state compliance may become less likely. Differential levels of federal oversight, therefore, may help explain the content of state water pollution policies. And insufficient oversight may become a factor disrupting institutional patterns of compliance in some cases. For this reason, the analyses of directive federal policies in part 3 of the book assess not only variables stemming from the state policymaking theories



*These factors are discussed in the historical analyses presented in part 2 of this book.

**Variables reflecting these factors are assessed in part 3 of this book. More detailed descriptions of these variables are presented in appendix E.

Figure 1-2. Potential Factors Disturbing Flows of Institutional Influence

summarized earlier, but also a variable reflecting the federal oversight of delegated state regulatory programs.

The analyses in the remainder of this book assess the influence of these potential disruptive factors under varying forms of statutory construction (directive policies for point sources and supportive policies for non-point sources) in order to determine the circumstances under which federal and state policies are most likely to stray from Congress's statutory directions. In so doing, they also give rise to assessments of the extent to which Congress's statutory directions influence both state policies and the politics that give rise to them.

Key Questions and Hypotheses

The analyses that follow focus on three major questions, and they—in turn—are addressed by investigating three major hypotheses. The first and most fundamental question asked is, to what extent has Congress's passage of the federal CWA institutionalized predictable water pollution policy outputs at the federal and state levels? Or, to put this question more directly in the context of past scholarly debates relating to congressional influence on public policy, are public administrators at the state and federal levels “running away” from Congress's water pollution policy directions or are their actions being subjected to ongoing congressional control?

A second and related question centers on the reasons why state water pollution policies may stray from Congress's directions. Are state policy deviations from congressional direction(s) traceable to differing problems and preferences, as advocates of policy devolution often suggest, or are they the result of other factors? Answers to these questions grow from an investigation of factors that are thought to disrupt flows of institutional influence emanating from Congress through its enactment of water pollution laws. The previous section provided an overview of these potential sources of disruption.

The third question focuses on how to improve water pollution control efforts in the future, and it is addressed based on information that is uncovered through the investigation of the first two questions. This question asks, given what we (now) know about statutory directions contained in federal law, current water pollution problems, and implementation of the CWA at the federal and state levels, what areas of focus should Congress address in future efforts to reform American water pollution policy? This latter question is dealt with most explicitly in the last chapter of the book.

To address these three questions, the analyses in this book investigate three hypotheses. The first two are grounded in basic precepts of institutional theory (Weber, 1922; March & Olsen, 1984; Peters, 1999) and they are consistent with the expected flow of institutional influence that is presented in figure 1-1. These precepts suggest that when Congress passes laws, federal agencies tend to implement them in ways that form ongoing institutional patterns of compliance—a “logic of appropriateness,” if you will (March & Olsen, 1984). These first two hypotheses are: 1) statutory direction from Congress structures federal involvement in water pollution control policymaking and implementation; and 2) federal policies guide state water pollution policy outputs.

Broadly speaking, the analyses presented in the chapters that follow support these two hypotheses, as both federal agencies and state governments have generally responded to Congress’s directions with respect to water pollution control over time. At the same time, however, the analyses reveal that there have been some clear lapses in bureaucratic fidelity to Congress’s statutory directions over the past sixty years at the federal level and state implementation of federal water pollution laws has been incomplete and uneven.

The third hypothesis investigated suggests that state policymaking processes are more likely to respond to state needs and interests than are federal policies, and these influences are likely to operate more freely when federal policies are supportive rather than directive. This hypothesis also reflects responsive theories of state policymaking processes and basic theories of federalism, which suggest that state and regional institutions are more likely to respond to “local” needs than institutions that operate on larger scales.⁴ In this sense, it is consistent with the arguments that have been made in recent years for the devolution of environmental policymaking authority to the states. More specifically, this third hypothesis states that 3) state water pollution policies are more likely to respond to broad-based (responsive) state-level influences when federal involvement is minimal than when it is extensive.

Interestingly, the analyses here suggest only mixed support for this third hypothesis. They find that the minimally interventionist federal policy structure used for non-point water pollution sources enables states with moralistic political cultures to enact relatively aggressive policies that are consistent with their cultural premises. However, other broad-based state-level influences such as public opinion regarding the environment and water pollution problem severity do not appear to be strong and direct predictors of state policy aggressiveness under this kind of minimally interventionist federal policy design. By contrast, broad-based influences relating to the severity of water pollution problems within the

states appear to influence state policies only under highly interventionist federal policy structures that regulate point source wastewater discharges for conventional pollutants, and this finding runs directly to counter this third hypothesis. This latter finding is consistent with past research that also found a relationship between levels of problem severity and the aggressiveness of state point source water pollution policies (Lowry, 1992).

While the findings produced through investigation of this third hypothesis are subject to some limitations as a result of the cross-sectional nature of the data that are evaluated,⁵ they do suggest that the statutory policy designs enacted by Congress yield institutional patterns that affect not only state water pollution policies, but the political dynamics underlying them as well. This finding, along with other information uncovered as a result of the analyses conducted, has potential implications for the manner in which federal water pollution policies may be improved in the future.

Overview

This book is divided into four parts, each of which addresses somewhat differing subjects. Part 1 includes the present chapter and a second chapter that overviews water pollution problems in the United States. These two introductory chapters describe some of the issues and complexities involved in assessing the nation's water pollution control policies and the progress that is being achieved in cleaning up polluted water bodies. Taken together, they provide basic information that should help readers understand the discussions and analyses that follow.

Part 2 of the book includes a total of five chapters (3 through 7) that focus on the historical development of water pollution policy in the United States. Chapter 3 provides an overview of the legal foundations of American water pollution policies and argues that these policies have been enacted and implemented in three major phases during the post-World War II era. This argument is based on a review of the rather extensive literature that exists on various aspects of American water pollution policy, and it suggests that changes in Congress's statutory directions have signaled transitions between each of the three eras. Looking at twenty-five major federal policy changes between 1948 and the first decade of the twenty-first century, chapters 4, 5, and 6 in this part suggest that most major policy changes made by Congress during each of three eras were subsequently implemented by both the federal government and the states. Where clear implementation failures did occur, they were generally traceable to the disruptive factors identified