

## Seeing the Forest for the Trees: Managing Social Conflict and Forest Restoration

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### **ABSTRACT**

This paper examines the role that social conflict is likely to play in forest restoration projects. A definition of conflict as "perceived goal interference among interdependent parties" serves as a point of departure for the discussion, and the nature of forest restoration conflict is systematically examined by focusing on each aspect of the definition: perceptions, goal interference, the parties, and their interdependence. Agencies undertaking restoration projects are encouraged to adopt a discourse orientation, wherein they recognize that 1) their public involvement efforts are creating a discourse that can incorporate a wide array of values and voices and 2) groups may create competing discourses if they feel that the agency's process disenfranchises them.

Keywords: collaborative learning, discourse, negotiation

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### INTRODUCTION

Imagine, if you will, a situation where the governmental environment agency has prepared an extensive plan to restore the forests within a local region. The plan employs the best scientific models and is based on extensive field data. The personnel developing the plan are all well trained, their analysis has been thorough, and the agency has gone so far as to utilize university faculty to supplement its internal expertise and to provide technical reviews. The plan clearly documents the various ways in which local ecological conditions no longer represent the natural processes that had historically been present, and describes very specific actions that could be taken to restore the ecological processes and the various conditions that they would produce.

The agency scientists and managers have prepared an extensive presentation to unveil their plan to the local communities located in and around the project area. They have invested considerable time and energy preparing maps, Power Point presentations, charts, project timelines, and draft regulations. They arrange a local meeting room and hope that 50 people show up. When the agency people arrive at the facility an hour early to set up their equipment and displays, there are already a few dozen local citizens waiting. By the time the meeting is scheduled to begin, the room is full to overflowing, and there are many people who cannot be accommodated; instead of 50 people, there are

300. The project team leader is no more than a minute into her overview presentation when someone in the audience yells out a quite accusational question about the real intent of the project, and whether the agency had any legitimate authority. The team leader, more than a little surprised by the question, offers a fairly bureaucratic and not particularly effective answer. As she attempts to return to her prepared text, more questions and comments start popping up. Before long, the room is in disarray and the carefully scripted presentations of the biological rationale for the plan are never even given. The increasingly chaotic meeting is cut short and the agency personnel slip out of a very awkward and quite threatening interaction. The local residents applaud and cheer when they leave, while seeming quite upbeat and victorious.

So what went wrong? Why were the managers so blindsided? On what basis could the local people oppose restoration? After all, they had never even heard the presentations explaining all the good science that was the basis for the plan. Perhaps more importantly, given how much local opposition there seems to be, and how badly this meeting has gone, what are the prospects for getting the plan implemented, and is there any hope that the local residents will voluntarily comply with it? In short, is this restoration strategy dead in the water?

This short vignette obviously portrays an extreme outcome, but the dynamic it illustrates is altogether too com-

mon. The purpose of this paper is to lay out some of the typical dynamics in large scale restoration projects and why social conflict is more likely to be the norm rather than the exception. The fundamental point of departure for this paper is the recognition that "restoration" is a hugely value laden concept. Biologists tend to couch their arguments in precise and presumably objective measures of population characteristics, species distributions, seral stages, and habitat attributes. Nevertheless, the term "restoration" has at its core a connotation of repairing damage, of bringing back a preferable or unimpaired state, of righting a wrong. The very landscape scale changes that the biologists indict as ecological damage have occurred for a reason and probably still have a constituency of local residents that continue to benefit from them. Efforts at innovative conservation are imperiled when we fail to recognize 1) the extent to which restoration is a value-laden concept, 2) that local residents quite understandably mobilize to protect their lifeways, and 3) that communication/engagement strategies can be a critical component in initiating and sustaining meaningful change. As a result, our ability to make progress in biological conservation relies every bit as much on our ability to understand and manage the social ecology as on our grasp of the natural ecology.

# THE INEVITABILITY OF SOCIAL CONFLICT IN FOREST RESTORATION

### Social conflict defined

If you ask typical people on the street for examples of conflict, they are likely to report personal experiences such as "fight with my spouse," "argument with my boss," "hassles with my landlord," etc. They also recognize that conflicts occur at larger organizational and social scales as well, because they also mention "budget cuts," "the climate change mess," "the Arab-Israeli conflict," and "Northern Ireland" as illustrations of conflict. These responses reveal common perceptions of conflict, we typically associate conflict with fights, games, debates, squabbles, arguments, shouting, violence, tension, and anger. Wilmot and Hocker (2000) present prevalent images of conflict as metaphors and note that people often characterize conflict as war, disease, struggle, a trial, explosive, and as a mess; such images suggest that "many people view conflict as an activity that is almost totally negative and has no redeeming qualities."

While some people may assume that conflict is overwhelmingly negative, conflict scholars do not hold this view. A brief review of how leading scholars define conflict reveals that conflict is neither inherently positive nor negative. Rather, it has the potential to be either. **Table 1** offers a compendium of scholars' definitions of conflict and their key terms. These definitions have much in common. First, they indicate the inevitability of conflict in human affairs. Second, they reveal key features of conflict situations. For example, many of the definitions stress that conflicts involve interdependent parties that perceive some kind of incompatibility.

From the definitions presented in **Table 1**, we conclude that conflicts generally involve:

Perceived incompatibility
Interests, goals, aspirations
Two or more interdependent parties
Incentives to cooperate and compete
Interaction; communication
Bargaining/negotiation
Strategy/strategic behavior
Judgments and decisions

From these definitions and this list, we have identified a set of elements we think are essential to understanding conflict situations. Incompatibility, goals and aspirations, parties and roles, and interdependence are addressed here.

*Incompatibility.* A central, defining feature pervades the conflict definitions in **Table 1**: incompatibility. Deutsch writes that "a conflict exists whenever incompatible acti-

Table 1 Definitions of conflict (from Daniels and Walker 2001).

Author(s)	Definition	Key terms
Coser 1956	Social conflict is a struggle between	struggle
00001 1900	opponents over values and claims to	opposition
	scarce status, power and resources.	scarcity
Schelling	Conflicts that are strategic are essentially	strategy
1960	bargaining situations in which the ability	bargaining
1700	of one participant to gain his ends is	dependence
	dependent on the choices or decisions that	decisions
	the other participant will make.	decisions
Deutsch	A conflict exists whenever incompatible	incompatibility
1973	activities occur one party is	interference
1973	interfering, disrupting, obstructing, or in	effectiveness
	some other way making another party's	effectiveness
	actions less effective.	
Wall 1985	Conflict is a process in which two or more	anala
wali 1965	*	goals
	parties attempt to frustrate the other's goal	interdependence
	attainment the factors underlying	perceptions
	conflict are threefold: interdependence,	
	differences in goals, and differences in	
Pruitt and	perceptions.	
	Conflict means perceived divergence of	perception
Rubin 1986	interest, or a belief that the parties' current	interests
	aspirations cannot be achieved	aspirations beliefs
C1	simultaneously.	
Conrad	Conflicts are communicative interactions	perception
1990	among people who are interdependent and	communication
	who perceive that their interests are	interdependence
T' 11	incompatible, inconsistent, or in tension.	tension
Tjosvold	Conflict—incompatible activities—occurs	goals
and van de Vliert 1994	within cooperative as well as competitive	incompatibility
Viiert 1994	contexts conflict parties can hold	cooperation
D.1 . 7	cooperative or competitive goals.	competition
Folger et al.	Conflict is the interaction of	perception
1997	interdependent people who perceive	interaction
	incompatible goals and interference from	interdependence
XX71 4 1	each other in achieving those goals.	incompatibility
Wilmot and	Conflict is an expressed struggle between	struggle
Hocker	at least two interdependent parties who	interdependence
2000	perceive incompatible goals, scarce	perception
	resources, and interference from others in	scarcity
	achieving their goals.	

vities occur... an action that is incompatible with another action prevents, obstructs, interferes, injures, or in some way makes the latter less likely or less effective" (1973, p. 10). Incompatibility may appear simply as different interests. "Conflict," Pruitt and Rubin propose, "means perceived divergence of interest, or a belief that the parties' current aspirations cannot be achieved simultaneously" (1986, p. 4). But it can also be reflected as different preferences regarding procedures.

Goals and Aspirations. Situations become conflictual when incompatibility arises about a goal, objective, or aspiration. Substantive matters include tangible (observable, definable, measurable) content issues parties perceive: "what to do, what decisions to make, where to go, how to allocate resources, or other externally objectifiable issues" (Wilmot and Hocker 2000, p. 56). Parties may also experience conflict about the rules that guide their interaction, including how decisions are made. So discussion of procedural issues must sometimes precede discussion of substantive issues. Procedural issues are generally tangible. Relationship issues embrace intangible, subjective material such as each party's importance to the other, the emotional distance that they wish to maintain, the influence that each is willing to grant the other, the degree to which the parties are seen as a unit, or the rights that the parties accede to one another (Wilmot and Hocker 2000). Power, authority, responsibility, control, and leadership may appear as overt relational issues. A less obvious type of relationship issue involves identity concerns, which relate to an individual's identification with a group that shares symbols, meanings, and norms/rules for conduct (Collier and Thomas 1988). Within interpersonal relationships, people negotiate social roles and personal identities (Ting-Toomey 1985). Identities provide individuals with purpose, meaning, and a sense of worth. They can be broad in scope, like nationalism, or narrow in scope, such as identification with an individual or even personality type. Typically intangible, identity issues feature concerns about self-esteem (Wilmot and Hocker 2000), acknowledgment, achievement, reputation, and image or 'face' (Folger *et al.* 1997).

**Parties and Roles.** Parties are entities (individuals, groups, organizations, governments) capable of making decisions directly or indirectly related to the conflict. They have a stake in the outcome. A party may enact a variety of roles in a conflict, which affect their choice of strategies and tactics. Possible roles include:

- *Direct conflict party*: the party interacts and negotiates for herself or himself.
- *Conflict party as agent*: the individual interacts or negotiates on behalf of someone else (e.g., an attorney).
- Secondary or indirect conflict party: the individual uses a conflict agent; the conflict party advises the agent and may give the agent responsibility, while maintaining decision-making authority.

Related to a conflict party's roles is her or his responsiveness in those roles (Druckman 1977). In any given negotiable conflict, a disputant must balance responsiveness and accountability to a number of parties. These include the conflict party's responsiveness to herself or himself, to the other direct conflict parties, to her or his own primary constituency, to secondary parties (those that influence self or other), to the public and community, to the media, and to precedent and principle.

Interdependence. As implied in scholars' definitions, a portion of the potential for significant communication and constructive conflict management is based on the parties' perceived interdependence. Without interdependence, there is little need or opportunity for meaningful interaction. "Conflict parties engage in an expressed struggle and interfere with one another," Wilmot and Hocker write, "because they are interdependent" (1998, p. 35). The greater the goal interdependence, the greater the incentive for parties to manage their conflict collaboratively. Consequently, the extent to which goals are interdependent may directly affect communication patterns in conflict (Tjosvold 1990).

People who do not perceive their dependence on another person, "that is, who has no special interest in what the other does—has no conflict with that other person" (Braiker and Kelley 1979, p. 137). An individual who perceives incompatibility but not interdependence might not consider engaging in conflict interaction, such as negotiation. A high-powered person may decide unilaterally to resolve the conflict by presenting a promise or threat or some other way of gaining compliance. A low-powered individual may decide unilaterally to accommodate, withdraw from, or avoid the conflict. When the disputants perceive interdependence, the prospect for direct, constructive communication to deal with the conflict begins to improve. Interdependence implies that each party has enough power, not necessarily equal, to warrant joint decision making (Bacharach and Lawler 1981a).

These conflict concepts can be embedded into a brief definition: conflict is perceived goal interference among interdependent parties. As such, a conflict perspective forces us to examine the issues, the parties, their perceptions of the situation, and the choices that they ultimately make. There is no guarantee that conflict situations inevitably evolve into acrimonious and polarized disputing behaviors; while that is a possibility, it may also be that the situation undergoes conflict avoidance, capitulation by some parties, or some form of collaborative problem solving.

# Applying a conflict theoretical approach to forest restoration

Given that we have established this essentially value-neutral conceptualization of conflict as being perceived goal interference among interdependent parties, how does that help clarify the challenges inherent in large scale forest restoration? First, it provides the basis for deconstructing the situation into its constituent parts:

**The Parties:** Perhaps the shortest reasonable list of parties to a large scale forest restoration effort includes the following:

Agency scientists and managers;

Local landowners or people who use the area for commercial/subsistence activities;

Local elected/appointed officials;

National/regional officials;

Externally located NGOs;

The population at large, who live at varying distances from the site.

It is important to recognize that although first-level generalizations about parties tend to cast all individual stakeholders into organizations/interest groups (agency personnel, environmentalists, farmers, etc.) there can in fact be considerable variation of attitudes and preferences among members of the same group. In some cases, managing that intra-group goal incompatibility will often be more subtle and may therefore be more difficult than managing the inter-group conflict because the intra-group issues tend to be worked out in private internal power struggles.

**The Goals:** Again distilling the complexity and variety of biological conservation down to its essence, the goals are typically going to be:

Returning the landscape to more natural conditions/functions:

Ensuring the resilience of the landscape in the face of climate change;

Continuing to derive various benefits (e.g., economic, cultural, recreational) from the manipulation/use of the land-scape;

Minimizing the political damage/maximizing the political benefit from the process.

Some parties' goals may be driven primarily by the attributes of the final decision and the tangible impacts that occur on the landscape. Others may have goals that focus primarily on the process—that whatever decision is finally made, they want it to have been made through particular mechanisms or in particular venues.

The Perceptions: The perceptions that the parties hold will typically only be partially correct, and as such will be a fruitful opportunity for constructive conflict management, as we will see below. The perceptions of all parties may be considerably more "fixed pie" (the situation is either-or; there are no mutual gains possibilities) than the situation actually calls for. The local users may perceive the external agency professionals as eco-elitists who don't care about the human impacts of their proposed restoration strategy. The agency professionals may perceive the local users as short-sighted, old-fashioned, or uneducated. Neither party may really know much about the other, their values, and their worldview regarding the best and worst futures regarding the area in question

Interdependence: The issue of interdependence is complex and multi-faceted. On one hand, the parties' interdependence is very high because everyone is addressing the same project area. They are attached—through various connections—to one another as long as they remain attached to the project area. But the interdependence between the parties is quite low. The agency professionals are often external, often lacking significant social networks within the local community. They similarly do not have a high level of dependence on local residents or upon the area in question. The local people, on the other hand, will typically be involved in myriad formal and informal social networks that are connected in various ways to the project area. Their

connections to the agency professionals and to outside organizations, while variable, are often low. These various networks can be mobilized to promote collaboration, but individuals who are able to play a boundary spanning role are key to that process (Munoz-Erickson *et al.* 2010).

Framed this way, large scale efforts at forest restoration are rich with conflict. The sheer number of parties potentially involved, their deeply held values, the technical complexity of the situation, the different meanings that people assign to the same words, the distrust of "outsiders" all potentially come into play. In fact, it is a far more reasonable assumption that significant conservation initiatives always include a conflict dimension. There are likely only two special cases wherein landscape level restoration would not be a source of potentially significant social conflict. One is when the causal agent is not anthropogenic. If the problem to be remedied has been caused by a purely natural (non-human) agent—e.g., landslide, earthquake, or wildfire—then it is easy to imagine a political consensus emerging to address the problem. The second is when a nonlocal company conducts a damaging extractive practice, and then leaves without adequately remediating the site (cyanide heap leach extraction of gold and large blocks of clearcut logging without any reforestation would be perfect examples.) In this case, there are likely to be few local beneficiaries to inaction.

But arguably cases with these features constitute the minority. More often ecological restoration will involve situations wherein historic patterns of resource utilization have created large scale changes at the landscape levelthus creating the rationale for "restoration." In these cases, social conflict over the adoption of a restoration agenda is virtually assured, predicated on the premise that the local landscape condition has a constituency. Whatever activities have created the need for restoration—e.g., logging, animal husbandry, water use/diversion—there are people who are currently benefiting from those activities and have organized their lives to a greater or lesser extent upon the expectation that they will be able continue to do so into the future. This constituency for the status quo will quite understandably be threatened by a restoration proposal that either eliminates or constrains their ability to engage in their patterns of use. There are clear economic incentives to continue these patterns of use. Their use may be an important source of income, but perhaps more importantly, local residents/users may have made considerable investments in human and physical capital that provide a return only if they can continue the use of the project area. Their only marketable skills may be in fishing, and if that is eliminated, then they have no means of livelihood. They may have invested in logging equipment that would be worthless if harvesting is no longer permitted. But just as powerfully as these economic incentives that create a constituency, cultural values can similarly argue for continued patterns of use. In a modern global economy, many local populations may not be as strictly dependent on the lands around them as they once were. Food that was once only locally available can be externally procured. Jobs may be more available in the nearby city. But even as these globalization changes occur, local communities remain strongly linked to the lands around them and the activities that they have traditionally undertaken. These symbolic and cultural ties to lands are every bit as important as the straightforward economic linkages, and may in fact be defended more strongly.

At least among scholars who focus on policy processes (of which forest restoration decisions are a subset,) it is certainly not novel or heretical to conclude that conflict is more likely than not. Beierle (2002), Bingham *et al.* (2005), and Fischer (1993) all contend that conflict is a fundamental dimension of policy processes. Focusing specifically on natural resource conservation planning, there is a robust literature that addresses the deeply embedded conflict that one typically encounters (Ozawa 1996; Randolph and Bauer 1999; Kapoor 2001; Bouwen and Taillieu 2004; Keough and Blahna 2006), and some goes so far as to say that con-

flict plays an essential role in the socio-political process through which conservation strategies are forged (Peterson *et al.* 2005, 2006).

# ADDRESSING THE CONFLICT DIMENSIONS OF FOREST RESTORATION

#### A discursive approach to forest restoration policy

The first major contention of this paper is that forest restoration is rife with conflict because of the perceived goal incompatibility among the various interdependent parties. The second core contention of this paper is that landscape restoration projects have a greater likelihood of adequately addressing this conflict by embracing a discourse philosophy. There is certainly experiential data in support this contention: Leskinen (2004) explains that a systematic failure in Finnish forest restoration policy can be linked back to a failure in public participation and van Gossum et al. (2011) identified similar challenges in Flanders that emerged from competing perspectives on sustainable forest management that were exacerbated by power imbalances and trust deficits. But a more conceptual understanding of discourse – and its potential contribution to forest restoration – provides a richer foundation.

While key writers on discourse include Habermas and Foucault, in recent years an extensive literature has emerged that uses the term discourse in two different ways. First, it employs "discourse" as a broad and encompassing term that includes the full range of processes through which political and social decisions emerge. In broad measure, a discursive view of policy processes focuses on the nature or character of communicative interaction and the ways in which competing storylines are constructed and variously granted legitimacy in the policy process. Viewing a decision process as discourse does not necessarily presume that the process is highly participatory or inclusive. The long list of terms and concepts provided in the introduction are all methods to promote participatory discourse. But by the same token, the most rigid, technocratic, and narrow policy decision process (e.g., the vignette in the introduction to this paper) is also a form of discourse. Discourse focuses more on the nature of the interaction than on specific techniques or formats for achieving that interaction. It is much more about the emergence of shared norms of interaction, independent of whether those norms arise organically from group process or are administratively-defined rules of participation. The goal of discursive policy analysis is to identify resilient storylines and shared narratives rather than objective facts (Dryzek 1994). Authors in the broad field of discursive democracy argue that involving people is not optional if the goal is authentic and sustainable environmental change (Munton 2003).

Hajer (1997) is an early example of a discourse-based analysis of public policy innovation in his study of environmental policy in the UK and the Netherlands, drawing extensively upon Foucault. Martin (1999) builds on Habermas in a discourse-based conceptualization of environmental democracy. Simmons (2007) embraces both Habermas and Foucault, and argues that even environmental risk situations such as the management of chemical warfare agents benefit from a discursive approach that deeply involves citizens, rather than marginalizes them.

A somewhat more applied treatment of discourse is Fischer (2003) because it applies discourse principles to policy formation. Fischer argues that all policy processes can be thought of as discourse—as negotiation between competing groups that is based every bit as much on values as it is on objective science. Fischer presents a contrast between a neo-positive/empiricist/rational view of policy formation with a discursive/social constructionist paradigm. His contention is that a social constructionist viewpoint would focus more on the ways that competing worldviews and value sets jockey for position in the policy process, rather than on viewing policy formation as a rigorously analytical

process wherein objective data is used to develop policies intended to provide the greatest good for the greatest number. And while he makes a compelling case for a discursive model of politics and policy formation, he leaves one key question largely unanswered: If policy is the result of discourse, could we improve the policy if we improved the discourse? Stated another way, what kinds of discourse designs could improve policy formation? Certainly recent work by Wagner (2008) shows that potential exists, at least in international negotiation.

Agencies attempting to implement large-scale restoration processes need to regard their decision process as a form of discourse that through intentional or unintentional design choices will either include or exclude various stakeholders. Highly technical processes that operate within rigid bureaucratic procedures tend to be quite exclusive, allowing only those constituents with mastery of the scientific jargon and the various procedural rules to have their perspective meaningfully included in the process. Other discourse coalitions – quite often local residents and indigenous peoples – may be far less proficient at operating within the confines of such a technical/regulatory discourse, and are therefore likely to construct competing discourses. Rather than engage the agency directly (and thereby pursue a disadvantageous strategy), local groups may appeal to their elected officials on the grounds of local self-determination in the face of external bureaucratic hegemony. Or they might take the process to a court of law, or use local media outlets to vilify the plan in the court of public opinion. As a last resort, they may engage in civil disobedience or otherwise sabotage the implementation of the plan. In any case, if the agency moves forward as if its process was the only "right" discourse, the chances for meaningful engagement are likely diminished. A discourse-based analysis of policy making around biofuels in the Philippines clearly showed that different coalitions created different discourse frames which had variable success in affecting the policy debates (Montefrio and Sonnenfeld 2011).

Perhaps the defining issue that an agency faces as it attempts to conduct restoration at a large scale is whether the effort can successfully be sustained in the face of active opposition within the local population. If it cannot, then the agency must develop the restoration strategy through discursive means that offers meaningful involvement to local stakeholders through broad and inclusive mechanisms. Incorporating discursive methods does not require abandoning past practices. While the literature in this field tends to construct this problem in the context of a traditional v. participatory approach dichotomy, it is in fact more useful to think about discursive processes as occupying a gradient of choices rather than mutually exclusive choices. More or less participatory, more or less inclusive are more constructive cognitive frames to adopt than are all-or-nothing frames. Employing a gradient/continuum model focuses the design task on development of desirable and feasible tactics that could be utilized to increase meaningful involvement, rather than on the various logistical, administrative, and strategic factors that inevitably preclude a perfectly participatory process (and thereby serve as convenient rationalizations against doing anything participatory.) This need to find a balance between technocratic/elite and participatory methods in forest planning is discussed in Steelman (2001). Two recent books that clearly link collaborative discourse and success in environmental public policy processes are Innes and Booher (2010) and Steelman (2010).

#### Links into the techniques literature

Adequate articulation of the skills and techniques that agencies could employ to successfully engage local populations in their restoration planning is not feasible within the scope of this article. Fortunately, there is a large and extensive literature on how to conduct multi-party decision processes related to natural resource management and planning. Much of that literature is from the US and is dominated by the

term "collaborative." Although that particular terminology is not universally employed (collaborative is rarely used in the European literature because for many it invokes WWII images of French collaborators providing assistance to Nazi occupation forces), there is a considerable global literature on these processes and the lessons that have been learned from them.

Two of the seminal works in the field are Amy (1987) and Carpenter and Kennedy (1991), although they take a more mediated negotiation approach than a public participation/civic discourse angle. More recent literature that is a lessons-learned-from-the-field approach includes Weber (2003), Koontz et al. (2004) and Sabatier (2005). A book dealing with the special case of transnational environmental disputes (specifically water in the Mid-East) is Beach et al. (2000), and on focusing on participatory process for developing local environmental sustainability strategies (specifically Agenda 21 in the UK) is Buckingham-Hatfield and Percy (1999). Although the community forestry literature (e.g., Baker and Kusel (2003)) has a somewhat different paradigm, it nevertheless is a deeply discursive model, particularly in international contexts (e.g., Ogbaharya and Tecle's research in Eritrea and Ethiopia (2010)) wherein indigenous patterns of pastoral rights may conflict with technically constructed scripts of reclamation being promoted by international aid agencies. Because it focuses on participatory research (which has particular potential for closing agency-community schisms over restoration projects), Wilmsen et al. (2008) has relevance. Two techniquebased books that focus on social learning approaches to natural resource/environmental situations are Daniels and Walker (2001) and Keen et al. (2005). Practitioners will also derive both good lessons as well as a measure of reassurance from the large number of case study articles that have been published in recent years. These seem to cover both every corner of the globe as well as a wide range of conservation contexts: Finnish forestry (Leskinen 2004) Mexican marine areas (Rodriguez-Martinez 2008), fuelwood in South Africa (Kaschula et al. 2005) and biodiversity in Canada (Kelsey 2003).

### CONCLUSION

The reader who embarked on this paper hoping to find the techniques that could be used to make forest restoration conflict free has no doubt been disappointed. The thrust of this paper is that that goal—conflict free natural resource management—is rarely if ever possible. It is more useful to understand conflict as a much more value neutral process that results from the convergence of multiple parties, their goals, their understanding of the situation and the forums and mechanisms that they can use to identify and creatively work through their goal incompatibilities. Forest restoration projects will have a better chance of success when our methods of social learning are as advanced as our methods of site classification and ecological modeling.

The recently emerging literature on policy processes as a form of discourse offers perhaps the best theoretical foundation for thinking creatively about participatory methods for forest restoration. This intellectual paradigm contends that all policy decisions—even the most technologically dense ones—are, at their core, a social discourse over values and voice. If we write environmental disclosure documents that are voluminous, painstakingly detailed, but largely devoid of any discussion of community impacts, then we are sending a very clear message about which issues matter. If we hold public hearings in which only the paid representatives of interest groups have three minutes to testify, they we are sending clear messages whose voices matter and how much difference they will make.

Improving the discourse around forest restoration is not an either/or problem. In every project there are incremental improvements to the process that would make it more accessible, inclusive, and meaningful. To the extent that we are able to make such changes, the ability for forest restoration projects to make sustained impact will be enhanced.

#### **REFERENCES**

- Amy DJ (1987) The Promise of Environmental Mediation, Columbia University Press, NY, 255 pp
- Baker M, Kusel J (2003) Community Forestry in the United States: Learning from the Past, Crafting the Future, Island Press, Washington DC, 264 pp
- Beach HL, Hammer J, Hewitt JJ, Kaufman E, Kurki A, Oppenheimer JA, Wolf AT (2000) Transboundary Freshwater Dispute Resolution, United Nations University Press, Tokyo, 324 pp
- Beierle TC (2002) The quality of stakeholder-based decisions. Risk Analysis 22, 739-749
- Bingham LB, Nabatchi T, O'Leary RO (2005) The new governance: Practices and processes for stakeholder and citizen participation in the work of government. Public Administration Review 65, 547-558
- Bouwen R, Taillieu T (2004) Multi-party collaboration as social learning for interdependence: Developing relational knowing for sustainable natural resource management. *Journal of Community and Applied Social Psychology* 14, 137-153
- Braiker HB, Kelly HH (1979) Conflict in the development of close relationships. In Burgess RL, Huston TL (Eds) Social Change in Developing Relationships, Academic Press, New York, pp 135-168
- Buckingham-Hatfield S, Percy S (1999) Constructing Local Environmental Agendas, Routledge, London, 202 pp
- Carpenter SL, Kennedy WJD (1991) Managing Public Disputes, Jossey Bass, San Francisco, 293 pp
- Collier M J, Thomas M (1988) Identity in intercultural communication: An interpretive perspective. In: Kim Y, Gudykunst W (Eds) Theories of Intercultural Communication, Sage, Newbury Park, CA, pp 99-120
- Conrad C (1990) Strategic Organizational Communication: An Integrated Perspective (2<sup>nd</sup> Edn), Holt, Rinehart and Winston Fort Worth, TX, 386 pp
- Coser L (1956) The Functions of Social Conflict, The Free Press, NY, 188 pp
- Daniels SE, Cheng AS (2004) Collaborative resource management: Discourse-based approaches and evolution of TechnoReg. In: Manfredo MJ, Vaske JV, Bruyere BL, Field DR, Brown PJ (Eds) Society and Natural Resources: A Summary of Knowledge, Modern Litho, Jefferson, MO, pp 127-136
- Daniels SE, Walker GB (2001) Working through Environmental Conflict: The Collaborative Learning Approach, Praeger Publishers, Westport, CT, 299 pp
- **Deutsch M** (1973) The Resolution of Conflict: Constructive and Destructive Processes, Yale University Press, New Haven, CT, 312 pp
- Dryzek J (1994) Discursive Democracy: Politics, Policy, and Political Science, Cambridge University Press, Cambridge UK, 286 pp
- Fischer F (1993) Citizen participation and the democratization of policy expertise: From theoretical inquiry to practical cases. *Policy Sciences* 26, 165-187
- Fischer F (2003) Reframing Public Policy: Discursive Politics and Deliberative Practices, Oxford University Press, Oxford, 280 pp
- Folger JP, Poole MS, Stutman RK (1997) Working through Conflict (3<sup>rd</sup> Edn), Longman, NY, 336 pp
- Foucault M (1984) The Foucault Reader (P. Rabinow, Ed), Pantheon, NY, 400
- Hajer MA (1997) The Politics of Environmental Discourse: Ecological Modernization and the Policy Process, Oxford University Press, NY, 344 pp
- Innes JE, Booher DE (2010) Planning with Complexity: An Introduction to Collaborative Rationality for Public Policy, Routledge, NY, 237 pp
- Kaschula SA, Twine WE, Scholes MC (2005) Coppice harvesting of fuelwood species on a South African common: Utilizing scientific and indigenous knowledge in community based natural resource management. *Human Ecology* 33, 387-418
- Keen M, Brown VA, Dyball R (Eds) (2005) Social Learning in Environmental Management: Towards a Sustainable Future, Earthscan, London, 240 pp
- Kelsey E (2003) Integrating multiple knowledge systems into environmental decision-making: Two case studies of participatory biodiversity initiatives in Canada and their implications for conceptions of education and public in-

- volvement. Environmental Values 12, 381-396
- Keough HL, Blahna DJ (2006) Achieving integrative, collaborative ecosystem management. Conservation Biology 20, 1373-1382
- Koontz TM, Carmin J, Steelman TA, Thomas CW (2004) Collaborative Environmental Management: What Roles for Government? RFF Press, Washington DC, 200 pp
- Leskinen LA (2004) Purpose and challenges of public participation in regional and local forestry in Finland. Forest Economics and Policy 6, 605-618
- Mason M (1999) Environmental Democracy, St Martin's Press, NY 266 pp
- Montefrio MJ, Sonnenfeld DA (2011) Forests, fuel, or food? Competing coalitions and biofuels policy making in the Philippines. *Journal of Environment and Development* 20, 27-49
- Munoz-Erickson TA, Cutts BB, Larson EK, Darby KJ, Neff M, Wutich A, Bolin B (2010) Spanning boundaries in an Arizona watershed partnership: Information networks as tools for entrenchment or ties for collaboration. *Ecology and Society* 15, 22 (online)
- Munton R (2003) Deliberative democracy and environmental decision-making.
  In: Berkhout F, Leach M, Scoones I (Eds) Negotiating Environmental Change, Edward Elgar, Cheltenham UK, pp 109-136
- **Ogbaharya D, Tecle A** (2010) Community-based natural resources management in Eritrea and Ethiopia: Toward a comparative institutional analysis. *Journal of Eastern African Studies* **4**, 490-509
- O'Leary R, Bingham LB (Eds) (2009) The Collaborative Public Manager New Ideas for the Twenty-first Century, Georgetown University Press, Washington, DC, 320 pp
- Ozawa C (1996) Science in environmental conflicts. Sociological Perspectives 39, 219-230
- Pagdee A, Kim Y-S, Daugherty PJ (2006) What makes community based forestry successful. A meta-study from community based forests around the world. Society and Natural Resources 19, 33-52.
- Peterson MN, Peterson MJ, Peterson TR (2005) Conservation and the myth of consensus. Conservation Biology 18, 762-767
- Peterson MN, Peterson MJ, Peterson TR (2006) Why conservation needs dissent. Conservation Biology 20, 576-578
- Pruitt DG, Rubin JZ (1986) Social Conflict, Random House, NY, 288 pp
- Sabatier PA, Focht W, Lubell M, Trachenberg Z, Vedlitz A, Matlock M (2005) Swimming Upstream: Collaborative Approaches to Watershed Management, MIT Press, Boston, 343 pp
- Schelling TC (1960) The Strategy of Conflict, Harvard University Press, Cambridge, 319 pp
- Simmons WM (2007) Participation and Power: Civic Discourse in Environmental Policy Decisions, Suny Press, Albany, NY, 204 pp
- Steelman TA (2001) Elite and participatory policymaking: Finding balance in a case of national forest planning. Policy Studies Journal 29, 71-89
- Steelman TA (2010) Implementing Innovation: Fostering Enduring Change in Environmental and Natural Resource Governance, Georgetown University Press, Washington DC, 216 pp
- Tjosvold D (1990) The goal interdependence approach to communication in conflict: An organizational study. In: Rahim MA (Ed) Theory and Research in Conflict Management, Praeger, New York, pp 15-27
- **Tjosvold D, van de Vliert E** (1994) Applying cooperative and competitive conflict theory to mediation. *Mediation Quarterly* **11**, 303-311
- van Gossum P, Arts B, de Wulf R, Verheyen K (2011) An institutional evaluation of sustainable forest management in Flanders. *Land Use Policy* 28, 110-123.
- Wall JA (1985) Negotiation: Theory and Practice, Scott, Foresman & Co., Glenview, IL, 182 pp
- Weber EP (2003) Bringing Society back in: Grassroots Ecosystem Management, Accountability, and Sustainable Communities, MIT Press, Boston, 333 pp
- Wilmsen C, Elmendorf W, Fisher L, Ross J, Sarathy B, Wells G (2008)

  Partnerships for Empowerment: Participatory Research for Community

  Natural Resource Management, Earthscan, Sterling, VA, 292 pp
- Wilmot WW, Hocker JL (2000) Interpersonal Conflict (6<sup>th</sup> Edn), McGraw-Hill Boston, 360 pp