COMPARING FOREST CERTIFICATION IN THE U. S. NORTHEAST AND THE CANADIAN MARITIMES

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I. INTRODUCTION

Students of comparative public policy (Howlett, 2000) and international relations (Haufler, 2001; Cutler, Haufler, and Porter, 1999; Hurd, 1999) have noted that in the last decade, the arena of private authority has become increasingly important for addressing matters of concern to civil society. From shared governance mechanisms where non-governmental actors have a responsibility for policy implementation (Salaman, 2002; Gunningham, Grabosky, and Sinclair, 1998), to voluntary programs initiated by industry associations (Kernaghan, 1999; Prakash, 1999), to firm level choices that increasingly take societal interests into account in their business practices (Prakash, 2001; Cashore, Vertinsky, and Raizada, 2001; Cashore and Vertinsky, 2000; Vertinsky and Zietsma 1998; Zietsma and Vertinsky. 1999-2001; Jennings and Zandbergen, 1995), the world of policy analy-

*A list of acronyms used in this article is provided on page 35.

sis has been turned upside down. Now, private actors are seen not only as being in need of regulation, but also as being part of the authority-granting arena in which regulations are developed.

Within these broad trends a unique phenomenon has startled the world of domestic and global environmental governance: the emergence of non-state, market-driven (NSMD) governance systems that gain their authority not from traditional (Westphalian) state sovereignty, but from the manipulation of markets and attention to customer preferences (Cashore, 2002; Cashore, Auld, and Newsom, 2002). These NSMD systems, commonly known as "certification programs," are emerging in a number of business sectors within Canada, the U.S., and globally, including forestry, tourism, food production, mining and fisheries (Sasser, in press, 2002; Cashore, Auld, and Newsom, 2002: Chapter One; Conroy, 2001). If successful, they could challenge traditional public policymaking processes as

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the key arena in which long-standing struggles over environment and resource use occur.

This paper seeks to understand better the NSMD phenomenon in influencing environmental policy by focusing on its emergence in the U.S. Northeast and Canadian Maritimes forest sectors. We have chosen this focus for three reasons. First, forestry provides the most advanced cases of the NSMD phenomenon globally (Cashore, Auld, and Newsom, 2002; Meidinger, 2001). Second, these regions experienced some of the earliest attention and disputes over forest certification. Third, a competition for rule-making authority has emerged between the international Forest Stewardship Council (FSC), which has support from the leading environmental groups in the U.S. and Canada, and the U.S. Sustainable Forestry Initiative (SFI) and the Canadian Standards Association (CSA) programs, which draw their origins and initial support from industry associations in each country. Understanding the ways in which each program develops and modifies its rules is key for understanding the emergence and impact of these new governance systems. And this exploration will allow us to reflect on the broader impacts of NSMD governance in Canada and the U.S. in addressing matters of concern to global civil society, and to examine whether NSMD systems might be able to act in ways that are unavailable to traditional governmental processes.

A. The Puzzle

Our exploration of forest certification in the U.S. Northeast and Canadian Maritimes immediately posed a curious puzzle. The two regions differed dramatically in terms of the development of the standards used to "certify" companies as practicing sustainable forestry. In particular, initial standards designed for public comment were generally more stringent, wide-ranging, and less discretionary in the Canadian Maritimes than those that emerged from the FSCcreated U.S. Northeast standard-setting body. Differences were especially striking with regard to the most controversial forest practices, including the use of plantations, biocides and exotic species. Why the same certification program would develop such different approaches to sustainable forest management in the same ecological region is a curious and counter-intuitive result.

Table 1

Key Differences in FSC Draft Regional Standards, U.S. Northeast and Canadian Maritimes

Standard	U.S. Northeast (1/28/99)	Cdn. Maritimes (11/11/98)
Biocides	Use avoided and minimized Exceptions to be monitored	Use to be banned Exceptions to be justified beforehand, case-by-case
Plantations	Plantations deemed minor in region Future mgt. primarily natural	A partial restoration plan and implementation required Future conversions < 5%
Exotics	Invasives banned Natives preferred Non-invasives monitored	Invasives banned Natives preferred Non-invasives monitored Non-invasives to be • compatible with ecosystem • less than 5% in area • for restoration of ecosystem

Answering this question is important because its explanation will shed light on the process through which the FSC addresses on-the-ground forest management, as well as on the ability of the FSC to develop an NSMD governance system that will attract industrial forestry participation alongside its existing environmental group support.

B. The Argument

We argue that differences in the structure of the FSC's (private) standards-development "policy networks" in each region largely explain the variation in approaches and standards that emerged. Differences in the network structures created differences in representation of environmental, social and industrial interests across the Canadian Maritimes and the U.S. Northeast and led to significant disagreements and choices over the most controversial sustainable forestry standards that had long occupied those involved in public policy debates about forestry regulations. Recognition of the role of public policy leads us to argue that these FSC private networks

themselves were indirectly influenced by the structure of existing public policy networks governing sustainable forestry in the Maritimes and Northeast. Our argument is that the more groups feel alienated from public policy networks governing sustainable forest management, the more likely they are to attempt to influence and shape the structure of the (FSC) private forest policy networks and to set their policy agendas. As we show below, those environmental and social activists who felt excluded from public policy processes in the Maritimes were the first to show up and influence the network structure within the private, FSC arena. And while the U.S. Northeast had its share of public policy disputes, the perceived relative openness of its public policy networks by many environmental and social interests, and additional access points to the political system by those who felt excluded from the networks, meant that there was not the same rush to create a structurally distinct private policy network.

We also argue that the initial differences in draft standards that emerged from the private forest policy networks reinforced existing network structures (relations among groups) and served to mediate political struggles after the initial draft standards were in place. In both regions the type of private policy network structure, and initial choices over standards development, cast a shadow over future FSC deliberations. This created a climate of relative collaboration in the U.S. Northeast and a climate of hostility and division in the Canadian Maritimes.

The remainder of this paper details our argument in four steps. The first section distinguishes the FSC as an example of the NSMD governance systems that are emerging globally in a number of sectors. A second section details the FSC's current governance system, the role of its international, national and regional levels, illustrating how its division of authority provided for a great degree of latitude within standard-setting, decision-making processes. A third section identifies key aspects of policy network literature that form the basis for our argument about standards development. We use this section to develop specific explanatory hypotheses regarding network structures and policy outcomes. A fourth section illustrates our argument by applying it to the two cases of FSC standards development in the Canadian Maritimes and U.S. Northeast. This section traces the historical development of the regional network structure in mediating policy debates in each region and the ultimate differences in the way standards emerged. It takes care to intersect rule development with the type of support the FSC ultimately obtained in each region. We focus particularly on the case of J.D. Irving, one of the largest industrial forest companies in the region, which eventually withdrew its support in the Canadian Maritimes because of its dispute over the rules that emerged, while it still maintained its support of the FSC in the U.S. Northeast.

II. GOVERNANCE SYSTEMS

The FSC is arguably the most advanced example of NSMD governance worldwide. It was created in 1993 following deep dissatisfaction among environmental and social non-government organizations with international and domestic public policy responses to global forest deterioration (Meidinger, 2000: 4). Similar NSMD governance systems have emerged in coffee, fisheries, food production, mining and tourism. Cashore (2002) has identified four features that render NSMD governance a unique form of private authority (Table 2). The most important feature of NSMD governance is that there is no use of state sovereignty to force compliance. The Westphalian sovereign authority that governments exist to develop rules to which society more or less adheres (whether it be for coercive Weberian reasons or more benign social contract reasons), does not apply. There are no popular elections under NSMD governance systems and no one can be incarcerated or fined for failing to comply.

Table 2

Key Features of NSMD Governance

ROLE OF THE MARKET	Products being regulated are demanded by purchasers further down the supply chain
ROLE OF THE STATE	State does not use its sovereign authority to direct adherence to rules
ROLE OF STAKEHOLDERS AND BROADER CIVIL SOCIETY	Authority is granted through an internal evaluative process
ENFORCEMENT	Compliance must be verified

Source: Cashore (2002).

Since the state does not require adherence to its rules, a second feature is that various stakeholders, including environmental groups, companies, and landowners, must undertake evaluations as to whether they ought to comply. These evaluations are affected or empowered by the third key feature of NSMD governance: authority is granted through the market's supply chain. Much of the FSC's efforts to promote sustainable forest management (SFM) is focused further down the supply and demand chain toward those value-added industries that demand the raw products, and ultimately, toward the retailer and its customers (Bruce, 1998: chapter 2; Moffat, 1998: 42-43). While landowners may be appealed to directly with the lure of a price premium or increased market access, environmental organizations may act through boycotts and other direct action initiatives to force large retailers, such as B&Q and Home Depot, to adopt purchasing policies favoring the FSC, thus placing more direct economic pressure on forest managers and landowners. To satisfy the demand for certified wood, the FSC grants not only "forest land management" certification, but also "chain of custody" certification for those companies wishing to process and sell FSC products. The fourth key feature of NSMD governance is that there must be a verification procedure to ensure that the regulated entity actually meets the stated standards. Verification is important because it provides the validation necessary for certification of program legitimacy to occur in order to distinguish products to be consumed along the supply chain.

The FSC has developed a governance system containing three levels of decision-making. The international level is governed by an FSC General Assembly comprised of three equal economic, social and environmental chambers. Each chamber is divided equally between North and South representation. The aim of this institutional design is to insure that no one group can dominate policymaking, and the North cannot dominate at the expense of the South-two criticisms directed toward failed efforts at the Rio Earth Summit to sign a global forest convention (Lipschutz and Fogel, 2002; Domask, forthcoming, 2003; Meidinger, 1997; Meidinger, 2000). The lumping together into one chamber of those economic interests (i.e., companies and non-industrial forest owners) who must actually implement SFM rules with companies along the supply chain who might demand FSC products, along with consulting companies created by environmental advocates, has been the source of much controversy

and criticism. Certainly industrial forest companies and non-industrial private forest owner associations have revealed their discomfort with such an approach (Sasser, 2002; Cashore, Auld, and Newsom, 2002). Surveys of forest owners and companies reveal that these concerns are shared among the broader forest sector interests (Auld, Cashore, and Newsom, 2002 in press; Newsom *et al.*, 2002 in press; Vlosky, 2000).

The international level of FSC is responsible for developing broad principles and more detailed criteria to guide standard development. The FSC originally created nine "principles" (later expanded to 10), including tenure and use rights, community relations, workers' rights, environmental impacts, management plans, monitoring and preservation of old-growth forests, and the use of plantations (See Moffat, 1998: 44; Forest Stewardship Council, 1999).

The FSC governance system provides for the creation of national initiative bodies whose job is to address FSC issues in an individual country, such as the development of standards-setting processes initiatives. The national initiatives must not only adhere to the FSC principles and criteria (P&C), but also the FSC head office must approve the standards. Rules governing standards development were given much less attention in the early days of the FSC. Most national initiatives created one set of standards for the entire country. In Canada and the U.S., owing to both their size and to previous choices by certifiers to develop standards according to "ecoregions", the FSC Canada and the FSC U.S. created regional working groups to develop standards (Cashore, Auld, and Newsom, 2002: chapter 4). The FSC-U.S. office delineated nine regional working groups (one of which was the U.S. Northeast), and Canada initially developed three (Maritimes, Ontario, and British Columbia) and later added a boreal forest process. The regional standards must first gain approval from the national office and then from the international office, but in practice the regional working groups have maintained significant authority. Initially there were very few rules governing composition and procedures at this standard-setting level. As a result, the guidelines governing standard rule development were often left to those who "first showed up". Applications of "consensus" versus "majority" rule were allowed to vary, as was the type of representation afforded to industrial forestry interests.

III. THEORY: POLICY NETWORKS AND PRIVATE AUTHORITY

Accumulated evidence from almost two decades of research by policy subsystem/policy network scholars (Howlett, 2002; Coleman and Skogstad,1990; Atkinson and Coleman, 1992) reveals that the nature of the relationship between state and societal interests (the policy network) has influenced policy choices and patterns of policy change. While the field has suffered from confusion over the use of different categories to explain these relationships, there is general agreement that networks in which no single group dominates tend to produce very different ideas and policy choices than networks where there exists a relatively closed process in which a single group tends to dominate. Howlett (2002) has identified two key aspects of policy networks or "sub-system" structures: the degree of receptiveness to new ideas on the one hand, and to new actors on the other. Studying a range of sectors, he documented that policy sub-system (network) structures do indeed lead to different choices of policy content, whether measured by policy goals, objectives, instruments or settings. The more open a sub-system is to new ideas and actors, the more likely it will experience changes in policy goals and objectives.

We assume that we can apply this public policy network/policy sub-system literature to forest certification and NSMD governance systems since its ultimate logic is that network or sub-system structure matters. Moreover, as noted above, there appears to be an important, and often inverse, relationship between the type of policy network that exists governing public policy and the type of policy network that emerges within the FSC private network approach to sustainable forest management. We make this latter point for two reasons. First, a host of existing research has revealed that the FSC emerged in large part owing to dissatisfaction on the part of nongovernmental environmental organizations with domestic and international public policy networks which they felt were dominated by industry interests and did not adequately represent those organizations whose primary interests were the preservation of biodiversity and other ecological interests. Hence, the FSC tends to promote the development of policy networks in which business cannot dominate (with the caveat that it gave few rules about how to do this at the regional level). Second, the lack of specific rules governing standardsetting at the regional level has meant that those most interested in using forest certification to affect change tend to be the ones to show

up initially to participate in the formulation of the network structure. And those who tend to see the public policy arena as one they can influence are less likely to attempt to use the FSC regional standard-setting process to redress perceived imbalances in public policy networks. If we are correct, we would expect to see regions with the most polarized public policy approaches witness the emergence of private networks radically distinct from the public policy networks. By contrast, in those regions where public policy approaches are more collaborative, we would expect to see fewer differences in the FSC private forest policy network structure (and, arguably, relatively less of a "win or lose" approach on the part of environmental and social actors in the FSC process). The above discussion leads us to develop four hypotheses that shape our argument and are listed below.

IV. HYPOTHESES

A. Public Policy Networks

H1: Where public policy networks are relatively closed (both to new ideas and actors) and dominated by business interests, disaffected groups will attempt to structure private policy networks to reflect environmental and social interests.

H2: Where public policy networks are relatively open (to both new ideas and actors) and where no one group dominates, private policy networks will be treated as another arena of many in which to address policy problems. There is likely to be less interest in structuring private policy networks as a way of seeking redress for public policy network structures perceived to be closed.

B. Private Policy Networks

1. Open Network Hypotheses

H1: An open network (with respect to new ideas and actors) governing FSC regional standards is more likely to produce SFM rules that diverge only incrementally from the status quo, and its participants are more likely to consciously strike a balance between environmental and economic goals.

H2: An open network (both to new ideas and actors) governing FSC regional standards is more likely to produce rules that grant a higher degree of discretion to auditors and companies in implementing identified goals, minimizing the imposition of mandatory settings levels.

2. Private Closed Network Hypotheses

H3: A closed network (to both ideas and actors) in which environmental and social groups dominate vis-à-vis business interests is more likely to produce regional standards that diverge significantly from the status quo. Policy choices will emphasize environmental goals over economic development goals. Standards over disputed areas will tend to increase quite dramatically above the status quo.

H4: A closed network (to both ideas and actors) governing FSC regional standards is more likely to produce rules that grant limited discretion to auditors and companies in implementing identified goals, hence increasing the amount of mandatory rules with clearly identified settings.

V. NETWORKS AND RULE DEVELOPMENT IN THE CANADIAN MARITIMES AND THE U.S. NORTHEAST

We now illustrate our argument by addressing the emergence of private policy networks first in the Maritimes and then in the U.S. Northeast. In each case we develop our story by first tracing the structure of public policy networks in the region and then turning to an analysis of the emergence of the FSC private policy networks. We trace the influence of this network structure in shaping SFM standard-setting policy choices in each region and the profound consequences on SFM rule development, and ultimately, on industrial forest company support and implementation.

A. The Maritimes

The Maritimes public policy approaches to forest management have long been subject to controversial debates over forestry practices, arguably the most controversial of which has been pesticide spraying that began in the 1970s. Historically entrenched policy networks dominated by business and governmental agencies meant that environmental groups did not have the kind of access to the public policymaking process that they desired, and they became frustrated in their efforts to influence public policy networks and policy choices. This frustration led to efforts to influence policy from outside of the public policy networks in the form of public campaigns and boycotts, something the policy network literature asserts will happen when groups cannot gain access to traditional policy networks. We detail this story now because it illustrates the pent-up

frustration that had been created, and the way in which FSC came along at a key moment to serve as a relief valve for the disaffected interests.

1. Public Policy Approach

Public policy networks in the Maritimes in the 1970s and 1980s can be best described as closed networks in which government and business interests enjoyed close collaborative relationships, while environmental and other social interests as well as smaller economic players attempted to gain increased access. The most controversial issue addressed by the network was a massive outbreak of the spruce budworm in the 1970s which threatened the economic health of the industry and likewise posed important environmental problems.

Large industrial interests recognized that these outbreaks could threaten the commercial value of many forests, and they preferred to use aerial biocides to minimize the damage. But many environmental non-governmental organizations and some scientists saw this solution as unduly threatening to naturally functioning forest ecosystems. The result was an intensive and decades-long debate over the general practice of using pesticides, which expanded from an initial focus on insect outbreaks to the whole issue of intensive industrial forest management in general. At both the federal and provincial levels, public policy networks dominated by industry officials and government economic development agencies considered the use of biocides to be vital. With no scientific consensus about the impact of these biocides on the forest environment, spraying was accepted as a normal and proper method of managing industrial forestry (Mackay, 1985: pp. 205-214; Swift, 1983: pp. 172-189; Sandberg and Clancy, 2000: pp. 115-7, 122-4; McNulty et al., 2000-2001).

Many of the region's environmental activists, frustrated by their inability to inject new ideas or their own organizations into public policy networks at either federal or provincial levels, attempted at first to change policy by avoiding networks altogether through the use of public campaigns. A key campaign in this regard, led by locally organized environmental and community organizations, targeted Stora's Nova Scotia Forest Industries in Cape Breton for using pesticides. Indeed, this campaign marked the beginning of an expanding "problem definition" from that focused on pest outbreak treatment to the general use of pesticides and herbicides. The activists also sought to expand the issue beyond that of forest

management and ecosystem preservation by asserting that the use of pesticides and herbicides affected human health as well.

These campaigns generated mixed results. While environmental groups felt that by 1998 they had been largely successful in directly changing Stora's firm-level policies, and in influencing Nova Scotia provincial forest policy (by bypassing traditional closed policy networks), they had been less successful in changing firm (especially those of J.D. Irving) and provincial level policy choices in New Brunswick (May, 1998: pp. 78-114). In both provinces policy networks were perceived as closed to new ideas and actors, and in New Brunswick, campaigns to sidestep networks were deemed unsuccessful. The time was ripe for a new strategy to bypass New Brunswick forest policy networks, and it came in the form of forest certification.

2. The Emergence of Private Policy Networks

Frustration on the part of environmental groups to alter public policy network structure and their policy choices proved a key aspect in the emergence of private policy networks for FSC regional standards in the late 1990s. Their perceived lack of influence in the public policy process made the environmental groups more persistent and pro-active in using the private governance option presented by the FSC process. These environmental groups sought linkages with organizations that shared their concerns about industrial forestry. This included a number of small woodlot owner associations (some of whose leaders had a critique of industrial forestry practices that in many ways was more stringent than those of environmental groups), and aboriginal groups who were attempting to gain increased access to the forest resource. As a result of these public policy experiences, an array of environmental groups, social activists, and small woodlot owners became the most interested in, and excited about, an alternative governance system in which they might seek redress over longstanding debates about forest resource use management. They were particularly concerned about herbicide and biocide practices as well as how to maintain naturally functioning eco-systems. These actors focused on the very issues to which, they asserted, the public policy networks had not adequately responded.

The effort to seek redress from public policy approaches affected the structure and emergence of the new private networks, as these groups consciously attempted to shape an FSC private policy network distinct from their own public policy experience— one

where industrial interests would not be able to dominate. However, unlike many other FSC regional standard-setting processes in the United States in which industrial interests failed to participate at all in FSC policy networks (Cashore, Auld, and Newsom, 2002: Chapter 2), the Maritimes process did indeed involve industrial participation from J.D. Irving, the region's most dominant industrial forest company. Irving itself had seen the FSC as an opportunity to demonstrate to the world and the marketplace that it was indeed practicing responsible forestry. It saw FSC certification as a way of gaining positive outside evaluations, hoping to avoid acrimonious public policy debates by marking a new path. And for these reasons Irving broke ranks with most of its industrial competitors in North America by expressing considerable interest in becoming FSC certified (Lawson and Cashore, 2001). Indeed, Irving had become interested in such third-party recognition even before the FSC had been created, and the company was in contact with Home Depot and the FSC certifier, Scientific Certification Systems, on this matter long before Home Depot finally made its announcement in 1999 to support FSC-style certification.

To this end, J.D. Irving had decided to proceed with FSC certification of its forest lands in New Brunswick even before the FSC regional standards network had even been created, relying instead on provisional rules developed by its certifier, Scientific Certification Systems, that had been approved by FSC International. This meant that while non-industrial stakeholders saw the FSC primarily as a way of offsetting perceived industrial influence over public agencies, Irving viewed support of the FSC as a way to recognize its conception of industrial forestry, including the use of chemicals, biocides, and intensive management, as environmentally appropriate. The stage was set for the development of a policy network in which environmental, social, and small economic players outweighed industry interests— the inverse relationship of the public policy network approach in the Maritimes.

Distinguishing and classifying an emerging private policy network is methodologically difficult. Formal rules influence patterns of interactions among the actors and interests, but by themselves they do not tend to determine network structure, which is often comprised of informal but durable patterns of interaction. Despite these caveats, a careful review allows us to identify key features of the FSC-Maritimes network that did emerge from the first deliberations. The

first feature was that non-industrial interests came to dominate the standard-setting policy process, and that most of these interests were strongly critical of public policy networks and policy choices. The lack of direction from FSC-International and FSC-Canada over rules for forming the FSC-Maritimes organization and drafting process meant that decision-making rules used in the Maritimes did not immediately adhere to the international "three chamber" format, or to the "four-chamber" format that ultimately prevailed throughout Canada. Instead, the April 1996, stakeholders meeting in Truro, Nova Scotia (known as "Truro I") was dominated by interests opposed to existing industrial approaches. They created a ninemember structure, of which only one came from large industry. There would be two representatives from each group forming the Technical Standards Writing Committee; the latter was to draft regional standards and refer them back to a second large meeting. This was a far more detailed system of (non-industrial) representation for stakeholder groups than those found at the level of FSC-International or FSC-Canada.

From the standpoint of stakeholder groups frustrated by their own perceived exclusion from formal decision-making roles in the public sector, this nine-group format was intentionally designed to limit the ideas and direction promoted by industrial interests. While the labeling of the process as following a "consensus" approach appeared to indicate a network open to new ideas and interests, network interactions were actually quite different. When it came time to address the key public policy controversies of the last two decades, J.D. Irving, the sole voice for large industry, became isolated. The majority's commitment to "consensus" rules quickly dissipated, and the non-industrial interests attempted to direct and shape the final policy choices and policy responses without industry approval. When the controversial issues were being addressed, the closed (to industrial interests) private network structure was clearly evident. Industry was left frustrated with the resulting draft standards, while social, environmental groups and disaffected small woodlot owners were relatively satisfied.

3. Development of Standards

Over more than two years, the technical standards writing committee met monthly for two- to three-day sessions. Step by step, the least controversial aspects of the draft standards were developed

and refined, but the key public policy controversies noted above were not resolved. Public consultation meetings held in August and November,1997, and again in May, 1998, drew considerable interest from the general forest policy community. On June 23, 1998, a second review meeting was held (known as "Truro II"), although industrial interests were fewer in number this time and they appeared to be frustrated by their lack of influence in the standards process.

On July 15, 1998, a 19-member Maritimes Regional Steering Committee was established and given the task of developing the technical standards into regional working standards. About half the members had been on the technical standards writing committee. Reflecting the relatively closed (to industrial interests) network structure, Irving's chief forester, Blake Brunsdon, was the sole industry representative. Just four days later, 12 of the 19 members of the Maritime Regional Steering Committee completed their review of the technical standards. Most notable was their attention to the wording on standards governing pesticides, herbicides and natural forest regeneration, which reflected the closed (to industrial interests and ideas) network structure and which contained very focused and non-discretionary wording that these groups had unsuccessfully lobbied for at the public policy level in New Brunswick (Duinker 1999: p. 47). Reflecting the underlying patterns of closure in the private policy network, the sole industry representative, J.D. Irving's Blake Brunsdon, was notably absent from this review.

Irving later noted its opposition to the draft standards, citing concerns that mirrored the controversial issues governing the public policy climate—the use of biocides, chemical fertilizers, and questions surrounding regeneration. The growing debates about FSC decision-making rules and international principles being broken or not broken illustrated the influence of the network structure. In short, the environmental and social interests long critical of industrial forestry and public policy networks had found a welcome home in the FSC private policy network, while industry had not. The strongest industrial supporter of the FSC in the region, J.D. Irving, remained highly attracted to the idea of obtaining FSC certification in order to earn the company positive recognition and market advantages after decades of criticism. But the company was not drawn at all to the particular standards that were emerging from the FSC regional standards policy network.

On August 1, 1998, under the auspices of the Maritime Regional Steering Committee, the environmental, social, and small woodlot owners who dominated the FSC private network quickly passed on their draft standards to the FSC national level, then known as the Canada Working Group. It was hoped that the September meeting of FSC-International would consider the standards. Instead, the Canada Working Group requested that the Maritimes Regional Steering committee reconsider its standards in light of standards developed elsewhere which, the Canada Working Group noted, were fundamentally different with respect to the contentious issues noted above. Pressures from outside the regional network, this time from the FSC national level, were clearly requiring the regional network to reconsider its standards on biocides and conversion, and for expanding forest land reserves (Boetekess, Moore, and Weber, 2000: p. 4; Duinker, 1999: p. 47). Indeed, the story to follow largely centered on J.D. Irving's efforts to bypass the regional standard-setting network by going to other levels in the FSC that they felt were more hospitable. In that respect, it is similar to efforts by environmental groups during the 1970s and 1980s to bypass what they felt were inhospitable public policy networks.

J.D. Irving's efforts to bypass the regional network, and the regional network's efforts to maintain its approach, have largely shaped these highly charged political struggles. The stakes were enormous for both industry and the non-industrial interests. J.D. Irving had just earned precedent-setting industrial certification at its Black Brook site under the more flexible scientific certification standards which had been approved by the FSC International as provisional until the Maritimes FSC standards were finalized. For decades the Black Brook site had been known for intensive industrial forest management and plantations whose key components included the use of biocides and the conversion of sites to single-species stands. Yet with the looming draft standards on biocides and plantations about to become permanent, Irving faced a dilemma. Either it would change its forest practices to adhere to the new rule in order to maintain its FSC certification, or it had to make a last attempt to show why its current practices should be FSC certified. Irving chose the latter approach. After announcing on October 8, 1998, that Black Brook had been successfully FSC-certified, the firm immediately opened its site to review by other stakeholders in an effort to win support for its approach to sustainable forestry. Indeed, Irving

deemed the draft standards so costly to its operations that they would outweigh any economic and social-license benefits gained from being FSC-certified.

To stay with the FSC in the Maritimes, Irving had to find a way to circumvent the standards-setting policy choices of the FSC regional network. At the same time the environmental and social groups and their allies were equally adamant that choices made by the private policy network be allowed to stand. Caught in the middle were FSC national and international strategists focused on maintaining the FSC's limited support from industrial forest companies in North America. They feared that losing Irving would send a negative signal to other companies who were then contemplating their own certification choices.

4. Resilient Regional Networks and Industrial Frustration

Recognizing that the initial network structure was relatively unresponsive to the ideas promoted by industrial interests, Irving increasingly focused its efforts at both the national and international levels, hoping to reverse key choices on biocides, chemicals, and natural forest regeneration. At the same time environmental groups sought to limit these efforts; indeed, the Sierra Club of Canada appealed Irving's FSC certification—via provisional standards—of Black Brook. If the FSC recognition of Black Brook were to stand, the Sierra Club of Canada believed, the FSC would entrench an approach which they had been campaigning against for decades.

By November, 1999, the domination by environmental and social groups of the existing regional network structure was now openly apparent to all sides, and it intensified the already significant animosity between industrial forestry interests (represented by Irving) and the environmental and social groups long critical of industrial forestry. As directed by the FSC Canada Working Group, the regional FSC network members met on November 11 under the auspices of the Maritime Regional Steering Committee to reconsider its standards on the key issues that had dominated public policy struggles for the last 30 years. Illustrating the dominated structure of the network, environmental groups and their allies announced that a consensus had now been reached among all participants on biocides (6.6.1 and 10.7.2), exotics (6.9.2) and conversions (10.1.1) (Duinker, 1999: p. 47). While debates continue between the two sides about whether there was indeed a fleeting consensus at this meeting

(Boetekess, Moore, and Weber 2000: pp. 29-30), the next day Irving's chief forester (Blake Brundson) made it clear that his firm could not support the standards. Such was the domination of this network by non-industrial interests that Irving's disapproval was largely ignored. The network had made its choice clear and again sought FSC-Canada ratification without Irving's support.

As one international investigation into the Maritimes standards would suggest, relationships characterizing the network structure were so strained, and animosity so high, that every action was interpreted through very different lenses:

To varying degrees, the 18 [Maritime Regional Steering Committee members in the majority] came to believe that Irving's withdrawal of consent was just another instance of [J.D. Irving] throwing its substantial weight around. To Mr. Brunsdon, it contributed to his perception that the Maritime standards process, and the Maritimes Regional Steering Committee in particular, was stacked against his employer and other large forestry interests. (Boetekess, Moore, and Weber, 2000: p. 30)

At this time frying's efforts to seek redress again at the Canada Working Group level failed. Despite strong dissent from Timbec, the lone industrial representative at the FSC national level, the majority of board members at the Canadian level, most of whom were sympathetic to the environmental and social group interests, passed the draft standards on to FSC International for consideration and approval. In particular, the Canada Working Group requested advice from Oaxaca on the controversial biocides standards (Boetekess, Moore, and Weber, 2000: p. 4, personal communication), hence acknowledging the issue as still requiring resolution.

In December, 1999, Irving appealed to the international FSC level to have the approval overturned and registered formal complaints about the Maritimes process (Boetekess *et al.*, 2000: p. 4; Duinker, 1999: p. 49). This appeal created consternation among those environmental and social organizations who dominated the regional standards policy network, and they made it known through confidential memos to the national office that any tinkering with their standard would delay the acceptance of hard-won regional consensus among all other participating stakeholders (personal interviews).

FSC-International officials knew they had a problem. They needed to maintain the limited industrial support the FSC was gaining in the U.S. and Canada, but at the same time they could not risk upsetting their most committed environmental and social advocates. The officials struggled to find a way out of this dilemma, but it was to be an ill-fated effort, we argue, given the prevailing regional network structure.

FSC-International acted in two ways in an attempt to strike a delicate balance: it provided conditional approval for the standards in January, 1999, but it also initiated a dispute resolution process at the Canadian level to address Irving's appeal of the Maritimes majority's submission. Preconditions for the approval included the requirement that: 1) standards would have to be "harmonized" with those of other FSC regions; and 2) a number of specific procedural requirements in the standards, including those for biocide use, would have to be re-examined (FSC-Maritimes, 2000, Annex 1: pp. 55-6). After three months the FSC-International executive director was to assess the results. Any biocide standards still unique to the region would have to enjoy "significant agreement by all relevant stakeholder groups," and even then, such standards would be reviewed after two years.

These balancing efforts appeared to be removing some decision-making authority from the regional standards network, but other procedural changes occurred that actually solidified the influence of the regional network. This is because "unanimity" and "consensus" approaches gave way to directions that there be "significant agreement." The Canada Working Group had defined "significant agreement" to mean a 50 percent majority in each of the houses and a 75 percent overall majority (Duinker, 1999: p. 3; Boetekess, Moore, and Weber, 2000: pp. 49-50, 76). This was an important, though poorly understood, outcome. If applied to the FSC-Maritimes regional network, these "significant agreement" conditions could be met without industrial forest company support, since the small private woodlot owners involved with the FSC-Maritimes tended to side with the environmental and social majority.

Disputes continued on several fronts in February and March of 1999. The Maritimes Regional Steering Committee met regularly to address Oaxaca's preconditions and on February 22 the Canada Working Group dispute resolution process began to consider Irving's appeal of the Maritimes process. And now, other industrial interests,

concerned with the proposed standards, stepped up their interest in participating in the regional standards process. Recognizing the difficult road ahead and the need to think strategically about its commitments to certification, Irving cultivated certification credentials beyond the FSC-Maritimes. It had its Black Brook operations successfully audited under the systems-based International Organisation for Standardization (IS) Environmental Management System (J.D. Irving, Ltd., 1999) and it continued the FSC certification in northern Maine that it had begun in 1998.

As expected, given our story to date, talks between industrial participants on the one hand and the majority of the network on the other repeatedly deadlocked. The Maritimes committee was not given any new or different means of approving standards (Boetekess, Moore, and Weber, 2000: p. 4; personal communication), and the network structure simply did not permit unanimous consent for a new approval process. While a number of revisions were made to the draft standards in the course of these evaluations, efforts to gain industrial support for a final overall package failed.

Confronted with essentially the same dilemma in September, 1999, that it had repeatedly faced during the spring and summer, the regional network did not come up with any new solution to the fundamental and underlying structural and policy issues. Meanwhile, for the most part the dispute resolution process ruled against Irving's appeal of the Canada Working Group's support of the draft standards.

Recognizing that this ruling could create the last straw for Irving and undermine general efforts to obtain industrial support for the FSC, officials in Oaxaca sought an innovative solution. They did so using a three-pronged approach. First, Oaxaca required reforms to representation and decision-making requirements that they believed would make more balanced future power relationships amongst participating stakeholders in the region (FSC-Maritimes, 2000, Annex 4: pp. 59-60; Boetekess, Moore, and Weber, 2000: p. 39; Duinker, 1999: p. 1, 49). That is, they consciously sought to alter the structure of the existing regional network. Second, Oaxaca commissioned Peter Duinker, a leading academic forestry specialist from the region, to report on whether the Maritimes Regional Steering Committee had reached the level of agreement FSC-International had required of it, notably on the biocides issue. In November, given Irving's dissent, Duinker concluded it had not (Duinker, 1999: pp. 51-2), and a high-ranking

FSC delegation to Halifax confirmed this finding. Third, Oaxaca proposed to intervene on the most controversial issue by changing regional standards governing the use of biocides. Certifying firms would have to make a clear, demonstrable commitment to phase out biocides, but they would not be required to meet an explicit time-frame. On the one hand, Oaxaca was clearly trying to show its best face to industry in general and to Irving in particular. Indeed, its denial of the Sierra Club's appeal of the Black Brook certification—on the grounds that key appeal documents had been filed late—coincided with these efforts and was seen by some as an attempt to show good faith to industrial concerns. On the other hand, the denial of the Sierra Club's appeal also worked to reinforce the regional network divisions between industrial interests and their critics—environmental activists, social reformers and small woodlot owners.

It was a compromise approach fraught with difficulties, as divisions and hostilities were so entrenched that it pleased neither Irving nor those that dominated the regional standard-setting network. The effort to have the Maritimes standards reviewed in two years (FSC-Maritimes 2000, Appendix IV: pp. 53-56) was met with opposition from both Irving and environmental groups. Irving felt it could not afford to wait two years to resolve these matters, and environmental groups feared they would lose in two years' time their hard-won efforts at the FSC regional level. Despite attempts to broker a solution, there is little doubt that the FSC-International officials knew they could not veer far from the standards that had come out of the regional network. On December 20, 1999, FSC-International endorsed this package and all remaining non-controversial standards.

Faced with this outcome, Irving publicly broke with the FSC-Maritimes process on December 29, 1999, returning its Black Brook certification and characterizing the Maritimes Regional Steering Committee as unrepresentative and biased (Brunsdon 1999; Canadian Broadcasting Corporation, 1999). Other key stakeholders in both Canada and the U.S. were also publicly very critical of the FSC-Maritimes process, and still more pressed for clarifications. Two major U.S. voices wrote of a crisis of "North American proportions" (Kiekens, 2000: p. 2; Boetekess, Moore, and Weber, 2000: p. 57; personal communication), and indeed, the crisis did send a signal to industrial forest companies elsewhere that it could be dangerous to commit to the FSC in advance of regional standards, since afterward the rules of the game might change significantly.

The FSC-International published a detailed response to Irving's withdrawal on January 10, 2000, that accelerated procedural reform (Johansson and Synnott, 2000). It promised cross-border standards harmonization and an official commission of enquiry into the Maritimes process during which other forest certification processes would be suspended. On January 13, the Canada Working Group and the Maritime Regional Steering Committee also agreed to accelerate the transformation of the private network through a process of outreach and membership-recruitment, leading up to elections for a new regional group (FSC-Canada, n.d.). They also agreed to the CWG's control and third-party facilitation during the transition. By February 23, the commission of enquiry was launched (Boetekess, Moore, and Weber, 2000, esp. p. 10).

Meanwhile, critics of Irving maintained their pressure on the FSC-Irving relationship. In January, 2000, the Sierra Club of Canada and its regional allies registered a new complaint about Black Brook, based on controversial allegations that biocides Irving had used there were forbidden under FSC principles (Sierra Club of Canada, 2000; Restino, 2000, personal communications).

Subsequent planning and regional consultations went ahead, but difficulties remained. One such occurred during a June, 2000, Moncton meeting held for the purposes of electing a new regional working group on the basis of FSC-Canada decision-making rules. It was to elect four houses, using the Canadian voting rule for decision-making (50 percent for each chamber; 75 percent overall voting). While participants did elect three of the four new regional 'houses' the economic house remained split after repeated attempts to achieve agreement between large industrial forest interests and small woodlot owners. At stake, under the new rules, was the potential veto power of either stakeholder group over future standards decisions. Once again the existing network structure impeded efforts to formally reconstitute a different group.

While many FSC supporters in the Maritimes continue to seek a reconciliation with Irving, the relationship appears to have been permanently damaged. Irving has remained disconnected from the FSC-Maritimes process following the Moncton impasse (Canadian Sustainable Forestry Certification Coalition, 2000; personal communications). Although two members have been chosen for the economic house at the time of writing, large industry, which remains

central to the regional forest economy, still does not have a representative on the new working group.

The FSC-International commission of enquiry, reporting in May, 2000, (Boetekess et al., 2000), accepted as appropriate those decisions made by FSC's officials at the international, national, and regional levels. But the commission also translated many of the lessons from the regional controversy into an impetus for wider institutional change within FSC-Canada. Irving has remained outside the FSC in the Canadian Maritimes but has continued to support the FSC in the U.S. Northeast. Now we will explore what happened in the Northeast to learn why its regional standard-setting process took such a different direction.

B. The U.S. Northeast

Like those of the Canadian Maritimes, the Northeast public policy approaches to forest management have long been subject to controversial debates over forestry practices. Nevertheless, three features have combined to make its public policy approach distinct from those in the Canadian Maritimes. First, the two key issues that dominated its public policymaking process were centered on maintaining a sustainable supply of timber and on the controversial practice of clear-cutting. These issues were important because the former created common ground for industrial and environmental interests who both wanted to see a sustainable rate of cut, while the latter split the environmental community into two: those who felt that clear-cutting should never be used, and those who felt that it could be permitted as part of a broader approach to sustainable forest management. (On this divide, see for example, Lansky, 1992; Lansky, 1999). Second, and related, the public policy process responded to these pressures with the emergence of relatively open (with respect to ideas and actors) public policy networks. This was important because it meant that environmental groups did not have to look to FSC private networks to find an arena open to their ideas and interests, since many felt they were already being accommodated in the public policymaking process. Third, the fragmented and diffuse public policymaking structures in the Northeast meant that even radical environmental groups saw greater access and influence within the public policy process rather than outside of it. In particular, the use of referendum campaigns came to be seen by radical groups as a more effective means of eliminating clear-cutting than focusing on arenas of private authority. These referendum campaigns were consequential because they ultimately led to the disintegration of a hard-won compromise agreement with industry by mainstream environmental groups. Unlike the case of the Canadian Maritimes process, it was the mainstream environmental groups who then came to see the FSC as another potential arena in which to implement its compromise.

For these mainstream groups the FSC was seen as another arena in which to further their ongoing consensus-based approach with industrial forestry interests (e.g., Johnson, 2000). Far from offering an alternative vision in which industry was seen as the antagonist, mainstream environmental groups in the Northeast were keen on developing an FSC network in the hope that they would earn industrial support. And this is an important distinction because most industrial forest companies (with the exception of Seven Islands and J.D. Irving) had opted to participate only in the U.S.American Forest and Paper Association's Sustainable Forestry Initiative certification program. The result of these dynamics was that the FSC veered away from strict rules governing biocides, chemicals and plantations that had characterized the Maritimes process. Instead, FSC in the Northeast opted for standards that they hoped would maintain what industrial support it had, and also encourage increased industrial participation. This case details these dynamics by first exploring the public policy process and then the emergence of the FSC private standard-setting network in the Northeast.

1. Public Policy Approach

The historical treatment of forest policy issues on the public policy agenda in the U.S. Northeast was discernibly different from that of the Maritimes. While the spruce budworm crisis did affect this region and resulted in important and heated debates about pesticide use, it did not become the key issue through which relationships were defined. Instead, environmental groups' efforts in the Northeast were focused on an array of issues designed to entice or compel industrial forest companies to practice sustainable forestry. Their agenda included maintaining a sustainable supply of timber, increasing the number of forest reserves, and encouraging lower-impact harvesting techniques to replace, where ecologically appropriate, the practice of clear-cutting. The result was the emergence of a number of environmental groups who supported working with industry to

develop a consensus approach to sustainable forestry policy development.

There certainly were Northeastern environmental activists whose experience with increased budworm spraying and clear-cutting in the 1980s led them to feel excluded from public policy processes, and critical of industrial forest management practices (Dobbs and Ober,1996: pp. 124-5). But these groups felt better accommodated through alternate "referendum" public policy approaches that bypassed policy networks, rather than through active participation in the FSC private policy network.

The greater emphasis by many Northeast environmental groups on maintaining a steady supply of timber was important because, unlike the situation of the biocide debates in the Canadian Maritimes, both environmental and industry groups both saw the need to address the timber supply issue. And as universities and state forest services received more funds to research timber supply data and the industry's rate of cut, governmental agencies increasingly worked with industry and environmental groups to systematically and cooperatively address this issue (Irland, 2000; Maine Forest Service, 1998; personal communications).

2. The Dominance of Clear-Cutting and Timber Supply

Two policy issues dominated Northeastern forestry circles in the 1990s, 1) a timber supply issue that brought together moderate environmental groups and industry, and 2) the practice of clearcutting, which most environmental groups felt should be reduced or eliminated. In Maine these issues led the governor to create dedicated multi-stakeholder processes: a Northern Forest Lands Council established in 1990, which was succeeded by a broader Maine Council of Sustainable Forest Management in 1995. Environmental group officials saw these processes as differing from relatively closed business/government policy networks, and some heralded a new era area in open access to public policy decision-making processes. The Maine Council of Sustainable Forest Management mandate from the governor was to develop a forest sustainability policy, reforms to the department of conservation, and amendments to the forest practices law (McNulty et al., 2000-2001; personal communications). While mainstream environmental groups (i.e., including Maine Audubon Society, Nature Conservancy, and Natural Resources Council of Maine) supported these collaborative efforts, radical environmentalists thought that these processes would be unable to address what they perceived to be underlying problems with industrial forestry in the region. In 1996 they decided to effect policy change by turning to citizen-initiated referendum processes permitted under the U.S. system of government. Under the auspices of Maine's Green Party, these groups launched the first in a series of statewide forest referenda. Similar to referenda in some other states, the initiative sought to make clear-cuts and other increasingly common forest practices illegal. Maine voters thus faced a choice between the regulatory status quo and significant legislated change in the forest management.

It was this referendum initiative that led both to the disintegration of the Maine Council of Sustainable Forest Management and to the development of the Forest Compact. The Forest Compact was an agreed-upon set of sustainable forestry standards designed to be the "third" option besides the "yes" or "no" approach of the referendum campaign. The Compact was developed primarily by the same players involved in the Maine Council on Sustainable Forest Management, with the key difference being that instead of going through the legislature for approval, the Compact was designed to head off what industry felt would have been a devastating economic blow to them if the anti-clear-cutting forces were to win the referendum.

Moderate environmental groups participated in this Compact, earning an agreement for this "alternative approach" generally promoted by most industrial and private forest owners. The Compact required forest management audits for large private landowners that did not certify with the FSC any reductions in clear-cuts, or the creation of some ecological reserves, or the study of "liquidation" harvesting (Anonymous,1996). But while the Compact most certainly resulted in increased access to public policy networks by many environmental groups, it also served to bridge the divide between moderates who would work with industry and those who supported a clear-cutting ban and more radical agendas for change (Lansky,1996).

At 47 percent support, the Compact nearly won the three-way 1996 referendum and was placed in a 1997 run-off vote. To some key environmental groups and observers across the region, the results initially appeared to shift the terms of the debate in their favor. For a time, both non-traditional public policy initiatives and multi-stake-holder strategies seemed to have real strategic value (Dunning, 1998). However, over the next two years both referendum and legislative

strategies would disappoint their environmental-group backers. By 1997's run-off referendum, the more radical environmentalists, organized small woodlot owners, and property rights groups all actively opposed the Compact. Support stalled, and the "no change" option ended up winning the 1997 referendum (Dunning, 1998).

The era of environmental-group access to policy networks seemed to be in jeopardy, and mainstream environmental groups used a number of tactics to seek policy influence. In 1998, they sponsored a series of forest policy bills in the legislature (McNulty et al., 2000-2001; Natural Resources Council of Maine, 2001), most of which failed to gain enough support.

After the dissolution of the Maine Council of Sustainable Forest Management and the two defeats of the Compact, moderate environmental groups began to see the FSC's private forest policy network as a potential new arena in which to promote, and implement, the multi-stakeholder format and choices of the Compact. They began to see the FSC accomplishing what the referendum had foiled; that is, widespread consensus approaches to developing sustainable forest management policy. (Those who shared a more radical critique of industrial forestry preferred to stick with the referendum approach, believing that it still offered the best hope for implementing their policy goals).

On the other hand, industrial and governmental agencies, frustrated with their experimentation with a broader set of stakeholders, came to see the American Forest and Paper Association's Sustainable Forestry Initiative as a more appropriate arena in which to encourage and develop forest certification rules. The SFI approach was seen as providing fewer surprises and bottlenecks than an FSC-style approach. And recognition of these dynamics persuaded moderate environmental groups to develop an FSC network that was open to industrial interests, and rules that reflected the consensus approach of the Compact. From the use of chemicals to exotics to plantations to clear-cutting, the standards developed under this network would be less stringent and more flexible than the rules emerging from the Canadian Maritimes approach.

3. The Emergence of Private Policy Networks

Public policy networks surrounding forestry had opened to new ideas and actors in unprecedented fashion in the 1990s, with well thought out compromise policy alternatives as the result. But the inability of the public policy system to implement the compromise led mainstream environmental groups to see the FSC as an alternative arena in which to give new life to the compromise they had won. These groups recognized that the "no clear-cutting referendum" approach of the radical groups, and their own legislative efforts, had failed to produce policy change. Indeed, industrial interests, beleaguered by their efforts to produce collaborative solutions, appeared to be reverting to traditional, closed industry/government relations.

These dynamics meant that, unlike the Maritimes experience in which disaffected groups rushed to the FSC standard-setting network in an effort to shape rules and network structures to limit industrial influence, the environmental groups in the U.S. Northeast sought to develop an FSC process that might encourage industrial participation. This focus also took place as the American Forest and Paper Association's Sustainable Forestry Initiative (SFI) was emerging as the preferred option for most industrial forestry interests, apart from Seven Islands, J.D. Irving, and Hancock (Cashore, Auld, and Newsom, forthcoming, 2002)

The Vermont-based New England Environmental Policy Center ended up taking the lead in establishing the FSC regional private network. In October, 1996, it hired a trained forester as regional FSC coordinator and then took care to develop broad-based, multi-stake-holder "preparatory" consultations along with a clear planning strategy.

Working group candidates were recruited in advance in consultation with interested groups and organizations. Efforts were made to choose participants who represented organizations and embraced multiple constituencies. Experienced forestry professionals, business people, and forest policy advocates predominated (FSC-Northeast and Reidel 1999). In 1997 the New England Environmental Policy Center also developed a 422-page Certification Standards Workbook with which to guide discussions and interaction. Committee members received their documents before the first meeting, and their comments were incorporated into revised standards. On August 26, 1997, working group members voted to adopt these clear and specific formal rules of procedure designed to facilitate broad involvement and support in the FSC standard-setting process. Absent from the deliberations was the conflict that characterized the Canadian Maritimes process. Draft standards were sent out for broad comment, followed by formal meetings. The desire to achieve widespread support and the specific interest in maintaining and building industry support resulted in draft standards that were more flexible and discretionary than those in the Maritimes. The differences were most stark with respect to the biocides, chemicals, exotics, and plantation policies that dominated the Maritimes process, but are also relevant to clear-cutting. Reflecting negotiations in the Forest Compact, the draft Northeastern standards did not require companies to stop clear-cutting, but instead they obligated to cap clear-cuts and to consider the most appropriate, ecologically sensible, approach.

4. Private Network and Outside Influence

While the private network was open to industrial and nonindustrial interests and their ideas, events outside the network also worked to fashion certification in the region. During 1998, J.D. Irving began to certify its Allagash properties in Maine before the standards development process in the Canadian Maritimes had moved to its decisive break that November. This became the U.S. Northeast's second major FSC certification and the first by an operation having extensive interests in secondary processing. By 2000 the Allagash certification was complete (J.D. Irving Ltd., 2000), and like the Black Brook certification, it was appealed. But importantly, it was not appealed by any of the mainstream groups involved in the FSC-Northeast private network, but rather by the Sierra Club of Canada, whose experience and motivations can be traced back to their alienation from the Canadian public policy processes noted above. In December of 2002 the FSC-International approved the less stringent approach of the Northeast standards following an FSC-U.S. nationwide harmonization process for the regional standards.

5. Industrial Support for Private Forest Policy Networks

Despite efforts on the part of moderate environmental groups, as of 2002 few industry stakeholders favored the FSC private network. But rather than ignoring private networks altogether, they opted to pursue private networks under the auspices of the SFI. Not only did the AF&PA require its members to participate in the SFI (though completion of the actual certification procedure was voluntary), but industrial participants, still gun-shy about their public policy efforts to achieve consensus, saw the SFI as a more legitimate arena in which to develop private rules governing sustainable forest management. But recognizing the moderate stance of the FSC in the

region, and its support from Irving and Seven Islands, the Maine SFI implementation committee sought additional changes to improve the SFI's competitive position. It called on the SFI-U.S. to accelerate the national changes and consulted with the national program while developing a unique Maine approach.

Indeed, these efforts were buttressed by public agencies with historically close ties to industry who worked with SFI supporters to create a more effective and accountable SFI presence in the U.S.Northeast. For instance, some branches of Maine's government cooperated with the Maine SFI to reshape the SFI's state-level implementation even more quickly. By April, 1998, just before a new FSC-Northeast regional draft and the final FSC meetings in the region, and while the legislature faced a large number of ENGO-supported forest practices bills, the legislature and the Maine SFI negotiated a resolution adopted by both state houses "encouraging the development of a Sustainable Forestry Initiative" (Maine Legislature, Joint Resolution Encouraging the Development of a Sustainable Forestry Initiative, 1998).

The resolution called for a unique reporting link from the SFI to the legislature, a public body that many ENGOs considered historically reluctant to pass the forest-practice legislation that they favored. The reporting link opted for both an independent panel that was to establish indicators specific to Maine and for another expert panel dedicated to monitoring and oversight. In effect, this package of reforms would strengthen the SFI's credibility and demonstrate to the public an atmosphere of concern and initiative amongst legislators. Insofar as they succeeded in building up the SFI, these efforts created unique pressures on the FSC to maintain its moderate approach.

The SFI-U.S. approved these indicators and panel structures on December 17, 1998. By the end of January, 1999, the Maine Forest Products Council had presented proposals to the state legislature to move ahead with the terms of the joint resolution. The draft initiative now proposed a verification process that was open to all the major programs, though it was intended primarily to bolster the credibility of the SFI. Meanwhile, the Irving experience north of the border served to bolster industrial interest in the SFI as a more feasible alternative to the FSC. Increasing industrial skepticism put further pressure on the FSC private network to tailor the general direction of its regional standards in order to accommodate firms seeking added recognition from an ENGO-supported certification.

It became evident that industry efforts had been clearly designed to bring the *public-private* linkages that had been characteristic of the Northern Forest Lands Council and Maine Council of Sustainable Forest Management to *the SFI*, while environmental groups had carried over the *multi-stakeholder* quality of these experiences to the FSC. The more radical environmental groups continue to feel excluded from both the public policy process and the FSC standards-development process (*e.g.*, Lansky, 1999). In an effort to promote certification but avoid criticism from industry or environmental groups, both New York and Maine have sought both FSC and SFI certification for state-owned forest lands (Higgins, 2000).

VI. CONCLUSION

Despite similar forest ecosystems overall, private networks developed in very different ways in these two adjacent regions that resulted in fundamental and significant impacts on the development of (private certification) sustainable forestry policy. Our cases clearly reveal that the structure of existing public policy networks and public policy approaches influences the emergence of private networks. The role of traditional governmental authority has always been a key issue in understanding the emergence of voluntary, market-based, and other policy instruments which the state does not directly regulate. Some have argued that these new non-state, market driven governance systems emerging through certification within forestry, mining, fisheries, food production, and tourism are unique because the state does grant its traditional "Westphalian" sovereign authority to these new systems (Cashore, 2002). But these cases reveal that the roles of the state, its policy networks, and ultimate policy choices, are still important. The state's actions and ability to accommodate a range of societal interests is a large predictor of which groups will even show up to influence and shape emerging private policy networks. And, the role of the state in encouraging the private regimes either through coordination or oversight capacities— also appears critical to understanding the emergence and support for these private policy networks.

One aspect is clear: private networks do not stop deeply ingrained conflicts over forest resource use-management, but they do alter the rules of the game and the influence of different interests and ideas. And these choices, in turn, influence whether environmental groups and industrial forest companies consider the private networks appropriate arenas of authority.

Our research has revealed that networks are important to analyse not just in terms of whether they expand to include non-business interests (which has been the predominant focus of the majority of policy network and sub-system scholars), but whether networks dominated by non-industrial interests can expand to include industrial ones. We have revealed why the FSC private network in the Canadian Maritimes did not do this, and why in the U.S. Northeast a different network structure was designed to accommodate business interests and ideas.

Two conundrums emerge from our story. First, those who support a radically different way of conducting sustainable forestry have turned to the FSC private networks as an arena in which their ideas can be considered. Yet the more the FSC considers this "radical" agenda, the less likely it is to be supported by industrial interests who, as profit maximizers, are constrained by the market in developing what they believe to be appropriate standards governing sustainable forestry management. Hence strategists in the FSC-International and National offices are confronted with our second conundrum-- the strongest supporters of the FSC tend to be those groups who have the greatest concerns about current modes of industrial forestry and the maintenance of naturally functioning forest ecosystems. But if the FSC is to have any (direct) effect at all, it must be seen as an economically feasible system for industrial forest companies and their managers. Whether the FSC can provide a model for addressing both these interests through the market remains to be seen. Thus far, evidence from the Maritimes, Northeast, and elsewhere suggests that these efforts are tenuous and difficult. Indeed, despite ongoing interest on the part of Irving and Hancock Lands Company in Maine, other industrial interests have opted for the SFI program. And in the Maritimes, there is now virtually no industrial support for the FSC despite strong initial interest. In this regard, it may be that the FSC's greatest impact in North America will stem not from whether it receives direct industrial support, but from the impact it has had on industry-initiated alternatives such as the SFI and Tree Farm in the United States, and the CSA in Canada.

These findings provide at least three important lessons for those interested in building support for certification in mining, tourism, coffee, food and flower production, fisheries, or other sectors. First,

there must be a keen understanding of the approach and perceptions of existing public policy approaches. Second, clear rules governing multi-stakeholder participation should be made before negotiations begin. Third, there may be an inverse relationship, in the short term, between developing the most stringent standards or regulations, and the acceptability of the system in domestic and global markets. A choice must be made between "institution" or "standard" building. The former might gain support necessary for (long-term) impacts and changes, while the latter may provide a "gold standard" whose short- or long-term impact may be at best indirect, or, at worst, negligible.

What is clear is that the arena of "certification" as a mode of private authority is growing increasingly important to students of public policy. Just how societal concerns are addressed in these new systems, and whether private authority may be a more effective and efficient means to serve these functions, is a pressing research question. Students of public policy cannot afford to ignore these new arenas of private authority. Students of private authority must take care to explore the influence of public policy processes on the emergence of private policy networks, and the policy choices that result.

ACRONYMS

AF&PA American Forest & Paper Association

CSA Canadian Standards Association

ENGOs environmental non-governmental organizations

FSC Forestry Stewardship Council

NSMD Non-state market driven governance systems

P&C (FSC) principles and criteria

SFI (U.S.) Sustainable Forestry Initiative

SFM sustainable forestry management

SOURCES

- Anonymous. 1996. Resolution, Proposing a Competing Measure under the Constitution of Maine to Implement the Compact for Maine's Forests.
- Atkinson, Michael M, and William D. Coleman. 1992. Policy Networks, Policy Communities and the Problems of Governance. Governance 5 (2):154-180.
- Auld, Graeme, Benjamin Cashore, and Deanna Newsom, 2002 in press. Perspectives on Forest Certification: A Survey Examining Differences Among the US Forest Sectors' Views of Their Forest Certification Alternatives. In Forest Policy for Private Forestry: Global and Regional Challenges, edited by L. Teeter, B. Cashore and D. Zhang. Wallingford, UK: CABI Publishing.
- Bangor Daily News. 2001. Editorials: Logging report [Internet]. Bangor Daily News, November 23, 1999 [cited January 24, 2001].
- 2000. Report: No crisis in Maine forests [Internet]. Bangor Daily News, October 25, 2000 [cited November 9, 2000].
- Bangor Daily News (Editorial). 2000. Certifying Forests. Bangor Daily News, April 18.
- —. 2000. Green Irving [Internet]. Bangor Daily News, June 6, 2000 [cited November 9, 2000]. Available from http://www.bangornews.com/cgi-bin/article.cfm?storynumber=16290.
- —. 2000. Irving Woodlands, Bangor Daily News, June 3.
- Boetekess, Gemma, Keith Moore, and Gregory Weber, 2000. Forest Stewardship Standards for the Maritime Forest Region, Commission of Enquiry: Final Report.
- Bradbury, Dieter, 2000. Foes Link Forest Referendum to Sprawl. SWOAM News 25 (10):1, 5.

- Bruce, Robert A. 1998. The Comparison of the FSC Forest Certification and ISO Environmental Management Schemes and Their Impact on a Small Retail Business. MBA, University of Edinburgh Management School, University of Edinburgh, Edinburgh, UK.
- Brunsdon, Blake. 1999. Memo: Facts and Trends Regarding J. D. Irving, Limited Pesticide Use. Saint John: FSC-Maritimes.
- —. 2000. Press Release: Chief Forester Responds to FSC Approval of Maritime Regional Standards [Internet]. J.D. Irving, December 29, 1999 [cited November 8, 2000]. Available from http://198.73.126.20/default.asp?action=news-article&id=74.
- Canadian Broadcasting Corporation. 2000. Irving opts out of green plan [Internet]. CBC, December 30,1999 [cited December 12, 2000].
- —. 2000. J.D. Irving Wants to Get Back on with Forest Practices Standard. CBC, February 10, 2000 [cited November 14, 2000]. Available from http://cbc.ca/cgi-bin/templates/view.cgi?/news/2000/02/10/irving000210.
- Canadian Sustainable Forestry Certification Coalition. 2000. Forest Management Certification -- Clear Leadership in Canada. Sustainable Forestry Bulletin 6 (2):1-4.
- Cashore, Benjamin. 2002. Legitimacy and the Privatization of Environmental Governance: How Non State Market-Driven (NSMD) Governance Systems Gain Rule Making Authority. Governance Journal 15 (4 (October)):503-529.
- Cashore, Benjamin, Graeme Auld, and Deanna Newsom. 2002. Politics Within Markets: Regulating Forestry through Non-State Environmental Governance. New Haven, CT: Draft Manuscript, Program on Forest Certification, Yale School of Forestry and Environmental Studies.
- —. Forthcoming, 2002. Forest Certification (Eco-labeling) Programs and their Policy-Making Authority: Explaining Divergence Among North American and European Case Studies. Forest Policy and Economics, Fall.

- Cashore, Benjamin, and Ilan Vertinsky. 2000. Policy Networks and Firm Behaviours: Governance Systems and Firm Responses to External Demands for Sustainable Forest Management. Policy Sciences 33 (March):1-30.
- Cashore, Benjamin, Ilan Vertinsky, and Rachana Raizada. 2001. Firm Responses to External Pressures for Sustainable Forest Management in British Columbia and the US Pacific Northwest. In Sustaining the Pacific Coast Forests: Forging Truces in the War in the Woods, edited by D. Alper and D. Salazar. Vancouver: UBC Press.
- Coleman, William D., and Grace Skogstad, eds. 1990. Policy Communities and Public Policy in Canada: A Structural Approach. Mississauga, ON: Copp Clark Pitman Ltd.
- Conroy, Michael. 2001. Can Advocacy led Certification Systems transform Global Corporate Practices? Evidence and Some Theory,
- Cutler, Claire, Virginia Haufler, and Tony Porter. 1999. Private Authority and International Affairs. In Private Authority in International Politics, edited by C. Cutler, V. Haufler and T. Porter. New York: SUNY Press.
- Dobbs, David, and Richard Ober. 1996. The Northern Forest. White River Junction, VT: Chelsea Green.
- Domask, Joe. Forthcoming 2003. Chapter Eight: From Boycotts to Partnership: NGOs, the Private Sector, and the World's Forests. In Globalization and NGOs: Transforming Business, Governments, and Society, edited by J. P. Doh and H. Teegen. New York: Praeger.
- Duinker, Peter. 1999. What is "Significant Agreement" in the Context of FSC Preconditions? Halifax, NS: Forest Stewardship Council.
- Forest Stewardship Council. 1999. FSC Principles and Criteria: Forest Stewardship Council.

- FSC-Canada. 2000. The Forest Stewardship Council (FSC) is Seeking Additional Members from the Maritimes, and Expressions of Interest from Organizations or Individuals Interested in Serving on the Maritimes Regional Steering Committee [Internet]. FSC-Canada No Date [cited December 14, 2000]. Available from http://www.fallsbrookcentre.ca/programs/certmark/fsc/requirements.html.
- FSC-Maritimes. 2000. Certification Standards for Best Forestry Practices in the Maritime Forest Region [Internet]. FSC-Maritimes, January 2000 [cited November 23, 2000]. Available from http://www.web.net/fscca/standard.htm
- http://www.fallsbrookcentre.ca/programs/certmark/fsc/standards2000.html.
- FSC-Northeast, and Carl Reidel. 2001. Northeast Working Group: Northeast Forest Certification Standards A Report Summary [Internet]. FSC-Northeast, January, 1999 [cited February 1, 2001]. Available from http://www.fscus.org/standards-policies/...onal standards/archives/north east3.html.
- —. 2001. Northeast Working Group: Northeast Working Group Procedures and Process [Internet]. FSC-Northeast No Date [cited February 1, 2001]. Available from http://www.fscus.org/standards_policies/...onal_standards/archives/north_east4.html.
- Gunningham, Neil, Peter N. Grabosky, and Darren Sinclair, 1998. Smart regulation: designing environmental policy, Oxford sociolegal studies. Oxford/New York: Clarendon Press; Oxford University Press.
- Haas, Peter. 1992. Introduction:epistemic communities and international policy coordination. International Organization Volume 46 (Winter 1992):1-35.
- Haufler, Virginia. 2001. A Public Role for the Private Sector: Industry Self-Regulation in a Global Economy. Washington, DC: Carnegie Endowment for International Peace.

- Higgins, Margot. 2000. New York Forests Get the Green "Thumbs-Up". Environmental News Network, February 5.
- Howlett, Michael. 2000. Managing the 'hollow state': procedural policy instruments and modern governance. Canadian Public Administration 43 (4):412-432.
- —. 2002. Do Networks Matter? Linking Policy Network Structure to Policy Outcomes: Evidence from Four Canadian Policy Sectors. Canadian Journal of Political Science 35 (2 (September):235-268.
- Huntress Jr., Fred. 2000. Maine Forestry Referendum Targets Small Woodlot Owners. National Woodlands 23 (4):14.
- Hurd, Ian. 1999. Legitimacy and Authority in International Politics. International Organization 53 (2):379-408.
- Irland, Lloyd. 2000. Maine Forests: A Century of Change, 1900-2000...and Elements of Policy Change for a New Century. Maine Policy Review 9 (1):66-77.
- J.D. Irving. 2001. Forest Certification [website]. JDI, November 1 2001 [cited December 13, 2001]. Available from http://www.jdirving.com/green.shtml.
- J.D. Irving, Ltd. 2000. ISO 14001 Environmental Certification for J.D. Irving, Limited's Black Brook Woodlands in New Brunswick [Internet]. J.D. Irving Ltd., June 1, 1999 [cited November, 1998, 2000]. Available from http://198.73.126.20/default.asp?action=news-article&id=6.
- —. 2000. Press Release: Irving Allagash Woodlands Earns Forest Stewardship Council Certification [Internet]. J.D. Irving Ltd., June 1, 2000 [cited November 8, 2000]. Available from http://198.73.126.20/default.asp?action=news-article&id=91.
- Jennings, P. Devereaux, and Paul A. Zandbergen. 1995. Ecologically Sustainable Organizations: An Institutional Approach. Academy of Management Review 20 (4):1015-1052.

- Johansson, Olaf, and Tim Synnott. 2000. Statement on the FSC Endorsement of the Maritime Regional Standards, Canada [Internet]. FSC-International, January 10, 2000 [cited December 12, 2000]. Available from http://www.fscus.org/press_center/ breaking news/news articles/maritime statement.html.
- Johnson, Catherine. 2000. Certify or referendum: A false choice [Internet]. Bangor Daily News, August 7, 2000 [cited November 9, 2000].
- Kernaghan. 1999. Voluntary Approaches, the Environment and the Law: A Canadian Perspective. In Voluntary Approaches in Environmental Policy, edited by C. C. a. F. Leveque: Kluwher.
- Kiekens, Jean-Pierre. 2000. Forest Certification Part II: Impacts on Forestry, Trade and Consumer Information. Engineered Wood Journal: pp32-36.
- Lansky, Mitch. 1992. Beyond the Beauty Strip: Saving What's Left of Our Forests: Tilbury House Publishers.
- 2002. The Forest Compact: A Happy Day for Cynics [website].
 Industrial Forestry Watch 1996 [cited January 29, 2002]. Available from http://www.powerlink.net/fen/mitch.htm.
- —. 1998. If Certification is the Answer; What was the Question? A Close Look at J.D. Irving and the Certification of the Forest Industry: Environment News Service.
- —. 1999. If Certification is the Answer, What was the Question?
- A Close Look at J. D. Irving and the Certification of Industrial Forestry. *Understory* 9 (2-3).
- Lawson, James, and Benjamin Cashore. 2001. Firm Choices on Sustainable Forestry Forest Certification: The Case of J.D. Irving, Ltd. In Forest Policy for Private Forestry, edited by B. C. L. Teeter, and D. Zhang. Wallingford, UK: CABI Publishing.
- Lipschutz, Ronnie D., and Cathleen Fogel. 2002. The Emergence of Private Authority in Global Governance. In *The Emergence of*

- Private Authority in Global Governance, edited by R. B. Hall and T. J. Biersteker. Cambridge: Cambridge University Press.
- Maine Audubon Society. 2001. Maine Audubon Takes Position on 2000 Forestry Referendum [Internet]. Maine Audubon Society, October 12, 2000 [cited January 21, 2001].
- Maine Forest Service. 1998. Timber Supply Outlook for Maine: 1995-2045. Augusta: Department of Conservation.
- 2000. Report of the 1999 Annual Inventory of Maine's Forests. Augusta, Maine.
- Maine State Legislature. 1998. (Maine Legislature) Joint Resolution Encouraging the Development of a Sustainable Forestry Initiative. SP 866.
- McNulty et al., John. 2000-2001. The Influence of Eco-Labeling on Forest Sustainability: A Legislative Review of Maine Public Policy and Industry's Response. Bangor, ME.
- Meidinger, Errol. 1997. Look Who's Making the Rules: International Environmental Standard Setting by Non-Governmental Organizations. Human Ecology Review 4 (1):52-54.
- Meidinger, Errol E. 2000. Incorporating Environmental Certification Systems in North American Legal Systems. Buffalo: University of Buffalo.
- —. 2001. Environmental Law for Global Civil Society: the Forest Certification Prototype. Paper read at Paper prepared for the Conference on Social and Political Dimensions of Forest Certification, June 20-22, at Freiburg, Germany.
- Miller, Paul. 2000. White Pine Thinning: Would Question #2 Impact Small Woodland Owners? SWOAM News 25 (8):8-9.
- Moffat, Andrea C. 1998. Forest Certification: An Examination of the Comptability of the Canadian Standards Association and Forest Stewardship Council Systems in the Maritime Region. MES, Environmental Studies, Dalhousie University, Halifax, Nova Scotia.

- Natural Resources Council of Maine. 2001. The Legislature Has Refused to Protect Maine's Forests [Internet]. NRCM, January 9, 2001 [cited February 27, 2001]. Available from http://www.maineenvironment.org/nwoods/rejected-bills.htm.
- Newsom, Deanna, Benjamin Cashore, Graeme Auld, and Jim Granskog. 2002 In Press. Forest Certification in the Heart of Dixie: A Survey Of Alabama Landowners. In Forest Policy for Private Forestry: Global and Regional Challenges, edited by L. Teeter, B. Cashore and D. Zhang. Wallingford, UK: CABI Publishing.
- Prakash, Assem. 1999. A New-Institutional Perspective on ISO 14000 and Responsible Care. Business Strategy and the Environment 8:322-35.
- —. 2001. Greening of the Firm.
- Restino, Charles. 2000. J.D. Irving Biocide Use. Ottawa.
- Romano, Jeffrey. 2000. Are Maine Forests Being Cut Two to Three Times Faster than They are Growing Back? SWOAM News 25 (9):6-7.
- Sabatier, Paul, ed. 1999. An Advocacy Coalition Lens on Environmental Policy. Cambridge, Mass: MIT Press.
- Salaman, Lester M. 2002. Introduction. In The Tools of Government: A Guide to the New Governance. New York: Oxford University Press.
- Sandberg, L. Anders, and Peter Clancy. 2000. Against the Grain: Foresters and Politics in Nova Scotia. Vancouver: University of British Columbia Press.
- Sasser, Erika N. 2002. The Certification Solution: NGO Promotion of Private, Voluntary Self-Regulation. Paper prepared for presentation to the 74th Annual Meeting of the Canadian Political Science Association, May 29-31, 2002, at Toronto, Ontario.

- —. In Press 2002. Gaining Leverage: NGO Influence on Certification Institutions in the Forest Products Sector. In Forest Policy for Private Forestry, edited by L. Teeter, B. Cashore and D. Zhang. Oxon, UK: CAB International.
- Seattle Post-Intelligence Staff. 2000. Starbucks, Tully's offer fair trade, organic coffee Starbucks, Tully's offer fair trade, organic coffee. Seattle Post-Intelligence, August 15.
- Sierra Club of Canada. 1999. Appeal of the Black Brook District Forest Stewardship Council Certification (Draft).
- —. 2000. Media Release: Forest Stewardship Council Finds J. D. Irving, Ltd. Pesticide Use Violation of Standards: Evidence Confirms Sierra Club of Canada Concerns over Black Brook Certification Process [Internet]. Sierra Club of Canada, January 21 2000 [cited December 10 2000].
- The Forestry Source. 2000. Maine Facing Another Forestry Referendum. The Forestry Source 5 (10):1, 9.
- Transfair USA. 2000. Starbucks Coffee Company Brings Fair Trade Certified Coffee to Retail Stores Through TransFair USA Alliance. Seattle/Oakland California: TransFair USA.
- Vertinsky, Ilan B., and Charlene Zietsma. 1998. Corporate Greening and Environmental Protection Performance: Static and Dynamic Analysis. Vancouver: Faculty of Commerce and Business Administration.
- Vlosky, R. P. 2000. Certification: Perceptions of Non-Industrial Private Forestland Owners in Louisiana. Baton Rouge, LA, USA: Louisiana State University Agricultural Center.
- Young, Susan. 2000. Forestry referendum rejected for 3rd time [Internet]. Bangor Daily News, November 8, 2000 [cited November 9, 2000].
- Zietsma, Charlene, and Ilan B. Vertinsky. 1999-2001. Shades of Green: Cognitive Framing and the Dynamics of Corporate Environmental Response. *Journal of Business Administration and Policy Analysis* 27-29:217-247.