

British Columbia's Environmental Forestry Policy Record

in Perspective

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ABSTRACT

Some environmental groups and US forest companies, each for their own reasons, have criticized forest policy in British Columbia as lax, and the US Congress and media have taken up the call for stricter regulations in Canada. A comparison of BC forest policy with the policies of the USDA Forest Service and six major softwood-harvesting states reveals that British Columbia has more stringent regulations than has been supposed. Focusing on clearcutting, riparian zone management, and protected areas, we find that BC policy in spring 2001 was generally comparable to that of Washington State and Oregon; only the Forest Service had stricter rules. State practices in Texas, Alabama, Mississippi, and Georgia were less stringent.

Keywords: Canada; conservation; industry; regulation

Forest policies in British Columbia, Canada, have come under increasing international scrutiny from two fundamentally different sources: US, European, and transnational environmental groups that wish to protect and preserve the unique ecological character of British Columbia's rainforests (Bernstein and Cashore 2000; Stanbury 2000) and the Coalition for Fair Lumber Imports, a group of US companies that say BC forest policies constitute an unfair subsidy to their Canadian competitors (Cashore 1997a, 2001). By the early 1990s, some members of both groups had developed an informal "bootleggers and Baptists" relationship through their shared interest in increasing the cost of harvesting British Columbia's publicly owned timber. They asserted in the US media and in the US Congress that British Columbia's environmental regulations were lax compared with those

in the United States (Balmer 1993; Canadian Press 1994; *Vancouver Sun* 1994; Saunders 1995; Cashore 1997a; Vogel and Rugman 1997; Olsen 1998; Coalition for Fair Lumber Imports 2000; Price 2000). Such claims resonated with some senators. Max Baucus (D-MT) argued on the Senate floor in 1999 that in an era of globalization, "One continuing issue is Canada's relatively weak environmental standards for timber harvesting" (Baucus 1999).

Following the expiration of the Canada-US softwood lumber agreement in spring 2001, these arguments became particularly pronounced. Some environmental groups charged that the absence of "costly" environmental protections was, in effect, a subsidy for BC and other Canadian companies (Environmental Media Services 2001), because unlike their US competitors, they were not burdened with rules to protect threatened species and sensitive

habitats and were allowed to clearcut their forests (Associated Press 2001). Senator Baucus and then-House Majority Leader Dick Gephardt (D-MO) wrote to President Bush to ask that he "make environmental protections a priority in any new [softwood lumber trade] agreement" with Canada (Associated Press 2001). In the *New York Times*, former President Jimmy Carter (2001) criticized Canadian forest policy for causing overharvesting and contributing to global warming. These charges strained US-Canada relations, with the Canadian and BC governments vehemently denying a lack of environmental protection.

Were the assertions about the BC environmental record true? Could it be legitimate to say, in spring 2001, that British Columbia was lax in its environmental regulations compared with the United States? This article asks just how the BC record compared with the US record at that time. Our purpose is not to address the *dynamic* nature of forest policy change that other studies have explored (Cashore 1997b; Cashore et al. 2001), but rather, to ascertain whether the assertions about BC forest management were accurate.

Methods

Conducting such a comparison is fraught with methodological challenges. Do we compare jurisdictions'

explicit policy goals? Do we study the various policy instruments used to create and implement forest policies? Do we study enforcement mechanisms? Existing analyses have often avoided these issues by presenting the BC environmental forestry record in isolation from other jurisdictions (Tollefson 1998; Wilson 1998; Cashore et al. 2001) or selectively comparing it with rules governing US national forest lands in the Pacific Northwest (Hoberg 1993). (For two important exceptions, see Haddock 1995 and Westland Resource Group 1995.) Yet data from 1996 (the latest available) tell us that the national forests in the Pacific Northwest accounted for 1.3 percent of total US forests and that the entire harvest from all US national forests accounted for only 6 percent of the timber harvest (USDA Forest Service 2000) (*fig. 1*). As Hoberg (1997) has noted, “BC rules are more stringent than the state government rules that regulate private lands in [Oregon and Washington], and private lands comprise both more area and a higher percentage of the harvest level than [Forest Service] lands. [Forest Service] rules would almost certainly not be as stringent if the forest economy in the US northwest was not so reliant on less regulated private lands.”

Likewise, environmental groups (Rowland 1994) and former Forest Service Chief Dale Robertson (1990) have noted that increased forest preservation on US national forests could be offset by continued supply from private lands. Cashore’s (1999) analysis of the development of forest practices and protection rules in the US Pacific Northwest empirically confirmed these assertions, revealing fundamentally different approaches to forestry regulations on federal land compared with private land regulations.

What regions to compare? In the United States, both the federal and the state governments are important arenas of policy authority, creating a fundamental problem for a comparison of this type: Just which states’ regulations do we compare? An analysis of all 50 states is beyond the scope of this arti-

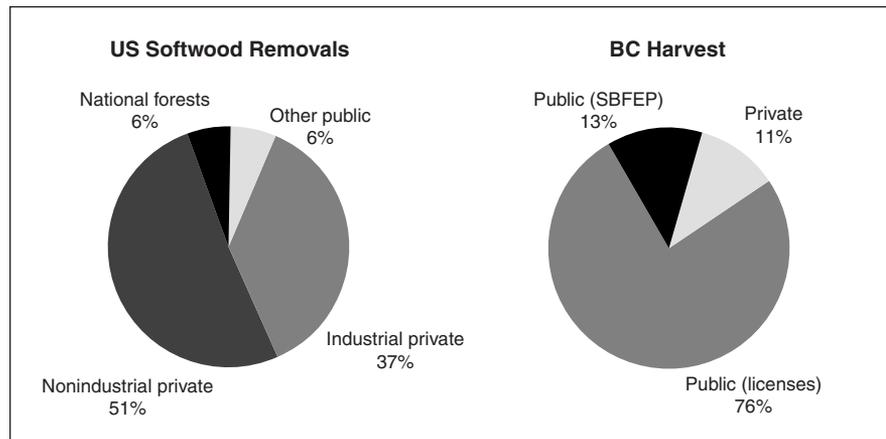


Figure 1. Proportion of total US softwood removals by ownership for 1996 (left) and proportion of total BC annual harvest by ownership for 2000–01. Notes: BC data include waste and firm wood rejects (~1,440,000 m³) and hardwood harvest volume billed (3,071,000 m³, or 4 percent of total harvest). SBFEP = Small Business Forest Enterprise Programme. Sources: USDA Forest Service (2000); British Columbia Ministry of Forests (2002).

cle, and an analysis of only federal or private policy would present misleading comparative data. We have addressed this problem by taking the top softwood-harvesting states whose combined share of the US softwood harvest roughly amounts to 50 percent—the same general share that British Columbia has of the total Canadian softwood harvest (Council of Forest Industries 2001). These states are Georgia, Alabama, Oregon, Washington, Mississippi, and Texas (see USDA Forest Service 2000).

We have also decided to include rules governing US national forests, for three reasons. First, national forests contribute 10 percent of the commercial softwood extraction on the West Coast. Second, many groups have made national forests their point of comparison with BC practices. Third, as noted above, there appears to be an (inverse) relationship between the federal rules governing forest practices on national forests and the primarily state rules governing forest practices on private forestlands—that is, because most commercial harvesting comes from privately owned forestlands, stringent regulations on federal lands do not have the same effect as they would have on the forest sector if they provided the bulk of the fiber supply (as is the case with publicly owned forests in British Columbia). We have excluded BC pri-

vate lands from this analysis because they play a limited role in the province (*fig. 1*) and because they were not the focus of the US timber lobby’s criticisms of BC forest policy.

What rules to compare? Forest management is incredibly complex, and the rules and procedures have resulted in volumes of field guides and instructions for policy implementation in both Canada and the United States. We have chosen to focus on three of the most scrutinized rules in British Columbia that have come to represent measures of sustainable forest management: (1) maximum clearcut sizes, (2) streamside buffer zone rules, and (3) the amount of land off limits to harvesting and other forms of industrial activity, commonly referred to as “protected areas policy.” We encourage future comparisons to cover other important arenas. We do not seek to explain why these policies have arisen or justify their existence but instead intend to show where, and to what degree, differences exist.

Results

Clearcutting. One of the most controversial and highly scrutinized forest harvesting practices in even-aged silvicultural management is clearcutting (Kimmins 1992). Concerns about clearcutting arise from the impacts of this method on forest ecosystems

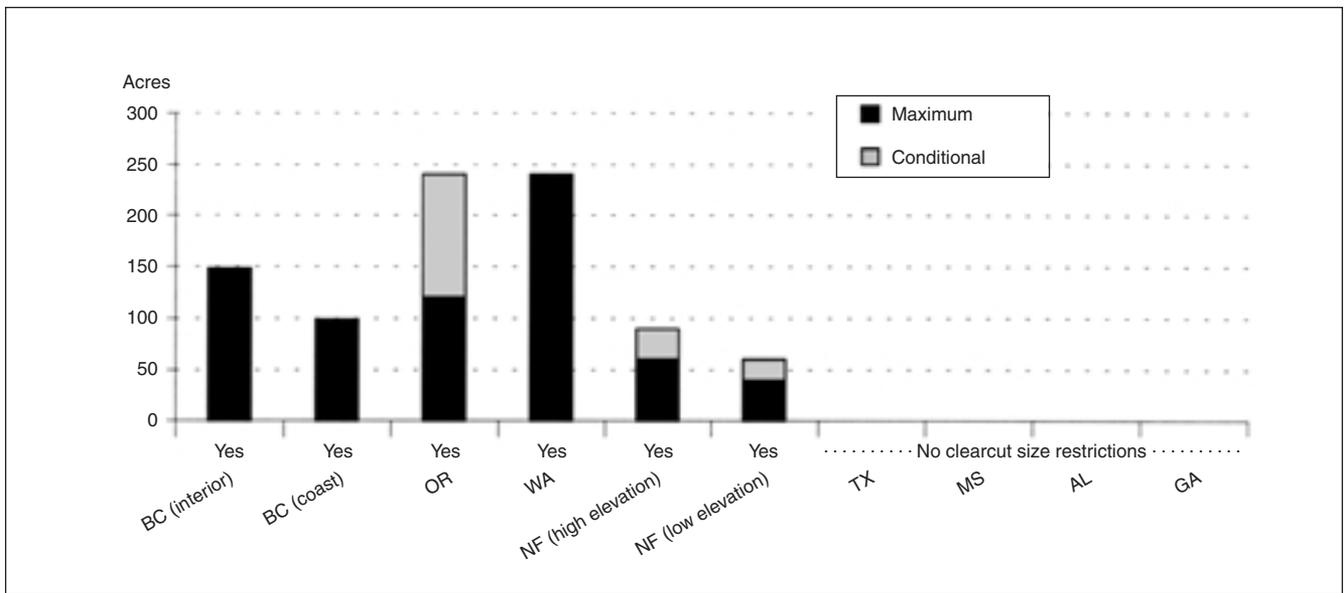


Figure 2. Clearcut size restrictions (expressed in acres) for British Columbia; the US states of Washington (WA), Oregon (OR), Texas (TX), Alabama (AL), Mississippi (MS), and Georgia (GA); and the US national forests (NF). *Note:* The conditional category refers to situations in which written justification is required for gaining approval for increasing clearcut size. In British Columbia the district manager does have discretion to allow for larger clearcuts based on written justification presented by the forest manager. *Sources:* Robertson (1992); British Columbia Ministry of Forests (1994).

(Franklin and Forman 1987; Kimmins 1992), the visual impacts of clearcutting, and the resulting public criticisms (Bliss 2000).

Clearcut sizes are most restricted on US national forest lands (*fig. 2*), and a 1992 directive permits them only when “essential” for meeting forest plan objectives (Robertson 1992; Haddock 1995). British Columbia had the second most stringent rules. Since the implementation of its Forest Practices Code in 1995, British Columbia’s maximum clearcut has been 98.8 acres (40 ha) for coastal areas and 148.2 acres (60 ha) for its interior region. Georgia, Mississippi, Alabama, and Texas have no rules governing maximum clearcut size. And, although Oregon and Washington State have developed such rules, British Columbia’s coastal clearcutting rules are stricter.

There are exceptions, however. BC law permits exceptions to its clearcut size rules when the district manager concludes that “the larger cutblock is designed to be consistent with the structural characteristics and the temporal and spatial distribution of natural openings” (BC Forest Practices Act, Section 11 (3) (b) (ii), see www.for.gov.bc.ca/tasb/legsregs/fpc/fpcaregs/oplanreg/opr-3.htm). Oregon regulations permit up to 240-acre clearcuts if ap-

proved by a state forester (Oregon State Legislature 1999).

Streamside riparian rules. Forest management practices in riparian zones have been a major concern to forest sector stakeholders and have been subject to numerous studies in the United States and Canada. The issue gained particular attention following the northern spotted owl controversy (Yaffee 1994) and the ultimate adoption of an ecosystem management approach for national forests (Committee of Scientists 1999). Interest in riparian management on private and state-owned forests spiked in the late 1990s in Oregon and Washington because of considerable reductions in coho and other salmon stocks (Northwest Renewable Resources Center 1998). Likewise, environmental groups focusing on British Columbia have argued that achieving sustainable forest management means better enforcement of existing practices and expansion of rules to small fish-bearing and nonfish-bearing streams (Sierra Legal Defence Fund 1997).

A multifaceted regulatory approach to streamside harvesting rules in British Columbia, Washington State, and Oregon and US national forest lands makes comparisons challenging. In the other states under review, less complex

guidelines for best management practices (BMP) have emerged as the dominant approach to address riparian management. Establishing BMPs allows state and private landowners to avoid direct regulation under the Clean Water Act (Aust et al. 1996). British Columbia represents a hybrid case of legally binding rules and guidelines. Rules governing fish-bearing streams with an average channel width of less than 4.9 feet (1.5 meters) fall under BMP guidelines rather than legal requirements. BC environmental groups have criticized such a voluntary approach because, they argue, it leads to poor compliance rates (Sierra Legal Defence Fund 1997). Such a critique suggests the need for a rigorous comparison of compliance and enforcement across the jurisdictions.

A review of riparian zone policies among our cases reveals a distinction between buffer zones in which harvesting is forbidden altogether and those in which harvesting is limited (e.g., clearcutting is not permitted but other types of harvesting are). For a broad review of what types of harvesting are permissible within these zones, see Blinn et al. (2000).

Figure 3 (see “Requirements for Streamside Management”) reveals that when the US Congress was being told

Requirements for Streamside Management

The data in *figure 3* represent guidelines or rules governing all stream categories in the jurisdictions under review. In most jurisdictions, the typical distinction is between fish- and nonfish-bearing streams (for more detailed information on BMPs for each state, including the effects of federal and state legislation, see usabmp.net). However, some states classify streams into additional categories, with increasingly complex rules governing buffer strips. This is particularly the case for Oregon and Washington but also for British Columbia (Blinn et al. 2000). As of spring 2001, for the four fish-bearing

stream classifications in BC (S1–S4), only large S1 streams (>1 km in length, >100 m wide, and >100 m wide flood plain) and S4 streams had no “no harvest reserve” zones; the other three classifications have “no harvest reserves” exceeding all those required in all the US states under review. In Washington, riparian management as of spring 2001 was based on both the type of stream, as well as the site class, in determining how “inner” and “outer” management zones are to be managed. For streams classed as fish-bearing, the size of “core” management zone (no harvest reserve) remains con-

stant across site classes: In western and eastern Washington, respectively, the core zone is 50 feet and 30 feet either side of the bank full width or the channel migration zone, whichever is greater (Washington Department of Natural Resources 2001). Oregon takes a similar approach, excluding the consideration for site class. Three stream types and three stream sizes (large = annual flow >10 cubic feet; medium = annual flow 2–10 cubic feet; and small = annual flow <2 cubic feet) combined to create nine different possible riparian management prescriptions.

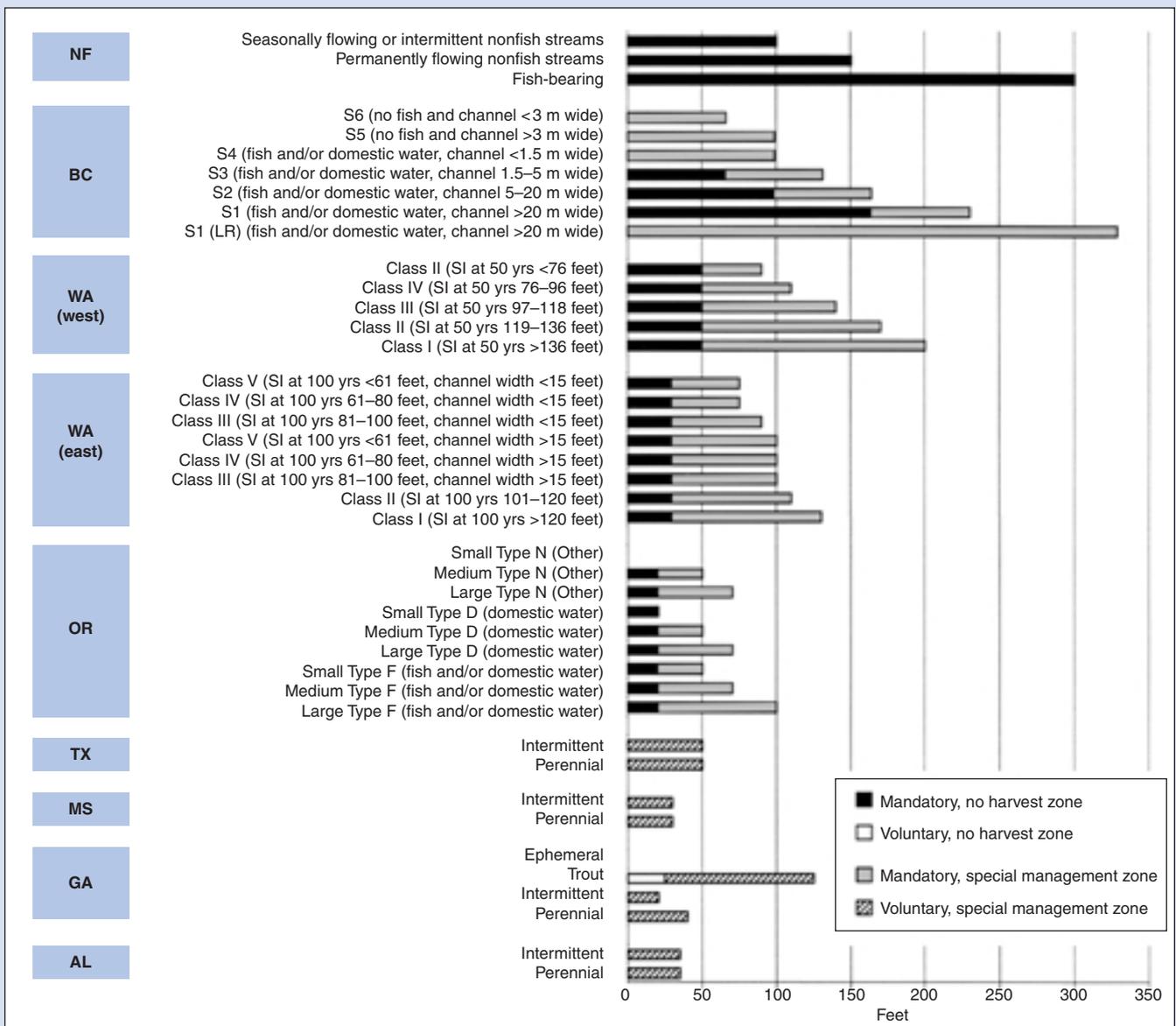


Figure 3. Mandatory and voluntary requirements for streamside management for categories of forest streams in BC and the US states of Washington (WA), Oregon (OR), Texas (TX), Alabama (AL), Mississippi (MS), and Georgia (GA). Sources: Alabama Forestry Commission (1993); Georgia Forestry Commission (1999); Blinn et al. (2000); Mississippi Forestry Commission (2000); Texas Forest Service (2000).

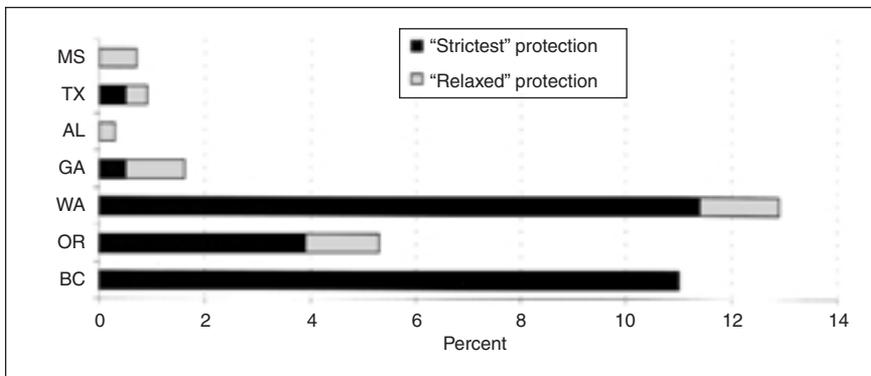


Figure 4. Protected areas as a proportion of total land area in British Columbia and the US states of Oregon (OR), Washington (WA), Georgia (GA), Alabama (AL), Texas (TX), and Mississippi (MS). Note: “Strictest” protection refers to areas where no commercial and/or development activity is permitted. “Relaxed” protection refers to areas where limited types of development are permitted. Source: DellaSala et al. (2001).

in spring 2001 that BC environmental forestry regulations were relatively lax, this province had in place streamside riparian rules comparable to those governing forest practices in western Washington and slightly stricter than those in Oregon and eastern Washington. Rules in Oregon, Washington, and British Columbia required wider riparian zones and more stringent legal requirements than did the BMP approaches in Alabama, Mississippi, Texas, and Georgia. The Forest Service, with its ecosystem management approach, had the most stringent rules in this comparison, with no harvesting at all permitted within 300 feet of fish-bearing streams and smaller no-harvesting zones for nonfish-bearing streams.

Protected areas record. In 1987, the World Commission on Environment and Development (1987) (the “Brundtland report”) recommended a tripling of the world’s protected land from its then—4 percent level. Environmental groups and other parties have pressured governments to commit to protecting additional land under their jurisdiction (World Wildlife Fund 1998). A lack of “standardized protected areas inventories” (DellaSala et al. 2001) prompted the World Wildlife Fund and the Conservation Biology Institute to develop a protected area database that distinguishes between Gap status 1 protection (where no economic development occurs) and Gap status 2 (where only limited economic development is per-

mitted). Applying this dataset to our cases and including all forest owner types—federal, state, and private—we find that British Columbia’s 11 percent Gap status 1 protection in spring 2001 was surpassed only by that of Washington State (*fig. 4*). The other five states fell well short. In Mississippi and Alabama no lands are reported to fall under strict Gap status 1 protection, and all four of the southern states set aside less than 2 percent of their land base for either Gap status 1 or Gap status 2 protection.

Additional and related work indicates that the data on protected areas present an overly optimistic picture in all regions. Many of the protected areas are small, occur in nonforested ecosystems, and do not adequately capture the most globally significant North American ecoregions. For instance, British Columbia has been criticized for protecting a greater share of “rocks and ice” than commercially productive low-elevation forest ecosystems (World Wildlife Fund 1999). And in the US South, only 0.8 percent of the southeastern conifer forest ecoregion receives strict protection (DellaSala et al. 2001)—an area deemed globally significant (Olson and Dinerstein 1998). Despite the caveats, what is clear is that the northwestern US states and the province of British Columbia have set aside a far greater share of their lands for protection than their southern US counterparts, and there is no large gap in BC rules about protected areas, as critics contend.

Conclusion

This analysis has not found support for the contention made in spring 2001 in the US media and US Congress that British Columbia’s environmental forestry rules were more lax than those governing harvesting in the United States. Exploring this claim was important because the assertion was made to bolster efforts by the US Coalition for Fair Lumber Imports to seek administered trade protection from their Canadian competitors. What our review has revealed is that British Columbia’s rules regarding clearcutting, riparian zones, and protected areas were either comparable to or more stringent than rules developed by the top five softwood-harvesting US states. Our study also makes clear that riparian and clearcutting rules governing the relatively small commercial harvest on US national forests are the most stringent of any jurisdiction under review.

This review does not address the old-growth and other unique environmental qualities of the British Columbia forest environment that have made its forest resource management such a hotly contested issue. Clearly, those wishing to preserve some of the world’s remaining intact ancient forests will necessarily turn to British Columbia which, unlike the United States, has considerable remaining old-growth (BC Ministry of Forests 2001). Those who support more stringent forest practice rules in British Columbia might be well advised to focus on the uniqueness of the BC forest environment rather than advance arguments that BC harvesting rules are comparatively lax.

This article does not address the dynamic nature of forest policy regulations, which continue to change as elections on both sides of the border produce administrations that appear to place different weight on environmental and economic goals. Indeed, we believe that if we are to move toward mutual understanding and achieve sustainable forest management that transcends a single region or country, Canada and the United States would do well to develop a binational North American Forestry Commission. Such a commission

could become a center for binational collaborative research among industry, environmental groups, governments, and other parties interested in developing the forest resource in a way that better addresses ecological functions of the forest and the social and economic impacts of doing so.

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