Finding Uncommon Ground: Sustainable Development Conflicts in the Northern Forest of New England and New York

by Robert B. Beattie

B.S. Communication Arts University of Wisconsin—Madison, 1981

M.S. Environmental Science State University of New York, College of Environmental Science and Forestry, 1987

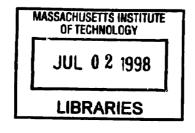
Submitted to the Department of Urban Studies and Planning in Partial Fulfillment of the Requirements for the Degree of

Doctor of Philosophy at the Massachusetts Institute of Technology June 1998

©1998 Robert B. Beattie. All rights reserved.

The author hereby grants to MIT permission to reproduce and to distribute publicly paper and electronic copies of this thesis document in whole or in part

Signature of Author:	
	Department of Urban Studies and Planning
	May 26, 1998
Certified by:	<u></u>
, <u> </u>	Lawrence E. Susskind
	Ford Professor of Urban and Environmental Planning
	Thesis Supervisor
Accepted by:	
1 ,	Frank Levy
	Daniel Ross Professor of Urban Economics
	Chair, Ph.D. Committee





Finding Uncommon Ground: Sustainable Development Conflicts in the Northern Forest of New England and New York

by Robert B. Beattie

Submitted to the Department of Urban Studies and Planning on May 18, 1998 in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy in Urban and Regional Planning

ABSTRACT

Discussions of sustainability in U.S. planning practice tend to focus on improving economic efficiency and minimizing environmental impacts of development. The political and philosophical elements of sustainability, emphasized in planning literature, are seldom adequately addressed. This dissertation examines these aspects of sustainability through a case study of the Northern Forest Lands Council (NFLC), a regional natural resources planning body formed by the governors of Maine, New Hampshire, Vermont, and New York to preserve and enhance the forest-based economy and ecology of these states' forests. I analyze both the technical reports and public involvement efforts of the NFLC and discuss how it dealt with conflicts in which knowledge, interests, values, and power were contested.

Conflicts in these four areas can be anticipated by planners when they undertake politically transformative, information intensive projects such as promoting sustainable development. After a four-year planning process, the NFLC made modest recommendations (on public and private land stewardship, taxes, public land acquisition, forest management, and other issues) that were responsive to some public concerns, but left many deep regional conflicts unaddressed. In particular, the Council did not productively engage conflicts over values (the moral and ontological aspects of sustainable development) and power (access to, and participation in policy decisionmaking).

The dissertation concludes by suggesting improvements to planning practice that may help planners go farther in engaging such conflicts. By making more extensive use of well-known dispute resolution techniques, and by properly sequencing the management of these four types of conflicts, planners can improve sustainable development planning efforts. Because sustainable development is a normative goal, planners should first initiate a dialogue about values, searching for understanding and empathy among disputing stakeholders who may have fundamentally opposed world views. Power conflicts, competing efforts to acquire and influence decisionmaking authority, should be addressed next to set the stage

for equitable stakeholder involvement. Interest conflicts among stakeholder groups can then begin, perhaps using facilitated negotiations. Once such a discussion is engaged, disputing parties can begin to resolve knowledge conflicts by jointly developing the information and analyses needed for sustainable development planning.

Thesis Supervisor: Lawrence Susskind

Title: Ford Professor of Urban and Environmental Planning

Acknowledgments

Writing a dissertation is a somewhat isolating process, yet one that cannot be completed alone. I would like to thank all of the people who have provided me with intellectual or emotional support during the course of my research and writing.

I first want to thank my committee—Larry Susskind, Lang Keyes, and Paul Levy—who provided me with comments that challenged me to both broaden my reach and tighten my focus.

The gracious members of the NFLC tolerated hours of questions and interviews. Without their forbearance and insights, this dissertation would not exist.

A series of writing groups with fellow Ph.D. candidates and professors at MIT's Dept. of Urban Studies and Planning gave me wonderful tools for examining and evaluating the written word. My thanks go to Jean Riesman, Kristina Hill, Dave Thatcher, and Mark Rossi for their time and wisdom.

Outside of MIT I had intellectual and emotional help from amazing and tolerant friends including Matthew Ireland, Dana Laird, and Charles Murn. I would particularly like to thank Matt for reading and discussing the entire dissertation twice!

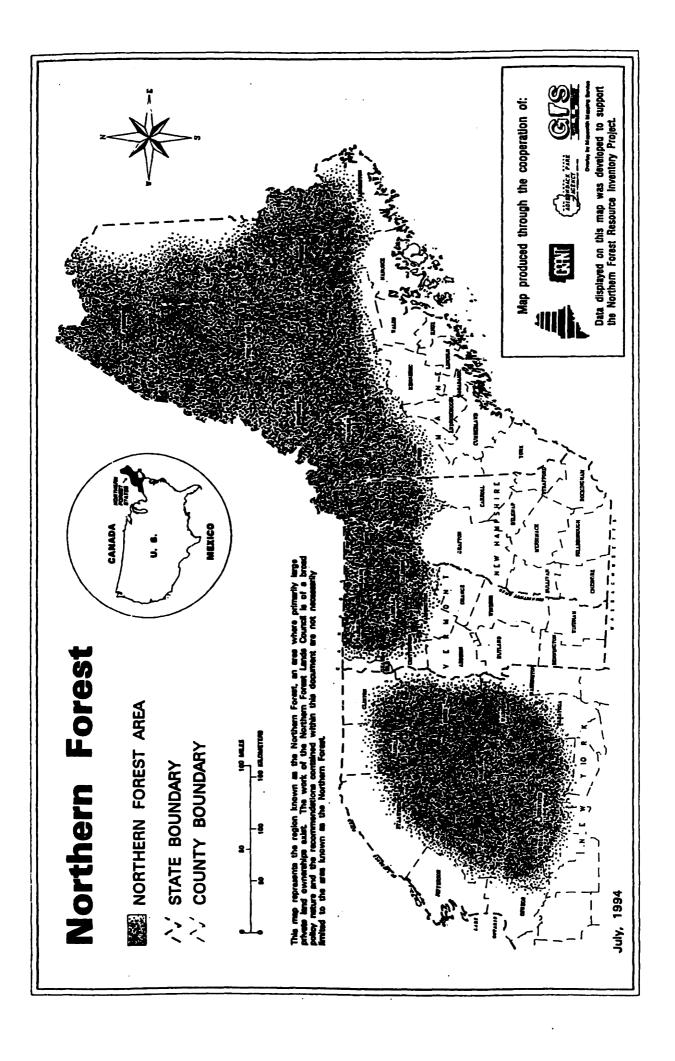
Finally, I would like to thank my family: my parents Diana M. Dieterich and C. Bruce Beattie for their years of supportive understanding and, particularly, Amy L. Laing, my partner and confidant, who kept my heart and head connected and operating through it all!

Thank you everyone—including those friends, acquaintances, and colleagues whom I haven't mentioned by name! The words of the dissertation may be mine, but you all made them possible.

Rob Beattie, May 22, 1998

CONTENTS

Abstract	3
Acknowledgments	5
Map of the Northern Forest	
1. Introduction	9
2. Understanding Conflicts in Sustainable Development	13
3. A History of the Northern Forest Lands Council	57
4. Knowledge Conflicts	85
5. Interest Conflicts	109
6. Value Conflicts	137
7. Power Conflicts	159
8. Conclusion	195
Appendix: NFLC Members	221
Bibliography	223



Chapter 1 Introduction

The problem of sustainable development

Sustainable development may be a desirable goal, but it is also somewhat utopian. As defined by its most ardent proponents, sustainable development suggests that we can achieve economic progress while improving the environment, promoting democracy, and building an equitable society¹. Needless to say, this is a tall order. Sustainable development is a political goal, not just a set of technical considerations.

Because sustainable development is principally a political issue, one would expect much of the literature on sustainable development to focus on the political forces that account for unsustainable development decisions. Some sustainable development proponents—particularly those concerned with developing countries—do emphasize the ways that unsustainable practices are the result of political decisions to allocate economic gains and losses across society. These writers suggest that the byproducts of international trading regimes and local social relations are unbalanced with regards to the various dimensions of sustainability (Archibugi and Nijkamp 1989; Hecht and Cockburn 1989; Redclift 1987).

Although the literature on sustainable development is reasonably well known among planners and academics in the United States, very little of this thinking has percolated through to sustainable development policy and planning. In the domestic political arena, a fascination with market-based solutions to everything has tended to de-emphasize the moral and philosophical considerations that drive sustainable development proponents elsewhere in the world. These issues are still present in the US, even though they have not received widespread attention. Our failure to deal with them within the realm of political discourse may create significant difficulties as we attempt to align U.S. policies and practices with those of the rest of the world.

Domestic proponents of sustainability in the United States, exemplified by the President's Council on Sustainability, are concerned primarily with technique and technology. These advocates have a strong faith in the power of scientific

¹ These elements of sustainable development come from (Gardner 1989). Sustainability will be more completely defined and discussed in the next chapter.

knowledge and research. By documenting the environmentally damaging effects of past development they hope to demonstrate that there must be a better way to undertake more sustainable economic development. Success stories about the economic and environmental gains achieved through improvements in industrial processes or regulatory structures are touted as proof that sustainability is within our grasp (President's Council on Sustainable Development 1996). This kind of cheerleading assumes that unsustainability is principally a result of inadequate and/or incorrect knowledge. How unsustainable development occurs and is maintained in the face of that knowledge is, apparently, unimportant to these analysts. This dissertation attempts to correct that bias by discussing in more political terms the rise of certain conflicts that prevent us from achieving sustainable development.

My case study offers an example of resource management planning in the United States that failed to achieve the goal of sustainability. In some ways the Northern Forest Lands Council (NFLC) process was a unique planning exercise. It was regional as opposed to local or state-based. It explicitly considered the environment and the economy together. And it initiated a dialogue about issues that engaged a broad cross section of the region's population. Despite these attributes, the process was stymied by political and philosophical conflicts that are all too common to American planning efforts. By examining these conflicts we can understand why planning for sustainable development needs to be structured differently.

Hypothesis

I argue that all efforts to promote sustainable development inevitably provoke political conflicts. Although many of these conflicts extend beyond their control, planners must still respond to them effectively if they are to move the quest for sustainability forward. This dissertation suggests that the conflicts generated by efforts to plan for sustainable development, in conjunction with the practical constraints on planners' actions, create enormous obstacles that are very difficult to overcome. My analysis considers the use and sequencing of various conflict management techniques as tools to help move the quest for sustainable development forward.

Sustainable development seeks to provide for human needs while at the same time preserving ecological integrity. The Northern Forest Lands Council (NFLC), a large, federally-funded planning process created to evaluate land use in the Northern Forest of New England and New York during the early 1990s, mirrored

these goals explicitly. The Council sought to "Enhanc[e] the quality of life for local residents..." and to "Protect[...] recreational, wildlife, scenic, and wildland resources" (Northern Forest Lands Council 1994b, inside cover). Sustainable development also seeks to promote equity and self-determination. The Council's extensive public involvement process, which included state- and issue-level citizen advisory committees and hundreds of public meetings, kept fairness questions before the Council. Both the planing process and the Council's recommendations asserted the region's need to solve its own problems. The work of the NFLC is, thus, a good example of sustainable development planning — it provides an ideal setting in which to explore the dynamics of sustainability, and to understand the conflicts which make it so hard to achieve.

This dissertation looks closely at a planning process in which knowledge, interests, values, and power were contested. By parsing these conflicts, and the NFLC's reactions to them, I seek to understand why attempts to plan for sustainable development in the U.S. are so difficult and to suggest ways in which planners might be more effective in the future. While the four types of conflicts I describe are well known in the planning field, they are seldom considered together when analyzing the outcome of a planning process. Showing how these conflicts interlock helps to explain their potency.

Methodology/Organization of the study

In-depth case studies are particularly useful for developing explanatory theories (Yin 1984). In this case, I offer a theory of sustainable development planning that assumes the need to manage political conflicts very carefully. By viewing sustainability through the lens of interrelated political conflicts, I explain why such planning efforts are often so intractable and suggest ways they might be improved.

My presentation is broken into four parts. Chapter 2 offers a definition of sustainable development. I try to show that sustainable development, by its nature, generates four types of inter-connected conflicts involving knowledge, interests, values, and power. Drawing on literature from political science, dispute resolution, and planning, I demonstrate how planners and policymakers have conceived of and dealt with these conflicts. I show that these types conflicts are well documented and discuss how they should be connected in discussions of sustainable development. While all four types of conflict can occur simultaneously, successful sustainable

development requires planners to acknowledge and address each of them somewhat differently.

Chapter 3 begins with an overview of the region and highlights some past conflicts over sustainability. I then present a history of my case study, which takes place in the 26 million-acre Northern Forest region of New England and New York. I review the work of the Northern Forest Lands Council, a multi-state planning body funded by Congress and set up by the affected states to recommend techniques for preserving and enhancing the economy and ecology of the Northern Forest. The Council produced recommendations about biodiversity, land taxation, forest management, federal taxes, public land acquisition, and other issues which, taken together, constitute an attempt at formulating a sustainable path for the region's development. This chapter describes the origins of the NFLC's planning process and introduces some of the stakeholders and conflicts that shaped the Council's final report.

The third section, encompassing Chapters 4 through 7, examines the NFLC's work in greater detail and discusses the Council's experience with the four categories of conflict identified in the first section. Using interviews with the planners on the NFLC, a review of the NFLC's technical documents, a close reading of the Council's extensive public involvement record, and various stakeholder publications, I reveal how planners perceived and responded to different types of conflicts. In separate chapters I analyze knowledge, interests, values, and power conflicts, showing how the planners responses were affected by the interplay among types of conflict. In each chapter I also discuss how this interplay can hinder the search for sustainable development.

The fourth and final section of the dissertation summarizes the findings of my analysis of the various conflicts and then concludes with recommendations that arise from this case study.

Chapter 2

Understanding Conflicts in Sustainable Development

Introduction

The Northern Forest Lands Council (NFLC) — a body formed by the governors of Maine, New Hampshire, Vermont and New York in 1990 and funded mostly by the federal government — was involved in sustainable development planning. Through its studies of the ecology and economy of the Northern Forest¹, the NFLC provided information about the complex realities of the region. Its operating principles and mission statement both stated that the NFLC would critically examine the natural, economic and social processes at work in the Northern Forest so that the region's environments and "way of life" could be preserved and enhanced(Northern Forest Lands Council 1993a; Northern Forest Lands Council 1994b).

While the next chapter will provide details about the history and work of the NFLC, this chapter explores some theoretical questions about planning for sustainable development. Although there are deep and important disputes about the precise meaning of sustainable development, common themes run through most definitions. In this chapter I argue that sustainable development efforts will inevitably generate several types of conflicts because such efforts challenge entrenched unsustainable development practices. There are four types of conflict in particular that deserve careful consideration: conflicts over knowledge, interest conflicts, value conflicts, and power conflicts. These are deeply intertwined, and their complex interactions create formidable obstacles to achieving sustainability

Sustainable Development

While some environmentalists believe that economic growth is a major cause of environmental problems, others have long battled the notion that there is any inevitable conflict between maintenance of the economy and protection of the environment. Early conservationists in the U.S., such as Teddy Roosevelt and his Forest Service chief Gifford Pinchot, believed economic growth and environmental protection could go

¹ The Northern Forest is a 26 million-acre area encompassing the northern two-thirds of Maine, the northernmost counties of New Hampshire, the Northeast Kingdom of Vermont, and the Adirondack Park and Tug Hill regions of New York. See map on page 6.

hand-in-hand with the "wise use"² and careful maintenance of the economically productive aspects of the environment. Others, inspired by Henry David Thoreau and John Muir (a contemporary of Pinchot), viewed nature as a public good in-and-of itself, valued for its spiritual and aesthetic qualities. They sought to preserve key wilderness areas from economic development.

When *The Limits to Growth* was published in 1972 it rekindled this debate between conservation and preservation because it focused renewed attention on the links between environmental problems and economic growth. According to its authors, growth was the problem, and the solution was obvious - "because our environment—the earth—is finite, growth of human population and industrialization cannot continue indefinitely" (Randers and Meadows 1973, p. 283).

These discussions about a seeming conflict between economic growth and environmental protection occurred in the 1970s and 1980s while critics of western-sponsored development were attacking the disruptive effects of prevailing development practices in developing countries. Critics in the US and abroad saw that environmentalism tied to a no-growth philosophy could become a shallow attempt to preserve a pristine space for the use of wealthy individuals, corporations, and countries while denying the fruits of economic development to the poor (Gorz 1980; Illich 1973; O'Riordan 1981). Concerned with this possibility, development critics and environmentalists tried to reconcile environmental concerns with global human needs. For these groups, the question was not characterized as one of growth vs. no-growth, but one of environmental sensitivity vs. environmental ignorance in economic development. This idea—that economic development and environmental preservation are compatible—has been captured in the phrase sustainable development³.

Between October 1984 and April 1987, the World Commission on Environment and Development (WCED), established by the Secretary-General of the United Nations, worked to develop a global agenda that would integrate environmental concerns into development theory and practice. WCED's report, entitled *Our Common Future*, defined sustainable development as that which "meets the needs of the present without

² Groups currently opposed to many environmental regulations in the United States call themselves the "wise use" movement as a tactical and explicit reference to Pinchot's view of conservation (Yaffee 1994, p. 313).

³ The controversy about growth itself has not disappeared, but does not seem to be at the center of the international debate over sustainable development, and will not be addressed in detail in this paper. Interested readers are referred to Rees (1990), or Daly's *Steady-State Economics* (1991) for an explication of the distinction between growth and development.

compromising the ability of future generations to meet their own needs" (World Commission on Environment and Development 1987, p. 9). The report's authors explained that sustainable development is "...not a fixed state of harmony, but rather a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development and institutional change are made consistent with future, as well as present needs" (World Commission on Environment and Development 1987, p. 9).

Since *Our Common Future* was released a vast literature debating the meaning, measurement, implementation, and political implications of sustainable development has emerged and the indictment of conventional development practices has continued⁴. The environmental and social problems caused by such development are well documented. Concerns about the earth's carrying capacity (Cohen 1995), the loss of global biodiversity (Quammen 1996; Wilson 1992), or the ubiquity of human impacts on the environment (McKibben 1989), all remind us of the connection between environment and development. Popular and academic attention to these issues continues to fuel discussions of the need for a more sustainable approach to development (Milbraith 1989; Reid 1995; World Commission on Environment and Development 1987).

Some writers, however, are quite critical of sustainability itself, arguing that the idea of sustainable development is so hopelessly muddled and open to interpretation that it can be used to justify development agendas that unfairly concentrate wealth and exploit local populations even as it protects certain aspects of the environment (Redclift 1987). These criticisms are an important warning to environmental planners who wish to define and promote a progressive⁵ sustainable development agenda. In essence, the current criticisms of sustainability still contain some of the tension of the old environment versus development debate.

People who want to promote sustainable development, therefore, are wading into an area of policymaking distinguished by numerous tensions. The idea of sustainable development invokes both ongoing disputes about the causes and significance of human environmental impacts and long-standing disagreements about the goals of economic development.

⁵ See note 6, infra.

⁴ For an eclectic sampling of this literature see for example, (Alperovitz 1995; Bidwell 1993; Buell and DeLuca 1996; Daly 1991; Gardner 1989; Milbraith 1989; Munro 1995; Norgaard 1992; O'Riordan 1981; Pearce et al. 1989; Pearce et al. 1993; Redclift 1987; Rees 1990; Reid 1995; Smith 1993; Trzyna and Osborn 1995; World Commission on Environment and Development 1987).

Defining Sustainability

To achieve sustainable development we need a starting point—a definition with components that are factually and normatively defensible. Where do we find examples of such a definition for sustainable development? Gardner (1989) concludes that most modern visions of sustainability contain both substantive and procedural features.

The substantive elements of sustainability suggest which aspects of the human and natural environment should be sustained. Gardner's substantive principles are: meeting human needs, preserving ecological integrity, promoting equity, and providing for self-determination and cultural diversity. These are normative objectives informed by our constantly varying understanding of and judgements about the environment, the economy, and stakeholders in the planning process.

Gardner sketches procedural elements as well (i.e., analytical processes used to plan and manage for sustainability). Procedurally, Gardner believes that sustainable development proponents want planning that is: goal seeking, relational or systems oriented, adaptive, and interactive/participatory. Gardner set out to demonstrate that efforts to implement sustainable development have successfully put the procedural aspects of sustainability into practice. She shows that the substantive elements of sustainability—which require hard-nosed measurement, ethical judgement, and farranging political debate—have not been embraced as enthusiastically (Gardner 1989).

Reid (1995) examines what he sees as the environment/development crisis and concludes that there is significant evidence of a need for a new form of development that is more respectful of both the environment and human needs. He sums up the "essential characteristics" of sustainable development:

- integration of conservation and development
- satisfaction of basic human needs
- opportunities to fulfill other non-material human needs
- progress towards equity and social justice
- respect and support for cultural diversity
- provision for social self-determination and the nurturing of self-reliance, and the
- maintenance of ecological integrity. (Reid 1995, p. 231)

Both Reid and Gardner generally agree about the substantive elements of sustainable development. They speak of human needs, promoting self-determination, integrating ecology and development, and promoting and preserving equity and

diversity. This form of what I would term progressive⁶ sustainable development is explicitly political, because it requires one to debate and define contested concepts such as "human needs," "diversity," and "equity." If we are to stay true to this notion of sustainable development, these terms can only be defined through some kind of democratic process that engages the hopes, desires, and biases of the people affected by development proposals.

There have been efforts in the United States to operationalize general concepts of sustainability. For example, a five-year volunteer effort in Seattle, Washington produced a list of indicators of sustainability that were, according to its proponents, understandable, measurable, inter-related and widely accepted among program participants. For this Seattle group, indicators of sustainability included issues such as voter participation, vehicle miles traveled by Seattle residents, the health of wild salmon stocks, and local poverty levels. Developing these indicators took so long because different groups had different ideas about how to measure sustainability and how to rank the multiple objectives that sustainable development puts forward. A facilitated decision process helped participants to reach agreement while broad participation and commitment allowed the group to survive the inevitable burn-out that can accompany a multi-year volunteer effort (Atkisson 1996).

Indicators are an important step towards operationalizing the notion of sustainability. They have much in common with performance standards in environmental regulation⁷ and share some of the same pitfalls. Like performance

⁶ I use the word "progressive" to describe the particular definition of sustainable development discussed in this dissertation. The term has been used by several planning authors (Clavel 1986; Forester 1987; Friedmann 1987; Friedmann 1992) to refer to planning that "calls into question the structural relations of nondemocratic control of capital and investment" (Forester 1989, p. 213 n. 4). Progressive planners generally have an explicit concern for public participation in development and for equitable distribution of the benefits of development. This approach is quite compatible with the definitions of sustainable development used in this dissertation: definitions which call for both meeting human needs, enhancing local democratic control during development, and promoting equity. These concerns distinguish progressives from those who view sustainable development as simply minimizing environmental harm by maximizing the material and energy efficiency of the economy. Forester distinguishes progressive planners from: technicians, who see planning as technical problem-solving; incrementalists, who see planning as bureaucratic and organizational networking; liberal-advocates, who try to promote the interests of historically under-represented planning clients; and the structuralists, who suggest that planners are so embedded in an inequitable economy that they cannot really do anything other than legitimize existing systems of ownership and control (Forester 1989, pp. 29-31). Progressive approaches to planning combine an awareness of the limiting consequences of social structure with a commitment to identifying and serving the needs of stakeholders who are under-represented in most planning efforts. Regulatory agencies use performance standards as benchmarks for evaluating compliance with some environmental laws. The standards are often proxies for the environmental benefit that the regulation seeks. For example, a developer may be told that only a certain percentage of the area of her

standards, sustainability indicators identify characteristics of the social or natural environment that must be monitored. Clear measurements of current conditions and desired progress must be developed. For example, the Sustainable Seattle group issues annual reports which indicate whether the "sustainability trend" on a particular indicator is neutral, favorable, or unfavorable.

Indicators are benchmarks and do not, by themselves, suggest the best way to solve any problems they might document. In the Seattle case, there was almost unanimous agreement that the health of the wild Salmon stock in nearby rivers was an important indicator of sustainability (Atkisson 1996). But salmon population decline has multiple causes, including logging near stream beds, federal energy policy, agricultural practices, overfishing, and expanding human settlements (Lee 1993). Consensus on a wild salmon population benchmark does not, however, lead to agreement on which, if any, of the multiple known causes of wild salmon population decline deserve attention, much less what relative weight to give to each cause. Sustainability indicators are useful as a public accounting mechanism to document our success or failure at moving towards a more sustainable future. To move from indicators to action, however, proponents of sustainability need some form of planning.

The Northern Forest Lands Council's process did not try to develop clear indicators of sustainability. While it might have been a good idea (it certainly would have allowed the public to monitor progress towards the goal of sustainability), the NFLC instead put forward a broad vision that sought to preserve the region's "way of life" while attempting to reverse threats to the region's economy and ecology.

I will use the NFLC's work to show how an effort to promote sustainability was contested and debated in a particular planning and policy making process. In the U.S. the meaning and implementation of broad proposals (like sustainable development) are usually decided in fragmented, multi-level policy-making situations. In such situations, individuals and institutions can be expected to try to influence and sometimes pervert the meaning of sustainable development as they vie for decisionmaking power or try to serve their differing interests and values. As Stone (1988) points out, many of the most important concepts in political discussions are fundamentally contested because they support multiple and sometimes contradictory interpretations. It is the arguments about the concepts, rather than some perfect *a priori* definition of them, that creates their

development can be impermeable. The goal of such a standard may be to reduce runoff or promote groundwater recharge, but the performance standard measures impermeable surfaces because there is a causal link between them and the desired environmental outcomes.

meaning and usefulness. Sustainable development may be a disputed concept, but the political and social process of defining sustainability will determine its usefulness as a guide for human action. The work of the NFLC is an example of an attempt to put sustainable development into practice: it is also an example of how such a concept becomes defined.

Planners and Policymakers

"Planning is the guidance of future action" (Forester 1989, p. 3). This dissertation regularly refers to the actions of planners and policymakers. For my purposes, planners are the individuals whose work guides future action. Usually marshaling knowledge, law, and judgment to accomplish their task, planners attempt to explain problems, craft solutions, and justify certain courses of action. Although planners can be found in government, the private sector, non-profit organizations, or among the general public, this analysis is principally concerned with planners who are working for or with the government to guide action on issues of public concern.

Planning as a formal discipline in the United States is tied to Reform-era visions of rational control over the messy reality of urban form and function. There is thus a strong undercurrent of scientism within planning, despite the fact that years of research into policy making has shown the limits of a strictly scientific and rational model for such work (Baum 1996). The legal requirement that government decisions must not be arbitrary or capricious sets a certain standard of analysis for many government-sponsored planning efforts. Even in informal, voluntary planning processes like the NFLC's where there are no legal standards that had to be met⁸, planning often adheres to a formula of scoping, research, the analysis of alternatives, and the description and justification of preferred courses of action. Because of this, planners can best be thought of as individuals who "guid[e] action by knowledge" (Baum 1996, p. 134).

Planners have many different types of responsibilities. Some may have the authority to act on their own (either as an elected official or as an administrator). Others serve only as advisors to those with decisionmaking authority whose work stands or falls on the quality of information and reasoning. In the case of the NFLC, the planners were individuals appointed by governors to do a particular job: identify recommendations that would preserve and enhance the Northern Forest region's economy and ecology. Some of them had no experience with government work, while others were bureaucrats who already worked within state agencies.

⁸ The history of the NFLC is discussed in detail in Chapter 3.

Fleshing out the general ideals of sustainable development requires the participation of a region's citizens, governments, and institutions. Putting those ideas together into a coherent package for government action requires planners. The work of those planners is at the heart of this analysis. As the issues embodied in the idea of sustainability are discussed, controversies about those issues and ideas will also become part of the discussion. Planners and policy-makers who want to promote sustainable development—consistent with the definitions of Gardner, Reid, and others—need to understand these conflicts. There are specific types of conflicts that they can expect to confront as the planning process proceeds.

Conflicts in Sustainable Development

Imagine a simple controversy over sustainability involving a small lake whose relatively pristine shoreline is divided evenly between two private owners and a town park. One owner runs a children's camp during the summer and a cross-country ski center during the winter. The other hopes to build a small commercial development with a marina, gas station, and restaurant along the shoreline. The town wants to maintain the park for use by residents. Because it sponsors a summer fishing contest that attracts many tourists, the town also wants to protect the lake's water quality.

Such a situation poses a typical development problem. To discover how such a problem relates to sustainability, we need to ask questions that probe deeper into the link between the local economy and ecology. What is the current status of the lake's ecosystem? What is the current status of the town's economy? How are the two tied together? How will the proposed development affect the local economy and ecosystem? Who will benefit from the development? Who, if anyone, will lose? How will those benefits and costs be distributed over time? Can the town say "no" to the gas station in order to protect the lake from the disastrous effects of a hypothetical leaking tank or spill? Should the developer (if unconstrained by legal regulations) simply build what she wants, regardless of the impacts? Should the owner of the children's camp have any say in the matter? And to paraphrase Dr. Seuss' Lorax, who will speak for the trees (or trout)? Of course these questions, and many more, are inevitable in such a situation. Each question has the potential to generate controversy as different parties, bringing different beliefs and understandings to the table, seek to define sustainability in this particular situation.

At first glance sustainable development might seem to promote an inchoate mass of questions. But unpacking these conflicts is a first step towards understanding its

dynamics. I believe there are four categories of conflict which, while they obviously overlap and interact, provide a relatively complete picture of the types of conflicts that are likely to arise in these discussions about sustainable development. They are knowledge conflicts, interest conflicts, value conflicts, and power conflicts.

These conflicts arise because of the broad range of issues upon which a quest for sustainable development touches. Knowledge conflicts arise because sustainable development proposals must be based on an in-depth understanding of human and environmental conditions. Fields of knowledge needed to explore these conditions (e.g., ecology, economics, forestry, etc.), like all areas of human knowledge, have data gaps, incomplete explanatory theories, and internal inconsistencies that become more apparent and important when they are used to inform a public policy debate. Interest and value conflicts arise because sustainable development purports to satisfy human needs, equity, and justice, concepts that are at the heart of most political and ethical debates. These conflicts over the use and distribution of resources, and the "rights and wrongs" of actions are charged with symbolic meanings that are constantly being debated and disputed in the polis (Stone 1988). Power conflicts, revolving around the relative guidance and control institutions or individuals exercise over development decisionmaking, also accompany any effort to promote sustainability.

Sustainable development is <u>not</u> uniquely susceptible to these different types of conflict. These conflicts are present in almost any planning endeavor. They become increasingly important and intractable, however, as the scale of planning increases, and as the objectives of planning broaden. The quest for <u>sustainable</u> development acknowledges connections between economics, equity, and the environment in a way that most planning efforts do not. It promotes a particular set of environmental values in explicit opposition to mainstream notions of development. Proposals that expressly connect these broad concerns are particularly prone to conflicts between those who benefit from current patterns of development and those who want changes for material or moral reasons. The insights we get from reviewing these conflicts over sustainable development may also help us understand planning conflicts over other large-scale social planning efforts such as regional or state-wide land use planning, large urban redevelopment projects, or international environmental efforts on biodiversity or global warming.

Planners have seen these types of conflicts before. Their dynamics, confirmed by different fields of research, show one indisputable fact: these conflicts can never be

neatly separated⁹. The categories of conflict that I identify and examine in this study are deeply intertwined. Because of this interconnection they are important categories for understanding the progress of sustainable development efforts. They represent 'types' of conflict that savvy policy actors recognize. There is a conventional wisdom about how each conflict occurs and how it can (or cannot) be resolved. Sometimes planners, advocates for different interests, politicians, and citizens will use these categories to explain, justify, and defend their actions or positions in a planning process. Other times they will neglect one or more of these categories and thereby make avoidable mistakes in judgement or action. These categories have a basis in reality: people do hold different values, and interests, we can gain working knowledge about natural systems, and there are differences in power that affect our ability to control our destinies. But the meaning of each of these conflicts is also constructed by participants as they attempt to understand the issues in dispute, cope with new facts, learn from (or ignore) other policy actors, and affect the policy-making process.

The connections among these types of conflicts present opportunities for planners and other actors to recast problems in their search for sustainability. By correctly identifying the conflicts and applying well-understood dispute resolution techniques planners can sometimes make significant headway toward an acceptable outcome. But the connections also represent hidden stumbling blocks which, if ignored, can prevent planners from making progress. For example, public conflicts over sustainability may be rooted in fundamentally different value systems among members of the public. Mistaking such value differences for simple interest disputes could have disastrous results. A market-based solution might be considered appropriate for one type of environmental problem (e.g. to compensate for the public use of private land), but wildly inappropriate for another environmental problem (e.g., to compensate for the deliberate elimination of a particular species). Understanding these distinctions, and the ways that planners respond to them, is a first step towards planning for a more sustainable future.

⁹ Analyses of policy disagreements often show how one form of dispute can merge into another. Stone (1988) emphasizes that this shifting landscape is a feature (and not a bug) in our political system. Many other authors have noted how misunderstandings or mischaracterizations of the problems faced by policy analysts and policy makers can inhibit their ability to move towards policy goals. Shifting the focus of understanding, or the locus of decisionmaking, seem to be among the most common themes in public policy literature. See, for example: (Allison 1971; Altshuler 1965; Bachrach and Botwinick 1992; Lipsky 1980; Lowi 1979; Majone 1988; Mazur 1981; Nelkin 1984; Ozawa 1988; Schwarz and Thompson 1990; Stone 1988; Taylor 1984)

In the sections below I present a definition of each conflict. Using an example from my case study, I show why each type of conflict is inevitable in sustainable development planning. I then discuss what we know about the dynamics of these conflicts, paying particular attention to their interrelationships. By identifying and understanding each type of conflict, planners will be better able to manage them and may even learn to use them to gain valuable insights into sustainable development.

Knowledge Conflicts

Definition and Features

Knowledge conflicts are disagreements about data, facts, or explanatory theories. They often take the form of debates among specialists or experts (e.g. scientists, economists, doctors, etc.) on specific analytical topics. They sometimes occur among members of a broader public who use either the work of experts or their own observations to dispute the observations or explanations of others. One key feature of knowledge conflicts is that they revolve around measurement and analysis of supposedly objective phenomena. Because they claim to be conflicts about the state of the objective world, knowledge conflicts are theoretically resolvable by further research. In the case of debates among scientists and academics, one forum for resolving these debates is the peer-reviewed scholarly literature. In the case of public debates about knowledge, there is no standard forum for resolving disputes, although courts, elected officials, private groups, and planning bodies (such as the NFLC) will sometimes engage in "fact finding" missions which are often characterized as objective and scientific.

Knowledge Conflicts in Sustainable Development

The information provided by scientific and public observation is crucial to any attempt to attain sustainability. Explanatory theories about human impacts on the environment help proponents of sustainable development identify both environmental problems and solutions. Information about job growth, energy use, and changes in the economic system is a crucial part of planning for sustainability. Local understanding of the way the environment is used or misused, conveyed to planners through citizen advisory committees, can be full of historical and biological detail. All of these ways of knowing can contribute to understanding when sustainable development is being promoted.

Knowledge conflicts are an inevitable part of this process. Scientific knowledge is conditional, and open to challenge based on new information or more robust

explanatory theories. Thus, accordingly, knowledge conflicts, as I have described them, are inherent in the scientific enterprise. These conflicts are compounded during sustainable development planning. Public participation in the planning process guarantees that many parties will have an opportunity to contribute information and ideas to the quest. To identify conservation goals, for example, proponents of wildlife protection will need to develop explanatory theories about current threats to biological resources. Those theories in turn will dictate what should be measured to gauge progress. Disagreements can arise over explanatory theories, or measurement techniques, or about the meaning of research results. If the disagreements persist, they can paralyze any attempt to base sustainable development goals on a scientific standard.

To promote a sustainable future for the forests of New England and New York, planners needed information about the prevailing status of the region's environment. The NFLC asked ecologists from academia, state government, and private consulting firms to participate in a discussion of the biological resources of the region. The NFLC soon discovered that there were some disagreements about the status of the region's ecology, but there were even more disagreements about necessary and appropriate courses of action to protect it. All the proponents cited research that supported their particular point of view. Were these disagreements based on unresolved scientific issues? Were they, as some NFLC members thought, merely the result of differing political agendas among the scientists? Understanding knowledge conflicts, and their relationship to other types of conflicts, is critical for any group seeking to promote regional sustainability.

Some things we know about knowledge conflicts

Over the years the use of scientific and technical knowledge has brought many benefits. Even critics of modern industrial society acknowledge as much (Milbraith 1989). Scientific knowledge—acquired through techniques of empirical research which are based on the philosophical tenets of logical positivism—became an important tool for public policy, and particularly for urban planning, during the Reform era at the turn of the century. At that time, zealous reformers—who applied presumptively scientific principles of analysis to the solution of urban problems—joined forces with urban business elites who wanted to regain control of city government from populist ward bosses. These forms of knowledge received a boost after World War II when principles of scientific management gained further adherents (Boyer 1983).

Scientific knowledge gained adherents, at least in part, because it was thought of as an apolitical, neutral way of knowing. The authority of scientific knowledge is an important and accepted tool for policy makers.

By invoking the authoritative canons of scientific reasoning and method, public authorities and others having a stake in technical issues seek to demonstrate the rationality of their position and thereby gain political support and acceptance. (Brickman, p. 108) quoted in (Ozawa 1988, p. 9)

Planners and political scientists recognize the prevalence and importance of scientific disputes in policy making (Mazur 1981; Nelkin 1984). But researchers have noted other issues besides the ubiquity and significance of such disputes. For example, there can be honest disagreements among experts about scientific knowledge, and these disagreements make it hard for policy makers to use experts' knowledge when making decisions. In addition, scientists may agree on the basic science, but disagree on the implications of that science for society. When experts clash, marshaling competing sets of facts against one another, or arguing for different policies based on the same sets of facts, scientific knowledge seems to lose some of its authority and become just another form of argument.

Conflicts within a scientific community can persist for many years because of the nature of scientific inquiry and evidence. Contrary to the public view of science as an objective method of proving causes and effects, the scientific method is primarily a method for testing and <u>disproving</u> theories of cause and effect. Proof, in the lay persons sense of "unequivocal demonstration of truth," is not provided by scientific inquiry. Rather, science provides a range of techniques for testing hypotheses to see if they are false. Science is an inductive enterprise. As supporting data accumulate, explanatory theories are accorded more and more respect and used as the basis for expanded testing and theorizing. Hypotheses that stand up to repeated testing are certainly more likely to be correct and gain a greater and greater number of adherents. Ideally scientists recognize that even their most widely accepted truths are provisional—they are still subject to uncertainty and future refinement.

Within any particular scientific discipline at any given time there will be conflicts among well-intentioned scientists about the meaning and interpretation of scientific evidence and the application of scientific models. These disagreements are largely played out in scientific journals, where specialists argue arcane points about measurement, theory, and technique. McMullin (1987) believes that scientific controversies can either be 1) resolved — with agreement reached by all parties on the

merits of the case; 2) closed — where forces external to the debate, such as state authority or loss of a research grant, terminates the controversy without resolving it; or 3) abandoned — where a controversy may "wither away" without resolution or closure simply because time has passed or interest has waned (McMullin 1987, pp. 77-82).

Given that science is not designed to produce proofs, it is not surprising that scientists often disagree about the interpretation of data. Scientific disagreements are an inevitable part of an ongoing research enterprise, and are a fundamental part of the scientific process. But planners and policy makers must often act before the scientific community comes to a consensus on explanatory theories. And scientific disagreements, while real, may be proxies for interest or value disagreements (Mazur 1981; Nelkin 1984; Ozawa 1988).

Connecting conflicts

Researchers who examine knowledge disputes have pointed out that it is difficult to separate the political implications of a dispute from its factual components. Some (e.g. Mazur, 1981) argue that such a separation is sometimes possible and necessary for policy making. Most others, however, suggest that an intermingling of technical and political factors is inevitable. As Nelkin observed in *Controversy* (1984), although many public controversies rage around technical questions debated in scientific terms, the fundamental issues in such disputes are usually political and value-based. Her statements about science and technology controversies are equally applicable to sustainable development planning.

... controversies over science and technology persist. They continue to develop over competing political, economic and ethical values, reflecting a dialectic between the desire for efficiency and the demands of a democratic technology. The tendency to place a high value on efficiency leads to defining inherently political problems as technical. Yet technical planning limits public choice and threatens the widely held assumption that people should be able to influence decisions which affect their lives. And this assumption has considerable and increasing salience. (Nelkin 1984,p. 22)

Nelkin urges us pay attention to the "competing political, economic, and ethical values" for which scientific disputes often become proxies. Ozawa (1991) agrees, to some extent, when she notes that scientific arguments are used strategically by actors in policy discussions (Ozawa 1991, p. 13). This "advocacy science" is simply a tool by which policy participants attempt to realize their interests and values in a policy dispute. The problem for Ozawa is that scientific knowledge, and the particular authority that it conveys, is expensive to acquire and use, and is less accessible to some

(particularly poor) participants in a policy dispute than it is to others¹⁰. She shows that consensual procedures can help level the playing field and improve decisionmaking in science-intensive policy disputes by improving access to technical knowledge, reducing the likelihood of costly lawsuits, and improving the credibility of scientific knowledge by subjecting it to critical review (Ozawa 1991, pp. 105-122). But she also cautions that participation in consensual processes is "one of a package of tactical options" available to groups involved in a policy dispute, and she acknowledges that some groups will resist participation because it does not serve their political objectives (Ozawa 1991, p. 123). Ozawa, like Nelkin views scientific knowledge as a tool that can be used for the resolution of interest disputes¹¹.

But are all knowledge conflicts merely the result of interest disagreements? The short answer is "no." Value and frame differences 12 among stakeholders result in sharply different ways of developing and interpreting knowledge (Douglas and Wildavsky 1982; Schwarz and Thompson 1990). Stakeholders with differing values are not simply trying to gain a strategic advantage in policymaking through the use of knowledge conflicts. Instead they actually see the world differently: what passes for valid knowledge with one may simply be irrelevant background noise for another. This observation is consistent with the work of Thomas Kuhn (1970) who explained that there is a world of stimuli that everyone (including scientists) can only experience through their limited senses. The route from stimulus to sensation to knowledge is one that requires "elaborate theory," (Kuhn 1970, p. 196). Different observations and different explanations are inevitable even if one makes no assumptions at all about the interests of the scientists or other policy participants involved.

Kuhn also showed that science is not simply a process of incremental change in knowledge. He argued that each scientific discipline is enveloped in a paradigm, a framework of educational indoctrination, experimental design, and explanatory theory, which determines the nature and direction of research. Most "normal science" (Kuhn's phrase) simply solves problems within existing paradigms. Occasionally, with the accumulation of anomalous data, there is a revolution in thinking which causes scientists to gradually embrace a new paradigm, one which offers greater potential for

¹⁰ This has become even more obvious as a result of recent widely-publicized US court cases (e.g., the O.J. Simpson trial), and public policy controversies (e.g., global warming). These heighten concerns about the role of <u>paid</u> experts and probably serve to increase public cynicism about science.

¹¹ Interest conflicts are defined and discussed later in this chapter.

¹² See the section on value conflicts later in this chapter for a full definition and discussion of the differences between values and interests.

future understanding and problem solving. These "scientific revolutions" result not from interest conflicts, but from the accumulation of information which cannot be explained within the existing paradigm.

Finally, Kuhn noted that each successive paradigm is related to the one before it, and that "later scientific theories are better than earlier ones for solving puzzles in the often quite different environments to which they are applied" (Kuhn 1970, p. 206). Each new paradigm creates new puzzles, new opportunities for gaining knowledge, and new knowledge conflicts.

Summary

Conflicts about knowledge are inevitable because of our cognitive limitations, because of the social structures within which we accumulate knowledge, and because of the cumulative character of knowledge. These conflicts are problematic for people attempting to achieve sustainable development. Scientific and technical knowledge about the environment and the economy are essential for developing a meaningful notion of sustainability. Honest disagreements about such information are part of the process of testing and refining explanations of the environment and the economy.

On the other hand, seemingly technical controversies may mask deeper disagreements about values and interests. Research communities dedicated to the resolution of knowledge conflicts are ill equipped to resolve conflicts among differing interests, while planners don't have the time or inclination to delve into the philosophical or technical reasons for knowledge disputes. Actors who are trying to promote a particular point of view or who are opposed to sustainable development have good reasons to try to act strategically and miscast their interest or value conflicts as scientific conflicts. Such efforts at distortion make it particularly difficult for planners to disentangle knowledge disputes from other types of disputes. And since science is a notoriously laborious technique for gathering and evaluating knowledge, strategic efforts to overplay scientific uncertainty can be used to delay a sustainable development planning process. Thus while we know some things about how science gets used and misused, we can not always control the strategic use of science by participants in the planning process.

Interest Conflicts

Definition and Features

Interest conflicts are disagreements among organized groups (including government agencies, businesses, and more traditional interest groups) or individuals about the

appropriate distribution of social costs and benefits. Unlike knowledge, which is explicitly tied to objective features of the world, interests are subjective, supposedly formed by individuals or groups based on their own preferences and experiences. Interest conflicts are thought of as market-like because they represent attempts by groups or individuals to allocate fixed sets of goods. In environmental policy these goods may have monetary value (e.g. lumber from trees) or more intangible worth (e.g. the solitude of the forest). While bargaining and trading are features of markets that sometimes apply to interest conflicts, such conflicts usually don't occur in a market. Instead they take place in various public policy forums such as elections (in which politicians representing different interests compete), legislation (through which laws about public resource allocation are set down), regulatory rulemaking (by which specific and technical methods of implementing public resource legislation are promulgated), and ad hoc policy-making processes such as planning.

Interest Conflicts in Sustainable Development

Policy makers should expect interest conflicts in any attempt to achieve sustainable development. Interest conflicts arise, in part, from competition among different groups attempting to satisfy their self-defined needs. Sustainable development processes are predicated on a definition of human needs, and existing interest groups can be expected to weigh in with their opinions on any such definition. Since a sustainable development planning process will also require some form of public participation (to ensure that it is satisfying the requirement for "self determination" noted in definitions above), many of those interests will be expressed and discussed during the course of planning, particularly if the issues being analyzed become the subject of broad, organized dispute. At the end of the planning process, alternative sustainable development proposals will result in differing resource distributions with different winners and losers.

One of the important issues faced by the Northern Forest Lands Council was the question of public land acquisition: namely, should states in the region increase the amount of publicly-owned land? The interest conflicts attached to these issues were much more complex than might be apparent at first glance. One would expect that environmental groups would generally want greater public land ownership, while large landowners would generally want no additional public land acquisition. During the NFLC process, however, interest-based debates about public land acquisition among environmental groups were a constant threat to the cohesion of environmental coalitions. And the most vocal opponents of public land acquisition were often property rights groups whose membership were not likely to be directly affected by

public land purchases (which would have focused on the large tracts of land owned by the pulp and paper industry).

How should planners respond to complex, and sometimes contradictory expressions of interests by groups involved in a planning process? Clearly the first step is for planners to understand something of the dynamics of interest conflicts.

Some things we know about interest conflicts

Interest group pluralism is the belief that public policy in democratic nations is made by political competition among distinct groups through which people articulate their interests. According to one proponent of this view (Truman 1977), U.S. citizens generally belong to several groups, some of which may have competing interests. Truman believes that the multiple group affiliations held by individuals, and the fact that group memberships overlap, together provide a kind of balance that keeps political debates in the U.S. from being taken over by any one group or faction. Citizens take note of the various issues being supported by the various interest groups, and vote for candidates that support those issues the citizens believe in. The winners in this quest for citizen support get to promote their favorite policies. In this view, public policy results (albeit indirectly) from the competition among interest groups.

In the U.S., discussions of politics are full of references that support this view of how public policy is made. News stories refer to "special interests," "interest groups," and "conflicts of interest" with regularity to explain politicians support for, or opposition to, particular policies. Thus the idea of interest conflicts is an important part of our public discourse on policy matters even before we delve in to the specific issues in dispute.

Interest conflicts easily arise when policymakers' recommendations on issues affect the distribution of costs and benefits in society. Common sense dictates that organized groups and individual citizens have a desire to defend their interests and will focus intently upon these distributional issues when they participate in a policy making process. This common-sense view has been hotly debated among political scientists who want to understand and explain the dynamics of public policy making in democratic societies. Concern with and focus on interest groups arose, at least in part, as a way to explain the relationship between people's interests and democratically-elected government. A classic of early empirical research on the subject suggested that competition among interest groups in New Haven, CT was an important factor in determining who was elected and what policies were implemented in that city. (Dahl

1962). A more recent study of environmental interest groups in the U.S. asserted that "[d]ecisions in the public sector are predominantly the result of a process of group interaction within a framework of accepted capitalist values" (Ingram and Mann 1989, p. 155). But critics of the pluralist view are numerous. Some political science literature, for example, takes issue with the pluralists view that interests are simple individual preferences. This literature (discussed below) highlights the problems of how groups realize and express their interests.

Connecting conflicts

Most people would agree that individuals in a democratic society are the best source of information about their own interests. To suggest that people are incapable of expressing their own interests would seem to undermine the very foundations of democracy. But our personal lives are full of examples where we observe people (and sometimes ourselves) making what we consider to be bad judgements. This casual observation that people can be wrong about their own interests is supported by research in the public policy arena. Crenson (1971) reviewed air pollution politics in Gary, Indiana and East Chicago, Illinois before the advent of national air pollution control legislation. He compared these neighboring towns, one of which had a single large steel mill and a single strong political party, the other having multiple steel mills and no strong party organization. He concluded that the power of the local steel industry in the single-mill town, coupled with the strong party organization, restricted the scope of interest competition among politicians, and therefore prevented the majority of people from realizing their interest (expressed in surveys) in cleaner air. Crenson called this phenomenon the politics of non-decisionmaking.

Going even deeper into the generation of interests and needs, Gaventa (1980), studied an Appalachian valley whose politics had for years been controlled by various outside landowners and companies. Noting the difficulty of imputing interests to people if they are not expressed, he argued that it was logical to expect individuals in this valley to want compensation, safety in the workplace, and democratic participatory rights comparable to those enjoyed in areas not controlled by outsiders. Gaventa showed that a history of domination and violent oppression of dissent had left the population with a strong sense of fatalism about any attempt to develop or articulate their interests. Rather than simply suppressing interests, the forces at play in Gaventa's study had succeeded in subverting their initial creation.

Other political scientists have focused on additional factors that limit the role of interest groups in determining public policy. Some researchers suggested that policy

debates are controlled by a small "power elite" who share common social backgrounds and who control the important institutions of society (Mills 1977). In this view it is the elites, and not competing interest groups, who determine what gets discussed in policy debates.

One type of widely discussed elite bias is that in favor of business. Lindblom (1977), noting that so many publicly important issues (employment, compensation, prices, etc.) are controlled by businesses, concluded that it made sense that governmental representatives would logically be particularly focused on issues affecting business. Although Lindblom is concerned about democratic decisionmaking, he argued that the important question wasn't whether a small number of people make policy decisions in a democracy, because this will be necessary in any large entity like a modern state. Instead the important issue is whether the small decision-making groups are popularly controlled. Businesses are not popularly controlled and Lindblom believes that they keep control of interest debates by using their influence over the economic sphere of human activity to indoctrinate the public, both directly and indirectly, to support business-friendly positions (Lindblom 1977, pp. 203-213).

Other observers of policy-making are interested in the ways that government institutions react to, and help to create, interest groups. When government enacts policies that give bureaucracy broad discretionary powers, interest groups attempt to influence policy directly by shaping the administration of laws by bureaucracies. (Lowi 1979). Instead of creating competition among interest groups which reflects the true aspirations of the public, Lowi believes that this situation creates interest groups that—rather than responding to their members—primarily focus on preserving and promoting themselves. These groups use their close relationship to government bureaucracies to perpetuate themselves, create and maintain privileges, and subvert popular control.

Other researchers focused on city planning have shown that institutions such as bureaucracies or political parties play a role in helping to define a public interest; a set of specific goals that—those within the institution believe—serve society as a whole (Altshuler 1965; Meyerson and Banfield 1964). Because they need to satisfy multiple—often contradictory—outside demands as well as their own internal needs, these institutions end up creating compromise solutions claimed to be in the "public interest." Meyerson and Banfield note, however, that different institutions may put forth competing visions of the public interest and may not understand the institutional and conceptual blinders that constrain their definitions. The broad social efficiency

framework of a planning department contrasts with the local-service emphasis of a city politician, and both planners and politicians can claim, within their conceptual framework, to be working in the public interest while promoting quite different policies.

Institutional definitions of a public interest are not the only way to find compromises when interests are in conflict. Although much literature on public policy and political science refers to competition among self-interested individuals with predetermined interests as the central explanatory feature of political activity, other literature seeks to understand shared interests and cooperative behavior in the policy making process (See, for example, (Gastil 1993; Mansbridge 1983; Mansbridge 1990; Pateman 1970)). This work emphasizes how shared experiences and shared learning can lead people to common definitions of their interests, or to identify their interests with those of the broader public. These analyses show that the reflection and deliberation among individuals can change their view of a situation and can help them build both the competence and commitment to take action on the basis of their interests (Gastil 1993, pp. 15-47). This research confirms the insights and tenets of the dispute resolution field, and may suggest some ways for planners to respond to interest conflicts. Those possible responses will be reviewed at the end of this chapter.

Summary

This is just a short survey of the way that researchers have viewed interest conflicts. There is broad acknowledgment that not all interests can be reconciled, and that interest conflicts are an inevitable feature of democratic politics. This review shows that the classic notion of interest conflict, where independent individuals freely associate with one another to express their opinions on issues of public import, represents a small portion of what actually goes on. Interests are shaped by many factors other than individual preferences and the power of certain institutions in society limit people's ability to act on, express, or even conceive of certain interests. Public institutions often claim to represent a broader public interest, but these claims need to be examined closely because various institutions may define the public interest quite differently. Still the possibility for defining shared interests does exist. For example, individuals working together in small groups have the ability to alter their interests and come to shared understandings of needs—an ability that may allow individuals to counteract distortions of their interests. Where does this leave a planner charged with planning for sustainability?

Proponents of sustainability have reason to be both concerned about interest conflicts and somewhat hopeful about the possibility for interest agreements. Analyses of dispute resolution and small group democracy have shown that civil discussions of interests will often uncover surprising levels of agreement among apparently disputing parties. On the other hand, even the best such forum will occur in the midst of a broader social, political, and economic context which can strongly influence the interests being expressed. Some groups, confronted with the (unwanted) possibility of reaching agreement, may simply choose not to participate in policy discussions about sustainability. Planners have, in the past, claimed to speak for the public interest while failing to be adequately aware of the institutional and social constraints on their own definitions of that public interest. Planners can not take on the impossible task of claiming knowledge of people's "real" interests in sustainability in the face of the distorting influence of economic or organizational power, but neither can they ignore the possibility that citizens are imbedded in a social context that can distort their interests.

Value Conflicts

Definition and Features

Value disputes are disputes about basic rights, moral absolutes and what should and should not be discussed or accepted as evidence in a policy debate. Value conflicts (which negotiation proponents like Susskind and Cruikshank might call "constitutional disputes") are not amenable to the bargaining, logrolling and creative packaging that characterize the successful resolution of interest disputes (Susskind and Cruikshank 1987, p. 17). Values are closely related to frames. Schön and Rein define frames as "the underlying structures of belief, perception, and appreciation" that ground people's policy positions (Schön and Rein 1994, p. 23). Frames are usually unexamined and unseen contributors to how we conceive of policy problems and they "determine what counts as a fact and what arguments are to be taken as relevant and compelling" when discussing a policy issue (Schön and Rein 1994, p. 23). Just as the critics of positivist empiricism have argued that there is no such thing as a value-free, objective position, Schön and Rein explain that there is no such thing as a frame-neutral way of observing the world.

There is no way of perceiving and making sense of social reality except through a frame, for the very task of making sense of complex, information-rich situations requires an operation of selectivity and organization, which is what "framing" means. (Schön and Rein 1994, p. 30)

The differences between values and frames are subtle. The word "values" brings to mind some conscious, normative aspects of a person's world view. Values are the principles which define what an actor believes to be worthwhile or desirable. Schön and Rein's frames, on the other hand, are described as "usually unconscious." They are the blinders and lenses that allow us to pick out details in the midst of the sea of potentially relevant information. Schön and Rein's view of frames is consistent with their explicitly social constructivist goal, one which rejects the idea that there is an objective social world independent of the observers frame (Schön and Rein 1994, p. 30, note 7). Values, as I use the term throughout this dissertation, means both people's conscious, normative choices about what is acceptable for a policy discussion and their deep conceptual frames. Value conflicts can arise in almost any forum where public policy is debated or created.

Value Conflicts in Sustainable Development

Sustainable development explicitly promotes a world view that places the preservation and enhancement of the natural world into consideration alongside the satisfaction of human needs. This is a value stance that draws ethical boundaries around what should and should not be considered in policy disputes over development. For example, discussing economic efficiency without discussing human needs would be inconsistent with the values promoted by sustainability proponents. Sustainable development's promotion of equity, diversity, and democracy will also engage different value frames as participants attempt to debate the appropriate definitions of these notoriously contestable terms. If everyone agreed that environmental protection and human needs were coequal values, then there would be little debate about the desirability of sustainable development. In practice, however, different groups and individuals have frames which allow them to judge sustainability in vastly different ways.

In debates about the Northern Forest, property rights groups were adamant in their opposition to the NFLC, especially to any recommendations which promoted any role for the federal government in the region. A close reading of their comments shows that their world view categorically eliminated the possibility of "good" federal intervention. This value stance was in marked contrast to that of the forest-products industry, the group most likely to be affected by any federal intervention. Although the industry also opposed certain types of federal intervention (e.g.-regulation), it supported other types (e.g.-conservation easements and tax breaks) opposed by the property rights groups. Conflicts over a federal role were negotiable for industry but *not* for the property rights

groups. Can planners charged with regional sustainable development planning achieve their goal without directly opposing or ignoring the absolute value stances of certain groups or individuals?

Some things we know about value conflicts

There is an extensive literature on the place of values in planning. Although some writers, such as Ortolano (1984) and Chapin & Kaiser (1979) tend to downplay the role of values in planning practice by focusing primarily on the techniques of planning, most others consider values to be a central concern. Indeed, there is widespread agreement that planners and policy makers must regularly face value conflicts in their work¹³.

As Susskind and Field (1996, p. 155) explain, "[v]alues are not only about what we hold dear, but fundamentally about who we are." Compromise or bargaining over values, therefore, is utterly unacceptable. "To negotiate away values is to risk giving up one's identity" (Susskind and Field 1996, p. 155). Conflicts over basic values can be some of the most intense and difficult conflicts that a planner faces.

Schwarz and Thompson (1990) point out that individuals engaged in policy discussions often possess differing rationalities (similar to Schön and Rein's frames) which incorporate certain assumptions about the ways the world works. They argue that facts and values in policy debates are inextricably intertwined. Reviewing examples of conflicts over environmental policies, they point out that different groups have different "myths of nature" that determine how they respond to facts about the environment. Their typology of rationalities about the environment claims that there are four views of nature: nature capricious (in which nature's reactions to human activity are essentially unknowable); nature benign (in which nature is resilient and resistant to change), nature perverse/tolerant (in which nature is resilient to a point, but then may be tipped out of balance), and nature ephemeral (in which nature is tipped out of balance easily by human actions). They believe that each of these differing rationalities sustain and justify particular institutions. The nature benign view is most consistent with market institutions, because it suggests the existence of an invisible hand that balances all individual actions. The nature ephemeral view is held by egalitarian groups (such as Green political parties), who don't believe in external social controls, but who do believe in moral suasion as a means of changing people's behavior. Nature perverse/tolerant is consistent with institutions that are hierarchical in nature (like government bureaucracies or multi-national corporations), and that can apply social

¹³ see for example: (Albrecht 1985; Altshuler 1965; Beatley 1994; Feiveson et al. 1976; Forester 1987; Keeble 1977; Majone 1988; Parker 1995; Tong 1987)

controls to make sure that nature is never pushed <u>too</u> hard. *Nature capricious* is "the natural habitat for those with neither standing nor influence in society" (Schwarz and Thompson 1990, p. 10). Using these categories to describe environmental conflicts, Schwarz and Thompson conclude that such value pluralism is essential to progress, because each institution cannot see outside of its myopic world view without the help of the others.

Schwarz and Thompson suggest that the first step to understanding and perhaps addressing the roots of deep policy disagreements is to acknowledge the connections between these rationalities and the institutions in which they thrive. Schön and Rein would probably agree, although they link frames more to individuals than institutions. Still they also see conflicting frames at the heart of many intractable policy disputes.

Values come from the personal, social, and institutional relationships in our lives¹⁴. While the values of people trying to affect a planning process are important, planners also have value frames that affect the ways that they see the world. These may be a significant factor during a planning processes. Socolow (1976) points out that certain environmental planning techniques, such as modeling or cost/benefit analysis, can become so routine that their inherent value biases can be ignored by planners until they are revealed by the public. For example, cost/benefit analysis might be considered quite useful until it is used to calculate a dollar value for a human life (perhaps as part of an overall risk-reduction project). Such an effort would probably confront strong hostility from those who believe that human life should never be looked at in this way. Cost/benefit analysis also frames analytical questions in ways that bias outcomes in favor of economic interests. By ignoring the value biases inherent in planning activities, policy makers can unintentionally infuriate groups or individuals.

Planners, just like other individuals, have values that are integral to their self-definition. Some planners and policymakers view themselves as rational problem-solvers, a view reinforced by some texts on planning and policymaking¹⁵. This view of planning has been challenged by critics who have suggested that such a world view actually inhibits planner's ability to work in a complex, shifting political world (Altshuler 1965; Majone 1988). Even though it has been dissected and delegitimized by planning theorists and educators, Baum (1996) notes this rationalist value frame persists

¹⁴ Although research in this area is just beginning, the field of evolutionary psychology suggests that humans' capacity for holding certain values is also tied to our species evolutionary history and genetic makeup. Evolutionary psychologists, however, do <u>not</u> believe in crude genetic determinism for human emotions or values.

¹⁵ See, for example, (Ortolano 1984; Stokey and Zeckhauser 1978).

in the background for most planning practice because, "it emphasizes the fundamental principle of guiding action by knowledge" (Baum 1996, p. 134).

These warnings about the ways that values affect policy debates <u>and</u> policymakers should make sustainable development planners particularly attuned to value conflicts. But values and frames are not always obvious, particularly when our world view is partially determined by them. As with other conflicts, it is possible to confuse value conflicts with other types of disagreements

Connecting conflicts

I have put forward two strong conclusions about values in policy disputes. The first is that they are resistant to change because values are closely tied to the self-definition of both planners and the other participants in policy debates. The second is that values are inextricably linked with world views, and that they help to determine what is evidence and what is useless noise in a policymaking process.

While most analysts mentioned above view values as deeply embedded and resistant to change, empirical reviews of small-group democracy (e.g. (Gastil 1993; Mansbridge 1983)) demonstrate how joint problem solving can lead to the emergence of shared values. They also show the possible pitfalls that arise when people's identities become too closely tied to the idea of what is right for the group. Unfortunately these particular studies do not tell us if individual ownership of group values preceded membership in the group, and thus tell us little about how values might change through group learning.

Sabatier and Jenkins-Smith (1993) examined advocacy coalitions ¹⁶ and concluded that such coalitions are bound together by a common belief system. This system is built around a normative and ontological set of beliefs—a deep core—which is quite similar to what I have called values above. Core beliefs, because they are so deeply personal, are extremely resistant to change. Advocacy coalitions also share policy beliefs, "fundamental policy positions concerning the basic strategies for achieving normative axioms of [the] deep core" (Sabatier 1993, p. 31). Policy beliefs are somewhat resistant to change, but because they have a "substantial empirical component" (Sabatier and Jenkins-Smith 1993, p. 220), coalitions can alter them if new information or changes in the social or political environment reveal serious problems. Finally there are secondary aspects of the coalition's belief system which comprise the "instrumental decisions and

¹⁶ "An advocacy coalition consists of actors from a variety of governmental and private organizations at different levels of government who share a set of policy beliefs and seek to realize them by influencing the behavior of multiple governmental institutions over time" (Sabatier and Jenkins-Smith 1993 p. 212)

information searches necessary to implement [the] policy core" (Sabatier 1993, p. 31). These are the easiest aspect of the coalition's belief system to change, and this is where much administrative and legislative policymaking occurs: through changes in rules and procedures that don't threaten the core values or policy beliefs of competing advocacy coalitions. Although advocacy coalitions can learn and change their beliefs, Sabatier and Jenkins-Smith conclude that they are remarkably stable over time because they are united in their promotion (and defense) of a particular set of beliefs.

Sagoff (1988) sees values as a sort of strong version of preferences or interests. He suggests that while all preferences may motivate an individual to action, "some of these preferences – we shall call them 'values' – reflect a considered judgement the individual makes about what is right or good or appropriate in the circumstances" (Sagoff 1988, p. 9). Sagoff is interested in distinguishing between differences in preferences that can be appropriately dealt through bargaining or in the market, and those which can only be settled through deliberative interactions among citizens. Although he is using the term "values" slightly differently from the way I have used it above, the message of his analysis is important. It can be difficult to distinguish between interests and values at times. Even those preferences which can be traded or negotiated still have values that underlie them, and there still may be certain kinds of tradeoffs that are not considered "right or good."

Summary

While most policy makers and planners would acknowledge that it is impossible to craft a policy that is in line with everyone's values, few seem eager to explicitly say that they will only promote certain values¹⁷. In the creation of sustainable development policy (or any policy, for that matter), planners must eventually represent one set of values over others. It is logically impossible to separate such a policy from a set of values. While people with conflicting beliefs may be able to embrace certain overarching values they hold in common, there will still be some people in a diverse society who possess core values that are different from the core values at the heart of a particular policy. Sustainability must be analyzed and understood through a value frame, one which may be fundamentally opposed to certain tenets of other value frames.

¹⁷ So-called advocacy planners are notable exceptions. These planners take on the role of advocating for the interests of poor and under-represented segments of their community. (Krumholz and Forester 1990) This is a value stance that is in explicit contradiction to the idea that planners should try to plan for an abstract "public good."

Value conflicts are reinforced by social, personal, or institutional factors that operate far beyond the reach of a sustainable development planning process. And planners themselves have values and frames that limit their search for sustainability. Because the distinction between interests and values is neither hard nor fast, the techniques used to confront interest controversies and value controversies may overlap somewhat. This will be discussed in the last section of this chapter where I review the responses that have been recommended for each of these kinds of conflicts.

Because of their deeply imbedded nature and their occasional opacity to planners, value conflicts can present a formidable obstacle to sustainable development planning. Developing sustainable development planning processes that search for overarching values among stakeholders is one way to minimize the affect of these conflicts. Schön and Rein remind us, however, that even after deliberate interaction and deep reflection we may still end up with fundamental disagreements that cannot be resolved. When promoting sustainability in the face of fundamentally conflicting beliefs and non-overlapping values, planners' recommendations will often represent *de facto* choices among conflicting values. Since planners will be validating certain value frames with their work, they need to be particularly attentive to managing value conflicts well.

Power Conflicts

Definition and Features

Power conflicts, as I use the term here, are conflicts about control of decisionmaking, in which individuals or institutions obtain compliance or approval from other institutions or individuals using sanctions, rewards, persuasion, threats, misdirection, and various other means. Power conflicts take place both inside and outside the planning process when actors use economic resources, organizational skill, legal authority, or threats to influence how and by whom decisions on the environment and development are made. In the other conflicts reviewed above, substantive disagreements among policy actors are engaged and discussed (however badly or incompletely). The effect of power conflicts is that they <u>preclude</u>, short circuit, <u>broaden</u>, or enhance discussion of knowledge, interests, and values by interfering with or bolstering democratic, deliberative decisionmaking¹⁸.

This definition is based, in part, on a democratic view of policy making that suggests that good policy arises from a deliberative process that is free from communicative distortions (Albrecht 1985; Cohen and Rogers 1995; Dryzek 1987; Forester 1989). In this view power conflicts among individuals and institutions can either interfere with a deliberative policy-making process (by, for example, using economic power to spread misinformation through advertising), or they can improve the policy-making process (by, for

The view of power conflicts developed in this dissertation is somewhat different from that put forward by political scientists. Most political scientists are concerned with the outcomes that result from the use of power. They believe that:

... the analysis of the outcomes of the use of power is the most effective form of political analysis. It has the advantage that a relatively specific empirical analysis may be conducted which does not depend on such unsure foundations as political rhetoric, reputations and the arbitrary identification of key decisions. It also focuses on the main objective of political action, namely to ensure continuing or more favourable distributions of scarce and desired goods and services. [...] It avoids the pitfalls of taking political disputes at their face value and devoting too much attention to verbal and administrative disputes which may have little or no significant outcomes (Simmie 1981, p. 21).

This view of power is inadequate for two reasons. First, it tends to conflate the different sources of power, and therefore prevents researchers from understanding exactly how outcomes were affected. More importantly, however, it explicitly ignores the uses of power that don't clearly alter a particular outcome, but which <u>do</u> alter the shape of "political rhetoric, reputations," and "verbal and administrative disputes," thereby changing the discursive landscape of decisionmaking. Such changes can alter participant expectations about how policy is and should be made without obviously affecting the outcome of a particular policy contest. Like Crenson's "non-decisions," they alter the playing field in ways that eliminate, obscure, or sometimes heighten, other forms of conflict. The subjectiveness of these aspects of policymaking, the fact that they only provide an "unsure foundation" for empirical analysis is precisely why sources of power can be brought to bear on them. If policymaking were a strictly empirical enterprise, or if it were a perfect deliberative enterprise¹⁹, then the various

example, using organizational power to teach affected stakeholders how to represent their interests at public meetings).

- 1. The ability to communicate in ordinary language (communicative competence) presupposes that it is possible for at least two subjects to reach an understanding/agreement.
- 2. 'Reaching an understanding/agreement' presupposes that it is possible to distinguish between a genuine and a deceptive understanding/agreement.
- 3. A 'genuine understanding / agreement' is an agreement based on the force of the better argument alone.

The notion of a "perfectly deliberative" policymaking derives from the work of proponents of discursive planning. Discursive planning has its philosophical roots in European critical theory, particularly in the communicative action theories of Jürgen Habermas. A full description of Habermas' theory is outside the scope of this paper. Put simply, Habermas suggests that human interpersonal communication is based on certain assumptions that are shared among those engaged in dialogue. These assumptions can be seen as the basis of an ideal, undistorted communication between two people. Although this undistorted communication is never possible in practice, it represents the ideal against which all acts of communication can be measured. Habermas' argument about communication is summarized by Roderick (1986) as follows:

forms of power would hold no sway. Since policymaking is neither, then planners and policymakers must make an effort to understand, and not merely document, the influence of power conflicts.

Power Conflicts in Sustainable Development

Various sources of power wielded by different actors are likely to come into conflict in a sustainable development planning process. For example, self-determination is a critical part of the progressive notion of sustainable development. Citizens' abilities to control and influence development are at the heart of any notion of sustainability. Conflicts over these abilities will arise if, to achieve sustainable development, control must be wrested away from other institutions or actors. Since sustainable development also implies some form of control over economic decisionmaking (to bring it into better balance with human needs and environmental limits), there will also be inevitable conflicts between those who now control economic decisions and those who wish to put those decisions on a more sustainable path (note that these power conflicts are in addition to other forms of conflict among these actors). Proponents of sustainability must confront the entrenched power of those who benefit from, or uncritically accept, the *status quo*. Each of these power conflicts has the potential to derail or enhance the quest for sustainability, depending upon how the conflict is managed.

One would expect a sustainable development debate in a region with a vigorous forest-based economy such as the Northern Forest to raise critical questions about the appropriate management of forest resources. Participation by the forest industry in Maine (the largest industry in the region's most heavily forested state) was considered

- 4. 'The force of the better argument' can prevail if and only if communication is free of hidden constraints.
- 5. Communication is 'free of hidden constraints' if and only if for all participants there is a symmetrical distribution of chances to select and employ speech acts.
- 6. A situation in which this 'symmetry requirement' is met is an ideal speech situation. Thus, -
- 7. The 'ideal speech situation' (as a communicative characterization of the ideas of freedom, truth, and justice) contains a 'practical hypothesis' (namely, that such a situation *ought* to be brought about) upon which the critique of ideology (as 'systematically distorted communication') can be based. (p. 158, italics in original)

Habermas' theory suggests a normative ideal for planning that is not only rational, but which confronts some of the problems that impede public involvement by seeking (ideally) to remove systematically distorted communication from the planning process and critiquing the established ideology of society. The hidden constraints to communication (such as institutional biases, different frames, unequal sources of power, unequal access to information, etc., which have all been discussed above) are acknowledged as aspects of the human communicative environment in this model, and must be explicitly addressed as part of any planning process based on it. A perfectly deliberative planning process would be one in which participants were able to select policies through a discussion that adhered to the parameters of an ideal speech situation.

to be crucial to the legitimacy of the NFLC planning process. The industry, however, refused to participate unless the NFLC avoided explicit discussions of forest management. Thus the NFLC began its work with forest management off of its agenda. Environmental groups and the region's general public, however, understood that sustainable forest management was crucial to the region's future. By organizing massive public comment on the issue, these critics were able to force consideration of the issue in the NFLC's final recommendations despite the opposition of the forest-products industry. A conflict between the economic power of the industry and the organizational power of environmentalists ended with a modest victory for environmentalists. This type of conflict over the content and conduct of a decisionmaking process is typical of what one might expect as proposals for sustainable development become more widely evaluated. A review of some of the writing on power and power conflicts shows that planners can anticipate and understand them if they make the effort.

Some things we know about power conflicts

Power is an important concept in public policy and planning, but it is also a somewhat vague term. Political scientists initially defined power as simply the ability to get someone "to do something he would not otherwise do" (Dahl, quoted in (Bachrach and Botwinick 1992, p. 51)). This notion of power, with its focus on action, leaves out several important factors. Crenson (1971), as noted above, showed the importance of non-decisions—moments when issues fail to even arise during decisionmaking because debate is curtailed by actors deference to (in this specific case) a local industry. Gaventa (1980), also mentioned above, showed that consistent suppression of dissent could leave people without the ability or will to participate in decision making. Gaventa's observation can be phrased in terms of Schön and Rein's notion of frames—one use of power is the ability to control or influence the frames which determine what is and is not an appropriate issue for consideration in a policy dispute. In short, power conflicts affect actors decisions, the list of choices from which actors select possible decisions, and the frames that allow actors to conceive of a list of choices. Put another way, power conflicts are attempts to contract or expand opportunities for democratic deliberation about policy choices.

There are several different sources of power that can be used to shape actions and perceptions. The most obvious, and in some ways easiest for planners to understand, is legal power or authority (Wrong 1995). Some individuals or institutions can impose their will because they have a legal right to dictate others' behavior. For example,

private landowners are legally empowered to dictate most aspects of how their land is used by others. This power is limited in turn by the legal authority of a local zoning board to impose certain restrictions on land-use as part of a town or city plan. Authoritative or legal power comes from federal, state, or local laws, or from the internal rules of an organization or institution.

A second form of power is economic or property power (Boulding 1989; Forester 1989; Galbraith 1983). This source of power uses compensatory benefits to gain influence over the decisions and/or perceptions of others. In some cases, economic power can be used to gain legal/institutional power. There are numerous examples of this kind of power, the most obvious being that an employer controls the income of her employees. The employer's ability to offer compensation for work can easily affect that employee's willingness to support public policies that are unpopular with the company's owners.

A third form of power is organizational power (Boulding 1989; Forester 1989; Galbraith 1983). This is the power of persuasion: the ability to mobilize people, information, or arguments to influence the actions, choices, or beliefs of others. Political organizations and social movements often use this source of power, but businesses also posses this type of power in addition to their ability to confer benefits or punishments. The recent U.S. controversy about the health affects of Alar, a potent pesticide used on apples, was at least in part an example of the use of organizational power. By gathering celebrity endorsements and skillfully using the media to get out their message, environmental groups concerned about Alar overwhelmed the objections of farmers and pesticide manufacturers that the pesticide was safe at the levels faced by consumers²⁰.

Finally there is destructive or threat power (Boulding 1989; Galbraith 1983; Wrong 1995). Although this source of power is so obviously aggressive that it is seldom considered as part of a policy discussion, it can be used to change people's behavior, at least in the short term. As both Boulding and Galbraith point out, however, it must be constantly reapplied or threatened in order to be effective. Threatening physical harm to people who hold particular views in a policymaking process, for example, can prevent them from freely expressing their opinions.

Do planners have any power? As noted above, some planners have legal authority to create rules or regulations that alter power relationships and recast power conflicts.

²⁰ The Alar controversy's principle effect was its serious short-term impact on the apple industry.

One could argue, however, that many of the planners, bureaucrats, and volunteers in the U.S. who participate in public policy discussions primarily have an advisory role with no direct control over policy. Certainly this is the case in many environmental planning efforts (including the one analyzed in this dissertation). If planners and policy analysts are primarily advisors, can they have any influence at all on power relationships and can they really use that influence to affect power conflicts?

Issues of political and social power are considered, by some, to be outside of the realm of environmental planners' concerns²¹. This is implicit in the rational model of planning (Baum 1996). Some authors acknowledge the existence of unequal power relations in society, but suggest that planners cannot have a significant impact on those relations. Proponents of this view (e.g. (Boyer 1983; Castells 1977)) claim that planners are so imbedded in an unequal social structure that planning interventions will inevitably reinforce and help legitimate existing power relations in society. Each of these views is dissatisfying for those who want to promote sustainable development. The first portrays planners as unconcerned with addressing structural inequities in society, inequities that may be part of current unsustainable practices. The second ignores the ways that human action can, occasionally, transcend the limits of social structure. Recognizing that sustainable development as defined here (with its emphasis on social as well as environmental goals) will challenge existing power relations, planners need to be aware of how power conflicts arise and how they should be addressed. To promote this version of sustainability, planners must be aware of the ways that economic and social power can limit policy discussions and outcomes. Forester (1989) suggests certain approaches for intervening in power conflicts that will be discussed at the end of this chapter.

Connecting conflicts

Power conflicts are inevitable because we are not (and never will be) able to conduct a perfectly deliberative policy making process²². Decisions about sustainable development (as one example of policymaking) will be partly made in deliberative processes, but also in the marketplace, in households, and through other social institutions. Because each of these forums places limits on parties' decisionmaking, it makes perfect sense for individuals, groups, and institutions to strategically use various forms of power to remove or reinforce those limits on policy debates. Thought of in this

45

²¹ The issue of power is ignored more often than it is dismissed. For example Ortolano (1984), despite an attempt to give a comprehensive picture of environmental planning, gives virtually no attention to this important concept.

²² See note 19, supra, and accompanying text.

way it is clear that use of power can increase or diminish conflicts over knowledge, interests, and values.

Power can be deliberately used to promote specific interests and values. But power also has a passive aspect. The works of Crenson and Gaventa, discussed above, show that power need not be actively exercised to have an effect on policy discussions. This view is confirmed by research on the American mass media. In a review of the role of the mass media in American politics, Herman and Chomsky (1988), show that the mass media exercise various forms of organizational power by creating news stories that tend to defend existing economic and political interests, but do so without any direction or intention.

In sum, the mass media of the United States are effective and powerful ideological institutions that carry out a system-supportive propaganda function by reliance on market forces, internalized assumptions, and self-censorship, and without significant overt coercion. (Herman and Chomsky 1988, p. 306, italics added)

Herman and Chomsky argue that various aspects of the mass media's operating environment (including the profit motive, reliance on advertising, and reciprocal relations with news sources) work together to filter the news that is fit to print (or broadcast).

In essence, Herman and Chomsky are arguing that the mass media tend to promote the values and frames of those who already have control of the government or influence in the market. Although their study examined media reporting on foreign policy, we can expect similar value orientation issues to arise during media discussions of sustainable development. They contribute to our understanding of power by showing that power can be exercised to promote the *status quo* even if there is no overt, conscious attempt to promote *status quo* interests or values. To correct this imbalance, proponents of a more sustainable future must bring their own sources of power to bear to counteract this background level of internalized assumptions. Additional power conflicts may follow if the proponents of the *status quo* decide to actively limit sustainability proponent's access to the policy making apparatus. Dramatic change in power relationships is likely to be quite difficult.

The background reinforcement of certain values (particularly the values of the marketplace) is a problem for sustainable development to the degree that sustainability requires limits or controls on market behavior or changes in the values at play in the marketplace. Planners can anticipate that efforts to promote sustainability will provoke

attempts to limit or broaden discussions of these values. But power must often be exercised simply to get a discussion of sustainability started, because it represents a change that challenges existing, unsustainable ways of organizing development. Planners can thus anticipate that significant power must be exercised to initiate a serious policy inquiry into sustainable development.

Summary

John Forester (1989) noted that "if planners ignore those in power, they assure their own powerlessness" (Forester 1989, p.27). Even knowing about power, however, planners are still left with the dilemma of trying to understand and intervene in power relations that have their roots in political and social forces well outside the scope of even the broadest sustainable development planning process. Participants are likely to attempt to influence the actions, choices, and beliefs of other participants by employing whatever sources of power they have at their disposal. Power conflicts, like value conflicts, represent another complicated, highly political problem for planners who are attempting to implement sustainability in a diverse, democratic society. Despite their complexity, power conflicts must be acknowledged and managed if planners are to have any role in promoting a form of sustainability that goes beyond mere tinkering with existing forms of production and consumption.

Confronting conflicts in the real world

This chapter has focused on the theoretical reasons why certain types of conflicts are likely to arise during sustainable development planning. It also examined descriptions of these conflicts provided by political scientists, planners, and policy analysts. Although there is overlap and influence among these categories of conflicts, the tools that planners ought to use to respond to each of them differ considerably. Each type of conflict throws up different barriers to achieving sustainability and the "goodness" of the idea of sustainable development does not seem to be enough to resolve or avoid this welter of conflict. While some successful planners will be able to understand the complex, shifting relationships between these differing categories of conflicts, others may not have the skills necessary to identify and/or deal with all of them. After all, the deep political understanding and strategic thinking needed to evaluate a power conflict are different from the technical understanding and scientific literacy needed to make a recommendation affecting a scientific dispute. Policy makers and planners are human, and their abilities and values will determine how they focus their attention and how they respond to these conflicts.

To supplement the varying innate ability of planners, we need to suggest some techniques that can help them plan for sustainability in this complicated environment. Much has been written about how to respond to these various types of conflicts. What follows is a brief discussion of techniques that have been put forward to resolve these conflicts.

Tools for Resolving Conflicts

Knowledge

Planners and policy makers have little role to play in resolving scientific controversy because resolution, as defined by McMullin above, usually occurs among members of the relevant scientific communities and not in the policy-making realm. Kuhn (1970) argued that science is a social process among people who have a shared language of observation and analysis. He noted that scientists develop paradigms; grand frameworks that determine the nature of research and acceptable evidence for a particular discipline. Both Kuhn and McMullin agree that scientific knowledge conflicts are resolved among scientists²³.

But these authors are referring to conflicts over explanatory theories and frameworks in established sciences—areas that are usually of little interest in the policy realm. Much of the science used in environmental policymaking involves forecasting, which requires the scientist to have a conceptual model of the environment's reaction to various future inputs. Disputes over such forecasts, which rely on contestable factual assumptions and speculative causal inferences <u>in addition to</u> well understood and undisputed scientific concepts, form the heart of many public knowledge conflicts.

Many recommendations have been made about how policymakers might intervene in these knowledge conflicts. Court-like procedures designed to pronounce the relevant knowledge community's best judgement on a topic of technical concern, expert panels, fact-finding missions, conferences—all of these forms have been either proposed or tried (Mazur 1981). The most promising suggestions have come from dispute resolution proponents, who have suggested that stakeholders in a conflict engage in joint fact finding to minimize concerns about advocacy science. Working together, often with the help of a facilitator, groups of stakeholders identify the issues where more research is needed, select acceptable experts to do the research, and jointly determine how to use the research results (Ozawa 1988; Susskind and Cruikshank 1987).

²³ Kuhn's radical notion that science is a social process was a break from the view of science as an empirical, objective enterprise. His book does not address the issue, but one implication of Kuhn's work is that science <u>can</u> be affected by social forces outside of the community of scientists.

These techniques do not solve all the problems of knowledge conflicts. Gathering, evaluating, and judging knowledge is a time-consuming human process that may resist efforts to speed it up, and policy making often occurs in situations where the time available for research is constrained by legal or political deadlines. A second, and more telling criticism, is the seemingly trivial admission that the world is a complicated place, and that the workings of nature and human-nature interactions are particularly difficult to understand in all their detail. As ecologist Daniel Botkin explains, "we understand, in spite of our wishes, that nature moves and changes and involves risks and uncertainties, and that our judgements of our own actions must be made against this moving image" (Botkin 1990, p. 190). Knowledge conflicts may, at times, simply reflect the fact that there is no single, correct, knowable answer to the questions policymakers want answered. The competition among different notions of how nature works may be unresolvable at their roots, but policymakers must still make decisions.

McMullin's distinction between the resolution of scientific conflicts and their closure is a useful one for understanding the difference between the evidentiary standards of science and public policy. The resolution of knowledge conflicts for scientists results from the broad acceptance among professional peers of an explanatory or descriptive theory. Such acceptance only comes after the theory is thoroughly vetted by other scientists, who use the language and criteria of their particular science to evaluate the theory's rigor and usefulness. Among scientists, prior conflicts about the atomic theory of matter, the helio-centric solar system, biological evolution, or the existence of cyclical ice ages are effectively resolved, regardless of any lingering public doubts.

Policy is made in a world where politics and technical knowledge interact and policymakers direct attention towards or away from certain issues during the course of their work. By focusing on particular scientific issues and directing public attention towards them, planners can influence technical debates by increasing interest in, or the importance of, various areas of knowledge. Public disputes about knowledge are unlikely to affect the resolution of science conflicts, but they <u>can</u> affect their closure either by making some outstanding knowledge conflicts irrelevant or by resurrecting knowledge conflicts that have been dormant due to lack of public interest.

Managing knowledge conflicts requires strategies for dealing with uncertainties and strategies which allow competing interest groups to come to a common understanding of what knowledge is useful and relevant to the task of achieving sustainability. Joint fact finding efforts seem to be a good way for the various stakeholders in a sustainable development planning process to come to some agreement on a relevant knowledge

base for making planning judgements. Joint fact finding efforts do not address the core uncertainties that can lie at the center of knowledge conflicts, but they do allow participants to reach a shared understanding of how to act in the face of those inevitable uncertainties.

Interests

The literature on consensual dispute resolution (e.g. (Fisher and Ury 1981; Raiffa 1982; Susskind and Cruikshank 1987)) shows there are ways that planners might attempt to reveal and incorporate diverse interests in a sustainable development planning process. Building on the insights of social psychology, game theory, and neoclassical micro-economics, this literature argues that interests need to be disassociated from the personal rancor that often accompanies conflicts. If given a forum in which they can clearly articulate their interests and make mutually agreeable trade-offs among different issues, disputing parties may be able to reach optimal agreements. The techniques and insights of this literature may form part of an environmental planner's repertoire for confronting a controversy over competing interests.

Of course dispute resolution techniques, while powerful and helpful, cannot in themselves resolve all interest controversies. While some proponents of dispute resolution feel that properly constructed negotiations can level the political playing field, even they acknowledge that participation may not serve the political ends of all stakeholders. For groups that wish to delay or kill a proposal, or are arguing over what they see as non-negotiable, value-based demands, it makes little sense to participate in a process that may resolve the conflict (Ozawa 1988, p. 125). Some powerful actors may be able to act unilaterally and impose their will despite the existence of stakeholders with conflicting interests. Dispute resolution advocates have regularly pointed out the pitfalls of such unilateral action in a policy arena where stakeholders will have multiple opportunities to block future actions (e.g. through direct protests, legal challenges, or legislation). (Susskind and Field 1996), Nevertheless those businesses, government agencies and individuals used to getting their own way with little or no negotiation will typically resist inclusionary dispute resolution processes.

Despite these pitfalls, dispute resolution provides a good tool for allowing people to debate and resolve their differing interests regarding sustainable development. It allows people to develop an understanding of tradeoffs between different interests, it confronts participants with the interests and values of their neighbors, and it reveals opportunities for cooperation that would stay hidden if interest tradeoffs were made by experts or even by distant markets. Dispute resolution techniques, when they make an

effort to include all the relevant stakeholders, can be an essential component of sustainable development planning. Without using such techniques for resolving interest disputes, planners would have considerable difficulty in understanding the needs and aspirations of local stakeholders.

Values

Value conflicts can be engaged as part of a constructive dialogue. The Public Conversations Project is a non-profit organization dedicated to promoting dialogue between parties who have strongly opposing value positions on complex issues. By facilitating dialogues that are explicitly not designed to reach substantive agreements, the Public Conversations Project hopes to teach participants to be tolerant of one another's values (Herzig 1994). Dispute resolution specialists like Susskind & Field (1996) note that appeals to shared values can be an important part of initiating discussions about areas where other values differ. Once a dialogue is engaged, the stage is set for deeper discussions that will touch on the values in dispute, and which may lead to better understanding, acceptance, or agreement. Such discussions, however, require an extraordinary amount of openness and trust to bring progress. And of course, policy makers who are interested in using such dialogue techniques should understand the value biases they embody: these approaches generally have a bias in favor of consensus. Consensus on appropriate action may be quite frightening to a group that feels fundamentally challenged at the level of values.

Other writers emphasize the fact that planning itself can become a process for revealing and elaborating values. Building on the theories of Habermas, Albrecht (1985) claims that planners can use focused "discourse" (cycles of communication between planners and the public that are focused on specific planned actions) to help separate the fundamental values of society from the particular interests of groups in the planning process. It is unclear how one might implement such an elaborately participatory planning process. The notion, however, that values are created, in part, by sharing the process of problem-solving with others is an important contrast to the idea that values are always created outside of the policy-making process.

Finally, Schön and Rein suggest there are even ways for planners and policymakers to get beyond the problems caused by competing frames. Their prescription for resolving these disputes is for policymakers to become attuned to the ways that intractable disputes resist resolution, and to try to understand the ways that other policy actors explain that resistance from within their own frames. By accumulating and reflecting on the views provided by different frames, policy actors can learn about

the values in conflict. Policymakers can then generate hybrid frames which may result in the resolution of policy conflicts, or which may simply "bring fundamental dilemmas—conflicts of abiding truths—to the surface" (Schön and Rein 1994, p. 186).

Consensual dispute resolution approaches try to emphasize shared values or principles, within which competing interests can be negotiated and conflicting values can be acknowledged. Approaches emphasizing discourse and frame reflection attempt to both learn about and shape societal values by improving everyone's understanding of issues and context in a planning situation. They do this by trying to separate negotiations about policy choices (communicative action) from discussions of the normative basis for those choices (communicative discourse). Although consensus is the ultimate goal for discursive approaches as well, it is a consensus that occurs only after a critical reappraisal of values by all the parties involved (Albrecht 1985).

On a national scale, of course, such reflective reappraisal of values can take years or generations to accomplish. The significant but far-from-universal value changes wrought in U.S. society by the civil rights movement demonstrates both the possibility and the difficulty of deep value shifts. Value shifts of this scale may require the action of a social movement dedicated to a particular value frame. Even in the absence of such a movement, however, values can change. The fact that a significant majority of American's call themselves environmentalists compared to 20 years ago (Kempton et al. 1995) suggests that environmental values have spread quite widely through society.

Planners should be able to play a part in facilitating discussions about value and frame conflicts. Planners' role in these conflicts, of course, is complicated by their need to adhere to professional standards while intervening in disputes. While the outcome of an intervention may be either a shift in stakeholder values or merely a clarification of the points of unresolvable difference, planners must be keenly aware of their own values during such a process. Ideally, the planner will reflectively consider all of the value stances held by stakeholders in a sustainable development conflict when formulating recommendations. The reason for such attention to values is simple: planning recommendations inevitably are based on a particular analytical frame, promoting particular values. Even without reflection, planners' recommendations will amount to a *de facto* promotion of certain values. If a planner explicitly considers alternate values while developing recommendations, she may be able to find common threads and new insights. The only way for planners to promote healthy debates about values is to engage in some kind of reflective consideration of their own values and frames.

Power

Forester (1989) argues that planners can shape power relationships even if they only serve in advisory roles. By helping relatively powerless participants focus attention on some issues rather than others, by anticipating and counteracting structural sources of misinformation (i.e., those identified in the research of Herman & Chomsky, Gaventa, Crenson, etc.) in the planning process, and by reducing or removing barriers to informed public participation, planners can effectively increase the influence of powerless groups in ways that go beyond merely advocating on their behalf. On the other hand, by failing to take these kinds of proactive steps, planners can ignore power issues during the planning process and effectively promote the *status quo*. Planners can also have an effect on conflicts between relatively powerful groups by using the same interest focusing techniques as they would use to empower less advantaged groups.

Forester's proposals are similar to those suggested by proponents of discursive planning. Discursive planners, as mentioned above, envision cycles of communication between planners and affected publics (Albrecht 1985). These cycles serve many purposes. First, they are intended to share information, frames, values and interests across all participants (planners and affected publics alike). Secondly, they represent an opportunity for participants to learn about one another and to come to mutual understanding about these issues. Finally, the cycles of communication are intended to be open enough that communicative distortions can be removed, and that participants can see the solutions to problems that can (if necessary) alter fundamental aspects of the social structure. The model is based on a belief that all aspects of human society are subject to change.

Few examples of discursive planning exist. Still some researchers have discussed ways to better balance the power of stakeholders during planning exercises. For example, Throgmorton (1992) suggests that "persuasive storytelling" (which explains the influence of power in an understandable, narrative form), can improve people's understanding of the power and influence of certain businesses (in this case, electric utilities) in a planning process which in turn helps them organize to represent their own interests. Healey (1977) proposes confronting structural sources of power and misinformation through the development of a collaborative planning process that has the following attributes:

1. It should recognize the range and variety of stakeholders concerned with changes to local and urban region environments, their social networks, the diversity of their cultural points of reference and their systems of meaning, and the complex power relationships that may exist within them.

- 2. It should acknowledge that much of the work of governance occurs outside the formal agencies of government and should seek to spread power from government outside the agencies of the state but without creating new bastions of unequal power.
- 3. It should open up opportunities for informal invention and local initiatives. It should enable and facilitate, encouraging diversity in routines and styles of organizing, rather than imposing single ordering principles on the dynamics of social and economic life. [...]
- 4. It should foster the inclusion of all members of political communities while acknowledging their cultural diversity and should recognize that this involves complex issues of power relations, ways of thinking and ways of organizing.
- 5. It should be continually and openly accountable, making available to relevant political communities the arguments, the information, the consideration of stakeholders concerns, the images and metaphors which lie behind decisions, and should include requirements for critical review and challenge. (Healey 1997, pp. 288-289)

Planning models such as this depends on iterative cycles of communication and participation among affected participants. Although Healey fails to address the issue, the administrative cost of designing, conducting, coordinating, and completing such an extensive collaborative process could rise dramatically as the geographical area of concern and the time frame planning expands. Thus the costs might be modest for local planning, high for regional planning, and enormous for issues of national import. Advances in information and communications technologies might reduce operating costs, but the capital costs of setting up such a system may be prohibitive²⁴.

Advocates of discursive approaches realize that they are suggesting techniques of planning and policy making that have the potential to change power relationships in society. Given this knowledge, these advocates are remarkably quiet about obstacles surrounding the implementation of such extensive changes in the way that planning and policy making is conducted. Reviewing rational planning with a critical eye, Lindblom (1977) noted that most policy change is incremental and that policy makers tend to "muddle through" without making large changes in policy or procedures. The

²⁴ Cautions about the complexity of such processes need not discourage interested planners. The American Energy Assurance Council convened a national energy strategy negotiation in an attempt to see if a consensual approach to such policy development would be useful. The Council's report on the project emphasized procedural issues that must be addressed in such large-scale, multi-party negotiations. These included proper preparation of participants, adequate time for discussions, proper stakeholder identification and attendance, the quality of stakeholder representation, ongoing negotiation coaching, and adequate follow-up (American Energy Assurance Council 1990).

best predictor of future policy, according to Lindblom, was past policy. He suggested that such incremental change was an inevitable aspect of the institutional and cognitive limits facing policy makers. Although subsequent experience with social movements shows that there is at least the potential for meaningful large changes, (see, for example, Castells, 1984), the conservative tendencies noted by Lindblom cannot be dismissed.

Forester's response to this challenge is to suggest, as noted above, that planners can have a positive influence on power conflicts by directing people's attention to the systematic distortions of information that inhibit participation and fully-interactive problem solving. Of course such an admonition assumes that planners are largely free from the influences of those distortions. Forester is correct in pointing out that planners are in a better position to know about some systematic distortions than the general public (for example, planners may have a better understanding of ways that a developer can distort a description of a project in order to mask its negative impacts). However, Forester fails to account for the fact that members of the public may also be able to provide the planner with insights into distortions of which the planner (because of her institutional position) may be unaware. The dilemma with all attempts by planners to affect power conflicts is that planners are embedded in an institutional structure that is dependent, to a greater or lesser degree, on the *status quo*.

For planners who want to promote sustainable development there is no substitute for acquiring wisdom about the dynamics of power conflicts in a particular sustainable development planning situation. Wisdom in this case comes when a planner listens closely to various stakeholders and then, reflecting on and understanding the values she wants to promote, formulates ideas about how to intervene. The goal of such intervention should be to expand access to decisionmaking for stakeholders whose views are improperly excluded or under-represented. How can a planner perform such an intervention and still adhere to the goal of democratic control of development? The simple answer is that planning is by definition an informed intervention intended to put knowledge in service of action. Environmental planners have to make choices about sustainable development, and that means making judgments about power conflicts. Avoiding such judgments merely puts the authority of the planner behind existing decisionmaking systems, which may reinforce development decisionmaking that is neither democratic nor environmentally sensitive.

Summary and Conclusion

This chapter has argued that efforts to promote sustainable development will, by definition, face a range of conflicts. Those conflicts, and their interactions, have been well documented by researchers in planning, political science, and dispute resolution. The comprehensive and transformative goals of sustainability require many changes in politics, society, and development, and each of those changes helps to create the conflicts described above. By aspiring to change so many things at one time, sustainable development creates an especially bewildering array of conflicts. My discussion of techniques that planners have proposed for dealing with each of these types of conflict shows that management of all the conflicts is likely to be difficult, but is still possible. Each of these types of conflicts has received some attention from planners and policymakers, and understanding of the problems and interactions they present is improving. Sustainable development, because it is such an ambitious and socially-transformative program, will only come about if planners can apply this accumulated wisdom about managing conflicts.

The remainder of this dissertation presents a case of sustainable development planning — the work of the Northern Forest Lands Council. The NFLC's ad hoc group of professional and amateur planners were able to analyze some conflicts in quite sophisticated ways, but in other cases the NFLC mischaracterized or misunderstood the conflicts it faced. An analysis of their efforts to plan for sustainability in the region shows that they were at times overwhelmed by the conflicts that confronted them. Although they came up with a range of recommendations to promote the continued use and protection of regional forest resources, they failed to understand and intervene in the value and power conflicts about sustainability in the region. This failure has left these critical conflicts unexamined and virtually guarantees the reemergence of the land use crises that precipitated the formation of the NFLC.

Chapter 3

A History of the Northern Forest Lands Council

Introduction

Planning processes have histories, narratives that describe events surrounding the identification of an issue, its placement on the public agenda, its analysis and reformulation. A good history also provides a context, describing how the unfolding events were a part of a particular setting, a particular place, and a particular time. To understand any planning effort, particularly a sustainable development planning project, that context must include the environment itself, the interlinkages of human economy and ecology, and a description of the political activity that surrounded the planning process.

There are, in fact, several histories that are relevant to the story of the conflicts faced by the Northern Forest Lands Council (NFLC). One is the history of events that precipitated the creation of the Council. These are described in some detail in this chapter. Another is the record of the Council's deliberations and actions. While later chapters detail specific issues and conflicts addressed by the Council, this chapter previews some of those conflicts by discussing the broad outlines of the NFLC's final report.

The other stories relevant to understanding the Council are those of the region's ecological and economic history. In this chapter I will present some brief sketches of the region's past touching on the nexus between nature and commerce which is at the heart of sustainable development. These stories serve several functions. First, they establish some sense of the Northern Forest as an ecologically specific and historically embedded place. Second, they emphasize the scope of changes that the region has undergone at the hands of humans. Finally, they point out that the conflicts we see in the NFLC's planning process were part of a ongoing debate about the appropriate relationship between humans and their environment, a debate that is unlikely to be resolved by a single planning activity.

The present situation of the Northern Forest is not the same as that which characterized the situation in the past, however. For example, although the scale of exploitation was grand, and the devastation of parts of the forest quite complete at the turn of the century, modern threats to the forest are different in both scale and

type. Industrial forestry, which uses a few men to run machines that consume the whole tree, and which relies on applications of pesticides and herbicides as canonical parts of forest management, is a far cry from the teams of horses and men that once felled and dragged trees from the forest. Our understanding of the ecology of the forest is vastly improved, but these improvements have also highlighted the areas about which we still know very little (for example, soil bacteria and microfauna). And we now believe we know how to design a politically inclusive process for evaluating the likely environmental impacts of our actions. In short, we are much more capable of destroying the environment, and much more capable of understanding it. But are we more capable of planning for it? This chapter shows that, despite the vast changes in knowledge, economics, and planning that have occurred over the last century, our attempts to develop sustainably still must confront basic types of conflict that have changed little.

The Northern Forest Lands Council (NFLC) was created by the governors of the Northern Forest states and funded in 1990 by an act of Congress. It's purpose was to examine the ecology and economy of the Northern Forest and make recommendations for preserving and enhancing the region's special characteristics. It came at the conclusion of a regional planning effort that began in the late 1980s with a U.S. Forest Service report entitled the *Northern Forest Lands Study*. That study was initiated because environmental groups in the region believed that the ecology and economy of the area were being changed by uncontrolled development. But many of the changes faced by the NFLC were the continuation of historical trends. The seeds of the conflicts inherent in the debate about sustainability can be seen in the past history of the region.

The Northern Forest—a brief environmental history

To understand the work of the Northern Forest Lands Council one must understand something of the Northern Forest Region itself. In the words of the first study of the region conducted by the U.S. Forest Service, the Northern Forest

... is a land covered by spruce-fir thickets and hardwood stands, interspersed with wetlands, bogs, rocky ridges and wind-blown mountain tops. It is littered with glacial erratics, carved by lakes and rivers, and overshadowed by a few spectacular mountain ranges. It boasts a unique complement of wildlife species that have adapted to these forest conditions over millenniums. (Harper et al. 1990, p. 1)

It is a region of great beauty, vast timber resources, and, in places, great poverty. It is also a recreational retreat for millions of residents of the Boston-New York metropolitan region. It covers approximately 26 million acres and includes the Tug Hill and Adirondack Park regions of northern New York, the Northeast Kingdom of Vermont, the northernmost counties of New Hampshire and over two-thirds of Maine. It is a region that has only about one million people living within its borders, but it is within easy driving distance of several large cities, including New York City, Boston, Hartford, Albany, Providence, and Buffalo (Harper et al. 1990). It is also a region that has been at the heart of numerous natural resource conflicts for centuries.

Past ecological and social revolutions in the region can be viewed through the lenses of the different types of conflicts identified in the previous chapter. Fundamental conflicts over values are most dramatically evident in the conquest of the region's indigenous residents by European colonists beginning in the 17th century.

The original human inhabitants of the region, the tribes of the Abenaki, Iroquois, and Penacook, used the resources of the forest to live. Their ancestors probably moved in to the area about 12,000 years ago, soon after the glaciers from the last ice age had retreated and the forest had begun to recover (Connor 1994)¹. The French and British colonists who pushed there original inhabitants to the margins also used the region, but they had a different moral view of the forest² and a radically different economic and social organization for the exploitation of forest resources.

The colonists from timber-poor England were overwhelmed by the abundance of the vast, dark, seemingly empty "wilderness," and they imposed their economic system and world view on it almost immediately. Over the first 150 years of colonization in New England timber of all kinds was shipped back to England, the British Royal Navy commandeered the large white pines of the region for masts, and French and English traders engaged the native tribes in a brisk competitive trade in furs and game, a trade which was the first in a long series of economic revolutions which transformed the ecology of the region (Cronon 1983; Merchant

¹ My description of the changing ecology of the region over the years is based on (Connor 1994; Trombulak 1994), and the natural history portions of the various NFLC reports.

² For an historical review of the different world views of native Americans and European colonists, see (Cronon 1983; Merchant 1989). For a modern Abenaki view of appropriate moral relations with the forest see (Robtoy et al. 1994).

1989; Smith 1972). The value systems of the natives and the colonists were totally at odds with one another, but the continued violent displacement of natives, coupled with the growing economic power of the colonists together subverted and overwhelmed the Indians' world view. This also had profound effects on the ecology of the Northern forest, drastically altering the mix of animal and plant species.

The products extracted from the forests changed as the demands of the European-based society, the capabilities of technology, and the forest ecology underwent simultaneous inter-related revolutions. Humans no longer simply took animals for subsistence or to make clothing and products for a small tribal group. Now they needed masts, firewood, lumber, barrel staves, bark for use in leather tanning — the forest provided these and many more products to several generations of colonial descendants. First barter and then money-based markets for these materials developed. The consumption of the resources of the forest changed their availability and cost, the changing cost pushed the development of technology, changing technology forced the development of new products. Interest conflicts among the various users of the forest were often mediated by the "market," through which the material demands of the consumers of Northern Forest goods were being satisfied.

Although the process is described in even the most basic economics textbooks, dry terms like "supply and demand" do not reflect the drama that is experienced on the ground. Specialized technologies and forms of labor come and go, entire ecosystems are stripped of one or two key species because of death, disease, or overexploitation and new, subtly different biological communities result. Capital extracted from the bounty of the land and the labor of workers is removed from one region and sent to another in the form of loans, machinery, or other investments. Rare activities become commonplace, the commonplace becomes rare, and the whole process begins again. The Northern Forest was no exception, and the changes in the forest have been truly dramatic. The region no longer hosts log drives in which millions of board-feet of raw logs float down rivers running deep and swift with the spring melt. Few people know how to use the hand tools that strip the bark from hemlock trees—once a critical raw ingredient for use in leather tanneries. American chestnut and elm trees have been laid low by diseases brought inadvertently from Europe. The Northern forest no longer harbors herds of elk, or significant numbers of mountain lions, wolves, or other species which used to be

economically important (Connor 1994; Cronon 1983; Merchant 1989; Smith 1972; Trombulak 1994).

The forests that stand now in Northern New England are actually second-, third-, or even fourth-growth forests. They are distant relatives of the forests that stood in the area when colonists first came from Europe. A forest which was once dominated by large stands of old trees came to be dominated by much younger trees, and a higher percentage of the trees that colonize newly disturbed lands. The economy these forests support no longer provides masts for the British Royal Navy or beaver pelts for the hats of the fashionable European middle classes. Instead, it provides pulpwood for the paper industry, recreational space for the cramped residents of the Boston-New York City megalopolis, and, as always, a livelihood for its human and non-human inhabitants. The changes in the land since the first European's arrived are ecological, social, and economic. Some of those changes are reversible, as is shown by the return of moose, wolves, peregrine falcons, and perhaps even mountain lions. Other changes are permanent, like the decline in elms and chestnuts, or the cyclical ravagings of the imported Gypsy moth.

The traces of the conflicts we will see in the work of the Northern Forest Lands Council are all present in this distant history. Cronon and Merchant show that colonists and Indians alike sought to document and understand changes in the biology of the region. They represented their interests to one another in attempts to get greater shares of the forests resources for themselves as individuals or social groups. But there were no forums where such interest disputes could be resolved in an evenhanded fashion. For example, as European encroachment and disease made traditional forest-based livelihoods more difficult for Native Americans, Indian trappers, working for their French or British patrons, became increasingly dependent on the fur trade. With strong European demand fueling an increase in hunting, the number of pelts brought to traders eventually began to decline as beavers became more scarce. These native trappers may have known the dangers of overexploiting the fur resource (indeed, on lands the Abenaki continued to control, they had an elaborate rotational hunting schedule), but they were unable to promote their interests in conservation of common resources because of their economic dependence on the fur trade (Merchant 1989, pp. 30-68). Put in terms of the previous chapter, the economic and organizational power of fur merchants impaired the ability of trappers to realize and articulate their interest in conservation.

In addition, the strongly differing values between Indians and colonists often prevented them from fully understanding the ways that other groups and individuals viewed the forest. The Indian framework which saw humans as a part of nature was ultimately incompatible with the colonists' view of nature as a force to be subdued and exploited. Backed by a growing population and expanding economic power, the colonists world view came to dominate the region, supplanting through force the values of one people for those of another.

If we examine more recent historical events we can see additional details of how these types of conflicts interact.

Tales from the North Woods - Past Conflicts in the Northern Forests

The most obvious and far-reaching conflict that has occurred in the Northern Forest was the displacement of the value system and world view of the original native inhabitants by that of the European colonists. As already noted above, this radical change, carefully documented by both Cronon (1983) and Merchant (1989), was not mediated by an inclusive political process, but instead took place on literal battlefields in the forests as well as the figurative battlefield of the newly created market economy.

A review of more recent history shows that conflicts very similar to those that surrounded the NFLC are a persistent feature in the region. They arise because they are inherent in the complex economic and social relationship that this region has with its forest. I have selected three historical stories which show how some of the past conflicts over sustainability have played themselves out. After each vignette, I will review its importance for helping us to understand the NFLC's deliberations.

New York — Unique alliances and precipitating events

³In the 1800s, the Adirondack region of New York was an important source of raw materials for the young United States. Iron ore deposits in its northern reaches, coupled with abundant timber throughout the mountainous region, made it a center of extractive industries. A blast furnace for smelting iron was built on the shores of Lake Champlain as early as 1822, and the iron industry provided significant quantities of ore to the country through 1880. As the iron industry was

³ These descriptions of the early years of the Adirondacks are based largely on (Heiman 1988), particularly his chapter on "Critical Area Protection and the Ideology of Nature," pp. 187-237, and (Schneider 1997), especially the chapter titled "Forever Wild," pp. 219-229.

declining due to increased competition from midwestern mines, logging in the region began a period of relentless growth, fueled by improved rail access and technological changes that allowed previously useless types of wood to be used as valuable pulpwood for paper mills.

The result of this development was that the Adirondack region began to suffer from many of the environmental effects of resource exploitation. Landscapes filled with slag from mining and slash from wasteful logging operations, flooding and silting of rivers, uncontrollable fires that started in the piles of downed brush and spread to neighboring state or private forest lands — all of these environmental horrors were visited upon the region during this period. Ironically, this period also saw a growing interest in the Adirondacks as a place for retreat from the rigors of urban life. Further expansion and improvement of railroad service allowed people greater access to the region. Artists, middle class vacationers looking for adventure, consumptives looking for the healing powers of fresh air, wealthy businessmen who owned large vacation estates in the region, and newspaper editors all began to wax poetic about the value of a retreat to the unspoiled parts of the Adirondack wilderness.

In what was surely a "a temporary coalescence of extraregional bourgeois production and consumption interests" (Heiman 1988, p. 198), business groups in the New York City area also became concerned about the news of environmental devastation in the Adirondacks. They were particularly troubled by the possibility of siltation and low water levels in the Hudson River and Erie Canal. The Hudson/Erie corridor was a critical one for New York businesses and these water-based transportation routes provided important competition to the regional railroads, thereby keeping transport costs low.

With these forces allied, years of lobbying began, with conservation proponents arguing that the state legislature should find some way to protect and preserve the Adirondack forests. In 1883 "(f)ollowing extensive fire damage and a severe drought, final impetus for state action arose when the Adirondack Railroad Company announced its intention to lumber 500,000 additional acres purchased by its predecessor from the state at prices as low as five cents per acre" (Heiman 1988, p. 198). That year the state prohibited further sales of state land in the Adirondacks: by 1885 the state legislature gave some protection to all state lands within the Adirondacks and the Catskills by declaring them "State Forest Lands." A decade later, after additional stories of mismanagement and loss of land to speculators, the

state of New York took the unprecedented step of endorsing a state constitutional amendment that protected the state forest preserve from any development, including logging. The amendment had been "originally drafted by the Board of Trade and Transportation," a New York City trade organization (Heiman 1988, p. 199). Nature lovers and powerful businesses had found common ground on a particular kind of environmental protection.

Modern Connections

This historical example from New York shows what can happen when seemingly disparate interests join forces to achieve a common goal. These events happened at a time when the science of ecology, still in its infancy, was beginning to change people's views of the forest. According to Schneider (1997), popular belief in the idea that the Hudson would cease to flow if the Adirondacks were stripped of trees could be traced directly to the 1864 book *Man and Nature* by George Perkins Marsh. By demonstrating that the forest had an economic impact beyond the value of wood and charcoal, Marsh's work helped bind the new alliance of city dwellers to support preservation of the Adirondacks. And although the debate took place mostly within the value frame of industrial capitalism⁴, the forest was nevertheless preserved.

New knowledge about the use of the forest, however, was not enough to spur action to preserve the Adirondacks. That knowledge needed to be used and directed by a set of interests. Those interests (New York City industrialists, budding environmentalists, and vacationers) were mobilized by reports about problems with the environment of the Adirondacks, and they had the political power to bring the issue to the government and get extremely protective legislation passed. In addition to giving an example of the power of allied interests, this story also points to the legacy of outside control of the region. Resentment and fear of outside control is an ongoing feature of debates about resource use in the Adirondacks.

⁴ Schneider (1997, p. 220) reports that even the "sporting press" did not try to argue for the intrinsic value of the forest. In 1883 Forest and Stream warned, "[i]f the Adirondacks are cleared, the Hudson river will dry up."

Maine — Arguing about forest management

⁵Maine was certainly not immune to the calls for resource conservation that were prevalent in the country at that time. An 1883 editorial in the Portland Eastern Argus reflected the concerns of the day.

Save the Forests

The terrible floods in the valleys of the Ohio and its tributaries are the result of the destruction of the forests of Western New York, Western Pennsylvania, and Western Virginia, where the headwaters of the Ohio are fed; and New York journals improve the occasion to warn New Yorkers not to bring similar disasters upon the Valley of their noble river by destruction of the Adirondack forests now going on. Forests retain snow and rain, moderating alike freshets and drought. When they are destroyed, the waters pour unobstructed down the valleys, creating devastating floods, unheard of before; and in the dry season leaving channels almost bare. (...) There is a determined effort in the State of New York to avert the danger; but in Maine we are actually courting it. (...) If it were wise to live today, as if there were no tomorrow, this might be excusable; but with the existing general impression that the country will remain after we are gone, and that our children will need, and will be thankful for the heritage unimpaired, it seems like the folly of madness, not the wisdom of wise men, to pursue the course we are now pursuing. (from a Feb. 17, 1883 lead editorial, quoted in (Smith 1972, p. 335)

In addition to the controversy about the effect of deforestation on rivers, there was genuine concern that improper forest practices were ruining the forest itself. The demand for pulp and paper following the Civil War continued to grow, and this economic pressure on the forest was accompanied by a chorus of editorial pressure on the industries cutting the timber to adopt practices that would conserve and enhance the resource. Even some industrialists began to sing the praises of conservation. A Vermont paper company president, speaking to the American Paper Makers Association in 1892 said, "We must either of our own volition, or by some government control, prevent the destruction of the forests in the way that it is now going on" (Smith 1972, p. 337).

⁵ The description of Maine's forest management debates relies heavily on (Smith 1972), particularly pp. 264-382, encompassing Chapters 11 and 12 (The Companies Gain Control of the Rivers (Part One and Part Two)), and Chapters 13 and 14 (Conservation and Forestry Come to Maine (Part One and Part Two)). Smith's book is a descriptive history, and his opinion of the conservation movement is somewhat ambivalent. Chapter 14 concludes that forests were preserved in Maine principally because millions of acres of the northern lands of the state were consolidated in the ownership of large corporations. He concludes with an observation that "[a]n investment of this sort was worth preserving and for that reason scientific forestry came to the Maine woods" (p. 374).

Maine's response to this perceived crisis was repeated attempts to pass legislation mandating the proper management of forests. Although conservation arguments and ideals were well accepted among some in the state, the timberland and pulpmill interests were largely skeptical of any attempts to limit their use of the land. By 1891 the state had passed a bill that created a Forest Commissioner charged with surveying and reporting on potential timberlands in the state, but bills mandating more intrusive forms of management were never seriously considered. Between 1890 and the mid-1920's, bills were submitted to the state legislature mandating "scientific" forest management in exchange for favorable tax breaks, supporting municipal forests, and requiring the establishment of state-run forest reserves. None passed (Smith 1972, pp. 340-366).

Many of these bills were considered to be against the interests of the forest-based industries of the state. The paper corporations were particularly powerful. In addition to owning vast timberlands, paper companies in the early 1900s wrested water power control rights on many rivers from the lumber industry (which used them to drive timber from the woods to the lumber mills). The paper companies directly promoted their interests through company employees who were also elected officials in Maine's part-time legislature. State senator Percival Baxter, who later became governor, alluded to these interests in a speech accepting election to the position of Senate president: "The paid representatives of classes and groups, of special interests and special privileges are always present during Legislative Sessions. The Legislative halls are frequented by selfish plausible men who often attempt to control those of us who are here to represent all the people" (1921, quoted in(Smith 1972, p. 314).

As governor, Baxter engaged in a long battle with the paper and power companies to re-establish public ownership of the water resources of the state and to establish a park around Mt. Katahdin, the state's highest mountain. In both of these endeavors he was defeated by the legislature. Although six attempts to pass park legislation failed, Baxter eventually succeeded. An independently wealthy man, Baxter began purchasing wild forest lands, including Mt. Katahdin, after he left the legislature. Once purchased and assembled, these lands were given to the state, along with a park trust fund. Baxter State Park exists today as his legacy. Without this personal donation, the first spot in the U.S. to see the rays of the morning sun—the same Mt. Katahdin that Thoreau had written about so lovingly—would never have been protected and preserved for future generations (Peirce 1976, pp. 366-7).

Modern Connections

The economic power of the paper industry, exercised through their employees and allies in the Maine legislature, was sufficient to prevent major efforts to change the way the forest was managed in Maine. This contrasts rather sharply with New York, where trade-based economic interests allied with conservation interests to preserve the forests of the Adirondacks. In this case, ecological knowledge did not contribute to parkland preservation or forest regulation because there were no countervailing interests with sufficient power to preserve the forest. Indeed, local economic interests in Maine were closely tied to the continued use of the forest, while the vacation industry, which gave city dwellers an opportunity to experience the forest as a leisure activity, was not well developed.

Although some public sentiment for better forest management was obviously present in Maine (as the quoted editorial shows), that sentiment was never effectively mobilized to change ownership or use of the forest. Maine's forest products industry is still the most influential industry in the state, and its role in this vignette is mirrored in its role as an influence on the NFLC.

Vermont — Act 250 and the politics of regional planning

⁶Vermont is one of the most rural states in the nation and has been since its earliest history as a state, with small farms and small towns dominating its landscape. But in the 1960s that rural character became an attraction to people outside the region, and vacation home development became an enormous business in the state. Peirce (1976) cites several factors that combined to make Vermont an attractive retreat: an expanded and improved interstate system made the state more accessible to all of the East's major metropolitan areas, discretionary income and leisure time increased for citizens in and around Vermont, and skiing became a serious winter business (Peirce 1976, p. 253).

The increased demand for property resulted both in rapidly rising property values near the most desirable vacation areas and, more importantly, increasing property taxes needed to pay for road improvements, fire protection, police, and other necessary services. At the time many Vermont towns did not have zoning or planning and developers found it relatively easy to get their way under these circumstances. Farmers and long-time residents complained they were being forced

⁶ This section is based on (Peirce 1976), particularly pages 252-262.

to sell out because of the radically changed economics of land ownership in boom areas. Rising taxes reached a point where it was economically impossible for these landowners to hold on to their land even if they wanted to. Concerns about development spiraling out of control and fundamentally changing the character of the state compelled the governor to set up a commission in 1969 to study the effects of the recreation home industry. With representatives of business, conservation groups, developers, and the state legislature, the commission's deliberations were closely watched. Its recommendations were incorporated into a piece of legislation called Act 250, passed in 1970 by a "heavily Republican legislature" (Peirce 1976, p. 255).

The Act set minimum standards for developments and created seven regional environmental commissions staffed by "citizen commissioners" to pass judgement on proposed developments. An appeals process allowed developers to bring their concerns to a new state environmental board if they were not satisfied with the district council's ruling. The criteria applied by the commissions were broad, although they only applied to larger projects (subdivisions over 10 lots, housing developments of over 10 units, or commercial developments over one acre). The commissions had to ensure:

... that the project would: (1) not result in undue water or air pollution; (2) have sufficient water available for its needs; (3) not cause an unreasonable burden on existing water supplies; (4) not cause unreasonable soil erosion or dangerously reduce the capacity of the land to hold water; (5) not cause unreasonable highway congestion; (6) not cause an unreasonable burden on the ability of a town to provide for schools; (7) not place an unreasonable burden on other services of local governments; and (8) "not have an undue adverse effect on the scenic or natural beauty of the area, aesthetics, historic sites or rare and irreplaceable natural areas." (Peirce 1976, pp. 256-257, quotes in original)

Additional amendments added other protections to the act, including energy conservation and protection of agricultural, forest lands, and other sensitive areas. Although the act put numerous potential restrictions on development, there was little let up in the number of applications for new projects. Most of the applications were approved by the regional commissions, but significant conditions were often put on the new developments. While development wasn't stopped in Vermont observers believed its quality was improved, and some of its more egregious impacts were mitigated.

Among other conditions, the Act required that the state establish a full-scale, state-wide land-use plan. In 1974 the land use plan began to be discussed in detail. The plan set projections for the state's population and specifically outlined where and how state planners expected the state to grow. Farming, commercial woodland and mining areas, "covering about three-quarters of the state's land face," were barred from vacation home development (Peirce 1976, p. 259).

But when the plan was finally debated, the focus turned from concerns about outside developers to concerns about state control of private land-use decisions. The specificity of the plan caused some to complain that the state was too strictly dictating future development patterns. Proponents of planning argued that the state needed to be able to impose town plans if the towns did not act on their own, while opponents countered that such state-level planning violated the entire notion of local control of land use—a tradition deeply ingrained in New England. With only two-thirds of the state's towns having adopted any form of planning or zoning controls, it was clear to planning proponents that some form of state-wide control was necessary. Vermont's people had approved of Act 250 because they didn't want to relinquish control of their landscape to well heeled developers. Now they were wondering whether control by Montpelier (the state capital) was any better (Peirce 1976, pp. 261-262). While the detailed state-wide land use plan envisioned in the original Act was never fully implemented, the debates it encouraged have never fully concluded.

Modern Connections

The NFLC's process can be seen as a distant echo of the state-wide planning process in Vermont. The state's experience features several intertwined conflicts. Certainly one type of conflict was that between those who would benefit from unbridled development and those who wanted to preserve the rural character of the state. But while the legislature passed laws limiting and controlling development, those laws (which explicitly required state-level land-use planning) were strongly opposed when the state attempted to implement them. This could be seen as a strict interest conflict, with the debate principally focusing on the apportionment of resources. The implementation of the laws brought out new conflicts, some of which touched on deeply held values (such as whether the state or the individual has the right to determine the disposition of private property), which did not hold as much sway during debates over the law. No amount of compensation, or appeals to a broader "public good" could satisfy those who felt that state control of private

property use was simply <u>wrong</u>. In the face of such a profound conflict of values, it is not surprising that state-level planning has not come to pass. And yet the landscape (if you will pardon the pun) for discussing development had changed, and there were new requirements for developers to meet before they could have their plans approved.

Recent Conflicts and the Genesis of the NFLC

These stories give a very broad overview of how the multi-layered conflicts described in this dissertation shape the dynamics of environmental policy debates. Debates about proper forest management, preservation, and the appropriate relationship between humans and the forest have obviously been an important part of the region's political life for many years. But these stories have been told at an high level of abstraction. We now turn to the specific case of the Northern Forest Lands Council to see how these conflicts shaped the region's recent history.

How and why did the Northern Forest Lands Council's planning processes get started? The choice of a starting point for a planning processes' history is largely arbitrary. It could be a natural event, a human intervention, an action, or a failure to act. In the case of the Northern Forest Lands planning process, one accepted starting point for the story is an event that came to symbolize an era—a leveraged buyout of a paper company in the early 1980s. Land sales resulting from this buyout invigorated conflicts over development and forest uses that had been simmering (as shown in the vignettes above) for years. Ultimately this resulted in the creation of a regional research and planning effort, the Northern Forest Lands Council.

Sir James Goldsmith, a British financier and so-called corporate raider, is seen by many as the catalyst for the burst of environmental planning that culminated in the work of the Northern Forest Lands Council. In 1982 Goldsmith succeeded in a hostile takeover of the Diamond International Corporation, a large pulp and paper company which owned paper and saw mills and 1.7 million acres of forested land in the Northeast and West Coast. (Northern Forest Lands Council 1994b; Whitney et al. 1992, p. 24)

Diamond was "undervalued" in the parlance of Wall Street—its stock value was considerably less than the market value of its various capital assets. This made it a perfect target for an investor like Goldsmith. By selling off Diamond's Maine paper mill assets to the James River Company, another pulp and paper manufacturer, Goldsmith recouped almost all of his investment (Lansky 1992, p. 14).

The Maine sawmill and timberlands were reorganized and incorporated into a new company, Diamond Occidental Forest, Inc., which, along with the land in the other Northeastern states, was sold to a French communications conglomerate (Cie Générale Electricité, or CGE). In late 1987 this conglomerate decided to sell the former Diamond lands in New York, New Hampshire and Vermont. It was the impending sale of this land, some of it for second home developments, that mobilized regional interests to ask for a federal review of the conversion of land from forest to non-forest land uses (McKibben 1995).

The economic pressures leading to the Diamond land sales had been building in the region for years before that catalyzing event. The takeover of Diamond was not all that unusual, since the historical trend in the paper industry was toward consolidation and concentration of land holdings (Reidel 1994). What had changed, however, was the gap between the value of land for timber growing, and the value of land for recreation and second home development. Tax law changes in 1986 eliminated favorable capital gains treatment of timber land, a change which some economists felt put further selling pressure on large landowners. Rising personal income in urban areas near the Northern Forest helped to increase demand for vacation homes, which put significant upward pressure on the value of certain types of property. In this climate it was natural for some landowners to consider how to maximize their economic return. According to a report written in the summer of 1987 by Perry Hagenstein, then the executive director of the New England Natural Resources Council, "(t)he large holdings, more than ever before, are viewed as profit centers by their owners and are expected to earn returns themselves that justify continued ownership" (quoted in (Reidel 1994, p. 95)).

These changes represented a shift in the perceived economic interests of forest landowners. Conflicts among these interests were being mediated, to some degree, by the market for land in the Northern Forest. The price for forested land for all purposes, both forest-based use and second-home development, was rising as these competing interests bid for access to this limited resource (Harper et al. 1990).

These events also precipitated reactions from recreational forest users who benefited from the current pattern of land ownership. Unlike the western United States, much of the land in the Northern Forest is privately owned and there is a long-standing tradition of public use of these private forest lands for hunting, camping, hiking, and canoeing (Harper et al. 1990). This tradition could be undermined by the conversion of forested lands used by the forest products industry

to forested lands used by individual home owners—these new landowners were often not willing to continue the traditional public uses of private land in the region. Recreational forest users and environmentalists (groups whose membership occasionally overlaps) were recognizing that the building land development frenzy threatened their interests in the forest. One avenue for preserving those interests was the land marketplace.

In November 1987 the Diamond Lands were listed for sale through a real estate firm called LandVest. Although dividing the property into many smaller parcels might have maximized returns, and although such an option was actively discussed, CGE decided to offer the land outside of Maine in two parcels to speed up the sale. The Nature Conservancy offered to buy the land when it first went up for sale, but these offers were rejected because the offering price of \$100 per acre was considered too low. New York, New Hampshire and Vermont all reviewed the lands when they were put up for sale but made no offers to purchase them. Eventually Georgia developer Lassiter Properties bought 96,000 acres of the Diamond land in New York for \$17 million, while New Hampshire-based Rancourt Associates entered into a purchase agreement for 90,000 acres of lands in New Hampshire and Vermont for \$19 million (Reidel 1994; Whitney et al. 1992).

Various conservation groups, including the Nature Conservancy and the Society for the Protection of New Hampshire Forests, expressed interest in the land both before and after it was controlled by these developers. In New Hampshire and Vermont the Rancourt lands attracted the interest of state governments and the U.S. Forest Service. Rancourt Associates had originally wanted the land because of a desire to develop a single large parcel. As the Northern Forest Lands Study noted, "(w)ith the exception of the 2,800 acres, they had no intention of retaining ownership of the Diamond lands" (Harper et al. 1990 p. 15).

Since it was widely known that the state and federal government were interested in the land, it was easy to predict what happened next. Rancourt offered the lands to the state, but its initial asking price was \$500 per acre, more than double the purchase price. An outraged Warren Rudman, then the U.S. Senator from New Hampshire, suggested that Congress might use eminent domain to acquire the land if negotiations did not proceed more reasonably. With the active participation of the Society for the Preservation of New Hampshire Forests, New Hampshire Governor Sunnunu, Senator Rudman and others, a deal was finally reached. Five months after it purchased the land, Rancourt sold 46,700 acres for \$12.75 million of

state, federal, and private funds. This sale price was about \$70 per acre above Rancourt's original purchase price (Harper et al. 1990; Reidel 1994; Whitney et al. 1992).

The land purchased in New Hampshire included some inholdings within the existing White Mountain National Forest as well as a 40,000 acre tract called the Nash Stream Watershed. The 7,600 acre "Victory Bog" parcel in Vermont was purchased from Rancourt by the Nature Conservancy and later given to the State of Vermont. Even after these sales the company was left with over 30,000 acres of land that it could sell at market rates. Rancourt tried to sell this land in something called "The Great North Country Land Auction," an event designed to generate excitement about remote, undeveloped parcels of forest land while at the same time disposing of as many of them as possible at a high sale value. The average sale price of the land sold in this auction was about \$85 above Rancourt's original price. It is unclear exactly how many acres of land were sold at auction, but in 1990, when the Forest Service's Northern Forest Lands Study was released, Rancourt still owned about 18,000 acres of undeveloped land. By the time the reports for the Northern Forest Lands Council's land conversion committee were prepared in 1992, Rancourt had gone bankrupt (Harper et al. 1990; Northern Forest Lands Council 1994b).

Lassiter's 96,000 acres of New York land also attracted the attention of conservation interests. The New York Department of Conservation (DEC), which manages 2.6 million acres of state-owned forest lands within the Adirondack Park (a 6 million acre mix of public and private lands regulated by a regional planning body called the Adirondack Park Agency), expressed interest in some of the land after its sale was made public. DEC eventually purchased 15,000 acres of former Diamond land within the Adirondack Park. In the first such purchase of its kind in New York State, the DEC purchased conservation easements on an additional 40,000 acres of Lassiter land within the Park. These conservation easements allowed logging and other forest-based uses of the land to continue, but prevented any land-use changes, such as vacation home development. The total cost to DEC for the conservation land and the easements was at least \$10.4 million, or \$198 per acre (one account (Harper et al. 1990 p. 17) puts the figure at \$10.8 million). As of 1992, the remainder of Lassiter's land was still up for sale, but Lassiter had also filed for Chapter 11 bankruptcy (Harper et al. 1990; Reidel 1994; Whitney et al. 1992 p. 26).

The extent of the Diamond lands in Maine dwarfed these sales. The 790,000 acres of land in Maine were felt to be too large, too diverse, and too dispersed to be

sold in one parcel. Although there was much interest in these lands, they were not sold as a single package (one developer did purchase an option to buy the lands which expired without any action). Some sales, however, did proceed. The Nature Conservancy purchased a 9,400 acre parcel, called Sunkhaze Meadows, that was later resold to the U.S. Fish and Wildlife Service. 230,000 acres of land was sold in August of 1988 to the Fraser Paper Company (Whitney et al. 1992).

James River, the paper company that had purchased the paper mill assets of Diamond International, bought a 23% interest in Diamond Occidental Forest, Incorporated, which held the remaining Maine lands. According to LandVest executives, this purchase allowed James River the opportunity to identify lands that were strategically important for providing a timber supply for its operating mills. For several years after this purchase of an interest in Diamond Occidental Forest, Inc. (DOFI), James River worked with various conservation groups, state agencies, and private developers to identify appropriate dispositions of its land. The company felt very strongly that it was being a good corporate citizen by allowing the conservation community "to develop a wish list of those parcels they considered to be most worthy of acquisition" (Whitney et al. 1992 p. 29). These negotiations eventually resulted in a 40,000 acre purchase of timberland and wilderness shorefront around Nahmakanta Lake by the Nature Conservancy, the National Park Service and the Land for Maine's Future Board. While these negotiations were going on, additional Diamond lands were sold for development in Dedham, ME, a "Lake Concept Plan" for development and conservation was written to establish a 50-year plan for all of the James River/DOFI lakefront properties, and several large parcels of forest land that were not strategically important to James River were listed for sale with LandVest.

These land sales were certainly dramatic in their size and visibility. At the time there was great fear that they represented a sea change in land use patterns in the Northern Forest region. Because of this perceived change, environmental groups, legislators and activists mobilized to study the "problem" of land conversion. The next section of this chapter will discuss the rise of the Northern Forest Lands Council as a response to these land sales. Before I recount that history, I want to examine some of the knowledge gaps and conflicts that planners faced when trying to answer questions about land conversion.

According to a presentation to the NFLC's Land Conversion Subcommittee by an official of Diamond Occidental Forest, these "massive" New England and New

York land sales did change land ownership patterns, but the trajectory of change was not obvious and the meaning of the change was not clear. The official's 1992 presentation, complete with pie charts, showed the disposition of the former Diamond lands from 1900 to the present. According to this display, in 1900 80% of the 976,000 acres was privately owned, while 20% was owned by the forest products industry. The industry share of ownership grew until 1960, when 100% of the land was owned by four paper companies. In 1988, when the Rancourt and Lassiter lands were put up for sale, 81% of the former Diamond lands were owned by DOFI, a forest industry owner, while 19% were owned by the two developers. In 1992, 72% of the land involved remained in industrial ownership (much of this land is in Maine), 10% of the land was privately owned, 17% was in "Conservation," use (because either the land or its development rights had been purchased by private conservation groups or governmental agencies), and 1% (7000 acres) had been targeted for "development." (Halsey et al. 1992, pp. 34-35).

Of course the Diamond lands were only a tiny fraction of the millions of acres of land of the Northern Forest region, but their ultimate disposition shows that land conversion is a difficult concept to use as a planning tool. For example, these figures seem to lump together conservation land on which logging would be allowed with land that has been permanently removed from logging. If the 1% conversion of land to "development" is a problem, then is the 17% conversion of land to "conservation" also a problem? The best way to resolve these issues would have been to allow a broad cross-section of stakeholders to reach an agreement about a research program designed to answer such questions.

Unfortunately these figures were given by land sales company executives in an effort to show to the Northern Forest Lands Council that not only was there no problem of land conversion, but that current changes in land use were essentially directionless, as had been past variations. Because the figures came from the industry and were presented at a forum not attended many other interest groups, they did not have much credibility with other stakeholders. The knowledge contained in these reports did not contribute much to the NFLC's deliberations.

This industry's presentation was delivered too late to prevent the implementation of the Northern Forest planning processes, but they did argue against any dramatic changes in regulatory structures. Even though this information was not widely accepted, it does raise an interesting point that became quite relevant later in the NFLC's process. If there is no clear answer to relatively

simple questions about the ultimate disposition of the Diamond lands then planners can expect even more uncertainty when they try to evaluate broader changes in land ownership patterns though the region.

Mobilizing for Action

These land sales mobilized politicians, environmentalists and others to analyze the effects of land conversion on the way of life prevalent in this region of the US. Some environmental groups probably saw the land sales as an opportunity to promote ideas about park land acquisition or forest management improvements that they had been working quietly on for years. As later chapters will argue, these groups were inspired in part by a connection to wilderness that saw its preservation as a spiritual and moral goal—their values conflicted to some degree with the marketplace values surrounding the land sales. Others in the region were simply shocked at the scale and suddenness of the sales and feared a new trend towards second-home development in the region. Senators Patrick Leahy of Vermont, Warren Rudman of New Hampshire, and George Mitchell of Maine all supported efforts to provide federal funding for some of the land acquisitions discussed above, and to fund a study of the region's land ownership patterns. In addition, environmental agency officials in the four states affected by the Diamond Land sales quickly convinced their governors to form a Governors' Task Force, with three members appointed by each state, to review the issue (Reidel 1994, pp. 96-99).

On July 13, 1988, Senator Warren Rudman of New Hampshire rose in the U.S. Senate to comment on an appropriations bill for the Department of Interior and other agencies, including the Department of Agriculture's Forest Service. He proceeded to discuss a proposal for a U.S. Forest Service study of the forests of northern New England and New York, a study that would "document the resources and changes in the northern forest lands of Maine, New Hampshire, Vermont, and New York, and to develop comprehensive strategies to conserve these lands and the natural resource economy and way of life they represent" (United States Congress 1988, p. S 9510). Although there was no corresponding provision in the House of Representatives' version of the bill, the appropriations for it were approved by the Senate, and ultimately the study was included as part of the appropriations bill reported by the conference committee that reconciled House and Senate appropriation priorities. The \$250,000 ultimately approved by Congress funded *The Northern Forest Lands Study (NFLS)*, which was the first study that sought to

identify this multi-state region as an area with a unique and valuable set of characteristics that should be preserved. According to its congressional mandate, the study was supposed to critically examine the natural, economic and social processes at work in these regions so that recommendations could be made on preserving and enhancing their environments and way of life (Reidel 1994). That same congressional mandate required that the *NFLS* not make recommendations, however. That task was left to the Governors' Task Force on Northern Forest Lands.

The Governors' Task Force (GTF) was a 12-member body with three representatives appointed by the governor of each Northern Forest state. The members represented forest landowners, state environmental groups, and state conservation agencies: a small but reasonably diverse set of interests. Although the NFLS was produced by the U.S. Department of Agriculture's Forest Service, GTF member Carl Reidel explained that the Task Force served as a "board of directors" for the study, providing advice and guidance to the Forest Service personnel who wrote the ultimate report (Reidel 1994, p. 98). This view is supported by the Governors' Task Force's final report, a slim volume in which most of the recommendations refer to specific page numbers of the NFLS for corroborating analysis and discussion (Governor's Task Force on Northern Forest Lands 1990). The NFLS itself was delivered to Congress in April 1990. It identified some of the problems faced in the region, but suggested that further study and analysis was needed to come up with well-grounded recommendations for action. The Governors' Task Force final report, completed a month later, made several recommendations to improve land conservation, and it also called for further study through the creation of a Northern Forest Lands Council with members appointed from each of the affected states.

The Governors' Task Force had discussed many more far-reaching recommendations, including some forms of regional regulation (known by supporters and detractors as "greenline" proposals) and the limited acquisition of land by state or federal governments for park land. But these discussions never bore fruit in part because of strong opposition from the forest industry and state conservation agency representatives from Maine. Because the GTF worked by consensus, the Maine delegation had the power to block any agreement it did not like (Reidel 1994). These efforts by the Maine delegation to use their power on the GTF to block deliberations about certain issues is a good example of the ways that

power conflicts can disrupt a policy making procedure. Similar power conflicts impeded the NFLC's work, and will be discussed in a later chapter.

These disputes went on behind the scenes, but the GTF final report still seemed to show unified support for the idea of further data gathering and analysis. As a result of the *NFLS* and the work of the Governors' Task Force—and in response to continued uncertainty about development pressures in the region—the governors of Maine, New Hampshire, Vermont and New York (with financial help from the federal government) were able to bring about the creation of the Northern Forest Lands Council (NFLC).

The NFLC, as initially proposed by the Governors' Task Force, was to be a 13-member body modeled after the Task Force itself. Three members were to be appointed by each state governor, and would represent the state conservation agency, environmental organizations, and the private forest resource. A 13th member was to be appointed by the U.S. Forest Service Chief. Originally the chair of the organization, who would convene and run all meetings and vote to break ties, was to be appointed from among the four conservation agency heads and would serve a one-year term. The NFLC would also have an executive director, a support staff person, and would receive additional support from resource planning specialists working for the conservation agencies of each member state (Governor's Task Force on Northern Forest Lands 1990, p. 8).

The NFLC is born

The disputes that had simmered during the final deliberations of the Governors' Task Force were still very much alive as the NFLC began to take shape. Senator Leahy, then chair of the Senate Agriculture Committee, had inserted funding for the creation of the NFLC into the 1990 Farm Bill. He simultaneously introduced a "Northern Forest Lands Act of 1991," intended to give the NFLC congressional guidance, along with a role in land acquisition and the proposal of regulatory structures (Reidel 1994, p. 105). This provision and the threat of a regulatory greenline around the region drew the ire of the property rights movement whose members, from various state-based groups, attended public hearings on the bill and complained about federal intrusion into local affairs. These groups were not just trying to preserve their personal property interests. They felt that the regulatory provisions of the act were an attack on their constitutional rights and personal values. With a passion driven by a desire to defend their values, property rights advocates came out in force when Maine senators Mitchell and

Cohen held a hearing on the bill in Bangor during July of 1990. Ended early, ostensibly because it was being held in a room too small to house the overflow crowd, the hearing did not satisfy property rights advocates that they or their concerns had been heard. An additional 6-hour long hearing was held in October (Guernsey 1994d). Between the focused opposition of the property rights groups and their realization that the forest products industry and environmentalists did not have a consensus view on the issue of land acquisition, Senators Mitchell and Cohen had little reason to support Leahy's bill (Reidel 1994, p. 106). This version of the Northern Forest Lands Act never became law⁷.

The Governors' Task force convinced the governors of the Northern Forest states to appoint NFLC members even without enabling legislation, since an appropriation for the Council had already been approved (Reidel 1994, p. 106). Formed as a non-profit corporation with no regulatory or land-acquisition authority, the Council was essentially an *ad hoc* advisory body that was to continue and build upon the work done by the Governors' Task Force and the *NFLS*. The NFLC responded to criticisms from property rights groups that they had been shut out of the process by adding a "local interests" representative to each state delegation. In its final version, the NFLC was a 17-member council with four representatives appointed from each member state and one appointed by the U.S. Forest Service. The Council had an executive director and a small staff, and its meetings were run by an elected chairperson. It made all of its decisions by consensus.

The Council adopted a specific sunset date and a self-imposed mandate to examine the region's economy and ecology with the goal of recommending ways to enhance both while maintaining the existing patterns of land ownership and use. Obviously this limited the Council's conclusions by restricting where it could place the blame for current economic or environmental problems (a point regularly made by environmentalist critics of the NFLC). The representatives of the Maine delegation further limited the Council by threatening to withdraw from the Council if it tried to discuss the issues of forest land management or federal land acquisition (Bley 1996; Bofinger 1996). The conflicts that attended the NFLC's creation were not resolved by these limits and concessions, as will be shown in later chapters.

⁷ At the time this dissertation is being written, another Northern Forest Lands Act is working its way through the legislature in Washington, DC.

The Findings of the NFLC

A discussion of specific types of conflicts faced by the NFLC begins in the next chapter, but the outlines of the NFLC's work are worth noting. Operating within the limits imposed by its unique genesis, the Council commissioned over a dozen studies by outside consultants. It held forums with experts in forest ecology, biology, land investment, and forest-industry economics on issues such as biodiversity and the regional economy. It also published all of its reports and findings during the 5-year planning process. The Council solicited input from citizens throughout the Northern Forest region by widely publicizing its work, forming state citizen advisory committees, and holding dozens of meetings throughout the four-state region at every stage of its planning process. This process provided Council members with additional information upon which they could base their recommendations (Northern Forest Lands Council 1994b).

In September of 1994, the Northern Forest Lands Council submitted its final recommendations. Entitled *Finding Common Ground: Conserving the Northern Forest*, the document contained 37 specific recommendations broken into four Sections.

In the section on Fostering Stewardship of Private Lands, the Council "determined that many key federal and state policies impede landowners from retaining and managing" private lands sustainably (Northern Forest Lands Council 1994b, p. 23). The NFLC recommended improvements in federal and state programs that purchase conservation easements on forest land. The Council also encouraged the creation of a private Green Certification program to acknowledge environmentally-sensitive forest managers. Another set of recommendations urged changes in federal and state tax policies, including improvements in current-use property tax programs, changes in federal estate and capital gains taxes and changes in passive loss tax rules. It even suggested that state legislatures should consider replacing ad valorum property taxes with current use taxes for all real property. All of these changes were intended to provide incentives (or remove disincentives) for keeping land in forest-related uses. Finally this section made some tentative recommendations on sustainable forest management, laying out a

⁸ Current-use tax programs allow lower property tax rates for land-intensive productive activities such as forestry or agriculture.

⁹ Passive loss tax rules currently prevent taxpayers from deducting the cost of forest management activities in years that they do not make money from the forest (i.e. - in years that they do not harvest trees) unless they invest at least 100 hours in forest management.

list of "Principles of Sustainability" for regional forests, and suggesting that states educate foresters about these principles, promote public/private cooperation for defining sustainability benchmarks, and assess current forestry regulations to determine if they adequately promote sustainability (Northern Forest Lands Council 1994b, pp.23-45).

Section II, Public Land Management and Acquisition, addressed the funding and implementation of improvements in these areas. The NFLC called on the federal government and the states to provide adequate funding for public land management, existing land and water conservation programs, and state land acquisition programs. It also suggested the use of less-than-fee acquisition as part of any acquisition strategy. The Council even recommended a national excise tax on recreational equipment as a possible source of funds for improved management and acquisition. The Council recommended state-level planning processes to refine land acquisition programs, assess water quality, and to assess and preserve biodiversity (Northern Forest Lands Council 1994b, pp. 47-64).

Section III, Strengthening Economies of Rural Communities acknowledged that the region is economically dependent on the forest. The NFLC recommended various state policies that could promote and enhance the existing forest-based economy, including market development and financial and technical assistance for the forest product industry, and promotional assistance for the recreation and tourism industry. The Council also recommended changes in government regulations ranging from improving forest-worker safety training and reducing workers compensation costs to the development of consistent transportation regulations across the region. In addition the Council made general calls for improving the effectiveness, responsiveness, and stability of administrative procedures and rules and for assessing the effectiveness of land-use planning in supporting the traditional uses of the forest (Northern Forest Lands Council 1994b, pp. 65-82).

The final section, **Promoting More Informed Decisions**, emphasized education, public involvement, and information transfer as critical components of a better future for the Northern Forest. The Council called for formal cooperation among the state's university systems and the USDA Forest Service. It also recommended improved use of knowledge about the region, including gathering state-level information on land conversion trends, support for the timely completion of Forest Service decennial forest surveys, and use of the Northern

Forest Resource Inventory (a state-based Geographic Information System database set up during the NFLC planning process that provides natural resource data in a consistent format) by local and regional organizations. The NFLC also recommended that natural resource education for all ages be promoted in all states (Northern Forest Lands Council 1994b, pp. 83-92). The Council concluded its recommendations with a brief discussion of "Post Council Action," including a general call for continued dialogue among the states, and a more specific suggestion for the creation of state-level forest roundtables that could continue discussing the issues raised by the NFLC's planning process (Northern Forest Lands Council 1994b, pp. 93-97).

Overall the recommendations ranged from excruciatingly specific guidance on changes in the federal tax code, to generic calls for states to develop improved regulatory procedures. Each recommendation was carefully worded, and the research findings and references that led to the recommendation were all documented 10. Finding Common Ground: Conserving the Northern Forest claimed to be an important, but admittedly incomplete, blueprint for preserving both the ecology and the economy of the region. It represented a first, formal step towards planning for sustainability.

Summary and Conclusion

This chapter began with three short stories about past environmental conflicts in the region. It ended with the description of a particular set of land sales that led to the creation of a particular planning process, that of the Northern Forest Lands Council. The work of the NFLC was truly an attempt to bring a new depth and breadth of analysis and understanding to the problems of simultaneously using and protecting the forest, but its efforts are part of a broader sweep of regional history. Understanding and recognizing that history is the only way to understand and properly frame the conflicts that the NFLC confronted.

Conflicts over knowledge, interests, values, and power pervade the natural resource planning history of the region, and this chapter has tried to highlight some of them. The recent history of the region shows how the NFLC's process was established in the midst of serious power conflicts over representation and scope of work for this regional planning body. It also shows how this most recent regional environmental crisis, like the others discussed in this chapter, was initially created

¹⁰ The *Technical Appendix* that gathered much of the NFLC's work in one volume is almost 2,000 pages long.

by the "normal" operation of individual and corporate business decisionmaking. In the next four chapters I will describe some of these specific conflicts in greater detail and show how planners understood and responded to them.

Chapter 4

Knowledge Conflicts

Knowledge Conflicts in the Northern Forest Planning Process

The Northern Forest Lands Council was created, in part, to achieve some kind of consensus about the problems that the region faced. With simultaneous economic, biological, and demographic changes occurring in the forests, it was not enough to rely on common sense to achieve this objective, even if the Council's mission was deceptively simple to describe:

The mission of the Northern Forest Lands Council is to reinforce the traditional patterns of land ownership and uses of large forest areas in the Northern Forest of Maine, New Hampshire, New York, and Vermont, which have characterized these lands for decades. This mission is to be achieved by:

- Enhancing the quality of life for local residents through the promotion of economic stability for the people and communities of the area and through the maintenance of large forest areas;
- Encouraging the production of a sustainable yield of forest products, and;
- Protecting recreational, wildlife, scenic, and wildland resources.(Northern Forest Lands Council 1994b, inside cover)

While the NFLC had among its members various specialists and experienced business, forestry and regulatory officials, it did not have any biologists or ecologists to provide expertise on biological issues. Although its members were familiar with the economics of the region, they were not necessarily experts in the regional economy. For every form of expertise and experience represented on the Council, there were many more specific fields of study that were needed to complete a comprehensive report on the region. The NFLC had to rely on scientific and professional disciplines, in part, to interpret complex information about the region's ecological and economic status.

Knowledge conflicts are disagreements about data, facts, or explanatory theories concerning a supposedly objective, material world. The NFLC confronted these types of conflicts as it attempted to gather information to accomplish its mission. Knowledge conflicts create specific dilemmas during a planning process. For example, we know that knowledge conflicts sometimes revolve around uncertainty about data and explanations. Particular importance and credibility is granted to technical and scientific knowledge in modern decisionmaking. This means that

groups and individuals have a strong incentive to try to use scientific knowledge to promote their interests (Nelkin 1984; Ozawa 1988). In such cases uncertainty at the heart of a scientific enterprise can be exploited to promote a particular interest or value perspective. But we also know that knowledge is inherently frame-dependent and that information requires an organizing paradigm in order to be useful for any kind of problem-solving (Kuhn 1970; Schwarz and Thompson 1990). Thus there are conflicts within fields of knowledge that result from differing paradigms, not just varying self-interest among disputing parties. Conflicts within fields of knowledge and conflicts about the use of fields of knowledge, while easily intertwined, have quite different implications.

Most policymaking is done by people who use the information from scientific or economic experts in order to make decisions. The NFLC commissioned reports on technical issues, held hearings and forums to discuss those reports, and solicited public comments throughout a long process in order to make sure it had high-quality, publicly accessible information on which to base its decisions. But it was confronted with an unpleasant (although not uncommon) reality when it began to examine the information it had gathered. The relevant experts often disagreed about some of the basic information that the NFLC was supposed to use in its decisionmaking. These conflicts sometimes involved fundamental disagreements about the meaning of data and the appropriate theoretical frameworks to use when interpreting data.

There were several fields of knowledge that affected the NFLC's work. To understand changing patterns of land ownership, the Council needed both facts about land ownership change <u>and</u> theories to explain why the change was occurring. To understand the region's economy, the NFLC needed good measurements of current economic activity <u>and</u> defensible speculations about the economy's future direction. Knowledge conflicts were most thoroughly explored, however, in discussions about biodiversity and ecological reserves. The Council had a Biological Resources Subcommittee to coordinate the analysis of these issues. This subcommittee gathered summaries of existing research on biodiversity, held a biodiversity forum with regional and national experts, and reviewed the wildland management activities of other states. As a result of the subcommittee's examinations, the scientific community's ongoing debates about biodiversity became part of the NFLC's planning process. The Council's response to those debates reflects

some of the difficulties that knowledge conflicts present for sustainable development planning.

Biodiversity

The study of biodiversity is a scientific enterprise, but defining biodiversity is an art. The NFLC cited several definitions in its final report:

- The variety and abundance of species, their genetic composition and the communities, ecosystems, and landscapes in which they occur. It also refers to ecological structures, functions, and processes at all of these levels. Biological diversity occurs at spatial scales that range from local through regional to global. Society of American Foresters
- The variety of life and its processes. USDA Forest Service
- The diversity of life in all its forms, and at all levels of organization. 'In all its forms' reminds us that biodiversity includes plants, invertebrate animals, and microorganisms, as well as vertebrates that garner most of the attention. 'All levels of organization' indicates that biodiversity refers to the diversity of genes and ecosystems, as well as species diversity. Dr. Malcolm Hunter, University of Maine (Northern Forest Lands Council 1994b, p. 61, attributions in original)

These definitions differ in details, but they are substantially similar in that they refer to the variation of life on both organizational and spatial scales. This agreement, however, masks conflicts about the measurement and protection of biodiversity within the ecological science community¹. The NFLC was confronted directly with some of these conflicts when it studied the issue of biodiversity as part of its planning process. To understand its response to those conflicts, it is necessary to examine the Council's research on biodiversity in some detail.

The work of the NFLC's Biological Resources Subcommittee

The Biological Resources Subcommittee reviewed executive summaries of dozens of papers on diversity and land management presented at a 1992 conference in Massachusetts². In this collection of summaries several different issues related to biological diversity were outlined. One issue was measurement. Some papers discussed biodiversity by examining the relative abundance of select species (Cooksey 1992, pp. 16-25, 40-43, 46-47) while others measured habitat types

¹¹ The scientific disagreements within the field are nicely documented in *The Song of the Dodo* (Quammen 1996).

² The conference was a meeting of the New England Society of American Foresters, "Forests of New England; A Conference on Integrating Biodiversity and Land Management" (Cooksey 1992)

(themselves defined by the presence or absence of certain associations of species) (Cooksey 1992, pp. 7-10), or classified species diversity within certain habitat types (Cooksey 1992, pp. 30-35). These papers also reflected the fact that biodiversity can not be measured in an absolute sense, but must instead be measured relative to some historical standard or comparative case.

Another issue discussed in the summarized papers was management. Some papers were principally concerned with demonstrating the shortcomings of traditional land management and species management regimes (Cooksey 1992, pp. 1-6), while others suggested incremental or wholesale management improvements to deal with the shortcomings of existing approaches (Cooksey 1992, pp. 10-17, 37-38, 43-45, 48-58).

The papers discussing biodiversity (as opposed to the ones debating various land management regimes) also hinged on the definition of biodiversity and the appropriate response to uncertainty in our understanding of biodiversity. These two factors were prominent in the presentations and responses given by panels of biologists during the NFLC's Biological Resources Diversity Forum.

The Biological Resources Diversity Forum was sponsored by the NFLC's Biological Resources Subcommittee in the winter of 1992. Four panel members (all biologists, three from academia and one from International Paper Corporation), and four respondents (ecologists, environmental group officials, and state government employees) discussed a set of questions (see below) given to them in advance. The four panel members responded to the questions with presentations which were then discussed by the respondents. The rest of the Forum consisted of questions from the NFLC and members of the public.

Questions posed at the NFLC Biological Resources Diversity Forum

General Question

To what extent do the traditional land uses of the Northern Forest affect the region's diversity of biological resources?

Specific Questions

- 1. How would you assess the current status of the diversity of biological resources in the Northern Forest region?
- 2. If current land use patterns and trends continue in the Northern Forest, how will the diversity of biological resources be affected?
- 3. What is the single most useful recommendation the NFLC could make to enhance biological resource diversity?
- 4. What is the single worst thing the NFLC could do, or fail to do?

Source: (Northern Forest Lands Council 1992a, p. 2)

The responses to these questions reflected some of the disagreement within the field of ecology. For example, Malcolm Hunter, a biologist from the University of Maine, urged the development of a classification system for ecosystems and the identification of the natural ecosystems that are not yet protected in parks or reserves. He also stressed the importance of developing a master list of endangered and threatened species for the region (Northern Forest Lands Council 1992a, p. 3).

Stephen Trombulak, a professor of Biology at Middlebury College in Vermont, downplayed the importance of an endangered species inventory, emphasizing instead the need for a focus on "all levels of biological organization, including genetic, ecosystem, and landscape levels, as well as that of the species" (Northern Forest Lands Council 1992a, p. 6). He also complained that a focus on endangered species "looks only at those that are currently at low population levels and are therefore at some kind of immediate risk," ignoring species that have been eliminated from the region as well as those that have not yet been discovered and described (Northern Forest Lands Council 1992a, p. 6-7). He emphasized the need to respond to this uncertainty with policies that protect areas of undisturbed forest that are "large enough to allow persistence of ecological functions and evolutionary processes, and to act as source pools for re-establishment of biological communities in disturbed areas" (Northern Forest Lands Council 1992a, p. 9).

Sharon G. Haines, Forest Environment Manager for International Paper (IP), agreed with the call for better information on the region and deferred to regional experts regarding the specific organisms or landscapes that should be protected. She

emphasized the need to identify "species/communities of concern" as an "early warning system" that would allow prompt responses to biodiversity problems. She also pointed out that the forest industry had a responsibility to examine both the effects of management practices on the forest resource and on non-resource aspects of biology. As an example she cited an IP-funded study that showed that clearcuts and even-aged tree stands in hardwood forests improve the density and richness of breeding bird communities (Northern Forest Lands Council 1992a, p. 11-12). She emphasized the need to gather better information on the biology of the region, but noted that this "does not mean inaction or continuing the status quo until we have all the answers" (Northern Forest Lands Council 1992a, p. 13). She stressed the importance of monitoring land management efforts based on new research so that they can respond to new information. Haines also made a plea for solutions that avoid false, all-or-nothing choices for the region, pitting harvesting against preservation, business against the environment, or humans against nature. A consensus-building effort is "the best way to develop solutions that will conserve the environmental quality of the Northern Forest and maintain the region's economic viability" (Northern Forest Lands Council 1992a, p. 13-14).

Rainer H. Brocke, a professor from the State University of New York College of Environmental Science and Forestry, expressed optimism about the region's biodiversity, citing reforestation of the region that is "partially restoring us to conditions prevailing here before the 1800's" (Northern Forest Lands Council 1992a, p. 14). His principle concern was the threat posed by imported pest species to native trees. He cited the loss of the American chestnut, the substantial declines in the American elm, and threats to beech and hemlock from such assaults. The decline of these species makes the remaining forest species more vulnerable to future disease. Dr. Brocke cited studies which showed that logged areas "had a higher bird species diversity than an uncut (wilderness) northern hardwood stand." He explained that for most species in the relatively continuous forests of the region, "habitat fragmentation per se is not a problem in the Northern Forest" (Northern Forest Lands Council 1992a, p. 16). He did note, however, that roads can have strong negative effects on the survival of large animals, and therefore suggested that some areas without permanent roads need to be preserved. "[S]trategically located tracts of juxtaposed public and private lands that can be consolidated into large blocks" should be identified and preserved, he suggested, as large animal refuges and as areas in which unique ecological features can be protected. He also described ways

that these refuges could be funded, managed, and maintained with combinations of public and private lands (Northern Forest Lands Council 1992a, p. 17-18).

The respondents panel demonstrated similar uncertainty and subtle conflicts over definitions. Just a few examples are necessary. Dr. Richard Dressler, an official from the Maine Department of Inland Fisheries and Wildlife, explained that his mandate has been to look at species level problems, acknowledging that there was a long way to go in this area. He also agreed on the need for an ecosystem management approach to biodiversity preservation. He did not, he claimed, hear a clear definition of biodiversity during the panels' presentations, and noted that "until we have some clear goals and objectives," it will be difficult to achieve biodiversity protection (Northern Forest Lands Council 1992a, p. 22). Another respondent was worried that "someone, seeing there is really not a great consensus on what biodiversity is or what needs to be done in terms of biodiversity, might come away saying that it is really not important or that we cannot do anything about it" (Northern Forest Lands Council 1992a, p. 27). Charles Cogill, an independent forest ecologist from Vermont, pointed out that, in his view, it is meaningless to talk about ecosystems being healthy or unhealthy, since these are strictly human concepts. He said that there is no natural goal of biodiversity that should be promoted. Instead he argued for a focus on understanding intermediate (ecosystem) levels of biodiversity rather than emphasizing landscapes or species. Later in the discussion he complained that "we are really locked in to this idea that unless we can define something to the point where everyone agrees, we cannot do anything about it. There are many terms we use daily that have no definitions that everyone agrees on [...] like economic health or national security." He suggested that we have to keep portions of the landscape as free as possible from human influence so nonhuman natural processes can take their course (Northern Forest Lands Council 1992a, pp. 20-21, 40).

The lively dialogue about measurement and appropriate means for protecting biodiversity continued when the NFLC and audience members questioned the panelists. Panelists recognized that any effort to protect the region's biodiversity should occur within the existing framework of laws and land ownership. Most agreed that there was a need to collect and codify existing information on regional ecosystems so that everyone understood the existing diversity of the region and the rates of change for various individual ecosystems and/or species. When pressed for conclusions about the best size and composition for regional ecological reserves,

none of the panel members made specific recommendations³. Instead they explained that such a determination could only be made after a systematic accounting of the region's existing ecosystems. Only after such an accounting could scientists know specifically what ecosystems needed better protection (Northern Forest Lands Council 1992a, pp. 34-50).

Natural ecosystems are subjected to various kinds of disturbances and some questioners were interested in the difference between these natural disturbances (hurricanes, fires, and winter weather were mentioned) and the disruptions created by large-scale human action, such as development or clearcutting. Although some aspects of human disturbance mimic natural factors, there are significant differences, and lots of unknowns factors. Soil ecology was cited as one area about which little is understood, but which might react quite differently to natural, as opposed to human disruptions. The scale and uniformity of human impacts may also differ considerably from their natural analogs. For example, hurricanes and fires might clear standing trees from large areas, but those natural disturbances will leave downed trees or ash in their wake, thereby returning much of the forest's organic material to the soil. Modern tree harvesting does not leave this organic matter. In light of this uncertainty, panelists and others felt there was a need to better understand just how analogous these human and natural processes are.

Interestingly, all the panelists agreed that old growth forests deserved protection because they are extremely rare in the Northern Forest. Some noted that there do not seem to be any individual species uniquely associated with such forests in the Northern Forest region, but others explained that the mix of species associated with old growth may be unique. (Northern Forest Lands Council 1992a, pp. 41-49).

The conversations also turned to the question of biodiversity protection. There were two ways that this issue was addressed. On the substantive side, all of the panelists believed that experts in the region's biodiversity could reach some agreement on the catalogue of ecosystems that existed in the Northern Forest, and all expressed general support for the idea of ecological reserves. Procedurally, the panelists noted that any implemented solution would have to be based on consensus, and must allow landowners, large and small, to have a role in helping to define appropriate protective strategies (Northern Forest Lands Council 1992a, pp. 45-50).

³ Later in the discussion two panelists <u>did</u> say that there are currently not enough reserved areas in the Northern Forest.

In addition to this forum, the NFLC's Biological Resources Subcommittee benefited from the work of several volunteer and consulting ecologists. Two participants in the Forum, Sharon Haines and Malcolm Hunter, were asked by the subcommittee to submit a brief report outlining some of the issues related to creating ecological reserves for the Northern Forest, using data from Maine to show what an ecosystem inventory for the region might look like (Hunter and Haines 1993). Another participant, Rainer Brocke—concerned that the Hunter and Haines paper did not adequately address economic, social, and political factors—wrote a commentary on their paper. He noted that "[o]ur northern forest biota are now in relatively good condition compared to their devastated state at the turn of the century" and gave credit to the humid eastern climate and the "massive reversion of open agricultural lands (lands cleared during the 1800s) to successional forest" (Brocke 1993, p. 2). His commentary referred to studies showing that there is an increase in the "species richness" of plants, trees and birds in many areas following logging of various types (Brocke 1993, p. 2-3). Although the research cited did not support the notion that old growth forest was especially "rich" in species, Brocke noted that old-growth forests have unique ecological characteristics and should be preserved because they are valuable for research and, perhaps, for the preservation of certain species of birds and amphibians. Brocke's commentary concluded with the following recommendations: that the NFLC emphasize a dynamic, limited process, rather than grand planning for biodiversity; that it create some kind of regional advisory structure to oversee progress; that it seek good information about the ecosystem/community level of the biodiversity hierarchy, and; that it should foster a working partnership between the private and public sectors to attain biodiversity goals. According to Brocke any effort to conserve biodiversity necessarily involved compromise because of the need to maintain a strong forest economy (Brocke 1993, pp. 3, 8-9).

The Subcommittee received three reports from a private consultant: Comparison of Ecological Classification Systems in the States of Maine, New Hampshire, New York and Vermont (Flatebo 1993a); Federal, State and Private Initiatives for Preserving Biological Diversity (Flatebo 1993b); and Maintaining Biological Diversity on Private Forestlands: Voluntary Techniques (Flatebo 1993c). These reports, true to their informative titles, told the Subcommittee what was currently being done on these subjects in the region, the nation, and the world.

The report on ecological classification systems concluded that a unified regional ecosystem classification system could be developed for a relatively modest investment in time and money, although it acknowledged that there is disagreement among ecologists about each proposed scheme. The report also noted that to create such a system, the NFLC would need to "develop a goal statement to give context to and guide the overall direction of this work" (Flatebo 1993a, p. 5).

The other two reports gave very general summaries of many different biodiversity preservation initiatives. The report on federal, state and private initiatives showed how different agencies and private entities perceived biodiversity preservation, and how they were implementing strategies that fit with their institutional needs and resource constraints. The report on voluntary biodiversity preservation techniques emphasized a set of biodiversity principles that could be used as guides for private landowners and suggested monetary and regulatory incentives that could be used to encourage such behavior. It concluded by recommending better information for and education of landowners, forestry professionals and the public. It also recommended experimentation with various incentive programs and suggested that such initiatives should be carefully monitored to ensure their effectiveness (Flatebo 1993c, pp. 16-17).

Public Comments on Biodiversity and Ecological Reserves

In addition to these reports and the forum, the NFLC received an enormous amount of comments on the issue of biodiversity. Comments came from corporations, organizations, the Council's citizen advisory committees, and from the general public. While it would be difficult, if not impossible to accurately summarize all of these comments, several clear categories of concern emerged from the comment process⁴.

In its 1993 Findings and Options⁵ report, the NFLC identified the notion of ecological reserves on public and private lands as one of the options that could be used to respond to concerns about biodiversity (Northern Forest Lands Council 1993a, p. 19). This option elicited a strong response. Many individuals and some businesses stated that they did not believe there was a need for reserves because

⁴ The issue of ecological reserves, and the specific interest conflicts that it generated, are discussed in more detail in the next chapter.

⁵ The Findings and Options report, released for public review in Sept. 1993, summarized the NFLC's research findings and provided an extensive list of possible recommendations. The list included options that would have been contradictory if they had all been implemented, and included "do nothing" options. Commenters were asked to tell the NFLC why they supported or opposed the various options.

there was not sufficient scientific consensus on the issue of biodiversity. A New Hampshire resident said that "given the level of current knowledge on this subject it is inappropriate to support ecological reserves," while a Maine resident was even more adamant, suggesting that the NFLC "delete this entire section from the report because it has no basis in fact from NFLC findings...do not use the word 'biodiversity' in your recommendations, it is yet to be defined, is poorly researched and impossible to implement recommendations on it, as a result" (ellipsis in original). The Coos County (NH) Community Alliance felt that "so much of the issue of biodiversity is founded in political persuasion and not science because the definition of it [is] so broad as to be ultimately undiscoverable." The Huber Corp., a forest-products manufacturer, claimed that "this issue is too new and highly emotional to be considered in this forum....very little scientific evidence to support many of the concepts...not even agreement on definition...only thing for NFLC to recommend on this now is further research" (ellipses in original) (Northern Forest Lands Council 1993b, p. 24).

Some comments about ecological reserves reflected concerns about their impact on private property rights: The Adirondack Solidarity Alliance (a self-described property and citizen rights organization) said that the "idea of creating 'ecological reserves' is abhorrent." A New Hampshire resident, responding to the idea of ecological reserves, had a "real problem with this because it appears to be confiscatory zoning." A New York resident complained that the "establishment of biological reserves is just another scam designed to take away the use of someone's property without paying for it." The New York Blue Line Council said that it "strongly oppose[s] the creation of regional reserve system [mentioned as one of the options in the *Findings and Options* report] because it is largely unfounded, poorly defined, and perhaps the most intrusive on landowner rights" (Northern Forest Lands Council 1993b, pp. 24, 25).

Other commenters reviewing the NFLC's published work, including both individuals and environmental groups, reached startlingly different conclusions. Biologist Steven Trombulak (a participant in the Council's Biological Resources Forum) said that, "based on our current level of scientific knowledge, a system of unmanaged lands is essential to conservation of biological diversity in the Northern Forest." Another participant in the forum, Rainer Brocke, noted that finding ways to "encourage good management on the vast majority of land in private ownership is the critical component to conserving biodiversity in the region," adding that

public ownership would be appropriate for "extremely fragile plant and animal communities and biodiversity which cannot be maintained through most accepted land and forest management procedures directed towards economic returns." A Maine resident believed that "because we do not understand the long-term impacts of human activities on natural processes in the forest ecosystem, we must create a reserve system to preserve existing biodiversity." Environmental groups seemed universally in favor of reserves. The Appalachian Mountain Club said that "reserves are important because they: provide unmanaged habitat that is scarce or absent on managed lands, provide permanent baselines, provide sources of plants and animals for recolonization of adjacent managed or otherwise disturbed lands, provide areas where ecological and evolutionary processes and properties are allowed to naturally adjust to short and long-term environmental trends, such as climate change, provide an insurance policy against our own ignorance." The Sierra Club agreed, and felt that such reserves should "incorporat[e] all types of biological communities in sufficiently large tracts of land to allow natural processes to govern." And the Maine Audubon Society explained that the "creation of a forest reserve system to complement the region's industrial forest lands is needed...here focus can be on protecting conditions which are least easily maintained on lands actively managed for forest products. (Northern Forest Lands Council 1993b, pp. 24-26).

There were some commenters who both recognized the controversial nature of this option and believed they saw a need for further study and discussion: A commercial woodland manager called it "a fragile issue which must be handled delicately for all concerned." The Society for the Protection of New Hampshire Forests (whose president was a member of the NFLC) said that the "NFLC should provide the framework to make reserve decisions in the future." International Paper, a multinational pulp and paper manufacturer with large land holdings in Maine and New York, called ecological reserves "[a] very new, scary concept that has merit if the research bears it out and if everyone can agree on the concept." Bowater, a Maine-based forest products company, supported the formation of a "neutral body [to] conduct a series of workshops to further examine the ecological reserves concept" (Northern Forest Lands Council 1993b, p. 24-26).

In short, the public comments on the NFLC's work were extremely varied and reflected some deep disagreements about the importance and desirability of a system

of biological reserves. The NFLC's response to all of this input reflected some similar levels of confusion and concern.

The NFLC's Response

The NFLC's final recommendations acknowledged that "maintaining the region's biodiversity is important in and of itself, but also as a component of stable forest-related economies, forest health, land stewardship, and public understanding" (Northern Forest Lands Council 1994b, p. 61). The Council recommended that states needed to "develop a process to conserve and enhance biodiversity across the landscape," by starting information-gathering and education processes in each state, and supplementing these with targeted economic incentives (for private landowners) and science-based programs to identify and purchase lands appropriate for ecological reserves (Northern Forest Lands Council 1994b, Recommendation 21, p. 62).

This sounds like a rather aggressive recommendation, and if adopted it would be a significant step beyond existing efforts in the region. Still the recommendation falls far short of that proposed by some biologists whom the NFLC listened to during its deliberations. Many environmental groups also saw the recommendations as a cop-out. They feared that sending the issue of biodiversity back to the states for further study was tantamount to destroying an historic opportunity for change (Northern Forest Forum 1993). Without large wilderness areas, linked by relatively wide corridors, some environmental groups felt that the survival of some of the more dramatic deep woods species could not be guaranteed for the future. Without such reserves there was also little hope for the reintroduction of species like wolves, elk, or mountain lions to the region, another goal of some environmentalists⁶.

More than a year before the NFLC released its final recommendations, the Biological Resources Subcommittee of the NFLC produced a cover memo for the

⁶ Environmental groups promoted their preferred approach in various publications during the NFLC's planning process. Three environmental groups working with the Northern Forest Alliance, for example, published a glossy photo essay on the Northern Forest that identified various habitats that needed protection (National Audubon Society et al. 1994?) (see discussion in Chapter 7, infra). The Northern Forest Alliance published A Forest at Risk: The Citizens' Agenda for Saving the Northern Forest, a report which categorized and summarized public comments to show the depth of support for various issues, including biodiversity and land acquisition (Northern Forest Alliance (undated)). The Northern Forest Forum, an independent environmentally-oriented newspaper published regularly during the NFLC process came out strongly in favor of ecological reserves as a means for protecting regional biodiversity (Sayen 1994b) (also discussed further in Chapter 7 infra).

Hunter and Haines paper on ecological reserves in which they summarized their understanding of the Biological Resources Diversity Forum's contribution:

Our Subcommittee agreed that the key findings from that forum were:

- a. That there is a need for more information regarding the status of the biological resources of the Northern Forest;
- b. That the panelists/respondents generally agreed that ecological reserves (or a system of ecological reserves) are <u>one</u> key element of any plan to protect the diversity of biological resources of the region;
- c. That continued dialogue, involving a wide range of interested parties under a consensus building format, is a key component to addressing this issue. (Hunter and Haines 1993, Foreword)

These conclusions, reached before public comments on the issue had been received, are similar to the recommendations which the NFLC ultimately adopted. Interviews with NFLC members show how they responded to the conflicting advice they felt they were receiving on the science of biodiversity.

Many NFLC members said they recognized the need to separate the desires of interest groups from the science of biodiversity. "The fact is that the science is an emerging one, so there was not a lot of clear information that we could draw upon as a basis for our actions, and that went back to the definition of biodiversity," said one NFLC member (Bley 1996). Another member complained about the vagueness of the idea of biodiversity, asking, "What is it? Is it having every species every place, everywhere? Is it having areas that man has no interaction with? And is man part of the ecosystem?" (Carbonetti 1997). Other members were less charitable in their assessments of the science. Referring to pronouncements on biodiversity by the United Nations and Vice President Al Gore, one NFLC member said, "we went through that stuff, and most of what was being presented was politically motivated rather than scientifically motivated — the U.N. stuff was crap, Al Gore's stuff was crap" (Johnston 1996).

Indeed, most NFLC members believed that the science that did exist could be used by various interest groups. "Some people saw this issue as the key vehicle and rationale for their ultimate objective, particularly on the environmental side — the establishment of large wilderness preserves" (Bley 1996). Early in the process NFLC members were confronted with the way that different groups would interpret the same information. As one recalled:

We were all in the same room, we were all in the same meetings, and we would come out of those meetings and the environmentalists would say,

"boy that was great information that we got, and biodiversity is a thing we've got to pay attention to," and landowner rights advocates were saying, "there wasn't any science in that, we didn't see it, and it isn't there." And those of us in the middle would say, "well, I can see a little science, and I can see a few things that we still need to know more about." (Sargent 1996)

Clearly the perception of uncertainty in the scientific information on biodiversity and other issues troubled some Council members. As one complained, "the NFLC wasn't originally supposed to be a forum for scientific debate [...] whose science should we have accepted?" (Meadows 1995). NFLC members often responded to the scientific debates with a kind of "split the difference" approach. "We cast out the extremes on both sides and came to a painfully slow recognition that there is something to biodiversity" (Bofinger 1996).

I think a lot of us felt that there were legitimate differences of opinion on biodiversity, so we tried to strike a balance. There was some scientific evidence for large reserves, but we had other information that said that use promotes other types of biodiversity, so it boils down to there being no one right answer [...] We were looking for a reasonable compromise. (Meyer 1997)

Can one strike a "reasonable compromise" on biodiversity knowledge? In this case, the compromise is not over the knowledge itself, but over what "type" of biodiversity the Council should try to preserve. The NFLC was confronting differences in the interests and values of scientists who had different notions of what types and quantities of biodiversity deserved protection, not about the meaning of biodiversity.

Council members appreciated it when scientists elaborated common sense rationales for their preservation preferences. References to some ideal, natural state for the region's forests were unappealing to some members. Practical appeals, however, rang true. One Maine scientist put forward a justification for ecological reserves that suggested they were needed as an experimental control for understanding human manipulation of the forest. She argued that the region needed to preserve representative samples of the type of forest lands that were not currently well-represented on public and private lands. A forest industry representative on the NFLC explained that, for hira, this model made sense. It also "helped achieve a goal that the environmentalists wanted, and that is to have set asides of these ecosystems for future generations for whatever purposes, and that's valid but we needed a way to make it palatable and not be an assault on forestry and private ownership" (Johnston 1996).

Most NFLC members acknowledged that their recommendations represented a compromise between the different values on the issue.

What the Council consistently heard is that there are those out there who believe that mans' [sic] actions are contrary to biodiversity and there are those out there who feel, "hey, what happens happens," but there's a broader range of folks in between who say what we really need to do to look at biodiversity issues is have a broad array of solutions to: better forestry, better economics, property taxes, heritage taxes, all these other things. (Carbonetti 1997)

One member (a forest-products industry representative from Maine) said that he believed the concern about biodiversity was motivated, at least in part, by people's awareness that species and habitats are being lost all over the world.

We look at the rain forests, and we look at the ancient forests in the Northwest, and we're worried that we're losing all these things - appropriately... But the rhetoric of this great loss of species that is happening nationwide or world wide carries the assumption that it's happening equally everywhere in the world. That's behind some of the rhetoric the Council heard. (Milliken 1996)

This member acknowledged that the desire to protect biodiversity exerted a strong emotional pull on some people, but he criticized the knowledge behind "the assumption that it's happening equally everywhere in the world." According to this NFLC member, the urgency that is felt in these relatively undisturbed environments is difficult to rationalize in the Northern Forest, which has been cut over at least two times since European colonists reached this continent. "I think we lost our spotted owl, if we had one, a long, long time ago, so to encourage the conversation and the continuing gathering of good information was, I feel an appropriate response of the Council" (Milliken 1996). Other members obviously agreed. "There were lots of emotions on this issue, we realized that there were issues we couldn't deal with because of the vast disparities between the four states [...] our recommendation gave the states tools to address the issue" (Harrigan 1996).

Knowledge Conflicts and Sustainability

Science is widely misunderstood by policymakers. This misunderstanding, however, is particularly damaging when the policymakers' goal is to promote sustainable development. The environmental sciences provide crucial information that is needed to evaluate human impacts on the natural world. If policymakers do not understand what science can and cannot accomplish, they cannot properly use scientific knowledge in the quest for sustainable development.

Recognizing the political nature and uses of science

Scientific research can help us to understand how an ecosystem works, what its constituent components are, and how they are affected by human activities. Science works by observing natural phenomena and then putting forward tentative, testable hypotheses that attempt to explain the observations. Most original science, then, will be incremental, adding a small piece to our overall conception of the natural environment. Unlike much experimental science, where conditions are controlled and external factors that could confound the conclusions are eliminated, most field ecology requires well-documented observations that take place in a messy world where causality is difficult to discern. Such science works through careful examination and inference. To ask an intelligible question, ecologists must begin some model of ecosystem function that they are planning to test. In the case of biodiversity research, the models attempt to explain biodiversity as a function of some other parameter, like habitat, food availability, etc.

The research about biological diversity reviewed by the NFLC is a good example of this type of research. One researcher looked at bird species and discovered that there are more species present in a small-scale timber management area of the forest than there are in a similar area where trees have not been cut. Another examined data on the overall decline in migratory birds and found that this decline is more serious in areas where forests exist only in small patches (both are described in Cooksey, 1992, pp. 16-19). These sorts of studies are fairly typical of original scientific literature—each uses certain types of data and measurement to make a tentative conclusion about causality. Other researchers then have an opportunity to question the conclusions and conduct additional research to refine the explanations offered.

Although these two studies are not directly contradictory, it is easy to see how a determined advocate could brandish them like weapons in a battle over whether logging is good for biodiversity ("Bird species diversity is greater in small scale timber management areas"), or bad for biodiversity ("The decline of migratory bird species is most serious in areas where the forest exists only in small, isolated patches"). The different focus of these studies could arise for any number of reasons including the location or expertise of the researchers, their theoretical goal (i.e., what ecological theory are they testing or expanding), or the even the source of funding for the research. There is no way of definitively telling simply from the research itself what factors led the researcher to ask one question and not another.

Many NFLC members understood that different studies could be used to support different positions. Sargent's comment above, noting how different groups, listening to the same presentations, came away with completely different interpretations, is also an acknowledgment that differing value frames can seriously affect ones understanding of scientific research. But because of the somewhat adversarial format, NFLC members did not have complete faith in the quality of knowledge they got from the biodiversity forum, and they were unable to decide if individual contributions were science or advocacy.

This problem might have been avoided if all the relevant stakeholders in the NFLC's process had been able to engage in a joint fact-finding process about biodiversity. Such processes can increase stakeholder confidence in the quality and usefulness of knowledge and allow the participants in a planning process to focus on their interest and value disagreements, rather than on dueling expert opinions (Susskind and Cruikshank 1987, pp. 115-117). The forum sponsored by the Council could have served as part of such a process. Unfortunately the forum became an end in itself. To be effective, it should have begun with a discussion about why biodiversity protection is important in the first place. The general questions posed to participants (shown in the figure on page 89 above) seem to assume that there is a common understanding about the meaning and importance of biodiversity. Debates inside and outside the Council show that there was no such common understanding. The forum itself was premature because the underlying values that justify biodiversity protection had not been aired or discussed.

Even if joint fact finding had been undertaken, there would still be further conflicts. The difficulties for policymakers who want to use biological research to promote sustainability go deeper than merely disentangling interests from science. Certain problems arise because of the nature of scientific research on biodiversity.

Developing goals in the face of the "discordant harmonies" of ecology

Biodiversity is a term that is well entrenched in the scientific and environmental policymaking literature. Writers like McKibben (1989, 1995), Quammen (1996) and biologist E. O. Wilson (1992) have written popular books on the subject, while journals like *Landscape Ecology*, *Conservation Biology*, *Wildlife Management*, and others present academics with an opportunity to discuss its implications in more detail.

Despite all this activity, or perhaps because of it, there may be no unified definition of biodiversity that is uncritically accepted by all biologists. A detailed positive definition of biodiversity is difficult because of the nature of scientific inquiry. As they examine ecosystems in greater detail and catalogue the organisms and relationships that characterize those ecosystems, scientists learn more and more about gaps in their knowledge of ecosystem diversity. As noted above, these gaps become the focus of further rounds of research and explanation. There is no end point where biodiversity is fully described and documented. This is not considered to be a problem for conducting biodiversity research, but it is profoundly disturbing to policymakers, like the NFLC, who are looking for definitive statements about biodiversity that they can use to make concrete recommendations. Planners and policymakers want to use biodiversity definitions to make policy, and for that purpose the definition must distinguish between what is desirable and what is unimportant. Some biologists recognize this problem, but they know that definitions of biodiversity that are sufficiently simple for use in planning documents can cause more harm than good.

Given a vague definition, groups on opposing sides of resource management disputes (for example, loggers versus environmentalists) can both argue that the policies they advocate will increase biodiversity. On the other hand, a fully operational definition of biodiversity would probably be too long and complex to serve as a definition (Noss et al. 1992, p. 68).

Noss, et al. suggest that the solution to this dilemma is to develop specific indicators that allow policymakers to inventory and monitor biodiversity in a general way without getting bogged down in an unattainable definition. But policymakers are unlikely to propose biodiversity indicators if they can not first explain why biodiversity should be measured.

This is a key problem — the unspoken assumption that biodiversity is unequivocally important and desirable. To be meaningful for sustainable development policy, discussions of the measurement of biodiversity need to be accompanied by discussions of its desirability. As noted above, the panel discussions and research reports all began with an unspoken assumption that biodiversity was desirable, but as the planning process progressed, it became clear that individuals had different ideas about how important it was, and what form of protection it deserved. Without a shared sense of the importance of biodiversity, the Council members each had to come to a justification for concern. That justification, in turn,

had to be filtered through the Council member's existing value frames and interest preferences.

Further complicating matters is the fact that scientific understanding of biodiversity and ecology has changed rather dramatically in recent years. Botkin (1990), discussing the state of ecological science, pointed out that old notions of stable, cyclical, or smoothly progressing ecosystems have given way to an understanding that ecological systems can vary dramatically on both temporal and spatial scales. Ecologists are only beginning to understand such variations, even though the change in ecological thinking has been occurring for over 20 years. These variations sometimes are caused by interactions within the system, but sometimes seem to be effectively random. One of the results of this acknowledgment, however, is that ecological science has difficulty answering the types of questions often asked by environmentalists, environmental policymakers, and their critics. If ecosystems are changing on all of these scales, how do you measure the background or "natural" biodiversity in a region when the ecology can vary widely independent of human intervention? Does nature matter if we can't even define what is "natural"?

Comments by some participants at the NFLC's Biological Resources Diversity Forum, and by NFLC members during interviews, show that many understood this dilemma. Arguments about preserving old growth forest made during the Forum, for example, did not make reference to old growth being a more natural or more unspoiled ecosystem. Instead biologists and Council members seemed interested in old growth forest because it was rare and could teach us about ecology because it was not managed for timber production. In short, they suggested concrete goals (preserve old growth forest as an example of a rare biological environment and as a scientific research area) that were independent of any scientific findings about the biological diversity of old growth portions of the Northern Forest. This suggests that the Council could have developed "principles of biodiversity preservation" similar to the "principles of sustainable forestry" that it adopted for evaluating forest management.

There was precedent for such an approach. NFLC-sponsored research on voluntary biodiversity protection (Flatebo 1993c) contained just such a set of

⁷ The principles of sustainable forestry were adopted as a way to acknowledge public concerns about industrial forest management practices in the Northern Forest. A more complete discussion of their adoption is included in Chapter 7, on Power Conflicts.

principles. Properly presented, discussed, and evaluated during the planning process, these principles could have been the basis for the Council's judgements about further action on biodiversity. In short, they could have been the NFLC's statement about the values that it wished to promote in its approach to biodiversity research and planning.

The Council did not consider creating such a list. Some NFLC members (and some members of the public) saw biodiversity less as a scientific concern than as an ill-defined technical term that could be used to justify the creation of large scale parks or preserves in the region. To these members, biodiversity started out as a ploy. But, as Council member Paul Bofinger said above, they did come, slowly, to the realization that biodiversity might matter. Unfortunately, the Council did not come to that conclusion in time to actually take a stab at explaining to the region how and why it might matter.

Understanding Uncertainty

Biodiversity was both a legitimate area of scientific inquiry and an area where value frames would determine what types of scientific inquiry was necessary. It is not clear if the Council understood how to deal with uncertainty in the study of biodiversity⁸. Once we acknowledge that a certain amount of uncertainty pervades our understanding of biological systems, we must decide how to plan for sustainability despite the gaps in our knowledge. As Schwarz and Thompson (1990) point out, however, the way different groups deal with uncertainty about the environment is fundamentally determined by their organizing value frames. Many of the disagreements among Council members, among biologists, and among members of the public, had to do with their responses to uncertainty.

Can we ever really fully understand an environment? Botkin's (1990) answer is that nature can be partially understood, but ecologists must accept that natural systems are affected both by interactions among their elements <u>and</u> by random factors that can only be specified probabalistically. Botkin illustrates this by pointing to his research on whooping crane populations. He looked at the birth and death rates of whooping cranes, a desperately endangered species that had increased under federal protection from 14 birds in 1938 to 51 by 1972. He saw many random, unexplainable fluctuations in the yearly birth and death rates, but he showed that if the (currently unknown) causes of these fluctuations remained the same, then the

⁸ Or perhaps they did. "When the experts disagree, the fools are free to choose" Council member Ted Johnston (Northern Forest Lands Council 1992a, p. 34)

chances of the population crashing back to zero over the next twenty years were incredibly small (5 billion to one). Despite this comforting conclusion, he also pointed out that a determined sharpshooter, a new disease, or some other factor could easily wipe out his assumption of stability in birth and death rate variation. This worst case scenario has not come to pass, and by the mid 1980s there were 170 whooping cranes (Botkin 1990, pp. 125-127). The research, however, points out how increased knowledge about a species can only go so far in protecting it. Botkin was able to make confident pronouncements on the stability of the population within certain parameters, but he could not account for factors that were outside of the framework of his analysis.

The proper response to uncertainty of this type will <u>not</u> usually come from more research, although incremental increases in knowledge are always possible. Botkin's aside about sharpshooters is actually the key lesson to take from his analysis. While a certain amount of uncertainty in biological science is inevitable, policymakers <u>can</u> try to control social factors that have the possibility of disrupting the biological systems targeted for preservation. In this case some of the forces that threatened the whooping cranes were human factors like hunting that could be deterred with greater or lesser amounts of effort, depending on how strongly policymakers valued the preservation of the cranes. The dilemma for planners, particularly sustainable development planners, is to be able to state clearly which biological systems are deserving of protection, and why. This choice is not a scientific choice, but a political choice informed by the interests, values, and power relationships operating in the region. To make such a choice planners need a certain amount of confidence that the values they are applying will serve some notion of "good planning."

Summary and Conclusion

Council members' comments and the final recommendations on biodiversity suggest that there is some misunderstanding about the role of science in this aspect of environmental planning. The goals of any process to preserve regional biodiversity will not be dictated by scientific research, and the NFLC's recommended state-level research proposals will still leave the question of biodiversity goals unanswered. Such goals arise, in part, from the values that planners use to frame the research objectives. So while the NFLC correctly identified a need for better research to catalogue biodiversity, and while it correctly noted the need to engage in a broad public dialogue about the need for ecological reserves, it failed to take the

lead in defining a proposed set of goals for such reserves in part because it failed to think clearly about values.

This failure stands in contrast to the Council's pronouncements on forest management, which will be discussed in Chapter 7. The NFLC commissioned no research on forest management because it claimed the issue was outside the scope of its initial mandate. It was forced to discuss the issue, however, because of ongoing public pressure. Despite the lack of research, the NFLC's final recommendations on forest management explicitly identify a list of sustainable forestry principles which reflect an ethical stand on how land should be managed. The Council could have developed a list of biodiversity principles, which took an ethical stand on what aspects of the region's biodiversity were worth preserving. Instead it developed a set of research and procedure oriented recommendations. A full exploration of the value of biodiversity has been left for that future ecological reserve planning process.

Sustainable development advocates can use scientific and other forms of knowledge to gain insight into natural processes, but even the best science will not provide unequivocal statements about human impacts on the environment. Definitional dilemmas and the complexity of ecological science conspire to thwart our quest for certainty. Even when we are clear about what we want to know, it is sometimes hard to disentangle interest conflicts among experts from the analytical disagreements that result from the process of gathering knowledge.

In this particular case, various environmental groups clearly had interests (stated in their comments to the Council) in expanding the amount of public land available for biological reserves in the region. But those easily described interests were supported by a value system which viewed the protection and expansion of biodiversity in the region as a morally desirable goal that was not based simply on knowledge of biology. NFLC members apparently recognized this and substituted their own "reasonable compromise" values for those of the environmental groups. The problem, of course, is that the recommendations emphasize the uncertainty of the science, when the true uncertainty is among the competing values and interests of the pro- and anti-reserve advocates. The Council's call for further research on biodiversity leaves this conflict of values and interests untouched.

One final point needs mentioning. The problem of hired experts did not seem to be very important in the NFLC debates (none of the NFLC members explicitly noted this as a problem during interviews). But public policy researchers are aware of the ongoing problem of advocacy science, where experts on complex issues are hired by competing interests to act as a new sort of gladiator in the arena of policy making or public opinion (Ozawa 1988). These experts, limited by the same factors discussed here and in the theory chapter above, are often tainted (in the public's eyes) by virtue of having been hired by one side or another to proclaim their knowledge. Carried to its extreme, this type of knowledge conflict promotes the idea that knowledge has no purpose other than to support or undercut certain interests.

Scientific knowledge is a powerful tool for understanding the natural world. Complex and somewhat indeterminate planning objectives, like promoting sustainable development, or protecting and enhancing biological diversity need to be understood <u>not</u> as objectives that arise from scientific knowledge, but as goals which arise, in part, from the values of planners and/or the public. While interest conflicts over these types of knowledge can be minimized through joint fact finding as recommended by alternative dispute resolution advocates, only a clear discussion and airing of the competing values underlying those interests will assure a stable outcome to such a process.

A healthy skepticism about interest conflicts masquerading as knowledge conflicts is crucial to planners. But while all knowledge is necessarily bound within a value frame or intellectual paradigm, there is still a world "out there" that will be the object of any sustainable development planning effort. The quest for knowledge about that world is no longer as simple as it was in the days when we had simple faith in the idea of rational inquiry and logical positivism. Our need for knowledge and understanding of the world, however, will only increase as we try to implement sustainable development.

Chapter 5

Interest Conflicts

Interest Conflicts in the Northern Forest Planning Process

Interest conflicts are disagreements among organized groups (including government agencies, businesses, and more traditional interest groups) or individuals about distribution of social costs and benefits. The NFLC planning process was designed, in part, to let regional interests speak out about their hopes and fears for the future of the Northern Forest. Groups and individuals revealed and elaborated their interests during the multi-year effort and the conflicts about the preferences and desires were often intense.

The discussion of interest conflicts in Chapter 2 shows that interests are seldom simple, unambiguous statements of preferences. Their development and expression is mediated by their political, economic, and institutional setting. Groups with ostensibly similar interests may find that the specific circumstances of a sustainable development planning process makes it difficult to remain allies. Others, when faced with planning recommendations that call for tradeoffs, may find that their interests are so closely tied to bedrock values that they can't compromise. Although self-defined interests are an excellent source of information about stakeholders' sustainable development preferences, we know that many factors, especially those related to economic and social power relations, complicate the development and expression of those interests. Given this complexity, it is often difficult for planners to discern the specific interests behind the stated policy preferences of groups or individuals.

An extensive public outreach and participation process allowed the Council to hear from a broad range of people throughout the region. The resulting welter of information about interests had to be processed by a small group of people who had their own divergent interests to contend with. The Northern Forest Lands Council's structure, modeled on that of the Governors' Task Force that preceded it, identified a subset of the region's interest groups who were to participate directly in deliberations about the NFLC's policy recommendations. As the Council explained in its official history, "The Governors of the four states each appointed four members to the Council, one each representing landowners, the state conservation

agency, local interests, and the environmental community" (Northern Forest Lands Council 1994b, p. A-13)¹. The local interest representatives were added to the Council at least in part as a reaction to strong property rights group opposition to the *Northern Forest Lands Act of 1991*. The NFLC's forerunner, the Governors' Task Force on Northern Forest Lands (GTF), only had three representatives from each state (conservation agency, forest landowner, and environmental organization), and had recommended a similar interest mix for the NFLC (Governor's Task Force on Northern Forest Lands 1990, p. 8).

The NFLC represented, at best, an informed guess about which interests were most relevant for discussing the long range economic and environmental future of the region. The biases in this guess are readily apparent. For example one prominent set of economic interests—real estate developers—were conspicuously absent from the Council. And while four *state*-based environmental groups held Council seats, the voices of national, local, and regional environmental and property rights groups were absent from the Council.

In 1991 and 1992 the NFLC created citizen advisory committees in each Northern Forest state and held public meetings to gather information about the region's problems and opportunities. At the same time it hired research contractors and held expert forums in order to provide additional information about the issues facing the Council. In September of 1993 it released a *Findings and Options* report that summarized the findings of the Council's various subcommittees and listed a wide range of options for possible action (including "do nothing") (Northern Forest Lands Council 1994b, pp. A12-A16). Public comments on the *Findings and Options* report, notes from public and citizen advisory committee meetings, and Council members' direct experience with the region's residents all provided information about the interests at work in the region.

Although interest conflicts were prominent in almost every area of recommendations made by the NFLC, the issues of public land acquisition and private land conservation present good examples of how interest conflicts occurred both outside and inside the Council. Land is a limited commodity and the question of how it should be controlled and used is at the heart of many sustainable development disputes. Discussions of public and private land use evoke concerns about both economic and non-economic interests in the land. In this particular case,

¹The members of the NFLC are listed in the Appendix, p. 221 infra.

the disputes which developed demonstrate some of the ways that substantive interest discussions were limited by the structure and choices of the NFLC. Sustainable development of the region requires discussion about how public and private lands can provide needed monetary, recreational, and non-consumptive environmental benefits. To undertake such a discussion, however, the interests of all the parties need to be explored, a common understanding of the issues needs to be forged, and a process needs to be developed that seeks to arrive at a true consensus. This chapter analyzes the interest conflicts that provided the backdrop to the NFLC's work as well as the interest conflicts within the Council.

Public Land Acquisition and Private Land Conservation

National environmental groups and some regional residents hoped that the Northern Forest Lands Council would recommend the purchase of additional public park land in the 26 million acre Northern Forest region. But with over 85% of the Northern Forest Lands in private hands, and with public land purchases unlikely to seriously alter that percentage, the development of private land protection echniques was bound to be at least as important as land acquisition for sustaining the Northern Forest. Before the Northern Forest Lands Council began its planning process, the USDA Forest Service's 1990 Northern Forest Lands Study evaluated several techniques for keeping forested private lands undeveloped. Some, such as current-use property taxes², had been in operation at the state level for years and were reasonably well documented. Others, such as federal or state purchase of conservation easements, had been discussed by economists, environmentalists, and regulators, but had not yet been widely implemented. Various forms of land-use regulation, regional planning, and public/private partnerships were also proposed in this study (Harper et al. 1990).

The NFLC was supposed to build on this legacy of research from the *Northern Forest Lands Study*. One of those legacies, however, was an acknowledgment that both the region's perceived problems and potential solutions to those problems were not well understood. This uncertainty about knowledge provided many

² Conventional property taxes are based on a percentage of the assessed value of the land—i.e., its market exchange value. Current-use taxes are based on some calculation of the land's ability to produce income through the sale of timber (its use value). The stated goals of current-use taxes can vary: they can be designed to guarantee continued timber production, protect open space, promote ecological preservation, or prevent land conversion, to name some examples. Various methods of property tax manipulation to serve these ends are already used in the Northern Forest states.

interest groups with an opportunity to make competing claims about how best to protect the region's land resources.

Regional residents, interest groups, and others who commented on the NFLC's work had many differing views of both park acquisition and private land conservation techniques. The comments that they forwarded to the Council may have been an accurate representation of their interests, or they may have been strategic statements that pushed for a particular outcome without revealing the true interests behind the lobbying. Within the Council, however, members were able to explore each other's interests, to package issues together, and to take advantage of a deliberative, consensual process. Thus the interest conflicts that went on inside and outside the Council evolved quite differently. An overview of some of the interest conflicts outside the Council provides us with some insight into the complicated process of articulating interests during a sustainable development planning process.

Environmental Interests

Although the creation of public parks and wilderness areas seems to be quintessentially "environmental," there were many complex disputes among environmental groups about public land acquisition and private land conservation in the Northern Forest. Ironically the conflicts among environmental groups are easier to see than those among other interest groups because environmentalists banded together in a coalition to try to develop a unified position on the work of the Northern Forest Lands Council³. That coalition, the Northern Forest Alliance⁴, was quite successful at mobilizing the broad environmental community inside and

³ Patrick Field reviewed the ups and downs of this coalition in a 1994 masters thesis (Field 1994), and many of the observations about conflicts among environmental groups in this subsection result from his thoughtful study. To get a candid view of the internal workings of the Alliance, Field granted his informants anonymity, and thus his review does not "name names" regarding conflicts among specific groups or individuals.

⁴ The following list of members is taken from a brochure published by members of the Alliance,

The following list of members is taken from a brochure published by members of the Alliance, probably in 1994: Adirondack Council, Appalachian Mountain Club, Appalachian Trail Conference, Association for the Protection of the Adirondacks, Conservation Law Foundation, Environmental Air Force, Green Mountain Club, Maine Audubon Society, National Audubon Society, National Wildlife Federation, Natural Resources Council of Maine, Natural Resources Defense Council, New Hampshire Wildlife Federation, New York Rivers United, Northern Forest Forum, RESTORE: The North Woods, Sierra Club, The Wilderness Society, Trust for Public Land, Vermont Natural Resources Council (Northern Forest Alliance 1994). Field (1994), lists 20 groups also, although his list includes The Society for the Protection of New Hampshire Forests and the Vermont Land Trust, but does not include the New Hampshire Wildlife Federation or New York Rivers United. Klyza (1994, p. 47, n. 33) provides a list of twenty eight groups who were part of the Alliance between 1991 and 1992. The Northern Forest Alliance obviously had a shifting membership that included national, regional, and state-level environmental and conservation groups. The Alliance still exists: a November 1996 conference sponsored by the Alliance listed 30 member groups.

outside the region to make their voices heard during the NFLC process. To take just one example of the Alliance's organizational strength, more than 450 letters, postcards, pre-printed mailers, and sticker/postcards reflecting the Alliance's three principle concerns were sent to the NFLC during one comment period (Northern Forest Lands Council 1993b, p. 10).

Despite this success at getting member organizations to promote its general goals, the Alliance was racked with disputes over the more precise message it wanted to communicate and the role of public land acquisition in any solution to the Northern Forest's problems. The groups in the Alliance were divided along several different axes of disagreement. Generally, state-level environmental groups were suspicious of efforts to promote large-scale federal intervention in the region. In their view such opposition reflected a commitment to environmental protection that was compatible with local autonomy and control. Some national and regional groups felt that the state-level environmental groups were too tied up in the local politics of the region to make the bold moves necessary to "save" the Northern Forest, and therefore favored some expanded federal oversight (Field 1994).

These disputes, in turn, were accompanied by differing views about state agencies, the forest products industry, the importance of biodiversity, the role of forest practices regulation, and publicity about the Alliance's efforts. For example, professional forester associations, which were among the members of the Alliance, would not support blanket condemnations of the forest products industry. National environmental groups wanted to make the Northern Forest a national issue, and had the power to do so using their widely disseminated membership magazines. As is true in any coalition, statements attributed to individual members of the group could get linked, in public discussions, to other groups. The distinction between "official" Alliance positions and positions taken by individual member organizations became very important as the NFLC process moved towards completion (Field 1994, pp. 42-44).

Public pronouncements touting the achievements of individual groups are useful to win funding—they prove the group's effectiveness. The achievements of the Northern Forest Alliance, however, could be claimed equally by all groups, regardless of their material participation in achieving them⁵. In an odd way this was the flip side of the problem of public pronouncements mentioned above.

⁵ An example of the well-known "free rider" problem.

Claiming credit was important for some groups' fundraising, but claiming distance from certain decisions was important for some groups' credibility. This tension forced groups to balance their interests in regional policy and coalition building against concerns about organization building, membership recruitment, and fundraising. Such a conflict probably existed within some of the larger organizations already—manifesting itself as disagreements between program staff, executive directors, and member committees—and the dynamics of the coalition simply added to this pre-existing dilemma. Although the Alliance did find a way to minimize these conflicts and pursue joint funding, the tensions themselves never completely disappeared (Field 1994, pp. 47-49).

Working together (sometimes using member facilitators) brought many tensions to the surface, but it also helped participating environmental groups consolidate and better define their interests. Some groups—particularly national environmental groups and regional groups like RESTORE: The North Woods and Protect Appalachian Wilderness (PAW)—entered the debates on the Northern Forest with a strong bias in favor of federal land acquisition. By the time the Northern Forest Lands Council was readying its final reports, the Alliance had refined its joint viewpoint on land acquisition and conservation and the public differences between member groups had been minimized (Field 1994, pp. 83-88).

Although the process of harmonizing interests was far from complete, it was sufficient to keep the Alliance together through the entire NFLC planning process, and to focus them increasingly on the process of identifying shared positions (Field 1994, p. 90). But if the Alliance was a forum for bringing interests together, it was also a forum for exploring the extent and meaning of shared or conflicting values among environmentalists (Field 1994, pp. 90-107) and for the discussion of regional power conflicts. These other conflicts, sometimes difficult to separate from interest disagreements, will be discussed later. It is important to remember, however, that they are interrelated, not just for environmental groups, but for all of the disputants in a sustainable development planning process.

The Northern Forest Alliance submitted lengthy comments, endorsed by 17 member organizations, on the NFLC's *Findings and Options*. Among many other specific ideas, those comments supported establishment of "a system of unmanaged lands" designed to protect the native biota (Northern Forest Lands Council 1993b, p. 27). Some member organizations came out more explicitly and forcefully for additional public land acquisition:

...minimum \$50 million needed annually for public acquisition with federal dollars in Northern Forest (National Audubon, NY)

major flaw [of the Findings and Options] is the lack of discussion about federal fee acquisition as a major conservation tool for the Northern Forest (RESTORE: The North Woods, MA)

full fee [acquisition] affords immediate protection for the full array of values and is essential for core wildland areas... (Wilderness Society, MA) (Northern Forest Lands Council 1993b, pp. 37, 43, 44)

Environmental groups also wanted to promote conservation on private lands. Given the level of private land ownership in the region, they had no other option if they were serious about conservation in the Northern Forest. Environmental groups have thousands of members who appreciate and use the private and public lands of the Northern Forest region, so success at protecting environmental values on private land was important for both substantive and institutional reasons. It is easier to maintain or build an organization when you can point to successes in an area inhabited or visited by your members.

The two most common techniques for affecting private land through government action are regulation or economic incentives/penalties. The goal of both is the same: change the behavior of landowners to achieve certain substantive results. Environmental groups embraced a mix of these techniques to achieve their objective of protecting the region's forests. The Northern Forest Alliance, for example, supported a "substantial increase" in funding for the Forest Legacy Program, a federally funded program that purchases conservation easements from private landowners (Northern Forest Lands Council 1993b, p. 32). The Alliance also believed that "current use zoning6 should be considered as an effective strategy for protecting land from conversion⁷ in the Northern Forest," and supported "regulation of forest practices on the state level to ensure maintenance of ecological values and function on private lands" (Northern Forest Lands Council 1993b, p. 44). The Maine Audubon Society supported "a speculation tax or some other tax tied directly to conversion/fragmentation as a source of funding" for expanded land and easement purchase programs (Northern Forest Lands Council 1993b, p. 32). The Wilderness Society, a national environmental group, favored "a comprehensive array of conservation strategies on perhaps 50% of the region [... including] extensive

⁶ See note 2, supra, for a description of current use programs.

⁷ In debates about the Northern Forest, land conversion was understood to mean changing land from forest-based to non forest-based uses. E.g., the construction of vacation homes on a forest tract is land conversion, the sale of land by a paper company to a conservation organization is not.

fee acquisition, targeted zoning ordinances, strategic use of conservation easements, enhanced forest stewardship and economic assistance to communities" (Northern Forest Lands Council 1993b, pp. 42-43).

Among most groups, however, there was an ongoing sense that certain market-based approaches simply rewarded landowners without achieving any guarantees that better conservation would actually occur. For example, to improve the effectiveness of current use taxation programs, the Natural Resource Council of Maine wanted to "make management plans mandatory, not optional. This will ensure other taxpayers footing the bill will get what they have been promised and are paying for" (Northern Forest Lands Council 1993b, p. 58).

These concerns were voiced most consistently in The Northern Forest Forum, a widely distributed environmental newspaper edited by Jamie Sayen⁸. Sayen was an independent environmental activist in the region, and a staunch proponent of ecological reserves. Issues of the Forum that responded to the NFLC's draft recommendations were full of articles and quotes from comment letters which expressed skepticism about many of the economic incentives suggested by the Council. In particular, Sayen noted that the NFLC proposed various tax reforms without clear evidence that such reforms would lead either to improved forest management or a lessened threat of land conversion. After discussing problems with the NFLC's conclusions and research, Sayen put the issue succinctly by asking, "[w]ill tax breaks without guarantees of sustainable forest management be a wiser use of limited funds than full fee acquisition of lands for ecological reserves?" (Sayen 1994c). Another critic, writing in the same issue of the Forum, explained that "[t]he requirement of forest management plans and silvicultural standards in exchange for tax relief in Current Use programs could be a reasonable linkage to public benefits" (Palola 1994).

Other NFLC proposals for economic approaches to private land conservation were also treated skeptically. The purchase of conservation easements, embodied in the federal Forest Legacy Program and other similar approaches suggested by the

_

⁸ His paper was also at the center of a critical interest conflict within the ranks of the Northern Forest Alliance according to Field (1994). An article written by a member of a national environmental group entitled "It Is Time to Draw a Line," and scheduled for publication in a 1993 issue of the Forum, called for a federal recognition of the entire region. This explicit embrace of the idea of a federal "greenline" was unacceptable to many of the state groups in the Alliance, who felt it would dilute the group's overall message. Field suggests that participants saw the conflict as both about strategy and about control of the Alliance's message (Field 1994, pp. 43-44).

Council, was derided by some environmentalists. These critics worried that the Forest Legacy program was just "a subsidy to the forest industry," and noted that easement purchase programs relied "on the highly unrealistic assumption that the American people will support massive transfers of their federal tax dollars to buy land or easements over which they will have no ownership or control" (Kellett 1994). The problem, according to these critics, was that these various economic approaches to land conservation provided little or no guarantee of substantive protection of the forest.

Environmental groups involved in the Northern Forest Alliance were a diverse lot, and the varied organizational and political environments they faced helped to determine their different interest positions regarding the NFLC's work. Despite their differences, a study by Patrick Field (1994) shows how they banded together to develop somewhat unified positions to present to the NFLC. The Alliance wanted the Council to endorse the idea of some form of ecological reserve system, and its members wanted some guarantees that economic incentives for conservation carried corresponding identifiable responsibilities and produced measurable results. The forest products industry, while remaining skeptical about expanded public land acquisition, was all in favor of economic incentives to encourage keeping land forested.

Forest Products Industry

Field's study of the Northern Forest Alliance provides a unique glimpse into the conflict and collaboration that the environmental community experienced during the Northern Forest Lands Council planning process. Definitive information on interest conflicts within the forest products industry is more difficult to come by. If the NFLC's planning process had been an interest-based negotiation, the actors themselves would have defined and elaborated their own interests during the course of the negotiation. In the absence of such a process, we, (and most NFLC members) must rely on the industry's public statements about its interests, as well as the reports and forums commissioned by the NFLC to analyze the industry.

These sources indicate that the forest-products industry had a complicated view of how public land acquisition would affect its operations. Several other economic difficulties faced by the forest products industry received more attention in the industry's comments to the Council. Since the NFLC was charged both with promoting the environmental health of the region and the economic health of the forest-products industry, much of the Council's research discussed ways to enhance

the region's economy. The Council's Local Forest-Based Economy Subcommittee issued several reports which identified the trends and issues facing the industry. International competition, log exports, excessive workers compensation costs⁹, undercapitalized facilities, and a lack of aggressive state support were among the factors that significantly affected the future of the industry. This research did not identify public land acquisition as an important issue for the forest-products industry generally (Donovan 1993; Lind 1993; Northeastern Forest Alliance Undated; Northern Forest Lands Council 1992b).

But while the Council's research did not identify land acquisition as a factor affecting the forest-products industry's overall success, acquisition was still a concern. One sawmill owner, interviewed as part of the NFLC's efforts to learn about the costs of doing business in the region, claimed that, "Proposed conservation land acquisition in the [sawmill owner's] state¹⁰ threatens the mill's log supply and prices" (Lind 1993, p. 7). And the comments received by the Council from various industry sources show that public land acquisition was only acceptable to the industry on a very limited basis.

Responding to the suggestion that a system of ecological reserves is needed in the region, International Paper gave the idea "broad cautious support as a concept which would be best suited to federal and state lands for initial implementation and demonstration" (Northern Forest Lands Council 1993b, p. 27). Boise Cascade, Inc. suggested that ecological reserves would deserve "support only on government land and then only for very specific rare ecosystem habitat types...anything beyond this is premature" (ellipsis in original) (Northern Forest Lands Council 1993b, p.25, ellipsis in original). Ethan Allen, a regional furniture manufacturer, made a comment "reiterating the Council's statement: 'It is clear that existing government policies at all levels do not sufficiently encourage, reward, or support long-term land conservation' ...until this is rectified, [Ethan Allen is] cautious about public land acquisition or the creation of biologically based reserves as a land conservation strategy" (Northern Forest Lands Council 1993b, p. 31, quote and ellipsis in original).

The flip side of high worker compensation costs is high accident rates among workers. In Maine, these accident rates are higher than the national average for logging. A debate in the Maine state legislature to reduce these costs for the forest products industry focused on reducing workers' benefits, despite the fact that states with higher benefits have lower costs than Maine (Lansky 1992, p. 76).

Most likely New Hampshire, according to circumstantial evidence contained in the report (Lind 1993).

Bowater, a large Maine-based pulp and paper company, had the following suggestion:

[we] recommend a neutral body conduct a series of workshops to further examine the ecological reserves concept and determine from the best scientific information and theories currently available what the specific benefits of implementing the three levels of such a system might be (Northern Forest Lands Council 1993b, p. 25)

In contrast, the New York-based Finch Pruyn paper company said it was, "strongly opposed" to such a system (Northern Forest Lands Council 1993b, p. 27) and the Empire State Forest Products Association agreed: "[we] do not support establishment of ecological reserves (Northern Forest Lands Council 1993b, p. 24, emphasis in original). The New Hampshire Timberlands Owners Association was "opposed to the creation of an ecological reserve system," and believed the "first order of business is to determine which major ecological communities are protected on public lands" (Northern Forest Lands Council 1993b, p. 25).

While the various forest-product companies had different views about public land acquisition for ecological reserves, they all were concerned about the nature and economic impacts of any land purchases. As noted by the mill owner quoted above, they did not want their timber supply to be adversely affected by increases in public land ownership. The NH Landowners Association felt that public land acquisition should exclude "the most productive timberlands based on soils, species composition and access," and also suggested that "any acquisition by the federal government should include provision that ensures that lands designated as available for timber production will remain that way by congressional decree just like wilderness" (Northern Forest Lands Council 1993b, p. 43).

Companies also did not want to be asked to give up land. One company (Finch Pruyn) flatly declared that the NFLC should propose "eliminat[ing] eminent domain as a means of acquiring land for conservation purposes" (Northern Forest Lands Council 1993b, p. 36). Some went even further. For example, Bell-Gates Lumber of Vermont stated that "fee acquisition is a major threat to the NFLC Mission statement except for last resort option for small critical parcels" (Northern Forest Lands Council 1993b, p. 43). Sidestepping substantive arguments on the merits of public land acquisition, Boise Cascade, Inc. simply noted that, "public funding for major acquisitions will not be forthcoming" (Northern Forest Lands Council 1993b, p. 43).

The NFLC's research and logs of public comments showed (not too surprisingly) that forest products companies were trying to balance their concerns about the Council's work with concerns about running profitable businesses. Some of the companies quoted above work in only one state, while others are multi-state or multi-national. Some use hardwoods, others use softwoods. Some make finished products like furniture while others make commodity products like paper and lumber. Those in New York state must work around a large state forest preserve in the Adirondacks that is "forever wild" and unloggable, while those in Maine operate in a state in which only 3% of the total forested land¹¹ is excluded from logging (as urban, wilderness, or parkland), and in which 96% of the usable timberland is privately owned (Lansky 1992, p. 2). In short, there is a broad diversity of timber supply and business conditions faced by these companies, and that diversity helped to determine the wide array of specific interest stances that companies took in the debate over public land acquisition in the Northern Forest Region.

The diversity of the region's forest industry also helps to explain some of the diversity of opinion on the NFLC's private conservation recommendations. Industrial landowners generally favored economic conservation incentives such as current use taxation, but they didn't want such incentives to be uniform across the region. International Paper, a major landowner in Maine, explained that "the components [of current-use taxes] must be state specific" (Northern Forest Lands Council 1993b, p. 56).

Large landowners and forest industry representatives were also in favor of other property and income tax breaks designed to make working forests more profitable. International Paper strongly supported proposals to change the federal tax code to allow the exclusion of a small percentage of their timber gains from capital gains taxes every year for a fixed number of years, while Finch Pruyn supported indexing capital gains from timber for inflation. The J.M. Huber Corp. also supported indexing capital gains for land (Northern Forest Lands Council 1993b, p. 83). Bowater, Inc. suggested that the NFLC "investigate a federal tax rollover provision which encourages all landowners to re-invest stumpage income and/or realized gain back into its forest lands for qualified forest management, silvicultural

^{11 &}quot;Nearly 90% of the land in Maine (excluding lakes, ponds rivers, etc.) is forested—the highest proportion of any state" (Lansky 1992, p.2).

treatments and conservation measures. Income or gain so rolled over would not be subject to income tax" (Northern Forest Lands Council 1993b, p. 88).

The industry generally opposed any attempt to tie such incentives to particular conservation requirements. For example, when the NFLC suggested, in its *Findings and Options* report, that current use forest land taxation programs could be tied to forest management plans, industry representatives said such plans "should be entirely voluntary" (QROE Companies, NH), and some complained that they would be "not easily administered" (Wagner Woodlands, NH) and "not a good tool to track compliance" (International Paper, ME) (Northern Forest Lands Council 1993b, p. 59). A suggestion that current use taxation should be linked to local land use planning efforts prompted similar concerns .

[There] shouldn't be [a] mandatory link between current use and local land use planning. Should be voluntary for landowners to participate (Boise Cascade, Inc., ME)

[The] landowner could be held hostage if current use tax programs were tied to local land use planning (International Paper, ME) (Northern Forest Lands Council 1993b, p. 60)

The industry clearly wanted the benefits of current use taxation, and federal tax law changes, but was not interested in any new responsibilities. Industry impressions of conservation easements are not clear from the written record of comments. What is clear, however, is that the industry's stated positions on conservation issues were usually intended to maintain flexibility and predictability in their operations.

Property Rights Advocates

Property rights groups generally opposed public land acquisition and were very skeptical of government efforts to promote conservation on private land. The reasons they give for their opinions are varied, most prominent being a general distrust of government and a strong belief that any restriction of private land use constituted a taking of private property for use by the general public, which should not be allowed even if the government offered compensation. Expressions of fear on this issue are a common aspect of property rights group pronouncements.

At the last NFLC public meeting in upstate New York, Bonnie Howard¹² complained about the Council's efforts to the assembled audience:

¹² Ms. Howard was married to David Howard, "a leader of the national property rights organization, Alliance for America" (Dobbs and Ober 1995, p. 271)

We sit here tonight and talk about a place for the trees to grow and the deer to run and the tourists to visit. I want to know, what about a place for me and my children to live? [... P]romise me that if I lose my home to acquisition, you will exchange your home for mine. My home is on the line. I'm asking each of you to put your home on the line also. (Dobbs and Ober 1995, p. 271)

The NFLC's draft recommendations (to which Ms. Howard was presumably responding) suggested that public land acquisition should not use unilateral eminent domain (Northern Forest Lands Council 1994a, p. 34). The final version recommended limiting all public land acquisition to exchanges between willing sellers and the government (Northern Forest Lands Council 1994b, pp. 51-53). But those eminent domain restrictions do not tell the whole story. Even in its first draft recommendations, the NFLC suggested a process for identifying several levels of land preservation, and recommended using full fee acquisition only for lands of exceptional ecological, recreational or scenic values. The words of the NFLC's recommendations suggested that public land acquisition would be limited, balanced against other interests, and that planning for it would be implemented at the state level with local government and public participation. These assurances, however, did not seem sufficient to Ms. Howard and other property rights advocates.

As was noted briefly in the previous chapter, these advocates also stated their dislike of ecological reserves during the NFLC's planning process. They argued that the "idea of creating 'ecological reserves' is abhorrent (Adirondack Solidarity Alliance)" and "just another scam designed to take away the use of someone's property without paying for it (Howard Aubin, NY)" (Northern Forest Lands Council 1993b, pp. 25-26). Even when the issue of eminent domain condemnation was set aside, they were extremely skeptical of the ability of government, and the federal government in particular, to properly manage the lands it already owned (Bishop 1993a; Guernsey 1994c). Thus they presented a relatively consistent message that opposed any efforts to expand government ownership or control.

Most property rights proponents were similarly opposed to efforts to expand less-than-fee easement programs such as Forest Legacy¹³. They saw this program as a creeping federal presence in the region because the Forest Legacy program allows the federal government to buy conservation easements on privately owned land. As one critic put it:

¹³ The Forest Legacy program is a federal program in which the USDA Forest Service purchases conservation easements on forest lands from willing sellers. A somewhat complicated voluntary listing process is used to determine what land is suitable for Forest Legacy.

Legacy remains an ill defined and dangerous program [...] The law allows the Forest Service free reign to 'ascertain' 'environmentally important forest areas' regardless of who owns them – often a frightening precursor to greenlining of unsuspecting rural communities. (Guernsey 1994a).

Such criticisms were consistent with these advocates' philosophical outlook—their values—regarding land ownership. Although the purchase of easements represents an acknowledgment of a property owner's fundamental right to control her property, the sale of those easements to the federal or state government is considered a "scam" — either a government attempt to increase its power and influence or an attempt by big companies to "[cut] their taxes at the expense of other property owners" (Morse 1993, p. 4). The groups' interests in preserving their own property was so closely tied to their values that they did not distinguish in their rhetoric between a threat to property rights generally and a threat to their own property. This value stance will be discussed more in the next chapter.

Property rights advocates were also very concerned about the purchase of land by private conservation organizations. They claimed to see such purchases as an extension of the federal government's land acquisition efforts because some properties initially purchased by conservation trusts have been subsequently sold to the federal or state governments. Property rights groups also point to stories of profiteering and "gross corruption" on the part of groups like The Nature Conservancy as justification for opposing any role for non-profit land trusts in land conservation (Guernsey 1994b)¹⁴.

In general, the property rights advocates were skeptical of the motivations behind the various types of land preservation, whether by purchase or regulation, promoted by environmentalists and others. They saw them as part of an overall philosophy of regulation designed to confiscate land. "Regulation has a significant synergy with environmentalists' cries for acquisition," claimed one property-rights newsletter. "When they are found to be crying wolf and their acquisition funds slow, by encouraging ever more onerous regulation, they tie up land by seizing much of its value regulatorily" (Bishop 1993b).

Interestingly, while environmentalists were supporting the notion of ecological reserves and acknowledging that they could be a justification for further public land

¹⁴ The Settler's Advocate, a property rights newsletter, cited a federal report that concluded the government had "paid non-profits \$5.2 million more than the properties approved fair market value of \$44 million in 64 transactions, and that Fish and Wildlife and other bureaus gave the non-profits another \$1.9 merely for facilitation of seven other transactions" (Guernsey 1994b).

acquisition, property rights advocates were opposing them for the same reason. Seeing such reserves as a scam (as noted above), the property rights groups clearly saw the same connections that environmentalists hoped would validate park and wilderness purchases.

The NFLC's Response to Interest Conflicts

Interest conflicts can reveal information critical to a sustainable development planning effort. The multiple definitions of human needs, or the environmental conservation aspirations of various groups, for example, become public when conflicting parties clash during a planning process such as the NFLC's. According to dispute resolution literature, once interests are revealed different groups can negotiate, exploring and exploiting areas of interest overlap to produce recommendations that have the potential to make all parties better off. Such negotiation requires that all relevant stakeholders be present and able to represent their interests, that they have relatively balanced power, and that they all have a hand in setting the agenda, making joint findings of facts, and reaching consensus on the final recommendations (Susskind and Cruikshank 1987, pp. 93-129, pp. 188-192). But the interest conflicts just discussed did not take place in an atmosphere where groups could move beyond their simple stated positions to learn about the various limits and goals that underlie the interests of others. The NFLC's public involvement process, as extensive and inclusive as it was, simply provided groups and individuals with a forum for airing their differences, not for resolving them. The NFLC's internal process, while it was much closer to such a negotiation, fell far short of providing outside groups with an adequate dispute resolution forum.

As discussed in the last chapter, the NFLC's final recommendations did not suggest any specific areas for public acquisition or protection. They did, however, recommend a general process for states to follow when planning for public land acquisition (Northern Forest Lands Council 1994b, pp. 52-53). They also acknowledged that ecological reserves, used to preserve and enhance biodiversity, should be one component of state public land acquisition programs (Northern Forest Lands Council 1994b, pp. 62-63). Some environmentalists (for example, the Society for the Protection of NH Forests, which had a representative on the NFLC), felt that this recommendation was a critical first step towards expanding public land ownership in the region. The recommendations for land acquisition were much more modest than groups like the Wilderness Society, the Sierra Club, or PAW (Preserve Appalachian Wilderness) had hoped for.

At the end of the NFLC process many groups were still debating whether they had been successful in promoting their interests. During that process, however, the various groups were not really discussing their *interests* with one another, but were instead elaborating their *positions* in front of the Northern Forest Lands Council. The NFLC's public involvement process was simply not designed to encourage discussions or dialogue in any formal way. The resulting positional bargaining can be monotonous and frustrating, and Council members occasionally viewed these conflicts as something that simply had to be endured.

Interest group conflicts reflected the different conceptions about the appropriate use of land. Nothing surprised us about those conflicts. (Harrigan 1996)

[Environmental groups] wanted 10 areas in the region to be identified as special areas for special protection [...] It gets to a certain point where somebody gets up, and you read the first three sentences of their letter or you hear the first three sentences of their speech and you know exactly what the rest of it's going to be because they're all speaking from the same play sheet. They've all gotten the same activist alert— 'Go to the Council, mention these things' [...] you're clearly looking at an organized drive [...]. There's the issue of interest, but it's like, "here comes another Budweiser commercial," you know — you just tune it out. (Milliken 1996)

Within the Council, however, there was more of an attempt to get beyond mere positions to discuss various interests. The process was not easy. One Council member acknowledged that the most significant initial problem was the lack of shared experience. Reflecting on the different motivations of various NFLC members, and the different experiences they had living and working in different states, this Council member felt it took a long time for NFLC participants to start working together.

The fundamental conflict was a lack of ability to truly identify with where each of the various interests were coming from. [...] We couldn't just sit down and do some rather objective scale to evaluate the merits [of issues facing the NFLC] because our starting points were so different, and we had such a divergent range of issues that formulated those starting points. I think everything else after that was difficult for the public because everybody debates from where they're coming from, and if you don't have an appreciation of where the other side is coming from you can't communicate. It took us—let me see, this project went on for 6 years—I'd say it took us 5 years to learn that. (Johnston 1996)

Even though the public did not see the growing sense of shared understanding, the Council's ability to work together grew over time. According to some members

the level of trust increased and the quality of discussions and work also increased (Carbonetti 1997; Johnston 1996; Sargent 1996). Despite this level of increased trust, there were issues that the Council simply would not touch. In particular, the NFLC was unwilling to debate any specific ideas about acquisition that identified particular areas of land for preservation despite pressure from some environmental groups to do just that. Some on the Council felt that this was simply outside of the scope of the Council's mandate.

An agenda was being pushed that went way beyond the charge of the Council. The Council hadn't done any work looking at the landscape to identify what key areas were deserving of different kinds of protection. And so it was kind of an off-the-wall initiative, at least for the Council to deal with. [...] That was an example where I think everybody on the Council understood clearly what their mission was, what they could deal with and what they couldn't, and so there was outside pressure being brought to bear and it didn't bear any fruit. (Milliken 1996)

This mandate, however, was set by the Council itself and could, presumably, change based on the desires of Council members and the information gathered by the Council. What the quote above does not acknowledge is that the decision to keep specific land acquisition decisions off the agenda was among the compromises that allowed the Council to be created in the first place. Senator Leahy's Northern Forest Lands Act of 1991, had it been enacted, would have given the Council a role in land acquisition decisions. The bill, strongly opposed by property rights groups, was never passed, and the NFLC was created and funded without a specific federal mandate. The state of Maine only agreed to participate if the NFLC avoided discussions of forest management practices and specific land acquisition recommendations. The Council's operating principles went out of their way to satisfy everyone's fears on this issue, deftly trying to stick to a middle path:

The Northern Forest Lands Council cannot and will not acquire land. The Council recognizes that public acquisition, from willing landowners, is one of many tools in the protection of critical lands within the Northern Forest area. The Council also recognizes that wholesale public land acquisition is not the total solution to the problems of the Northern Forest. When acquisition is appropriate:

- it should be selective and for the purposes of maintaining critical public values that are best protected by full or less-than-fee purchases, and
- consideration should be given to the benefits of conservation easements over fee purchases. (Northern Forest Lands Council 1994b, p. A-80)

Despite the equivocation it is clear that, in principle, the NFLC was still free to recommend particular areas for preservation. The fact that such recommendations were considered outside of their mandate was a matter of choice, influenced by power conflicts surrounding the Council's work. These power conflicts will be discussed in more detail in Chapter 7.

Environmental representatives on the NFLC recognized that the compromises which allowed the formation of the Council put serious constraints on the recommendations they could make—constraints that precluded a full discussion of the elements of an environmentally sustainable future for the region. Interestingly some environmental representatives felt that the NFLC recommendations had improved the possibility for public land acquisition in the region. By clearly stating that ecological reserves were legitimate parts of a public land acquisition strategy, and by suggesting a list of goals for the land acquisition planning process, these NFLC members felt that they had achieved a major victory.

By linking two controversial issues [biodiversity and land acquisition] and then providing a process — we never said how many ecological reserves there should be, we never said where they should be, we never said how many acres, what sizes, who should own them, how they should be managed — we set up some broad criteria and parameters and said 'here's the process by which individual states can deal with this issue,' and, believe it or not, it's happening (Bofinger 1996)

Outside of the Council, as noted above, environmentalists were not so sanguine about the compromises that led to these planning recommendations. Environmental representatives on the NFLC felt that environmental groups such as PAW (Preserve Appalachian Wilderness) and RESTORE: The North Woods, which continued to advocate for large, federal land purchases, were "reaching too far" (Bofinger 1996). These Council members were generally satisfied that they "went as far as was appropriate" (Bley 1996) on the issue of land acquisition. They and other NFLC participants noted that the environmental groups had more to lose than the forest products industry or property rights groups if the process of developing recommendations failed. Both of those latter groups were quite content with the status quo regarding land acquisition and conservation (Bley 1996; Bofinger 1996; Johnston 1996).

Private land conservation strategies were discussed by the Council, but they generated far less controversy than the land acquisition debates. Environmental representatives on the Council acknowledged what those outside of the Council

complained about: the various tax law changes and less-than-fee purchase arrangements recommended by the Council were not strictly tied to improved conservation by landowners. In essence these economic incentives were granted without any guarantees that they would be effective.

Environmental interests on the Council, some of them at least, had a tough pill to swallow in that there wasn't necessarily a quid pro quo on some of these tax breaks, that is they weren't tied in to necessarily doing good works. But that was a concession that was easy for some of the others of us to make, since 2 of the four environmental representatives on the Council came at the issue with a forestry background. (Bofinger 1996)

Despite this difficult pill, the Council did not deadlock on any of these economic incentives. Indeed, they didn't seem to cause any controversy at all among Council members. Recommendations about less-than-fee purchases of conservation easements, state and federal tax law changes, and other economic approaches to conservation had all been part of the Governor's Task Force reports, and they were repeated and elaborated in the NFLC's final report. Environmentalists' calls to limit tax breaks by tying them to better forest management, or their complaints that conservation easements did not provide assurances of forest protection did not seriously affect the negotiations over these issues. The consensus on the Council rejected the need for *quid pro quo* requirements by those who got these benefits. The diverse range of environmentalist suggestions on this issue didn't make it to the final recommendations.

Interest Conflicts and Sustainability

Land acquisition and conservation can be central to notions of sustainable development. The debate over these issues in the Northern Forest was far from complete. While some environmentalists focused principally on preserving wild, unmanaged areas, there were groups and individuals (such as those writing for *The Northern Forest Forum*) who tried to directly acknowledge humans' connections to the environment and to imagine ways to integrate economic and ecological concerns. Industrial, landowner, and other interests in the region weighed in with their opinions on this issue, some of which were directly opposed to those of environmentalists. This is exactly the kind of conflict that sustainable development will inevitably generate as society tries to understand how the environment works and then tries to match that knowledge to some kind of acceptable arrangement of social freedoms, economic activity, and environmental responsibilities.

The interests of the vast majority of residents in the Northern Forest are directed at mundane but essential concerns: earning a livelihood, caring for children, maintaining livable communities. Sustainable development can occur only if it satisfies these basic concerns. The NFLC's planning process revealed that many people concerned about the Northern Forests feel that there is a connection between these basic interests and some broader vision of the regions future environment. Specific proposals about land conservation and acquisition brought out strong disagreements about how an "enhanced" regional environment should be achieved, but there was a shared sense that the environment, broadly defined, was an essential component of what made the region livable and special.

This shared vision, which will be discussed a bit more in the next chapter, would have provided a good starting point for an elaboration of the detailed interests that people had in the region's ecology and economy. As the quote from Johnston above shows, the Council's participants went through just such a process, slowly coming to accept each others love of and need for the woods, and then engaged in a process of bargaining over issues relevant to the different interests that NFLC members represented. Because of the Council's reliance on internal consensus for decisionmaking, along with its efforts to come to joint agreement on issues of fact by commissioning and publishing various reports, there was a certain equality of power among Council members when it came time to decide on final recommendations. Members all had access to the same information on which to base their arguments, and they all could veto recommendations that did not satisfy their individual concerns. Unfortunately most people outside the Council were unable to participate in such a process, so few had a sense of ownership for the solutions produced by the NFLC. Groups without representation on the Council had little power over the final recommendations and could only threaten action outside of the planning process to get their concerns addressed.

Interests within and without the Council

As mentioned above, several NFLC members explained that the environmentalists had the most to lose, and the forest industry the most to gain, from inaction on the part of the Council (Bley 1996; Bofinger 1996; Johnston 1996; Milliken 1996). The proposals of the more aggressive advocates for parkland acquisition and private land conservation threatened not just the industry, but also the deeply held values of property rights groups. National environmental groups (the strongest proponents of public land purchases) did not have representation on

the Council, and Council members did not feel that they had an obligation to speak for these "extreme" interests. While the views of the most aggressive property rights advocates were thought of as equally extreme, their opposition to parkland happened to coincide with the position of Maine's delegation, so their position on this particular issue was represented on the Council. The NFLC generally stuck with a narrow definition of its role and did not try to accommodate all of the interests in the region. Instead Council members acted as if they represented mainstream opinions and used that belief to justify the exclusion of other interests.

This narrow definition was at least partly a result of the structure of the NFLC itself. Chapter 7 will explain how power conflicts before and during the formation of the NFLC helped to promote the interests of the forest products industry and limit the search for sustainable solutions to the problems faced by the Northern Forest. Chapter 6 will show how the Council's values helped them interpret and justify the restriction of interests. But this section shows some of the more subtle ways that the NFLC limited itself. Whether it was fear (of the extreme property rights advocates) or boredom (with the orchestrated pressure from environmental groups), the NFLC tended to resist and discount the interests and opinions of those outside of the perceived mainstream¹⁵.

The reasons for resistance to the outlying interest groups are numerous. The design of the NFLC is one explanation, but the specific membership of the Council is important as well. As one of the environmental representatives on the Council noted above, two of the four environmental representatives had a background in forestry, and were therefore quite comfortable listening to and understanding the needs of the forest products industry. Specific proposals from preservationists or property rights groups had no articulate advocates on the Council, and therefore these positions, which may have had some merit, were never seriously considered as solutions.

The NFLC was still sensitive to the need to hear outside voices. Recognizing that the interests on the Council were only an approximation of the region's interest diversity, the Council initiated an elaborate public involvement and outreach process to get in touch with as many interests as possible. By performing that type of extensive outreach, the Council was able to hear the broad diversity of interests that

While they claimed not to be substantively affected by property rights groups, some Council members conceded that they were also more "careful" with their language in the final report to deflect criticism from these groups.

is necessary for sustainable development planning. Unfortunately "hearing" about interests does not ensure balanced solutions that actually engage those interests. A forum for the elaboration and discussion of acceptable trade-offs among such a large number of groups would have been difficult to create, but the Council's internal deliberations were not an adequate substitute.

Despite its efforts to get information out to the public, many of the Council's studies were conducted using basic assumptions with which outside interest groups could legitimately disagree. As mentioned in the last chapter, the Council's joint fact-finding process on biodiversity did not begin with an adequate discussion of the interests and values which provide justification for a concern about biodiversity. Other research efforts had similar shortcomings in basic design. Environmentalists writing in the Northern Forest Forum criticized the Council's studies of the regional economy because they didn't discuss common economic activities such as farming. And the Council's failure to evaluate forest management practices as part of its research on the forest economy was extremely unpopular among most regional stakeholders. With citizen advisory committees in every state, the NFLC could have used its public involvement process to help it determine what research to conduct. This failure to include the full diversity of interests at the beginning of the study process—probably the result of internal disputes about the appropriate direction for the Council—ensured that some basic knowledge about the region would remain in dispute.

So while there were dozens of open public meetings during the NFLC's planning process, their adversarial structure contributed to the problem by encouraging people to grandstand and present positions without getting into a discussion of their underlying interests. The forums available simply did not allow participants to realistically consider the possibility of tradeoffs. Proposals by some of the national environmental groups to create large parks in the region sparked a counter-reaction by property rights activists concerned about a loss of control and (accurately or inaccurately) a loss of their livelihoods. Forest businesses took a slightly different view of the issues, expressing a willingness to accept incentives for conservation on private land, but expressing strong skepticism about expanded public land ownership. Public comment letters suggest that national environmental groups misjudged the degree to which the residents of the Northern Forest Lands identified their interests with existing patterns of land ownership and control. The environmental groups, and to some degree the members of the NFLC,

misunderstood the strong resistance to outside control that drove many property rights activists.

Common interests in uncommon places

All of this argument obscured some of the most intriguing revelations to come out of the NFLC's process. While there were cynical property rights activists who were pursuing a private and selfish agenda (a charge that also fits some members of every other identifiable interest group), there was also a strong undercurrent of a search for justice among property rights group members. This search for justice shows surprising commonalty with that of some environmentalists. Compare the following two statements, the first by an Adirondack resident and property rights advocate, the second by a staunch environmental critic of the forest industry.

The [NFLC's] Mission statement proclaims that we have to 'reinforce traditional patterns of land ownership and use which have characterized the land for decades.' The poor economy of the region, which is too dependent on low-wage jobs in forestry and tourism, along with a declining population, show that this 'traditional pattern' has not served the region very well, and the NFLC should not proceed on the assumption that it has. (Susan Allen, quoted in (Northern Forest Forum 1994))

...the Council makes the assumption that protecting the *status quo* is the equivalent of protecting the forest and local communities. The large landownerships, however, have *not* always served the region well. The timber industry *status quo* is *not* always equivalent to the best interest of the forest or local forest communities. Problems connected with the large landownerships include: forest degradation; simplification and fragmentation of wildlife habitat; worker exploitation; industrial leverage over timber prices; minimal contributions to the tax base; domination of local economies deterring economic diversity; rural poverty (documented in the *NFLS*¹⁶). (Lansky 1993)

These individuals would probably disagree strongly about the appropriate course of action to take. Still, they have both clearly stated a concern for, and an interest in, providing a more economically secure future for their communities. They have also both linked current <u>in</u>security to the region's traditional pattern of land ownership. This is exactly the kind of common ground that would serve as a fruitful starting point for a true interest-based dialogue. Unfortunately these voices were shut out of the discussion because they came from the so-called extreme sides of the debate in the region. The adversarial format of public hearings and

¹⁶ The Northern Forest Lands Study, the USDA Forest Service Study completed in 1990 that preceded the work of the Northern Forest Lands Council.

meetings—which fosters positional grandstanding rather than interest articulation and discussion—was the only venue available to these interest groups. Divergent interests can only be explored and elaborated during a conflict that engages a broad cross-section of the community in a productive discussion. These voices spoke during the Northern Forest Lands Council process, but they were not taken seriously.

The difficulties of negotiating transformative social change

A desire to participate in and approve a planning document like that produced by the NFLC is fundamental to democracy and is particularly important for sustainable development. Because the environment and the human economy are constantly changing on all time scales, an active process of interest elaboration and expression is necessary feedback for any effort to achieve sustainability. Ironically, it is the conflicts that arise during the testing of new ideas that generates active participation in sustainable development. If people didn't actively and publicly disagree about how to achieve sustainability, fewer people might participate in the process and offer their opinions. If that occurred, society might not have enough alternatives to choose from in order to attain that goal.

Sustainable development virtually requires that people engage in joint problem solving, creating a process that seeks shared definitions for both social justice and an environmentally healthy future. Equally crucial is having a diverse set of interests from which to gather ideas about directions for the future. Certain amounts of uncertainty and unpredictability are always present in natural systems. Similarly, diverse, unpredictable, and occasionally contradictory interests provide a rich set of possible solutions to the problem of sustainable development. Any sustainable development planning process must wrestle with a fundamental contradiction—a diversity of interests has to be engaged in the search for sustainability, but some interests may actually be hurt by a shift to a more sustainable future.

The broad array of interests present in the Northern Forest may have found some mutually beneficial changes in the final recommendations of the NFLC. Attempts to make the environment, broadly defined, better off can, however, reach a point where they make entrenched human interests (those which benefit from current exploitative practices) worse off.

While the dispute resolution field has shown how to harness conflicts and find agreement among disparate parties, it does not eliminate the need for individuals

and organizations to take sides on the distribution of social benefits once they have been generated in a negotiation. If sustainable development is taken seriously as a goal, it requires various participants to argue in good faith about how interactions between society and the environment should be changed. The problem, as demonstrated in the work of the NFLC, is that such changes are seen by some participants as worse than no agreement at all. Dispute resolution can focus groups on behavior that promotes substantive discussion, but such behavior is easy to discard when agreement might challenge either fundamental values or might make a party worse off. If they believe their interests will be attended to in a particular forum, participants have less reason to resort to grandstanding or to look for resolution in areas outside of that forum (such as the press, or other layers of government or public opinion). But if interests or values are threatened, strategic, disruptive behavior becomes much more likely. While the potential for disruption can not be eliminated, it can be minimized by creating a process that encourages the effective participation of all of the relevant interests, and which promotes a discussion of values that allows participants to identify common ground.

This observation about the limits of negotiating interests is true of any effort to use policymaking to change fundamental patterns of behavior in society. Sustainable development challenges forms of economic activity which profit by disrupting ecological and social networks. To succeed under such circumstances, there must be a strong consensus among most negotiation participants, a sense that the public interest lies in reducing the disrupting influence of those unsustainable economic activities. If the individuals or industries involved in those activities have a better alternative to negotiating their future with their ideological opponents, they will undoubtedly ignore efforts to bring them to the table. Strategic behavior by both the powerful and the weak, in this context, is perfectly understandable. It represents an attempt to satisfy interests that those stakeholders fear could not be secured in a negotiation. Planners need to be aware of this potential for disruption even as they try to design a participatory process that maximizes the potential for discussing and resolving interest disputes.

Conclusion

The NFLC process did provide some new insights and procedures that will help the region wrestle with the issue of sustainability. For example, the recommended process for identifying land for future public acquisition <u>does</u> finally put ecological concerns clearly on the table, and this is an advance over past practice. But the NFLC left unresolved many of the fundamental questions of how to balance our environmental and economic concerns. Interest conflicts around these questions will continue, and the search for appropriate forums for debating these differences remains a critical regional need.

By restraining the search for solutions to those proposed by the mainstream (i.e., those interests actually represented on the Council), the NFLC was prevented from considering possible evolutionary changes in the region that could help provide long-term solutions to some of the region's more vexing, long-term problems. But such a restriction was caused largely by the fact that the more powerful parties in the discussion were reasonably content with the *status quo*. As I will show in Chapter 7, those parties used their power to block agreements and stall the process in an effort to control what issues the Council could publicly discuss. This suggests that sustainable development planning will require a more explicit and searching method for dealing with power conflicts if it is to succeed.

Chapter 6

Value Conflicts

Value Conflicts in the Northern Forest Planning Process

If the NFLC's planning process actively sought to include different interest groups, it did not take as explicit a stance when it came to different values. In fact the planning effort was predicated on the assumption that regional residents shared a "vision" of the Northern Forest that justified some form of intervention to prevent undesirable changes. This assumption was also prevalent in the earlier Northern Forest Lands Study. In that study, the authors described a vision of the forest that presumably reflected the aspirations and values shared by regional residents.

... The forests - including the air, water, soil, plants, and animals - must be healthy and available for all to enjoy.

A working landscape of forests interspersed with lakes, rivers, mountains, crop and pasture land will provide attractive visual contrasts. The many attributes that create the special character of the region will be preserved while certain of the economic, social and environmental factors which affect peoples lives must be improved.

The people of the area will play a central role in guiding the future conservation and management of the Northern Forest... A modern forest industry will benefit from a steady supply of wood fiber. Tourism and other industries will add to a diverse economy... Citizens will benefit from good jobs, affordable housing and adequate health care.

...Many opportunities will exist for people to view and harvest wildlife. Within the working landscape, there will be places that are protected from human disturbance, providing natural areas and wilderness. Threatened, endangered and rare species will be protected in order to survive and prosper. (Harper et al. 1990, pp. 2-3)

To achieve these goals, people of the region "will have to adopt a common will and work for a common cause" according to the report's authors (Harper et al. 1990, p. 3).

The NFLC mirrored this vision statement in its final recommendations.

We see a Northern Forest with extensive forests rich in natural resources and values cherished by residents and visitors; timber, fiber and wood for forest products and energy supporting successful businesses and providing stable jobs for residents; lakes, ponds, rivers, and streams unspoiled by pollution or crowding human developments; [...] forest tracts large enough for wide-

ranging wildlife, protected and managed in ways that sustain the diversity of plant and animal species; a culture deriving its identity from the environment in which it has evolved... (Northern Forest Lands Council 1994b, p. 12)

These statements paint a pleasant picture of the future. While broad agreement on some of these visions is apparent from the record of the NFLS and the NFLC, there are important areas of <u>value</u> disagreement that arose during the NFLC's process. Value conflicts are disputes about basic rights, moral absolutes and what should and should not be discussed or accepted as evidence in a policy debate. Groups and individuals concerned about the Northern Forest often had drastically different views of what fundamental norms were at stake in debates about the Forest's future. These disagreements were not just about claims on resources or the wants, desires, or goals of individuals and groups. Instead they were disputes about right and wrong outcomes, right and wrong processes for attaining those outcomes, and what should count as evidence. These value conflicts are the subject of this chapter.

Despite its belief in a shared "vision" for the region, the Northern Forest Lands Council was created in the midst of some deep value conflicts. These conflicts have their roots in historical and philosophical disagreements that are far older than the NFLC. Questions about the sanctity of nature, the appropriate role of government, the morality of private property ownership or the profit motive, and other such fundamental issues are the types of value conflicts that arose during (but obviously predated) the NFLC's process. Because our values are part of our self-definition, they are seldom clearly articulated or carefully scrutinized. This makes it somewhat difficult for a researcher (or a planner) to accurately ascribe values to participants in a planning process. The pronouncements and actions of individuals and groups provide planners with a significant amount of information about values, but such information will always be provisional. Only an honest discussion of values with all relevant participants could ensure a completely accurate picture of all values at play in a sustainable planning process. While a detailed explanation of value disputes makes up the bulk of this section, this analysis is necessarily tentative because the NFLC's planning process was not designed to provide a probing discussion of disparate values in the region. Despite this failure, some voices in the planning process seem to articulate value orientations that are distinct from one another. The generalizations of those basic values, described below, will be examined in more detail later in this section.

Property rights groups, fearing encroaching federal involvement in the region, and distrusting almost everything that the government touched, packed meetings at the beginning of the NFLC's process. These groups made it clear that they saw an individual's right to use and dispose of her property as one of the most sacred values in the U.S. Constitution, and they felt that any government effort that might infringe upon that right was suspect from the very beginning. Many members of these groups lived and worked in the Northern Forest because they valued the solitude, beauty, and freedom they felt the region offered. Fiercely independent, individualistic, and self-sufficient, they had disdain for the notion that any government-sponsored plan could improve their lives.

By contrast, environmental groups and their supporters were among the strongest initial proponents of the NFLC. Broadly speaking, these groups believed that the region's environment was threatened by profit-hungry landowners willing to develop or denude the region's forests in their quest for a favorable short-term return on investment. Environmentalists valued the aesthetic, contemplative, and non-human qualities of the forest in-and-of-themselves, and believed that their corporate opponents were like Oscar Wilde's cynic, men who know the price of everything and the value of nothing. While most environmentalists recognized the legitimacy of private property rights, they felt that the Northern Forests were being mismanaged in ways that were both wasteful and morally wrong. Promoting the notion of a shared responsibility for stewardship of the region's natural beauty and diversity, some environmental groups felt that government (federal or state) was the only entity large and powerful enough to stand up to the worst abuses of corporate landowners.

A "pragmatic" value frame was apparent in many of the comments given to the NFLC by businesses and business-oriented groups, value frame shared by most NFLC members themselves. Council members were aware of the depth of values on the various sides, but felt that openly confronting them would derail their planning process and create more problems than it was worth. Council members valued stability, respect for law and precedent, conflict avoidance, and compromise during the planning process. They also valued the forests of the region, but only within a framework that was consistent with the NFLC's mission statement. This group's values were often not expressed with the passion, or with the same elaborate justifications, as those of other groups. Despite this difference, the values

¹ The Mission Statement is reprinted at the beginning of Chapter 4.

of this group were the most prominent force for shaping the NFLC's recommendations.

Of course these are generalizations about a much more complex reality. The values held by any individual or group are multiple, overlapping, and occasionally contradictory. These contradictions are usually safely hidden until a crisis of some kind brings them to the surface. Sustainable development can precipitate such crises because the concept itself embodies potentially contradictory notions of stability and change, human progress and environmental restraint. In Chapter 2 above I noted that these types of conflicts can be anticipated to cause problems because planners' recommendations, consciously or unconsciously, will inevitably reflect a particular value frame. The NFLC planning process, as will be shown, conforms to this expectation and demonstrates some of the ways that value conflicts can complicate the quest for sustainability. The issue of land conversion and a further exploration of public land acquisition are useful places to examine value conflicts because they demonstrates the ways that different values can determine the acceptability of evidence. They also illuminate some unique features of different group's values.

Land Conversion and Public Land Acquisition

Land conversion—from forest-based to non-forest uses—was the driving concern behind the creation of the NFLC. The large land sales of the late 1980s, described above, created a crisis atmosphere that encouraged federal and state officials to initiate a research and planning process. One result of that planning process was commissioned research that was intended to determine, once and for all, if the region was experiencing large scale conversion of land from forest to non-forest land uses.

The answers provided by the research were surprising to some. The NFLC-commissioned study of land conversion (called the Sewall Study, after its consultant-author) showed that the amount of conversion occurring in large (500 acres and over) forest tracts was not very significant. Although ownership of 21% of the Northern Forest region's forest land area changed hands during the 1980s, most of the large land sales were made to owners who continued the forest-based uses of the land. Only 1% of the large parcel land sales, affecting only .2% of the total area of the region, resulted in conversion of the land to non-forest-based uses. More significant for the region perhaps was the fact that 6% of the land sales, covering

1.3% of the region, resulted in public acquisition of lands, either through full fee or conservation easement purchases (Northern Forest Lands Council 1993a, p. 11). The study did note, however, that "[f]orest land conversion is most likely to occur in areas with significant recreational, scenic, and wildlife habitat values and, as a result, these resources are more seriously affected by conversion activities than are lands without these attributes" (Northern Forest Lands Council 1993a, p. 11).

	500+ acre parcels			<500 acre parcels		
	acres	% region	% land	acres	% region	% land sales
land sales	5,500,000	21%		?	?	
parcelization	203,000	1%	4%	?	?	10-25%
conversion	39,000	.2%	1%	?	?	10-25%
public acq.	344,137	1.3%	6%			

Table from (Northern Forest Lands Council 1993a, p. 11). Question marks in original table represent data gaps. (note: of the 344,137 acres publicly acquired, 151,297 acres were acquired through conservation easement purchases.)

Conversion of parcels below 500 acres was more difficult to get a fix on because there was no state or county-level clearinghouse of information on small land transfers and because the sheer number of transfers was relatively large. To find out about small-parcel land conversion, the NFLC's research contractor would have had to get information from the state on land sales in the region, and find a way to verify the development status of each parcel both before and after the sale—a daunting and expensive task². In the face of this data gathering dilemma, the NFLC used existing research on land sales, which was available in different forms, and in different qualities, in each state. The contractor (Market Decisions of Portland, ME) used this existing information on land transfers in a few towns in Vermont and New Hampshire as a small sample, and then called local officials in those areas to attempt to determine whether the sold land had been converted to non-forest uses. Given the limitations of the research, the contractor cautioned that its study "does not provide a complete record of ownership, transfer, and conversion," although it does provide "the best possible picture of these issues drawing on available data and studies" (Market Decisions 1993, p. 1). Using this limited research the NFLC concluded that "[f]or parcels less than 500 acres in size, the limited available research

² This information is generally <u>not</u> recorded in state records on land transfers.

indicates that land transfer of parcels under 500 acres in size is more likely to result in subdivision, parcelization and conversion than for transactions involving larger ownerships in the region (greater than 500 acres)" (Northern Forest Lands Council 1993a, p. 10).

These research results provided no proof that a serious land conversion crisis was occurring in the region. By pointing out that high-amenity land (such as land around lakes and rivers) was particularly vulnerable to conversion, the study did highlight important trends in the region, but it did not provide unequivocal guidance for action.

Value frames determine our reactions to information like this: first because they help us determine what to pay attention to and what to ignore, and second because they provide cognitive models that structure our reactions to new knowledge. The responses of different groups to this information shows something of the value frames that they brought to the NFLC's planning process. It also demonstrates some of the difficulties that any sustainable development planning process must face when confronted with data that shows no compelling problem.

Property Rights Groups

Property rights groups paid close attention to the findings of the NFLC. And they noticed that the Council found no significant threat to the region from land conversion. "No significantly demonstrable impending loss of any large portion of the Northern Forest has been demonstrated by the years of federal largess dumped into this project," noted one property rights newsletter (Bishop 1993a, p. 6) in response to the NFLC's reports. "Suddenly the whole premise that the Northern Forest was 'threatened' by 'ever-increasing development pressures' was exposed as unfounded," another newsletter claimed (Guernsey 1994e). The persistence of the NFLC in the face of this lack of land conversion in the region confirmed the property rights groups deepest fears about bureaucracies. One property rights advocate referred to these fears in his newsletter.

Literally tracing the roots of bureaucracies, we have seen multitudes spawned across this country over the last two decades based on large significant harms. After seemingly significant accomplishment we see these same benign and wonderful organizations turn on small businesses and citizens focusing on non-issues and joining neighborhood pissing contests in order to find missions to define their continued existence. Any regulatory body created or extension of authority to any existing body must be stopped until the enviro-

industry demonstrates the same balance that they ask of citizens and business. (Bishop 1993a, p. 6)

For the advocates writing these newsletters and their followers, the NFLC was an example of the way that governments (in this case embodied by the NFLC) attempt to justify regulation and expansion even when a problem doesn't exist or has been largely solved. The principle concern of these groups is control of their own lives and property, and they value this control very deeply. They believe that government expansion will take those rights away. The Adirondack Solidarity Alliance explained this stance in one of its newsletters.

The focus of our organization is primarily property rights. However, you will notice that much of the material in this newsletter has little to do with the property rights issue. Many of our members, associates, etc. bring these issues to our attention. Whether it is gun control, fully informed juries, education issues, etc., they all relate to government abuses and attempts to control every aspect of our lives. (Adirondack Solidarity Alliance 1995)

In his comments to the NFLC on the *Findings and Options* report, a leader of a Vermont property rights group titled one section of his comments, "Constitutional Infringements." This section explained reasons why the NFLC's findings were unacceptable to his group:

Our Constitutions and the Bill of Rights are the limits placed on governments. Those who refuse to accept these restrictions must change the Constitutions or risk being called 'traitor.'

The Constitutional patterns of ownership are lost when land owners are forced to sell and/or pay taxes on land and buildings on which their choice for use is taken.

- ... Collective public planning of other people's property is in conflict with the peaceable use of private property. The people are allowed to use their property within the limits of public health and safety!
- ... The strategy fostered and promoted to accomplish the goals [of the NFLC] contain intimidation, theft, blackmail, and extortion and are designed to take large percentages of present and future values of land and buildings. (Morse 1993, p. 3)

The driving motivation of these groups, according to their literature, is a concern that government will use the results of the NFLC's work to try to justify intrusive regulation and/or outright taking of their property. They are also certain that there is a strong collaboration between environmentalists and the NFLC itself. The Vermont Property Rights Center claimed that, "(t)he staff and the majority of the Northern Forest Land Committee (sic) is basically a preservation, conservation, and

environmental advocacy group, unhappy with the tabling of the Northern Forest Lands Act, moving to use other means of advancing and promoting a 26 Million acre Federal Reserve" (Morse 1993, p. 1).

The continuation of the NFLC following the release of the land conversion report (which, as noted above, found only a small amount of land being converted to non-forest uses from large land holdings) was proof to many property rights advocates that their analysis of government was correct. For them, the NFLC's continued existence was a sure sign of a government planning process out of control. Many of these groups also believed that the NFLC was simply an attempt to take property through an enormous program of federal land acquisition, regulation, and various other mechanisms, such as the purchase of conservation easements, current-use taxation schemes, etc. In their rhetoric and outlook, there is almost no possibility for anything good to come from a government program.

Property rights advocates were similarly skeptical of the motives of anyone affiliated with government. If someone was working for the NFLC, in this view, they were either actively seeking to undermine property rights and basic freedoms, or else were dangerously ignorant of the real issues at stake. The property rights groups were convinced that they knew what was at stake in the NFLC's reports: "This report is about the take-over of power and control of billions of dollars worth of currently productive land" (Richmond 1993). Given this analysis, their opposition to the NFLC and its recommendations was completely understandable. Even qualified support for what the NFLC was doing would have undermined their beliefs and their values.

These quotes also show that property rights groups were skilled at using exaggeration (or deception) to motivate their followers. For example, the NFLC never had any plan to create a "26 million acre federal reserve" out of the Northern Forest study area (the total area studied by the NFLC was approximately 26 million acres)³. This extravagant claim aroused the anger and fear of property rights supporters, who were only too willing to believe that the government was conspiring to take land in the region. This probably also attracted new supporters

³ The National Audubon Society, in comments to the NFLC, <u>did</u> state that, "the key option under conservation strategies should be for the NFLC to recommend a federal boundary area around the 26 million acre Northern Forest to attract funding and program direction" (Northern Forest Lands Council 1993b, p. 43). The notion of federal boundaries, which the environmental community saw as a way to attract federal money, was often conflated with the idea of large scale federal control and ownership by property rights groups.

from among those already predisposed to believe in such government conspiracies. Whether conscious or unconscious, such hyperbole served to create an atmosphere of impending crisis which formed part of the political environment within which the NFLC had to operate. Countering these claims took a considerable amount of time and effort, according to NFLC members, and they couldn't just be ignored.

Environmental Groups

While property rights groups rhetorically blasted the government for abusing the rights of individuals, environmentalists were railing against the abuses of the environment by corporations. A brochure written for the National Audubon Society, The Wilderness Society, and the Sierra Club titled *The Great Northern Forest* presents one version of the environmentalist world view.

After extolling its beauty and environmental importance, the brochure discusses the risks facing the forest.

The region is threatened by uncontrolled development, poor forestry practices, and declining rural economies. Over 85% of the Great Northern Forest lands are privately owned, mostly by large paper and timber companies with headquarters outside the region. In the last decade alone over 20% of these lands have been sold.

Because of trends in the marketplace, the development value of the real estate parcels is now beginning to exceed the value of the land's timber, and some companies are being lured into selling off their land to make a quick profit. The devastation results in forest fragmentation, encroachment, and loss of wildlife habitat. (National Audubon Society et al. 1994?, p. 2)

Part of the solution proposed is the protection of "Ten Proposed Wildlands of the Great Northern Forest," each of which is described in a photo essay in the brochure. Earlier the authors list other areas of "extraordinary beauty" in the American landscape. Including the Northern Forest in the list, they say that, "[t]hese places suggest powerful notions about what it means to live on this earth, symbolizing the relationship between nature's beauty and abundance, and our own humanity" (National Audubon Society et al. 1994?, p. 1).

Discussing the nationwide threat of species extinction, the brochure states that "[t]he aesthetic and moral dimensions of this crisis cannot be overstated, and the effects of this trend on society are ominous" (National Audubon Society et al. 1994?, p.2). The clear implication of these quotes is that the environment of this region, and the entire nation, deserves protection for spiritual, emotional, and ethical, as well as practical, reasons.

For the authors, the economic problems of the region are tied to the environmental problems, and the blame for them is laid at the door of those who are mismanaging the region's economy. In the brochure it seems clear that government land management is not the source of the region's problems.

At the time of this writing, millions of acres of the Great Northern Forest are for sale. Clearcutting continues and raw logs are leaving the region. Job opportunities decline and local communities are being hurt. We stand at the turning point. We must act immediately to protect the region from further environmental degradation and continued loss of jobs (National Audubon Society et al. 1994?, p. 3)

Although mismanagement of natural resources is the key cause of the linked problems with the economy and the environment, these groups are careful not to attack the notion of the free market economy directly. After noting that many Americans see a clean environment as a "fundamental right," the brochure proceeds to try to stake out a middle ground on the economy.

Americans also want a strong, free-market economy. We do not want the government—or conservation groups—telling us what we can and cannot do with the land. Typically, Americans support the right of private companies to use natural resources for the benefit of society. Their efforts create jobs and build communities.

Therefore, it can safely be said that most Americans are conservationists who believe in the sensible, sustainable use of natural resources. We are in agreement that jobs must be protected and that the environment must be protected as well. The two go hand in hand. (National Audubon Society et al. 1994?, p. 3)

Other environmentalists mirrored this view. The editor of Northern Forest Forum, a staunch environmental journal funded by the Earth Island Institute, made much the same point when he wrote:

The environment <u>is</u> the economy. Only a healthy Northern Forest environment can support a healthy Northern Forest economy. And, on those occasions where economic interests harm or threaten to harm the environment, we must find other ways to provide jobs that are <u>not</u> environmentally destructive. (Sayen 1994a)

The environmentalist's frame acknowledged both moral and economic values in the region's forests. The need to discuss both sets of issues simultaneously seemed to be important to most of the environmental groups. For them the environment is not just something to be protected <u>if</u> the economy is doing well, but is instead a consideration that is coequal with the economy. These groups were also

persistent in their belief in the need for intervention in the region. As noted in previous chapters, even relatively conservative conservation groups such as the Society for the Protection of New Hampshire Forests, which regularly works with landowners and the timber industry, were in favor of additional public land acquisition and the creation of biological reserves (Society for the Protection of New Hampshire Forests 1994). Ethical concerns about preserving nature were important motivating values for most environmentalists.

Environmentalists were persistent in their suggestion that publicly-owned wildlands and preserves had an important role to play in the future of the Northern Forests. The prominent role of public acquisition in environmental thinking showed a distinct distrust of private land management practices — a belief that important values in forest land could not always be guaranteed by private landowners⁴.

The quotes above also show that environmentalists were still discussing land conversion as a problem even after the Sewall study had shown that very little land in large parcels was being converted to non-forest uses. Although environmentalists justified such discussions by pointing to data gaps in the Sewall study (which could not examine land conversion on small parcels in the region because of a lack of available data), the claims of a land-conversion problem were difficult to completely document. The value frame of environmental groups, however, incorporated a precautionary principle of environmental protectiveness as a natural response to a knowledge gap. Property rights groups, by contrast, believed environmentalists were promoting a siege mentality with these claims of a crisis in land conversion so that they could increase donations and membership. Environmentalists in turn could point to the property rights groups' claims about federal land "grabs" as another example of scare tactics that were being used in debates about the Northern Forests. Both groups made claims that made sense

⁴ There is a certain irony in this stance. Some of the larger national environmental groups that took an interest in the Northern Forest (like the Sierra Club, the Wilderness Society, and the National Audubon Society) are actively opposed to current federal land management practices in the Northwestern United States. One NFLC member, commenting on this irony, noted that environmental groups could sue federal land managers, but couldn't sue private landowners, so their promotion of federal land ownership was really an attempt to gain more influence over the resource (Carbonetti 1997). While this can be seen as a power issue, it is also consistent with organizations who do not believe that others (including private landowners, forest-based businesses, or government) will promote environmental values as consistently as they themselves will.

within their value frames and world views, but which could not be justified solely by reference to the known facts about change in the Northern Forests.

The Forest Products Industry and other business interests

Pragmatism is defined, in part, as a belief that one must deal with things as they are, and must not become bogged down in theoretical or speculative concerns. The notion of pragmatism accurately captures the stated value orientation of most of the business interests in the Northern Forest debates. By failing to address speculative or theoretical concerns, however, business leaders effectively ignored and dismissed the motivating values of other participants in debates about the Northern Forests. By doing so, they defended values which supported industry's operational goals little or no change in regulatory environment, changes in tax policy that were favorable for the industry but which did not impose any quid pro quo responsibilities, and a strong desire to keep the NFLC's attention focused on economic issues, rather than rights or moral responsibilities. This latter stance is particularly telling because it treats the maintenance of the region's current economic system as a normative value goal. This focus on the status quo allowed the forest products industry to find occasional common ground with property rights advocates. Its emphasis on pragmatism and deal making, however, shows the subtle differences between the two value frames. Its advocacy for tax breaks and economic incentives that could inhibit land conversion, as well as a willingness to consider the need for government land acquisition, show that the industry wanted to maintain a cooperative relationship with government agencies — behavior that would be immediately suspicious to a zealous property rights advocate.

The industry watched closely when the NFLC was formed to make sure that it could protect its interests (these actions are described in the section on interest conflicts above). As part of its ongoing scrutiny, the industry participated in NFLC forums on land conversion and other issues. While the forest products industry did not print manifestos clearly stating its values, a general view of its values can be gleaned by reviewing the statements of industry representatives in NFLC forums, research questionnaires, and public participation documents.

One of the points made by industry representatives was that large land transfers among forest products companies are part of the normal operation of the region's economy, and hence is not a cause for alarm even if it is occurring. Commenting on the land sale deal that prompted the *Northern Forest Lands Study* and the work of the NFLC, Brent Halsey, an official from Diamond Occidental Forest—which

controlled most of the former Diamond International lands sold in Maine—declared that such sales should be seen as "change" rather than "massive land conversion" (Halsey et al. 1992, p. 29). According to this account, these types of sales have occurred throughout the history of the region, and most of the recent sales still kept the land in productive forest-based uses. A property rights advocate, noting that little had changed in the region, would probably tell the government to leave the situation alone. In his comments to the NFLC, however, Halsey recommended that the state and federal governments should encourage private ownership and responsible development, but at the same time offer and promote conservation tax easements to improve the industrial forest owners returns on investment (Halsey et al. 1992, p. 30). Such a stance clearly defines a value orientation that treats private property and pragmatic cooperation with government as good things.

Other evidence confirms the notion that the industry values pragmatic engagement. The NFLC convened an expert panel of investors and forest-industry officials from outside the region to examine land conversion and other issues. This panel emphasized the importance of stability and predictability for those who invest in the forest-products industry. Issues such as taxation, environmental regulation, and the overall economic climate all affect the industry's viability. The expert panel explained that the political aspects of these issues will always be important to the industry. Because of this connection, these experts urged the NFLC to be very cautious and supportive of the region's forest industries, promoting policies that will help the industry remain viable, while avoiding extreme or unpredictable swings in policy. To support and enhance the status quo, the industry had to remain engaged with government, according to these experts (Market Decisions 1992).

Comments from the industry on public land acquisition and biological diversity have been discussed above. These comments present important information about the industry's value orientation and the predominance of economic values is evident here too. Sharon Haines, Forest Environment Manager for International L'aper, explained this stance while discussing old growth timber at an NFLC-sponsored forum on biodiversity.

I think that there may be some potential for us to do it [protect old growth] in selected circumstances, perhaps along borders with public land that has old timber on it as a way of increasing the size of the areas that are in old growth. It is not realistic for anyone to expect that industry will maintain old growth simply for the sake of it. We do not make every single decision from the basis

of economics, but obviously we have to answer to our shareholders and economics drives us to a large degree. (Northern Forest Lands Council 1992a, p. 45)

The dominant values of the industry are essentially the values of the marketplace and capitalism. These values recognize that government is both a guarantor of commercial rights and a regulator of those rights. Industry often has to balance between strict opposition to regulation and a view that some regulation to satisfy societal goals is inevitable. Because it must stay engaged with government, the industry often opposes regulation at the same time that it works with government agencies to try to identify the least onerous ways to implement regulation. This engagement clearly distinguishes the industry value system from that of the property rights advocates. The industry's emphasis on economic predictability, and its reluctance to explicitly acknowledge ethical concerns about the environment, are the most striking differences between its value system and that of environmentalists.

The NFLC's Response

NFLC members knew that they were working in the midst of a volatile mix of value systems. Their response was to look for areas of agreement, and ignore or downplay areas of strong value disagreement. In doing so, the NFLC ended up principally promoting a pragmatic, economistic value system similar to that propounded by the forest industry.

Very early in the process, the intensity of the disputes over policy for the Northern Forest showed NFLC members that deep value differences were being brought to the surface. "We knew value differences were there, but we were shocked by the mischaracterization of the Council's work," said one Council member.

I was very dismayed with the extent and rate to which debate over legitimate public issues is getting polarized in this country. [...] I think it was a reflection of the tenor of the times — I know that even some of the willing participants in the NFLC process contributed to fanning that flame, and once it got going everybody felt that they had to add their fan to it because they couldn't afford to be 'outflamed' by the other side, so to speak. (Meadows 1995).

For this NFLC member and some others, the intensity of value disagreements prevented deeper discussion of other issues. Other Council members believed that

values could not be compared in any meaningful way, and felt the NFLC strived to avoid such a comparison. "Our biggest concern with values was trying not to rank them, not arbitrarily saying what was better and what was worse — we recognized them, but we didn't want to pick among them" (Harrigan 1996).

This avoidance, however, had its own problems. A pragmatic desire for balance can often promote the *status quo*. In most cases, NFLC participants agreed to ideas after making very sure that they could be implemented in ways that did not challenge their fundamental values. For example, a Council member who was appointed to represent forest industry interests said that many of his values were reinforced, even when those with very different values made presentations to the Council.

I had a superficial understanding [about ecological reserves] and on paper they sound very good, they sound workable, they sound like they can very much meld into what we had in Maine. But then when it entered into the social/political arena, it became very much an assault on what we had in Maine. We had some advocates who were extremists from all different walks of life come in and tell us how we had to change everything we ever did, and you know, great ideas that were extreme, and they didn't help us much. In fact we did a lot of that for a while and finally we said, 'look, let's find some people who are not advocates, and instead are scientists.' We spent a lot of time talking about those things and my original perceptions of how these ideas could be melded into Maine in a positive way were reinforced. But I came full circle through that experience, and at one time I was the strongest opponent to those schemes. (Johnston 1996)

As noted in the section on knowledge conflicts above, this attempt to rely on scientists for justification of ecological reserves merely put off the inevitable discussions about the ultimate purpose and value of those reserves. By putting the discussion into the realm of science rather than politics, the NFLC also made it more difficult for individuals with moral or ethical reasons for the creation of ecological reserves to participate in debates. Deferring that discussion deferred any attempt to engage value differences.

How did the NFLC planners keep value disagreements, both inside and outside the Council, from disrupting their process? Principally by seeing themselves as agents of compromise or conflict avoidance. "Our goal was to squeeze the two extremes — the landowner rights groups on the one side and the staunch environmental groups on the other side — to bring them more to that common ground, to the central position where each gives a little to get a little," said a state

government representative (Sargent 1996). Others suggested that NFLC members themselves already occupied that middle ground. "Council members weren't strong ideologues, they were by and large pragmatic folks that were not tied to philosophical positions but were there to wrestle with the issues in a substantive as opposed to a value/philosophy sort of way," according to an environmental representative (Bley 1996). This Council member acknowledged that there were times when fundamental value disagreements came up, but explained that it didn't happen that often.

By and large we all were in the range that there is both a public and a private interest in this forest, that there were such things as landowner rights, that there were such things as public values and that our job was to find an appropriate balance for maintaining the important private elements of the forest as well as the public elements. Certainly that was not the case outside of the Council. We had very, very strong private property rights involvement that thought that government had absolutely no right to do anything when it came to private land in the Northern Forest, and that wanted us out of town as quickly and as far away as possible. Then there were those on the other end that felt there was no legitimate private interest in the forest, that the values of the forest were primarily public values that had been diminished through private ownership, particularly industrial ownership, and that the time was ripe to get rid of the 'wrong-doers' and to return those values of the forest to the proper owner, which is the public. (Bley 1996)

These strong differences in values only rarely came up into the Council's internal deliberations. When they did they were quickly put aside because Council members felt there was no way to resolve them (Bley 1996; Harrigan 1996). Outside conflicts, however, could not be controlled. "We ended up with the extremists on both ends balancing each other out and feeding on each other," noted a Council member, but he added that those conflicts, "had no significant influence on what the Council said" (Bofinger 1996).

If the NFLC was not influenced by these value disagreements did it perform any valuable function for helping the region discuss and debate value differences? Some members felt that the NFLC provided a space for the public to reveal and become familiar with one anothers' values (Sargent 1996). Another common theme was that the NFLC allowed people to act on values that they had all along, but which they were inhibited from acting upon by fear and distrust. "The net of all of that is better understanding, more people being willing to act on their values, or recognizing that their values and their supposed opponents values were not that different" (Bofinger 1996). But as we have seen from a review of the values of

different groups in the planning process, there <u>were</u> strong differences in values, even though there was apparent agreement on a "vision" of a usable, well-managed forest.

Value Conflicts and Sustainability

Values frame our understanding of the world, helping us sort the useful information from the meaningless, and shaping our interpretation of data. In the debates about the future of the Northern Forest, the values of various participants guided their arguments and focused their attention on different aspects of the NFLC's work. Any attempt to plan for sustainable development will encourage people to reflect on and defend their values because sustainability itself is a value-based goal, one which may challenge, reinforce, or dismiss other value systems. As planners work on the issue, individual definitions of sustainability will inevitably be based on the values of the disputing participants. Discovering the participants' values in a sustainable development planning process is not easy, but it is a critical first step if planners and researchers are to understand the value conflicts that will be unleashed by sustainable development debates.

In this particular case the NFLC members adopted their own value frame, searching for a so-called middle ground, tied closely to the existing economic arrangements in the region, upon which they could base their recommendations. Such a middle ground almost inevitably ignores or downplays values that lie outside the realm of broad agreement. A value frame based on compromise and perceived implementability of agreements is perfectly understandable for an organization which must come up with recommendations by consensus in a limited amount of time. Still, the quotes above show that the Council's members did not represent the full range of values that were debating the future of the Northern Forest. The Council did not fully accept the validity of the views of the more "extreme" groups on different sides of regional debates. A shared value frame favoring compromise and a modified *status quo* helped the Council develop a list of final recommendations. It also prevented the Council from imagining or considering sustainability solutions that were outside of the box of current economic and social conditions.

The NFLC planning process, and earlier regional planning exercises, were motivated in part by the belief that there existed among those concerned with the Northern Forest a core set of values. This core set of values were linked (in the rhetoric of the *Northern Forest Lands Study* and the NFLC's final

recommendations) both to the region's environment and to the existing patterns of land ownership. This belief in shared values was put to the test by the clamor of disparate voices that followed the NFLC as it met throughout the region. The clamor of values was as predictable as the clash of interests described earlier in this chapter, but it poses problems that are much more difficult to confront in a planning process.

While multiple interests may be satisfied by a creative set of planning recommendations which embrace compromise and trade-offs, multiple values often can not be satisfied. Each value frame carries its own definition of relevant issues, its own cast of heroes and villains, and its own view of salvation (Schön and Rein 1994). Resolution of disparate values is a social process that usually takes place over years of contact, debate, and conflict (Susskind and Field 1996). Even in the face of value conflicts, there may occasionally be shared values that can be used as the basis for ongoing dialogue. Commonly held "higher" values (such as a commitment to democracy) may allow for continuing discussions even when fundamental disputes about "lower" values (such as the sanctity of private property or the objectivity of scientific inquiry) persist. Schön and Rein have noted that by reflecting on frames, planners and policymakers can learn to see some of those areas of overlap and common understanding. But they also point out that overlaps may not always exist. In the case of fundamental value disagreements, one cannot expect a resolution as part of a planning process.

The planners of the NFLC wisely did not believe they could enforce a consensus on values. The notion that they were holding on to a shared "central" viewpoint while squeezing out the views of the extremists provided them with a feeling that they were serving the most important possible audience. Using their own version of a utilitarian philosophy, members felt they were doing the best they could under the circumstances.

Interviews with the participants also show that they were being a bit naive or disingenuous about the values they were promoting. The NFLC's actions show how their value frame, which saw extremism of various kinds as part of the Northern Forest's problems, allowed them to selectively ignore or pay attention to certain evidence or individuals while formulating their recommendations.

The notion that planners' values influence their selection and analysis of information is not in dispute. There is no way around this dilemma because some

value frame is necessary in order to make judgements and evaluate alternatives (Schön and Rein 1994). The quest for sustainability, however, requires planners to be aware of their own value frames, and the biases those frames inevitably introduce into the development of recommendations.

The need for value reflection

Sustainability, at least as I am defining it, requires an active, democratic engagements of all viewpoints, even those that are inimical to the idea of government planning (or, for that matter private enterprise). The planners of the NFLC were not terribly self-aware about the value bias inherent in their planning enterprise itself, and consequently saw themselves as a "middle" in the midst of "extremes." When the NFLC continued its planning process even after various research reports found only a modest amount of forest land conversion in the region, it was following its own organizational value frame, one which had already accepted the existence of problems that needed to be solved in the region⁵. Some members, when faced with information about land conversion that conflicted with their own personal observations simply believed that the data on land conversion were so sketchy that the crisis of conversion was simply hidden in the data gaps (Harrigan 1996). The evidence of their own eyes and inferences based on their beliefs were so compelling that conflicting data from the Council's own research was insufficient to sway their belief in the need for new solutions. In this way they were similar to environmentalists who believed that land conversion was a problem even when data supporting that notion was lacking.

The NFLC process did provide forums for the elaboration of value differences, but the public meetings and expert forums favored by the Council provided participants with little evidence that their values were being understood or respected. While many areas of shared values were revealed, there was also a clear sense among property rights groups and certain environmentalists that their values were being ignored. The quotes from NFLC members above show that this assessment was correct. The Council did not provide a forum in which values could be discussed openly and safely reflected upon. When strong value differences were present, Council members were quite reluctant to try to engage them.

⁵ This was seen as an environmental bias by property rights groups. It is consistent, however, with pragmatic engagement with the forest-products industry, as long as proposed solutions to the land conversion "problem" do not take forest land out of production.

The NFLC also failed to recognize itself as a body with a set of internal values which limited its vision. Although it reached out to different groups and solicited their participation, the Council didn't understand how its uncritical acceptance of its own values might make some groups unwilling to participate. For example, sitting at the table with an organization intent on making planning recommendations may simply be unacceptable to an individual (such as a strong property rights advocate) who believes that all government planning is inherently wrong. The NFLC did utilize a broad public participation process to get advice about its activities, but it could not compel the participation of those who saw it as an illegitimate body. As an organization, it never found a way to discuss the values of those who opposed its world view.

A more active outreach to non-participants would have required time and resources that were in short supply during the Council's work. Such a process of engagement need not be designed to resolve value differences, but instead to actively build understanding of the differences and to make the planners' choices among values more transparent and reflective. To hope for more than this modest goal is to ignore the deeply ingrained nature of value conflicts. But would even this modest achievement have been possible?

There is some evidence that more progress could have been made. A privately funded effort called the Northern Forest Dialogue Project⁶, undertaken during February and August of 1994, attempted to establish a dialogue and build understanding among Northern Forest disputants from different organizations and backgrounds. The Dialogue Project used multiple facilitators to guide a group of approximately 20-30 people through a discussion of the values and issues that they felt were important in debates about the future of the Northern Forest region. While few minds were changed (that was not the goal of the project), participants did learn new ways of viewing their disputes. Environmentalists learned that property rights advocates were motivated by their desire to maintain local control of their lives. Property rights groups learned that environmentalists did not always think of government as an ally. Representatives from the forest industry found they could talk to environmentalists about the need for forest reserves without being called names. And all participants learned something about the ways that their personal values are shaped, confused, and thwarted at times by institutions

⁶ I worked as a recorder for this project and was involved with discussions about the design of the interactive sessions.

(Northern Forest Dialogue Project 1994a; Northern Forest Dialogue Project 1994b). Project participants were enthusiastic about the format of a facilitated dialogue as the basis for learning about the values of others in the Northern Forest.

The Northern Forest Dialogue Project is an example of a formal attempt to reflect on values in the context of a natural resource dispute. Sustainable development represents both a new way of understanding and analyzing human relations with the environment, and also a new value stance. The environmental groups' desire to place environmental protection and economic issues at an equal level of analysis is consistent with the general definition of sustainable development. But such a general definition needs much more detail to be operationalized. And sustainable development is also supposed to be democratic. To be true to their claims that it promotes inclusive decisionmaking, proponents of sustainable development must be willing to modify their definition of sustainability by engaging the values of all those affected by any project to achieve sustainability. Is there an inherent tension between environmental protection and democratic decisionmaking in sustainable development? Could the values of property rights groups and the values of the environmentalists have both been accommodated by a sustainable development solution in the Northern Forest? The experience of the Dialogue Project suggests that value differences can be productively discussed but it does not tell us whether they can be resolved. It may be that some values are incompatible with any intelligible notion of sustainable development. If this is the case, then planners may have to choose among values more explicitly if they decide that sustainable development is a worthwhile goal.

Value conflicts are, and will continue to be, largely social processes which occur at scales and in forums outside the control of any planning process. Well designed planning processes can, however, contribute to discussions about these conflicts by being more explicit about the values being examined and disputed. Several researchers have explored both the difficulty and necessity of understanding planners' value frames as a first step towards improving and democratizing planning (Forester 1989; Schön and Rein 1994). The Northern Forest Lands Council successfully inspired groups to express their values, but did not go as far as it could have in understanding the planning implications of its own values. This failure, and the fact that its members thought that there was no way to have productive dialogues about values, helped to ensure that the NFLC's recommendations reflected the value orientation of the individuals and institutions who were

responsible for the current state of affairs in the region. A true quest for sustainability would have required a deeper and more searching elaboration of the values in the Northern Forest.

Chapter 7

Power Conflicts

Power Conflicts in the Northern Forest Planning Process

Power conflicts are conflicts about control of a policymaking process, in which individuals or institutions obtain compliance or approval from other institutions or individuals using sanctions, rewards, persuasion, threats, misdirection, and various other means. Power conflicts occur as stakeholders use these means to preclude, short circuit, broaden, or enhance discussion of knowledge, interests, and values during a planning process. The history of the NFLC's formation, structure, and mission, discussed above, shows the indelible stamp of power conflicts. They are also evident in the Council's work on particular issues, where different groups used their available sources of power in attempts to alter the NFLC's course.

I identified four types of power in Chapter 2: authority or legal power, economic power, organizational power, and threat power. A cursory overview of the forces competing to influence the NFLC shows all of these distinctive types of power at play. The forest products industry, by virtue of the size of its land ownership, its regional payroll, and its overall role in the economy, was the most significant industrial economic force in the region. All participants in discussions about the Northern Forest knew that the forest products industry could confer or withhold benefits to politicians, workers, and other regional residents. Even if no actions were ever taken by the industry, the knowledge of its ability to influence events was widespread. Environmental groups principally exhibited organizational power. They mobilized the participation of their memberships and marshaled information and arguments (in the form of pamphlets, reports, expert testimony, etc.) to bring various environmental issues to the attention of the NFLC's planning process. Some private property rights advocates, despairing of ever receiving a fair hearing for their concerns, used angry words, threats of violence and, on at least one occasion, physical intimidation to make their voices heard. Finally, the authority of the NFLC itself was a delicate thing. The Council had been formed by the region's governors and while its reports would have no legal force, everyone expected its recommendations to serve as models for action in the region. In the glare of its very public policymaking process, stakeholders would judge the Council's legitimacy by

the perceived quality and fairness of its recommendations. In an odd way, the NFLC's policy authority depended on its moral authority.

Sustainable development planning embodies an explicit search for solutions that put environmental values and human justice into discussions about regional development. Efforts to control economic activity so that it is compatible with environmental protection should provoke particularly vigorous power conflicts. This chapter explores the ways that power conflicts flared up during the NFLC's planning process and how they affected the Council's deliberations and recommendations.

In that process, various forms of power influenced and framed policy debates about the future of the forest. Three areas of the NFLC's work are particularly revealing for describing the complex ways in which power operates during sustainable development planning. Those areas are forest management practices, land acquisition and land-use regulation, and federal capital gains taxes for timber. Tracing causality in these conflicts is difficult, but the following discussion will show specifically how groups brought different forms of power to bear on the NFLC's decisionmaking process. In the case of forest management practices, environmentalists and their allies were able to convince the Council to add issues to its recommendations despite the prior opposition of the Maine NFLC members. Land acquisition and land-use regulation issues were contested by property rights, environmental, and business organizations, each using a different type of power to try to shape the discussion of the issues. Finally, a discussion of the Council's capital gains tax recommendations shows that the NFLC members had internalized the economic explanatory frame of landowners and the forest industry. This is an example of the organizational power of landowning stakeholders within a market economy.

Forest Management Practices

Forest products businesses are the most significant industrial actors in Maine's economy. In 1988, the pulp and paper business ranked first among Maine industries in value of product, value of exports, capital expenditures, gross payroll, and number of employees (Lansky 1992, p. 12). This dominance has been an historic factor in the state's politics¹. With the formation of the NFLC, the economic dominance of the forest products industry in one state took on new importance.

¹ See discussion in Chapter 3, supra.

Maine contains most of the land as well as the bulk of the privately owned timberlands in the Northern Forest study area. Thus the state's participation in the NFLC was critical for the Council's legitimacy. To get that participation, however, the other states had to confront the economic power of the forest products industry in Maine.

As discussed in Chapter 3, the Council had no official legislative mandate. Its mission statement and operating principles did not mention anything about regional forest practices, despite the obvious importance of these issues for protecting the long-term viability of the forest resource (Northern Forest Lands Council 1993a, pp. 8-9). Far from being an oversight, this deliberate gap was the price that the Council as a whole paid for Maine's participation. Maine's conservation agency and landowner representatives simply refused to be a part of the Council if it intended to recommend regional regulatory structures, endorse large-scale land acquisition, or investigate and evaluate the forest management practices of industrial landowners². By limiting the scope of the NFLC's research, the other states gained Maine's participation, thereby insuring the representation of the entire Northern Forest region—a multi-state effort was seen as the best way to secure federal assistance, should it be forthcoming (Reidel 1994).

The NFLC's initial agenda was limited by the forest products industry, working with Maine's state government. There is no evidence that the industry exercised its economic power directly to achieve this outcome (i.e., it did not, as far as we know, use direct rewards or economic sanctions to any of the decisionmakers), but its historical importance to the economy was undoubtedly understood by the state's governor. The NFLC members appointed from Maine all agreed to keep forest practices off the agenda. Even the environmental representative from Maine was required to agree to this limitation (Bley 1996). By threatening to withhold its participation, the Maine delegation extracted a significant concession and thwarted formal planning on certain issues even before the Council's work had begun.

As mentioned above, however, the NFLC did have a need to maintain an image that it was conducting a fair and open process of discussing the region's economy and environment. The Council did not create a subcommittee charged

² The fact that Maine was determined to keep forest management practices off of the table was an open secret during the NFLC's deliberations. Although it was never discussed publicly, several council members acknowledged that tense negotiations about Maine's participation almost prevented the NFLC from proceeding (Bley 1996; Bofinger 1996; Johnston 1996).

with reviewing forest management practices: it commissioned no studies and held no hearings or public meetings specifically on the subject. When public concern about forest management practices continued to surface during the planning process, the NFLC was forced to justify its lack of attention to this obviously important issue. It explained its decision in its *Findings and Options* report:

... the Council has focused on only those issues which it deemed are the most significant from a regional, multi-state perspective. There are seven: biological resources, conservation strategies, land conversion, local forest-based economy, property taxes, recreation/tourism, and state/federal taxes. There are other important issues that the Council has chosen not to address separately, despite requests to do so. Among the most significant are forest practices, business regulation, effects of climate change, acid deposition, forest health, and labor costs. It is the Council's belief that the states can and should address these issues individually. (Northern Forest Lands Council 1993a, p. 5)

These issues were related to various findings and options, so the Council explained that these neglected issues were technically still "part of the subcommittee discussions," although the subcommittees did not produce detailed analyses on them (Northern Forest Lands Council 1993a, p.5). This explanation for inaction on the issue of forest management took up a few lines in the introduction to the 65-page document that announced the Council's initial findings of fact. It obviously did not tell the whole truth. But the oblique language was the best the Council could do because admitting that it had agreed to keep these issues off the agenda would undermine its authority, and dash any hopes that it could make recommendations that would be taken seriously by legislators and the public.

The initial agreement with Maine and the Council's lack of work on the topic could not, however, keep forest management issues off the table. Broad public concerns about regional forest health had been growing even before the NFLC began its planning process. The 1990 Northern Forest Lands Study had identified forest health as an important issue. The Forest Service and the Governors' Task Force had received many comments about forest management practices during their public involvement process for the NFLS. Mitch Lansky's Beyond the Beauty Strip (1992), a broadside against Maine's forest product industry published during the early part of the NFLC's deliberation, described an industrial forest that was managed without regard to environmental or social impacts. This book laid out a stark, detailed, and well-documented exposition of environmentalists' concerns about forest health in the region.

Throughout its planning process, the NFLC received complaints about clearcutting, herbicide use, and other forest management/health issues, comments which mirrored and expanded upon the arguments in Lansky's book. Many came from regional residents not obviously affiliated with any group or interest agenda, but worried about the nature and pace of logging in the region. These concerns were reinforced by the organizational efforts of various environmental groups, which repeatedly stressed the importance of forest management practices in mailings and other outreach to their members. The Northern Forest Alliance³ published a summary of public comments from the NFLC's 1994 Listening Sessions which emphasized the problems caused by various forest management practices (Northern Forest Alliance 1994, pp. 8-9). The Northern Forest Forum, a newspaper published by a regional environmental activist with funds from the Earth Island Institute, devoted an entire issue to a critique of the *Findings and Options*, featuring several articles complaining about the fact that forest health was not examined by the NFLC (Northern Forest Forum 1993).

Loggers, woodsmen, and even property rights advocates were concerned about forest management practices. As the quote below shows, some property rights advocates felt that forest management practices were actually being kept off the table by environmental groups and industrial forest landowners working in concert⁴.

Forest Practices

Stopping development has always been the driving force behind the environmentalist community. Their continual trumpeting of forest practices concerns serves primarily to broaden public support. Early Council structure was dominated by environmentalists and the forest products industry, so it was only natural that a deal be cut early on to relegate forest practices to the states and discourage open public debate.

The public has a different idea. Forest practices are vital to the continuation of its quality of life and the welfare of future generations. When the Council froze forest practices out of its process, this concern boiled over. NFLC Recommendation 16's belated acknowledgment did little to stem it. Comments on forest practices have been far and away the most prevalent and passionate of those heard at the Council's Listening Sessions.⁵ (Guernsey 1994c)

³ The Northern Forest Alliance, a broad and varying coalition of approximately 20 environmental groups, is discussed in more detail in Chapter 4, *supra*.

This newsletter was written after the draft NFLC recommendations were released.

⁵ Recommendation 16 from the NFLC's Finding Common Ground Draft Recommendations supports the federal Stewardship Incentive Program, which offers money to small landowners to help them manage their land for natural resource values in addition to timber. This recommendation does not seem to be

These comments, from so many different sources, created an enormous dilemma. Council members felt that their planning process had improved the policy dialogue in the region. The NFLC had publicly committed itself to a serious review of issues affecting the environmental and social integrity of the Northern Forest region. The claim that forest management was outside of the NFLC's scope of work, however, was clearly not a satisfactory answer to the broad spectrum of the public who continued to press the issue. Without a specific legislative mandate, the Council's authority was directly tied to its perceived honesty and accessibility. If the NFLC failed to respond to the comments under these circumstances the integrity of the entire planning process might be challenged.

The onslaught of information and opinion from environmentalists, property rights groups, and the general public was an example of what Boulding (1989) calls "organizational power," and what Galbraith (1983) calls "conditioned power." This type of power works on the beliefs, not just the actions, of others⁶. In the face of its limited authority and this manifestation of citizen power, the NFLC's members found it increasingly difficult to ignore forest management practices. The power of the Maine delegation to control the Council's agenda was met with broad public demands for forest management to be discussed. The Council's reaction to this conflict will be discussed later in the chapter.

Land-Use Regulation and Land Acquisition

The NFLC's approach to land-use regulation and land acquisition was affected by a somewhat similar history of power conflicts. But on these issues stakeholders were clearly divided and the forms of power they brought to bear on the Council were slightly different. The Maine delegation opposed large-scale land acquisition or land-use regulation. As above, the delegation refused to participate in the NFLC if these issues were to be a focus of the Council's recommendations. In contrast to

directly related to the comments above. Draft recommendations 17 and 18 are titled "Forest Practices," and suggest that there need to be objective, state-level assessments of forest practices, as well as educational programs to inform all parties about sound forest management practices. These seem to be the practices the author's reference intended.

^{6 &}quot;Conditioned power is the product of a continuum from objective, visible persuasion to what the individual in the social context has been taught to believe is inherently correct. As we have seen, such power can be explicit, the result of a direct and visible attempt to win the belief that, in turn, reflects the purposes of the individual or group seeking or exercising the power. Or the belief can be implicit in the social or cultural condition; submission to the authority of others reflects the accepted view of what the individual should do. As one moves from explicit to implicit conditioning, one passes from obtrusive, ostentatious effort to win belief to an imposed subordination that is unnoticed —taken for granted. And, an important point, the social acceptance of conditioned power rises steadily as one moves in this direction from explicit to implicit conditioning" (Galbraith 1983, p. 29)

the issue of forest management, however, property rights groups were also strongly opposed to land acquisition and regulation. Environmentalist lobbying had little effect on the Council. A more detailed look at land-use regulation and land acquisition will illuminate these somewhat more messy and indeterminate power conflicts.

The region already has some large publicly-owned areas, most notably the Adirondack State Park in New York, the Green Mountain National Forest in Vermont, the White Mountain National Forest in New Hampshire and Maine, and Maine's Baxter State Park. Eighty-five percent of the land in the Northern Forest, however, is privately owned, much of it in large holdings that are used for the production of pulpwood and sawlogs. Maine, which contains the largest fraction of the Northern Forest, has the smallest percentage of public parks of any state in the northeast, and is 47th among the fifty states (Lansky 1992, p. 302). Maine's situation was obviously unique. Among the NFLC state delegations, Maine was the most concerned about any large-scale federal acquisitions or land-use regulations.

As with the forest management issue, Maine's opposition to regional regulation and land acquisition predated the NFLC. When the Governors' Task Force (GTF) was making recommendations to accompany the *Northern Forest Lands Study* in 1990, Maine's GTF delegation made its opinions on these matters heard.

... whenever there was an attempt to raise the topics of a green line⁷ or public land acquisition, other than for small tracts of significant natural areas by the states, positions hardened. Even though advocates of large-scale acquisitions expressed willingness to limit purchases to those where there was "a willing buyer and a willing seller" (thus rejecting any form of condemnations), some representatives from Maine would not discuss these issues further and they were never again seriously considered by the GTF. (Reidel 1994, p. 104)

While members of the Maine delegation were opposing land acquisition and land regulation in the GTF, property rights groups were mobilizing for a similar fight in the legislative arena. As discussed in Chapter 3, Vermont Senator Patrick Leahy introduced the Northern Forest Lands Act in 1990 to give congressional direction to a new Northern Forest Lands Council. This act originally would have given the NFLC a role in land acquisition efforts. The Act was opposed by many of

⁷ "Green line" is shorthand for proposals to draw a regulatory boundary (a "green line") around the entire Northern Forest. Greenlining was evaluated during the NFLS as one possible technique for establishing uniform regional land management regulations, or attracting federal development assistance.

the property rights groups in the region, including the Maine Consertation Rights Institute, which "led an intensive grassroots campaign across the four states to educate the public as to the true meaning of the Act" (Guernsey 1994d). For these groups, that "true meaning" included a belief that the NFLC was also going to get the authority to regulate land use across the Northern Forest—authority that had never been part of the Act.

As a result of an organizing drive based in part on these mischaracterizations of the Act, four hundred people, many opposed to the bill, packed a noisy Bangor meeting on the Act held by Maine senators. In addition to the dramatic Bangor protest, property rights groups picketed hearings on the bill throughout the region. This opposition probably played a role in convincing the regions' federal representatives (except for Leahy) to withdraw their support for the Act (Guernsey 1994d; Reidel 1994, p. 104-106).

Without regional support, Leahy's Act died in Congress, and the issue of land acquisition was tossed back to the newly-formed NFLC's ad hoc planning process. The NFLC's work was based upon the same assumption that had framed the NFLS—that traditional land ownership patterns had served the region well, and that only minor tinkering would be needed to protect and improve the region's economic and environmental stability⁸. Maine's participation in the NFLC, as with the issue of forest management, was predicated on keeping regional land-use management and large-scale federal land acquisition off of the agenda of the Council (Reidel 1994). The Maine delegation had opposed the inclusion of the issues during the work of the GTF, and that opposition usually originated with Maine's forest product industry representatives (Reidel 1994, p. 103). By keeping these issues off of the NFLC's agenda, the forest products industry and its allies in the Maine state delegation were able to restrict the discussion of sustainability, making certain ideas or options (such as regional greenlining) untouchable.

The forest products industry had allies on these issues outside of the Council, but they wielded a different form of power. At the NFLC's first public meeting, held in the Adirondacks, property rights advocates and residents "threatened the Council

⁸ This assumption has its roots in a letter that Leahy and N.H. Senator Warren Rudman sent to the USDA Forest Service Chief F. Dale Robertson at the outset of the Northern Forest Lands Study. In that letter, Leahy and Rudman observe that "[t]he current land ownership and management patterns have served the people and forests of the region well" (Harper et al. 1990, p. 90). This phrase, with slight variations, was often used by both the GTF and the NFLC to justify inaction on forest practices, land acquisition, and other issues. See the further discussion of this issue at the end of this chapter.

members in such hateful language that several [Council members] were visibly shaken" (Dobbs and Ober 1995, p. 271). NFLC staff member cars were vandalized at that meeting. Almost four years later the NFLC held its last public listening session on its draft recommendations at Glens Falls, New York. At that meeting Carole La Grasse, an opponent of the NFLC's draft proposals, and an avid property rights advocate angrily told the attending NFLC members "you should be ashamed to use the power of government [...] to cause terror" (Dobbs and Ober 1995, p. 269). All of the New York members of the NFLC were at this meeting, including Robert Stegemann, an International Paper Corporation executive, and Barbara Sweet, a town manager from an small Adirondack town. La Grasse shocked these relatively conservative NFLC members with her anger — "I hope the gates of hell open for you," she said in a comment she punctuated by tossing her copy of the NFLC's recommendations at the feet of Council members and tipping over a chair while she retrieved it (Dobbs and Ober 1995, p. 269). The uses of threats, threatening language, and angry confrontation, as several NFLC members admitted, made the Council much more careful about wording recommendations in ways that would not offend property rights advocates (Bendick 1997; Sargent 1996).

These examples from New York, while among the more extreme, are representative of the anger and fear that the NFLC faced from property rights critics. As noted in Chapter 6, these groups and individuals felt that the entire NFLC process was an excuse for federal intervention in local land use decisions. Many in these groups believed that environmentalists and government bureaucrats were conspiring to create regulations that would force the poorer, long-time residents of the region off their land or out of their jobs. Citing the lax management of existing publicly-owned lands, these groups generally opposed any new public land acquisition. (Guernsey 1994f; Northern Forest Dialogue Project 1994a; Northern Forest Lands Council 1993b).

Land-use regulations that provided incentives to promote good forest management, or to promote wildlife conservation, aesthetics or other "public values" were also strongly opposed by these groups. Such proposals were simply the camel's nose under the tent, according to these critics. Property rights groups in the Adirondacks, such as the Adirondack Solidarity Alliance, had already experienced regional land-use regulation (through the Adirondack Park Agency), and they were determined to resist any attempt to add another layer of bureaucracy (Northern

Forest Lands Council 1993b). Opposition to and fear of "greenlining" persisted even after the NFLC had publicly disavowed any interest in regional regulation.

Quotes from these groups provide some sense of the intensity of their feelings:

They [the NFLC] are a lynch mob of new age advocates who will justify any means to their end of government control of all lands (Richmond 1993, p. 1).

The staff and the majority of the Northern Forest Land Committee [sic] is basically a preservation, conservation and environmental advocacy group, unhappy with the tabling of the Northern Forest Lands Act, moving to use other means of advancing and promoting a 26 Million acre Federal Reserve (Morse 1993, p. 1).

We'll fight you in the courts, we'll fight you in the hills, we'll fight you in the valleys (an Adirondack Solidarity Alliance member quoted in (Reidel 1994, p. 106)).

Anger, rather than argument, was the persuasive tool in many of the property rights groups' contacts with the Council. But the threats and organizational efforts of the property rights advocates, while at times frightening, merely served to reinforce the forest-products industry's move to keep regional regulation off of the Council's agenda. These groups tried to control the NFLC's process through threats and intimidation, but their actions seemed to have had little determinative effect.

The polite letters, color brochures, and largely dispassionate arguments of environmental groups seem tame by comparison to the intimidation used by some of the opponents to regulation and acquisition. Environmental groups, however, used the organizational and persuasive power at their disposal in an attempt to bring land-use regulation and land acquisition back into the NFLC's policy discussions.

Some national environmental groups, particularly the National Audubon Society, Wilderness Society, and the Sierra Club, clearly hoped that the Northern Forest Lands Council's planning process would lead to new public land acquisitions, maybe even national parks, in the region. As part of their lobbying effort these four groups produced an expensive photo essay titled *The Great Northern Forest* which lyrically described ten wild areas within the Northern Forest region which they felt deserved public protection. The brochure also portrayed a region that faced an imminent crisis requiring swift action. The brochure stated their hopes:

The integrity of the Great Northern Forest will be preserved if the following criteria are met:

- 1. A major portion of these wildland areas must become publicly owned and remain in their natural state;
- 2. Forest management in outlying sections of these wildlands must meet stringent ecological guidelines; and
- 3. Future human development and large scale commercial forestry must take place only outside the boundaries of these wildlands. (National Audubon Society et al. 1994?, p. 3)

The brochure suggested that this land be purchased as it becomes available, and that all sales be from willing sellers at fair market value. It also discussed the need to keep a viable economy in the region, and supported private land ownership while emphasizing the need to avoid acrimonious legal battles over conservation (National Audubon Society et al. 1994?, p. 2-3). Still, the actual tradeoffs or conflicts between these land acquisitions and the regional economy were not discussed. The picture essay provided beautiful photographs of various wilderness scenes, emphasizing the biological and natural features that need to be preserved. At the end, a pair of pages illustrated "The Good... the Bad... and the Ugly," to emphasize the message of the brochure. "Good" is represented by canoe trips, fly fishing, selective harvest logging and cross-country skiing. "Bad" pictures include "for sale" signs and pictures of trash-filled sites of long-time camp leaseholders who have "rebelled" against a developer who wants exclusive rights to recently purchased land. Pictures of clearcuts illustrate what is "Ugly" in the region (National Audubon Society et al. 1994?, p. 26-27). The brochure ends by revealing how the "good" future of the region can be insured.

For this to happen, we need to create a land acquisition program empowered by an unprecedented partnership between state and federal governments. To be successful, public and private interests must be united in supporting this public investment as an issue of national importance. (National Audubon Society et al. 1994?, p. 28)

This brochure was part of a lobbying effort by these groups to increase the amount of land set aside for wilderness, parks, and other forms of conservation. It was intended to engage supporters and mobilize them to lobby the NFLC and legislators to promote parkland purchases. As a rhetorical device, it makes an effort to remind readers of certain issues (e.g., the beauty of and need for unspoiled areas) while downplaying or ignoring other issues (e.g., the fact that people currently work and live within almost all of the wild areas identified in the brochure). It concluded

with a call to action: "It is time for the people of the Northeast and the country to call upon Congress to adopt this comprehensive policy to protect these wildlands" (National Audubon Society et al. 1994?, p. 28). The brochure, and others like it, were an attempt to exercise organizational power, marshaling arguments to put the issue of large-scale land acquisition onto the table for discussion. But power exercised for one purpose can have other, unintended results.

This brochure nearly disrupted the Northern Forest Alliance because it suggested specific areas of parkland as the solution to the region's problems. While promoting parkland was rhetorically useful for gaining the support of the members of the sponsoring national environmental groups (many of whom lived outside of the region), environmental groups with membership inside the region were less sanguine about the prospects of vastly expanded parkland within the Northern Forest (Field 1994). The national groups that financed the brochure were wealthy enough to push this agenda without the help of the local groups in the Northern Forest Alliance⁹. By doing so, however, they threatened the integrity of the environmental alliance.

The story of power conflicts over land-use regulation and land acquisition is complicated and the effect of the power conflicts on the NFLC's deliberations is hard to discern. Remembering that power conflicts are competing attempts to inhibit or enhance the deliberative policymaking process, it becomes easier to see the pattern of conflict. Maine's delegation, particularly its forest-industry representative, used its ability to block the creation of the NFLC as a lever to keep land-use regulation and land acquisition issues off the Council's policymaking agenda. Property rights groups, apparently acting independently, used threats and intimidation also in an attempt to keep the Council from considering action in these areas. Several national environmental groups, working independently from the Northern Forest Alliance, created a brochure that favored land acquisition—an attempt to influence the policy debate with beautiful pictures and a persuasive factual and emotional argument. That same brochure, in turn, caused divisions within the Northern Forest Alliance as an unintended consequence of its creation and distribution. Council members were aware of most of these attempts to shift their attention and control their agenda (although they probably did not know of the brochure's brief impact on the Northern Forest Alliance). Their response to these uses of power will be discussed later in this chapter.

 $^{^{9}\,}$ The differing interests of the environmental groups were discussed in Chapter 5 above.

Capital gains taxation of timber

The above discussions of power all relate to the active use of certain forms of power in an attempt to influence the planning process. Power also affects debates about sustainable development by shifting people's expectations and beliefs about what is likely and what is possible¹⁰. The economic and political power of dominant industries and institutions has been shown to shape people's expectations and to inculcate values that perpetuate that power (Gaventa 1980; Herman and Chomsky 1988). This aspect of power conflicts is almost impossible to prove definitively because it operates at the level of belief-without being fully aware of it, people adopt the arguments of individuals, institutions, or groups that dominate a region's economic or social life. This happens both because people understand how their well-being is tied to those dominant institutions and also because these dominant individuals and institutions make an effort to influence discussions of possible solutions to regional problems (Gaventa 1980). Galbraith noted that the use of organizational power can persuade people actively, or it can gradually influence what people believe until they submit to a point of view because they accept it to be contextually correct (Galbraith 1983, p. 26). Do we see examples of this gradual influence in the Northern Forest Lands Council? The following discussion of capital gains taxation provides an example of this kind of power.

Proposed federal tax policy changes generally did not generate the same emotional debate as other issues discussed by the NFLC. Despite this lack of passion, there was considerable interest in various types of tax law changes. The logic underlying all the proposed changes was their provision of economic incentives intended to induce better management and protection of the working forest. Property owners and industrial forest users who would benefit monetarily from these changes generally supported the proposed changes. Environmental groups did not seem to oppose the recommendations, but wanted some form of guarantee that the ostensible environmental goals of the tax law changes would be achieved in exchange for the monetary benefits. For example, the National Audubon Society believed that capital gains indexing proposals "should contain provisions to ensure a certain level of forest management" (Northern Forest Lands Council 1993b, p. 83).

One NFLC tax proposal—changing the capital gains tax treatment of timber—is particularly interesting. Prior to 1986, 60 percent of the capital gains realized from the sale of timber could be excluded from an individual's taxes. The maximum tax

¹⁰ See the Galbraith quote, note 5, supra.

rate for individuals at this time was 50 percent. Corporations had a 46 percent tax rate, but only paid 28 percent tax on capital gains, a difference which meant that they could effectively exclude 40 percent of their capital gains from their taxable income. The 1986 Tax Reform Act eliminated the capital gains deductions, but also reduced the maximum tax rates on individuals and corporations to 28 and 34 percent respectively (Harper et al. 1990, p. 62).

The paper industry regularly supported a return of the capital gains tax deduction for timber sales¹¹. The industry argued that the tax changes meant that landowners had to earn more now simply to achieve the same net income. This could lead to more intensive and damaging timber harvests (Lansky 1992, pp. 357-359; Northern Forest Lands Council 1993b, p. 81-88). Almost everyone agreed that the capital gains tax changes had some impact on the return on timberland investment. There was no clear agreement, however, on whether the changes had any effect on the behavior of landowners or the preservation of the working forest. Research commissioned by the NFLC's State and Federal Taxes Subcommittee presented some theoretical arguments about why such tax law changes should alter landowners decisions about managing and conserving their lands, but even these studies noted: "There is no conclusive theoretical or empirical evidence that suggests that favorable income tax treatment will increase rotation ages or intensify management on any given forest stand" (Howard 1992, p. 8). The commissioned research instead suggested that the reasons for landowner decisions were too complicated to clearly attribute to a tax law change of this kind (DeCoster 1993; Howard 1992). Nevertheless, the commissioned research still promoted a restoration of favorable capital gains treatment for timber, albeit at times in rather tentative language:

[...] economic studies indicate that present tax rules contribute to very low after-tax rates of return on investment in timber. Failure to improve these rates of return *could* jeopardize the viability of the entire forest products industry and encourage the conversion of existing timberland for inappropriate purposes (Dubroff and Geske 1993, p. 74, emphasis added) A significant rate differential [between capital gains and ordinary income taxes] *could* discourage owners of forest property from subdividing and selling it for development (Dubroff and Geske 1993, p. 75, emphasis added).

Forest-products industry critic Mitch Lansky wryly noted "Industry certainly has not argued to bring back the previous higher tax rates—it just wants the previous tax breaks" (Lansky 1992, p. 358)

The Northern Forest Lands Study had suggested a strategy that tied favorable capital gains treatment of timber sales to a commitment on the part of landowners to not subdivide or develop their land for ten years (Harper et al. 1990, pp. 60-62). Similar approaches received qualified support from environmental groups during the NFLC's planning process (Northern Forest Lands Council 1993b, p. 83-84). The NFLC backed away from this quid pro quo requirement, however. Instead, the Council suggested the following:

Recommendation 8, to allow inflation adjustment on the original cost of timber. Congress and State legislatures should change income tax policies to allow adjustments for inflation on the basis (original cost) of timber owned by forest landowners. This would tax landowners on the real gain (not inflationary gain) from selling timber, thereby recognizing the long-term nature of forest land investments. This recommendation refers to timber revenue only, not timber land revenue (Northern Forest Lands Council 1994b, p. 37, emphasis in original).

One of the NFLC's consultants had identified this indexing as a possible response to capital gains concerns, but had noted that "such an approach would likely require indexing for all capital assets and is not a politically viable alternative" (Howard 1992, p. 19). Despite this lukewarm endorsement, and the preference of environmental groups for a more direct linkage between tax breaks and forest-friendly performance, the NFLC produced a recommendation that, if implemented, would have provided direct benefits to forest land owners without any strong evidence that it would promote sustainability by inhibiting land conversion or improving land management.

The Council's research provided only tentative, qualified support for the underlying logic of this recommendation. But this tentative support was enough to get the Council to promote a change in the national tax code. Why was this recommendation so easy while others were so difficult for the Council to make? Part of the reason, as will be shown in the next section, was that NFLC members relied not just on their research, but on the anecdotal evidence that they supplied from their own experience and their frame-based assumptions about landowner motivation. Because many of the NFLC's members (including environmental representatives) had worked in the forest, it was easy for them to appreciate the economic benefits of this change. The ostensible purpose of the NFLC, however, was not just to provide economic benefits to the forest landowners, but to provide benefits that would promote "economic stability for the people and communities of the area and" maintain "large forest areas" and protect "recreational, wildlife, scenic,

and wildland resources" (Northern Forest Lands Council 1993a, p. 8). This fundamental distinction is the difference between sustainable development and more conventional economic development. Keeping sustainability at the forefront of a planning process is difficult if the members of the planning body have internalized the preconceptions of the region's dominant industrial actors.

The NFLC's Responses

The substantive disputes described above resonate with various types of power conflicts. The NFLC's responses provide some additional insights into the nature of power conflicts, and to the difficulties they create for sustainable development planning.

The forest products industry, through its representatives and allies on the NFLC, certainly had the authority to block any efforts that it felt would be inimical to its interests because the Council worked by consensus. The NFLC process began with both forest management and large-scale federal land acquisitions ostensibly off the table. In the final recommendations neither issue received a detailed analysis. Federal land acquisition was still not mentioned, although state level acquisition was. Forest management practices had moved from being "unmentionable" to gaining some official legitimacy as an appropriate focus of concern.

How did forest practices get on the table? Partly this happened through concerted and effective public pressure. The environmental Council representative from Maine explained this well.

The Council was really not conceived of to deal with the forest practices issue, that is something that really evolved. There was, at least if you listen to industry, a specific agreement in their willingness to go along with the establishment of the Council, that it would not focus on forest practices, that it would focus on this fragmentation/development issue. I went in to it with that understanding, [... and I was] asked if I would abide by that understanding, and I said yes. It became clear as we went through the process, particularly with regard to public input, that that just wasn't going to fly. People saw the future of the forest integrally tied to forest practices, and for us to try to create a vision and create a pathway to achieving that vision, ignoring forest practices and biodiversity issues was not going to wash and it would make us in essence irrelevant. Everyone came around to that conclusion, in their own way. It took some much longer to do that, but in the end everyone including our staunchest landowner/industry representative agreed to that. So we started, late in the game but still in the game, to address that issue. (Bley 1996)

According to several NFLC members, forest management issues were initially kept off of the NFLC's agenda through the efforts of Ted Johnston, a representative from the Maine Forest Products Council on the NFLC, and Edwin Meadows, the head of Maine's Department of Conservation. "Ed and Ted could tie the Council in knots over forest practices [...] talk about stonewalling," said one Council member, "We could not get into forest practices because of opposition within the Council" (Bofinger 1996). Ted Johnston admitted as much:

The primary directive from Congress was to focus on development and changing land-use patterns. A second issue that became very important to a lot of people, but was not what we were directed to do, was forest practices. [For people who seized on this issue] that became the mantra, or that was supposed to be our whole focus, and the other 99% of it was irrelevant. So we spent an awful lot of time arguing and I was the immovable object. Forest practices were not going to be the focus, forest practices were not what we were here to examine, that is not a federal role, that is a state role, and if you want to take it up, take it up in the [state] legislature. That held for probably four years, maybe even five. Meanwhile, back at the ranch, working with the people that I was representing, we were finally able to get them — to get us — to acknowledge that forest practices, if for no other reason than to gain political support, had to be an issue, or at least not shut out (Johnston 1996).

Johnston's comment is revealing in several regards. Johnston had worked on the Governors' Task Force (GTF), which had overseen the USDA Forest Service's Northern Forest Lands Study. That effort had received some congressional direction, but none of that direction prevented the GTF from making recommendations on forest health and forest management if it had chosen to do so (Harper et al. 1990, pp. 89-91). The reason the GTF did not address forest management practices had nothing to do with Congress, and everything to do with the recalcitrance of certain GTF members, particularly Ted Johnston (Reidel 1994, pp. 100-105). The NFLC, while funded by Congress, had never received any explicit congressional authorization or direction. It could have taken up the issue from the start, but forest practices was kept out of discussion by prior agreement with Maine's delegation, which used its power to block the formation of the NFLC as a lever to keep the issue off the Council's agenda.

The second telling point in Johnston's quote reveals something interesting about how power operates on individuals within an *ad hoc* planning process. Johnston was the executive director—an employee—of the Maine Forest Products Council. His ability to get out in front on the issue of forest practices was limited by the fact that he had to answer to his employers, a coalition of industrial forest

concerns. His employers felt besieged by the rhetoric they heard from environmental advocates about issues such as biodiversity, forest practices, and ecological reserves. They felt that some of the environmental advocates were attacking everything they had done during their professional lives. Consequently they spent most of their time and effort during meetings with Johnston discussing their fears. "After an hour of venting we did get around to the merits of issues," noted Johnston. "When we got to that point we'd make great progress," he explained, "but then we would all be wrestling with the fear of putting forth something that was reasonable, but would be picked up by what we perceived to be unreasonable people and turned into something else" (Johnston 1996). Johnston expressed considerable frustration at how much pressure he was under. Even the slightest positive public comment about some environmentalist proposals would result in a phone call from a worried MFPC member. Johnston's ability to engage in the NFLC's deliberative process was restricted, in part, by his status as an employee of the Maine Forest Products Council.¹²

Other NFLC members (including the forest-products industry representatives from Vermont and New York and local interest representatives from Maine and New York) were also content to keep forest management practices out of NFLC reports (Bofinger 1996). But this all changed dramatically when Johnston left and was replaced by Roger Miliken, the chairperson of the Maine Forest Products Council.

Miliken is also the president of Baskehegan Lands Company, a forest owner and manager responsible for 100,000 acres of land in northeastern Maine. When he took Johnston's place on the NFLC in July 1994, he knew that despite earlier agreements with the state delegation from Maine, forest practices had been effectively put on to the Council's agenda by the public outcries of the environmental community and other regional residents. As Ted Johnston noted above, some recognition of the importance of forest practices was necessary, if only to gain political support for the rest of the NFLC's work. As the chair of the Maine Forest Products Council (MFPC) he called a retreat of major landowners and the MFPC board to ask what he should do, and how far he should go on these issues. About this same time, Richard Carbonetti, a "local interests" representative and

¹² The ability of any representative to get out in front of his/her sponsoring organization is a persistent factor in public policy disputes. At least one Council member (Carbonetti 1997) noted that environmental representatives on the NFLC were often unable to discuss alternative proposals effectively because they had to "check with their groups" before the could commit to anything.

forester who was one of the Vermont members on the Council, sent a letter to the Council suggesting that something had to be done about forest practices. "My fear was that if we didn't do something about forest practices, then the whole report would be discounted and I would have wasted all the time I volunteered for the Council" (Carbonetti 1997). Carbonetti, Miliken, Jerry Bley (the environmental representative from Maine), and others worked together to come up with something that shifted the focus from discussing forest practices to discussing sustainable forest management. "It was my feeling that forest practices are really the symptom and the underlying disease, if you will, is unsustainable forestry," Miliken explained when asked about this shift (Milliken 1996).

Principles of sustainability

- Maintenance of soil productivity
- Conservation of water quality, wetlands, and riparian zones.
- Maintenance or creation of a healthy balance of forest age classes.
- Continuous flow of timber, pulpwood, and other forest products.
- Improvement of the overall quality of the timber resource as a foundation for more value-added opportunities.
- Addressing scenic quality by limiting adverse aesthetic impacts of forest harvesting, particularly in high elevation areas and vistas.
- Conservation and enhancement of habitats that support a full range of native flora and fauna.
- Protection of unique or fragile natural areas.
- Continuation of opportunities for traditional recreation.

Source: (Northern Forest Lands Council 1994b, p. 42)

This shift allowed a skeptical forest-products industry to acknowledge the need for sustainability without engaging in a divisive debate about past (and current) activities. Of course, it also allowed the NFLC to save its credibility in the face of mounting public skepticism about the Council's ability to stand up to forest products industry pressure. The resulting principles of sustainability seem relatively tame, but one Council member says, "I challenge anyone to look in any other public document and see that sort of honest appraisal of forest management practices" (Bley 1996).

Using these principles of sustainability as a starting point, the Council went on to recommend that individual states review forest management practices on a regular basis. Thus the Maine delegation was able to say that it had preserved the integrity of its request to keep forest management issues out of any regional agreement while the environmental community was able to get an

acknowledgment that forests should be managed for a type of sustainability that went beyond mere sustained yield. But the delays caused by the industry also meant that the Council had not studied these principles and had not conducted any research about appropriate forest practices that could have been brought forward and debated during its public involvement process. It was much easier for the forest products industry to sign on to general precepts like these than it would have been to allow environmental groups and others to discuss specific proposals to improve forest management. The principles, while generally applauded by environmentalists, did nothing to change the locus of control over forest management decisions, leaving it firmly in the hands of the forest products industry that had created the perceived crisis in the first place.

The NFLC's recommendations on public land acquisition were also modest. The recommendations acknowledged the importance of public land acquisition and management as "important tools in protecting components of the full range of values in the Northern Forest, where private lands cannot be expected to provide or protect such values" (Northern Forest Lands Council 1994b, p. 49). The recommendations did not propose any specific land acquisitions, however. Instead, they suggested that federal and state governments fully fund public land management agencies, and that states set up planning programs to identify land that is appropriate for public purchase.

There were many reasons for these modest proposals. Several Council members, including environmental representatives, felt that the environmental community, particularly the large national groups, had over-reached in their proposals for new public land acquisitions (Bley 1996; Bofinger 1996; Harrigan 1996). Such proposals were not supported by sufficient scientific research, according to some Council members, and the notion of public land acquisition in the fiercely independent north country would require broad and deep social agreement — agreement that was not apparent during the NFLC's public involvement process.

The local interest NFLC representative from Vermont explained that he felt that the call for more public land acquisition was coming from outside of the region. He recalled his experience at a NFLC public meeting in Boston:

This fellow got up and he says, 'I'm from Concord and I work for General Electric,' and the bubble over my head was, 'batteries and bullets—[sarcastically] here's a reasonable guy working for a great environmentally sound company. The gist of his testimony was, 'I can't afford to live up there, but I want up there preserved so that when I want to go to the wild, I can go.'

And I thought, OK, so in other words, people who live in this region shouldn't have economic opportunities, they shouldn't have the same right to succeed that he had, and those people should be able to tell us what we can and cannot do. This was a very enlightening, concise testimony for me because what it did was it put me on edge for all of the outside testimony that was coming to the Council. (Carbonetti 1997)

When the Council received hundreds of letters supporting the creation of parkland in the region, but all using much the same language and coming from outside of the region, this Council member said that he treated those letters as if they were just one letter. The testimony he heard at the Boston meeting allowed him, "with very clear conscience" to weigh the individualized testimony of people within the region more heavily than that outside testimony. He saw a difference between heartfelt testimony and the mass testimony sent in response to a mailing (Carbonetti 1997). While the power of the national environmental groups to mobilize their constituency was considerable, the quality of their arguments did not sway this (or other) members. Thus organizational power, to be effective, required both a certain volume of concern and a compelling argument that was consistent with the Council's experience, knowledge, and expectations.

This desire to preserve control of the region by regional residents was also evident in discussions of land-use regulation. The property rights onslaught against greenlining, for example, served to reinforce the existing opposition to the idea from forest-industry representatives on the Council. The idea of regional land-use regulation was totally absent from the NFLC's recommendations. "No Greenlining" had become the rallying cry of the region's property rights advocates, and they were quite successful in removing any consideration of such an idea from the Council's final report. Environmental groups had originally wanted some coordination of the region's land use rules with one group suggesting that "the key option under conservation strategies should be for the NFLC to recommend a federal boundary area around the 26 million acre Northern Forest to attract funding and program direction" (Northern Forest Lands Council 1993b, p. 43). By 1994, however, environmental groups attending a meeting of the Northern Forest Dialogue Project (a privately funded attempt to get disputing parties in the region to discuss their differences), were disavowing any interest in greenlining. While they hoped to bring some kind of benefits to the entire region, members of these groups claimed to agree that "the 'Northern Forest' region is too diverse, and widespread"

to set up an effective regional regulatory body (Northern Forest Dialogue Project 1994a, p. 26).

Despite their frustration over the tactics of property rights groups, the Council did end up trying to allay some of their concerns by softening the language of their final report. Discussions of full-fee federal land acquisition never made it in to the Council's recommendations, although the NFLC did not ban all public land acquisition. Among other qualifications, the Council recommended that land only be acquired from willing sellers, that local governments be given a role in the planning process, and that eminent domain should only be used with the consent of the landowner "to clear title and/or establish purchase price (i.e., 'friendly' condemnation)."

The criteria used to select lands for potential acquisition included recreational, ecological, and scenic considerations, as well as threats to working forest lands (Northern Forest Lands Council 1994b, p. 53). As in the case of forest management practices, the Council had recommended leaving the decision authority in the hands of the individual states, but had recommended a process and set of criteria that acknowledged the validity of the concerns of acquisition proponents and opponents alike. And despite the opposition of property rights groups, the Council suggested several forms of market-based land protection, such as conservation easements, expansion of current-use taxation policies, full funding and expansion of federal Forest Legacy and Stewardship Incentive programs.¹³

Although industrial and property-rights groups achieved their goal of keeping federal land acquisition out of the Council's recommendations, environmental group arguments about the need to preserve biodiversity did have an effect. Recommendation 21(d) suggested that scientifically supported ecological reserves should be one component of <u>state</u> public land acquisition and management programs (Northern Forest Lands Council 1994b, pp. 61-63). As noted in the discussion of science conflicts in Chapter 4, the Council decided (incorrectly) that additional scientific research would help determine the need for ecological reserves. But a watershed was reached when even the staunchest industrial landowners on the NFLC acknowledged that ecological reserves could play a role in helping to gain a better understanding of biodiversity. Council member Paul Bofinger recognized the significance of this change for discussions of land acquisition and biodiversity.

¹³ The Stewardship Incentive Program offers assistance to non-industrial forest landowners who want to manage their land for non-timber natural resources (Northern Forest Lands Council 1994b, pp. 25-28).

"By linking two controversial issues and then providing a process" to evaluate the need for ecological reserves, the Council was able to give individual states guidance about the issue and move forward towards possibly acquiring such lands without having to specify exactly what must be preserved (Bofinger 1996). This strategic move kept the possibility of large-scale land acquisition alive for the future. If that future planning process is well-designed, it may allow environmentalists and other stakeholders another opportunity to promote the biophilic¹⁴ value frame that would justify further land preservation.

The capital gains tax recommendations did not generate a lot of controversy on the Council. The ideas about tax law reforms had been under discussion since well before the NFLC's process started, and were featured in the *Northern Forest Lands Study* and the Governors' Task Force reports (Governor's Task Force on Northern Forest Lands 1990; Harper et al. 1990, pp. 59-69). Even the environmental interests on the Council did not disagree with using these tax law changes as a way of promoting better land management. There was virtually unanimous agreement on these issues, according to most Council members, although some environmental representatives "had a tough pill to swallow," because there was "no quid pro quo on tax breaks—they weren't tied to good works" (Bofinger 1996).

There was also very little concern that the capital gains tax recommendations were not thoroughly supported by the Council's research. While acknowledging that they might not change landowner behavior, various Council members justified the capital gains tax recommendation in different ways. One explained that it might prevent people from "doing things they didn't want to do to the land" (Harrigan 1996). Another said that it would influence people because taxes are generally so emotionally charged that, "people will pay \$3 to avoid \$1 in taxes, and they claim in surveys that they are influenced by tax policy" (Johnston 1996). Still, the evidence presented to the Council was not conclusive on this issue.

One side had sort of the rational approach that said, "if you make it more attractive for people to hold the timber longer we're going to have less cut-and-run type of forestry and people will hold on to their assets longer because they won't be forced from a financial point of view to cut it sooner." And then there were others who cited empirical evidence saying, "Well, prior to the 1986 tax reform we had capital gains treatment for timber and the forests weren't managed that great then so why should we expect them to be

The biologist Edwin O. Wilson defines *biophilia* as, "the connections that human beings subconsciously seek with the rest of life. To biophilia can be added the idea of wilderness, all the land and communities of plants and animals still unsullied by human occupation." (Wilson 1992, p. 350).

managed any better if we give improved tax treatment now." There were those that viewed tax policy as a way of achieving desired environmental benefits and those that saw it simply as a giveaway to the industry. (Bley 1996)

The interesting juxtaposition in this quote is between those who had a "rational" approach and those who cited "empirical evidence." In this case, there was a rationality that went beyond the empirical evidence. "I agree that cause and effect for capital gains is difficult or impossible to prove," said one Council member. He added, "Our economic system is all about short-term rewards and efficiency, which is in most cases diametrically opposed to sustainability, and I think the capital gains tax is more symbolic than anything else, but it [focuses attention on] a different time horizon" (Milliken 1996).

Capital gains tax changes won NFLC support because they satisfied Council members' notion of landowner behavior, even though there was little empirical support for their efficacy as a conservation tool. Some Council members explained that their direct experience with landowners in the region led them to support these changes (Carbonetti 1997; Harrigan 1996). For anecdotal evidence to inspire such confidence about a course of action there must be some pre-existing mental frame that allows a small amount of evidence to be matched to a pattern that gives that evidence meaning. In this case, as with many of the NFLC's recommendations about private land conservation, the recommendations rely more on Council members' immediate experience of landowner behavior and on a pre-existing economistic value frame than they do on generalizable empirical evidence. Such a response is totally understandable, but it also shows that in areas where research provided ambiguous evidence, NFLC members' recommendations were largely determined by their value frames. These frame-dependent judgments, imbedded in the region's existing economic system, were very unlikely to perceive options for future action that threaten to change that system.

Power Conflicts and Sustainability

The planners of the Northern Forest Lands Council, when asked directly about power conflicts, generally claimed to be above the fray, promoting a notion of a Council that refused to be pushed around:

The anger of the property rights folks made us very careful to bring in all of the public [...] but otherwise it didn't change our process (Harrigan 1996). There weren't a lot of power struggles internally, although there was a lot of posturing in the first year (Sargent 1996).

Nobody on the Council subscribed to conspiracy theories. We all recognized that there is a spectrum of interests. What we realized is that for us to be successful we had to make sure we didn't disenfranchise anyone or leave them out. (Johnston 1996)

We got off to a very difficult and political start that didn't allow us to gradually get into the politics of all this. We faced crisis early on [...] and we got through that and that made us really strong as a group, getting through that first year or so. From that point on we felt that we could deal with each other as a group and also deal with the outside forces (Bley 1996).

These disclaimers have as their common element the idea that the NFLC successfully insulated itself from power conflicts. The answers also show that Council members' definition of power conflicts is probably something like "the use of illegitimate force." But power, as defined here, is more than just obvious threats or pressure. Power has several dimensions, each of which can create unique kinds of conflicts. When asked about the factors that influenced their decision process, NFLC members acknowledged that some issues were placed on or taken off their agenda for reasons other than the quality of evidence or argument. And the capital gains tax issue suggests that members had internalized an ideological frame consistent with the interests of landowners, but not necessarily consistent with ongoing preservation and improvement of the forest. It is these forms of power that are worth discussing in more detail.

Understanding the sources of power

Legal or Institutional Authority

The NFLC's authority to make recommendations was limited by several factors. The first, and most glaring, was the Council's *ad hoc* nature. Although originally conceived as a planning body with a congressional mandate and a specific planning task (Reidel 1994), the Council actually came in to existence as a non-profit corporation funded by the federal and state government, but with no explicit legislative guidance¹⁵. Many planning bodies have little or no authority to implement their recommendations, but the NFLC had no clear legal authority even to make recommendations. What authority it did have came from informal agreements among the governors of the Northern Forest states, and from the mutual agreement of the NFLC members themselves (Reidel 1994). This informality created a unique situation. Planning usually takes place within a well-

¹⁵ The creation of the NFLC under such unusual circumstances cries out for an explanation. Unfortunately, providing that explanation is beyond the scope of this dissertation.

established institutional framework in which planners' responsibilities are established and limited by law or regulation. The NFLC, unlike many other planning bodies, could not long hide behind claims of limited authority or restricted mandates. The legitimacy of the NFLC's recommendations depended on their perceived quality and fairness.

Of course authority within the NFLC was a result of 1) having a seat at the table, and 2) working within a consensus process where all parties had an equal opportunity to block decisions of the Council. Seats at the table were conferred by the governors of each state, apportioned to environmental, landowner, state conservation agency, and local interest representatives from each state. Each appointment carried with it some authority to influence the NFLC's recommendations. That individual authority was tempered however, by the fact that the NFLC members agreed to operate by consensus, and to make all recommendations unanimously. The ability to bring issues to the table was dependent on the agreement of all NFLC members, while the ability to block issues from consideration was available to every member. Such power had to be used judiciously, however, or else it could corrode working relationships and make agreements on other issues difficult.

The discussion above shows that some members of the NFLC, particularly the Maine delegation, used their authority on the Council to seriously restrict the NFLC's ability to consider issues relevant to sustainability in the Northern Forest region. While all members of the NFLC probably used this form of power to one degree or another, the Maine delegation, with its close relationship to the forest-products industry, represents the most obvious example of the use of authority on the Council to block consideration of issues that other Council members believed were legitimate.

Curiously, it is the Council's *ad hoc* nature that ended up partially counteracting this exercise of authority. With no explicit, written mandate other than the Council's own operating principles, and with an extensive public outreach process that engaged thousands of regional citizens, the NFLC depended on broad public acceptance of its work in order to confer legitimacy on its recommendations. Several members above allude to the fact that the Council's work might have been seen as "illegitimate" if it had not responded to public pressure and considered the problem of unsustainable forest practices. The organizational power of those who wanted the NFLC to address forest practices was enhanced by the Council's need for

legitimacy. The argument in favor of examining forest management—the widespread belief that the future of the region's resource-based economy was critically dependent on the quality of the forest environment—resonated with council members and the public, and demanded some kind of response.

It is not clear from the testimony of Council members if even this public pressure for responsive recommendations on forest management would have been enough if there hadn't also been some change within the NFLC regarding how the issue of forest health was framed and dealt with. Several NFLC members suggested that replacing Ted Johnston with Roger Miliken was a turning point that allowed the Council to come up with a broadly supportable compromise on sustainable forestry. Johnston's recalcitrance on the issue, in turn, was partly a response to his difficult position as an employee of an economically powerful but politically besieged organization of forest industry owners. Johnston's ability to consider a wide variety of options on this issue was limited by his institutional position both on the Council and with his employers. As a forest-products industry representative, he wanted to protect the industry from any loss of operational control; as an employee of the Maine Forest Products Council, he didn't want to lose his job for appearing too conciliatory to environmental concerns.

Authority was used in one other way during the NFLC process. Four of the NFLC's members were state employees charged with responsibility for administering park or forest lands in their respective states. Because these members would have the responsibility and authority to implement certain of the Council's recommendations, they had a particularly strong influence on the NFLC's work. One NFLC member remembered making a comment about how land should be acquired, "and Jack Sargent¹⁶ said, 'that's not going to happen in <u>my</u> state'."

Whenever we tried to kind of dictate things into the Council's report that were going to be tough on those people, on those four people [the natural resource agency representatives from the four Northern Forest states], they kind of used their combined power as public representatives who could always say, 'you know folks, you can recommend whatever you damn please, but ultimately I'm going to decide if this gets in to a budget or not.' They didn't say that outright, but [...] there was always this recognition that ultimately the government and the body politic is going to decide how this all happens, so they probably had the strongest veto power of those of us on the

 $^{^{16}}$ Council member and Director of the Division of Forests & Lands in New Hampshire's Dept. of Resources & Economic Development.

Council. And there were times when they certainly played that card. (Carbonetti 1997)

The NFLC's ability to recommend policy options was limited by Council members who had the institutional power to help or thwart their implementation. Although these individuals obviously have special knowledge of the abilities and constraints that their regulatory institutions face, they also have vested interests in programs and policies that may stand in the way of sustainability.

Chapter 6 examined how the values of Council members helped them to determine whose inputs were legitimate and whose were extreme. The Council members could make those judgements stick, in part because they possessed the authority of NFLC membership. Those groups or individuals who did not have a representative on the Council were effectively shut out of decisionmaking unless (as in the case of forest management) they could present a set of arguments and information that was compelling, and which would undermine the legitimacy of the NFLC if it was left unaddressed.

Economic/property power

Economic power operated at many levels in the NFLC process. Obviously the entire regional planning process was set in motion by concern about the ability of certain economically powerful actors—investors, land developers, vacation home owners—to shape the future of the forest without concern for issues important to recreational or industrial forest uses. The direct impact of economic power on the NFLC was somewhat more limited. The economic significance of the forest products industry was part of the reason that it gained access to the legal/institutional power of Council membership. The industry's dominance in Maine probably explains the fact that Maine's participation was contingent on adherence to the industry's party line on forest management and land acquisition. But the pattern of an economic actor dictating the positions of a state delegation did not appear in the other states, and other individual NFLC members certainly came from less economically powerful groups. Economic power did not, in this case, strictly determine access to legal authority and control over the NFLC's process, but it certainly affected the process indirectly.

Organizational/Integrative Power

This is the power to mobilize people, information and arguments to influence the beliefs of others. At times the effectiveness of this form of power is

difficult to uncover because, when it works most successfully, people believe their changed beliefs were generated internally. This power is represented by political organizing and social movements, but it is also seen in the organizational power of business, which exists apart from business' ability to confer economic benefits or punishments (Galbraith 1983).

One example of organizational power conflicting with other forms of power has already been discussed above. The Council's belated attempt to address forest practices shows that grass-roots mobilization and persuasion can be effective tools under certain circumstances. Probably the most significant example of the importance of <u>business'</u> organizational or integrative power can be found by reviewing the way the debate about the region's future was framed. From the beginning of the Forest Service's Northern Forest Lands Study, right through the work of the Northern Forest Lands Council, the existing patterns of land ownership were praised as having "served the region well." Although this assumption was criticized by participants in the NFLC process, it was never challenged by the Council itself, and support of existing economic relations in the region formed the backbone of most of the Council's recommendations. This study does not examine the process by which this framing of the issue came about. During the NFLS Senators Leahy (of Vermont) and Rudman (of New Hampshire) felt the need to remind the Forest Service that they were "seeking reinforcement rather than replacement of the patterns of ownership and use that have characterized these lands" (Harper et al. 1990, p. 90). While we do not know what caused the Senators to formulate the problem this way, we do know that this framing continued through the work of the Northern Forest Lands Council. The result of these restrictions of scope was that existing patterns of ownership and control of the forest were validated, while alternatives were never seriously discussed by the Council.

Given the lack of empirical evidence supporting the effectiveness of tax incentives as conservation tools, their easy acceptance and promotion by the Council suggests that member's beliefs about them were strongly influenced by a pre-existing value frame. This economistic value frame is prevalent because of the way that capitalist values are regularly reinforced in U.S. society as a whole: it shows the feedback between values and the organizational power of dominant social

institutions¹⁷. Its acceptance by NFLC members certainly helped to promote the interests of the forest-products industry.

If the question of enhancing the region's ecology and economy had been framed differently, then the Council could have conducted research to determine what aspects of the existing economy were serving the region well. This is not to suggest that the existing economy should somehow be questioned to its core in every sustainable development planning process. But even the Wall Street analysts convened to discuss the issue by the Council agreed that international economic conditions and complex individual landowner motivations probably had a much greater effect on Northern Forest land use decisions than taxes. These analysts understood that economic forces behind forest land conversion were much more complex than those suggested by a simple micro-economic model of landowner behavior. But it was this simple, ideological model that lay behind the Council's recommendations, and the tax relief solutions suggested by the Council principally provided benefits to existing, and often economically powerful, landowners, without guaranteeing improved retention or management of the forest.

Other forms of organizational power also influenced the Council's process. Environmental groups were quite successful at mobilizing their supporters to write letters and attend meetings. That mobilization was most effective when it was accompanied by arguments and persuasive evidence that resonated with what the Council was hearing from other commenters in the planning process, or when it conformed to the Council's framing of the issues. But even when there was broad support for some form of intervention to preserve sustainability, such as on the issue of forest management, the organizational power of the environmental groups was not sufficient to force movement by itself. The structure of the NFLC, and Council members' good-faith desire to preserve its legitimacy both worked to enhance the power of environmental groups to get certain issues considered.

Destructive/threat power

Threats and violence can be used to change behavior in the short term. As many researchers have observed, however, threats must have some likelihood of being carried out to be effective (Boulding 1989; Galbraith 1983). Violence, once

¹⁷ The observation that the dominant values in society are the values of the institutions and individuals that dominate society is an old one, advocated historically by Rousseau and Marx, and reformulated and confirmed by political scientists like Shattschneider (1960) and Gaventa (1980) among many others.

used, must be constantly reapplied to maintain its deterrent/motivating effect. Although the regular application of violence and coercion can change people's actions, and perhaps their beliefs (Gaventa 1980), this did not happen in the Northern Forest Lands Council process. The use of violence and threats was very limited, but by all accounts it was an intense experience for Council members. The passion of the emotions directed against them made the NFLC pay close attention to the arguments of the property rights groups, but subsequent threats and posturing did not dramatically alter the Council's actions.

Power conflicts and the quest for sustainability

The relative ease with which capital gains tax law recommendations passed through the Council demonstrates the way that subjective judgements influence planners' readings of research about alternatives for sustainability. I believe it also hints at the power of economic interests in this region, and the U.S. as a whole. In the NFLC case, micro-economic motivations of landowners depicted in economics textbooks were used as a proxy for real landowner behavior. Narrowly-defined economic self-interest was used to explain how a "rational" person would respond to the Council's tax law recommendations, even when this assumption conflicted, as one Council member noted above, with the empirical evidence. This particular recommendation, if implemented, will be financially advantageous to landowners in the region even if it doesn't alter the way they take account of the environment on their land. In this case planners' judgements internalized the interests of landowners in the region. This is completely consistent with the NFLC's stated desire to reinforce traditional patterns of land ownership and use. But is it consistent with the other parts of the NFLC's mission: to enhance the economy and the ecology of the region? This question did not get debated or answered during the NFLC's planning process.

The economic power of the forest products industry and local industrial landowners to control the use of private forest lands is undiminished by any of the Council's recommendations¹⁸. The NFLC tinkered with the complex motivations provided by a profit-driven economic system in the hope that it could get people to "do the right thing" for the forest, but its members rejected any attempt to require landowners to "do the right thing." Given the current political climate, which

¹⁸ The Council's sustainable forestry criteria provide benchmarks for assessing the quality of private forest management, but assert no control over those private decisions.

favors market-based solutions to almost any environmental problem, this non-regulatory approach is not surprising.

Without any central coordination and without intentional indoctrination, the forest products industry apparently carved many inroads into the hearts and minds of NFLC members. The power of the "haves" in the economic system to dominate policy debates is well documented. Such power needs to be critically appraised to determine its effect on the quest for development that enhances local quality of life while protecting environmental resources—the NFLC did not make any effort to engage in such criticism. Many planning researchers have made the point that certain actors/institutions are favored by the current economic system, and that those advantages can easily be perpetuated during a planning process²⁰. According to Forester (1989), planners have an obligation to speak out when structural forces (such as the dominance of large landowners and the paper industry in the region, or the political influence of national environmental groups) threaten to distort the outcomes of a planning process.

Because Council members believed they were correct, rather than ideologically blinkered, in their promotion of tax law changes as a means for changing landowner behavior, it is difficult to imagine how this particular form of power might have been counteracted. As Galbraith and others have noted in discussions of organizational power, a truly successful use of this form of power changes people's internal beliefs and they are unaware that their opinions are affected by outside forces. The Council's uncritical acceptance of the logic of this tax proposal could only have been challenged if it was confronted with and seriously considered an alternative value frame that suggested other, logically coherent explanations for the motivations of landowners²¹. While the values of the Council were strongly shaped by the power of dominant sectors of society, alternative frames could have illuminated power conflicts and ensured that the Council's

See, for example, (Albrecht 1985; Altshuler 1965; Bachrach and Botwinick 1992; Boulding 1989; Castells 1977; Crenson 1971; Forester 1989; Galbraith 1983; Shattschneider 1960; Simmie 1981)
 See, for example, (Albrecht 1985; Boyer 1983; Castells 1983; Clavel 1986; Dryzek 1987; Flyvbjerg 1998; Forester 1989; Friedmann 1992; Healey 1997; Hoch 1994).

²¹ Such value frames would not have been hard to find. Environmental groups have, for years, espoused spiritual and emotional motivations for land preservation. This view might help to explain the empirical observation that many people struggle to hold on to their forest land even when its economic return is low. Property rights groups, whose fierce loyalty towards land they own often transcends simple economic logic, resented any kind of tax law "subsidy" to large landowners, while at the same time decrying land taxes in general. Their values suggest that a concern for equity towards small landowners is more important than commitment to simplistic free market principles.

recommendations were consistent with the full complexity of landowner motivations.

Consideration of alternative value frames could also have changed the Council's conception of who were legitimate participants in the Council's process. As has been noted several times in this dissertation, Council members felt that they had an obligation to ignore or squeeze the so-called extreme voices during deliberations about the Northern Forest's future. The ability of these groups to have their proposals taken seriously by the Council was curtailed by the NFLC's emphasis on the need for a consensus that excluded the extremes of regional values. While including these voices in deliberations would undoubtedly have been difficult, ignoring or discounting them effectively guaranteed that their core concerns will continue to arise whenever sustainable development of the region is discussed. The Council probably should have done more to ensure these groups some equitable access to and influence over the decisionmaking process.

NFLC planners were aware of some of the power-based distortions in their planning process, but even then they did little to use the planning process as a means for demystifying the region's power conflicts. Early Council discussions of the subject of forest management (such as those in the introduction of the Findings and Options report, quoted above), for example, suggested that its exclusion from the Council's agenda occurred simply because it was not an appropriate regional issue. The efforts of the forest product industry, particularly the Maine NFLC delegation, to keep it off the agenda—a clear use of their power to restrict policymaking discussions—were not mentioned. Stakeholders were left on their own to interpret these events, imagining (sometimes correctly) all sorts of behindthe-scenes efforts to manipulate the Council's work. When the issue resurfaced in the Council's final recommendations, it simply dropped into the document with no explanation of why it had been left out up to that point²². It is quite interesting what can happen when power conflicts like this are obscured from public view. As I show in earlier in this chapter, property rights groups were able to partially blame environmentalists for the Council's failure to address forest practices, while national environmental groups believed the problems lay with the forest products industry.

The first line of the final recommendations' section on Sustainable Forest Management is: "Since the Council's inception, people have expressed great concern over current management of the forest"

Although power is contingent and uncertain in many cases, it need not be invisible. A public discussion of power conflicts could have helped stakeholders better understand the forces that have shaped the Northern Forest economy and ecology. It could have allowed the public to judge the forest industry's claim that forest practices were being adequately addressed at the state level. It could have allowed people to decide for themselves if the national environmentalist group's idea of regional forest management regulations made sense. It could have helped them judge the Council's recommendations by highlighting which government agencies, private companies, non-governmental organizations, or individuals were promoting informed discussion of which alternatives.

Summary and Conclusion

Power conflicts form part of the landscape within which sustainable development planning must take place. Those conflicts, as has been shown, can have a distorting influence on planners' abilities to research, discuss, and evaluate alternative courses of action. The effect of power conflicts depends to a large degree on the specific planning situation that is being confronted. In the case of the Northern Forest Lands Study, some issues critical to a discussion of sustainability (e.g., forest management practices, regional economic structure) were kept out of discussion because of power conflicts. Of those issues, some (e.g., forest management practices) were put back in to discussion because opposing groups marshaled their resources and fought one form of power with another. NFLC members understood that these power conflicts were affecting the quality of their deliberations, but they saw them as an inevitable aspect of making decisions about difficult public policy issues. They did not seem to feel that it was their job to counteract these distortions of the debate. In some cases, such as the Council's early refusal to discuss forest practices, the Council members actively worked to hide the source of these distortions so they could preserve the perceived legitimacy of their process.

Sustainable development will not be achieved with such a casual approach to power conflicts. Power can be used to shut certain stakeholders out of a planning process, distort communication within the process, and keep issues off of a planning agenda. Similarly power can be used to counteract communicative distortions, enhance participation, and bring certain issues into the process. Planners can not be

⁽Northern Forest Lands Council 1994b, p. 41). This is as close as the Council gets to admitting that public pressure was responsible for putting this issue onto its agenda.

indifferent on these issues. As Forester (1989, p. 27) explains, "If planners ignore those in power, they insure their own powerlessness." To satisfy sustainable development's goals of democratic participation and human needs satisfaction, planners must take some stand (explicit or implicit) on the ways that power conflicts affect the planning process.

Chapter 8

Conclusion

The NFLC put together a package of recommendations that could be unanimously accepted by Council members. That package reflected a desire to make certain changes in the region's physical, political and economic landscape. The Council believed that a sustainable future could be promoted by correcting perceived economic distortions created by state and federal tax policy, by providing incentives for conservation and recreation on private land, by broadening education about the environment, and by improving information-gathering about land use and the ecology of the region. Council members were generally pleased with the results of their efforts. They felt they had given the region's residents a chance to voice their aspirations and concerns. And they felt that they had responded to those concerns in a reasonable way, given the limitations under which the Council worked.

Newspaper accounts of the Council's draft and final reports give the impression of a broad, if occasionally grudging, acceptance of the recommendations by key interest groups (Concord Monitor 1994; Union Leader 1994). Just the fact that the Council produced a coherent package of recommendations in the face of bitter differences was seen as an achievement. In the years since the Council's work was completed, some former Council members believe that the recommendations have served as a reference point for individuals concerned with environmental and economic processes in the region (Bley 1996; Bofinger 1996; Carbonetti 1997; Sargent 1996).

While the Council's recommendations may represent an important first step towards a more sustainable future for the region, the NFLC's experience also represents a challenge to sustainability proponents who subscribe to the progressive definitions of sustainability discussed in Chapter 2. These definitions envision a form of development that emphasizes environmental improvement and expanded social justice. The value changes and power shifts progressive sustainability proponents claim are needed were not forthcoming as a result of the NFLC's efforts. Conflicts over these issues were present, but were either ignored, downplayed, or hidden from view. Understanding the NFLC's response to these conflicts is an important first step towards developing improved sustainable development planning techniques.

Lessons from the NFLC's process

The Council employed a relatively open and participatory planning process. Stakeholders had plenty of opportunities to review and comment on the Council's draft proposals and to review the Council's logic. Many people throughout the region were able to learn about and contribute to the NFLC's work. The Council itself employed a consensual deliberative style: all of its recommendations were approved unanimously. This suggests that the Council was promoting particular normative ideals about the process of planning for the region's future—that stakeholders should understand and agree upon future actions, that such actions should be based on the collective wisdom of residents, and that all the relevant planning bodies' recommendations should be developed by consensus. If these ideals were at the heart of the Council's efforts, however, they were not well implemented. A quick review of the ways in which four kinds of conflict were handled demonstrates the problems that impeded the Council's efforts.

Knowledge Conflicts

Many different types of knowledge were needed to plan for the future of the region's northern forests. This dissertation focused on one particular area of knowledge conflict: biodiversity. The NFLC convened an expert forum on biodiversity in the Northern Forest region before there was a clear statement (even from environmentalists) of why biodiversity was important. Consequent confusion about why biodiversity should be protected led to misunderstandings about what biodiversity is. At the NFLC biodiversity forum, and in subsequent public comments, proponents of ecological reserves emphasized the limited regional knowledge base, and used this uncertainty to justify expanded public land ownership. Industry scientists and others used research showing increases in forest cover and a positive correlation between songbird species and logging to downplay biodiversity problems in the region. The inherent uncertainties of ecological dynamics added to the Council's difficulties in evaluating biodiversity. In the end, the NFLC's recommendations called for a process to evaluate the region's biodiversity and use "scientific assessment and analysis" (Northern Forest Lands Council 1994b, p. 63) to create ecological reserves. This reliance on scientific assessment substituted for a discussion of the interests and values necessary to achieve a real consensus on why and how to protect aspects of the region's biodiversity.

Interest Conflicts

I selected conflicts about public land acquisition and private land management as representative examples of interest conflicts in the Northern Forest. The Council's elaborate public involvement process was undoubtedly intended to gather information about the interests and concerns of stakeholders throughout the region on these issues. While this process attracted many people's attention, it did not necessarily give them the tools necessary to resolve their interest conflicts. The NFLC's membership was limited to certain political interests, resulting in the drastic restriction of the potential for broad-based collaborative decisionmaking—the ideal built into the NFLC's operating procedures. Outside the NFLC, stakeholders were forced to act strategically: emphasizing their differences with one another and their dissatisfaction with the Council. Thus in their public pronouncements property rights groups raised fears of wholesale federal control of the region, while environmental groups emphasized the harmful practices of large-scale private landowners.

I used quotes from various sources to show that, despite these disagreements, some property rights groups <u>and</u> some environmentalists believed that the prevailing pattern of land ownership and control was partially responsible for the region's economic and environmental problems. The NFLC failed to understand this overlap, in part because it saw the "extreme" groups as "canceling each other out," rather than contributing towards a search for solutions. The Council's limited membership, and its emphasis on solutions that held to a self-defined middle ground, ensured that some important interest conflicts between property rights groups and environmentalists would remain unresolved.

Value Conflicts

Using Council debates about land conversion and public land acquisition, I showed that at least three discernible value frames clashed during the NFLC's planning process. Property rights groups—fundamentally opposed to all government roles in private decisionmaking—fought against particular recommendations and against the existence of the Council itself. They interpreted uncertainty in the data on land conversion to be a justification for disbanding the Council. Environmental groups, who believed that the environment had standing independent of its economic utility, looked to the NFLC to protect these environmental values. These groups felt that uncertainty in the land conversion data was due principally to the difficulty of data collection, and they assumed that

the problem was still real and deserving of governmental action. Businesses and (most significantly) Council members were unwilling to whole-heartedly validate either of these opposing value stances, although Council members generally believed in the need for the NFLC despite the uncertain land conversion data. They promoted pragmatism and compromise, a value stance which ended up both defending and justifying the *status quo*. Although these value frame differences were quite public, the Council was unwilling to discuss them because it did not believe such deliberations could be productive. Without such a discussion, however, there was little hope of creating the kind of political climate in which competing values might be usefully compared.

Power Conflicts

To illuminate power conflicts, I examined debates about forest management practices, federal land acquisition, and federal tax changes. The region's timber industry, working through its political connections, used its seat on the Council to block consideration of regional forest management standards and federal land acquisition. Environmentalists and other stakeholders marshaled public outrage and substantive arguments in an attempt to put forest management on the agenda. With the legitimacy of the Council at stake, the forest-products industry relented, but was still able to prevent any state control of its forest management practices. The industry succeeded in keeping federal land acquisition off of the Council agenda, aided, in part, by the vocal opposition of property rights groups. Environmental groups, despite efforts to mobilize their members, were unable to generate a compelling argument in favor of specific land acquisition recommendations, although the NFLC's final report did lay out a process for some state-level land purchases. Finally, with regard to capital gains tax reform, the Council proposed to increase landowners' financial gains without guaranteeing that those resources would be devoted to improving forest management. This may show, in part, one of the subtle faces of power, in which an unquestioning enthusiasm for market-based solutions to the region's problems ends up serving the interests of the area's forest landowners and dominant industry. All of these observations show that there were many attempts to control and subvert, along with a few attempts to expand, the NFLC's deliberative process. By not openly acknowledging the role of power, the NFLC was unable to respond to public debates about the causes of the unsustainable status quo in the region.

Assembling the lessons

The NFLC's process for developing recommendations followed many suggestions made by dispute resolution proponents for policy making in the face of conflicts. It used a subcommittee system to undertake a process of joint fact finding. The Council worked from common texts that were refined and revised based on free-ranging discussions and public comment. Decisions were reached by consensus and all of its work together was facilitated by the Council's chairperson, Robert Bendick¹. Some NFLC members felt that Bendick's skilled facilitation was the only thing that got them through their major disagreements (Bley 1996; Bofinger 1996; Harrigan 1996; Johnston 1996). The consensual decision process ensured that minority views (those lucky enough to be represented on the Council) were respected, while simultaneously providing all participants with incentives to find broad agreement.

Despite these procedural strengths, the conceptual weakness of the Council's planning approach was considerable. The most obvious was Council members' outward confidence that improved research would be the key to improving the region's economy and ecology. This emphasis on knowledge acquisition is consistent with a model that sees planning as rational problem solving. But planning for the Northern Forest's future was much more than that. As this case shows, the future of the forest was being shaped by key conflicts among the largest consumers of forest resources, property rights groups with non-negotiable values regarding their relationship with government, and environmental groups with several different agendas. In such a contested policy landscape, planners must do more than just gather information: they must make sense of that information in the context of diverse interests, values, and power.

Although the NFLC's process was consensual and collaborative, its recommendations were shaped by its limited membership. Some interests in the region were able to represent themselves, make tradeoffs, and jointly agree on recommendations by virtue of their representation on the Council, but others could only watch and complain that their views were not being taken into account. Although it was obvious to the groups left out of the process, the Council did not openly acknowledge that its work was an extension of the political world of

¹ Originally the NFLC's chairperson position was supposed to rotate among the state conservation agency representatives, but Bendick's clear aptitude for the job kept him in the position (Sargent 1996).

decisionmaking in the region. Thus it left itself open to charges of hidden agendas and back room deals.

Both interest and knowledge conflicts could have been handled better by broadening participation in the Council's deliberations and more explicitly outlining the goals of joint fact-finding efforts. Such moves could have helped assure that the Council's knowledge base and decision structure were viewed as fair and representative even by the so-called extreme interest groups. But the larger problem was that the NFLC avoided dealing with value and power conflicts entirely. Sensing that they were either outside of their control or could not be engaged without bringing down the carefully crafted but superficial interest agreements that formed the bulk of their recommendations, the Council tried to avoid and obscure these conflicts². By avoiding these issues the NFLC ended up promoting a form of regional sustainability that abandons the transformative goals described in Chapter 2.

Conflicts over values and power are fundamental to a sustainable future. Alternate value systems each embody certain fundamental truths about our relationship to one another and to the environment. Alternate power relationships allow different groups of stakeholders greater or lesser influence in decisions about the future path of development. How can we decide on sustainable alternatives in these areas unless we first openly consider a wide range of values and power arrangements? We cannot. To satisfy the notions of participatory and equitable democracy used in this dissertation's definitions of sustainability, planners need to understand and reflect on these conflicts, searching both for common ground and common good. But after reflecting on and, (perhaps) reframing their own views, planners will still have to make some difficult choices, decisions which will have the effect of promoting certain value and power arrangements.

I propose that since such choices always must be made, decisions should be made more transparently and self-consciously. If we want a kind of sustainable development that promotes human welfare, democratic decisionmaking, equity, and environmental protection, we need an approach to planning that addresses power and value conflicts.

² As reported in Chapters 6 and 7 *supra*, council members admitted that they avoided discussing values, and that they deliberately did not reveal the ultimatums of the Maine delegation so that the NFLC planning process could continue. The hope was that <u>some</u> agreement on these issues was better than no agreement.

This does not mean that planners simply substitute their judgement on these matters for that of the stakeholders with whom they are planning. Instead, planners concerned with politically and technically charged issues like sustainable development must find techniques for engaging value and power conflicts and then planning in the context of such conflicts. The goal should be to make these kinds of choices in a public, participatory planning process. What follows is one suggestion for the structure of such a process.

The correct sequencing of conflict management efforts is, I believe, one way that planners can reap some benefits from the conflicts that pervade sustainable development planning efforts. These conflicts contain in them the seeds of greater wisdom about knowledge, interests, values, and power. To listen to the conflicts, we need to understand, as this dissertation has attempted to do, their genesis, their interactions, and their potential for resolution. Management, however, is not the same as wholesale resolution or suppression of conflict.

Sustainable development is an ideal goal and an uncertain destination. The Northern Forest Lands Council case showed one ad hoc planning body's attempts to move towards that ideal. As there were in this case, there will always be legitimate, well-informed disagreements about how sustainability should be achieved. But because the Council avoided or ignored certain types of conflict it was prevented from examining the deeper political and philosophical disagreements that are at the heart of the sustainability debate. A better approach would have acknowledged the need for the NFLC to manage all of the difficult types of conflict among stakeholders with the same care it gave to managing conflicts among the 16 Council members. As I envision it, such conflict management would be a dynamic process in which planners resolve some conflicts (by facilitating stakeholder dialogues), improve the knowledge content of others (by encouraging joint fact finding and research), improve our understanding of those conflicts which may be unresolvable (by reflectively exploring conflicting values and power), and make public, transparent choices between alternatives when circumstances dictate that choices must be made even though conflicts persist. The order for undertaking these tasks is as important as their content, and a discussion of the appropriate order for conflict management efforts follows.

Sequencing conflict management efforts: a better path to sustainability

In the real world of planning, conflicts arise at different times and for different reasons. Planners can not and should not attempt to control all the ways that

conflicts erupt. They can, however, acknowledge the inevitability of these conflicts so that stakeholders can understand the types of difficulties that must be worked through during a planning process. Planners can also frame conflicts so that they, and the public reviewing their work, control how such conflicts interact. Properly sequencing conflict management efforts might help.

By first addressing conflicts over values, then power, then interests, and finally knowledge, planners may be able to restore some of the truly transformative potential of sustainable development planning in the United States. The reasons for this particular sequencing are explained below.

Values

Working on value conflicts first, planners can establish a context for sustainable development. Beatley (1994) has argued that there are considerable areas of overlap among the different environmental value stances held by various policy actors. Values determine how we conceive of policy problems and help to determine who we are as planners and stakeholders. To explore overlapping values, we must start by acknowledging their primacy. Values frame our understanding of issues and allow us to determine what the interesting and important policy questions are.

The most ardent proponents of sustainable development espouse a value frame which claims that protecting the environment and assuring local self-determination in the course of development are not just useful goals, but also right. In other words these goals are moral imperatives. This stance explicitly challenges the values of the neo-classical economic marketplace, which treats efficiency and individual property rights as preeminent moral standards. The values of business owners, environmentalists, forest industry workers, and other participants in the policy debate each point to different questions, suggest different solutions, and embody different analytical standards. Without a clear discussion of those values, people's reaction to planning efforts can not be properly understood. Therefore, in any sustainable development effort one of planners' first actions should be to try to explicitly delineate the values that will guide their search for sustainability. These values may be in conflict with those of some stakeholders. In the Northern Forest case, for example, property rights groups possessed values which viewed regional planning as inherently undemocratic and wrong. Therefore, for the democratic management of these types of value conflicts, planners should initiate a process for accurately describing, discussing, and reflecting on other, competing value frames, even those that view the planning exercise itself as illegitimate. Only by

acknowledging and confronting these deep disagreements can planners hope to understand their sources, and to begin a search for what common ground might exist.

Within the Council, the process of developing respect for—and understanding of—the values of different members was a prerequisite to effective decisionmaking. Recall that one member claimed that it took several years to become comfortable working with such a disparate group (Johnston 1996). The process of learning to respect, tolerate, and learn from one another's values went on to some degree within the Council, and resulted, as I show above, in a shared value frame within the Council. It was not adequately pursued with outside stakeholders, however.

The NFLC took a first step towards engaging outside values when it developed a mission statement and a set of fundamental principles early in its work³. These provide clues to the values (some, perhaps, contradictory) that were supposed to guide and frame the NFLC's work. Ultimately, however, the Council did little to show how it was satisfying or using these principles in its recommendations. Even worse, the Council did not explicitly acknowledge that there might be other sets of values, held by other stakeholders, which might lead to different decisionmaking structures and different outcomes. Many of the differing views presented in the public comments make the most sense when understood as arising from different frames and values. The Council could have asked other stakeholders—perhaps using a process similar to that of the Northern Forest Dialogue Project discussed in

3

Fundamental Principles

The Council's work rests on several fundamental principles. These should also guide the implementation of the recommendations. The key principles are as follows:

- People must have a right to participate in decisions that affect them.
- The rights of private property owners must be respected.
- Natural systems must be sustained over the long-term: air, soil, water, and the diversity of plant and animal species.
- The history and culture of the Northern Forest and the connections between people and the land must be respected.
- States must work in partnership with local and federal governments.
- Differences among the four Northern Forest states must be recognized.
- People must appreciate that the Northern Forest has values important beyond its boundaries.
- Public funds are scarce; the greatest public benefit must be secured for any additional investment.
- Proposals must be judged by their long-term benefits, at least 50 years ahead.
- Existing programs, regulations, and systems must be evaluated, built upon, and improved, before new ones are created. (Northern Forest Lands Council 1994b, p. 15)

earlier chapters—to identify their own sets of values or principles which should guide the Council's work and then publish them in a widely distributed document.

Why put so much effort into describing the various values in conflict? The principle reason is to use the conflicts as a heuristic device. Understanding another group's values is the first step towards discovering the roots of disagreement. And reflection on one's values, in the face of the values of others, is the best way to begin the process of reframing—stepping, however partially, outside of one's own frame in order to see the truth and wisdom that lies in the frames of others.

Why should values be the first item on a sustainable development planning agenda? Because value frames are the lenses through which all other stages of the planning process are designed and judged4. To even conceive of a sustainable development planning process, one must begin with a value-based notion of legitimate sources of information, legitimate stakeholders, and legitimate environmental and economic goals. The standards by which one judges legitimacy come from ones values, but the values of the sustainable development planner may not be those of the workers, residents, businesses, and politicians for whom she is planning. The NFLC developed its own notion of legitimate and illegitimate reasons for intervening in the region's affairs—its own shared sense of values among Council members. But these shared values were private and did not engage the so-called "extreme" values in the region. To establish standards of judging legitimacy, or-when agreement on values was impossible-to understand why certain groups could not accept certain approaches to planning as legitimate, the NFLC's planners should have started with a broader and more public inquiry into values.

Many observers have suggested that value and frame differences are at the root of policy disputes, particularly environmental policy disputes⁵. Milbraith (1989), interpreting several years of polling data on environmental beliefs, suggests that the dominant social paradigm of modern society is increasingly being challenged by a new environmental paradigm which invokes deeper moral obligations to the environment. Kempton, et. al. (1995), in a work that partially challenges Milbraith's

⁴ A planner who believes that a good process guarantees, by definition, a good outcome, has a different value frame from one who believes that the outcome of a planning process is all that matters. Differences such as this usually exist before any planning work is done.

⁵ See for example (Doob 1995; Douglas and Wildavsky 1982; Dryzek 1987; Keeble 1977; Kempton et al. 1995; Maguire 1994; Milbraith 1989; Schön and Rein 1994; Schwarz and Thompson 1990; Snow et al. 1986)

conclusion that there are two distinct value systems in conflict, nevertheless conclude that environmental values and related explanatory models (frames) are widely held even by non-environmentalists. While both of these studies have their problems⁶, they suggest that value and frame differences are critical for understanding support for or opposition to environmental initiatives, such as sustainable development. They also make it clear that values can change (albeit gradually) as people examine, discuss, and reflect on them.

As discussed in Chapter 2, values are part of our self-definition. But humans are complex creatures and we can hold multiple, unexamined, and sometimes contradictory values: uncompromising belief in democratic decisionmaking can coexist with equally deep belief in a moral imperative to protect the environment. Making them as explicit as possible is the first step towards finding if there are any areas of commonality among stakeholders' values.

Planners have no difficulty reflecting on the knowledge and information we amass. We similarly have developed dispute resolution techniques for considering the competing and conflicting interests at stake in large, multi-objective planning processes. Carefully weighing and evaluating knowledge and facilitating the resolution of interest claims is our job. But despite years of research pointing to their importance, planners seldom make any formal effort to reflect on values (our conscious moral guidelines) and frames (the analytical lenses with which we view the world). When the *status quo* is widely accepted this is not a problem. But a quest for environmental sustainability, as this case shows, encourages discussions about the meaning of development and exposes value differences that would otherwise be left unexamined. Planners have an obligation to productively examine their own values, by comparing and contrasting them with those of the various stakeholders, as part of the process of planning for sustainability.

To achieve such a goal, the NFLC could have asked stakeholder groups or individuals for brief (one or two page) elaboration of the values they believe should guide the planning process. A published set of moral principles from divergent

⁶ Milbraith examines national polling data to look at how businessmen, environmentalists, laborers, politicians, and others view certain environmental issues. His results are limited by the specific questions asked by the polling services—multiple-choice questions which only reflect respondents positions and do not reveal what, if any, value-based reasoning went into the answer. Kempton, et. al. use an anthropological methodology involving open-ended interviews to reveal environmental values. This labor-intensive approach is wonderful for learning about why participants hold certain views. Unfortunately because only 46 people were involved in the semi-structured interviews, the study's conclusions have serious geographic and ethnographic limitations.

groups would help to identify both common and divergent values held by those stakeholders. A second document, in which both the Council and stakeholders reflected upon these values⁷, could help to identify areas of value overlap as well as the fundamental disagreements that exist among (or even within) groups⁸. The Council could complete the document by discussing the various frames in light of one another, showing clearly what values the Council was going to use to guide its decisions, and discussing how those values fit with those of other stakeholders. Such a discussion would necessarily include a clear, thoughtful statement that demonstrated an understanding of the values of various stakeholders.

This last point is somewhat analogous to the role a facilitator plays when she restates the concerns of participants in a negotiation. When done well, the facilitator's intervention helps individuals clarify their interests for themselves and the other participants. In this case, unlike the case of interest-based negotiations, the goal would not be to try to negotiate and resolve values, but instead to acknowledge the points of similarity and difference.

On some issues stakeholders will have a hierarchy of values, and agreement on "higher" values (e.g. – democracy) might exist even when disagreement on "lower" values (e.g. – whether nature has moral standing)⁹. If such a hierarchy exists, then the common ground can definitely form the basis for discussions and perhaps resolution of outstanding issues.

The resolution of interest conflicts presupposes the existence of an area of overlap within which specific alternatives can be traded (Raiffa 1982). Because they represent "fundamental dilemmas—conflicts of abiding truths" (Schön and Rein 1994, p. 186), frame and value conflicts can not always be resolved like some interest conflicts can. For example many values can not be traded for one another. Any attempt to do so is likely to be deeply offensive to the disputing parties. In disputes

⁹ My characterization of these two examples is only an illustration.

⁷ E.g., by examining how their values fit in amidst those espoused by other groups, acknowledging the sources and validity of alternate views, or by pointing out why other values were still incompatible even though they were now better understood.

⁸ The existence of common or competing values often comes as quite a surprise to conflicting groups because they generally do not reflect on the sources or internal consistency of their values. During the Northern Forest Dialogue Project's meetings, environmentalists were surprised to learn that paper company employees viewed protecting nature, in part, as a moral obligation. Similarly property rights advocates were surprised to hear environmentalists talk about the importance of local self-determination (Northern Forest Dialogue Project 1994a; Northern Forest Dialogue Project 1994b). Current policy debates within some national environmental groups about their stance on immigration reflect a surprising difference of values where members might have expected unity.

over the Northern Forest, if the process of value reflection was unable to identify overlapping values, or if the higher values of one group did not correspond to those of other groups, the NFLC probably could not have facilitated the resolution of deep value conflicts.

Values and frames often represent stark either/or alternatives. To take the most extreme example, the Abenaki, who lived throughout the Northern Forest region before European colonization, considered themselves to have reciprocal obligations to the plants and animals of the forest. European colonists felt they had an obligation to subdue and civilize the forest into farms and hayfields, and certainly didn't recognize animals and plants as co-equals in any meaningful sense. Although there may have been areas of overlap between the values of these two groups, any compromise on these basic tenets would have been impossible: they are mutually exclusive.

In the context of the NFLC, the property rights groups probably could not have been convinced of the legitimacy of federal activity in the region, and environmentalists probably could not have been convinced that the forest should not have moral standing independent of its value as property. If values truly are part of our self definition, then asking for these changes would have been akin to asking participants to abandon a fundamental part of who they are.

But just because we cannot hope to resolve all value conflicts in the short term does not mean we should shy away from discussing and managing them. There is considerable merit in these inevitable value conflicts. By promoting the understanding of other value systems and other frames, planners can help diffuse tension based on misinformation and mistrust. If disagreements are sharpened by better knowledge about alternative values, at least they will be focused on the true areas of disagreement, rather than on mistaken notions about the values of other groups. Most importantly, however, a direct discussion of values by planners and stakeholders is the only way to promote reflective consideration of our own moral and methodological blinders. Such a step is necessary if we wish to reframe¹⁰ our

¹⁰ The distinction between value conflict resolution and reframing is subtle but important. Resolving value conflicts would mean that the stakeholders in conflict (presumably including the planner) would, through some process of discussion and debate, come to agree with one another on common values. As I have said repeatedly in this dissertation, such resolution is unlikely to occur when differences are great because of the personal, self-defining role of values. Reframing is the process of understanding the values of another group or individual and incorporating insights and wisdom from them into your own value frame. Reframing may or may not "resolve" the differences between your values and those of

values so that they both promote sustainability and reflect the wisdom of competing value frames.

I have suggested a technique for gathering and reflecting on alternative values, but planners must still choose among the non-overlapping values they face, promoting some and not promoting others by default when they make their recommendations. By making competing frames more explicit, planners can clarify the stakes in the broad social debate over environmental values. By openly reflecting on those value differences, the planners can demonstrate how they are taking that diversity into account, perhaps even showing how they have changed their views as a result of considering alternative frames. Presumably this will lead a planner to recommendations that demonstrate greater wisdom and tolerance.

The truism that one can not legislate morality is equally applicable here: we cannot plan values. Although sustainable development proponents are calling for value changes, such changes can not (and should not) be imposed throughout society by planners. But planners <u>always</u> promote particular values in their work. Planners are ultimately responsible for the values embodied in their policy recommendations and the work of planners is part of the social milieu within which societal values are formed. Politicians, activists, and other citizens will use these recommendations, as they always have, in their broader debates about the values society should promote. Thoughtful, value-critical recommendations about sustainability would be a modest but important contribution to that social debate.

Power

This case shows (in Chapter 6) that shared values and frames among planners gave them a particular view of who were legitimate "mainstream" participants in the planning process, and who were "extremists" who would never be satisfied. These distinctions were based on a shared value system among NFLC members which emphasized compromise and accommodation between the business community and the government. NFLC members effectively determined whose voices would speak the loudest during deliberations on the Council's final recommendations. The power to influence policy making was distributed based, in part, on the values of the people who formed the NFLC. This suggests that the choice of values or frames (whether conscious or not) is an important factor in

another group, but, it may improve policymaking by ensuring that it is cognizant of and perhaps responsive to alternative standards of morality and judgement.

determining which groups will have power during a sustainable development planning process. The second issue to be addressed, then, is power conflicts.

Power, the ability to control or influence a public policy decisionmaking process, is unevenly distributed in most sustainable development cases. We know (from the NFLC's process and from other research (Ozawa 1991; Susskind and Cruikshank 1987)) that multi-party negotiations are a good tool for helping groups come to agreements about issues such as sustainability. We also know that groups have trouble representing themselves effectively in conventional policy processes when they are economically disenfranchised, politically shut out of decisionmaking, or when systematic distortions of information and interests interfere with their political participation (Albrecht 1985; Bachrach and Botwinick 1992; Castells 1983; Crenson 1971; Flyvbjerg 1998; Forester 1989; Gaventa 1980). Because power conflicts distort people's ability to represent themselves in policy making, power conflicts must be explicitly acknowledged and confronted before interest conflicts can be resolved. The best way to evaluate power conflicts is by having a reflectively developed set of values that provides a framework for judging the legitimacy of various uses of power¹¹.

Any planning body interested in sustainable development will end up participating in power conflicts, even if it is only by validating existing power relations, as was the case with the NFLC. But if sustainable development, as has been repeatedly noted in literature on the subject, should increase local control of environmental and development decisions, then planning for sustainability requires a change to the power relations that uphold and legitimate current development practices. Without such a change in power, there is little opportunity to improve democratic control over the relationship between environment and development.

Changing power relationships in this case means that access to decisionmaking about development must be broadened to allow the full range of relevant stakeholders to participate meaningfully. This can occur in several ways. For example, improved stakeholder participation in political and economic choices is not dependent on a planning process. Social movements, political parties, or

¹¹ As noted in earlier discussions of power, the values of planners can certainly be distorted by the power of other actors in society. This is another reason why planning for sustainability should <u>begin</u> with a searching and reflective look at value frames. Only by critically examining ones moral principles and organizing world views in the face of others' morals and world views can a planner begin to determine the influence of power.

interest groups can use one of the various forms of power (described in Chapter 2) to gain access to and influence over existing development decision processes (Castells 1977; Piven and Cloward 1971). But within a planning process, planners can also act in the absence of a social movement to try to enhance the ability of sustainable development proponents (or their arguments) to gain more influence. This is one of the oldest problems of planning: identifying legitimate stakeholders and allow them to engage in a mutually acceptable process of problem-solving and interest representation. The work of proponents of more discursive planning (Albrecht 1985; Dryzek 1987; Forester 1989), discussed in Chapter 2 above, suggests some ways that this might be accomplished.

Forester believes that planners can affect power relationships as communicators and facilitators: pointing out how existing economic and social structures distort the planning process, and facilitating improved participation by disenfranchised stakeholders. In the NFLC's case, the most obvious distortion came from the Maine delegation's refusal to consider forest management and federal land acquisition issues. Less publicly controversial, but more vexing in some ways, was the strong undercurrent of economistic thinking that allowed NFLC members to rationalize tax policy manipulation even though it seemed unlikely to generate the large-scale behavioral changes needed to preserve the Northern Forest.

Both of these instances of power conflicts that distort the planning process could have been evaluated more thoroughly by NFLC members. Publicly explaining that such distortions are an expected part of planning in a democratic market economy would have allowed the Council to engage a public discussion of the impact of such distortions. By delaying discussion of forest management until the end of the planning process, the NFLC effectively prevented informed policymaking on this issue, and gave those who did understand regional power conflicts powerful evidence of the Council's pro-industry bias. Regional stakeholders actually outpaced the NFLC on the issue of forest management: broad public outcry for the Council to deal with forest management showed that the public recognized the potential for systematic distortion of the planning process despite the Council's silence.

By acknowledging and validating a discussion of power, planners make the political nature of the planning process explicit and may give stakeholders the ability to participate in policy making without adopting the language of science and bureaucracy that so often dominates planning processes. Public discussions of power conflicts would have been difficult for the Council, but as with a discussion of

values, the best source of alternative views of power would have been regional stakeholders themselves. A document containing an explicit discussion of stakeholders' fears about the ways that power conflicts could distort decisionmaking, and an explicit response by the Council as to how it would work to prevent such distortion and enhance the ability of under-represented voices to participate could have been a first step towards directly dealing with power. Although such abstract discussions can be difficult to initiate, the NFLC was formed during a period where public interest in, and concern about the forest was very high, so it is likely that many groups and individuals would have presented the Council with their views.

The Council probably could not have <u>fundamentally</u> altered regional power relationships. After all, the forest-product industry's influence over the decisionmaking structures of the Northern Forest states has been accumulated over years of economic, political, and social interaction, and one planning exercise is unlikely to change that. Planning can, however, make some difference in power relations, for good or ill¹². The discussions of the region's history in Chapter 3 above show that power over the environment and development can shift if social groups mobilize to achieve such an outcome. The goal of a more environmentally sustainable regional economy is unlikely to be achieved if the power relationships of the past—those that created the current atmosphere of crisis—are left unacknowledged and untouched. In general, by legitimating a discussion of power conflicts and pointing out the legal, constitutional, and economic limits facing various advocates for change, planning bodies can positively affect the course of power conflicts¹³.

If environmental or other social movements are trying to advocate sustainable development, then planners' public efforts to demystify power can aid political struggles outside of the planning process itself. To aid the quest for sustainability, planners must have a reasonably coherent value frame which allows them to

¹² The region's U.S. senators clearly recognized that planning could affect power. During the Northern Forest Lands Study, the forest service report that preceded the NFLC's work, two senators felt a need to remind the Forest Service that, "the current pattern of land ownership has served the region well" (Harper et al. 1990). The Senators recognized that planner's recommendations about the pattern of land ownership could reshape the economic sources of power available within the region, and they were supporting the status quo.

There is no guarantee that such discussions will lead to the resolution of power conflicts. For example, discussions of the role of donations in federal elections have yet to produce a law that corrects the distorting influence of economic power on political speech. Still, widespread acknowledgment that such distortion can be a problem has at least set the stage for reform. Without public discussion, resolution of this power conflict would be impossible.

evaluate power conflicts and decide how to intervene to improve public policy discussions. Public reflections about power relationships from both planners and stakeholders can become part of a process of discussion about power in which views about legitimate and illegitimate uses of power can be tested against one another. At the end of the testing and refinement, planners need make judgements about how the use of power has distorted or improved deliberation about policy, and then structure the content and process of the planning process to counteract those avoidable distortions¹⁴.

Interests

Explicit evaluation of values and power did not occur during the NFLC's work, and the planning process was therefore limited in its ability to recommend meaningful alternative regional development strategies. The elaboration and resolution of interest conflicts, the third phase of a recommended sustainable development planning process, was where the NFLC began its work. The Council was originally set up as an advisory body made up of a variety of interests from each of the four Northern Forest states who were to work towards a consensus on recommendations for the region's future. This format—a consensus-based negotiation among disparate interests—worked reasonably well, according to interviews with NFLC members. The case study shows, however, that it might have been even more effective if it included a broader set of interests, and if it were preceded by an acknowledgment of the need to manage value and power conflicts.

Consensus-based negotiation can provide participants with more control over decisionmaking than traditional forms of planning or legislating and is a good model for sustainable development planning. A negotiation about sustainable development will be most useful if participants are widely perceived as being representative of the full range of interests in a region. Among participants with roughly equal power within the negotiation process¹⁵, consensual negotiation can

_

There are many different techniques that can be used to affect power conflicts. They range from simple interventions to train stakeholders to better represent their interests in negotiations (thereby enhancing participants organizational power), to more dramatic attempts to put planning in the service of particular ideals. See, for example: (Clavel 1986; Clavel and Wiewel 1991; Dryzek 1987; Kolb and Associates 1994; Krumholz and Clavel 1994)

Power in a negotiation process, the ability to effectively participate in and influence the course of the negotiation, is dependent on many factors, some of which will obviously be uncontrollable. Multistakeholder negotiations, ideally, are designed to allow participation by all the people assembled for the negotiation. This procedural effort to promote equality can only go so far, however, towards equalizing power. Individual participants have different communication skills, different personalities, different knowledge, and different reasoning styles. Although they can try to

help to identify equitable and stable agreements on resource distributions. If participants are shut out, or if some exercise more control over the negotiation process than others, their ability to articulate and advocate for their interests will be severely limited. Therefore a meaningful consensus-based process is best undertaken after conflicts over power have been revealed and discussed.

The NFLC's planning process was designed to allow the Council members (representing various interests in the four Northern Forest states) to negotiate recommendations. As noted in this dissertation, other groups and individuals—while they could provide information to the Council—could not participate in the actual negotiations, and therefore had fewer opportunities to affect the outcome of the planning process. Their interests could only be represented in arguments during the public participation process and they had little power to influence the NFLC's recommendations.

The above recommendations for making value and power issues more explicit could have assisted the Council in developing a more inclusive process for these other interests. A clear statement of how the Council would deal with the participation of non-members could have helped those groups focus their energies on effective means of having their interests heard and addressed by the Council. While the NFLC did meet with many outside groups to discuss their concerns, such meetings were informal and unstructured, leaving stakeholders uncertain about how their input would be used.

If sustainable development planning can not satisfy all interests equally, it can at least help a region's residents to understand the competing interests around them. Sustainable development plans have a heuristic value—their development lets people understand some of the consequences of change, and to see the obstacles to that change. Consensual approaches to interest conflicts can provide a safe forum for that learning to take place, but only if all of the region's interested residents feel they have the necessary access to the process.

compensate for some participant weaknesses, planners must still maintain enough apparent neutrality towards the outcome of the negotiations so as to keep the trust of other participants. Determining and maintaining rough equality among participants requires the planner or facilitator to make judgements (often in consultation with stakeholders) about the form of discussions, the communication abilities of participants, and the information needed to move the discussions forward. This is not an easy task, but it is one that professional facilitators regularly accomplish.

Knowledge

Argument and persuasion within a negotiation depends, in part, on the use of information and knowledge that is mutually agreed upon. If developing knowledge whose validity and relevance is accepted by all parties is best accomplished within a negotiated decisionmaking process (Ozawa 1991), then knowledge conflicts can only be effectively resolved after interest-based negotiations have begun. The final stage in planning for sustainability, then, is the development of common knowledge based on shared sources of information.

The NFLC, as a group, decided how to structure its search for knowledge, what types of studies to commission, what issue forums to sponsor, and what consultants to hire. Although the Council did not understand how to address knowledge uncertainty (in part because it refused to acknowledge the role of values and power in shaping its studies), it <u>did</u> make some progress towards resolving knowledge conflicts by beginning to develop a shared base of information about the region.

Several researchers (Schön and Rein 1994; Schwarz and Thompson 1990) have observed that policy makers' responses to uncertainty and their understanding of information is determined by the values and frames that they bring to the policy making process. By tying different reactions to knowledge more explicitly to the value differences among participants, policy makers can perhaps minimize futile scientific debates that are merely proxies for unresolvable frame conflicts, or for more malleable interest disputes. Joint fact-finding, coupled with explicit agreements about how to respond to uncertainty and differing interpretations of information, can improve the handling of knowledge conflicts in sustainable development planning.

Additionally, the public participation process could be more tightly focused on the airing and resolution of knowledge conflicts. Public knowledge about the region was already quite sophisticated. In comments to the Council, members of the public seemed to weigh the credibility of information based on the affiliation of the messenger. This shows, at least in part, that commenters recognized the ways that values and pre-existing frames can influence the way that knowledge is gathered and presented. This is the beginning of a value-critical view of knowledge. The only thing it lacks is some kind of impetus for people to reflect on their own values so that they can begin to see their own preconceptions and framing shortcuts.

Rather than emphasizing weakness in the data (as the Council did for the information on biodiversity but did not for information on land conversion), the NFLC could have developed a strong value orientation towards protecting forest biodiversity. Within such a frame, making decisions on how to interpret the uncertainty in the biodiversity data would have been much easier.

Knowledge conflicts arise both because of limits on our ability to discern the truth about our world, and because of the frames and interests which inevitably channel our understanding. By addressing knowledge conflicts as part of a joint process of problem solving among interested stakeholders, planners can mitigate the influence of other conflicts on these disputes.

Summary

Sustainable development, like any challenge to conventional political wisdom, forces planners to deal with widespread disagreements about the nature of progress and a good society. I have suggested a sequence—along with some potential frameworks and processes—for addressing certain categories of conflicts that attempts to be both analytically reflective and democratically responsive.

Value conflicts are examined first because framing and value differences are widely acknowledged to determine people's entire analytical outlook. Addressing these conflicts requires a robust discussion among stakeholders and planners about the appropriate moral and analytical framework for examining the issue of sustainability. Planners recommendations represent *de facto* choices in these conflicts, but those choices need to be reflectively informed by the values of all stakeholders.

The value stance taken by planners will help them decide how power conflicts should be analyzed and managed. Without a firm value frame which allows them to judge which uses of power are legitimate, planners would have difficulty knowing how to intervene in policymaking disputes. Power conflicts must be examined second because unequal power in the policymaking process undermines stakeholders' ability to participate in the resolution of interest and knowledge conflicts.

Interest conflicts must be addressed third. As was noted in the body of this dissertation, interest disagreements can strongly influence and undermine the search for a common base of knowledge upon which planning recommendations can be built. By using dispute resolution techniques to help resolve interest

conflicts, planners can both make tradeoffs to satisfy different stakeholder groups, and set the stage for reaching agreements on knowledge conflicts.

Knowledge conflicts, which are seemingly the most basic types of disagreements, can often only be resolved once other types of conflicts have been revealed and engaged. By taking a stance on the other types of conflicts, planners ensure that participants will have a clear understanding of why and how information is being used to develop recommendations about sustainable development.

This recommended sequencing obviously simplifies the complex and occasionally chaotic process of sustainable development planning. I do not mean to imply that the most difficult and deep of these four types of conflicts, those over values and power, need to be <u>resolved</u> before other conflicts can be discussed. Instead I believe that planners should begin management of these conflicts in the order I suggest so that they, and the public, can understand and debate sustainable development as more than simply improved economic efficiency and environmental protection. Debates about broad sustainable development issues will necessarily give way to more concrete discussions as people start to examine the practical implications of different value and power arrangements. And as the planning process proceeds, it is likely that the value and power issues that I recommend dealing with first will need to be revisited as new issues are identified and new interpretations become apparent to stakeholders. But having put these political and philosophical conflicts on the table in the first place, planners will have a reference point for making subsequent judgements. Using this sequence for managing conflicts allows both planners and stakeholders to better understand the relationships among conflicts over sustainable development. This sequencing of issues attempts to use both the conservative strengths of planning, and its transformative potential.

Conclusion

Sustainable development, as critics such as Redclift (1987) have noted, is principally a political, not a technical problem. The experience of the NFLC confirms this observation. Conventional planning and policy making, despite years of critical commentary from practitioners and academics alike, are still focused on technical problem solving in the face of conflicting interests (Baum 1996). The NFLC was aware of the political nature of its work, but its recommendations reflect

little connection to the political world in which they were made ¹⁶. They appeal to science and research, but do not make reference to the other factors that shaped their conclusions. In the face of this kind of prevarication, sustainable development can never be adequately promoted by planners. We need a new way of defining sustainable development, one that engages a discussion of the values of sustainability at the beginning of the process. The balancing of interests and the quest for knowledge about the proper nature/economy mix can not effectively take place until the values of sustainability are explicitly on the agenda for discussion.

This conclusion is similar to that reached by some other proponents of sustainability, all of whom believe that truly sustainable development will require a fundamental shift in values (Reid 1995). Reid and other advocates seem to believe, however, that sustainable development is so logically desirable a conclusion that policymakers will work for it once they understand the best information about the important links between the economy and the environment. This view—that better knowledge will lead us to more sustainable development—needs to be turned on its head. People do not seek sustainable development solely because of knowledge about environmental economics, endangered species, or toxic contamination. They also want sustainable development because they have the conviction that meeting human needs, protecting the environment, and promoting human equity, are, on balance, more important (i.e., "higher") than values such as utilitarianism, the sanctity of private property, or the right to make a profit.

The important qualifier, "on balance," needs elaboration. How do we determine what that balance should be? The recommendations above suggest a pathway towards defining it. Broadening public discussion of values and power in planning will help to demystify the policymaking process. It will facilitate explorations of the disagreements between various value orientations, and it may help citizens do a better job of accepting the creative tensions among values that are inevitable in a democracy. It can also help to expose the ways that resource management decisions are currently made, and may catalyze public efforts to exert more control (e.g., through voluntary efforts, local zoning, state or federal regulation) over the future of development.

Publicly debating the structure of our values and our views of appropriate decisionmaking power is a deep and difficult task. Since its inception, planning has

¹⁶ The recommendations make passing references to the overall political climate against taxation or increased federal funding, but do not discuss regional politics or economic power in any detail.

played an important role in such debates. Planning ideology has run the gamut from asocial scientism (Chapin and Kaiser 1979; Ortolano 1984) to the promotion of radical social change (Albrecht 1985; Dryzek 1987). The biggest struggle for planners is to try to stay open to the possibility for social change while at the same time keeping within the limits of democratic and constitutional structures. If Forester (1989) is right that planners are in a unique position to understand the forces that limit social justice in our society, then this dilemma will be a fundamental obstacle to sustainable development until planners are as systematic about tackling issues of value and power as they are when resolving interest and knowledge conflicts.

Planners' ability to affect public beliefs and values is appropriately limited: planners, after all, do their work ideally as the result of some public mandate, not to satisfy their personal whims or biases. Still, to achieve a mandate like the quest for sustainable development, planners must act in ways that both reflect and extend the values underlying the mandate. The public may or may not develop a shared stance towards all of the issues debated during sustainable development planning, but the planners, to be true to the values of participation and democracy, had better be able to understand the sources and pitfalls of public attitudes towards their work.

Planners are not omnipotent scientists. They must rely on many, often contradictory, inputs in order to make their decisions and recommendations. The resolution of these contradictions is never neutral or objective, but instead involves choices that effect the distribution of goods, services, natural resources and, occasionally, political rights. And sustainable development cannot be achieved until planners recognize that they must ultimately choose sides in sustainability debates.

One of the most important results of a sustainable development planning process may not be the recommendations but the fact that the process catalyzes people's opinions about acceptable futures. Those opinions, informed by the values of participants, their experiences during the planning process, and the information brought forth by the process, are the source of variation and challenge to the status quo that sustainable development planning strives for. Asking questions—uncomfortable questions about the problems of the current economy and the direction of future development—is a necessary step on the road towards a working vision of sustainable development. Conflicts are the inevitable product of such questioning. Conflicts such as those described in this dissertation have a message for us if we know how to listen. They tell us about our limits, our chances for

working together, our morality, and the desirability of changing our social and physical environment. They tell us about the meaning of sustainable development.

Appendix: Northern Forest Lands Council Members¹

	Maine	New Hampshire	Vermont	New York
Landowners	Edward I. Johnston, (Former) Executive Director, Maine Forest Products Council (until 6-94) Roger Milliken, Chair, Maine Forest Products Council and Pres., Baskehegan Lands Company (after 6-94)	John D. Harrigan, Small forest landowner and Editor of the Coos County Democrat Newspaper	Peter Meyer, Vice President of EB Hyde Corporation, and an owner of family forest land in Northern Vermont	Robert Stegemann, Regional Manager for Public Affairs at International Paper and former Executive Vice President of the Empire State Forest Products Association
State Conservation	C. Edwin Meadows, Commissioner, Department of Conservation	John E. Sargent, Director, Division of Forests & Lands, Dept. of Resources & Economic Development	Conrad Motyka, Commissioner, Dept. of Forests, Parks and Recreation, Agency of Natural Resources (ANR)	Robert L. Bendick, Jr., Deputy Commisssioner, NYS Dept. of Environmental Conservation
Environmental	Jerry A. Bley, Principle of Creative Conservation, a natural resource consulting firm, and former land use policy director of the Natural Resources Council of Maine	Paul Bofinger, President/Forester, Society for the Protection of NH Forests	Brendan Whittaker, Forester and former Secretary of the Vermont ANR, an Episcopal Minister and the Northern Forest Project Coordinator for the Vermont Natural Resources Council	Neil Woodworth, Conservation Director/ Corporate Counsel, Adirondack Mountain Club, and a practicing attorney in the Albany area
Local	Janice A. McAllister Selectwoman for Abbot, ME and a small forest landowner	Beaton Marsh Former state legislator, former director of lumber management for Ethan Allen, Inc.	Richard G. Carbonetti Forester and owner of Round Top Woodlot Management Co.	Barbara Sweet Councilwoman from Newcomb, NY and a local business woman

¹ Information is taken from inside rear cover of the NFLC's final report, Finding Common Ground.

Bibliography

- Adirondack Solidarity Alliance. (95-Winter). "It's Not Just Property Rights!!"

 Adirondack Solidarity Alliance, . (Newsletter) Adirondack Solidarity Alliance,
 Crown Point, NY.
- Albrecht, J. (1985). Planning as a Social Process, Verlag Peter Lang, Frankfurt am Mein.
- Allison, G. T. (1971). Essence of Decision, Little, Brown, and Company, Boston, MA.
- Alperovitz, G. (1995). "Sustainability and "The System Problem"." The Good Society, 5(3), 1, 6-10.
- Altshuler, A. (1965). The City Planning Process, Cornell University Press, Ithaca, NY.
- American Energy Assurance Council. (1990). "Energy Strategy: Roadmap to Consensus.", American Energy Assurance Council, Denver Colorado.
- Archibugi, F., and Nijkamp, P. (1989). Economy and Ecology: towards sustainable development, Kluwer Academic Publishers, Boston, MA.
- Atkisson, A. (1996). "Developing Indicators of Sustainable Community: Lessons from Sustainable Seattle." Environmental Impact Assessment Review, 16(4-6).
- Bachrach, P., and Botwinick, A. (1992). Power and Empowerment: A Radical Theory of Participatory Democracy, Temple University Press, Philadelphia.
- Baum, H. S. (1996). "Why the Rational Paradigm Persists: Tales from the Field." Journal of Planning Education and Research, 15(2, Winter), 127-135.
- Beatley, T. (1994). "Environmental Ethics and the Field of Planning: Alternative theories and middle-range principles." Values and Planning, H. Thomas, ed., Ashgate Publishing Company, Brookfield, VT, 231.
- Bendick, R. Interview. 1997.
- Bidwell, R. (1993). "From Political Goals to Practical Application: Making Sustainability Operational.", Environmental Resources, Ltd, London.
- Bishop, B. H. (93-03-23). "The Phallacy's Neud Paper." The Phallacy's Neud Paper, (5). (multi-page Newsletter) Brian H. Bishop, Exeter, RI.
- Bishop, B. H. (93-03-23). "Regulation is Greenlining." The Phallacy's Neud Paper, (5). (newsletter insert) Brian H. Bishop, Exeter, RI.
- Bley, J. Phone interview. 1996.
- Bofinger, P. Interview. 1996.
- Botkin, D. B. (1990). Discordant Harmonies, Oxford University Press, New York.

- Boulding, K. E. (1989). Three Faces of Power, Sage Publications, Inc., Newbury Park, CA.
- Boyer, C. (1983). Dreaming the Rational City, MIT Press, Cambridge, MA.
- Brocke, R. H. (1993). "Recommendations to the Northern Forest Lands Council with Comments on a Briefing Paper.", SUNY College of Environmental Science and Forestry, Syracuse, NY.
- Buell, J., and DeLuca, T. (1996). Sustainable Democracy: Individuality and the Politics of the Environment, Sage Publications, Inc., Thousand Oaks, CA.
- Carbonetti, R. G. Phone interview. 1997.
- Castells, M. (1977). The Urban Question, MIT Press, Cambridge, MA.
- Castells, M. (1983). The City and the Grassroots, University of California Press, Berkeley, CA.
- Chapin, F. S. J., and Kaiser, E. J. (1979). *Urban Land Use Planning*, University of Illinois Press, Urbana, IL.
- Clavel, P. (1986). The progressive city: planning and participation, 1969-1984, Rutgers University Press, New Brunswick, NJ.
- Clavel, P., and Wiewel, W. (1991). Harold Washington and the neighborhoods: progressive city government in Chicago, 1983-1987, Rutgers University Press, New Brunswick, NJ.
- Cohen, J., and Rogers, J. (1995). "Associations and Democracy." Associations and Democracy, E. O. Wright, ed., Verso, London, 7-98.
- Cohen, J. E. (1995). How Many People Can the Earth Support?, W. W. Norton & Company, Inc., New York.
- Concord Monitor. (94-09-20). "Tax Breaks Sought to Protect Forests: Study aims to better manage vast tracts." Concord Monitor, Concord, NH.
- Connor, S. (1994). New England Natives A Celebration of People and Trees, Harvard University Press, Cambridge, MA.
- Cooksey, J., Richard A. (1992). "Executive Summaries, Selected writings, published and unpublished, from the speakers at the New England Society of American Foresters Meeting: "Forests of New England; A Conference on Integrating Biodiversity and Land Management".", Northern Forest Lands Council, Biological Resources Subcommittee.
- Crenson, M. A. (1971). The Un-Politics of Air Pollution, The Johns Hopkins Press, Baltimore.
- Cronon, W. (1983). Changes in the Land: Indians, Colonists, and the Ecology of New England, Hill and Wang, New York.
- Dahl, R. (1962). Who governs? Democracy and power in an American city., Yale University Press, New Haven.

- Daly, H. E. (1991). Steady State Economics, Island Press, Washington, D.C.
- DeCoster, L. A. (1993). "Environmental and Societal Benefits of Certain Federal Taxation Policies Affecting Private Timberland Owners.", Northern Forest Lands Council, State and Federal Taxes Subcommittee, Reston, Virginia.
- Dobbs, D., and Ober, R. (1995). *The Northern Forest*, Chelsea Green Publishing Company, White River Junction, VT.
- Donovan, C. T. (1993). "Global Economic Trends that Affect the Forest-Based Economy in the Northern Forest Lands.", Northern Forest Lands Council, Concord, NH.
- Doob, L. W. (1995). Sustainers and Sustainability: attitudes, attributes, and actions, Praeger Publishers, Westport, CT.
- Douglas, M., and Wildavsky, A. (1982). Risk and Culture, University of California Press, Berkeley, CA.
- Dryzek, J. S. (1987). Rational Ecology: environment and political economy, Basil Blackwell, New York.
- Dubroff, H., and Geske, A. (1993). "A Report to the Northern Forest Lands Council on Federal Taxation Issues Affecting Private Timberland Owners.", Federal and State Taxation Subcommittee, Northern Forest Lands Council, Concord, NH.
- Feiveson, H. A., Sinden, F. W., and Socolow, R. H. (1976). Boundaries of Analysis, Ballinger Publishing Company, Cambridge, MA.
- Field, P. (1994). "How Green is Green? Conflict and Collaboration Among Environmental Advocacy Groups," Masters of City Planning, Massachusetts Institute of Technology, Cambridge, MA.
- Fisher, R., and Ury, W. (1981). Getting to Yes, Penguin Books, New York.
- Flatebo, G. (1993a). "Comparison of Ecological Classification Systems in the States of Maine, New Hampshire, New York and Vermont.", Northern Forest Lands Council, South Harpswell, ME.
- Flatebo, G. (1993b). "Federal, State and Private Initiatives for Preserving Biological Diversity.", Northern Forest Lands Council, Yarmouth, ME.
- Flatebo, G. (1993c). "Maintaining Biological Diversity on Private Forestlands: Voluntary Techniques.", Northern Forest Lands Council, Yarmouth, ME.
- Flyvbjerg, B. (1998). Rationality and Power: Democracy in Practice, Steven Sampson, translator, University of Chicago Press, Chicago.
- Forester, J. (1987). "Anticipating Implementation: Normative Practices in Planning and Policy Analysis." Confronting Values in Policy Analysis: The Politics of Criteria, F. Fischer and J. Forester, eds., SAGE Publications, Inc., Newbury Park, CA, 153-173.
- Forester, J. (1989). Planning in the Face of Power, University of California Press, Berkeley.

- Friedmann, J. (1987). Planning in the Public Domain: from knowledge to action, Princeton University Press, Princeton, NJ.
- Friedmann, J. (1992). Empowerment: the politics of alternative development, Blackwell, Cambridge, MA.
- Galbraith, J. K. (1983). The Anatomy of Power, Houghton Mifflin Company, Boston.
- Gardner, J. E. (1989). "Decision Making for Sustainable Development: Selected Approaches to Environmental Assessment and Management." Environmental Impact Assessment Review, 9(4), 337-366.
- Gastil, J. (1993). Democracy in Small Groups, New Society Publishers, Philadelphia.
- Gaventa, J. (1980). Power and Powerlessness, University of Illinois Press, Urbana, IL.
- Gorz, A. (1980). *Ecology as Politics*, Patsy Vigderman and Jonathan Cloud, translators, South End Press, Boston, MA.
- Governor's Task Force on Northern Forest Lands. (1990). "The Northern Forest Lands: A Strategy for their Future.", Governor's Task Force on Northern Forest Lands.
- Guernsey, D. (94-03-11). "Land Acquisition I Forest Legacy." Settler's Advocate: Common Sense from New York and New England, 1(10). (One page Newsletter) Settler's Advocate, Maine.
- Guernsey, D. (94-03-29). "NFLC Draft Recommendations: "Non-Profits" for Hire?" Settler's Advocate: Common Sense from New York and New England, 1(11). (One page newsletter) Settler's Advocate, Maine.
- Guernsey, D. (94-4-21). "NFLC Draft Recommendations: Biodiversity." Settler's Advocate: Common Sense from New York and New England, 1(13). (One page newsletter)?, (?) Maine.
- Guernsey, D. (94-1-31). "Northern Forest Lands Council IV Grassroots Rebellion." Settler's Advocate: Common Sense from New York and New England, 1(4). (Newsletter) Maine (?).
- Guernsey, D. (94-02-10). "Northern Forest Lands Council VI Punctured Premise." Settler's Advocate: Common Sense from New York and New England, 1(6). Maine (?).
- Guernsey, D. (94-01-18 to 94-04-21). "Settler's Advocate: Common Sense from New York and New England." Settler's Advocate: Common Sense from New York and New England, 1(1-13). (Newsletter) Settler's Advocate, Maine.
- Halsey, B., Christensen, D., and McKnight, B. (1992). "A Review of the Land Sales of the Former Diamond International Corporation.", Northern Forest Lands Council, Lancaster, NH.
- Harper, S. C., Faulk, L. L., and Rankin, E. W. (1990). "The Northern Forest Lands Study of New England and New York.", Forest Service, U.S. Department of Agriculture, Rutland, VT.

- Harrigan, J. Phone Interview. 1996.
- Healey, P. (1997). Collaborative Planning: Shaping Places in Fragmented Societies, UBC Press, Vancouver.
- Hecht, S. B., and Cockburn, A. (1989). The Fate of the Forest: developers, destroyers, and defenders of the Amazon, Verso, New York.
- Heiman, M. K. (1988). The Quiet Evolution: Power, Planning, and Profits in New York State, Praeger Publishers, New York.
- Herman, E. S., and Chomsky, N. (1988). Manufacturing Consent: The political economy of the mass media, Pantheon Books, New York.
- Herzig, M. conversation with the Executive Director of the Public Conversations Project. 1994.
- Hoch, C. (1994). What Planners Do: Power, Politics, and Persuasion, American Planning Associating, Chicago, IL.
- Howard, D. T. E. (1992). "Federal Taxation and the Northern Forest Lands: A Discussion Paper Prepared for the Northern Forest Lands Council.", Federal and State Taxation Subcommittee, Northern Forest Lands Council, Durham, NH.
- Hunter, M. L., and Haines, S. (1993). "An Ecological Reserve System for the Northern Forest Lands of New England and New York.", Northern Forest Lands Council, Orono, Maine and Bainbridge, Georgia.
- Illich, I. (1973). Tools for Conviviality, Harper and Row, New York.
- Ingram, H. M., and Mann, D. E. (1989). "Interest Groups and Environmental Policy." Environmental Politics and Policy, J. P. Lester, ed., Duke University Press, Durham, NC, 135-157.
- Johnston, T. Telephone Interview. 1996.
- Keeble, R. (1977). Values and Planning: A first hard look, Institute of Environmental Research, Inc., Toronto.
- Kellett, M. J. (94-04-01 (Council Listening Sessions)). "NFLC Retreat on Public Land Acquisition Undercuts Creation of Reserves." The Northern Forest Forum, Lancaster, NH.
- Kempton, W., Boster, J. S., and Hartley, J. A. (1995). Environmental Values in American Culture, MIT Press, Cambridge, MA.
- Kolb, D., and Associates. (1994). When Talk Works Profiles of Mediators, Jossey-Bass Publishers, San Francisco.
- Krumholz, N., and Clavel, P. (1994). Reinventing Cities: equity planners tell their stories, Temple University Press, Philadelphia.
- Krumholz, N., and Forester, J. (1990). Making Equity Planning Work: Leadership in the Public Sector, Temple University Press, Philadelphia.

- Kuhn, T. S. (1970). The Structure of Scientific Revolutions, The University of Chicago Press, Chicago, IL.
- Lansky, M. (1992). Beyond the Beauty Strip: Saving What's Left of Our Forests, Tilbury House, Publishers, Gardiner, ME.
- Lansky, M. (93-09 ("Autumn Equinox")). "Flawed 'Mission Statement' Mars Findings & Options." The Northern Forest Forum, Groveton, NH.
- Lee, K. N. (1993). Compass and Gyroscope, Island Press, Washington, DC.
- Lind, B. (1993). "Costs of Doing Business: Case Studies of Northern Forest Companies.", Northern Forest Lands Council, Concord, NH.
- Lindblom, C. E. (1977). Politics and Markets, Basic Books, Inc., New York.
- Lipsky, M. (1980). Street Level Bureaucracy, Russel Sage Foundation, New York.
- Lowi, T. J. (1979). The End of Liberalism, the Second Republic of the United States, W.W. Norton and Company, Inc., New York, NY.
- Maguire, L. A. (1994). "Science, Values, and Uncertainty: A Critique of the Wildlands Project." *Environmental Policy and Biodiversity*, R. E. Grumbine, ed., Island Press, Washington, D.C., 267-272.
- Majone, G. (1988). Evidence, Argument, and Persuasion in the Policy Process, Yale University Press, New Haven.
- Mansbridge, J. J. (1983). Beyond Adversary Democracy, University of Chicago Press, Chicago.
- Mansbridge, J. J. (1990). "The Rise and Fall of Self Interest in the Explanation of Political Life." Beyond Self Interest, J. J. Mansbridge, ed., University of Chicago Press, Chicago, 3-22.
- Market Decisions. (1992). "Forum on National and International Influences on Land Ownership in the Northern Forest.", prepared for the Land Conversion Subcommittee of the Northern Forest Lands Council, Concord, NH.
- Market Decisions. (1993). "Analysis of the Transfer and Conversion of Forestland of Less than 500 Acres in the Northern Forestlands Study Area.", prepared for: The Land Conversion Subcommittee of the Northern Forest Lands Council, Portland, ME.
- Mazur, A. (1981). The Dynamics of Technical Controversy, The Communications Press, Inc., Washington.
- McKibben, B. (1989). The End of Nature, Random House, New York.
- McKibben, B. (April 1995). "An Explosion of Green." The Atlantic Monthly. 61-83.
- McMullin, E. (1987). "Scientific Controversy and its Termination." Scientific Controversies: case studies in the resolution and closure of disputes in science and technology, H. T. Englehardt and A. L. Caplan, eds., Cambridge University Press, Cambridge.

- Meadows, E. Telephone Interview. 1995.
- Merchant, C. (1989). Ecological Revolutions: Nature Gender, and Science in New England, The University of North Carolina Press, Chapel Hill, NC.
- Meyer, P. Phone Interview. 1997.
- Meyerson, M., and Banfield, E. C. (1964). Politics, Planning, and the Public Interest: The Case of Public Housing in Chicago, The Free Press, New York.
- Milbraith, L. W. (1989). Envisioning a Sustainable Society Learning our Way Out, State University of New York Press, Albany, NY.
- Milliken, R. Telephone Interview. 1996.
- Mills, C. W. (1977). "The Structure of Power in American Society." American Society, Inc.: studies of the social structure and political economy of the United States, M. Zeitlin, ed., Rand McNally College Pub. Co., Chicago, 350-362.
- Morse, T. J. (93-10-10). "Rebuttal of Northern Forest Land Committee Findings and Options from a Property Rights Perspective." Rebuttal of Northern Forest Land Committee Findings and Options from a Property Rights Perspective, . (Newsletter/Comment document) Vermont Property Rights Center, Underhill, VT.
- Munro, D. A. (1995). "Sustainability: Rhetoric or Reality." Sustainable World, T. Z. Trzyna and J. K. Osborn, eds., IUCN The World Conservation Union, Sacramento, CA, 27-35.
- National Audubon Society, Sierra Club, and The Wilderness Society. (1994?). "The Great Northern Forest.", Albany, NY.
- Nelkin, D. (1984). Controversy, Sage Publications, Inc., Beverly Hills.
- Norgaard, R. B. (1992). "Sustainability as Intergenerational Equity: Economic Theory and Environmental Planning." Environmental Impact Assessment Review, 12(1/2), 85-124.
- Northeastern Forest Alliance. (Undated). "The Economic Importance of the Northeast Forest.", Northeastern Forest Alliance, Unknown.
- Northern Forest Alliance. (1994). "A Forest at Risk: The Citizens' Agenda for Saving the Northern Forest.", Northern Forest Alliance, Montpelier, VT.
- Northern Forest Alliance. ((undated)). "A Forest at Risk: The Citizens' Agenda for Saving the Northern Forest.", Northern Forest Alliance, Montpelier, VT.
- Northern Forest Dialogue Project. (1994a). "First Meeting of the 'Northern Forest' Dialogue Project.", Public Conversations Project, Cambridge, MA.
- Northern Forest Dialogue Project. (1994b). "Second Meeting of the Northern Forest Dialogue Project.", Public Conversations Project, Cambridge, MA.
- Northern Forest Forum. (93, Autumn equinox). "A Forum Critique of NFL Council's Disappointing Findings and Options." A Forum Critique of NFL Council's Disappointing Findings and Options, 2(1). (Newspaper/Newsletter)

- Northern Appalachian Restoration Project of Earth Island Institute, Lancaster, NH.
- Northern Forest Forum. (94 (Council listening sessions)). "Public Advises Council, Promote Sustainable, Not Abusive 'Traditions'." Northern Forest Forum, Lancaster, NH.
- Northern Forest Lands Council. "Proceedings From Biological Resources Diversity Forum." Northern Forest Lands Council Biological Resources Diversity Forum, University of New Hampshire, Manchester, NH, 53.
- Northern Forest Lands Council. (1992b). "Summary of Proceedings: Forum on Building Local Economies with Wood Products and Forest-Based Recreation and Tourism.", Northern Forest Lands Council, Concord, NH.
- Northern Forest Lands Council. (1993a). "Findings and Options.", Northern Forest Lands Council, Concord, NH.
- Northern Forest Lands Council. (1993b). "Listening Log of Public Comments on the <u>Findings and Options</u>.", Northern Forest Lands Council, Concord, NH.
- Northern Forest Lands Council. (1994a). "Finding Common Ground: The Draft Recommendations of the Northern Forest Lands Council.", Northern Forest Lands Council, Concord, NH.
- Northern Forest Lands Council. (1994b). "Finding Common Ground: The recommendations of the Northern Forest Lands Council.", Northern Forest Lands Council, Concord, NH.
- Noss, R. F., Cline, S. P., Csuti, B., and Scott, J. M. (1992). "Monitoring and Assessing Biodiversity." Achieving Environmental Goals: The Concept and Practice of Environmental Performance Review, E. Lykke, ed., Bellhaven Press, London, 67-85.
- O'Riordan, T. (1981). Environmentalism, Pion, London.
- Ortolano, L. (1984). Environmental Planning and Decisionmaking, Wiley, New York.
- Ozawa, C. (1988). "Consensual Procedures and the Role of Science in Public Decision Making," Ph.D. in Environmental Planning, Massachusetts Institute of Technology, Cambridge, MA.
- Ozawa, C. P. (1991). Recasting Science: Consensual Procedures in Public Policy Making, Westview Press, Boulder, CO.
- Palola, E. (94-04-01 (Council Listening Sessions)). "Local Communities Submerged by Landowner and Industry Emphasis." The Northern Forest Forum, Lancaster, NH.
- Parker, J. (1995). "Enabling Morally Reflective Communities: Towards a Resolution of the Democratic Dilemma of Environmental Values in Policy." Values and the Environment, A Social Science Perspective, Y. Guerrier, N. Alexander, J. Chase, and M. O'Brien, eds., John Wiley & Sons, Ltd., Chichester, England, 33-49.

- Pateman, C. (1970). Participation and Democratic Theory, Cambridge University Press, Cambridge, England.
- Pearce, D., Markandya, A., and Barbier, E. B. (1989). Blueprint for a Green Economy, Earthscan Publishing Ltd., London.
- Pearce, D., Turner, R. K., O'Riordan, T., Adger, N., Atkinson, G., Brisson, I., Brown, K., Dubourg, R., Fankhauser, S., Jordan, A., Maddison, D., Moran, D., and Powell, J. (1993). Blueprint 3: Measuring Sustainable Development, Earthscan Publications Ltd., London.
- Peirce, N. R. (1976). The New England States, W. W. Norton & Company, Inc., New York.
- Piven, F. F., and Cloward, R. A. (1971). Regulating the Poor: The Functions of Social Welfare, Random House, Inc., New York, NY.
- President's Council on Sustainable Development. (1996). Sustainable America: A New Consensus, The President's Council on Sustainable Development, Washington, DC.
- Quammen, D. (1996). The Song of the Dodo, Touchstone (Simon & Schuster), New York.
- Raiffa, H. (1982). The Art & Science of Negotiation, Harvard University Press, Cambridge, MA.
- Randers, J., and Meadows, D. (1973). "The Carrying Capacity of our Global Environment: A Look at Ethical Alternatives." Towards a Steady State Economy, H. Daly, ed., W.H. Freeman, San Francisco, 283-306.
- Redclift, M. (1987). Sustainable Development: Exploring the Contradictions, Methuen & Co. Ltd., London.
- Rees, W. E. (1990). "The Ecology of Sustainable Development." The Ecologist, 20(No. 2, March/April 1990), 18-23.
- Reid, D. (1995). Sustainable Development: An Introductory Guide, Earthscan Publications, London.
- Reidel, C. (1994). "The Political Process of the Northern Forest Lands Study." The Future of the Northern Forest, C. M. Klyza and S. C. Trombulak, eds., University Press of New England, Hanover, NH, 93-111.
- Richmond, D. (93-10-01). "To: All who find constitutional property rights inconvenient." To: All who find constitutional property rights inconvenient, . (Comment Letter) Citizens for Property Rights, Jonesville, VT.
- Robtoy, H., Brightstar, D., Obomsawin, T., and Moody, J. (1994). "The Abenaki and the Northern Forest." *The Future of the Northern Forest*, C. M. Klyza and S. C. Trombulak, eds., University Press of New England, Hanover, NH, 27-35.

- Sabatier, P. A. (1993). "Policy Change Over a Decade or More." Policy Change and Learning: An Advocacy Coalition Approach, P. A. Sabatier and H. C. Jenkins-Smith, eds., Westview Press, Boulder, CO, 13-39.
- Sabatier, P. A., and Jenkins-Smith, H. C. (1993). "The Advocacy Coalition Framework: Assessments, Revisions, and Implications for Scholars and Practitioners." Policy Change and Learning: An Advocacy Coalition Approach, P. A. Sabatier and H. C. Jenkins-Smith, eds., Westview Press, Boulder, CO, 211-235.
- Sagoff, M. (1988). The Economy of the Earth: Philosophy, Law, and the Environment, Cambridge University Press, Cambridge, England.
- Sargent, J. Interview. 1996.
- Sayen, J. (94-04-01 (Letter writers' guide)). "Challenges Council Must Address in Final Recommendations." The Northern Forest Forum, Lancaster, NH.
- Sayen, J. (1994b). "Northern Appalachian Wilderness: The Key to Sustainable Natural and Human Communities in the Northern Forests." The Future of the Northern Forest, C. M. Klyza and S. C. Trombulak, eds., Middlebury College Press, Hanover, NH, 177-196.
- Sayen, J. (94 (Council Listening Sessions)). "Raise Taxes for Absentee Owners Give Relief to Towns & Small Owners." The Northern Forest Forum, Lancaster, NH.
- Schneider, P. (1997). The Adirondacks: A History of America's First Wilderness, Henry Holt & Company, Inc., New York.
- Schön, D. A., and Rein, M. (1994). Frame Reflection, Basic Books, New York.
- Schwarz, M., and Thompson, M. (1990). Divided We Stand, University of Pennsylvania Press, Philadelphia, PA.
- Shattschneider, E. E. (1960). The Semisovereign People; a realist's view of democracy in America., Holt, Rinehart and Winston, New York.
- Simmie, J. (1981). Power, Property and Corporatism, The MacMillan Press, Ltd., London.
- Smith, D. C. (1972). A History of Lumbering in Maine 1861-1960, University of Maine Press, Orono, Maine.
- Smith, L. G. (1993). Impact Assessment and Sustainable Resource Management, Longman Scientific & Technical, Essex, U.K.
- Snow, D., Rochford, E. B., Jr., Worden, S. K., and Benford, R. D. (1986). "Frame Alignment Processes, Micromobilization, and Movement Participation." American Sociological Review, 51(August), 464-481.
- Society for the Protection of New Hampshire Forests. (94-02-01 (Late Winter, 1994)). "Council recommendations due in March: Here's what the Society is looking for." Forest Notes. 10-11.
- Stokey, E., and Zeckhauser, R. (1978). A Primer for Policy Analysis, W.W. Norton & Company, New York, NY.

- Stone, D. A. (1988). Policy Paradox and Political Reason, Harper Collins, New York.
- Susskind, L., and Cruikshank, J. (1987). Breaking the Impasse: Consensual Approaches to Resolving Public Disputes, Basic Books, Inc., New York.
- Susskind, L., and Field, P. (1996). Dealing with an Angry Public, The Free Press, New York.
- Taylor, S. (1984). Making Bureaucracies Think: The Environmental Impact Statement Strategy of Administrative Reform, Stanford University Press, Stanford, California.
- Tong, R. (1987). "Ethics and the Policy Analyst: The Problem of Responsibility." Confronting Values in Policy Analysis: The Politics of Criteria, F. Fischer and J. Forester, eds., SAGE Publications, Inc., Newbury Park, CA, 192-211.
- Trombulak, S. C. (1994). "A Natural History of the Northern Forest." The Future of the Northern Forest, C. M. Klyza and S. C. Trombulak, eds., University Press of New England, Hanover, NH, 11-26.
- Truman, D. (1977). "Interest Groups and the Nature of the State." American Society, Inc.: studies of the social structure and political economy of the United States, M. Zeitlin, ed., Rand McNally College Pub. Co., Chicago, 317-337.
- Trzyna, T. C., and Osborn, J. K. (1995). Sustainable World, IUCN The World Conservation Union, Sacramento, CA.
- Union Leader. (94-04-13). "Report of the Forest Lands Council Draws Praise." Union Leader, Manchester, NH.
- United States Congress. (1988). "Congressional Record, 7-13-88.", U.S. Government Printing Office, Washington, DC, S 9510.
- Whitney, R. H., Halsey, B., and Bedard, P. J. (1992). "Forum on Land Sales of Coburn Lands Trust and Former Diamond International Corporation.", Land Conversion Subcommittee of the Northern Forest Lands Council, Lancaster, NH.
- Wilson, E. O. (1992). The Diversity of Life, W. W. Norton & Company, Inc., New York.
- World Commission on Environment and Development. (1987). Our Common Future, Oxford University Press, Oxford, United Kingdom.
- Wrong, D. H. (1995). Power: Its Forms, Bases, and Uses, Transaction Publishers, New Brunswick, NJ.
- Yaffee, S. L. (1994). The Wisdom of the Spotted Owl Policy Lessons for a New Century, Island Press, Washington, D.C.
- Yin, R. K. (1984). Case Study Research: Design and Methods, Sage Publications, Beverly Hills, CA.