

VOLUNTARY ENVIRONMENTAL PROGRAMS IN THE UNITED STATES

Whose Interests Are Served?

TODDI A. STEELMAN

North Carolina State University

JORGE RIVERA

The George Washington University

The appeal of voluntary environmental programs (VEPs) lies in their promise to mutually serve government, industry, and environmental interests because they can reduce administrative burdens, provide flexibility to decide how to implement environmental improvements, and work toward superior environmental performance. In practice, however, one interest may be served to the exclusion of others, and this is a charge that often has been leveled at VEPs in the United States. If VEPs are used to serve some interests at the expense of others, they are likely to lose their value as alternative policy instruments. This article details a framework involving procedural, substantive, and practical tests to determine whether the common interest has been served. This assessment framework is applied to two different VEPs in the United States: the Forest Stewardship Council Certification and the Sustainable Slopes Program.

Keywords: *voluntary environmental programs; common interest; alternative regulatory instruments; Forest Stewardship Council; Sustainable Slopes Program*

In the United States in February 2003, the George W. Bush administration launched Climate VISION (Voluntary Innovative Sector Initiatives: Opportunities Now), a voluntary, public-private partnership to reduce greenhouse gas (GHG) emissions in key industrial sectors of the economy. Climate VISION supplemented the Climate Leaders Program, already put in place in February 2002, and the Climate Challenge Program implemented between 1994 and 2000, which likewise established voluntary industry-government partnerships to encourage individual companies to reduce GHG emissions. Partners in these programs set a corporate-wide GHG reduction goal and inventory their emissions to measure progress. By voluntarily reporting data to the Environmental Protection Agency (EPA) or the Department of Energy (DOE), partners documented a publicly accessible emission reduction track record. All these programs aimed to create an incentive for industry to pursue creative, cost-effective initiatives while cutting GHG. In 2000, Climate Challenge had attracted 124 participation agreements by utilities representing about 60% of the 1990 electric generation capacity in the United States (Delmas & Montes-Sancho, 2006). Two time-series econometric studies of this program found

no statistically significant evidence to suggest that Climate Challenge participants reduced their emissions more than nonparticipants (Delmas & Montes-Sancho, 2006; Welch, Mazur, & Bretschneider, 2000). Similarly, from 2002 to 2005, the Climate Leaders program enlisted 71 participants, but only 38 had established goals to reduce GHG emissions (EPA, 2005). In 2005, no data had been made public about GHG emissions reductions by the Climate Leaders participants. In the meantime, the government claimed it was accomplishing GHG reductions more efficiently without any impact on the economy, companies were free to promote themselves as corporate environmental leaders, and the EPA ran public service announcements praising Climate Leader companies in *Business Week*, *Forbes*, and *Time* (Stempeck, 2005). In fairness, some of the businesses enrolled were engaged in exemplary GHG reduction activities. Yet the majority were free riding on the reputation of the responsible businesses while cloaking themselves in the appearance of action.

Part of the appeal of voluntary environmental programs (VEPs) is that they can serve multiple interests. Voluntary approaches promise to serve government, industry, and nonprofit interests because they reduce administrative burdens, provide flexibility to decide how to implement environmental improvements, and work toward superior environmental performance (Carmin, Darnall, & Mil-Homens, 2003; Delmas & Terlaak, 2001; Melo & Wolf, 2005; Welch & Hibiki, 2002). However, programs that purport to serve multiple interests may not necessarily serve the common interest. In practice, one interest may be served at the expense of others, and this is a charge that often has been leveled at VEPs in the United States (Andrews, 1998; Overdeest, 2005; Rivera & de Leon, 2004). For programs or policies to serve the common interest, they must pass procedural, substantive, and practical tests (Brunner, 2002, pp. 12-14). In other words, the policy or program should entail inclusive and responsible participation, take into consideration the valid and appropriate concerns of participants, and uphold the expectations of those who participated in the decision process in good faith.

The appeal of VEPs as alternative policy instruments lies in their potential to serve multiple interests. Studies indicate that VEPs without sanctions, independent oversight, and standards, such as Climate VISION, Climate Challenge, and Climate Leaders, are not effective in promoting improved corporate environmental performance (Khanna, 2001; King & Lenox, 2000; Rivera, de Leon, & Koerber, 2006). In these cases, the expectations of industry appear to be met through more flexible and cheaper environmental protection requirements, whereas those of the environmentalists and other community stakeholders are not (Levy, 1997). If VEPs are used to serve some interests to the exclusion of others, they are likely to lose their value as potentially useful regulatory instruments, thereby impoverishing the already meager tool box with which we govern. To improve the ability to evaluate VEPs, this article details and applies a common interest framework. This assessment framework is applied to two different VEPs in the United States: the Forest Stewardship Council Certification and the Sustainable Slopes Program. Enhancing the conceptual tools and capacity to appraise VEPs is key to clarifying the problems with them so that they can be improved to better serve the common interest.

WHAT ARE VOLUNTARY ENVIRONMENTAL PROGRAMS?

Generally, VEPs are promoted to (a) reduce administrative burden, create more effective compliance, and reduce regulatory costs for governments; (b)

create greater flexibility, reduce regulatory burden, and result in pollution prevention to provide an alternative to traditional command and control policies for business; and (c) achieve superior environmental performance for environmental groups. Whereas VEPs broadly defined consist of agreements with firms or facilities that require them to improve their environmental performance (Carmin et al., 2003), they also can be broken into subcategories that cover a diverse set of self-regulatory approaches. These include voluntary initiatives established and encouraged by regulators, negotiated agreements between firms and regulators and unilateral programs promoted by industry and environmental nonprofit organizations (Delmas & Terlaak, 2001; Khanna, 2001). These various voluntary approaches can cover a range of initiatives from the greening of individual products, such as the case of organic vegetables, to the greening of entire production processes, including the development of environmental management systems as in the case of ISO-14001 (Darnall & Edwards, 2006; Marshall & Standifird, 2005; Prakash, 2000).

The presence of VEPs has mushroomed, both in the United States and around the world since first appearing in the 1980s (Dowd & Boyd, 1998; Mazurek, 2002; Melo & Wolf, 2005). For instance, by 2004 in the United States alone, more than 50 VEPs had been established by the federal government with more than 13,000 participants (Brouhle, Wolverson, & Griffiths, 2003). In other OECD (Organization for Economic Cooperation and Development) countries, the number of VEPs sponsored by government was estimated at more than 350 in 1998 (Mazurek, 2002). Participation in ISO-14001 has grown exponentially to more than 66,000 firms in more than 100 countries (Delmas, 2002). The use of VEPs is also growing in developing countries. One example is the Certification for Sustainable Tourism program for hotels. This program, established in 1997 by the Costa Rican government, is probably the first performance-based voluntary environmental program created by a developing country government. It aims to verify the implementation of beyond-compliance environmental practices that are known to be valued by the large percentage of "green" tourists visiting Costa Rica (Rivera, 2004).

VEPs come in many forms. In the United States, industry has been especially active in sponsoring VEPs. Responsible Care, established in 1988 by the Chemical Manufacturers Association (now Chemistry Council), is probably one of the best known initiatives in the United States (Garcia-Johnson, 2000; King & Lenox, 2000). Likewise, the American Forest & Paper Association adopted the Sustainable Forestry Initiative, a self-regulatory program, in 1995 (Sustainable Forestry Initiative, n.d.). Examples of other industry sponsored voluntary programs established in the United States include the Sustainable Slopes Program by the National Ski Areas Association, the Quest for the Best Program by the American Textile Manufacturers Institute, the Coatings Care Program by the National Paint and Coatings Association, and the Strategies for Today's Environmental Partnership by the American Petroleum Institute. Major multinational corporations increasingly are establishing supply-chain mandates that require their suppliers, located around the world, to participate in VEPs as a condition to continue their commercial activities (Darnall, 2002; Hudson, 2006; Nash, 2002). For instance, Ford, General Motors, and DaimlerChrysler require ISO-14001 certification from all their suppliers (Hudson, 2006). Dell, Hewlett-Packard, and IBM mandate adoption of the Electronics Industry Code of Conduct by the members of their supply chain (Hudson, 2006). Also, in the case of the

forestry industry, Home Depot and Lowe's, the largest retailers of lumber in the world, give preference to Forest Stewardship Council (FSC)-certified suppliers (Hudson, 2006). Voluntary programs have also been established by environmental nonprofit organizations. Some of the best known programs include the Fair Trade Certification, Social Accountability International Standards, and Rain Forest Alliance Certification (Melo & Wolf, 2005)

As these trends indicate, VEPs are an increasingly popular regulatory option both in the United States and abroad. The numerous permutations of VEPs leave governments, businesses, environmentalists, and others with different options to pursue (Marshall & Standifird, 2005). Evaluative criteria by which to judge VEPs is worthy of greater examination if these new regulatory alternatives are to serve all parties well (Carmin et al., 2003; Harrison, 2002).

THE COMMON INTEREST

Commitment to a policy goal is necessary to provide direction for environmental governance. Advancing the common interest is the appropriate goal of governance in a democracy (Brunner 2002; Clark 2002; Lasswell & McDougal, 1992). The common interest is made up of interests widely shared by members of a community. A common interest is at stake "whenever people who act on their perceived interests also interact enough to form a community around an issue" (Brunner 2002, p. 12). When considering VEPs, the community of interests could include industry, government, nonprofit and nongovernmental groups such as environmentalists and third-party certification organizations, local communities and firms' employees directly affected by corporate environmental practices, and scholars interested in participating in or researching VEPs. In the abstract, the common interest is difficult to identify. The common interest and the community of relevant interests become more concrete when a specific context is investigated.

Although there is no single formula for determining whether the common interest is achieved in all situations, there are three tests that can be applied to assess whether the common interest is served in particular contexts. Brunner (2002, pp. 12-14) details the procedural, substantive, and practical tests in the abstract, and we apply them here to illustrate how these criteria provide insight into the achievement of the common interest as they relate to VEPs. The *procedural test* suggests that inclusive and responsible participation serves the common interest. Otherwise, the policy is unlikely to reflect the interests of those excluded. In this sense, participants should be representative of the community as a whole. To ensure that part of the community is not served at the expense of others, participants must be willing to serve the community and be held accountable for their decisions. The *substantive test* acknowledges that valid and appropriate concerns should be considered, whereas invalid or inappropriate concerns should be discounted. To be considered a valid and appropriate interest, the concern expressed should be compatible with broader community goals and be supported by existing evidence. Finally, the *practical test* recognizes that the policy or decision needs to work. Those who participated with valid concerns should have their expectations corroborated in the prevailing practices. Altogether, these three tests provide a framework for assessing the degree to which the common interest is served in a given VEP. In fleshing

out how the criteria are applied to VEPs, we build on Brunner's work to provide more specific criteria for appraising the achievement of the common interest in the VEP context in the United States.

PROCEDURAL TEST: INCLUSIVE AND RESPONSIBLE PARTICIPATION

The procedural test means that to serve the common interest, the proposed policy should entail an inclusive process with responsible participation while building accountability for the actions suggested and taken (Brunner 2002, pp. 12-13). Not much is known about the procedural dynamics involved in most VEP programs. Most of the studies conducted to date focus on the industries and businesses that participate in VEPs rather than the broader participation in the design, implementation, and evaluation of VEPs. Inclusivity as a function of VEP perceived legitimacy is raised as an important issue (Carmin et al., 2003).

A survey of 61 VEP program managers revealed that corporations, government, environmental nongovernmental organizations, and certification organizations are the relevant participants involved in the design of many VEPs (Carmin et al., 2003). Of the 61 VEP programs, government sponsored 42, whereas industry and third parties sponsored 9 and 10, respectively (Carmin et al., 2003). This study revealed variations in the diversity of stakeholders, as well as the intensity of involvement of the stakeholders. Government programs were the most diverse, with an average of 5.24 different stakeholder groups. Federal government and industry associations were the most active participants in these programs. Third party-sponsored VEPs were the least diverse, with 3.20 stakeholder groups on average. Industry associations and the federal government were the most active participants in the third-party programs. The study also tracked intensity of involvement in the design of VEPs. Industry groups were the most intensely involved participant in the design of government-sponsored and third party-sponsored VEPs. These findings suggest that all the studied VEPs are at least somewhat inclusive of diverse interests in their design, with government programs being the most inclusive. Nonetheless, the intensity of involvement, especially that of industry, indicates that some interests may be more vigorously represented than others.

Responsible participation means that those involved in VEP processes do not make demands that are incompatible with needs of other participants and that participants are held accountable for their decisions and subsequent actions. Environmentalists have been especially concerned about holding business and government accountable for responsible participation in VEPs. In the United States, environmentalists are not inclined to participate in VEPs organized by government and industry because some perceive them as greenwashing schemes (Dietz & Stern, 2002; Overdevest, 2005). Environmentalists also fear that their participation may give credibility to programs that may not end up promoting superior environmental performance by corporations (Dietz and Stern, 2002; King and Lenox, 2000). Evidence supports these claims among some businesses. The opportunistic adoption of VEPs constitutes one of the main obstacles to advancing the common interest through VEPs (King and Lenox, 2000; Lyon & Maxwell, 2001). Under these scenarios, businesses participate in VEPs to gain an improved green reputation, technical assistance, access to green

markets, friendlier environmental inspections by government, and preemption of regulations without actually achieving superior environmental performance. This free-riding behavior has been documented in a variety of VEP programs, including Responsible Care (King & Lenox, 2000), WasteWise (Delmas & Keller, 2005), Sustainable Slopes (Rivera & de Leon, 2004; Rivera et al., 2006), and Climate Challenge (Welch et al., 2000). Even in the case of ISO-14001, the evidence is mixed (Toffel, 2005; Potoski & Prakash, 2005).

The institutional environment in the United States also provides obstacles to more inclusive participation. In the United States, the relationships between government, businesses, and environmentalists do not encourage responsible and accountable voluntary involvement. Relationships between these participants are predominantly adversarial and rely heavily on litigation to settle disputes (Cashore & Vertinsky, 2000; Delmas, 2002; Welch & Hibiki, 2002). In contrast, Europe and Japan enjoy greater cooperation between corporations and government agencies in environmental protection (Cashore & Vertinsky, 2000; Delmas, 2002). For instance, the U.S. EPA has little flexibility in how it applies mandatory environmental regulations and is often sued by environmentalists if it tries to enforce them flexibly. Conversely, regulatory agencies in Europe, Japan, and Costa Rica have more flexibility on how they enforce their regulations and are allowed to experiment with voluntary approaches (Welch & Hibiki, 2002; Delmas, 2002; Rivera, 2004). Firms in these countries are less concerned that third-party environmental audits could be used as evidence in lawsuits, whereas in the United States, environmental auditors do not yet enjoy attorney-client confidentiality privileges (Delmas, 2002). Finally, in Europe there is the perception that environmental regulatory agencies are more committed to environmental protection than is the Bush administration's EPA. Hence, environmentalists and other stakeholders are more willing to experiment with VEPs in Europe.

To fulfill the procedural criterion, VEPs need to demonstrate that they included the relevant participants for their program of concern and that the participants demonstrated responsible involvement in the process and were held accountable for their actions. As the broad review of the literature above indicates, many programs, especially government-sponsored programs, are inclusive of multiple interests in the design of VEPs. The research also reveals that environmentalists are less active participants than industry. This may be explained partially by environmentalists' concerns about accountable and responsible participation in the programs by industry and government. Businesses that engage in opportunistic adoption of VEPs clearly violate the responsible participation requirements in the procedural criteria. Finally, institutional incentives, at least in the United States, may inhibit responsible participation by environmental and business interests alike.

SUBSTANTIVE TEST: VALIDITY AND APPROPRIATENESS OF CONCERNS

All valid and appropriate concerns raised by participants should be taken into account as suggested by the substantive test (Brunner, 2002, pp. 13-14). To determine whether a concern is valid and appropriate, it should be supported by the evidence that is available and be consistent with broader community goals. Industry, government, and environmentalists have different concerns, and the

main challenge in meeting the substantive criteria is making these individual goals compatible.

Industry

Industry associations and individual firms, including privately held, state-controlled, and publicly traded businesses, have participated in VEPs and are motivated by different concerns to participate in them. Andrews (1998) believes that industries are motivated to participate in VEPs for one of two reasons. First, some industries want to redesign their products and processes to achieve superior environmental performance and need regulatory flexibility to do so. Second, other industries may bristle against conventional regulatory regimes and would like to pursue new alternatives. Both of these categories of concerns could be compatible with the broader common interest depending on the contexts in which they are expressed. More specific concerns articulated by business include addressing public fears about environmental impacts; increasing the flexibility for reaching environmental goals; avoiding, affecting, or delaying regulation; and promoting consistency and industry-specific environmental solutions (Carmin et al., 2003; Levy, 1997). Although most of these goals are likely to be compatible with the broader common interest, it is unlikely that avoiding or delaying regulations are concerns that would be widely shared with the environmental community. Pollution prevention as a cost-saving measure for business may very well be compatible with other interests, thereby satisfying the substantive criteria, but an interest in regulatory reduction alone as a cost-saving measure may not.

It is in the interest of business, government, environmentalists, and others to seek the most efficient use of resources, and in many cases, the businesses themselves are best prepared to identify where these efficiencies might occur. However, not all of business's concerns may be compatible with broader goals shared by other participants in pursuit of a common interest. With this in mind, it is important to consider what constitutes an effective regulatory mechanism and whether some of industries' expectations are warranted by the evidence available. Andrews (1998, p. 180) suggests that it is less likely that business is really correcting long-term inefficiencies, because these should already be accounted for. Rather, businesses are more likely adapting to new regulatory costs. He cautions,

If this later view is correct, it is important that any "self-regulation" approach not involve relaxing any regulatory requirements that are in fact the stimulus for self-regulation, so long as those regulations also reflect a reasonable surrogate for the social costs that are otherwise imposed by the pollution itself.

If this line of argument is reasonable, then programs that call for voluntary measures as substitutes for regulations may not be compatible with more comprehensive goals.

Government

In the United States, VEPs are most commonly initiated and funded by government agencies like the EPA, the DOE, and the U.S. Forest Service (Carmin et al., 2003). Governments are concerned about creating less administratively burdensome

and more efficient and effective regulatory options to achieve environmental goals. For instance, traditional command and control regulatory approaches are known to suffer from a variety of challenges, including fragmentation among multiple agencies and jurisdictions, inflexibility, complexity, high administrative costs, and high compliance costs. VEPs may allow government to avoid regulatory capture, promote trust that the agency is working for the public good, minimize conflict, and enhance program legitimacy and acceptability by industry and environmentalists (Carmin et al., 2003). As articulated, these demands are valid and appropriate if they are supported by existing evidence and are consistent with environmental and business demands (Brunner 2002).

Besides the concerns about making environmental regulations more efficient, more flexible, and effective, the increased support of VEPs by the Bush administration may involve additional interests that have purposely not been clarified (Vig & Kraft, 2005). Critics have argued that the administration's endorsement of VEPs, especially those with no oversight and sanctioning mechanisms, reveals an interest in using VEPs to dismantle all types of mandatory regulations—from air quality standards and wetlands protection to, most recently, the Endangered Species Act (Vig & Kraft, 2005). Interviews with high-level career officials (who wished to remain anonymous) at the EPA suggest that the Bush administration's goal with VEPs is to weaken as much as possible the environmental regulatory framework built during the last 30 years. According to these career EPA officials, current political appointees, who previously had been working for the major industry associations, see VEPs as a means to weaken the existing regulatory framework. VEPs allow them to claim credit for new environmental protection programs, which may be intentionally designed to be ineffective, while weakening or phasing out traditional command and control regulations (Lyon & Maxwell, 2004). If evidence were to support these claims, then the additional interest of the Bush administration could not be considered valid or appropriate, thereby failing the substantive test. If environmental goals are not served, it is unclear how the behavior of government differs in this case from what would happen under regulatory capture. Government becomes complicit in helping industry achieve its goals at the expense of environmental goals.

Environmental Groups

In the United States, many environmental groups are distrustful of the VEPs promoted by industry and government. These programs are perceived as greenwashing initiatives where environmental interests will be subsumed to other interests in an arena dominated by industry or government agencies captured by industry (Hudson & Hudson, 2003; Lyon & Maxwell, 2004; Overdevest, 2005; Rivera et al., 2006). Environmentalists are predominantly concerned about attaining superior environmental performance and in exchange will give greater flexibility in traditional regulatory settings—this is known as quid pro quo (Marcus, Geffen, & Sexton, 2002). Superior environmental performance is termed beyond compliance. In other words, if businesses get better environmental results than would be achieved by full compliance with current regulations, then existing requirements are waived. The benefits of quid pro quo are increased regulatory flexibility, increased and cost effective environmental protection, incentives to create more innovative technology, increased waste minimization and pollution

prevention, and more cooperation between regulators, industry, and environmentalists (Marcus et al., 2002). In light of the skepticism about industry- and government-sponsored programs and their commitment to superior environmental performance, environmentalists' response has been to create their own VEPs with mechanisms that prevent substandard performance (Hudson & Hudson, 2003; Marshall & Standifird, 2005).

To achieve their goals of superior environmental performance, environmentalists have discovered that they can take advantage of small, new market preferences for greener behavior arising from supply chain, consumer, and/or media demands. They have created VEPs that promote superior environmental protection practices by credibly certifying beyond-compliance environmental performance by firms in industries such as forestry (e.g., FSC), agriculture (e.g., Rain Forest Alliance Certification and Fair Trade), tourism (e.g., Certification for Sustainable Tourism Certification Network of the Americas), and ISO-14001, which provides different types of environmental management system certification for all types of industries (Darnall, 2003; Marshall & Standifird, 2005; Melo & Wolf, 2005). Environmentalists' concerns are consistent with broader community goals insofar as they foster mutual gains such as providing more flexible regulatory alternatives and reducing administrative burdens.

To fulfill the substantive criterion, participants need to demonstrate that their concerns are valid and appropriate in a given circumstance. Existing evidence from industry, government, and environmentalists indicates that some concerns can be labeled valid and appropriate, whereas others can not, especially when considered in light of broader community goals. Evidence indicates that industry in some cases may try to further its own interests at the expense of environmental and governmental interests. In other cases, government may be captured, thereby subsuming environmental concerns to those of industry. The concept of *quid pro quo* best articulates the mutual gains that can be expected when all participants honor the valid and appropriate concerns offered by fellow participants.

PRACTICAL TEST: CORROBORATING EXPECTATIONS

The final test of the common interest is practical. Participants with valid and appropriate concerns should have their expectations corroborated in practice. Thus, the practical test evaluates whether the policy works for those involved (Brunner, 2002, p. 14). With VEPs, much of the evidence about whether expectations are corroborated has focused on environmental and industry concerns. Less is known about whether governmental expectations are corroborated.

Only a handful of studies have been completed that evaluate VEPs (Khanna, 2001; Toffel, 2005). The findings from these studies indicate that environmental interests are less likely to have their expectations corroborated than industry under specific conditions. In these cases, industries that seek greater regulatory flexibility without necessarily achieving superior environmental performance appear to have their expectations met. Thus, the practical test criterion is not satisfied for all participants, indicating that the common interest is not served. In the studies that have been completed, VEP participants perform worse environmentally than non-VEP participants before they enroll in the program (Darnall & Carmin, 2005; King & Lenox, 2000; Lenox & Nash, 2003; Naimon, Shastri, & Sten, 1997; Rivera & de Leon, 2004), and some continue to exhibit inferior

environmental performance after participation in the program (Delmas & Montes-Sancho, 2006; King & Lenox, 2000; Naimon et al., 1997; Rivera et al., 2006). Firms that engage in environmental underperformance appear to enroll strategically in programs where no stringent demands are made of them and sanctions are not credible (Toffel, 2005, p. 84).

The design of the VEP appears to influence whose interests are served by the respective programs. Nongovernmental organizations and researchers have suggested that industry-sponsored programs may lack implementation, monitoring, and reporting protocols that may lead to lower environmental standards (King & Lenox, 2000), whereas third-party certification efforts may include more stringent implementation, monitoring, and enforcement requirements (Toffel, 2005). Opportunistic businesses seek out programs with no performance standards, no sanctions, and no third-party oversight to disguise poor performance and adopt the outward appearance of action while not making efforts to improve environmental performance (Khanna, 2001, p. 312). In contrast, VEPs that included third-party certification saw enrollments from firms that engaged in superior environmental performance before the program and after the program (King & Lenox, 2001; Melo & Wolf, 2005). These programs are effective in promoting beyond-compliance environmental protection when they include strong institutional mechanisms to prevent free-riding behavior. These mechanisms include performance-based standards, independent-periodic oversight, and sanctions and rewards for green behavior, respectively. In these cases, the expectations of environmentalists and industry appear to be corroborated. Environmentalists get superior environmental performance and industry receives flexibility and regulatory relief. The common interest would be served in these cases.

CASE STUDIES: FOREST STEWARDSHIP COUNCIL CERTIFICATION AND SUSTAINABLE SLOPES

VEPs can consist of agreements with firms or facilities that require them to improve their environmental performance and can be formed in partnership with government, environmentalists, and others. The case studies below illustrate two types of VEPs. One is a nongovernmental organization-sponsored program, the other is an industry-sponsored program. The procedural, substantive, and practical criteria discussed above are applied below. Specific application makes it easier to identify practices and strategies that are associated with serving the common interest or not and provide insight into how we might refine VEPs to better serve common-interest purposes.

The Forest Stewardship Council Certification

FSC is an international network that promotes sustainable management of the world's tropical, temperate, and boreal forests, as well as plantations. FSC does this through a labeling process that identifies products as coming from certified lands and through certified systems. Chain of custody certification is completed separately from certification of forest management operations, and every entity controlling certified wood throughout the chain of custody must be separately certified (Meridian Institute, 2001). Labels are acquired through a third-party certification process. According to many, FSC provides the gold standard by

which other VEPs could be judged because of its emphasis on independent, performance-based verification, broad participation by industry, environmentalists, and others, and sanctions for noncompliance (Cashore, Auld, & Newsom, 2004; UNEP-WCMC, WWF, FSC, & GTZ, 2006). Ten performance-based “principles” and additional “criteria” address social, economic, ecological, cultural and spiritual concerns to assist consumers in purchasing wood and other forest products to preserve forest resources for future generations (FSC, 2006b). As of 2006, FSC has offices in more than 34 countries and had awarded 731 certifications that covered 50 million hectares in 60 countries (FSC, 2006b; UNEP-WCMC et al., 2004), which includes 9 million acres certified in the United States (Washburn & Miller, 2003).

Procedural Test: Inclusive and Responsible Participation

FSC involves a diverse range of social, economic, and environmental organizations and individuals. Procedurally, FSC is an open-membership association consisting of three chambers—social, economic, and environmental. At the international level, FSC is governed by a board of directors elected from its membership. The international committee develops organization-wide policies and procedures from each national program. Processes are transparent, independent, and participatory to develop international, national, and subnational FSC standards (FSC, 2006a). In the United States, FSC has its own board of directors who are selected from U.S. membership. Three members are elected from each of the membership chambers (social, economic, and environmental) to make a total of nine (Washburn & Miller, 2003). The social chamber includes

non-profit, non-governmental organizations, indigenous peoples associations, labor unions, as well as research, academic, technical institutions, and individuals that have a demonstrated commitment to . . . delivering forest products to the market in a way that does not infringe on the rights of other stakeholders. (FSC, 2006a)

The environmental chamber “includes non-profit, non-governmental organizations, as well as research, academic, technical institutions and individuals that have an active interest in environmentally viable forest stewardship” (FSC, 2006a). The economic chamber includes employees, certification bodies, industry, and trade associations wholesalers, retailers, traders, consumer associations, and consulting companies from both the profit and nonprofit sectors (FSC, 2006a). These representative procedures make clear that FSC places a high priority on avoiding domination by business interests while encouraging high standards for certification (Cashore et al., 2004). More than 150 stakeholders from the forestry, environmental, social, and business sectors participated to create the nine regional standards that compose the U.S. accreditation standards (Washburn & Miller, 2003). FSC’s governance structure places great emphasis on the equitable inclusion of multiple interests through processes that hold responsible participants accountable for their decisions.

Substantive Test: Validity and Appropriateness of Concerns

Environmental groups became interested in FSC as an alternative means to strengthen regulatory oversight of private forestlands (Natural Resources Defense

Council, 1997). Certification could provide an external signal to buyers and others that a given forest producer was meeting high environmental and social standards. Increasingly, environmental groups have also been concerned with maintaining a credible and responsible certification program. These concerns have been embraced by many of the other participants in FSC as valid and appropriate. Retailers, like Home Depot, and some forests companies and nonindustrial private forest owners saw niche market opportunities in the FSC certification process (Hayward & Vertinsky, 1999; Jenkins & Smith, 1998). Their concerns were how to gain direct market benefits from price premiums and a growing market share that would come with being producers of certified wood products. In addition to direct market benefits, certification provided a signaling benefit because businesses could be recognized as sustainable producers and practitioners of good forestry. This signal has been an important concern for both large and small private enterprises (Rickenbach & Overdevest, 2006). In some cases, larger companies were unaware of or not interested in the initial development of FSC (Wallinger, 1995) and thus opted not to participate in the FSC processes. FSC has been criticized by some business interests as being too expensive and prescriptive (Cashore et al., 2004). FSC changed many of its programs to accommodate these concerns, but these efforts did not change the opposition of some industrial forest companies and smaller nonindustrial forest owners. The changes did allow FSC to gain support from some state-owned government lands and some mid-sized companies and private forest landowners in the United States (Hayward & Vertinsky, 1999). Environmentalists, retailers, large and small private enterprises, and land managers have expressed valid and appropriate interests that have been taken into consideration in FSC certification processes. Some interests have been discounted as not being valid and appropriate given the interests of the broader community in maintaining a credible certification process.

Practical Test: Corroborating Expectations

To date, FSC has maintained support from a broad cross-section of environmental and business interests. Consider that the Natural Resources Defense Council, World Wildlife Fund, and The Nature Conservancy all support FSC, as do major retailers that have adopted wood procurement preferences, including Home Depot, Ikea, Andersen Windows, Kinko's, and Lowe's Home Improvement. Small and large forest owners and timber companies in 54 countries, including two of the largest pulp and paper companies in the world—Assidomain and Stora in Sweden—also support FSC (Natural Resources Defense Council, 2002).

Evidence indicates that certification processes have been responsible for changes in on-the-ground practices. A survey of land managers indicated that ecological and silvicultural practices were most commonly altered as part of the forest certification process (Hartsfield & Ostermeier, 2003). While some users of the certification process have had some expectations corroborated, others have not. Studies of end consumers, participants in the production chain, land management organizations, and certified firms indicate that substantial price premiums have not materialized from FSC certification processes (Anderson & Hansen, 2004; Hartsfield & Ostermeier, 2003; Vlosky, Gazo, & Cassens, 2003). Small and larger private enterprises as well as public and nonprofit users were dissatisfied with the market aspects of certification (Rickenbach & Overdevest, 2006). Public and nonprofit groups have been more satisfied with the signaling

benefits offered by certification than have private enterprises (Rickenbach & Overdeest, 2006). Most land managers surveyed felt that their signaling goals had been moderately or highly met (Hartsfield & Ostermeier, 2003). Overall, large private enterprises, public entities, and nonprofit organizations rated their experience with FSC as “mostly positive,” whereas small private enterprises rated it “neither positive nor negative” (Rickenbach & Overdeest, 2006, p. 145). According to Hartsfield and Ostermeier (2003, p. 35), “FSC certification is effectively addressing the interests of forest stakeholders calling for greater forest management accountability.”

Implications for the Common Interest

To fully serve the common interest, FSC needs to meet procedural, substantive, and practical criteria. FSC appears to satisfy the procedural and substantive criteria while not meeting all the dimensions of the practical criteria. FSC has established a governance structure that takes into consideration multiple interests to ensure responsible and accountable participation. The valid and appropriate concerns expressed by business and environmentalists are considered and balanced with those of the broader community into which they are integrated.

Practically, the expectations for realizing direct economic benefits have not been fulfilled for industry or environmentalists, although many other expectations on behalf of a wide range of participants have been satisfied. To fully serve the common interest, FSC needs to clarify how it could do a better job securing the direct economic benefits that have been identified by many participants as important to them. An inability to provide these benefits in the long run could be sufficient to reduce participation by those who value direct economic benefits most highly. Large defections ultimately could threaten the certification ideal itself. Others might value the signaling and additional benefits adequately to ignore the failure to provide direct economic benefits. The failure of the market to return direct economic benefits for certification is in many ways a phenomenon beyond FSC’s control and yet may be crucial to its long term survival. Although FSC appears to serve the common interest for the most part in the present time, it is unclear whether it will continue to do so in the future.

Sustainable Slopes Program

In June 2000, the National Ski Areas Association (NSAA) launched the Sustainable Slopes Program (SSP). In addition to articulating an environmental vision and mission statement for the industry, the SSP’s goal has been to demonstrate the ski industry’s “commitment to good environmental stewardship” and to “provide a framework for resorts across the country to implement best practices, assess environmental performance, and set goals for improvement in the future” (NSAA, 2000). The SSP charter involves 21 general categories of environmental protection for ski area planning, operations, and outreach that participant resorts are supposed to adopt. The ski industry’s decision to create this voluntary program followed years of increasing media scrutiny and criticism by environmental groups (Briggs, 2000). Over the years, the number of resorts endorsing the SSP has increased from 160 in 2000 (33% of U.S. ski areas) to 178 in 2005 (36% of U.S. ski areas; NSAA, 2000, 2005). However, the number of resorts completing the SSP’s annual self-assessment tool, a key instrument used to

evaluate the environmental effectiveness of the program, fell from a high of 90 (52%) resorts in 2002 to 54 (30%) resorts in 2005 (NSAA, 2002, 2005).

Procedural Test: Inclusive and Responsible Participation

Before its official launching, between 1999 and 2000, the NSAA actively encouraged the participation of environmental and other groups in the design of its voluntary initiative, the SSP (Rivera et al., 2006). NSAA sought input from multiple stakeholders through regional meetings in different parts of the United States and received comments and contributions from more than 200 organizations, including federal and state government agencies and reputable national environmental organizations such as The Nature Conservancy, the Sierra Club, and the Natural Resources Defense Council (NSAA, 2000).

A number of governmental agencies and a few environmental nonprofit organizations involved in this consultative process became official partners of the SSP, agreeing to “support the development” of the Sustainable Slopes’ Principles (NSAA, 2000). They include, among others, the EPA, the U.S. Forest Service, the DOE, the U.S. National Park Service, the Colorado Department of Public Health & Environment, Conservation Law Foundation, Leave No Trace, and The Mountain Institute (NSAA, 2000). Yet, none of the major environmental groups involved during the creation of the SSP, such as the Sierra Club, the Natural Resources Defense Council, and The Nature Conservancy, agreed to become “official partners” of the program. Additionally, small western environmental groups became outright opponents of the program, labeling it a greenwashing initiative. These environmental groups and the media have criticized the SSP for its lack of performance standards and independent oversight and for ignoring many important areas of environmental protection (see e.g., Hartman & Zalaznick, 2003; Langeland, 2002). According to the director of the Ski Areas Citizens Coalition, an umbrella coalition of western environmental groups highly critical of the SSP, the ski industry used the “consultation process” to gain symbolic legitimacy for the program without incorporating the suggestions and inputs provided by environmentalists and local communities (J. Berman, Director of Ski Areas Citizens Coalition, personal communication, April 12, 2005). Members of the Ski Areas Citizens Coalition also believe that their participation in the consultation process organized by NSAA provided political cover to government agencies such as the Forest Service and the EPA to officially endorse the program.

Procedurally, environmentalists were involved in initial discussions, but some declined to stay involved due to concerns about the final program criteria. The design and standards of the SPP formally launched in 2000 were not responsive to the monitoring and environmental performance issues raised by some national and local environmentalists. These groups felt that they could not hold industry accountable for superior environmental performance, and they opted not to participate as partners in the final program. Thus, the procedural criteria were violated due to a lack of mechanisms that could guarantee accountability and responsiveness to the consultative processes organized by the industry association.

Substantive Test: Validity and Appropriateness of Concerns

Environmental groups, particularly in the Western United States, began in the 1990s to pressure ski areas to improve their environmental protection practices as

concerns over their negative impact on sprawl, air quality, water quality, and wildlife protection increased with the expansion of the most popular resorts in the United States (Briggs, 2000). These groups wanted the ski industry to become a leader in environmental protection given that environmental quality was a recognized priority to skiers and also given the heavy use of national forest lands by western ski areas (Clifford, 2002; NSAA, 2000; Rogers, 2002). Environmentalists also expected that any credible voluntary program established by the ski industry had to distinguish beyond-compliance environmental performance by the most proactive resorts (Ski Area Citizens Coalition, 2005).

The ski industry initially reacted dismissively as they perceived themselves as a low-environmental-impact sector of the economy, particularly when compared with forestry, mining, and other economic activities traditionally performed on national forest lands. However, this dynamic changed after the 1998 arson attack on a Vail ski lodge. Purportedly, the work of a radical environmental group concerned about an expansion project undertaken by Vail, this arson incident received widespread media attention, seemingly united environmentalists, and subjected the ski industry to significant scrutiny (Glick, 2001; Sachs, 2002).

In the aftermath of the arson attack, the NSAA met and worked with ski area owners, government agencies, and environmental groups to improve the industry's environmental image and develop better relationships with major environmental organizations. The industry appeared to focus on palliating the increased demands for more environmental regulations and monitoring of ski areas' activities and real estate expansion plans (Glick, 2001; Sachs, 2002). The SSP was created a year later as the main mechanism to show the industry's new commitment to "promoting environmental awareness and striving to be a model of sustainable development" (NSAA, 2000). Yet, the SSP design did not include mechanisms to distinguish the best environmentally performing ski areas and has allowed "dirty" participants to continue marketing their professed voluntary beyond-compliance practices (Rivera et al., 2006).

The U.S. Forest Service, and to a lesser degree other federal government agencies, played a key role in this process. For instance, the Forest Service contributed \$30,000 to finance the creation of the SSP and later funded data collection efforts used by the NSAA in the creation of SSP annual reports (Clifford, 2002; NSAA, 2005). The Forest Service and the NSAA have also established additional partnerships to promote ski sports (Clifford, 2002). The active role by the Forest Service in partnering with the ski industry reflects the fact that outdoor recreation surpasses timber logging as the most important economic activity in national forests (Wharton, 1997 a, b). More than 90% of ski areas in the Western United States are located in national forest lands and must pay permit fees ranging from 1.5% to 4% of their revenue to the Forest Service (GAO, 1996; Rogers, 2002, 2003). These fees are used in part to fund special trust funds that partially finance overhead expenses and equipment purchases for local Forest Service offices, potentially creating an incentive to sacrifice environmental enforcement responsibilities and promotion of beyond compliance, such as the ones ostensibly sought by the SSP, for the encouragement of increased ski area activities and expansion (Gorte, 2000; Rivera & de Leon, 2005).

Additionally, the Forest Service is required by law to share 25% of its gross commercial revenue from national forests with local counties for roads and school financing (Gorte, 2000; Rey, 2005).¹ Accordingly, local western congressional representatives and county officials with national forest lands in their districts

also tend to actively advocate for increasing economic activities in national forests against the demands for enhanced environmental protection (Dombeck, 2000; Gorte, 2000; Rey, 2005). Substantively, the Forest Service is concerned about environmental protection and economic returns to its agency. Within the context of SSP, concerns about environmental protection are valid, whereas concerns about increasingly economic revenues are not widely shared. This case approximates an example of regulatory capture, whereby government is complicit in helping industry achieve its goals of appearing more proactively environmental without making substantive changes that are consistent with broader community goals, including superior environmental performance.

Practical Test: Corroborating Expectations

From the perspective of the NSAA, the SSP has significantly helped to meet the main concerns of the ski industry. It has allowed the major ski companies to continue their expansion plans and simultaneously improve the industry partnership with federal and state agencies responsible for enforcement of environmental regulations. Additionally, since the SSP launching in 2000, the industry has not confronted enhanced regulatory burdens and scrutiny in the media (Rivera et al., 2006). The continued official endorsement of the SSP by federal government agencies—and funding in the case of the U.S. Forest Service—seems to indicate their satisfactory perception of the program as an “innovative–flexible–cost efficient” policy tool that promotes economic growth and environmental protection. According to the NSAA (2005), “The number one reason for supporting Sustainable Slopes, expressed either directly or indirectly by all partnering organizations, is that it leads to improved environmental performance.”

Unfortunately, third-party systematic assessments of the environmental effectiveness of the SSP suggest that it has not significantly promoted the adoption of beyond-compliance environmental practices by participant ski areas (Rivera & de Leon, 2004; Rivera et al., 2006; Sachs, 2002). These independent studies indicate that opportunistic ski areas with lower environmental performance appear to be more likely to participate in the SSP, and once enrolled they do not seem to show significantly higher overall environmental performance than do nonparticipant ski areas (Rivera & de Leon, 2004; Rivera et al., 2006). These free-riding problems may reflect the SSP’s purely voluntary nature as it lacks performance-based standards, independent oversight of participants, and sanctions for poor performance. Thus, despite the industry association’s claims to the contrary, the SSP fails to corroborate the expectations of environmental groups for superior environmental protection, thus failing the pragmatic test.

Implications for the Common Interest

The SSP’s implementation experience suggests that this program appears to fail the test of the common interest on procedural, substantive, and practical grounds. Procedurally, the SSP did not foster a culture of responsible and accountable involvement. Notably, the most reputable environmental groups defected from being formally associated with the final program as official partners. Valid concerns for superior environmental performance by environmentalists do not seem to have been taken into account by the industry association. Industry’s interest in being perceived as more environmentally friendly took

precedence over a program that could have achieved actual superior environmental performance if designed with appropriate standards and monitoring mechanisms. In the process, government agencies such as the Forest Service appear to have served the interests of industry at the expense of environmental interests, thereby failing to honor these broader community goals. Existing evidence indicates that although industry and government expectations are corroborated, the expectations of environmentalists are not. Finally, although the number of participants in the SSP has remained relatively constant, a significantly lower proportion of its members self-reporting their efforts again calls into question the program's longer term effectiveness.

CONCLUSIONS

VEPs are valuable tools that can supplement the regulatory toolkit. Their strength lies in serving the multiple interests that can come together to benefit from more flexible regulation, lower administrative burdens, and superior environmental performance. Many VEPs, especially in the United States, have been criticized for serving industry's interests at the expense of environmental interests. These trends are important to clarify because they have the potential to devalue this important regulatory tool. The three tests of the common interest that we apply here begin to develop a language and a vocabulary to express how and why some VEPs move us closer to serving the common interest than do others.

Our review of literature and the case studies suggest that there are specific weaknesses identified by the procedural and substantive tests when the common interest is not served. For instance, procedurally, some interests might be excluded, ignored, or less vigorously represented than others. This exclusivity can lead to misrepresentation or underrepresentation, which can contribute to processes that do not hold all participants responsible or accountable. Substantively, some valid and appropriate concerns may be ignored. Likewise, not all concerns put forth may be considered valid and appropriate in light of broader community interests or existing evidence. For instance, the desire by industry to receive regulatory flexibility without commitment to superior environmental performance is invalid in light of the concerns expressed by environmentalists. Opportunistically participating in VEPs to avoid regulations violates procedural criteria for responsible and accountable behavior as well as invalidates a participant's interest as appropriate, given broader concerns on behalf of the community. Pragmatically, research indicates that there are design guidelines that can lead to common interest solutions. Factors that can condition the development and implementation of effective VEPs include performance-based standards, third-party oversight, and sanctions or rewards. These conditions require intensive cooperation, flexibility in the application of environmental regulations, and a high-level commitment to substitute or supplement command-and-control regulations for VEPs. In many cases, they seem to be designed and implemented under a credible threat to enforce existing mandatory regulations and/or enact new mandatory regulations (Khanna, 2001; Lyon & Maxwell, 2004).

The case studies indicate that FSC and SSP differ dramatically along the procedural, substantive, and practical criteria. Accordingly, FSC moves us closer to serving the common interest, whereas SSP appears to serve the interests of industry at the expense of environmental interests. FSC has a transparent and participatory governance process that places priority on the equitable representation of diverse

interests. Substantively valid and appropriate interests have been addressed. Some interests were deemed not to be valid and appropriate given broader community concerns to create a credible certification program, and were therefore excluded. Practically, FSC has corroborated many expectations while disappointing those who would like to see greater direct economic benefits. To continue serving the common interest, FSC will have to work to meet these unfulfilled expectations so as not to discourage those who have participated in the program in good faith. In contrast, SSP resulted from faulty processes that did not fully consider all valid and appropriate interests. This resulted in a program that could not be supported by many environmental groups and is widely seen to have credibility and legitimacy issues. Substantively, valid and appropriate interests expressed by environmental groups have been ignored or dismissed. Practically, falling noncompliance with certification processes raises issues about the long-term credibility of the program. All three tests call into question SSP's ability to serve the common interest.

There is a perception in the United States that many VEPs serve business interests to the exclusion of environmental interests and that government often is captured by business to serve its interests. These perceptions are harmful to the long-term survivability of VEPs as alternative regulatory tools. It is important to note that business has the most to lose if VEPs are no longer considered credible instruments to supplement regulation because alternatives like command and control regulations are unlikely to serve business better than more flexible approaches. Consequently, business has most to gain from ensuring that VEPs serve the common interest.

It is possible to realize joint gains in reducing administrative burdens for government, providing flexibility to decide how to implement environmental improvements for industry and working toward superior environmental performance for environmental organizations. However, to serve the common interest, all participants in a VEP must be committed to processes, concerns, and outcomes that legitimately serve all parties.

NOTE

1. Since 1908, the 25 Percent Fund Act (16 U.S.C. sec. 500) has required these payments in lieu of property taxes.

REFERENCES

- Anderson, R. C., & Hansen, E. N. (2004). Determining consumer preferences for eco-labeled forest products: An experimental approach. *Journal of Forestry*, 102(4), 28-32.
- Andrews, R. N. L. (1998). Environmental regulation and business "self-regulation." *Policy Sciences*, 31, 177-198.
- Briggs, J. (2000). Ski resorts and national forests: Rethinking Forest Service management practices for recreational use. *Boston College Environmental Affairs Law Review*, 28, 79-118.
- Brouhle, K., Wolverton, A., & Griffiths, C. (2003). *The use of voluntary approaches for environmental policymaking in the U.S* (Working paper 2004-05). Washington, DC: EPA National Center for Environmental Economics.
- Brunner, R. (2002). Problems of governance. In R. Brunner, C. Colburn, C. M. Cromley, R. A. Klein, & E. A. Olson (Eds.), *Finding Common Ground: Governance and Natural Resources in the American West* (pp. 1-47). New Haven, CT: Yale University Press.

- Carmin, J., Darnall, N., & Mil-Homens, J. (2003). Stakeholder involvement in the design of U.S. voluntary environmental programs: Does sponsorship matter? *Policy Studies Journal, 31*(4), 527-542.
- Cashore, B., & Vertinsky, I. (2000). Policy networks and firm behaviors: Governance systems and firm responses to external demands for sustainable forest management. *Policy Sciences, 33*, 1-30.
- Cashore, B., Auld, G., & Newsom, D. (2004). *Governing through markets: Forest certification and the emergence of non-state authority*. New Haven, CT: Yale University Press.
- Clark, T. (2002). *The policy process: A practical guide for natural resources professionals*. New Haven, CT: Yale University Press.
- Clifford, H. (2002). *Downhill slide: Why the corporate ski industry is bad for skiing, ski towns, and the environment*. San Francisco: Sierra Club Books.
- Darnall, N. (2002). *Why firms signal "green": Environmental Management System certification in the United States*. Doctoral dissertation, University of North Carolina-Chapel Hill.
- Darnall, N. (2003, August). *Why firms certify to ISO 14001: An institutional and resource-based view*. Academy of Management Conference's Best Paper Proceedings, Seattle, Washington.
- Darnall, N., & Carmin, J. (2005). Greener and cleaner? The signaling accuracy of U.S. voluntary environmental programs. *Policy Sciences, 38*(2-3), 71-90.
- Darnall, N., & Edwards, Jr., D. (2006). Predicting the costs of environmental management system adoption: The role of capabilities, resources & ownership structure. *Strategic Management Journal, 27*(2), 301-320.
- Delmas, M. (2002). The diffusion of environmental management standards in Europe and in the United States: An institutional perspective. *Policy Sciences, 35*(1), 91-119.
- Delmas, M., & Keller, A. (2005). Strategic free riding in voluntary programs: The case of the U.S. EPA Wastewise Program. *Policy Sciences, 38*(2-3), 91-106.
- Delmas, M., & Montes-Sancho, M. (2006). *Collective corporate political activity: Are late joiners the free riders?* (unpublished manuscript). University of California-Santa Barbara, Bren School of Environmental Science and Management.
- Delmas, M., & Terlaak, A. (2001). A framework for analyzing environmental voluntary agreements. *California Management Review, 43*(3), 44-63.
- Dietz, T., & Stern, P. (2002). *New tools for environmental protection*. Washington, DC: National Academy Press.
- Dombeck, M. (2000). *Letter of resignation as chief of the U.S. Forest Service*. Washington, DC: United States Forest Service.
- Dowd, J., & Boyd, G. (1998). *A typology of voluntary agreements used in energy and environmental policy*. Washington, DC: US. Department of Energy.
- Environmental Protection Agency. (2005). *Climate leaders: Partners*. Retrieved September 6, 2005, from <http://www.epa.gov/climateleaders/partners/index.html>
- Forest Stewardship Council. (2006a). Governance: Membership chambers. Retrieved May 16, 2006, from http://www.fsc.org/en/about/governance/membership_chambers
- Forest Stewardship Council. (2006b). *Principles and criteria*. Retrieved May 16, 2005, from http://www.fsc.org/en/about/policy_standards/princ_criteria/1
- GAO. (1996, December). *Fees for recreation special-use permits do not reflect fair value*. Washington, DC: United States Forest Service.
- Garcia-Johnson, R. (2000). *Exporting environmentalism: U.S. multinational chemical corporations in Brazil and Mexico*. Cambridge, MA: MIT Press.
- Gorte, R. (2000). *Forest service receipt-sharing payments: Proposal for change*. Report to Congress by the Congressional Research Service (RS20178). Washington, DC.
- Glick, D. 2001. *Powder burn*. New York: Public Affairs.
- Harrison, K. (2002). Challenges in evaluating environmental programs. In T. Deitz & P. Stern (Eds.), *New tools for environmental protection: Education, information, and voluntary measures* (pp. 263-283). Washington, DC: National Academies of Science.

- Hartman, B. & Zalaznick, M. (2003, February 23). Impeccable peaks or sloppy slopes? *Vail Daily*. Retrieved May 18, 2005, from http://www.eaglevalleyalliance.org/sloppy_slopes.htm
- Hartsfield, A., & Ostermeier, D. (2003). The view from FSC-certified land managers. *Journal of Forestry*, December: 32-36.
- Hayward, J., & Vertinsky, I. (1999). What managers and owners think of certification. *Journal of Forestry*, 2, 13-17.
- Hudson, A. (2006). *Evaluating environmental supply chain mandates: Evidence from Mexican industry* (unpublished manuscript). University of North Carolina—Chapel Hill, Department of Public Policy.
- Hudson, I., & Hudson, M. (2003). Removing the veil? Commodity fetishism, fair trade, and the environment. *Organization & Environment*, 16(4), 413-430.
- Jenkins, M. B., & Smith, E. T. (1998). *The business of sustainable forestry*. Washington, DC: Island Press.
- Khanna, M. (2001). Non-mandatory approaches to environmental protection. *Journal of Economic Surveys*, 15(3), 291-323.
- King, A., & Lenox, M. (2000). Industry self-regulation without sanctions: The chemical industry Responsible Care Program. *Academy of Management Journal*, 43, 698-716.
- Langeland, T. (2002, February 14-20). Green room or greenwash? *Colorado Springs*. Retrieved May 18, 2005, from <http://www.csindy.com/csindy/2002-2-14/news3.html>
- Lasswell, H. D., & McDougal, M. S. (1992). *Jurisprudence for a free society*. New Haven, CT: Kluwer Law International.
- Lenox, M., & Nash, J. (2003). Industry self-regulation and adverse selection: A comparison across four trade association programs. *Business Strategy and Environment*, 12(6), 343-356.
- Levy, D. (1997). Environmental management as political sustainability. *Organization & Environment*, 10(2), 126-147.
- Lyon, T. P., & Maxwell, J. W. (2001). Voluntary approaches to environmental regulation: An overview. In M. Franzini & A. Nicita (Eds.), *Economic institutions and environmental policy* (pp. 75-120). Aldershot, England: Ashgate.
- Lyon, T., & Maxwell, J. (2004). *Corporate environmentalism and public policy*. Cambridge, England: Cambridge University Press.
- Marcus, A. A., Geffen, D. A., & Sexton, K. (2002). *Reinventing environmental regulations: Lessons from Project XL*. Washington, DC: Resources for the Future.
- Marshall, R. S., & Standifird, S. (2005). Organizational resource bundles and institutional change in the U.S. organic food and agricultural certification sector. *Organization & Environment*, 18(3), 265-286.
- Mazurek, J. (2002). Government sponsored voluntary programs for firms: An initial survey. In T. Deitz & P. Stern (Eds.), *New tools for environmental protection: Education, information, and voluntary measures* (pp. 219-235). Washington, DC: National Academies of Science.
- Melo, C., & Wolf, S. (2005). Empirical assessment of eco-certification: The case of Ecuadorian bananas. *Organization & Environment*, 18(3), 287-317.
- Meridian Institute. (2001). *Comparative analysis of the Forest Stewardship Council and Sustainable Forestry Initiative certification programs: Executive summary*. Retrieved May 26, 2006, from <http://www.merid.org/comparison/>
- Naimon, J. S., Shastri, K., & Sten, M. (1997). Do environmental management programs improve environmental performance trends? *Environmental Quality Management*, 7(1), 81-90.
- Nash, J. (2002). Industry codes of practices: Emergence and evolution. In T. Dietz, *New tools for environmental protection: Education, information, and voluntary measures*. Washington DC: National Academy Press.
- National Ski Areas Association. (2000). *Sustainable Slopes: The environmental charter for ski areas*. Denver, CO: Author.

- National Ski Areas Association. (2002). *Sustainable Slopes annual report 2002*. Denver, CO: Author.
- National Ski Areas Association. (2005). *Sustainable Slopes annual report 2005*. Denver, CO: Author.
- Natural Resources Defense Council. (1997). *Forests for tomorrow: Responsible forest stewardship through consumer power*. New York: Author.
- Natural Resources Defense Council. (2002). *Forest certification programs: A comparison of the Forest Stewardship Council (FSC) and the Sustainable Forestry Initiative (SFI) of the American Forest & Paper Association (AF&PA)*. Retrieved May 30, 2006, from http://www.dontbuysfi.com/reports/FSC_SFI_Differences.pdf
- Overdevest, C. (2005). Treadmill politics, information politics, and public policy. *Organization & Environment*, 18(1), 72-90.
- Potoski, M., & Prakash, A. (2005). Green clubs and voluntary governance: ISO 14001 and firms' regulatory compliance. *American Journal of Political Science*, 49(2), 235-248.
- Prakash, A. (2000). *Greening the firm: The politics of corporate environmentalism*. Cambridge, England: Cambridge University Press.
- Rey, M. (2005, February 8). *Congressional testimony before the Subcommittee on Public Lands and Forests*. Retrieved April 4, 2006, from <http://www.fs.fed.us/congress/109/senate/oversight/rey/020805.html>
- Rickenbach, M., & Overdevest, C. (2006). More than markets: Assessing Forest Stewardship Council (FSC) certification as a policy tool. *Journal of Forestry*, April/May, 143-147.
- Rivera, J. (2004). Institutional pressures and voluntary environmental behavior in developing countries: Evidence from Costa Rica. *Society and Natural Resources*, 17, 779-797.
- Rivera, J., & de Leon, P. (2004). Is greener whiter? Voluntary environmental performance of western ski areas. *Policy Studies Journal*, 32(3), 417-437.
- Rivera, J., & de Leon, P. (2005). Chief executive officers and voluntary environmental performance: Costa Rica's certification for sustainable tourism. *Policy Sciences*, 38, (2-3) 107-127.
- Rivera, J., de Leon, P., & Koerber, C. (2006). Is greener whiter yet? The Sustainable Slopes Program after five years. *Policy Studies Journal*, 34(2), 195-222.
- Rogers, P. (2002, April 7). Cold cash: Ski resorts profit on cheap U.S. land. *San Jose Mercury News*, p. 1A.
- Rogers, P. (2003, January 10). Forest Service to review rents paid by ski resorts. *Knight Ridder Tribune Business News*.
- Sachs, R. F. (2002). National perspectives on mountain reports and ecology. *Vermont Law Review*, 26(3), 515.
- Ski Area Citizens Coalition. (2005). How are ski areas graded? Retrieved May 18, 2005, from <http://www.skiareacitizens.com/criteria.html>
- Stempeck, B. (2005, January 27). EPA voluntary emission program's progress still a mystery. *Greenwire*.
- Sustainable Forestry Initiative. (n.d.). *The SFI Program: A bold approach to sustainable forest management*. Retrieved January 3, 2002, from <http://www.afandpa.org/forestry/sfi/menu.html>
- Toffel, M. W. (2005). *Voluntary environmental management initiatives: Smoke signals or smoke screens?* Doctoral dissertation, University of California, Berkeley.
- United Nations Environment Programme-World Conservation Monitoring Committee, World Wildlife Fund, Forest Stewardship Council and GTZ. (2006). Information on certified forest sites endorsed by Forest Stewardship Council (FSC), December 1995 to January 2006. Retrieved on October 23, 2006 from <http://www.certified-forests.org>
- Vig, N. J., & Kraft, M. E. (Eds.). (2005). *Environmental policy: New directions for the twenty-first century* (6th ed.). Washington, DC: CQ Press.

- Vlosky, R. P., Gazo, R., & Cassens, D. (2003). Certification involvement by selected United States value-added solid wood products sectors. *Wood Fiber Science*, 35(4), 560-569.
- Wallinger, S. (1995). A commitment to the future: AF&PA's sustainable forestry initiative. *Journal of Forestry*, 93(1), 16-19.
- Washburn, M. P., & Miller, K. (2003). FSC: Forest Stewardship Council Certification. *Journal of Forestry*, 8, 10-13.
- Welch, E., & Hibiki, A. (2002). Japanese voluntary environmental management agreements: Bargaining power and reciprocity as contributors to effectiveness. *Policy Sciences*, 35, 401-424.
- Welch, E., Mazur, A., & Bretschneider, S. (2000). Voluntary behavior by electric utilities: Levels of adoption and contribution of the Climate Challenge Program to the reduction of carbon dioxide. *Journal of Policy Analysis and Management*, 19(3), 407-425.
- Wharton, T. (1997a, December 4). Recreation bumps logging as top use of America's forests. *Salt Lake Tribune*, p. A1.
- Wharton, T. (1997b, December 6). Forests' overseer promotes public lands partnerships. *Salt Lake Tribune*, p. D5.

Toddi A. Steelman is an associate professor of environmental and natural resource policy within the Department of Forest and Environmental Resources at North Carolina State University. Her research focuses on the role and function of public and community involvement within the larger context of environmental governance. She is the coauthor of Collaborative Environmental Management: What Role for Government? (Resources for the Future, 2004), and Adaptive Governance: Integrating Science, Policy, and Decision Making (Columbia University Press, 2005) and numerous journal articles and book chapters.

Jorge Rivera is an assistant professor in the Department of Strategic Management and Public Policy at George Washington University. He has published multiple manuscripts that focus on studying the relationship between business strategy and environmental policy in the United States and emerging market economies. Between 2004 and 2006, he was one of the coauthors of the Millennium Ecosystems Assessment's Policy Responses and Business-Industry Synthesis Reports.