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SHAPING WATER POLICY: POLITICAL INFLUENCES IN THE EUROPEAN UNION AND UNITED STATES

Christopher Young

INTRODUCTION

Water is not a commercial product like any other but, rather, a heritage, which must be protected, defended and treated as such (Paragraph 1 of the preamble of the Water Framework Directive).

Water is the most basic resource for the sustenance of human life, and even though 70% of the earth is covered in it, only one quarter of one percent is available to meet the needs of the earth's ever-growing population. To secure sufficient quality and quantity of this vital resource for future generations, governments and international institutions around the globe will have to develop water policies to protect it. During the development of such policies, coalitions of economic interests compete with environmental interests to shape policy outcomes. The Clean Water Act and the Water Framework Directive are the United States and European Union's most comprehensive water policies to date and serve as excellent case studies for understanding the political influences that affect such policies.

Both policies developed out of a growing concern for human health and environmental degradation. They established quality standards, enabled public participation, and devolved the implementation and enforcement to the state or regional level. However, the political influences that have helped shape each law have led to vastly different implementation and enforcement strategies with varying mechanisms for federal oversight and public participation.

The Federal Water Pollution Control Act Amendments of 1972, known as the Clean Water Act (CWA), established national Water Quality Standards (WQS), Total Maximum Daily Loads (TMDL), a system of permits for maintaining WQS, and increased assistance for municipal sewage treatment plants through the Construction Grants Program. It set two specific goals: to eliminate discharges of pollutants into the nation's navigable waters by 1985; and to achieve water quality standards, which enabled the protection and propagation of fish, shellfish, and wildlife, as well as, preserved it for recreational use. The act called for progressively more stringent, technology-based standards to reduce and eventually eliminate discharges

of pollutants by municipalities and industries. It also enabled more public involvement by establishing public comment periods and public hearings, and also giving citizens the ability to bring violators to court.

Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for community action in the field of water policy otherwise known as, the Water Framework Directive (WFD), institutes a legal framework for the protection and restoration of all European waters. By recognizing that water is not static and incorporating surface water, groundwater, coastal waters and estuaries into one piece of legislation, the WFD has created a whole new approach to European Union¹ (EU) water policy. The WFD repealed out of date directives, integrated effective policies within one administrative framework, and addressed issues not dealt with before under EU law such as quantity, droughts and floods. As such, the WFD is an innovative and ambitious reformation to European water policy (See European Parliament 1996; European Commission 1996 and 1997; Grant et al., 2000; and Kallis & Butler, 2001).

Both the WFD and the CWA shift the decision-making authority from the federal or supranational level towards the regional level (Foster, 2002; Whitford, 2007; Lubell et al., 2002). This shift is called devolution or decentralization². It is a move away from the traditional “command and control” approach. Foster describes the traditional approach as a “top down, national uniform standard,” whereby important policy decisions are made without public input, and the administrative agency making those decisions then “announce and defend” those decisions to the public (Foster, 2002). Decentralization promises many improvements over the traditional consultative nature of regulatory policy. Devolved institutions promise to engender civic participation by stakeholders directly affected by policy outcomes, create democratic legitimacy in which all parties’ needs are considered and deliberated, and move the range of expertise away from national technocrats to local communities that are closest to the situation (Kenney, McAllister, Caile, & Peckham, 2000; Foster, 2002). Devolution, or decentralization, is not without its critics who would argue that states are incapable of consistent implementation, are vulnerable to regulatory capture, and do little more than create symbolic policies (Lubell, 2004a; Dunlap & Mertig, 1992; Kuehn, 1995; Flatt, 1997; Steinzor, 2000; Sigman, 2009; Sigman, 2005).

To understand who is involved in the policy process and what strategies they utilize in order to achieve their policy goals, I will turn to the Advocacy Coalition Framework (ACF). Sabatier et al. have argued that actors from varying public and private institutions or organizations who share a “set of normative and causal beliefs” work together in order to achieve a common goal (Sabatier & Pelkey, 1987; Sabatier, 1988; Sabatier et al., 2005). Advocacy coalitions attempt to change policy by influencing multiple governmental institutions over time through various instruments, resources, or venues including litigation, direct political influence, research, monitoring, and public engagement campaigns. The influence of these coalitions is evident in both the CWA and the WFD.

Through the lens of the ACF (Sabatier & Pelkey, 1987; Sabatier, 1988), I will analyze

1 The European Union was called the European Community until the Maastricht treaty of 1993, under which, the title was officially changed. Since this paper extends over that time but focuses on the present, I will always refer to it as the EU.

2 Devolution and decentralization have become interchangeable in the literature and for this paper's purposes will be defined as the shift of decision making and enforcement authority from the federal (U.S.) or supranational (EU) level to the regional level.

stakeholder participation throughout the conception, drafting, adoption, and implementation phases of the CWA and the WFD policy cycle (Grant et al., 2000; Rosenbaum, 2002). I hypothesize that advocacy coalitions have shaped the creation, implementation and enforcement of both of these policies and that devolution has increased the availability of resources, strategies and venues. This paper will be structured into four sections. Following this introduction I will review the relevant literature, outlining the ACF, both sides of the decentralization debate, and one type of institution, which resulted from devolution, the watershed partnership. The literature review will be followed by a brief introduction to the policy making process to understand how policy is created in the EU and the U.S. In the subsequent section, I will conduct a stakeholder analysis using the ACF during each phase of the CWA's and WFD's policy cycle. In the final section, I will discuss my findings within the context of the proposed hypothesis.

ANALYZING WATER POLICY IN A COMPARATIVE PERSPECTIVE

The Advocacy Coalition Framework

The Advocacy Coalition Framework, as developed by Sabatier and Pelkey (1987), is a model for analyzing stakeholder behavior and public policy outcomes throughout the life cycle of a given policy. The ACF has three basic principles: that the most useful unit for analysis is the policy subsystem, consisting of a coalition of actors from a broad spectrum of organizations and institutions; that subsystem actors are driven by a set of shared normative or causal beliefs about problem causation and desired policy outcomes; and that 'policy oriented learning' is a result of internal and external changes, happens suddenly or over time, and as such, policy processes should be studied over a decade or more (Sabatier, 1988).

The ACF moves beyond the traditional notion of the "iron triangle," consisting of interest groups, administrative bodies, and legislative committees. Instead, Sabatier et al. consider coalitions as a multitude of actors involved at various levels of government, from public and private institutions, who play important roles in formulating, disseminating, and evaluating policy ideas (Sabatier & Pelkey, 1987; Sabatier, 1988). The ACF defines this subsystem of actors as the most useful unit of analysis and has explicit assumptions regarding whom to include, individual beliefs, individual motives to form coalitions, available resources, and the factors necessary to produce policy changes (Weible, 2006). These subsystems adopt strategies utilizing one or more instruments in order to achieve their goals (Sabatier, 1988). Instruments, or venues, used to affect policy change include litigation, direct political influence, research, monitoring, public opinion, public mobilization campaigns, financial resources, and skillful leadership such as policy entrepreneurs (Weible, 2006).

TABLE 1: ACF Three Tiered Belief System

Type of Belief	Resistance to Change	Entrenchment	Example
Fundamental core beliefs	Very resistant	Span multiple subsystems	Political Ideology
Policy core beliefs	Resistant	Subsystem wide	Effectiveness of policy instruments
Secondary beliefs	Most susceptible	Relate to area within a subsystem	Budgetary allocations

Source: (Weible, 2006, p. 99; Sabatier, 1988, p. 145)

Table 1 describes the three-tiered hierarchical belief system identified in the ACF. The three tiers consist of fundamental core beliefs on top, followed by policy core beliefs second, and secondary beliefs on the bottom (Sabatier & Jenkins-Smith, 1993). Fundamental core beliefs are those that are least likely to change over time and span multiple subsystems, such as political conservatism or liberalism. Because these beliefs are unlikely to change over the life of a policy, they can be generalized. Policy core beliefs are subject to change based on new information or external events, but because they are shared throughout the subsystem, and much more deeply rooted than secondary beliefs, they are highly resistant to change. Individuals tend to filter or ignore information or events that challenge their policy core beliefs but readily accept information that reinforces them (Weible, 2006). Sabatier and Jenkins-Smith (1999) identify eleven categories of policy core beliefs, the three most relevant to this paper being: the perception of the severity and causes of a problem; value priorities; and the effectiveness of policy instruments. Secondary beliefs are the most likely to change in response to new information or events and are relevant to an area within a subsystem, such as budgetary allocations (Weible, 2006).

Internal and external events can change policy core beliefs. Examples include: changes in socioeconomic conditions, such as the loss or gain of a source of funding; changes in public opinion about the policy issue; changes in systemic governing systems, such as the loss or gain of a policy entrepreneur; or the influence of other, opposing, subsystems (Sabateir & Jenkins-Smith, 1999). When an external event happens, and the subsystem reacts by changing their secondary or policy beliefs, then they are engaged in what Sabatier et al. refer to as ‘policy-oriented learning.’

“Policy-oriented learning refers to relatively enduring alterations of thought or behavioral intentions which result from experience and which are concerned with the attainment (or revision) of policy objectives” (Sabatier, 1988).

Specifically, coalitions choose available instruments or venues to affect desirable policy changes and then learn from the outcomes of their efforts. Policy oriented learning can happen suddenly, such as when a court rules in the opposing coalition’s favor and the subsystem is forced to alter their strategies, or it can happen gradually, such as when research or access to new information can sway public opinion over time.

Examples of policy-oriented learning can be seen in the European Union and the United States. In the EU, environmental groups rarely use litigation through the European

Court of Justice because they have found it to be extremely difficult and unproductive (Hoornebeek, 2004). In the U.S. litigation is a primary tool. However, environmental groups generally conduct a cost benefit analysis when deciding which violators to pursue since legal action has proven expensive and time consuming (Naysnerski & Tietenberg, 1992).

According to Sabatier et al., “policy-oriented learning,” policy analysis, and the completion of a full policy cycle influence subsystem actions or reactions over time. Therefore, subsystems must be analyzed over a period of a decade or more. Sabatier (1988) defines policy analysis as “the cumulative effect of findings from different studies and from ordinary knowledge,” which influences the perceptions of policy makers over time. For example, this can be seen in the U.S. when considering the establishment of Total Maximum Daily Loads for chemicals and toxins in water bodies and the long list of chemical research that preceded such policies (Hawken, 2007). Furthermore, a decade or more of analysis is needed to complete at least one formulation, implementation, and reformulation cycle of any given policy and to acquire an accurate portrait of a policy’s successes and failures (Sabatier, 1988).

The formulation, implementation and reformulation of a policy can be called a policy cycle. The policy cycle is conceptualized in various ways. Grant and his colleagues view the policy cycle as a ‘policy loop’ when they apply it to European environmental policy. Their loop consists of policy conception, the drafting of legislation, formal adoption, and implementation and enforcement (Grant et al., 2000). Literature regarding U.S. policy processes applies a different set of terms to the same cycle. Rosenbaum (2000) refers to the policy in six phases: agenda setting, formulation and legitimation, implementation, assessment, reformulation, and finally termination. However, these two approaches are symbiotic.

Agenda setting is described as getting issues on legislative calendars, before legislative committees, or on the president’s agenda (Rosenbaum, 2002). In broad terms, policy conception is agenda setting, the tools for both concepts are the same: public mobilization, scientific research, and direct political influence. Rosenbaum amalgamates formulation with legitimation. Formulation is equivalent to the drafting phase of Grant’s loop, whereas legitimation is the same as Grant’s adoption phase. The implementation phases are identical; however, Rosenbaum adds the assessment and reformulation phase along with a termination phase to his process. For Grant, the policy loop starts over – assessment and reformulation are inherent.

GRAPH 1: Grant's Policy 'Loop' (headings) Integrated with Rosenbaum's Policy Process (bullets)



Graph 1 shows the overlap between Grant's policy loop and Rosenbaum's policy process. By observing policy subsystems and the policy oriented learning that takes place throughout the entire policy loop, levels of public participation and access can be analyzed. Within the Clean Water Act and the Water Framework Directive public participation varies at each phase. There tends to be more room made for public input and direct participation during the conception and implementation phases. Likewise, due to the technical nature of the drafting and adoption phases, access is generally limited to political elites and to organizations with more economic or scientific resources or political "know how" (Kaika, 2003; van Overveld et al., 2010; Richardson, 1994).

Stakeholder Analysis

Stakeholder analysis is defined by Varvasovszky and Brugha as "a tool or set of tools for generating knowledge about actors – individuals and organizations – so as to understand their behaviour [sic], intentions, interrelations and interests; and for assessing the influence and resources they bring to bear on decision-making or implementation processes." According to Weible (2006) most stakeholder analyses address a similar set of questions: Who are the stakeholders? What are their interest and beliefs? Who controls what resources? With whom do stakeholders form coalitions? And what strategies or venues do stakeholders use to achieve their goals?

Stakeholder analysis is a useful tool for understanding advocacy coalition's beliefs and motives. However, to conduct a stakeholder analysis of the CWA and the WFD much more information is needed than is available. A quantifiable stakeholder analysis requires the analyst to identify and collect data directly from stakeholders (Varvasovszky & Brugha, 2000). Data collection methods include in-person interviews, semi-structured interviews, self-administered questionnaires, or some combination thereof. Only through data collection from actual stakeholders can many of these questions be answered with confidence. As that level

of analysis is outside the scope of this paper, I will attempt to answer the who, with whom, and what resources, strategies, or venues questions through primary and secondary sources but will only be able to speculate about stakeholder beliefs and motives based on generalizations in existing literature.

Within the environmental policy arena, policy is formed and reformed through the efforts of conflicting coalitions representing either environmental interests or economic interests (Schlager, 1995). While this is a very broad generalization of much more complex subsystems, it is useful to understand their overall policy goals in order to envisage their underlying policy core beliefs. In general, ‘environmental interests’ promote stronger environmental policies, while ‘economic interests’ work to prevent or remove environmental policies, which may cause economic hardship (Hays, 1982; 2000).

Environmental interests share a general set of causal beliefs centered on human health, the aesthetic value of nature, and ecological stability (Hays, 2000). Environmental interests are coalitions of governmental and non-governmental organizations along with members of the public and private sector, whose primary concerns are environmental, consumer, and health protection. Examples of members would include the Sierra Club, Green Peace, the World Wildlife Fund, the U.S.EPA, The European Commission’s DG XI, or The United Nations Environment Programme (Hays, 1982; Grant et al., 2000).

Economic interests oppose environmental regulation based on two sets of deeply rooted values: the defense of traditional manufacturing or agricultural methodologies; and contemporary free market values (Hays, 2000). They view regulation as a threat to traditional norms or to economic development and free enterprise. The economic interest coalition is comprised primarily of business interests such as ‘food giants’, agribusiness, the pest control industry, the chemical industry, the USDA, the European Federation of National Associations of Water and Wastewater Services (EUREAU), along with deregulation, free-market politicians such as Reagan, Bush, Thatcher and their administrations (Richardson, 1994; Kaika, 2003; Grant et al., 2000; Hays, 2000).

In regards to the WFD, European actors involved in promoting environmental policy include institutional actors, such as the European Commission’s DG XI (Directorate General for the Environment) and the European Parliament’s Environmental Committee, along with environmental and consumer interest groups. The anti-regulation coalition is comprised primarily of political elites within the Council of Ministers and the European Commission’s DG VI (Directorate General of Agriculture) along with agricultural, water supply, and chemical interests (Richardson, 1994; Kaika, 2003; Grant et al., 2000).

Institutional actors advocating for environmental regulation in the U.S. have consisted primarily of Democratic senators and presidents, although many republican politicians in the pre-Reagan years could be included. These political elites coalesce with environmental and consumer protection organizations such as the Nature Conservancy, the Wilderness Alliance, and the Sierra Club (Hays, 1982). Anti-regulation coalitions consist of ‘food giants’, the pest control industry, agribusiness, the chemical industry, and the USDA. During the Reagan years, the Reagan administration and large portions the Republican Party joined these efforts (Hays, 1982; Hawken, 2007).

The Environmental Era and the Move toward Decentralization

As the environmental movement has unfolded, coalitions of economic interests, opposed to environmental regulation, have successfully diminished federal capacity to enforce

environmental regulations (Hays, 1982; Whitford, 2007). Such was the case during the Reagan administration when he severely cut the EPA's budget and appointed Anne Gorsuch as its Director in 1981. She effectively curtailed environmental regulations through administrative reviews, budgetary restrictions, and staff changes (Dunlap & Mertig, 1992). Meanwhile, environmental interests have become generally dissatisfied with the regulatory inflexibility, unequal distribution of environmental hazards, and the traditional "announce and defend" practices of the federal bureaucracy (Foster, 2002; Whitford, 2007; Lubell et al., 2002; Lubell, 2004a). Both groups have pushed for the devolution of the decision-making authority from the federal (U.S.) or supranational (EU) level towards the regional level.

Devolution can be viewed as a move away from traditional "command and control" policies of the federal government towards local authorities. The traditional top down approach has been criticized for being inefficient, technocratic, piecemeal, dislocated, and lacking democratic legitimacy (Sabatier et al., 2005; Foster, 2002; Lubell et al., 2002). Advocates for devolution argue that it is more democratic and engenders civic participation. In addition, it moves the range of expertise away from national technocrats to local communities that are closest to, and most familiar with, the situation and therefore most able to choose appropriate responses (Foster, 2002; Lubell et al., 2002; Whitford, 2007).

Devolution goes by many names, including: collaborative management institutions and watershed partnerships (Foster, 2002; Lubell, 2004a; Lubell et al., 2002; Kenney et al., 2000). Collaborative management institutions form in two ways: there are "ad hoc", or local groups, that form on their own; and there are community advisory committees that develop out of formal arrangements generally overseen and initiated by a regulatory agency. Ad hoc institutions attempt to resolve conflicts between various stakeholders and find practical, cost-effective and economically salient solutions to watershed problems while overcoming administrative "red tape" consistent with traditional regulation. Community advisory committees, or "working groups," are set up by statutory or regulatory mandate and typically bring together public and private interests to resolve issues related to the placement of environmentally hazardous facilities or the cleanup and reuse of contaminated lands (Foster, 2002).

Devolution, or decentralization, is not without its critics (Flatt, 1997; Steinzor, 2000; Sigman, 2009; Sigman, 2005; Kuehn, 1995; Prud'homme, 1995). One argument against devolving authority to the state level is that states are incapable of consistent implementation of environmental policy. Flatt suggests that the quantity of states in the U.S. that have authority over their National Pollutant Discharge Elimination System (NPDES) permit program (37) is "too large for the EPA to monitor and police effectively" (Flatt, 1997). There is also concern over state willingness to enforce strict environmental laws, when economic incentives for the state induce lower standards (Flatt, 1997; Steinzor, 2000). For instance, states that want to attract economic investments may refrain from enforcing environmental policies and pass pollution problems onto "downstream" states. Furthermore, if downstream states have stricter laws, their efforts are undermined and dis-incentivized. This practice can lead to a "race to the bottom" in environmental enforcement (Sigman, 2009; Sigman, 2005; Steinzor, 2000; Kuehn, 1995).

Two other arguments against devolved institutions include the preservation of markets and the threat of regulatory capture. International institutions such as the EU have traditionally been concerned with the use of environmental regulations as de facto trade barriers (Aubin & Varone, 2004). Regulatory capture is when well-resourced interests overwhelm state agencies' enforcement capacity with technical and legal resources or political influence

in order to steer environmental policy in a direction that benefits them (Flynn, 2000; Kuehn, 1995).

Collaborative Watershed Partnerships

Collaborative watershed partnerships have emerged as part of the move toward devolved public policy and created one of the most vital and valuable means for public participation (Lubell & Leach, 2005). They tend to be more grassroots, or ad hoc, rather than government appointed institutions (Lubell, 2004b; Sabatier et al., 2005; Foster, 2002). Sabatier et al. (2005) define watershed partnerships as:

[R]elatively informal organizations involving a wide variety of governmental and non-governmental stakeholders seeking to develop a management plan for the watershed and then implementing it through specific restoration projects, changes in land use practices, water quality regulations, and other ways. Partnerships are intended to be rather long-term affairs (five to ten years).

As decentralized institutions, watershed partnerships promise to be beneficial for both environmental and economic interests; either addressing issues outside the scope of the centralized government for environmental concerns or adopting flexible policies that cater to economic interests. Watershed partnerships tend to develop where there are more non-point source polluters and tend not to develop when there is more government enforcement (Lubell et al., 2002). It is important to point out that these organizations do not work in lieu of the government, but rather they work with the government to continue regulation efforts (Lubell et al., 2002).

Like decentralization in general, watershed partnerships are not without their critics. In one study, Mark Lubell, sought to examine the effectiveness of watershed partnerships. He compared two competing efficacy frameworks: The political contracting framework, which views collaborative institutions as venues for political decision making processes where stakeholders seek mutually agreeable policies (Ostrom, 1990; Lubell et al., 2002); and the symbolic policies framework, where partnerships do not produce tangible results but rather symbolic policies that do little more than suppress potential political threats (Lubell, 2004a). The political contracting framework suggests that there would be consensus and cooperation between members of the coalition, whereas the symbolic policies framework suggests high levels of perceived consensus but little or no cooperation or follow-through. Lubell analyzed the U.S. EPA's National Estuary Program³ and compared stakeholder perceptions between NEP participating estuaries and non-participating estuaries. Through a survey of various stakeholders he assessed the level of perceived consensus and the level of behavioral cooperation. The author found that there were indeed high levels of consensus but little cooperation

3 "EPA's National Estuary Program was established by Congress in 1987 to improve the quality of estuaries of national importance. The Clean Water Act Section 320 directs EPA to develop plans for attaining or maintaining water quality in an estuary. This includes protection of public water supplies and the protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife, and allows recreational activities, in and on water, requires that control of point and nonpoint sources of pollution to supplement existing controls of pollution. In several cases, more than one State is participating in a National Estuary Program. Each program establishes a Comprehensive Conservation and Management Plan to meet the goals of Section 320." -<http://water.epa.gov/type/oceb/nep/index.cfm>

(Lubell, 2004a). While decisions reached by consensus are more likely to be complied with by those involved in the decision making process (Foster, 2002), Lubell's study indicates that there is room for concern considering the effectiveness of watershed partnerships to actually achieve their desired results (Lubell, 2004a).

TABLE 2

Section	Description
Two approaches to public policy	A comparison of the EU and U.S. political systems and their policy making apparatuses
Policy Conception	A historical look at both policies and what placed them on the political agenda
Drafting Legislation	Investigates the political influences that shaped the draft bills
Adoption	Political maneuvering that shaped the final language of each statute.
Implementation and enforcement	The implementation and enforcement strategies of each statute
Devolution	How each statute incorporates public participation

As outlined in Table 2, in this section I will briefly compare the political systems of the U.S. and the EU followed by a stakeholder analysis of the CWA and the WFD with what data is available. I will utilize the policy cycle or 'loop' as outlined by Grant et al. (2000) in an attempt to identify: who is involved in the coalitions; with whom they coalesce; and what resources, strategies, or venues they utilize to achieve their goals during each phase of the policy cycle.

Two approaches to public policy

The EU and U.S. governmental structures are fairly similar with small variances in the responsibility of each institution. The three main institutions of the EU consist of the Council of the European Union (the 'Council'), the European Commission (the 'Commission'), the European Parliament (the 'Parliament') and the European Court of Justice (ECJ) (European Union, 2011a). The U.S. federal government consists of the Presidency, the Senate, the House of Representatives, and the Supreme Court. These institutions are known the executive, legislative, and judicial branches. The bureaucracy is sometimes considered the fourth branch although its agencies fall under the executive branch (Van Horn et al., 2001).

The Council is the seat of the European President and most similar to the executive branch, however its role in the legislative process is more similar to that of the U.S. Senate. The Parliament is the body most similar to the House or Representatives. Like the Senate and the House, the Council represents the member states equally, whereas the Parliament represents the member states proportionately. Also similar to the Senate and the House, on most topics, these two institutions must agree on the final language of a directive in order to make legislation in the European Union.

The Council is made up of the Heads of State (HOS)⁴ from each member state. Within the Council, the Heads of State appoint ministers who represent their country in the various meetings. The Heads of State only meet twice a year to address larger issues, such as the Euro debt crisis, whereas the ministers meet much more frequently to deal with smaller issues. For example, the minister of the interior from each member state will meet to discuss issues of immigration several times a year. The Council can only make decisions with consensus. If they can reach consensus on a given issue, they will adopt a ‘resolution’ that either establishes a common position or asks the Commission to draft a specific piece of legislation. Resolutions are formal documents that state an official position and can be legally binding (European Union, 2011a).

The Parliament currently has 736 members from the 27 EU countries. The Members of the Parliament (MEPs) are voted into office directly by the EU citizens every 5 years. The Parliament makes decisions during what is called a ‘plenary session’ which is a meeting of all 726 MEPs in Strasbourg, France. This happens every month and lasts one week. The rest of the time the parliament is preparing for these sessions. The Parliament cannot initiate new policies, however, it can forward draft proposals for legislation to the Commission or ask for new legislation to be drafted. (European Union, 2011b).

The Commission is the bureaucratic branch of the European government. Much like the U.S. bureaucracy, Commissioners are appointed by the Council to head various administrative agencies. However, appointments must be approved by the Parliament. In the U.S. context, the administrators of the various administrative agencies are appointed by the President and confirmed by the Senate. EU Commissioners typically hold political positions within their member state prior to coming to the commission but are sworn to work in the best interests of the EU rather than their nation after they take office. Appointments happen every five years within six months of the Parliamentary elections.

All new legislation begins in the Commission. Legislation is drafted in consultation with various stakeholders, technical experts, the Council, the Parliament, or one of the various autonomous committees who represent different public or private interests. The Commission also conducts technical analysis and drafts scientific reports with the help of outside consultation (van Overveld et al., 2010). Once a proposal is drafted, a ‘communication’ is adopted and goes to the Parliament and the Council for further debate and approval (European Union, 2008). Typically, legislation is only adopted if the Parliament and the Council can agree upon a final version through a co-decision procedure that consists of up to three readings, recommendations for amendments, and the possible formation of a conciliation committee. However, it is important to note that the co-decision process does not apply to all areas of legislation. The Council, for example, can take decisions on agriculture, economic policy, visas and immigration alone in consultation with the Parliament.

The legislative process in the U.S. is fairly similar. Legislation is initiated in the Congress. Members of Congress, their staff, or interests groups can draft federal bills, however, only a member of either chamber can introduce a bill into the legislature. Once a bill is introduced it is assigned to one or more committees, and from there, possibly into subcommittees. It is in the committees and subcommittees where bills are amended and committee hearings are held. If a bill is voted out of all of its assigned committees, it goes to the floor of that chamber for debate by all members. On the floor, it is amended further and then

4 The Heads of State of Government are commonly referred to as simply the ‘Heads of State’ or HOS

voted on by all members. If it passes one chamber, it is introduced into the other chamber for similar action. If two identical bills pass both houses, the president receives the bill for signature or veto. If both houses pass similar but varying bills, each version is debated in a conference committee where the two bills are merged into one. From there, a conference report is created and each chamber must vote to approve the changes. If both chambers approve the conference report the final bill then goes to the president for a signature or veto. If the President signs a bill it becomes law. If it is vetoed, the legislature can override that veto with a 2/3 vote in both the House and the Senate, making it law (Van Horn et al., 2001).

Policy Conception

Policy conception, or agenda setting, can be initiated either by policy elites in a 'top-down' manner or by the public in a 'bottom up,' sometimes called 'grassroots,' manner (Van Horn et al., 2001). The CWA and the WFD can be seen as being initiated from the bottom-up. To fully understand the evolution of the WFD and the CWA, including the coalitions that placed these policies on the agenda, we must look at the history of environmental policy in general. The coalitions that were instrumental in the passage of these two policies were also part of the larger environmental movement and saw water as only one piece of a larger movement.

The development of the WFD and the CWA were influenced by a growth of environmental lobbies as well as an emergent awareness within the international community of the environmental degradation caused by human actions (Bär & Kraemer, 1998; Hays, 1982; Hawken, 2007; Davis, 1998). The first Earth Day in April of 1970 and the first world environmental summit in Stockholm, 1972, were two major international demonstrations of public concern for the environment, and many would say the beginning of the modern environmental movement. But, while these events influenced the development of environmental policies in both polities, their paths to policy conception varied.

EU development of environmental policy can be divided into three waves (European Commission, 1997; Kallis & Butler, 2001). During the first wave, from 1973 until 1986, environmental policies were primarily concerned with the protection of public health and the protection of market liberalization. Following Stockholm, at the Paris Summit of the European Heads of States of Governments, the HOS agreed to include policies on the environment within EU legislation resulting in the First Environmental Action Programme (European Communities, 1972). Also at this time, pressure was building within the Union: the development of international environmental treaties between member states was viewed as potential trade barriers. In part, the decision to enact laws at the European level was made in order to maintain economic harmonization (Aubin & Varone, 2004).

The foundation for the WFD was first laid in the First Environmental Action Programme (EAP) of 1973 (Aubin & Varone, 2004). The first EAP proposed defining environmental quality objectives and led to research into pollution causes and problems (Hey, 2005). This innovative policy led to the formation of several water policies but only proved to be somewhat effective. They were criticized greatly for being cumbersome and ineffective. However, one thing these policies did do was create political clout for the European Union in the area of environmental policy (Kallis & Butler, 2001). In a 1996 report, the European Commission reviewed each of the policies formed during this wave and proposed to either eliminate them or integrate them into the WFD (European Commission, 1996).

The second wave, from 1988 until 1992, introduced two new directives, which ad-

dressed point source pollution from urban wastewater⁵ and non-point source pollution from agricultural run-off⁶. This wave of environmental policy focused on environmental protection and pollution control through environmental objectives and emission limits. The integrated use of environmental objectives and emission value limits was a different approach from the first wave of environmental policy, which focused primarily on environmental objectives. The Commission had advocated for the amalgamation of these two regulatory approaches, reasoning that a combined approach enabled local flexibility in implementation while also allowing for the protection of more sensitive aquatic environments (European Commission, 1996).

During the second wave, in June of 1988, the Council began laying the groundwork for the WFD when they asked the Commission to submit a proposal to improve the ecological quality in the Community's waters. In 1991, the declaration of the Ministerial Seminar on groundwater, a body of the Council, called for a "programme of actions" aiming at "sustainable management and protection of freshwater resources." Again, in 1992, and later in 1995, the Council requested revisions to existing groundwater and pollution policies "as part of an overall policy on freshwater protection" (European Parliament and Council, 2000).

The third wave of environmental regulation was marked by the adoption of the 5th Environment Action Programme of 1993 and includes the subsequent development and implementation of the WFD. Policies focused on sustainable development, integrated management and subsidiarity⁷ (Kallis & Butler, 2001). Part of the 5th Action Programme was to assess the state of the European environment (European Commission, 1992). In 1995, the Council and the Environment Committee of the European Parliament called for a "fundamental review of Community water policy." In November of that same year, the European Environment Agency produced its report "Environment in the European Union – 1995" in which it found a need for action to protect Community waters in both qualitative and quantitative terms (European Parliament and Council, 2000). The next month, December of 1995, the Council adopted a resolution that required the Commission to draft a proposal for a new Directive on sustainable water policy.

The Commission did carry out a fundamental review in 1995 and found a need for a new Water Resource Framework Directive. In their 1996 communication, the Commission notes that previous EU water policy had been divided for administrative purposes into various categories such as surface water, ground water, marine water, rivers, lakes, estuaries, etc., and acknowledged that water does not "recognize such distinctions." This assertion is the basic principle driving the development of the WFD that either replaces existing EU water policy or integrates it within a single framework (European Commission, 1996). The 1996 communication was the beginning of the negotiations between the Commission, the Parliament, the Council, and the various stakeholders who assisted in drafting this legislation.

While the U.S. CWA was adopted around the same time as early EU water policies, the history of environmental activism and water protections dates back to the progressive era (Hays, 1982). The first legislation dealing with water specifically was the Rivers and Harbors Act (RHA) of 1899. The RHA included a provision in it known as the Refuse Act, which

5 Council. (1991). *Directive concerning urban waste water treatment (91/271/EEC)*. Official Journal.

6 Council. (1991). *Directive concerning protection of water against pollution by nitrates from agriculture (91/676/EEC)*. Official Journal.

7 Subsidiarity is the notion that, where possible, environmental regulation should be handled at the Member State level rather than the Community level.

banned the discharge of pollutants into America's navigable waters. However, until 1968, the Refuse Act was never enforced (Cronin & Kennedy, 1999). It was not until the 1948 Federal Water Pollution Control Act (FWPCA) that the next piece of significant water legislation was passed. The FWPCA gave responsibility over preventing water pollution to the states and focused on point sources⁸ of pollution like industrial waste or municipal sewage (Migliaccio et al., 2011).

Samuel Hays (1982) views WWII as the historical dividing point between the conservation movement and the environmental movement. After the war, American prosperity increased as did their education and access to information, which brought about a new kind of awareness to environmental issues. With an increase in income, and an increase in interstate highways, more Americans had access to the outdoors (Davis, 1998). People soon became concerned about the natural environment for its aesthetic value. The loss of nature as a recreational and aesthetic resource was viewed as a threat to one's quality of life (Dunlap & Mertig, 1992). Environmental groups such as the Nature Conservancy, World Wildlife Fund, Friends of the Earth, Environmental Defense Fund, Natural Resources Defense Council, and Greenpeace formed during this period and pushed for stronger national pollution controls (Davis, 1998).

The National Pollution Control Act of 1955 was adopted as smog became noticeable in cities like Los Angeles and Pittsburg and after reports that 4,000 people had died in London due to heavy smog (Davis, 1998). The Water Quality Act of 1965 focused on interstate water quality at the same time the use of chemicals was increasing and having visibly negative effects on the environment and human health. Large fish die offs in the Mississippi, the fire on the Cuyahoga River, and the release of Rachel Carson's book *Silent Spring* brought national attention to environmental degradation from human actions (Hays, 1982; Davis, 1998). All of this culminated into 20 million Americans celebrating the first annual Earth Day on April 22, 1970 (Dunlap & Mertig, 1992).

At that time, the federal government was actively pursuing environmental policies. President Nixon signed the National Environmental Policy Act (NEPA), and established the EPA in 1970 following the 1969 Santa Barbara oil spill (Clarke & Hemphill, 2002). The EPA, once established, began enforcing the Refuse Act of 1899 (Davis, 1998). Seeing a need for a complete overhaul of the 1948 FWPCA, Senator Edmund Muskie (D-ME), an environmentalist, chair of the public works committee, and a presidential hopeful, began drafting amendments to the FWPCA in April of 1970 (Houck, 2002).

As can be seen in this brief history of environmental policy conception, there are distinct advocacy coalitions in the EU and the U.S. In the EU, coalitions included members from the Environment Committee of the Parliament, the European Environment Agency, the Commission's DG XI, environmental NGOs, and the general public. The venues they utilized include research and monitoring (e.g., EEA), public engagement campaigns (e.g., environmental NGOs), Direct Political Lobbying (e.g., environmental NGOs), and International Institutions (e.g., the Stockholm Summit). In the U.S., environmental coalitions include the general public, members of the Senate, the President, environmental NGOs, and the newly formed EPA. They used research (e.g., Rachel Carson), monitoring (e.g., EPA), direct political lobbying (e.g., NGOs), and policy entrepreneurship (e.g., Senator Edmund

8 Point pollution comes from a singular source such as a discharge pipe from a sewage treatment plant or industrial factory. Contamination levels can typically be measured. Non-point pollution comes from diffuse sources such as farms, mines, or urban areas. Measuring contamination and identifying sources tends to be difficult.

Muskie and President Richard Nixon) to achieve their policy goals.

Drafting Legislation

Drafting the WFD took place over several years with the consultation of the Council, the Parliament, the European Environment Agency, stakeholders, and scientific bodies. In February of 1996, the Commission adopted the *Communication from the Commission to the Council and the European Parliament: European Community Water Policy (COM (96) 59 final)* in response to the various requests from the other European institutions (European Commission, 1996). This communication evaluated previous water policies, defined objectives for a new policy framework, and gave recommendations for future action. The Parliament, the Council, the Committee of the Regions, and the Economic and Social Committee responded to this communication that same year (European Parliament and Council, 2000)⁹.

In 1997, the Commission published its first draft proposal of the Framework Directive on water policy, which outlined four main objectives: the provision of drinking water; the provision of water for other economic purposes; the protection of the environment; and the alleviation of the impacts of floods and droughts. It addressed the means by which the objectives should be met including the achievement of “good” chemical and ecological status and the completion of a River Basin Management Plan in consultation with the public (European Commission, 1997). Three main points were contested the most during the drafting phase: the cessation of hazardous substances; the implementation of full cost pricing, where users pay for all costs associated with clean water; and the time allowed for implementation, (Kaika, 2003).

The Commission relies heavily on the use of experts to draft policies based on scientific analysis, however, since the Commission relies on outside experts for technical assistance, lobbying the drafting phase of legislation is considered to be highly effective (Kaika, 2003; European Commission, 2001). This is evident when one considers that the final directive maintains most of the original objectives outlined in the original 1997 proposal (Bouwen, 2002; van Overveld et al., 2010). To obtain the technical information and draft their proposal, the Commission invited various stakeholder and interest groups to a two-day conference on European water policy. According to the Commission, some 250 delegates from the public and private sectors participated in the conference and at least 30 stakeholders responded in writing regarding the proposed framework (European Commission, 1997).

The dissemination of information on environmental issues to the general public is guaranteed through European law (European Commission, 1990). While this enables all EU citizens access to the decision making process, in reality, organizations with more resources and “know how” have an advantage over other, less powerful entities or individual citizens (Kaika, 2003; van Overveld et al., 2010; Richardson, 1994). Factors influencing access include: resources dedicated to lobbying efforts, location of organizations’ headquarters, and whether or not the Commission asks an organization for their input. In addition to the Commission’s open call for participation in the 1996 conference, they specifically invited a select group of organizations that included: water suppliers, chemical and agricultural industries, agricultural and farmers unions, environmental NGOs, and private water companies. Although the Commission actively solicited participation from specific parties, it cannot be accused of “bias” when the variety of interests, economic and environmental, is taken into

9 October 23, July 25, September 19, and September 26, respectively

account. Additionally, the Commission claims to have carefully considered suggestions from all stakeholders who participated (Kaika, 2003).

The drafting phase in the U.S. is quite similar to that of the EU. The drafting of senate bill 2770, *the 1972 Amendments to the Federal Water Pollution Control Act*, (S2770) began as early as April of 1970. By the beginning of 1971, a prototype existed and went into eight days of committee hearings. In the House, the initial markup of their bill did not begin until November of 1971, after the senate bill had already passed. The main dispute of the bill was whether or not the federal government should establish effluent limits or continue to rely on water quality standards.

The water quality standards approach establishes general standards that must be met but gives the states flexibility in determining how to achieve those goals. The emission limits approach defines permissible levels of pollutants allowed in any body of water (Houck, 2002). Economic interests, along with state Governors, state water quality managers, municipal dischargers, and members of the Nixon Administration attended the committee hearings and pushed for continued implementation of water quality standards by the states. They saw WQS as sufficient and viewed the emission limits approach as an encroachment on states' rights. Those pushing for effluent limits included Senator Muskie, along with environmental interests such as *Clean Water Action*¹⁰ (Houck, 2002; Dunlap, 1992). The senate criticized state water quality standards as being "weak, late, widely disparate, scientifically doubtful, largely unenforced and probably unenforceable" (Houck, 2002). S2770, which focused on effluent emission limits, the use of Best Available Technologies (BAT), and excluded water quality standards, passed by a vote of 89-0: an unusually high level of bipartisan cooperation (Rosenthal & Poole, 2000; Houck, 2002).

The House version of the bill did not include emission limits but rather, focused on maintaining the state water quality standards. House Bill 11896, *A Bill to Amend the Federal Water Pollution Control Act* (HR11896), passed by a vote of 380-14 after amendments to include BAT, emission permits, and making polluters pay for treatment, were introduced and voted down. Amendments that were approved included one that allowed public hearings for employees who lose their job as a result of a company moving to meet effluent limits and another that preserved the rights of states to control discharges from vessels (Rosenthal & Poole, 2000). Once both legislatures passed their versions of the FWPCA amendments, S2770 and HR11896 went into a conference committee where the bills were debated, negotiated and amalgamated.

Access to the drafting phase by environmental coalitions is quite similar in both polities. In the EU, the process is very open as the Commission invites organizations for consultation. During committee hearing in the U.S., the House and the Senate will similarly invite interested parties in for consultation. Because the WFD is a much newer policy, information on who attended the consultations exists. However, for the U.S. this information is much more difficult to come by. In the EU environmental coalition members include the EEA, scientists hired by the Commission and the Parliament, the general public, the Environment Committee of the Parliament, the Commission's DG XI, and international Environmental NGO's. They used monitoring, research and direct political lobbying to achieve their policy goals.

10 David Zwick, founder of Clean Water Action, claims responsibility for getting the Clean Water Act passed. Clean Water Action. (n.d.). *About Us*. Retrieved March 13, 2011, from Clean Water Action: <http://www.cleanwateraction.org/about/Nader> for President 2008. (2008). *Ralph nader's Achievements*. Retrieved March 13, 2011, from Nader for President 2008: <http://www.votenader.org/about/achievements/>

Members of the environmental coalition in the U.S. included Senator Muskie, the general public through public opinion, and environmental groups. The only venues that were available during this phase were direct political lobbying and policy entrepreneurship.

Adoption

Adoption is the phase of the policy cycle where the bill goes from being a proposed law into an enforceable one. As outlined earlier, in the European Union, once a proposal is drafted by the Commission, it goes to the European Parliament and Council for further debate and approval; a co-decision procedure takes place resulting in the possible formation of a conciliation committee; and if agreement is found, a final version is adopted as legislation. The adoption process in the US is similar. If the House and Senate bills vary, these legislative bodies debate their two versions in a conciliation committee. However, unlike the EU, if a bill makes it out of congress, the President must either sign or veto it and if it is vetoed, it can only be overridden with a 2/3 vote in both houses – then it is adopted as law.

The adoption process for the WFD lasted from February of 1997 until June of 2000 (European Parliament and Council, 2000). The typical duration of this phase is one to two years (van Overveld et al., 2010). However, negotiations between the Commission, the Parliament and the Council took almost four years because of political maneuvering and disagreements between the Parliament and the Council. The Parliament refused to read the Commission's proposal until after changes to the decision making process enabled by the Amsterdam Treaty came into effect on May 1, 1999.

The Amsterdam Treaty established a co-decision process between the Parliament and the Council, giving the Parliament equal power to the Council in the passage of legislation. Prior to this date the Parliament could only make recommendations to the Council, which could, under most circumstances, dismiss those recommendations (Bär & Kraemer, 1998). The Parliament believed that if it moved forward with the WFD prior to May 1, 1999 that it would be a weaker directive, with less enforcement or oversight, than the directives it repealed (Kaika, 2003). The Council favors local interests, less Community level oversight and maintaining state sovereignty. The positions of the Council and the Parliament are evident in the amendments proposed by each body during negotiations. For example, when it came to priority hazardous substances, the Parliament wanted to fully incorporate the OSPAR Treaty¹¹, which would end all discharges of hazardous waste into European waters by 2020. The Council wanted to abandon the zero emission standards all together. There was also strong disagreement on issues ranging from full cost pricing to the length of the implementation period, where the council wanted to extend it to 34 years and the Parliament's wanted to reduce it to ten years (Kaika, 2003). It was not until after a third reading and intensive last hour negotiations that a compromise was finally reached. The Plenary Session of the European Parliament adopted the final text in September of 2000 and the WFD came into effect on December 22, 2000.

During negotiations various interest groups lobbied the Commission, the Parliament,

11 "The OSPAR Convention is the current legal instrument guiding international cooperation on the protection of the marine environment of the North-East Atlantic. Work under the Convention is managed by the OSPAR Commission, made up of representatives of the Governments of 15 Contracting Parties and the European Commission, representing the European Union." As quoted from the OSPAR website: www.OSPAR.org. The name comes from the amalgamation of two previous conventions where their goals and standards were established: the Oslo Convention and the Paris Convention. (OSPAR Commission, 2011)

and the Council (Richardson, 1994; van Overveld et al., 2010; Kaika, 2003). In fact, during the final negotiations, environmental NGOs organized meetings and discussions between the Council and Parliament in hopes of getting an agreement without compromising environmental protection (Kaika, 2003). The final version of the WFD is clearly a melding of environmental and economic interests. The result is a piece of legislation that is open for interpretation and has limited Community oversight (Kallis & Butler, 2001; Kaika, 2003).

The adoption of the CWA was relatively simple in comparison to the WFD. Once both chambers passed their versions of the bill, it went into conciliation committee. Once there, the debate centered on state water quality standards versus effluent limits and the required use of BAT. The House bill had requirements and standards for water quality, limits on total maximum daily loads for polluted waters, and an implementation plan. The Senate would not yield on the requirement of BAT but in order to compromise, kept the water quality standards and total maximum daily loads from the House bill. Not seeing the usefulness for TMDLs or WQS, Senator Muskie, who authored the Senate bill and chaired the Public Works Committee that passed it, told the EPA to “assign secondary priority” to the House measure (Houck, 2002).

Once the bills were reconciled, the committee report passed both houses and the bill went to the President for his signature. President Nixon vetoed the bill and it went back to the House and the Senate where it passed by votes of 247–23 and 52–12 respectively and became law; one of only two presidential vetoes overridden by the 92nd congress (Rosenthal & Poole, 2000).

Although the adoption phase is brief, it is highly politically charged. In the EU, the Parliament, the Commission and environmental groups pursued their policy goals through direct political lobbying. In the U.S., the only member of the environmental coalition with significant influence is the policy entrepreneur, Senator Muskie.

Implementation and Enforcement

The implementation and enforcement stage is the most complex for both the WFD and the CWA. Implementation of the WFD began on December 22, 2000. Once it came into effect, member states had to begin implementing the new directive within binding deadlines. The first deadline was the transposition, or integration, of the WFD into national law by each member state by December 22, 2003. Competent authorities and river basins had to be identified by June 22, 2004. A detailed analysis of river basin districts, including human impact on surface and ground waters, as well as an economic assessment of water use was due by March 22, 2005. Monitoring programs had to be operational by December 22, 2006 and reported to the Commission by March 22, 2007. Agreements on significant water management issues within River Basin Districts (RBD) and draft River basin Management Plans (RBMP) were to be drawn up by December 22, 2008. The public was to be consulted for 6 months and a final RBMP should have been submitted by December 22, 2009. The WFD stipulates that the final RBMP shall be reassessed in 2012 and that “good” chemical and ecological status is to be achieved in all European waters by 2015 (European Parliament and Council, 2000).

Implementation and enforcement are the sole responsibility of the member states. The WFD does not define any implementation strategy; however, the Commission recognized the challenges of implementing the WFD and adopted the Common Implementation Strategy (CIS) in May of 2001. The CIS is a non-legally binding document that aims “to allow,

as far as possible, a coherent and harmonious implementation of the framework directive” (European Commission, 2001). The CIS *suggests* strategies for everything from information sharing to monitoring programs and public involvement but the final implementation approach is up to the competent authority within each river basin. The European Commission only maintains oversight through the review of reports provided by member states and RBMP but has little enforcement authority. The only recourse the Commission has is the complicated processes outlined in Article 169 of the Treaty, which allows for consultations, informal warnings, formal opinions, and eventual legal action through the ECJ (Hoornbeek, 2004). The Commission can bring actions for failure to implement or enforce any EU laws before the ECJ and the courts can impose fines for non-compliance (Grant et al., 2000).

Actual implementation of the WFD at the national level has varied tremendously. For instance, member states have to classify water bodies ecological status as either high, good, moderate, poor, or bad, and can get exemptions for those classified as ‘artificial water bodies’ (man-made) or ‘heavily modified water bodies’ (canals for shipping, etc.). Denmark designated water bodies according to the best achievable status, whereas the Netherlands designates them based on their current condition (Keessen et al., 2010). These different approaches have very dissimilar consequences in the long-term with Denmark striving for higher standards than the Netherlands.

U.S. policy has been being implemented for 40 years and has yet to meet its goal of ending all pollution into the nation’s waters, originally set for 1985. The Clean Water Act consists of ten major programs: the establishment of water quality standards (WQS), anti-degradation policies, waterbody monitoring and assessment, reports on condition of the nation’s waters, total maximum daily loads (TMDL), National Pollution Discharge Elimination System (NPDES), section 319 for non-point pollution, section 404 for wetlands and other waters, section 401 state water quality certification, and the state revolving loan fund (SRF) (U.S. Environmental Protection Agency, 2011). The first thing that happens in the implementation of the CWA is the establishment of WQS by the EPA or state authority. If those are met within a given waterbody, then anti-degradation policies go into effect, which require monitoring by the EPA or the designated state authority. If WQS are not met then a strategy for meeting them is designed that typically includes the establishment of TMDLs. TMDLs establish permissible amounts of pollution and various polluters can receive permits through either the NPDES program for point source polluters, section 319 for non-point polluters, section 404 if it has to do with wetlands, section 401 if it is the federal government, or through the SRF which provides funding to municipalities for updated sewage treatment facilities (U.S. Environmental Protection Agency, 2011). All of these programs are supposed to work together to ensure WQS can be met within all inter and intra-state waters.

Implementation and enforcement is shared between the federal bureaucracy and the states. Many of the responsibilities of the EPA have been devolved to state level branches such as the Department of Environmental Conservation in New York, the California State Water Quality Control Board, or the Arkansas Department of Environmental Quality. Since the EPA permits states to carry out their own implementation and enforcement, it maintains influence through the issuance or revocation of authorizing agreements, or through the administration of various federal grants programs. The EPA has the authority to intervene and enforce the CWA through its own administrative body or the federal courts, should a state fail to meet its obligations. Furthermore, the CWA enables citizen suits, allowing environmental groups to act as de facto monitoring and enforcement agents. (Hoornbeek, 2004).

Federal enforcement mechanisms in the implementation and enforcement phase have allowed advocacy coalitions in the U.S. more venues to meet their policy objectives than the previous two phases. Members of the general public, the international community, the U.S. EPA, and a vast number of environmental groups can be considered members of the environmental coalition. They utilize such venues as research, monitoring, litigation, public engagement campaigns, direct political lobbying, and collective action institutions such as watershed partnerships to achieve their policy goals. In the EU, coalitions have broadened as well. They include the EEA, the general public, the international community, the Commission's DG XI, and international environmental organizations. They utilize research, monitoring, public engagement campaigns, direct political lobbying and public consultation to achieve their policy goals.

Devolution

The WFD and the CWA shift the decision-making authority from the federal or supranational level towards the regional level. The principle of subsidiarity, the notion that environmental regulation should be handled at the lowest level of government, pushed for by the Council, ensured that the implementation and enforcement authority remained within the member states (Kallis & Butler, 2001). As a result, oversight and enforcement at the Community level is relatively small, especially in comparison to that of the U.S. While the EPA can authorize states to carry out their own implementation and enforcement, the CWA assigns a much stronger federal role.

The WFD requires public consultation and stakeholder notification in the process of developing and drafting the final RBMP. The CIS encourages inviting NGOs and stakeholders with a "specific expertise" for consultative purposes (European Commission, 2001). The fact that the CIS goes so far as to recommend the inclusion of groups with a specific expertise, encourages consultation with organizations that will be regulated by the final RBMP. This exercise raises concern over the potential for 'regulatory capture.' While the Commission was able to maintain some objectivity when drafting the WFD in consultation with various interests, it is unclear if local authorities will be able to do the same. The Commission is a much larger institution that regularly consults with special interests while many of the competent authorities are new organizations with much smaller budgets and staffs.

The WFD requires that the competent authorities make the draft River Basin Management Plans public and invite stakeholders to comment for a period of six months. However, because no common implementation strategy exists, this also is left up to both – each member state and each region within that member state. A quick survey conducted of the Rhine river basin found that each country conducted this process differently: in France, a general survey was released to the public; in Germany each region was responsible for holding public hearings and collect the relevant data; in Austria an online survey was released that asked people whether or not they agreed with specific statements but did not ask for comments; and no data could be found for the Netherlands, Switzerland, or Luxembourg. How the public is involved in changes from region to region, state to state, and basin to basin. While well-organized economic interests are much more likely to know how to make their opinion known, the general public may not be as well informed about how they can participate.

The Clean Water Act encourages stakeholder participation throughout the enforcement and permitting processes. The issuance of a pollution permit requires that a public notice be released within 15 days of a permit application completion, followed by a 15-30 day com-

ment period. During the comment period the public is invited to offer comments or concerns about the permit in question. The issuing agency, as well as any other interested party, then reviews the permit and the comments. Concerned citizens can then request a public hearing to facilitate further discussion. If a permit is issued then a Statement of Findings, along with the conditions of the permit, is made available to the public (U.S. Environmental Protection Agency, 1990). This information allows for citizens to monitor the activities of the permitted company or developer. If citizen monitors find that the permit holder is not adhering to the conditions of the permit then they have the right to take that company or developer to court. However, the citizen monitors must show sufficient “standing,” which is the ability of the individual or group bringing the suit to prove that they will be sufficiently affected or harmed by the law or action being challenged. (Naysnerski & Tietenberg, 1992)

Increased public participation is inherent in the WFD and the CWA; still, the mechanisms that enable public participation vary. Membership in an environmental organization is almost requisite for participation. Without that, individuals must be vigilant to know when and where public hearings are to be held; they must know when a violation can or does occur; and they must be geographically savvy to know where violations may be occurring that can affect them. For example, Title IV, Section 401(a) (1) of the Clean Water Act states that, “Such State or interstate agency shall establish procedures for public notice in the case of all applications for certification by it and, to the extent it deems appropriate, procedures for public hearings in connection with specific applications” (The Senate and House of Representatives of the United State of America, 2002). This leaves the responsibility and judgment for what is “appropriate” in each state’s hands. A polluter seeking a permit in an upstream region of a river basin may affect water quality for fishing and swimming 100 miles or more downstream; however, public notices are not required 100 miles downstream.

Language barriers, community heterogeneity, technical knowledge, and income levels can all influence individual access to the policy process. For instance, the state of New York’s Department of Environmental Conservation, which administers the permit process for New York, has established that the public will be notified through the DEC’s weekly Environmental Notice Bulletin and through a publication in a local newspaper where the permit is being issued (New York State Department of Environmental Conservation, 2010). However, a publication in a local paper does not necessarily inform all citizens that may be affected by the permit, since notices of public comment periods and hearings are traditionally disseminated in English only. The NY DEC notes that “sometimes” notices will be published in foreign language papers (2010). Heterogeneity makes it harder to form effective coalitions by raising bargaining costs and decreasing consensus as compared to more homogeneous communities whose desires are relatively similar (Lubell et al., 2002).

Konisky (2009) and Imperial (1999) both found, in separate studies, that income correlates directly to enforcement efforts and grant awards under the CWA. They found that lower income counties received less enforcement and funding. Additionally, according to Naysnerski and Tietenberg, private citizens must be aware of the exact language of a statute in order to determine if a violation has occurred and have the financial resources to cover the upfront costs of a lawsuit when legal action is necessary (Naysnerski & Tietenberg, 1992). Legal cases can take years, and reimbursement is only available after all appeals have been complete and only if they have successfully won the case. Furthermore, the burden of proof is left to the plaintiff. While individuals have access to monitoring reports they must also have some technical understanding of the materials in the reports to understand how the permit

may be in violation. In legal cases, specialists are often needed (Naysnerski & Tietenberg, 1992). Money, time and expertise are thus necessities for pursuing legal action.

DISCUSSION

The WFD and the CWA were initiated by public sentiment, drafted to include public participation, and include devolved implementation and enforcement mechanisms that further encourage public involvement (Grant et al., 2000; Howarth, 2009). Coalitions of environmental interests have helped shape the creation, implementation and enforcement of both of these policies and their push for devolution has increased the availability of resources, strategies and venues. The environmental interests and venues, used in each policy, and during each phase, can be seen in Table 3.

The environmental coalition subsystems in either polity have changed over the course of each policy's cycle. In the early years, the EU coalition was broad and included members of Parliament, the Commission, the European Environment Agency (EEA), environmental NGOs, scientists, and members of the general public. During the drafting, adoption, and implementation phases many of these actors were present. However, during the implementation and enforcement phase the framework itself diminished some of their roles. For instance, the Commission, who was the biggest advocate for a strong environmental framework, is left with fewer oversight mechanisms or enforcement capabilities. Implementation and enforcement at the member state level is left up to the competent authority that each state, or group of states within each river basin, chooses.

The shift from federal policy making institutions to national policy making institutions alters the venues or resources that coalitions can use to obtain their policy goals. Political lobbying of the Commission and the Parliament were seen as being the most effective by organizations that had offices in Brussels and were therefore able to dedicate resources to lobbying (Kaika, 2003). Now these organizations will have to work in 110 river basins, all with potentially different implementation strategies and enforcement mechanisms. While they will still probably focus their efforts on Brussels, their capacity to affect change at the local level will be diminished. Local chapters of these environmental groups or newly formed ad hoc groups will have to compete directly with economic interests within each river basin.

In the U.S., the CWA developed, as public awareness to environmental degradation increased. Public sentiment was influenced by national disasters, research, such as that of Rachel Carson, and public engagement campaigns. In turn, the public influenced political actors and the policy agenda. In the years following the passage of the CWA, the coalitions and venues have changed. Republicans supported the CWA and environmental regulation in general prior to the deregulation, free market politics of the Reagan administration. Today, the party identification of the current president is the number one indicator of EPA enforcement, with less enforcement under republican presidents than democrats (Whitford, 2007).

The CWA opened the door for citizens to function as monitors and enforcers and utilize the federal courts to prosecute violators. Additionally, the EPA has moved to create devolved institutions such as watershed partnerships through programs like the National Estuaries Program (Lubell, 2004a). Watershed partnerships allow for direct debate and cooperation between actors in competing coalitions to achieve a policy outcome. This move toward devolved policy formulation and increased public participation is a general trend across both policies. However, it may not be as effective as it is intended to be.

Advocates for devolved regulation in Europe and the U.S. cite democratic legitimacy,

TABLE 3: Environmental coalitions and their resources during each policy phase of the Clean Water Act and the Water Framework Directive.

	U.S. CWA		EU WFD	
	Coalitions	Venues	Coalitions	Venues
Conception	General Public U.S. Senate Environmental NGOs EPA President Nixon	Research	EEA	Research
		Monitoring	General Public	Monitoring
		Public	International Community	Public Engagement
		Engagement	Commission DG	Campaigns
		Direct Political	XI	Direct Political
		Lobbying	Parliament's Envtl. Committee	Lobbying Policy
Drafting	U.S. Senate (Muskie) Environmental Groups General Public	Entrepreneur	Environmental NGOs	Entrepreneur International Inst.
		Direct Political	EEA Scientists	
		Lobbying	General Public	Monitoring
		Policy	Parliament	Research
		Entrepreneur	Commission DG	Direct Political
			XI Environmental Groups	Lobbying
Adoption	U.S. Senate (Muskie)	Policy	Parliament Commission DG	Direct Political
		Entrepreneur	XI Environmental Groups	Lobbying
Implementation	General Public International Community U.S. EPA Environmental Groups	Research		Research
		Monitoring	EEA	Monitoring
		Litigation	General Public	Public
		Public	International Community	Engagement
		Engagement	DG XI	Direct Political
		Direct Political	Environmental	Lobbying
		Lobbying	Groups	Public Consultation
Collective Action Institutions				

Source: Compiled by the author

transparency and greater responsiveness to local needs, while dissidents remain concerned about the harmonization of state laws and the willingness of states to meet minimal environmental standards at the cost of national competitiveness (Howarth, 2009). Both sides of the argument are right. Since the WFD only defines a basis for action through environmental objectives, deadlines, and emission limits, but gives each competent authority the discretion to define the mechanisms of implementation, the results have been mixed. While regulatory flexibility under the WFD has garnered more public involvement and site-specific implementation strategies, it has also seen reluctance amongst member states to comply. In fact, only 17 of the 27 Member States published their draft RBMPs by the December of 2008 deadline (Kampa et al., 2009). The CWA has also had mixed results when states consider economic consequences to stronger environmental regulation (Sigman, 2009; Sigman, 2005; Steinzor, 2000; Kuehn, 1995). For instance, Sigman (2004) finds that states that are authorized to implement the CWA were less likely to enforce the statutes, resulting in a 4% increase in degradation of water quality in downstream states.

CONCLUSION

The policy 'loop' is complex and multifaceted with various openings for interested parties to influence new policies. The conception phase was strongly influenced by early environmental groups, the failures of previous laws, and a growing concern over the protection of the environment and public health. The Commission and the Congress rely on outside experts and technical assistance through consultation, leaving well-positioned groups able to impact policy more effectively than less politically knowledgeable groups or individuals. The drafting and adoption phases of the WFD were wrought with political maneuvering. In the EU, the Parliament and the Council disagreed profusely during negotiations and reduced the final WFD to a weak compromise that is almost entirely left open for interpretation. Meanwhile, the Senate and the House could hardly agree on policy outcomes.

Both laws are extremely ambiguous as a result of political compromise and leave more uncertainty in their implementation and enforcement phases. Although the WFD and the CWA require public participation, what is clear is that lobbies with more resources and know how have been able to play a more strategic role in both of these policies than the average citizen. And the inclusion of consultation with technical experts leaves competent authorities vulnerable to regulatory capture by local interests or political elites.

By recognizing that water is not static and incorporating surface water, groundwater, coastal waters and estuaries into one piece of legislation, the WFD has created a whole new approach to water policy. The patchwork of policies developed in the first two waves of European environmental policy adoption have been criticized for being ineffective, neglecting certain areas while focusing heavily on others, or leaving some areas out altogether. This piecemeal policy process is comparable to existing U.S. water policy. By repealing out-of-date laws, integrating effective policies within one statute, and addressing issues currently not dealt with under U.S. law such as quantity, droughts, and floods, the U.S. could innovatively and ambitiously reform American water policy.

The CWA, along with the National Environmental Policy Act of 1970, the Safe Drinking Water Act of 1974, the Resource Conservation and Recovery Act of 1976, the Clean Air Act of 1970, and the Endangered Species Act of 1973, have allowed the public to: request reports through freedom-of-information laws, review and comment on Environmental Impact Statements, attend and participate in public hearings and comment periods, attend

hearing permit procedures, pursue litigation for violations, and call and report violations through various agencies. These powers, along with strong federal oversight and the ability for the EPA to enforce the CWA within any state that it deems necessary, have enabled environmental coalitions to be more active in the policy formation, implementation and enforcement processes. These are all highly effective tools that the WFD would benefit from adopting in future revisions.

This analysis of stakeholder participation is important for understanding the impacts of political influence in policy systems such as the EU and the U.S. Both systems allow actors from governmental and non-governmental institutions to affect policies throughout the policy cycle. Implications for future research include an in-depth analysis of actors' beliefs, motives, and coalition preferences within each subsystem. This would be possible only through a stakeholder analysis of actors and institutions in the U.S. and the EU, utilizing survey instruments following Weible (2006). In addition to understanding actors' motives and beliefs, a stakeholder analysis would be beneficial in understanding the long-term effects of decentralization on public participation and policy effectiveness.

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