

Economic Restructuring, Policy Change, and the Impacts on Labor in the Forest Products Industry:

Implications for Washington State through a Cascadian Lens

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TABLE OF CONTENTS

| | |
|---|-----------|
| Introduction | 2 |
| I. Cross-Border Regions | 3 |
| A. Theoretical Background | 3 |
| B. US-Canada Cross-Border Regions | 5 |
| C. Cascadia | 7 |
| D. Cross-Border Regions as Sites of Convergence | 9 |
| II. Cascadia’s Forest Products Industry: Three Decades of Change | 10 |
| A. ‘Crown Z’ and the Restructuring of Cascadia’s Forest Products Industry | 10 |
| B. REITs, TIMOs, and the Rise of Non-Traditional Ownership | 12 |
| C. The Spotted Owl and the ‘War in the Woods’ | 13 |
| D. Consolidation and Disaggregation | 14 |
| E. Conclusion | 16 |
| III. The Restructuring of Work and Workplaces in Cascadia’s Forest Products Industry | 17 |
| A. Union Evolution | 17 |
| B. Pulp and Paper | 19 |
| C. Solid Wood | 23 |
| D. Logging | 26 |
| E. Reforestation | 30 |
| IV. Challenges and Opportunities for Renewal in the Forest Products Industry | 35 |
| A. Employment Transitions | 35 |
| B. Rural-Urban Dichotomy | 37 |
| C. “Blue-Green” Alliances | 38 |
| D. Industrial Diversification and Power Generation | 41 |
| V. Whither Washington? Potential Implications of Research Findings | 44 |
| Acknowledgements | 44 |
| Bibliography | 48 |

Introduction

For over a century the forest products industry defined the economies and societies of the Pacific Northwest and British Columbia. However, the industry – and those who depend upon it for their livelihood – has experienced significant restructuring since the early 1980s. A constellation of factors have contributed to restructuring, including the institutionalization of the environmental movement, sectoral disaggregation, continental free trade agreements, and the prevalence of global commodity markets. Although these factors have significantly altered the nature of the industry for owners/investors, employers, policy-makers, and other stakeholders, ***nowhere have the effects been more pronounced than among non-managerial workers and timber-dependent communities.***

This report examines the effects of restructuring on labor in Washington State’s forest products industry. To do so, it situates Washington within the cross-border region of Cascadia, which also includes Oregon and the Canadian province of British Columbia. ***Drawing upon comparisons with other sub-national units that have encountered similar changes broadens and deepens the scope of analysis, and allows for stronger insight into policy implications.*** Additionally, and because the forest products industry is increasingly variegated in its functions, this method of analysis avoids simplicity and allows for more nuanced and thorough understandings of these implications (Salazar and Alper, 2001; Cashore, Vertinsky, and Raizada, 2001).

In addition to statistical and secondary sources, the report emphasizes qualitative data obtained through in-depth interviews with over eighty employees, employers, executives, or managers of forest products firms and unions in Cascadia. Interview subjects were recruited from seven unions representing forest products workers, over a dozen pulp and paper and solid wood manufacturing firms, landowners, and forestry contractors (e.g. logging, tree planting), as well as regional labor councils, local, state, and provincial government administrators, and regional non-governmental organizations (NGOs). The proper names of interview subjects, firms, governmental bodies, and other organizations are omitted for the purposes of confidentiality.

The report begins by examining the evolution and theory of cross-border regions, with a focus on those within Canada and the United States. It also examines the Cascadia cross-border region in detail. The following section details the restructuring of Cascadia’s forest products industry since the early 1980s. What emerges next is a detailed recount of the effects these changes have had on labor markets, labor practices, and unions. The following section examines recent trends and potential directions of Cascadia’s forest products industry. The report concludes with findings and conclusions that can inform and guide the direction of policy in an industry that has – at least recently – been too often overlooked despite being critical to the economic, social, and environmental well-being of Washington State, and to Cascadia as a whole.

I. Cross-Border Regions

Cross-border regions (hereafter CBRs) are territorial units comprised of contiguous sub-national units from two or more nation-states (Perkmann and Sum, 2002), and are increasingly prominent aspects of the global economy. CBRs exist throughout the world, and some of the most prominent are found in the European Union and Eastern Europe, South East Asia, Africa, and North America. Although the list is by no means exhaustive, Table 1.1 provides a list of some prominent CBR scholars and their regions of interest. This section begins with a theoretical background of CBRs. This is followed by a broad overview of CBRs along the US-Canada border. Next, the CBR of Cascadia is examined more closely. The section concludes with a discussion of why and how CBRs can provide a useful scale with which academics and policy-makers can examine cross-national convergence.

Table 1.1: List of CBR Scholars

| | |
|-----------------------|---|
| US-Canada | Alper, 2005; Artibise, 2005; Brunet-Jailly, 2004; 2006; Courchene, 1995; 2003; and Telmer, 1998; Sparke, 2000; 2002; Widdis, 2006 |
| US-Mexico | Alvarez, 1995; Martinez, 1994; 1996; Scott, 2002 |
| European Union | Blatter, 2000; Kortelainen, 2004; Kratke, 1999; 2002; Perkmann, 2002; 2003; Houtum, 2000 |
| Asia | Arase, 2002; Evans, Hutton, and Kuah, 2000; Sum, 2002; Wang, 2001 |
| Africa | Baud and Van Schendel, 1997; Lundin and Soderbaum, 2002 |

A. Theoretical Background

The recent proliferation of CBRs is primarily a result of processes of economic restructuring and the rescaling of governance. Fordist systems of mass production that dominated advanced economies were generally tied to Keynesian policies, and nation-states were the primary economic actors, using fiscal and monetary powers to stabilize long-term growth and demand. In the 1970s, the flaws of these systems became apparent, as mass production technology diffused, demand patterns changed, productivity growth slowed, international production increased, and firms – especially in the United States – became increasingly wary of long-run product specific technology and sought more flexible forms of production (Sabel, 1994). The result was the “second industrial divide” (Piore and Sabel, 1984), which brought massive restructuring caused in part by the rapid internationalization

of production, oil and resource price shocks, the breakdown of mass markets, and a resurgence of flexible specialization (Storper, 1995; and Walker, 1989). The latter worked to decentralize national economies and created a renewed focus on regional economies, industrial districts, and contributed to the rescaling of governance.

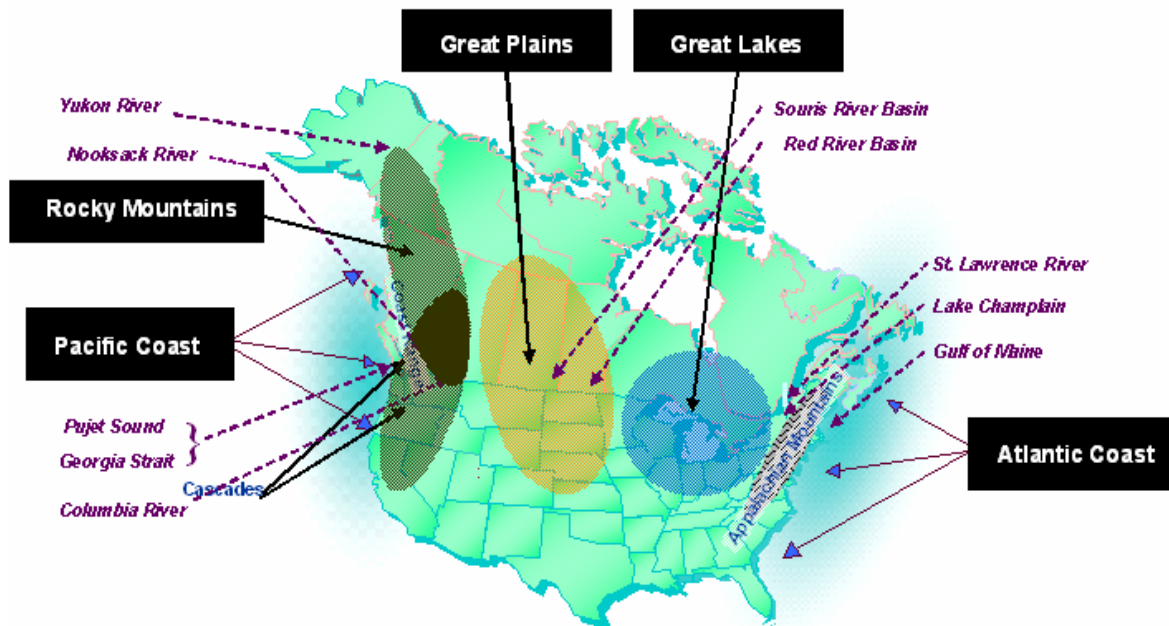
Rescaling refers to the displacement of certain elements of governance by nation-states to other branches of government. Rescaling upwards occurs with the emergence of supranational institutions, such as the EU or NAFTA. Rescaling downwards occurs when powers are assumed by, emerge in, or are divested to sub-national, regional, or municipal governments. Rescaling has created new forms of governance “radically different from classical democratic State form in terms of accountability, democratic control, or citizen’s representation” (Swyngedouw, 2000,

549). However, state rescaling does not imply that central governments are being dismantled, but rather, they are being transformed (Brenner, 2004). Institutions “above” and “below” the national scale remain reliant on national government for legal, regulatory, and financial power to meet their agendas (Swyngedouw, 2000), and national governments remain responsible for the legitimacy of the transfer of powers (Jessop, 2002). National governments – often ignorant of local needs, especially in regions where border management policies are critical (Leresche and Saez, 2002) – may opt to transfer powers downwards in the hope that placing authority amongst those most familiar with local or regional issues will lead to an

aggregate increase in the competitiveness or efficiency of that region’s economy.

Although cross-border relationships have always existed, they have benefited from a decline in national protectionism, the rise of (broadly conceived) neo-liberalism, the end of the Cold War, and political commitments to regional integration (Jessop, 2002). In some senses, the latter factors have facilitated the (re)emergence of formerly suppressed “natural economic territories”. This is certainly the case in North America, whose continental “grain” runs North-South, not East-West (Fig. 1.1). Additionally, many CBRs benefit from populations who share tacit histories, often a product of similar economic activities, landscapes, or climates (Morris, 1999).

Figure 1.1: Shared Natural Geographies of the US and Canada



(Source: PRI, 2007)

To summarize, I draw upon Jessop (2002, 38-41) who (in ascending order of importance) lists nine ways in which contemporary CBRs have, and continue to, emerge and develop:

- Through the existence of *obscure/liminal forms of economic and political organization* along or near borders, such as “black” and “grey” markets.
- Through *the opening of suppressed historical and economic spaces*, including links to shared resources and trade routes inherited from pre-colonial empires.
- Through *the growth of urban areas along national borders*.
- Through *the creation of functional economic spaces* where complementary resources, common problems, or a shared peripheral status prompts cooperation.
- Through *the promotion of regional economies by national governments* to ensure the success of the former through the actions of the latter.
- Through *the promotion of CBRs by supranational bodies* with the hopes of undermining national governments with a “pincer” movement from above and below.
- *In reaction to uneven development* or other region-building processes.
- As a *part of a process of nation-building in countries home to multiple nationalities*.
- *Through career- and institution building initiatives*.

B. US-Canada Cross-Border Regions

Formal free trade between Canada and the US was avoided far longer than conventional theories would have us believe (Golob, 2003). For Canada, the decision to enter free trade “...marked a significant departure from century-old Canadian policies of economic nationalism” (Wallace, 2002, 3). There were, however, bi-national agreements in the 20th century that set the stage for the 1988 Canada-US Free Trade Agreement (FTA). In 1941,

Canada and the US entered into an agreement with the US for the abolition of tariffs on farm implements. This devastated Canadian manufacturers, who lost the majority of their market share to lower-cost American producers (Anastakis, 2004). The 1965 Auto Pact proved more durable. It reduced tariffs on cross-border auto trade, and required specified levels of value adding and equitable sales/production ratios. The Auto Pact is widely held as one of the first shifts of Canadian federal policy towards liberal trade arrangements with the United States (Bone, 2005).

The FTA was finalized in 1988 (ratified in 1989) after a period of escalating tensions stemming from Canada’s controversial Natural Energy Policy and the protectionist measure brought about by the US after the 1982 recession. The more elaborate North American Free Trade Agreement (NAFTA) between the US, Canada, and Mexico was signed five years later, albeit with some reluctance from each nation. Although the “sovereignty preserving” principles of NAFTA have not created a single market or customs union in the same fashion as the EU, there is little doubt that the structure and mode of governance in each nation has been altered (Courchene, 2003; Brunet-Jailly, 2004).

The early years of the FTA and NAFTA ushered in new patterns of north-south trade in North America. Trade between contiguous US states and Canadian provinces nearly doubled between 1989 and 1996, while trade between neighboring Canadian provinces grew only 14 per cent (Industry Canada, 1999). In Ontario – Canada’s leader in finance and manufacturing – exports to the US had amounted to roughly the same value as those to the rest of Canada throughout the 1980s. By 1998, however, Ontario’s exports to the US equalled almost two and a half times the value of exports to the rest of Canada (Courchene and Telmer,

1998). Although the growth of trade between contiguous provinces and states has levelled off, there are few signs that it will falter. In fact, policy-makers on both sides of the border continue to work to entrench and increase these patterns, and to remedy impediments to trade such as wait times at border crossings (Brunet-Jailly, 2006).

While one cannot deny the momentum of free trade, a number of other factors have fuelled the emergence of US-Canada CBRs. First, US-Canada CBRs are especially significant due to the amount of power divested to municipalities, provinces, and states by their respective federal governments (Courchene, 2001). Second, CBRs require a growth of institutional linkages that have not come at the national or supranational scale. While NAFTA has kept common institutions to a minimum, regional cross-border NGOs have helped fill the void (PRI, 2006; for a typology of NGOs in CBRs see Blatter, 2004). Third, US-Canada

CBRs share historical similarities. Large portions of the East coast existed as a single British territory until 1776, and a large portion of the western parts of the US and Canada existed as the Oregon territory until 1846. Additionally, the westward settlement of both nations occurred in a similar fashion, with many regions were populated by like waves of immigration (PRI, 2005).

Although CBRs can be construed in a number of fashions that are highly-dependent on context and interest, the Canadian federal government’s Policy Research Initiative (PRI) has documented five prominent CBRs, all of which take into account numerous economic, political, social, historical, and environmental factors (Fig. 1.2). These CBRs share similar resource endowments, depend on similar economic activities (Table 1.2), were settled by like patterns of immigration, and in many cases, share “media” environments (Surlin and Berlin, 1991).

Table 1.2: Economic Activities in US-Canada CBRs

| | East 1 | East 2 | Great Lakes/ Heartland | Prairies/Great Plains | West |
|----------------------------|---|--|---|---|---|
| Provinces | Quebec | Nova Scotia, New Brunswick, P.E.I. | Ontario | Alberta, Saskatchewan, Manitoba | British Columbia, Alberta, Yukon |
| States | Vermont, Maine, New Hampshire, New York | Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut | Michigan, Ohio, Indiana | Montana, Wyoming, North Dakota, South Dakota, Minnesota | Washington, Oregon, Idaho, Alaska, Montana |
| Economic Activities | Forest Products, Leather, Footwear, Publishing and Printing, Furniture Production | Footwear, Forest Products, Agricultural Products, Fishing Products, Power Generation | Automotive, Metal Fabrication, Construction Equipment | Agricultural Products, Heavy Machinery | Forest Products, Transportation and Logistics, Oil and Gas Products and Services, Agricultural Products, Fishing Products, Bio-technology |

(Source: PRI, 2005)

Figure 1.2: US-Canada CBRs



(Source: PRI, 2005)

C. Cascadia

The term Cascadia originated from McCloskey’s (1989) ecologically-based map of a region based on the watersheds of the Cascade mountain range (Fig. 1.3). In many respects, Cascadia is an archetypical CBR. In addition to the moniker “Cascadia”, the west CBR has had a number of labels. The use of the term Pacific Northwest is common but carries American connotations. British Columbia, for most Canadians, lies to the West rather than the Northwest. “Ecotopia” refers to the regions’ natural beauty and rugged terrain and the environmental concerns common to many of its citizens (Callenbach, 1975; Garreau, 1981). It is ironic, however, that commercial strength and regional identity in “Ecotopia” is often synonymous with the exploitation of primary resources. The Pacific Northwest Economic Region, or “PNWER” (penn-wûr) is an acronym applied to the region by the cross-border institution of the same name, and is appropriate primarily in an economic and institutional sense.

Figure 1.3: Cascadia



(Source: Thomas, 1995)

Sparke (2000; 2002) is critical of the notion of Cascadia. He believes contemporary constructions of the region are unstable because of the idiosyncrasies that characterize Cascadian discourse according to both the “ecologies of bioregionalism” and “economics of strategic regionalism” (2002, 214). However, Cascadia has proven to be an emblematic appellation and is the only Canada-United States CBR that relies on symbolic reference (PRI, 2005).

Territorial definitions of Cascadia differ according to the actors and interests involved. These range from “Main Street” Cascadia, referring to the Vancouver/Portland/Seattle corridor, to the entire ‘PNWER’, which incorporates Washington, Oregon, Idaho, Montana, Alaska, British Columbia, Alberta, and the Yukon Territory (Blatter, 2000; 2003). To avoid ambiguity or confusion and similar to Artibise (2005), I define Cascadia as British Columbia, Washington, and Oregon. (Washington and Oregon are referred to as the “Pacific Northwest” often in this report.) These three sub-national units display the most advanced levels of integration. Empirical evidence suggests that economic, institutional, and socio-cultural linkages are the strongest between the three. There are economic similarities between these three sub-national units not evident elsewhere, including coastal proximity, dependence on similar natural resource endowments, and a metropolitan corridor that stands in contrast to the resource peripheries that encompass the rest of the region. Analyzing these sub-national units also allows for an unambiguous evaluation of provincial and state policies, especially considering that many of the other “PNWER” states and provinces are included only as peripheral members.

If an economic region is to transcend borders there must be some cultural integration (Ohmae, 1993). A number of socio-cultural

linkages are evident amongst residents of Cascadia. First, residents share a feeling of distance from their respective federal governments. For this reason, Cascadians are often resistant to “big” government and central state control. As Sparke (2000, 7) notes, Cascadian sentiment “represents a neo-liberal, market-oriented, anti-state transmutation of what is generally understood as democratic political sovereignty.” Supporters of this Cascadian ideology believe that borders and national policies are irrelevant or crippling to the region’s success. Demands for increased regional control may prove to exacerbate regional/federal tensions, however, as central governments may be unwilling to divest powers downward in some cases (although in some others they will readily do so) (Brunet-Jailly, 2004). Cascadians also share a natural environment that contributes to their cross-border identities. It is widely held that although there are environmentalists throughout North America, ecological concerns play a more prominent a role in defining the regional character of the western CBR than any other (PRI, 2005). The effects of environmentalism on Cascadia’s forest products industry are discussed in further detail in Chapter 4.

There are also similarities in the spatial divisions of Cascadia, be they urban-rural or eastside-westside (or in British Columbia, coast-interior). On the scale of the CBR, these spatial dichotomies can be best expressed as “Main Street-Resource Periphery”. Main Street Cascadia stretches from just north of Vancouver, British Columbia to just south of Eugene, Oregon. It encompasses the greater metropolitan districts of Vancouver, BC; Victoria; Seattle-Tacoma; Olympia; Vancouver, WA; Portland; and Eugene. “Main Street Cascadia” houses the majority of Cascadia’s population, provincial (Victoria) and state (Olympia, Salem) capitals, the head offices of many of the regions’ largest firms

(e.g. Boeing, Weyerhaeuser, West Fraser Timber, Catalyst Paper, Microsoft), and a disproportionate amount of decision-making capacity when compared to the remainder of the CBR. Outside “Main Street” lies Cascadia’s resource peripheries. Resource peripheries comprise the majority of the region’s territory, and are the source of wealth for the forest products industry. However, these regions lack the formal control and decision-making powers that exist in core regions. This leads to uneven development and a skewed distribution of wealth, because those who carry out the initial extraction (and in many cases processing) of primary resources lack influence in decisions of distribution and investment in their industries. In some cases, this can even exacerbate socio-economic divisions between residents of core and peripheral regions (Dunk, 2003). This is evident in recent environmental debates in Cascadia, which pit urban environmentalists against residents of resource peripheries whose livelihoods are dependent upon primary resource extraction (Carroll, 1995; White, 1995; Prudham, 2005).

D. Cross-Border Regions as Sites of Convergence

Over the past decade, a broad literature regarding cross-national economic, political, and socio-cultural convergence in North America has arisen, largely in response to the acceleration of globalization and the rise of supranational institutions (see Hall and Soskice 2001). Despite all this, a definitive position regarding processes and the extent of convergence in a number of important aspects of the North American economy has not yet been established, and much of the research previously undertaken puts forth only ambiguous conclusions (Hoberg, 2000). Considerable variation between national-scale institutions, regulatory systems, and policy frameworks of NAFTA members persists

(Rutherford 2004), and as Christopherson (2002, 1) notes, cross-national convergence is limited to specific arenas such as “production organization, sectoral strengths and weaknesses, equity investment patterns, and...labor market practices.” In short, this implies that the significance and political autonomy of sub-national units will continue to grow as supranational agreements broaden and deepen as globalization evolves (Van Nijnatten and Boychuk 2004). Fry (2004) agrees with this, but cautions that in the case of North America it may involve more effort on the part of Canadian provinces (and Mexican states) due to their high levels of economic dependency on nearby American states.

In light of all this, I take an alternative approach to analyses of cross-national convergence. Rather than examining convergence on a national scale, I argue that it is more useful to “scale down” our analyses and do so in CBRs. My line of reasoning follows Christopherson’s argument that convergence occurs mainly in specific arenas. I posit that we would expect convergence to be most evident in cross-border regions, which generally exist because they house these “arenas of convergence”. This is the framework under which I examine the Washington’s forest products industry and its labor markets.

II. Cascadia's Forest Products Industry: Three Decades of Change

The history of Cascadia's forest product industry is a rich one that dates back to the 19th century. Although there is much to be said about the industry before the 1980s, the report is limited in scope and sets off from events in the 1980s and early 1990s, including the hostile takeover of the Crown Zellerbach Corporation in 1985, the subsequent formation of Real Estate Investment Trusts (REITs) and Timber Investment Management Organizations (TIMOs), market valuations of timber, the beginning of the Canada-US softwood lumber dispute, the addition of the spotted owl to the endangered species list in 1992, the Canada-US softwood lumber dispute, and the most recent wave of mergers, acquisitions, and horizontal integration.

A. 'Crown Z' and the Restructuring of Cascadia's Forest Products Industry

Industrial use and state regulation of forests was critical to the post-war development of Cascadia's forest products industry (Prudham and Reed, 2001). This system prevailed until the 1980s, and despite the fact that many forest products firms diverse in size and function operated in Cascadia, the trends and practices of the industry were established by large firms such as the Crown Zellerbach Corporation (San Francisco, CA), the Weyerhaeuser Corporation (Tacoma, WA), and MacMillan-Bloedel Ltd. (Vancouver, BC). According to a recent PricewaterhouseCoopers (2007, 8) report, these were "regionally-focused, vertically-integrated industry players seeking to maximize fibre value at all stages of the value chain, from forestlands through pulp, paper, and wood products production." Furthermore, these firms maintained operations dedicated to distribution, secondary manufacturing, chemical inputs, and research and development. The development of many communities depended on these and other firms, who commonly assumed paternalistic roles. The paternalistic practices of regionally-based vertically-integrated firms are much less common today, as is described in an excerpt from an interview with a union official in British Columbia. Smaller local operators also employed these practices, as is evident in the

second excerpt drawn from an interview with a representative of a logging contractors' association in the Pacific Northwest.

"Crown Zellerbach and MacMillan-Bloedel were very paternalistic to a great degree. They were involved in the communities. Powell River and Port Alberni, for example, were the two Mac[Millan]-Blo[edel] communities... MacMillan-Bloedel funded the building of the new rec centre, the new pool, and they paid for it all. They subsidized the operation of the hospital. They maintained the town sites. The logging operations were solely theirs and the fibre went directly into the mill. Wherever they were it was a very good working relationship between the unions and the employers."

"I think one of the things that kind of disturbs me is the sense of community we had when the federal government was selling timber to the family-owned mills that are not their anymore. They were the ones who built the swimming pool at the YMCA when they needed one, or built the bleachers at the local high school baseball field. They were the major funders of community projects, and that's largely gone away."

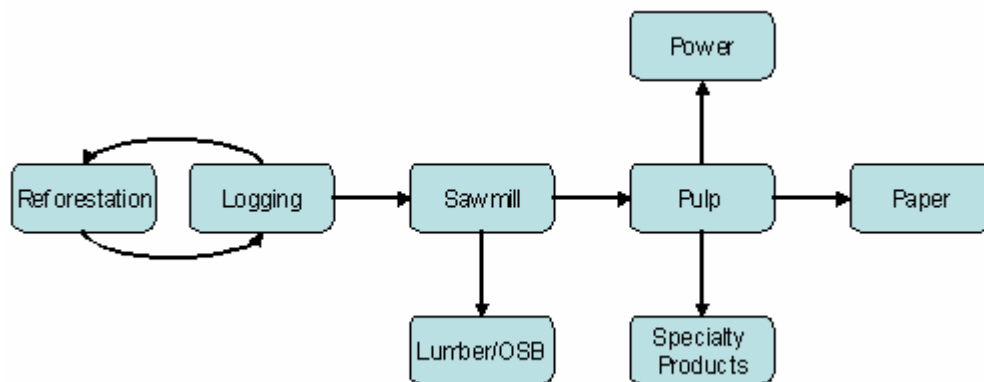
During this era, firms of all sizes benefited from low-cost timberland ownership or licensing agreements. Firms paid licensing

fees – or “stumpage” – to harvest public forests throughout Cascadia (although this system was most prevalent throughout British Columbia and in the parts of Washington and Oregon east of the Cascade mountain range). Although there was a shift to competitive bidding for the rights to harvest timber in the Pacific Northwest, stumpage was long set artificially low in order to stimulate employment and economic development. Simplistically, the Canada-US softwood lumber disputes arose from claims by US producers that Canadian provincial governments subsidize firms through low stumpage rates (Cashore, 1999). This is discussed in further detail below. The tale seldom told, however, is that previous to the mid-1980s, privately-held lands in the US were essentially subsidized, or held below full value. This was the result of a nuance in American accounting systems, whereby timberlands were held at depreciated values (usually to the tune of \$1) after harvest, despite their market value or any gains created by reforestation. It should also be noted that many of these lands were originally acquired from the federal government at low prices in order to promote economic development in the western US at the turn of the 20th century. Strategies of vertical integration had been

employed since the post-war era, and were successful for a number of reasons. First, integrated firms were able to offset high labor, capital, and transportation costs because of low wood and fibre costs. Second, the supply chains of many firms were tightly linked (Fig. 2.1). They were in some respects their own customers and suppliers. Sawmills and other wood production facilities relied on the pulp and paper sector to purchase residual wood chips, and the pulp and paper sector relied on those chips as a source of inexpensive fibre. Finally, the price cycles of solid wood and pulp and paper generally run opposite one another. Vertically-integrated firms were able to shift resources along their supply chain – such as labor, wood, and capital – in order to capitalize upon high commodity prices, and maintain steady profits. This mode of operation is described by a union official in British Columbia:

“In the 70’s when I first got in, all the companies were integrated, they almost all had pulp mills, and sawmills, and logging divisions. They were all cyclical businesses, and it worked in the sense that when two were down one was up, or when two were up, one was down. The company had sort of, probably more of a flat line in terms of their profits.”

Figure 2.1: Forest Products Industry Supply Chain



In the mid-to-late 1970s US paper markets were strong, and firms expanded and ran at full capacity to capture economies of scale (Birecree, 1993). By the early 1980s, and amidst volatile commodity prices, the rise in non-traditional patterns of ownership (e.g. mutual funds, pension trusts, asset management firms), and growing competition from producers in the southeast US, South America, and Asia, paper markets became saturated and the system of vertical integration began to unravel. The major catalyst for change came in 1985, when James Goldsmith, a British investor and notorious corporate raider, performed the hostile takeover of the Crown Zellerbach Corporation. The takeover came on the heels of the sale of Crown Zellerbach's Canadian portfolio to Fletcher-Challenge in 1982. This was partly due to cash flow problems, a result of overextension and timber supply shortages, themselves a result of non-sustainable harvest practices (Marchak, 1984). As a long-time union official in the Pacific Northwest and a former managerial employee of Crown Zellerbach's Oregon operations noted, respectively:

"[Restructuring] began when Sir James Goldsmith bought Crown Zellerbach and opened the books and realized that the pieces were worth more than the inflated price he paid to buy it, so he broke it up. He sold the timberland, the sawmills, the paper mills, and the panel mills. What he couldn't sell, he just shut down. He made a bazillion dollars, and all of a sudden the industry went 'oh my god'. They developed two responses. A portion of the industry developed 'poison pills' to prevent themselves from being bought by hostile suitors, and the rest went on to raise price to earning ratios, and that's the event that created investor-based companies. Every decision made from that point forward can be looked at in that context."

"It was fairly easy for [Crown Zellerbach] to be taken over. That whole transaction, once it got rolling, was done in a fairly short period of time. That started the whole restructuring of the business. Goldsmith came in, bought it, sold the assets, and took the timberlands as profits. That's what the analysts had been saying, the timberlands were undervalued relative to the mills."

Goldsmith was one of the first to realize the potential to capitalize upon the 'depreciated' timberlands. Soon after the purchase, he divested manufacturing and tangential assets (e.g. research and development, secondary manufacturing) previously held by Crown Zellerbach and recovered most of what he had paid. He incorporated the timberlands into Cavenham Forest Industries (which included timberlands from numerous other firms acquired by Goldsmith), of which he divested at an enormous profit in 1988.

B. REITs, TIMOs, and the Rise of Non-Traditional Ownership

Goldsmith's strategy of separating land-based and manufacturing assets proved infectious. Integrated firms were able to liquidate land in exchange for an influx of cash. This practice was especially critical during the market crash of 1987 and the recession of the early 1990s. Investors benefited from the structure of REITs and TIMOs, as they provided a shelter from corporate taxes so long as the vast majority of annual profits were distributed to the investors. Many of the emerging brokerage houses, mutual funds, and pension funds found REITs and TIMOs to be advantageous investments.

The growth of REITs and TIMOs had two profound effects on the industry. First, timberlands ceased to be at arm's length of many manufacturing firms, whose log supply was no longer guaranteed, as they were

required to bid for logs on the open market. The second was the inception of timber auctions. Although auctions severed the supply of less efficient mills that previously relied on inexpensive wood, they also allowed landowners to capture full value and optimize the use of harvested timber. Integrated manufacturers generally had specific size and species requirements, and often lacked the incentive to make full use of the timber they held. Landowners could therefore profit by virtue of an expanded customer base. A representative of a TIMO that operates throughout Cascadia summed up this rationale:

“We used to operate so you could ‘wood’ sawmills or supply the paper mills [...] there were times when we took export logs and made chips out of them because the mill needed them. From a timber standpoint that wasn’t the right thing to do, but from a corporate standpoint it was. If you’re tied to a mill, you’re giving up value because some of your export wood is going to go into that mill vs. going to the person who will pay the highest price.”

REITs and TIMOs also have the ability to reduce or discontinue timber sales when market prices are low, and in a complete departure from the practice of holding lands at a depreciated value, can realize appreciation of land values (and net worth) as timber stocks increase through growth.

The primary criticism of this system is that the cyclical nature of log and forest products markets and the investor-based ownership of REITs and TIMOs leads to a “churning” of properties between different groups who seek to maximize the value of their portfolio. Another contentious issue surrounding this system is that landowners are not necessarily tied to the manufacturing industry and often find more value in converting timberlands into

residential or recreational properties. This comes at the direct expense of Cascadia’s forest products industry – and the environment – as already tight regional wood supplies are constricted further.

C. The Spotted Owl and the ‘War in the Woods’

In 1990 the US Fish and Wildlife service listed the northern spotted owl – a native bird of the forests of the Pacific Northwest – as a threatened species under the Endangered Species Act. Since then, timber harvests in the federal forests of Washington and Oregon have essentially ground to a halt (Haynes, 1998). Nearly two and a half million acres of timberland have been removed from production in Washington State alone, and this figure is even higher in Oregon. Most interview subjects noted that the spotted owl debacle was not necessarily about the bird *per se*, but a “surrogate” of the environmental lobby, growing urban-rural dichotomy, legacy of destructive logging practices, and concern about the impending shortage of old-growth timber (Johnston and Krupin, 1991; Carroll, 1995).

Despite some unconvincing attempts that posit otherwise (Freudenberg et al., 1998), it is commonly held that the spotted owl debacle devastated the industry, which had not planned for or expected the sudden reduction of federal timber available for harvest. Nearly 20,000 direct forest products jobs were lost in Washington and Oregon between 1988 and 1995, with the latter bearing the brunt (Carroll et al, 1999). An executive of a Washington-based forest products firm noted that during this period, *“the rest of the country was in a recession, but that sent us into a depression.”* Many, however, ascertain that job loss was due to global competition, technological change, and a lack of investment (Freudenberg et al, 1998), although this argument was found

to be flawed (Weiner, 1996; Carroll et al., 1999).

A greater concern was that job loss and mill closures affected smaller producers in more vulnerable areas disproportionately, as they relied exclusively on federal timber (Carroll, 1995; Carroll et al, 1999). In fact, TIMOs and REITs benefited from supply constriction as log prices rose. Larger firms – especially those that held private timber – also benefited, and were able to pursue strategies based on economies of scale, product diversification, and wood imports to soften the blow.

While mill closures and job loss were abundant in Oregon, Washington's strong pulp and paper industry and large stocks of private timber provided a buffer (Gray and Shadbegian, 1998). This, however, presented two problems that the industry has not yet overcome. First, small- and medium-sized sawmills and logging contractors provide more stable, community-oriented employment than large firms, which are more susceptible to market downturns (Lee and Jennings-Eckert, 2002). Second, the industry's long-term viability, particularly in the pulp and paper sector, has since been hindered as potential producers are reluctant to invest if consistent supplies of fibre are not guaranteed. For many, the increase in international competition is partially attributable to the decline of timber supplies as a result of environmental legislation (Cashore, 1999). As one union official in the Pacific Northwest noted:

“Nobody will invest in a pulp mill or a sawmill or a plywood mill without having a guaranteed [fibre] supply. Even in third world countries like China or Indonesia, they spend their time looking at fibre acquisition. [Investors] look at the mill, they already know they want that. What they're looking for is a long-term contract of [fibre] supply.”

In the wake of the spotted owl debacle came the Canada-US softwood lumber dispute. Canadian producers – many of whom were owned directly or indirectly by US firms or investors – relied almost exclusively on publicly-owned timber (the major exception being producers on the privately-held lands of southeast Vancouver Island). Some US producers had argued for decades that the Canadian system of forest tenure constituted an unfair subsidy. This debate boiled over in the 1990s as timber harvests in the Pacific Northwest was restricted and as the US southeast became the nation's primary “wood basket” and usurped the role of setting continental lumber prices from the Pacific Northwest (Murray and Wear, 1998). Although the 1996 Softwood Lumber Agreement (SLA) provided some stability by allowing a prescribed amount of Canadian forest products to enter the US duty-free (in order to satisfy US demand, this amount was roughly equal to US production), the expiration of the agreement in 2001 raised tariffs on Canadian products to as high as 32 per cent, and provided another setback and disrupted the supply chains of firms with cross-border operations. After numerous trade rulings and appeals, some respite has been given. British Columbia also relaxed appurtenance clauses that linked timber to local mills and to withdraw 20 per cent of timber licenses. This increased the portion of timber available on the open market at competitive bids, thus providing a benchmark for US-style market valuations of public timber which could then be applied to existing licenses (BCFS, 2005). This was done partly to allow for the flow of Canadian logs South for processing by firms in the Pacific Northwest.

D. Consolidation and Disaggregation

To say that the break-up of vertically-integrated regional producers, decline of

available timber, and growing competition from the southeastern US, Asia, and South America ravaged Cascadia's forest products industry in the 1980s and 1990s is an understatement. The industry was served another blow in 1997 during the Asian financial crisis. No firm was more adversely affected than the massive Vancouver-based MacMillan-Bloedel, who had oriented a significant amount of its production for export to Japan in an attempt to remove itself from the volatility set forth by the Canada-US softwood lumber dispute.

In 1999 Weyerhaeuser purchased MacMillan-Bloedel for \$2.1 billion, in a sale that precipitated "...'inevitable' trends towards corporate consolidation in the global forest sector" (Hayter, 2004, 34). Aside from the symbolism of a major Canadian firm being sold to a US owner, this sale constituted one of the first major purchases in the latest round of mergers and acquisitions in the North American forest products industry. It also exemplifies the effects that non-traditional investors have had on the forest products industry throughout North America. Of the sale, a representative of the Washington State government with experience working in British Columbia noted:

"The shareholders and ownership of M[acMillan]-B[loedel] changed over the '80s and '90s. The ownership was very different than when M[acMillan]B[loedel] was in it's heyday in the '70s and early '80s. You've got a bunch of stakeholders sitting a long ways away that have a considerable interest in this watching their investment lose value. [A new CEO] came in, polished the car up a little bit, changed the sparkplugs, pointed it in a new direction, and gave folks a lot of hope. He did a hell of a good job selling that used car to Weyerhaeuser, and Weyerhaeuser was delighted to take it over, but they had no idea what they bought. They really didn't. [...]"

...you can tell that they didn't know what they were getting into because they didn't keep it for very long. They tried working it this way and that way and it just didn't work. They spun off the pulp mills and they tried differentiating the coast and the interior, and [eventually] bailed out."

Three years after the acquisition of MacMillan-Bloedel, Weyerhaeuser acquired Willamette Industries, long a major regional employer in Oregon. This was followed by a string of mergers and acquisitions by rival firms, including International Paper's purchase of Champion International and Union Camp, Georgia-Pacific's purchase of the Fort James Corporation (which held significant assets previously owned by Crown Zellerbach) and the merger of Stone Container with the US assets of Jefferson Smurfit, which created Smurfit-Stone (Pricewaterhouse-Coopers, 2007).

These acquisitions came at a heavy cost. In an attempt to gain market share and capitalize on economies of scale, a number of firms "carried a heavy debt burden into the new century and many of the deals left acquirers with sprawling portfolios of assets across a wide range of forest products sectors. In short, many of these deals didn't pay their way and investors lost interest. Since then, the industry has been tasked with transforming its value chain with the non-traditional investors into the sector facilitating the way" (Pricewaterhouse-Coopers, 2007, 16).

After this wave of activity, firms began to pursue strategies of horizontal integration. This is most evident in recent activity by Weyerhaeuser, who, after divesting most of the assets acquired in the MacMillan-Bloedel transaction, sold their remaining Canadian fine paper operations to the Montreal-based Domtar in 2006. This was followed by the \$6.1 billion sale of US paper and converting

assets to International Paper in 2008. In a similar vein, International Paper and Georgia-Pacific divested the majority of their timberlands to a number of smaller firms, and the former sold its solid wood production facilities in the US to the Vancouver-based West Fraser Timber Company. The latter transaction has made West Fraser the second-largest lumber producer in North America behind Weyerhaeuser (Pricewaterhouse-Coopers, 2007).

E. Conclusion

The shift from vertical to horizontal integration, the inception North American free trade, the increase in international competition, the reduction of timber harvests, and the rise of non-traditional ownership – for whom the forest products industry is too often simply an abstract vehicle for returns on investment – have had profound effects on the structure of Cascadia’s forest products industry. In particular, shareholders, pension funds, asset management firms, and income trusts have created this constant impetus for restructuring and change. These entities expect returns on investment in the

manufacturing and processing segments of the forest products industry within 3 to 5 years, while those investing in REITs and TIMOs expect returns within 10-15 years (Pricewaterhouse-Coopers, 2007). The majority of returns are realized the prices of lumber or pulp and paper are high, but when prices drop, cash flow and returns are generally obtained through the stripping and liquidation of assets. The effects of this *modus operandi* on the long-term health of Cascadia’s forest products industry are potentially devastating. One thing that is certain, however, is that while savvy investors may stand to gain from this system, shifts in corporate structure and industrial and environmental policy have exceptional consequences in resource-based industries (Young and Matthews, 2007), and it is the workers and communities who depend on the forest products industry who bear the full brunt of such changes qua restructuring. This is the subject of the next section of this report, which examines how change and restructuring has affected forest products workers in Washington, Oregon and British Columbia.

III. The Restructuring of Work and Workplaces in Cascadia's Forest Products Industry

Using a comparative approach, this section examines how work in Cascadia's forest products industry has been affected by restructuring, globalization, and neo-liberalization. This includes some brief notes on the evolution of organized labor in Cascadia's forest products industry, and an overview of the nature of work and the changes faced by four segments of the forest products industry: pulp and paper, solid wood production, logging, and reforestation (e.g. tree planting and pre-commercial thinning).

A. Union Evolution

Six unions represent forest products workers in Cascadia. In the Pacific Northwest the International Association of Machinists-Woodworkers Division (IAM) and the United Brotherhood of Carpenters and Joiners-Industrial Wood Council (UBCJ) represent workers in the solid wood and logging sectors. The United Steelworkers (USW) and the Association of Western Pulp and Paper Workers (AWPPW) represent workers in the pulp and paper sector. In British Columbia the USW represents workers in the solid wood and logging sectors. The Communications, Energy, and Paperworkers Union of Canada (CEP) and the Pulp, Paper, and Woodworkers of Canada (PPWC) represent workers in the pulp and paper sector.

The history of forest products workers in each of these unions can be traced back to two unions: the International Brotherhood of Pulp and Sulphite and Paper Mill Workers (IBPSW) and the UBCJ. One of the most significant steps in the evolution of organized labor in western North America came in 1937, when, frustrated with the conservative orientation of the UBCJ, loggers and sawmill workers in Cascadia broke away and formed the left-wing radical International Woodworkers of America (IWA) (Parnaby, 2000). The IWA expanded rapidly throughout the post-war period, but membership began to decline during the 1970s. In 1983 the wages of

British Columbia's IWA members surpassed those of their counterparts in the Pacific Northwest (Widenor, 1995). Additionally, this was the year that the Louisiana-Pacific Corporation withdrew from the IWA pattern agreement in the United States. Soon after, the political and economic climate surrounding the forest products industry began to sour in the US, while British Columbia's producers – partly due to more favourable relations between labor, management, and government – were able to maintain reasonable levels of output. In 1986 Weyerhaeuser withdrew from pattern bargaining in the Pacific Northwest, essentially spelling its doom (Widenor, 1995). Amidst this turmoil the Canadian divisions of the IWA broke away in 1987 and formed the Industrial Wood and Allied Workers of Canada (retaining the initials IWA, for the purposes of this report they are hereafter referred to as the IWA-C). Not long after the split, the FTA was signed, and as one union official in the Pacific Northwest noted:

“The irony of that was almost to the day the split occurred, the governments began negotiating the Canada-US Free Trade Agreement. From my perspective, at that exact instant in history, when [union members] on both sides of these countries needed a single voice to speak we were destroying it.”

In addition to the breakaway, the IWA had lost thousands of members due to job loss and mill closures. In 1994 the IWA merged with

the IAM. Nearly a decade after the IWA merged with the IAM, the IWA-C, reeling after twenty years of consistent job loss and mill closures, suffered a similar fate. In 2004 the IWA-C relinquished its independence and merged with the much larger USW. A USW and former IWA-C official discussed the rationale for the merger:

“It seemed like every time there was anything that went to arbitration, [the employer] just ignored it or kept appealing. I know some of our locals were getting clobbered by legal costs. [The employer] seemed to not want to deal with things through the grievance procedure, everything was off to arbitration. It became obvious that to be able to fight these big multi-national companies we had to get bigger. At the time the forest industry, where most of the IWA[-C] members worked, was slowly getting smaller instead of growing. I guess hindsight being 20/20, it’s probably a very good thing that we did merge.”

The evolution of Cascadia’s pulp and paper unions is in some ways similar to those in solid wood and logging, and equally interesting. The IBPSW represented the vast majority of pulp and paper workers in Cascadia throughout the 1940s and 1950s. Although the 1950s were a period of relative calm, “there was a feeling in the West that the unions were being operated in a dictatorial fashion by eastern officers who gave little thought to the problems and needs of western locals” (Kleinsorge and Kerby, 1964, 2). These sentiments ran deep among many of Cascadia’s pulp and paper workers, and in 1964 21,000 members of the IBPSW in the Pacific Northwest broke away and formed the democratic-to-a-fault AWPPW. A similar breakaway soon occurred in British Columbia with the creation of the PPWC. Of the similarities between the Canadian and US breakaway movements, a former PPWC president noted:

“It was the right thing to do in the ’60s and ’70s. We’re an independent country, and yet we were all dominated by American unions. And not only that, some of them were corrupt, especially the [IBPSW]. There were moneys disappearing, the leaders were in bed with Mafia... But don’t forget, there was also a breakaway movement in the United States itself. The AWPPW, in Washington and Oregon and northern California broke away from the [IBPSW] at the same time that we were, for a lot of the same reasons.”

In 1972 the IBPSW bolstered its membership by merging with the smaller United Papermakers and Paperworkers Union, forming the United Paperworkers International Union (UPIU). However, the breakaway trend continued, and Canadian members left in 1974 to form the Canadian Paperworkers Union (CPU). The CPU lasted until 1992, when it merged with workers in the energy and communications sectors to form the CEP. The UPIU remained intact until 1999, when it merged with the Oil, Chemical, and Atomic Workers Union to form the Paper, Allied-Industrial, Chemical, and Energy Workers International Union (PACE). In 2005 PACE completed the last in the long trend of mergers in the forest products industry when it merged with the USW. The USW is now the only union who represents forest products workers in British Columbia and the Pacific Northwest, or, for that matter, forest products workers in Canada and the US. The constant restructuring of the labor movement took a toll on communication lines and solidarity between Canadian and US forest products workers. As a representative of the CEP noted:

“In the ’70s there was a lot of communication and there were cross-border conferences and things like that, which is interesting, because that was the time when we broke away and created Canadian unions. In a sense, we did

more talking to each other than when we were breaking apart than now. Just recently these companies are much more multi-national and not just Canadian, and we certainly know that in the past it was worth our while to talk to different locals of different unions with the same employer.”

Since the 1980s organized labor has been placed on the defensive throughout North America. While smaller industrial unions confined to a single industry or region once thrived alongside larger international unions, this is no longer the case. The wave of mergers was largely done out of necessity and to keep pace with the consolidation of industry, gain economies of scale, access to information, and increase lobbying capacity. Although the consolidation of unions – especially in the forest products industry – remains a work in progress, the broadening and deepening of organized labor on a national and international scale has emerged as the most likely strategy to renew the strength and power of the union movement (Kumar, 2008). As representatives from the USW on both sides of the border noted:

“...business is global – it’s certainly that way with pulp and paper – and I think they that making those alliances outside of the country, that’s where we’re going to put up the best fight... It’s a natural thing to go global because that’s what’s happening to the companies and we need to take action...certainly what we’re faced with in this country as far as trade, there is no difference with other industries. There needs to be a vehicle there to take that fight global.”

“If you’re dealing with a great big globalized company that deals on several continents and in several countries, you need a union that can do the same thing. We have to take the meaning of international unionism and global solidarity to a new level. I think that’s all

really exciting stuff, and that’s the kind of stuff we’ve got to do as the companies get bigger.”

One example of the benefits of an international labor movement occurred in 2007 when USW members in British Columbia’s coastal solid wood and logging sectors went on strike. In a show of support, USW members from a number of industries across North America picketed Home Depot, a primary retailer of British Columbia’s wood products. This strategy was a key to avoiding a prolonged strike, and was demonstrative of the potential for new tactics of solidarity amongst North American workers.

B. Pulp and Paper

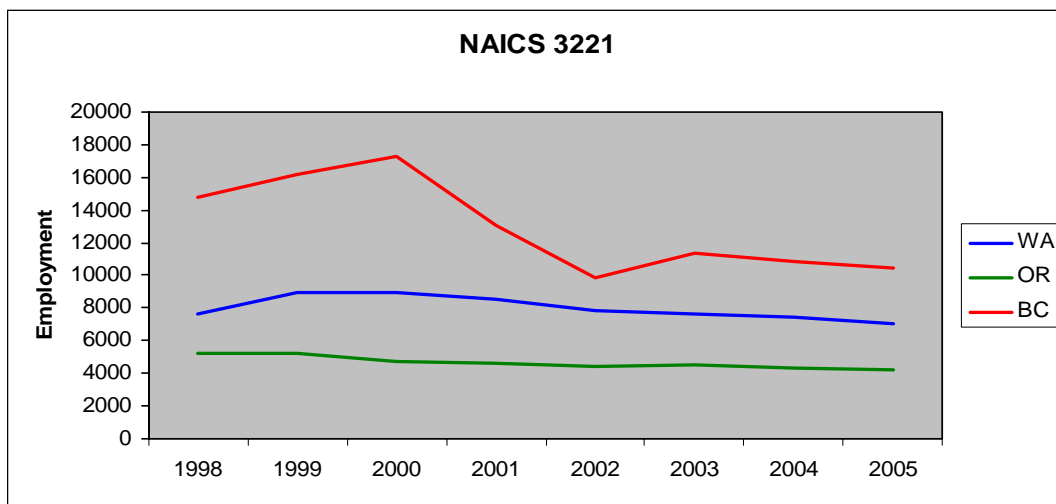
The pulp and paper industry is the most capital-intensive and highest value-added segment of the forest products industry. The most significant period of capital intensification occurred in the early 1980s, and since most pulp and paper employers require that their workers have college or vocational training (Birecree, 1993). Washington’s pulp and paper industry is smaller than British Columbia’s, but much larger than Oregon’s. Although it employs fewer people than the solid wood segment, workers enjoy relatively high wages, benefits, and job security. With the exception of scheduled maintenance shutdowns, pulp and paper production occurs on a continuous basis, 24 hours a day and seven days a week. Like other traditional Fordist industries, pulp and paper facilities are large and the vast majority of workers are covered by a collective agreement. Capital intensity requires that workers have a task-specific (but increasingly flexible) skill set, and the continuous nature of production and high sunk costs make it costly to shut down facilities (Gray and Shadbegian, 1998). This lends strength to organized labor. The vast majority of workers are white, male, and over 45 years of age. The aging workforce

and high levels of seniority in many mills have also contributed to increased average wages, as most workers are remunerated in the upper tiers of scheduled pay rates.

As is evident in Figures 3.1 and 3.2, wages rose as employment levels fell. Although individual workers gain from high wages and benefits, many felt that it came at the expense of solidarity and led to apathy towards the

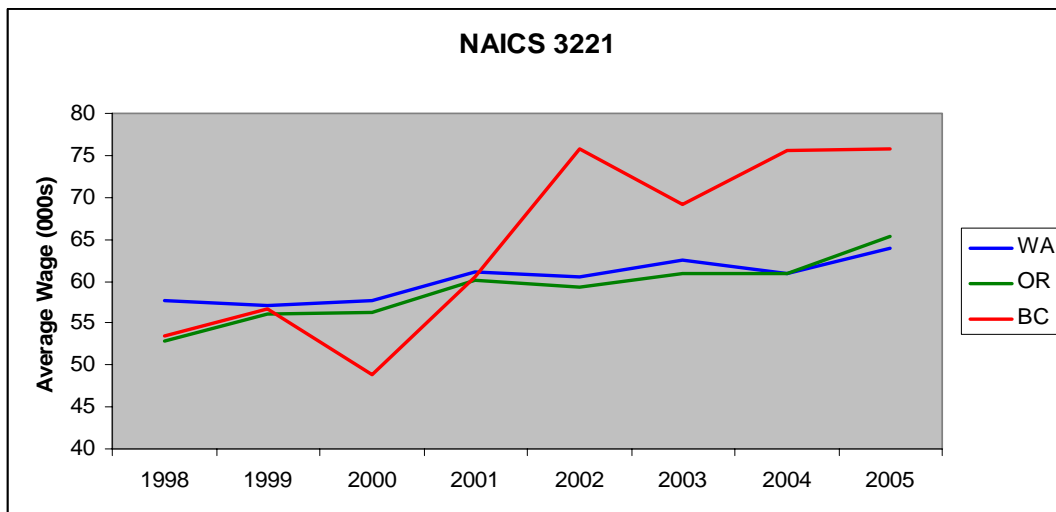
union. Many local union executives spoke to this, and noted that it was difficult to recruit workers into entry-level union roles, such as shop stewards or safety officers. Subjects noted that involving younger workers – who themselves were few and far between – was particularly challenging. The following excerpts from local executives of three different unions describe these problems:

Figure 3.1: Pulp and Paper Employment in Cascadia, 1998-2005



(Source: Statistics Canada; US County Business Patterns, 1998-2005)

Figure 3.2: Average Wages in Cascadia’s Pulp and Paper Industry, 1998-2005



(Source: Statistics Canada; US County Business Patterns, 1998-2005)

“Probably 80% of the workers in the mill don’t have any contact with the union. They’re not in trouble, so they’re not being represented. They’re not involved in some of these other committees and efforts. Younger folks are typically much more interested in punching in, doing their work, punching out, spending time with their family or having fun.”

“...getting people involved on an everyday basis is hard, but every local is in the same boat. I think that’s just a function of society...I think we’re a little bit spoiled. There’s that whole apathy thing towards the union...It’s a me first sort of attitude, but they don’t understand where it all came from. The other part is that there is a certain contingent of people who aren’t apathetic, they are kind of involved in the background, but they don’t necessarily come to the meetings because its two hours out of their lives they could be spending with their family. As long as the union is taking care of them and they feel that everything is OK, they don’t get involved. It’s kind of like a vote of confidence, and the way that you can test that is screw up, do something wrong in your local, and you’ll have people come to the meetings.”

“It’s that whole new age of workforce that has been selectively hired by the corporations. Those employees go through very stringent selective hiring processes, and they’re basically that new age kind of worker. They’re materialistic, they’re individualistic. Their kind of vision is not based around social or cultural values like pensions or health and welfare benefits. They say ‘just give me the money and I’ll look after myself’.”

Despite the various means of integration within the forest products industry, pulp and paper workers and solid wood workers have rarely been represented by the same union. Additionally, mill workers in vertically-

integrated firms often began their careers as loggers only to transfer to a sawmill or pulp and paper mill by the time they were in their late twenties. Once there, however, workers seldom transferred between operations. A union executive in Washington spoke of this phenomenon.

“I think that [local managers] are jealous of their assets. There are key people that they spend a lot of money and time and training on that worker and they can fit into a bunch of different spots, it’s hard to let them go. If they’re a hard worker and a reliable worker, a certain facet doesn’t want to lose them to another facet, even if it is in the same company.”

It is also generally held that pulp and paper workers are, essentially, at the top of the labor food chain, and that integrated firms would, as one union executive held, “*cream the crop*” and go to great lengths in order to ensure that the pulp and paper mills were stocked with those who the firm found most suitable. Although pulp and paper workers often require more technical skills and are more likely to work in and around dangerous chemicals, they enjoy higher pay and job stability, and perform less manual labor. As an executive of a Washington-based firm noted:

“Historically, pulp workers were called ‘cake-eaters’. They got paid a little bit better, they worked a lot less hard, based on the sawmill view. People sit in control rooms and push buttons. Historically, there was an education level you had to have to get hired into a pulp and paper mill, whereas in the sawmill, back in the ’70’s, if a guy walked in and was a warm body, he’d get hired. [...] The last five years, sawmills made a lot more money than pulp and paper mills did. There were years when the pulp mill broke records and every employee got a TV for Christmas. When the sawmills were doing well someone suggested

we should recognize our sawmill workers in a similar way, but corporate said, 'you can't do that, the pulp mills are losing money. They lose in a day what you guys make in a year.' Those kind of nuances were significant, but for whatever reason, people in sawmills tend not to apply for work in the pulp mills. Here we have them 100 yards apart, and we have no cross-pollenization at all. Nobody down there wants to work over here, and vice-versa."

The two most significant changes to work in the pulp and paper industry are the increase in automation and capital intensity and the inception of flexible work practices (Hayter, 2000). While automation is generally accepted as logical progress and often welcomed as it may allow workers to avoid working directly with dangerous chemicals, flexible practices have been met with fierce resistance. The latter are often synonymous with lean production, and involve multi-tasking or the introduction of team-based work and the subsequent reduction or contracting out of entry-level and maintenance positions.

During the era of vertical integration, most managers and executives of forest products firms had made their careers in the industry, and many had experience working in the mills as production workers, engineers, or front-line managers. Even owners worked on-site or in the immediate region and had a working knowledge of the daily operations and nuances of each mill. For many production workers in the pulp and paper sector, the most frustrating aspect of the shift to investor-based firms operated from outside Cascadia is that owners and executive-level management seldom have first-hand experience in the industry. Many are "transplants" from other industries such as telecommunications and energy, and from other regions. British Columbia's workers often seemed to resent management who had migrated from Alberta,

while workers in the Pacific Northwest had similar sentiments about management from parts of California or the right-to-work states of the southeast. Pulp and paper workers had similar thoughts throughout Cascadia, and are summed up well by a long-time papermaker and local union vice-president from Washington:

"We don't even need bosses here. Everybody knows their job, and there's pride in being a papermaker. We've only got two supervisors who were actually papermakers. The rest are all engineers from all over the country. The engineers know a lot, but they're not papermakers. They know how to build a machine, they know how to maintain a machine, they can do the chemical engineering, but they cannot run a paper machine. We've only got two [management] guys who can do that, and they help you out a lot. As far as management goes, it's just not there."

Additionally, many front-line managers and engineers are much younger than the average production worker. In fact, and drawing upon observations made during the course of data collection, it is likely that many unionized production workers had been employed in those same mills before a number of resident engineers had been born. Whether drawn along lines of class, age, or experience, it is not surprising that unionized production workers are hostile to the fact that their supervisor is three decades their junior and has little to no practical experience in the industry.

The loss of familial, regionally-based ownership has proved ruinous for labor relations in many of the mills. Interview subjects often looked back on any interaction with the senior members of the Weyerhaeuser, Zellerbach, MacMillan, or other controlling families with rose-colored lenses. While most long-time employees did admit that there were

tense periods and that the relationship between management and owners were not always amicable, the fact that the controlling owners of firms took an interest in their mills and their employees – particularly those that produced pulp and paper, the focal points of their business – was greatly appreciated. A former pulp and paper worker on Vancouver Island who now works as a union staff representative in British Columbia spoke of these relationships:

“The CEO of the company used to regularly visit all the operations. He would come to the pulp mill, probably three or four times a year. Wonderful, wonderful sweet little man. Just an amazing person in that I think he fundamentally believed that it was important for him to have a relationship with all his employees. He didn’t just come in and have coffee or meet with management in the board room, he walked around the plant and got to know people, and would remember your name. I can remember him coming to my department and chatting with people, and congratulating me on my marriage. That’s how in tune he was with the people in that facility.”

With only exception, Cascadia’s pulp and paper firms are owned by large corporate entities. Therefore, even those that are headquartered in the region – such as Weyerhaeuser, West Fraser, and Canfor – are likely to be owned by an intricate web of investors and asset management groups that span the globe.

On a more local level, trust and respect for mill and department managers – the primary regional representatives of many firms in Cascadia – are extremely low. In many communities, particularly in coastal towns outside of the I-5 corridor or the lower mainland, workers noted that many of mill managers chose to live elsewhere. In a broad

sense, it is this loss of community and identity that plagues labor-management relations and demonstrates the divisive nature felt within the industry today. A union representative from British Columbia summed up the thoughts of many well regarding the difference between the late 1970s and today:

“Those were the days when we had Christmas parties with union and staff. There wasn’t that division between union and management. Now, when I think about what’s going on in our pulp mills, the thought of a department Christmas party where you went to your supervisor’s home is completely unheard of. There’s just not that kind of relationship at all, and my guess would be that it fundamentally impacts productivity, because when you feel that you’re part of something, you want to go to work, you want to play the game. When you don’t, I don’t think you do. I don’t think that you go that extra mile. It doesn’t matter how much they try to scare you with layoffs. Once you feel like you’re on the outs, I think it’s almost impossible to get back, and I think that’s a really huge difference in three decades in this industry.”

C. Solid Wood

Despite being the largest employer, the solid wood industry is possibly the most fragmented segment of the forest products industry in Cascadia. The solid wood sector produces dimensional lumber, oriented stand board (OSB), and plywood, and encompasses a range of firms, from large facilities owned by integrated multi-national concerns that employ upwards of 1000 people to portable mills run by single owner-operators or small crews. Many solid wood workers enjoy relatively high wages, benefits, and job security, but an equal number are paid much less and work on a precarious basis. Although larger facilities have witnessed significant capital and technological investment, many continue to be

highly labor-intensive. Unlike the pulp and paper segment, solid wood operations are not required to operate on a continuous basis. Operators are afforded much more flexibility in scheduling work in order to meet fluctuating demand. Most solid wood operations are, however, partially reliant on the pulp and paper sector as a customer for residual wood chips and sawdust. In fact, the latter are often the primary source of profit for many operations, especially during period of depressed lumber prices (CFR, 2007).

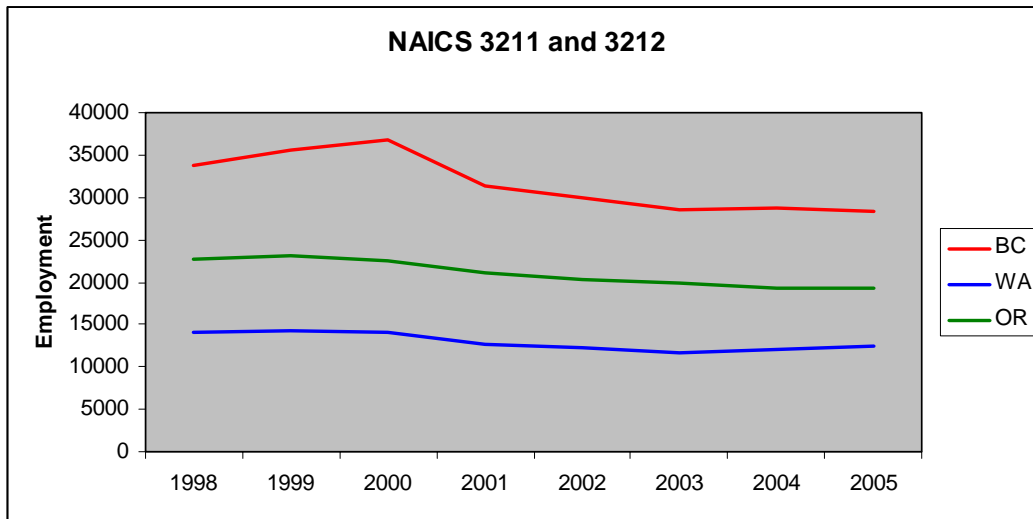
As is evident from Figures 3.3 and 3.4, employment and wages in the solid wood sector are relatively stable. Although accurate figures are not yet available, there is likely to be some job loss in these sectors as a result of the decline of housing construction in the US. It is also evident that British Columbia's solid wood workers earn over \$10,000 annually on average than do workers in the Pacific Northwest. There are a number of reasons for this. First, much of British Columbia's solid wood sector is oriented towards producing dimensional lumber. Many of these facilities are located in the north-central interior of the province, which is home to some of the largest sawmills in the world. The majority of production is controlled by large publicly-owned firms, and two of the three remaining vertically-integrated companies operate primarily in this region. The forests of the interior of British Columbia have also been ravaged by the Mountain Pine Beetle in the past decade, and license-holders have increased production in order to liquidate affected timber before it rots or catches fire. This stands in contrast to eastern Washington and eastern Oregon, which have not been as adversely affected by the pine beetle, but which also lack facilities that process timber on the same scale as the interior of British Columbia. Production facilities outside of

British Columbia and the coastal Pacific Northwest are more likely, as an executive of a Pacific Northwest-based pulp, paper, and wood products firm noted, to be owned by a "group of investors who are more fragmented, typically more privately-owned, but not necessarily privately-owned." Second, the large-scale facilities in British Columbia are highly capital-intensive. Because they require less labor per unit of output, they, like pulp and paper facilities, can afford to pay workers a premium and are more likely to be unionized. Third, the Canadian system of forest tenure historically allowed firms to pass wage increases on to the government in the form of reduced stumpage fees (Wilson, 1998). The size and capital-intensity of these mills, coupled with the relative strength of British Columbia's labor movement and system of forest tenure, lends towards more lucrative collective agreements and reduces wage competition from non-union facilities.

This is not to say, however, that solid wood production facilities in the Pacific Northwest have not increased in capital intensity. In fact, most have, but have simply not done so to the extent that the producers of the interior of British Columbia have. It is ironic, however, that the capital intensification (and job loss) was widespread throughout the 1990s, when worker support for employers was high as they rallied to their defence in light of the "war in the woods" (Wilson, 1998). An executive and former mill manager in the Pacific Northwest spoke of his firm's capital investments and their increase in productivity per worker:

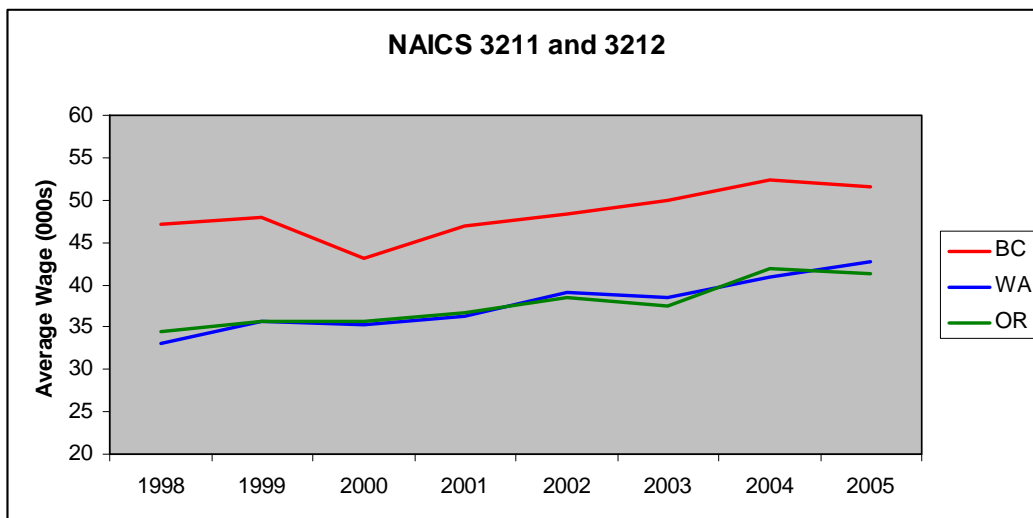
"The mill that we have 120 people working at, when I started seventeen years ago - and there was company logging too - we had 450 employees there. There's 120 now and they produce twice as much lumber as we used to."

Figure 3.3: Solid Wood Employment in Cascadia: 1998-2005



(Source: Statistics Canada; US County Business Patterns, 1998-2005)

Figure 3.4: Average Wages in Cascadia’s Solid Wood Industry: 1998-2005



(Source: Statistics Canada; US County Business Patterns, 1998-2005)

Although many facilities require less labor per unit of output, firms continue to have difficulty staffing mills with adequately-trained and highly-skilled employees. This, as the same executive noted, presents a challenge to the profitable operation of his firm’s mills:

“We don’t have the unskilled kind of jobs anymore, so these guys have to go off and learn a trade or a skill. Maybe they want that

small town standard of living and when they’re twenty-eight or thirty, and they have an apprenticeship or a millwright [certification], or they have some IT skills so we can put them on a computer that runs several machines, or they’ve got the maintenance ability. Capital is key, but there’s still a worry. Where are we going to find these skilled manual people that will work with their hands? Unfortunately the common drift today

is that these kids don't want to get their hands dirty and these are blue-collar – albeit in many cases very high-paying blue collar – jobs that aren't attractive to college students.”

Capital-intensity has reduced employment in the solid wood industry of the Pacific Northwest, thus reducing the strength and resources of the labor movement. As a union representative in Washington noted of the past two decades:

“I can just look at my local union, we had eight sawmills and four logging companies under contract. Now we have one union sawmill and we have no loggers. We went from about 1100 working members to 250.”

Although much of this loss was due to mill closures and the contracting out of logging operations, the increase in capital-intensity is equally responsible. The prevalence of contracting out the peripheral work in production facilities has also reduced the proportion and strength of unionized workers. A union representative in Oregon noted that:

“Well, our share of the pie is shrinking relative to the pie itself. [Companies] have outsourced incredible parts of their operations to either informal work or replacing labor contracts with commercial contracts, which have no enforcement mechanisms per se, or no bargaining power. We have, I don't think we've bargained a contract in the last ten years that hasn't been concessionary.”

This is concerning for many union members and representatives in the Pacific Northwest because, as one noted:

“The places where we have the highest density within a company are the places we have the best labor relations. The places where we have the least density, we have the most contentious labor relations.”

Although this seems to be the case, especially where strong collective agreements work to provide both parties with stability in employment, productivity, and remuneration, employer-friendly labor legislation and fragmentation have hindered the organization of small- and medium-sized facilities. This is especially the case when lumber prices are low, as the owners and managers of the growing network of medium-sized mills have little flexibility in the wages and benefits they can offer workers, and younger workers – whose employment is more likely to be precarious – fear retribution. As representatives of two unions representing solid wood workers in the Pacific Northwest noted:

“It's so difficult to organize a mill because the labor laws don't allow you to do anything. It's really sad because the union plants that are still around still have the good wages and benefits, but you can't get the younger people that work in these non-union plants to give you a look because they're afraid they're going to get terminated.”

“With the smaller companies you have to bargain individually and you can't always set a pattern. If that company is not doing well, what do you do? Push them until they go out of business? What good does that do you? You want that company to be able to succeed but you want to be able to do the best you can do for the employees.”

D. Logging

Unlike the pulp and paper and solid wood sectors, logging occurs in the woods, and is thus “ecoregulated” and subject to a variety of natural uncertainties that render production risky and unpredictable (Prudham, 2005). Although many parent firms and contractors have attempted to negate such risks through mechanization, especially in the

eastside/interior, technology has not yet encroached into many coastal regions. Like pulp and paper and solid wood, the logging workforce is primarily white, male, and over forty years old. There is some labor force participation by First Nations peoples (particularly in British Columbia) and migrant Hispanics. The latter group is discussed below. Logging employment has shown only a slight decline since the late 1990s, and wages have increased slightly, but remain higher in British Columbia (Fig 3.5, 3.6).

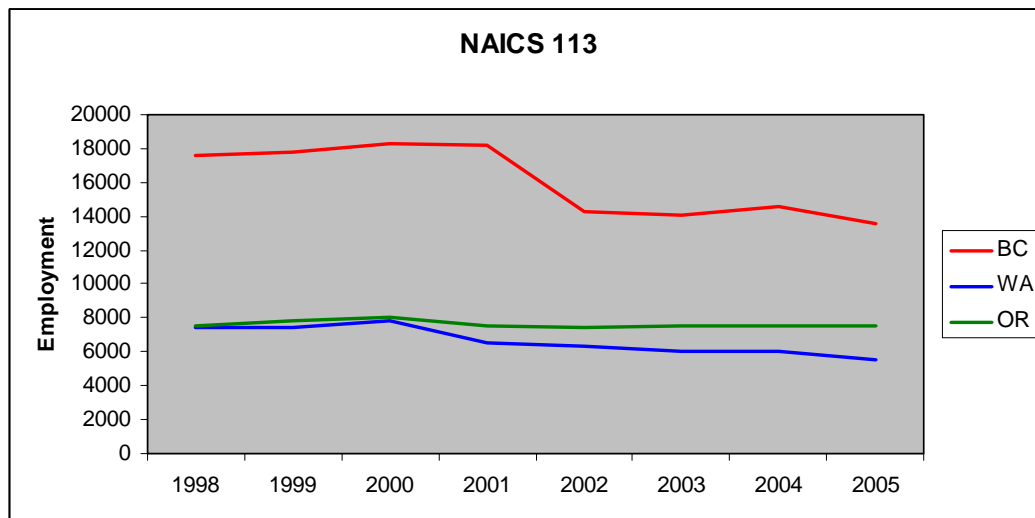
Logging in Cascadia has long been distinguished by two groups: independent contractors, otherwise known as ‘gyppos’, and crews employed directly by the timber-holding and/or manufacturing firm. Not surprisingly, one of the casualties of the industrial restructuring and divestiture of land-based assets since the 1980s has been the company logging crews. While company logging was once the norm in many parts of Cascadia – especially the Olympic Peninsula and coastal British Columbia – most logging operations have been externalized. Those that do remain are subject to constant scrutiny and are forced to compete for work with

contractors (Prudham, 2005). Additionally, many of the company crews persisted only so the parent firms could gauge costs.

A number of interview subjects spoke widely of the risks associated with logging and the decision of firms to externalize production. A former contractor and representative of a contractors’ association in the Pacific Northwest noted that:

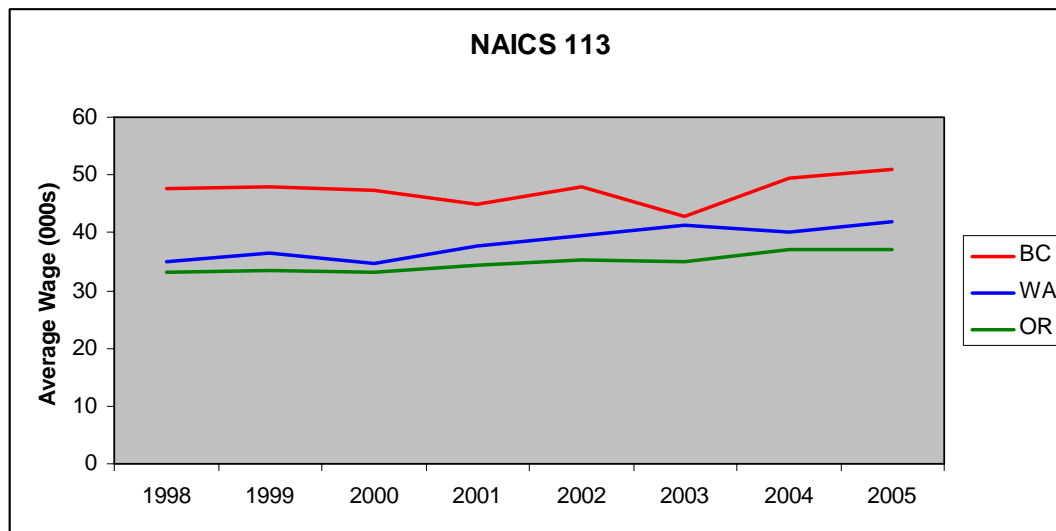
“Fifteen years ago on the peninsula we were totally unionized. Even the gyppo loggers were unionized. It had been good for them for years and years. Consequently, they had pretty nice logging companies with nice equipment. They had several generations of families working for one company. In the late ‘80s competition started, and [parent firms] went to a contract-based system and got rid of all the unions. In fact it took the union crews and made them into contractors. They let the individual union guys matriculate to whichever company they chose... The union ‘good guys’ drifted to those contractors, and the rest of them just went belly up and went back to work for someone else.”

Figure 3.5: Logging Employment in Cascadia, 1998-2005



(Source: Statistics Canada; US County Business Patterns, 1998-2005)

Figure 3.6: Average Wages in Cascadia’s Logging Industry, 1998-2005



(Source: Statistics Canada; US County Business Patterns, 1998-2005)

Similarly, an executive from an Oregon firm spoke of the risks associated with internal logging crews and the role that his firm played in externalizing production while keeping contractors at arm’s length.

“We used to have company logging which was very labor-intensive. It was also very dangerous. We’ve gone to contract logging there, so we’ve taken a sizeable amount of our employees and they become independent contractors. Those employees become independent firms, often with our backing from the bank so they can buy the equipment. Also, we sold them a lot of the equipment.”

Rifts between unionized company loggers and “gyppos” have long been apparent, and were discussed extensively in Carroll’s (1995) study of loggers in the Pacific Northwest. Many company loggers had long resented the involvement of organized labor, which restricted the flexibility of production (which was critical as many logger were paid based on their production) and the upward mobility of the most adept loggers. When questioned about the rationale for the use of contract

loggers, a British Columbia-based executive of a US-based firm noted:

“We had one logging operation, one side. For years that would be beneficial, we would run it ourselves, and you had the actual experience in logging costs, equipment costs, factual instead of out of a book We sold [the company logging operation] to a contractor a number of years ago because he could make more money doing it than we could, which is embarrassing in some respects, but as a [parent firm] owner, you’ve got a [parent firm] supervisor who goes out as a supervisor and sits and watches and can’t touch anything. The minute the contractor owns it, if someone can’t make it to work that morning and he wants to get on the feller-buncher or on the skidder, nobody says anything. If our supervisor wants to do that, it would be a big issue. They get some flexibility that we don’t have.”

Possibly the most common criticism of unions in the logging sector – and despite the fact that the IWA originated in Cascadia’s logging camps (Parnaby, 2000) – is that union practices and regulations are perceived to be a

“creature of the mills”. Long-time company loggers often attest, however, that although contract loggers are more efficient and flexible, the involvement of the union is beneficial in the long-run. The majority of these benefits rest in the long-term health and safety of workers, improved forest practices, and skill development and retention. An executive of a Pacific Northwest-based firm with a mix of company and contract logging crews discussed the advantages of retaining some internal logging divisions:

“Keeping our own crews allows us to keep the competition. What we’ve done is try to use our crews where they can be most effective, and in the other areas use the contractors where they can work better. We’ve evolved and changed and we’ve put everybody on an incentive system. We’ve modelled it like a contractor. Safety incentives, production incentives, we share in those things. Their mindset is more like a contractor’s, but we have more limitations in terms of work hours. Benefits and labor costs are higher, but offset hopefully by productivity, putting the right machine in the right place. Basically we get our crews to bid on units, and if they beat it they get a little bonus.”

Logging contractors have borne the brunt of the competitive restructuring of the industry and the recent collapse of the US housing market. A survey by the Washington Contract Loggers’ Association illustrated many of the difficulties contractors face in today’s low-priced and competitive logging industry. According to the survey, the most critical issues for logging contractors in Washington State were the low returns on investment and labor recruitment and retention (Pickell, 2007). Additionally, it found that many contractors are reluctant to invest in machinery due to the uncertainty of the log market. Logging contractors throughout Cascadia find it onerous to recruit and retain

local workers. The draw from construction and retail industries were two of the primary competitors for workers, and contractors themselves often questioned why a young worker would work as a logger in lieu of other opportunities.

Oregon’s contractors face a labor market situation similar to Washington’s. A representative of a logging contractors association in Oregon noted that:

“Right behind paying their bills, the biggest concern I hear our members express today is workforce issues. Trying to find people that will come to work everyday, pass a drug test, and work five days in a row and feel good about it.”

Contractors are thus forced to expand their efforts into non-traditional labor markets. Like many other labor-intensive industries in the US – including reforestation and forest fire management – logging contractors in the Pacific Northwest have drawn upon migrant Hispanic workers (to date British Columbia’s have not). As a representative of a Washington-based contractors’ association noted:

“...we’re seeing a lot of the Hispanic workers entering the logging industry. It’s a natural crossover [from reforestation] for them. We’re seeing some whole rigging crews comprised mainly of Hispanic workers, most of the time out of Mexico. I’ve heard from a lot of our contractors that ever since they went to a Hispanic crew down in the brush, their production jumped dramatically, simply because these guys will work their butts of all day long and not whine about it.”

Although some of the Hispanic loggers are US citizens or landed immigrants, the majority are not. Of those who fall outside of the former categories, a few hold H-2B visas, however,

most are undocumented. One of the most significant challenges presented is to health and safety, especially when considering the low profit margins of contractors. As one Washington-based contractor noted:

“...in the Hispanic workforce, some of the workers may be a little bit on more of the risk-taking side, simply because they might not know what needs to be done. They might know the risk, but they think it’s expected of them. We just need to be able to communicate how we want the job done.”

The aging workforce, tight labor markets, and competitive nature of contract logging could potentially create a capacity shortage in the near future. Most logging contractors are over 50 years old, and were uncertain from where the next generation of loggers will come. This, alongside the fact that many contractors are unable to invest in training due to low profit margins and are unwilling to purchase capital equipment due to erratic production schedules creates a great deal of uncertainty in the near future. Many contractors, however, have no choice but to invest in machinery to satisfy the demand of parent firms, and more importantly, as a substitution for labor. A Washington-based contractor put it bluntly when he noted that *“mechanization is being driven by the fact that we have a very difficult time finding people to work in the woods. I know it’s the same in Oregon, and it’s the same thing in BC.”* Increased mechanization presents a dilemma to most contractors, as the high cost of machinery requires high debt loads. Contractors fear that investing in expensive machinery or other capital goods renders them overly reliant on parent firms, who may use the contractor’s debt servicing requirements as leverage when tendering work. There is also some thought that maintaining a small, niche, or long-term business is a more profitable strategy, especially in light of the scarcity of labor and

the cyclical nature of the industry. This notion was also shared by most logging contractors, as well as reforestation contractors, regardless of size or scope.

There is some optimism for the future, however. Some contractors alluded to the potential for the renewal of the industry, but only after a number of older contractors retired or unprofitable contractors left the business. The reduction of capacity, when coupled with an increase in lumber prices, could give contractors more control over landowners who may eventually be in dire need of their services. As a representative of an Oregon-based contractors’ association noted:

“There’s a bunch of guys in their early ‘60s who have to decide if they’re going to spend the next five years in this business or if they’re going to cash in now, and I think you’re going to see a lot of people do the latter instead of the former. It’s conceivable that in the next two years there’s going to be a shortage of loggers and a lot of the landowners are going to wake up to the fact that they haven’t been taking very good care of their contractors and there’s going to be a shortage of people to work for them. What I think you will see is a lot more contracts up for negotiation, and then hopefully, we may reach a point where landowner calls up a logger and says ‘what are you going to charge me to do this?’”

E. Reforestation

With some exceptions, the reforestation of harvested timberlands in Cascadia was carried out in a haphazard manner until the late 1960s. In part due to growing environmental concerns, as well as the impending shortages of marketable timber, federal, state, and provincial governments began to mandate reforestation on public lands. Most early reforestation efforts were meagre, although

some companies had success with programs on private-owned land (Weyerhaeuser, 1974).

In the late 1960s, reforestation contracts were tendered for private bidding on public lands throughout Cascadia. The industry grew rapidly, but created an entirely new class of forest workers. Because reforestation work – such as tree planting and pre-commercial thinning – is seasonal and extremely labor-intensive, contractors were under constant pressure to recruit and retain workers in order to fulfill obligations. In the late 1960s, as Hartzell (1987, 27) notes, “[c]ontractors filled their tree planting crews at the employment service, out of taverns, by word of mouth, or off the street.” Many such workers did not last long on the job, as pay was low, conditions were harsh, and contractors were often abusive. Hartzell estimates that during this era, only one out of every fifty workers returned for a second season.

The provision of harvesting rights were increasingly contingent on successful reforestation, and the demand for services – particularly tree planting – rose (Hartzell, 1987). A new system of work organization evolved out of the shortcomings of the old one, and worker cooperatives grew exponentially throughout the 1970s. This system relied upon piece-rates and high quality work, thus combining “...individual productivity incentives with dispersed monitoring costs, making each worker responsible to and for each other” (Prudham 2005, 47). Many cooperative members shared ‘back-to-land’ beliefs, and were, as an interview subject in a study by Tesluk (2003, 23) points out, “dropping out of society, but to go to work.” Although this system originated in Oregon, it moved north and took hold in Washington and, with the help of draft-dodgers, it soon reached British Columbia.

Within a decade, cooperative members on both sides of the border evolved into contractors, but assumed diverging recruitment strategies. Migrant Latinos were recruited in the Pacific Northwest, while crews of local workers were supplemented by post-secondary students on their summer break in British Columbia. This strategy persists, however, new legislation and labor shortages may allow British Columbia’s contractors to recruit migrants.

Migrants – primarily from Mexico – entered the reforestation industry in the Pacific Northwest in order to garner a source of income when agricultural work was unavailable, or as an alternative to agricultural work entirely (Hansis, 2002). Many were originally recruited from existing regional networks of agricultural workers (Prudham, 2005). For over two decades migrant reforestation workers toiled out of the public’s view, and were subject to rampant abuse and poor working conditions (Brown, 2001). However, a recent expose (Knudson and Amezcua, 2005) has “prompted some changes in forest regulations such as requiring contractors to provide safety equipment and authorizing USDA Forest Service inspectors to report hazardous working conditions and immediately suspend such contracts” (Sarathy, 2006, 359). There has also been an increase in reforestation contractors owned and operated by Latinos. Although this phenomenon began soon after amnesty was granted to Mexican migrants in the mid-1980s, it was not until the late 1990s that Latino contractors became prevalent. Today, Latino contractors do as much as three quarters of reforestation work in some regions of the Pacific Northwest. However, as Sarathy (2006, 362) notes, their success depends “on the perpetuation of a segmented workforce, based primarily on divisions by legal status...[and] many workers noted that in return for employment, they often are expected to lend foremen or

contractors part of their earnings and work longer hours without pay.” Latino workers were also noted to be fearful of deportation and rarely report employer violations, as many do not hold the H-2B visas common amongst their counterparts in the US Southeast (McDaniel and Casanova, 2005).

In British Columbia, reforestation workers are “a cultural fixture” and “...a fascinating combination of rural residents, counterculture enthusiasts, and university students looking for a quick infusion of cash” (Cashore et al., 2001, 220-1). The nature of reforestation work varies significantly throughout the province. While large, multi-faceted contractors perform most of the work, numerous small and medium-sized contractors exist. Variable climate and topography add to the range of reforestation activities in the province. Many contractors attempt to follow the “snowline” and secure contracts in a northward pattern to ensure work for several months. In British Columbia’s coastal regions, work is available up to nine months of the year, while the vast majority of work in the interior occurs between May and July. This translates into significant differences in the regional structure of the industry and labor force. As one Vancouver Island contractor noted, coastal reforestation work is “...*more conducive to a higher-skilled labor force due to the nature of the terrain more than anything*”, while work in the interior is generally preferred by younger post-secondary students on their summer break.

In British Columbia, reforestation contractors face a shortage of experience workers, especially in coastal regions. This is partly a result of the active recruitment of reforestation workers by construction, mining, and oil and gas employers. Contractors also face rising demand for reforestation services due to the mountain pine beetle infestation in the province’s interior and constant pressures

from parent firms to reduce costs. Coastal contractors have dealt with the labor shortage by recruiting experienced workers from the interior, while contractors in the interior have increased recruiting efforts targeted towards post-secondary student reforestation workers with experience working in Ontario, Quebec, and Nova Scotia (Sweeney and Valarezo, 2007).

The use of migrant workers allows reforestation contractors in the Pacific Northwest to avoid many of the labor-related problems faced by logging contractors and by their counterparts north of the border. Additionally, reforestation work generally pays more than agriculture, and seasonal employment is often preferred by migrants. However, a potential majority of migrant workers are undocumented. This is due to limitations on the number of H-2B visas allotted to forestry and the high administrative costs of procuring visas, and occurs despite the insistence of landowners that reforestation crews are comprised entirely of legal workers.

The majority of reforestation contractors in the Pacific Northwest are based in or near Oregon’s Willamette Valley. Many of these contractors initially worked on contracts in nearby public lands. After the decline of harvest in public forests, it was these contractors who had the most experience and were the most cost-efficient. Additionally, reforestation work is generally labor-intensive, contractors and their crews are highly mobile, and there are few barriers to entry in new communities.

The western Oregon-based contractors had developed another competitive advantage, however, which was largely facilitated by the United States Forest Service’s (USFS) tendency to let contracts out far below cost estimates. Contractors who used illegal migrant workers were able to bid low as they

paid workers below minimum or prevailing wages and did not pay other costs, such as Worker's Compensation Board premiums. A long-time cooperative member, co-owner, and current forest service contractor had this to say about the role of the USFS:

"The [USFS] was responsible for the creation and maintenance of an underclass industry. It became an underclass industry, which I think differentiates it from the Canadian industry. Here you can't even talk of making it a career. [The industry] wasn't thought out, and the contractors were making money by bringing people from out of the country."

As interview subjects noted, those that did attempt to operate a fully legal and morally responsible business were unable to compete with lower-cost contractors. They were thus required to follow suit in order to win bids, or if they were to remain in forestry, pursue other smaller-scale opportunities (such as surveying).

Like logging, reforestation is eco-regulated. Tree planting in particular must occur within a specific time frame, or seedlings will not grow properly. This, not surprisingly, has significant ramifications on the workforce, and is rarely conducive to maintaining stable local labor markets. However, other activities such as pre-commercial thinning can be carried out on a more continuous basis, and can provide long-term, stable employment for local workers. As a reforestation contractor in Oregon noted:

"They took that model that tree planting made, where a lot of people would work for a short period of time, and tried to make everything else that way. Rather than saying, let's have something that five guys could do over the whole summer, most of whom live there, we're going to have it done over three

weeks, so you have to bring a crew of twenty. That made it not attractive to family people."

Many subjects believed that in order to provide stable, well-paying jobs, work needed to be organized on a continuous schedule that incorporated a variety of activities. As one contractor noted:

"The ticket really is multi-contracting work, multi-skilled, multi-tasked, multi-season. That's the way it used to be with the USFS. There was in-house tree planting crews. When tree planting got way big in the '60s and '70s, that's when they needed to start having big contracts. They haven't structured the work so that a business could make that happen. Only very big businesses can make that happen..."

Many of British Columbia's contractors have had success with this type of system, although the case remains that few reforestation workers are employed for more than eight months out of any given year. However, many of British Columbia's contractors also attributed the stability in the organization of work in the Canadian reforestation industry to the more standardized systems of licensing in Canada's forests. As an executive of a large multi-faceted contractor in British Columbia who had experience working in Washington and Minnesota noted:

"What I was noticing in the States was that they didn't have the same kind of standard of how to do this work. It seemed very localized. We went down all through Oregon and Washington and spoke with a number of clients and visited a number of operations, and again we found the same thing. The tools, the approach to the work, was very different than what we were used to seeing. Nobody really knew what the others were doing. It was very fragmented. I think it's interesting because if you look at the Canadian experience, because it's Crown land and

because of the government's desire to foster an enterprise and an industry of forest renewal really catapulted the Canadian operations into a high standard. You find that in the States, but because it's mostly private land, some landowners are more progressive than others in terms of what they expect, I think that's why it's more fragmented."

The same subject discussed the work that his firm did in Washington on a regular basis. He noted that although their costs were higher – largely due to the wages that they paid their employees which rarely fell below \$200 a day, and were often much higher – the quality and organization of the Canadian contractors was much better than their American counterparts. He also noted that landowners in Washington would hire his crews to work alongside Pacific Northwest-based contractors to demonstrate how to implement and streamline their

operations in a manner similar to Canadian contractors. In his words:

"They were paying those people a lot less, but they were also a lot less productive. They didn't have the systems or the approach to make it work better. That's basically the niche we got into. When we first got into it with one company, they weren't having success with their forests and their plantation, so they were looking for a different approach. They were willing to work with us at the price we were willing to work at because we were showing them the math at how they could get the value out of that, because they didn't have a systematic approach to it. So it's not everywhere that there's a big opportunity for us, but one area we were going to go to but we couldn't get enough visas, they were going to pay double what they typically paid to get us in there because they weren't getting the work done on time."

IV. Challenges and Opportunities for Renewal in the Forest Products Industry

This section builds on the previous one and, through an examination of a number of topics, outlines present and future barriers, challenges, and opportunities for the renewal of industry and labor in Cascadia's forest products industry. The section begins with an analysis of the nature of employment transitions for displaced forest products workers. This is followed by an overview of the growing urban-rural dichotomy in Cascadia and its implications for industry and labor. Next, we examine the potential for "blue-green" alliances and how the labor and environmental movements can join forces and promote an economically and ecologically sustainable industry. The final component examines opportunities for large-scale diversification in production facilities.

A. Employment Transitions

The extent of job loss in Cascadia's forest products industry since the early 1980s may surprise anyone who has recently travelled to the region and observed the often gratuitous displays of wealth evident in places such as Seattle, Vancouver, or Whistler. Despite job loss, however, Cascadia's communities have been affected differently restructuring differently than other regions in North America – particularly the Great Lakes basin – whose Fordist industries have suffered similar fates. One recurrent theme during interviews with representatives of all segments of the industry is the employment transitions of displaced forest products workers, or alternatively, how the economy has "contained" those not fortunate enough to find permanent employment opportunities have been (Peck and Tickell, 2002).

The loss of forest products jobs in the 1990s was buffered to some degree by growth in Cascadia's Information Technology, oil and gas, tourism, and construction sectors. While job loss in the Pacific Northwest's forest products industry tapered off somewhat at the millennial turn, employment in British Columbia's forest products industry continued to suffer. Washington also lost almost 46,000 manufacturing sector jobs between 2001 and

2004, many of which were geared towards the secondary processing or conversion of paper and lumber products (Desmond, 2004). Many predicted that the Information Technology industry would absorb a significant proportion of displaced workers, however, this was seldom the case. In the Pacific Northwest, only 500 of 16,000 displaced forest products workers found employment in Information Technology; in fact, they were much more likely to find work in other segments of the forest products industry, such as forestry services, small-scale manufacturing, or logging (Helvoigt et al., 2003). The tourism industry is also lauded as a potential destination for displaced workers. This strategy has certainly proved fruitful in some cases, such as in Leavenworth, WA, but for many others, provides little income and even less stability.

Another pressing issue for the forest products industry is that its workforce is aging. Many of the most experienced and highly-trained employees are scheduled to retire in the next decade. This is most pronounced in the pulp and paper industry, where seniority regulations limit the involvement of younger workers. Additionally, the draw from other industries, such as mining, construction, and energy has reduced the pools of skilled tradespeople and production workers that

forest products firms can draw upon. In western Canada, for example, the allure of high wages in the thriving oil and gas industry has led to staffing issues in some pulp and paper mills. It also serves to reduce the vigilance of displaced mill workers, who are able to find work so long as they are willing to migrate to oil-producing regions. An executive of one of these firms noted that:

“[in British Columbia] we have one operation which currently has vacancies for twenty-nine positions. Last week we thought we made improvements, we hired two people, but we lost four. Most of them are going to the oil patch [in northern Alberta].”

He also noted that these positions paid over sixty thousand dollars a year, with pension, medical, and dental benefits, and alternating yearly wage increases of two and three percent, but that these were much lower than the wages and seven percent annual increases rejected in the latest round of collective bargaining with a nearby oil and gas concern.

The construction industry has also absorbed displaced forest products workers, many of whom had experience working with the machinery required to run sawmills or logging operations. Loggers are targeted heavily by construction firms for these transferable skills. Even reforestation workers – who, like loggers, are heralded for their work ethic – have been actively recruited as construction workers.

The perception that forest products is a “sunset” industry also taints recruitment efforts. The lack of availability or reluctance of younger workers to seek employment in the industry challenges employers, who are reluctantly bracing themselves to face the impending skill shortages that may occur when current employees retire. However, after the restructuring and change that has plagued

the industry since the 1980s, even some of the industry and union’s strongest supporters would not encourage their children to seek forest products-based employment. This, as is evident in the following quote by a union executive in British Columbia, contributes to the growing urban-rural dichotomy discussed below, and is detrimental to communities that have long relied on the forest products industry for employment.

“I have two children. I would never encourage them to go into the industry. I think many parents have encouraged their children to seek other opportunities. I think there are still a lot of mills running, and even though a lot of them are downsizing, there are still a lot of vacancies, and they are having a really hard time filling them, because people don’t see themselves making a long-term career in the industry. So, kids are leaving because if you can’t get a job at the mill, or you don’t want to get a job at the mill, what are your options? Well, you could get a job at a local restaurant, at the grocery store, but those wages are very hard to raise a family on, so kids leave. I see it as a problem all across the province. It’s the rural depopulation of British Columbia. We saw it in the prairies, kids don’t stay on the farm anymore, and this is what we’re seeing in forest communities.”

The aging workforce also presents problems for the strength and continuity of the labor movement. A ramification of retirement *en masse* is that the most experienced union organizers, administrators, and leaders leave the industry alongside. As mentioned, involving rank and file members in regular union activity is often a challenge. There is therefore a growing concern regarding where the next generation of union activists and supporters may arise from if there is a lack of experienced members to provide mentorship.

B. Rural-Urban Dichotomy

The growth of urban areas and expansion of residential and recreational properties into communities with mills or industrial forests creates contested zones. Most subjects noted an increasing dichotomy between ‘urban’ residents – whether city dwellers or the owners of newly-built retirement or vacation properties outside urban areas – and those who live and work in communities dependent on the forest products industry. This, they note, has skewed the public’s perception of and policies related to industrial forestry. As the executive of a pulp and paper firm in British Columbia noted:

“I think there is a rural-urban dichotomy. I don’t think it’s isolated to BC, I think it’s a condition of city-states, and you see that happening across the country. Policy-makers tend to represent urban population centres. Urbanized population centres don’t necessarily have the same understanding of the chain of custody that goes from where it all began to where that finished product hits your home or office or whatever. Unlike the agricultural industry, which has done a much better job at drawing a clearer line from gate to plate, forestry hasn’t done that. In BC, I don’t think there are a lot of people that appreciate that in Vancouver 1 in 7 jobs are still dependent on the forest products sector. So 1 in 7 is still pretty significant. In Vancouver though, I think if you talk to people and you ask them, ‘what do you think drives the BC economy?’, they’d probably say Electronic Arts or the film industry. Well the film industry, the entire BC film industry, contributes less to the GDP than one company does, us.”

Most subjects also felt that the forest products industry has been unfairly targeted by policy makers who are unable to regulate the environmentally detrimental activities of

urban residents. An executive from a Pacific Northwest pulp and paper firm noted that:

“I think the forest products industry has been poorly treated or discriminated against relative to other environmental risks. It’s been politically expedient and easy to regulate the hell out of timber companies. The same standards that would be applied to urban run-off, automobile pollution, or anything that would require some sacrifice on the part of urban dwellers is kind of ignored.”

A union official in the Pacific Northwest also spoke of the change in public priorities as they related to urban growth and fire policy, which is a concern for landowners of all sizes in many regions of Cascadia:

“I don’t know when it was that we became an urban nation, but it was long before I was born, and the arising environmental consciousness was transformed into public policy in a way that disadvantaged the timber industry vis-à-vis plastic, steel, and others. ...in a Doug[las] Fir forest, we have a specific fire regime. It is known and predictable. The second you intervene and say, ‘saving the forest’, or ‘saving the cities next to the forest’ is a public priority, from that point forward, you have to ask yourself, ‘what do I do with the fuel load?’ ‘What do I do with the carbon and the fibre that’s not going to be burnt in the fire?’ You have two choices, you can take it out of the forest, turn it into socially desirable products and build your houses out of it, or you can leave it in the woods and it will burn.”

Additionally, and despite the perception of the forest products as a rural-based industry, many firms continue to operate mills in urban centres, such as Everett, WA, Tacoma, WA, and New Westminster, BC. Due to the size and location of these mills – and the fact that many of them occupy waterfront property –

they are subject to constant criticism and face unique challenges. Of this, an executive of a Pacific Northwest-based pulp and paper firm noted:

“You’re constantly under the microscope because everybody on both hills has telescopes and they see everything that goes on in the harbour. You get phone calls any time something doesn’t look right or smell right and you can quickly get communities and neighbourhoods very angry.”

Another executive of the same firm discussed similar issues, but also noted that they had committed significant resources and effort in order to demonstrate the benefits that they provided to the community. The role of his firm’s pulp mill as a major employer was a critical component of the ensuing public relations campaign. He noted that:

“There was a lot of low-hanging fruit because the mill was a poor environmental operator, and in ten years or so we got that up to speed. Then we started showcasing our employees, putting ads in the paper, putting a face on the company. ...talking about safety records and investments, the amount of money that we spend on payrolls, the amount of money that comes in because all of our sales are pretty much outside of the community, that we’re basically a net influx of cash that go out in terms of salaries to the employees. We have a really diversified message and we try to put faces with the company. ...we encourage all of our employees to be involved, then we try to showcase them in the community. It was a tedious difficult job to get going, but once it got going it self-perpetuates. You don’t really have to do a lot once it gets going, you just have to not screw up. All the goodwill you put in the bank is extracted in one black liquor spill in the bay, so you have to be careful and vigilant.”

The non-timber values of forests have risen exponentially since the early days of the modern environmental movement. Not coincidentally, the expansion of urban areas – and the markets for paper, lumber, and other wood products – has occurred alongside. Yet urban residents and policy-makers seldom recognize the values that working forests and the attached manufacturing industries that have provided the backbone of the economy in Cascadia for so long. One might go so far as to say that many people today find it difficult to see the forest (and the forest products industry) through the trees.

C. ‘Blue-Green’ Alliances

Restructuring industrial production in a manner that is ecologically-sensitive is a focal point of the emerging sub-discipline of environmental economic geography (Angel, 2006). If this is the case, then ensuring that labor and the labor movement plays a role in facilitating an environmentally responsible industry is of the utmost importance.

Despite its successes in the 1970s, 1980s, and 1990s, the environmental movement has been criticized for blunt, reactive tactics, which included boycotts and blockades that hindered employment and the communities dependent on the forest products industry. As mentioned, logging in the old-growth forests of Cascadia’s coastal regions were targeted heavily by the environmental movement in the past quarter century. The result was the oft-discussed “War of the Woods” which began in the Pacific Northwest, but soon moved North to coastal British Columbia. This was evident in the highly-publicized protests in Vancouver Island’s Clayoquot Sound in 1993. Cascadia remains the target of intense environmental scrutiny, partly due to the volume of remaining old-growth and because the majority of these lands are publicly-held and thus open to higher scrutiny. During the

1990s, however, the environmental movement altered their strategies, and increased their lobbying and legal efforts to challenge the practices of the forest products industry.

In simplistic terms, capital (the owning classes), labor (the working classes), and environmentalists (the professional middle-classes) are divided, however, these divisions are increasingly blurred. For so long capital was able to reach out to both labor and environmentalists to form alliances to serve its needs, while at the same time creating divisions that diminished the ability the latter parties to work in concert. The foremost reason – and one that remains valid – is that the ability to distribute resources is disproportionately held by capital. Both labor and environmentalists rely upon capital to provide legitimacy, financing, and access to politicians and media (Rose, 2004).

Labor relies on capital for job creation and maintenance, and the employer-employee relationship fosters an understanding of motives and cultures. Additionally, much of the culture and strength of industrial unionism was born during a time of “red-baiting”, when labor leaders feared radical politics. Many union members were alienated from the environmental movement, as is summed up well by a relatively moderate pulp and paper worker in the Pacific Northwest who discusses the misplaced motivations of the environmental movement. His sentiments also hint at class-based tensions, which are commonly found in labor-environment debates, which contend that environmentalism is merely a tool of the upper-middle and upper-classes who seek to preserve natural areas for elite recreation while limiting access to the working-classes (Gould et al, 2004).

“I have spent a lot of time talking to people who call themselves environmentalists. When they call themselves environmentalists I

always take it as they’re calling me ‘not an environmentalist’. We live in a beautiful part of the world, and it’s our folks that have the family wage jobs that it takes to take vacations and go hiking and own a boat and go out into the San Juans and take a few weeks and go up in the mountains and ski or hunt or fish or whatever. When the mill was running, you’d go out into the parking lot and it looked like an advertisement for Ducks Unlimited, it was filled with canoes and campers. I understand not-in-your-own-backyard, but I don’t want to put it in somebody else’s backyard. If you want a clean pulp and paper industry, you put it in the countries with the highest standards. Every time we shut down a mill in the United States or Canada another mega-mill sprouts up in Indonesia or China. To me that’s an environmental crime against humanity, an aggregate loss to the environment. The largest source of heavy metal pollution in the Willamette River is acid rain coming over from China where all our mills are going. Not only are we polluting in someone else’s backyard, but it’s getting so bad that it’s coming over to ours.”

Additionally, the relocation of pulp and paper production to Asia, according to many union members, is primarily a function and consequence of environmental activism and the growing North American demand for lower-priced paper products. According to a number of workers and union leaders, this served the interests of corporations and shareholders well, as they were able to realize higher returns due to low environmental and labor standards and the widespread use of illegally harvested wood.

Environmental groups long relied on the owning classes – themselves motivated in influencing the future of environmental regulations – for leadership and legitimacy. The financing of these groups often comes from industry-based groups such (e.g. the

Ford Foundation and the Carnegie Corporation National Funding Program, or according to one union official in the Pacific Northwest, “*the children of the robber-barons of old*”), or from the stock market and mutual fund earnings of individual members. As Gould et al. (2004, 108) note “corporate downsizing, mass lay-offs, relocating facilities offshore and other cost-cutting measures usually provide returns to shareholders in increased stock values. Support labor in efforts to prevent corporations from downsizing and relocating means directly opposing their own economic interests, at least as commonly conceived in the short-term.” For these reasons, labor-leaning “greens” are often marginalized so their organizations can be made more attractive to capital.

Recently, however, the need for “blue-green” alliances between labor and environmentalists has come to the fore. Whereas environmental crises were once the source of conflict, they are now the source of common ground. First, the decline of union density – particularly in the US – led AFL-CIO president John Sweeney to move away from a strategy of business unionism and focus on alliances and growth. At the same time, the success of the environmental movement up until the 1990s was met with a backlash, requiring some groups to reorient their focus.

Recently, the rapid period of mergers and acquisitions in resource-based industries has helped further “blue-green” alliances, as both labor and environmental activists fear that the restructuring of corporate ownership will lead to the liquidation of natural resources and permanent degradation of timberlands. As the executive of a Washington-based pulp and paper firm noted

“Deforestation is when you pave over shopping malls or build buildings, it’s not when you’re on a sustainable harvest where

you cut trees down and replant. That’s starting to get some appeal to environmental groups now, mainly because of carbon sequestration and greenhouse gases.”

Furthermore, unions are becoming increasingly distrustful of capital’s claim that increased environmental regulations will lead to job loss. A 1990 USW publication noted that “for many years companies have tried to use economic and environmental blackmail on the unions and its members. For every fight for a new health and safety regulations, or better wages, or improved pensions, there has been a corporate economist to tell us that if we persist the company of industry will fold, with hundreds or thousands of jobs. It rarely turns out to be the case” (np.). This publication, entitled *Our Children’s World*, laid the foundation for some of the more successful “blue-green” alliances to date. A number of union members and officials within and outside the USW gave their thoughts on “blue-green” alliances:

“The environmental and labor community want the same thing in the end. The road we take to that end state is completely different, and that’s where that adversarial part is. I think one of the biggest reasons we have the cleanest pulp and paper facilities in the world, it’s not from the environmental laws, it’s from the health and safety regulations. If folks think a pulp mill is dirty and ugly from the outside, they should try working in it. A big reason that our pulp mills are cleaner is because we use fewer chemicals, and that’s because we don’t want to work with them. We want the cleanest, safest mills around, and that’s what the environmental community wants too. Long-term, to get anywhere we’re going to have to focus on these common issues rather than fight each other. If we fight each other the corporations – particularly the international ones – win.”

“It’s difficult sometimes because it’s so diverse. In the environmental movement, like anything else, some are very responsible, and understand that people have to work. If you open a dialogue, and I think that’s been missing in a lot of this, a lot of time’s they understand it. Our workers are not oblivious to what’s going on on the planet, they understand that. Some environmental groups have their own agendas, raising money for their cause. It might be fish over here, or the forest, putting pictures of stumps up. That’s been irritating to a lot of our people. We have been taking pretty good steps as a union. We’ve passed some environmental policies that we think are exciting, they’re respectful and they’re mindful. We have to be good environmental stewards. If we see that something’s wrong, we should have the mechanisms to do something about it. Right now you see a cry from our members on private lands in BC, where our members are saying ‘we’re overlogging, these methods are not sustainable’. Right now no one is listening in the province, in fact they’re just relaxing the laws so they can overproduce. We have to align with some of the environmental groups, but we have to be careful.”

“When I first started in the mill the effluent that was going out looked like Guinness beer. It was black, brown, foamy, nasty. Nowadays the effluent leaving a pulp mill – I still wouldn’t drink it – but it looks like you could. There’s been an unbelievable improvement. In terms of pollution, are they perfect? No. Has the change been dramatic? Absolutely. I think that’s great, and I think the unions and the environmental groups have a role to play in pushing that stone uphill. I personally have spent probably twenty years now straddling both groups and trying to bring both groups together. I think in the last decade we’ve developed a practice, and the practice goes something like this: when there’s an issue that comes along that we have similar ideologies

on, let’s do everything we possibly can to work together, because together the message is a lot stronger to the public or to the government. The things we fundamentally disagree on we just don’t talk about. We are going to have differences and that’s fine, but if there’s a way to work together on specific issues, one-off’s, or events, then absolutely, let’s pull together and do it.”

D. Industrial Diversification and Power Generation

Pulp and paper mills can produce a wide array of goods, yet seldom is this mentioned. In addition to paper-based products, wood pulp is used in cigarette filters, rayon fibre, cosmetics, camera film, and cellulose-based food additives (used widely by ice cream manufacturers). The fibre used to produce these products is generally derived from the hemlock fir, which itself is used for little else in North America. Two facilities in Cascadia focus on the production of specialty hemlock pulp, one at Port Alice in northern Vancouver Island, and the other in Gray’s Harbor County at Cosmopolis, WA (although it has been inoperational for nearly two years). The production of specialty pulp, however, is rarely a focus of large firms who cater mainly to commodity markets, and both mills have had difficulties since the millennial turn. There are also opportunities to expand the range of products made from the more standard market kraft pulp. Some mill managers noted that there are emerging options for the use kraft pulp in building products and concrete.

Pulp and paper mills are also a growing source of power generation. This has been a historic tendency of the industry, which located many of its earliest production facilities on fast-moving rivers in order generate hydro-electric power for the mill and surrounding community. Power generation became an

afterthought during the post-war era, as firms focused on serving rapidly expanding paper and lumber markets. Although investment in power generation was often tangential, seldom did a mill exist that did not generate at least some of its own heat or electricity.

Pulp mills generate power by capturing steam from boilers and directing it into turbines. Additionally, the main source of heat for the boilers is woody biomass, or hog fuel, which is made up of residual waste from wood and pulp production.

Cascadia's pulp and paper firms have come to recognize that they are in a unique position. The region has seen enormous growth in its residential population, and has also become a popular tourist destination. It should suffice to say that this growth strains already tight electricity supplies. The price of electricity has also risen sharply in the past decade, yet zoning by-laws and public resistance limit the development of large-scale power generation developments. The generation of wind and solar power has increased, but play relatively small roles in servicing Cascadia's energy needs. There are few new hydro-electric projects are on the horizon, and the public outcry over coal or nuclear power seemingly prohibits even the mention of the construction of such facilities. Recent criticisms of corn-based ethanol have also favored the pulp and paper industry, which can produce cellulosic ethanol from residual wood fibre. The executive of a Pacific Northwest-based firm had this to say about generating power from woody biomass:

"I think biomass has been the stepchild of renewables, it doesn't get the same tax advantages that solar or wind do, because maybe it's been around longer and because those industries have better lobbyists than we do. We're trying to make up for that, and I think there is a coming awareness that wind

and solar aren't going to make but a very small chink in the energy requirements, and that biomass has the greatest potential for growth given the state of the forests in the west and how healthy and renewable they are."

Another executive of a Pacific Northwest-based firm also spoke optimistically regarding the expansion of power generation in his firm's primary facility, but did note that it was an expensive proposition. However, he also discussed the value that biomass power generation provides to investors seeking a "green" portfolio. He noted that:

"Getting our permit was a piece of cake. We know the system, we've done lots of permitting. We already have the boilers, we're just putting in a turbine generator, it was a fairly straightforward kind of thing. It's not a cheap proposition, it's very expensive, it's upwards of 100 million dollars for a 50 watt plant, but also the renewable portfolio standards in the western states, where they're required to put so much renewable power in these energy portfolios by certain dates makes a new product - green energy - which sells at a premium. That's how you capture you're high energy costs, you sell to the green market, and that's what we were able to do here. I think regarding the cellulosic ethanol component of a pulp mill, the technology is not quite there yet, but when you can take out the heavy cellulose which is lost in the recovery boiler, extract that and turn that into ethanol, turn the cellulose into paper, and still have residual lignin to burn in your recovery boiler and make green power, you've kind of created the whole loop and everything that is being recycled and used and you're probably down to zero fossil fuel usage in a pulp mill."

As is evident, there are numerous advantages to expanding the power generating capacity of pulp mills. The most optimistic proponents

went so far as to note that in the next decade, they fully expected that their facilities would, essentially, be power generating stations that produced pulp as a by-product. Most also recognized that this conversion was a very expensive and time-consuming venture, and that more research and development would be required to retrofit mills so that they could generate power in a profitable and efficient fashion.

This last point presents a dilemma. Although it is well recognized that more research and development is required before pulp mills can fully realize their power generation goals, these types of activities were divested or discontinued during the restructuring of the industry. The consensus was that technological developments would have to come from elsewhere, and that at this point in time pulp and paper firms were limited in the expansion of their activities. As an executive from a Pacific Northwest-based firm noted:

“We’ve done a little pilot scale testing here and there, but we’ve determined that someone has to invest and invent the technology, because we’re not going to be the guinea pigs to try to put in something that doesn’t work very well and go through that iterative process of finally making it work. You see a lot of venture capitalist and angel investors in it, but they have obviously a vested interest in some of the early ethanol plants in California. There’s folks that are putting some real money and trying to find a way to make it work. Since we collect the biomass, we accumulate it, we cook it, we think we’re just one or two steps away from it, so we think we’re the logical place for that technology to be most economically invested.”

Others also mentioned that one of the most likely scenarios was that partnerships would form between pulp and paper firms and oil and gas concerns, which could capitalize on synergies and shared resources.

Investment in power generation was well-received by production employees and union representatives. Although power generation may only create a small number of jobs, it instills confidence in the labor force. Because power generation is tied to the production of pulp, it demonstrates to workers that their employers are invested in the long-term viability of their facilities and employees. The CEP and USW are also in particularly strong positions due to the fact that they represent workers in both the pulp and paper and energy industries

V. Whither Washington? Potential Implications of Research Findings

To this point, the report has provided a theoretical and practical background of CBRs and examined the restructuring of Cascadia's forest products industry since the early 1980s and the subsequent effects on labor and affiliated organizations. It has also analyzed current issues and potential trends in the forest products industry. These include the employment transitions of displaced forest products workers, the growing urban-rural dichotomy, the opportunities for "blue-green" coalitions, and has recognized the potential for power generation in pulp and paper facilities.

What then, can we learn from all of this, and what are the implications of this research for policy-makers in Washington? This section draws upon the findings in this report and lists seven broad implications.

Implication #1: Ownership

Policy must reflect the dynamic nature of ownership and the intertwined and dependent nature of all facets of the industry. Industrial policies geared towards production by large, regionally-based, vertically-integrated firms with deep-seated ties to timber-dependent communities and by locally-based mills and contractors reliant on public timber harvests are relics of a previous era. Today's owners are often geographically distant, fragmented, and are varied in their motivations. Understanding who the owning classes are and their temporal motivations is critical to the creation of policies designed to foster an economically, socially, and environmentally viable industry in the long-term. Additionally, the policies must be designed to ensure that the forest products industry is not simply an abstract vehicle for short-term profits. *Investors must be made aware that their actions have numerous direct and indirect consequences for the people and communities that depend on the industry and the often-delicate environments that sustain them.*

Implication #2: Power Relationships

Policy must take into account the nature of power relationships in the forest products industry. The owners and investors of forest products firms play a decreasing role in the management and administration of the industry. Yet they exercise an increasing amount of power. Understanding the relationship between owners and those who oversee day-to-day operations and implement the practices dictated from a firm's directors is key to understanding the chain of command in the industry. Another critical component here is the relationship between capital and labor. Where employer-employee relationships remain relatively well-defined in the manufacturing sector, these relationships are increasingly blurred elsewhere. This is especially the case in the logging and reforestation sectors. While independent contractors do constitute employers and have power over their employees, their relationship to clients must be better understood. Contractors often noted that they chose to operate in such a fashion because they value the efficiency and personal reward offered by independence, they also believed that client firms are too willing to overstep their boundaries in attempts to influence and control the actions of the former party. Clients too

often enter what would traditionally be considered an employer-employee relationship with contractors, yet they assume no risk or liability. This threatens the very existence of this system. Contractors often have little recourse, and fear that any collective action may jeopardize their relationships with clients or may be considered collusion. Many small landowners and manufacturers echoed these concerns. These groups constitute an increasingly critical component of the industry, and it is increasingly apparent that frameworks or policies must be enacted to allow for a more equitable balance of power in the industry. To do otherwise may present an undue risk to the capacity, flexibility, and profitability required by smaller entrepreneurs and the long-term viability of the industry.

Implication #3: The Geographies of Production

Policy-makers need to be aware of issues related to the geographies of production. The forest products industry does not operate in a uniform fashion throughout Washington. While harvesting and production does occur frequently in rural areas, policy cannot discount the fact that major urban centres (e.g. Tacoma, Everett, Spokane) play a critical role as producers, administrators, and regulators of the industry. They also act as shipping and transportation hubs. The forest products industry is also extremely active in medium-sized urban areas (e.g. Longview, Aberdeen, Richland) that are heavily-dependent on such wages and multiplier effects, and offer few other long-term employment opportunities.

The visibility of mills and harvested timberlands presents a unique set of challenges to the forest products industry. It is not surprising that the public – be they urban or rural – is often wary of the activities of waterfront mills or large logging operations. According to interview subjects, these are some of the reasons why the industry had been unfairly targeted by environmental lobbyists. However, it may be that the industry and affiliated labor organizations are partly to blame in that they have not properly communicated the economic benefits the enormous progress the industry has made in terms of environmental stewardship. They have also, in many ways, failed to take into account the variegated needs of different communities, towns, cities, and regions. *If industry, labor organizations, local residents, and policy-makers are better able to understand each other's geographical nuances, practices, and needs they will be better positioned to contribute to widely-distributed economic, environmental, and social benefits.*

Implication #4: Labor as an Active Partner

Policy needs to *accommodate, include, and understand the role of labor and the labor movement in the inception and fostering of partnerships, coalitions, and industry-based organizations.* These roles extend far beyond the traditional role of unions as a primary bargaining agent, social activists, and philanthropists. If policy and structure allow, the labor movement could potentially mobilize its significant human and financial resources and act as a formidable partner at a variety of scales. This may include the promotion of locally-based industries and employers, the extension of union activity and membership into non-traditional sectors, and community-, social- or environmentally-based coalitions, all of which can improve the lobbying capacity and public perception of organized labor in Washington State.

Implication #5: Satisfying Labor Demand

The labor force of the forest products industry is aging. *In the next decade it will be increasingly critical to replace retiring workers with a new generation of skilled, certified, and trainable workers.* Many of these positions offer family wages and have high economic multiplier benefits for the region. Because of massive job loss and the perception that forest products is a “sunset” industry, however, there is a question of how best to recruit and retain the next generation of workers. This is especially crucial in smaller communities that do not have a large labor pool to draw upon and that lack institutional education and training facilities. Furthermore, there is a need to act proactively to ensure that there is a readily available and adequately skilled labor force before it is too late.

The current structure of forest products firms limits the ability to train workers internally. This is the case in a number of large industries. *The responsibility therefore falls – at least partially – upon the state to ensure that young workers are aware of these employment opportunities and that education and training programs can meet the needs of the industry.* It should also be noted that firms cannot be completely absent in this process, and must work with state and local governments to ensure that the proper education and training opportunities are in place. Government and industry stand to benefit from a highly-skilled and fully employed workforce, which is a vital component of any region.

Organized labor must also be proactive in this matter, as it is these workers that will constitute the next generation of the labor movement. It is to the advantage of unions to involve themselves early and often in the replication of workplace-based skills, as it affords them an opportunity to convey the benefits, structure, and culture of their organizations in the earliest stages of the careers of potential workers.

Implication #6: Simultaneous Economic and Environmental Benefits

Despite its notorious reputation and legacy of environmental mismanagement, *the forest products industry – if properly managed, regulated, and encouraged – has the potential to be an economically-viable and ecologically-sustainable part of the solution to environmental crises.* This is a critical component of any resource-based industry today. More thought and effort must be given to the manner in which forests can be managed for multiple uses, which include the perpetual supply of high-quality local timber. This, of course, must be done without threatening the long-term health and non-industrial values of Cascadia’s forests. It is increasingly evident that so long as there is a demand for forest products, environmental gains are not realized by simply shifting production to other parts of the world that lack stringent labor and ecological regulations. *A system that rewards responsible forest management and discounts the value of timber, lumber, and pulp and paper-based products harvested in an unsustainable manner – no matter which part of the world they originate from – is crucial.* The role of forest certification programs may be particularly welcome here.

Implication #7: Towards a “Cascadian” Forest Policy Regime?

An intricate and dynamic web of economic, political, social, and environmental policies govern the forest products industry. Because of its geographic position in Cascadia, *Washington can draw upon lessons from Oregon and British Columbia to inform and guide policy-creation, and vice-versa*. Each sub-national unit faces its own challenges and constraints, however, this is where the strength of a tri-partite “Cascadian” forest policy regime lies. This “regime” does not necessarily require formal policy integration, nor does it assume that state and provincial governments – whose forest products industries often compete with one another – form traditional alliances. What it does consist of are *cooperative efforts to share information, learn from successes and shortcomings, and promote mutual gains for all parties involved*, whether it be elected government officials, representatives of industry, owner-investors, labor organizations, workers, small businesspeople, environmental lobbyists, and the residents and communities of Cascadia. While such efforts may occur formally or informally, on broad or narrow scales, the importance and strength of such a regime requires an open dialogue and the fostering of reciprocal relationships between any and all parties who have a stake in the economic, political, environmental, and social well-being of Cascadia.

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