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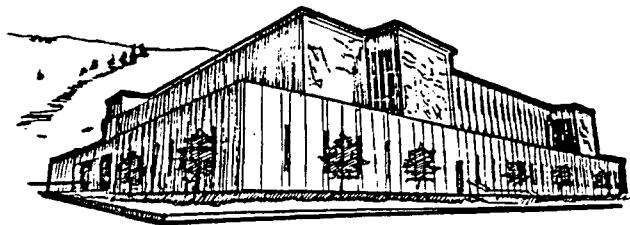
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University of  
**Montana**



**NOW v. FOREVER**  
**The conflict between business and forestry in the  
management of Plum Creek timberlands in Montana**

by

**Timothy Matthew Bechtold**

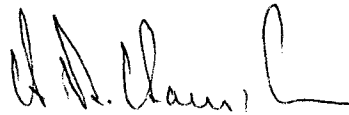
AB, Harvard College, 1984

Presented in partial fulfillment of the requirements  
for the degree of

**Master of Science  
in  
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University of Montana  
1992

Approved by



Chair, Examining Committee



Dean, Graduate School

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Now *v.* Forever: The conflict between business and forestry in the management of Plum Creek timberlands in Montana (113pp)

Director: H. Duane Hampton 

Plum Creek Timber Company currently owns about 808,000 acres of land in the state of Montana. The present incarnation of Plum Creek is the result of several corporate reorganizations of the Burlington Northern Railroad, itself the result of the merger of the holdings of the Great Northern Railroad Company and the Northern Pacific Railway Company. The Northern Pacific is a land-grant railroad, that is, the US government awarded the railroad with grants of land along the length of the track in order to help finance construction of the line. It is the remnants of this land grant that constitute the bulk of Plum Creek's land holdings in Montana today.

From 1880, when the first lengths of NP track crossed Montana's eastern border, until the present, the people in charge of the land holdings held different objectives in dealing with the land. Until about World War II, managers pursued an aggressive land sale policy to decrease land holdings in return for monetary payments, and acted primarily as custodians of the land. As the value of the timbered land holdings increased following the war, management reassessed the value and created a market for its timbered holdings by entering a series of long-term timber supply stumpage contracts with mills. This marked the beginning of managing the land to produce timber, and the railroad hired professional foresters to oversee the management. As soon as the markets for the timber were in place at the conclusion of the contracts, management abandoned stumpage sales, but continued to harvest trees through selective sales of logs at a rate projected to equal regrowth, under the guidance of Bob Binger, a trained forester who headed resources from 1968-1981. This practice continued through Northern Pacific's corporate merger with Great Northern in 1970, and later through reorganization as BN Timberlands, a part of the larger holding company of Burlington Northern, Inc. in 1981. In 1983, BN merged its timber operations, which by this time included several mills, into one company, known as Plum Creek Timber Company, that still operated under the holding company. Soon after timber operations were merged, Plum Creek abandoned its policy of cutting timber as fast as it could reasonably regrow it in favor of a vastly accelerated cut. Interviews with former and present company employees and with people familiar with the company point to a variety of factors involved in the sudden corporate decision to cut more trees: Changes in the inner and external corporate environment, personnel, market demand, and regulation all contributed to the decisions to escalate the cut on Plum Creek lands. In addition, changes in the level of timber harvest were paired with changes in the type of harvest, as Plum Creek relied increasingly on clearcutting to deliver its timber volume.

The science of sustained-yield forestry, so important during the Binger era of timberlands management, was abandoned by Plum Creek during the 1980s, when management practices were more heavily influenced by the business environment than by the tenets of forestry.

## ACKNOWLEDGMENTS

I would like to thank all the Northern Pacific, Burlington Northern, Burlington Resources, and Plum Creek employees, past and present, who consented to interviews, and without whom this thesis would have had no substance, especially Bob Binger. I would also like to thank the members of my committee (Duane Hampton, Paul Dietrich, Dave Jackson, and Tom Roy) for being bastards when they felt they had to, and for dealing with my time constraints. Hamp, frankly, is a gem, and I'm glad he consented to the burden of chairing my committee. Don Hofsommer, of St Cloud State University, was particularly helpful and insightful, Ron Erickson of the Environmental Studies Department at the University of Montana helped me find a focus, and Patty Limerick, now at CU in Boulder, pointed me west when I was an undergraduate. In addition, I would like to thank my various funding sources during my prolonged graduate school tenure, including the Erasmus Scholarship and the BB Dawson Scholarship, for keeping me supplied with bucks for beer and backcountry skiing for a little while.

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## INTRODUCTION

According to Charlie Grenier, a vice-president of the company, Plum Creek Timber Company has “hundreds of thousands of acres of merchantable timber to harvest. [Plum Creek's] policy is to harvest, replant and grow timber into perpetuity. That's what makes [Plum Creek] valuable—handling [Plum Creek's] timberlands otherwise would not only be unethical, it would be dumb.”<sup>1</sup>

Grenier states that, today, Plum Creek is managing its timber holdings “into perpetuity,” but this has not always been company policy. Even within this stated policy aim, how various company managers have carried out this directive has varied sharply over time. Plum Creek, which owns about 808,000 acres of timberlands in Montana, came into possession of the timberlands through land grants in the 19th century to a Plum Creek corporate progenitor, the Northern Pacific Railroad. The land grant to the Northern Pacific extended from Minnesota to Washington, and the company concentrated on selling the land whenever possible to raise funds. It was only after World War II that the company began to manage its timberlands in Montana for wood and fiber production, and first hired foresters to oversee the woodlands.

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<sup>1</sup> Devlin, Sherry. 1991. “Plum Creek growls at ‘unfair’ ad,” *Missoulian*, 22 November: p B-3.

Trained foresters in the United States at this time were heavily influenced by Bernhard Fernow and Gifford Pinchot, the “fathers” of forestry in the US. Fernow and Pinchot, enamored with the Germanic forest model, championed the concept of a “regulated” forest, in which harvest levels were equal to growth (harvests based on growth could never deplete a forest, so the forest would produce in perpetuity). This was the beginning of the concept of sustained-yield forestry in the US. In the popular notion of the public, in fact, “forestry” became synonymous with “sustained-yield,” as a response to the widespread deforestation that had already occurred in the US; forestry was portrayed by Pinchot, et al, as means to end destructive timbering and provide timber supplies for the future: community stability <sup>2</sup>

Foresters soon found the concept of only cutting as much as was growing too constricting. Most of the woodland was comprised of old growth, so the concept of sustained yield changed to cutting as much as the productive capacity of the forest rather than actual growth rates: cutting levels based on estimated potential rather than reality. This traditional Germanic approach to forestry was the basis of the curriculum of the forestry schools in the US, including the University of Montana. Foresters coming out of the training institutions in “mercantile Germany didn’t have a technology base, they relied on tradition. In the US, we have technology and no tradition; tradition is

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<sup>2</sup> Parry, B Thomas, Henry Vaux & Nicholas Dennis. 1983. “Changing Conceptions Of Sustained -Yield Policy On The National Forests,” *Journal of Forestry*, 81(3): 151.

last year's tennis shoe. Technology has always bailed this country out, and that is what we rely on."<sup>3</sup>

Management of the present Plum Creek timber holdings changed as the notions of how to manage the forest shifted with changes in management personnel. This thesis examines the land-use management of the land-grant timberlands that have ended up in Plum Creek ownership from the awarding of the grants to the present day, and it details the conflict between the tenets of scientific forestry and the drives of managers responding to varying business environments in timberland management on the Plum Creek timbered lands.

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<sup>3</sup> Goetz, Hank. 1991. Interview. 15 November. Former Northern Pacific forester and current manager of the University of Montana's Lubrecht Experimental Forest.

## ORIGINS OF LAND GRANTS

“Pioneering don’t pay”: As Andrew Carnegie knew, homesteading in the American West in the 19th century was a perilous and arduous undertaking. Settlers had to uproot themselves from their homes and move to a new and strange environment, often to undertake a completely different form of livelihood. Many homesteaders came from the states already established in the United States, and many, like Per Hansa in Ole Rølvaag’s *Giants in the Earth*, came from foreign lands. Many settlers, like Per Hansa, also succumbed, for one reason or another, to the power of the environment into which they had transported themselves. Pioneering was usually a test of survival, and not a highly profitable venture, it truly did not “pay,” but the pioneering spirit of adventure and new opportunities captured people and drove them west nonetheless.

In the mid-19th century, the spirit of Manifest Destiny, and later, Progress, caught the imaginations of Americans and emboldened them to move out into the territories and make the land their own and in so doing, strengthening the powers of American civilization on the continent. Obvious lures awaited the daring overland adventurer: the apparent promise of abundant minerals, rich soil, and tall trees. In short, the resources from which to derive a profitable income seemingly sat awaiting the arrival of somebody to take advantage of the opportunity these resources allowed. However, obvious hindrances also deterred potential pioneers from moving into the territories. Life in the territories was hard; conveniences common in the East, such as

roads and mail service, were infrequent, and a settler's life was often a lonely and danger-fraught affair.

The government, eager to tie the various outlying regions of the country and its territories closer together, wanted settlers occupying the far reaches to hasten the "Americanization" of these lands. The federal government therefore subsidized railroad line construction with grants of public land to railroad builders in order to hasten the construction of a web of railroads across the continent.

North America was largely agrarian during the formation of the United States. Thomas Jefferson believed that man found his greatest virtue when he was working and living as a yeoman on the land. In order to have a nation of virtuous citizens, in the Jeffersonian view, the government should act in favor of maintaining and enhancing this class of independent and self-reliant person in all cases. Jefferson viewed the budding development of cities and their worker and merchant classes with suspicion; he believed that the self-reliance inherent in yeomanry and essential to inherent virtue in humans was lacking in city-dwellers, and he therefore advocated a government that would favor an agrarian way of life.<sup>1</sup>

The Constitutional Convention passed over Jefferson's ideas for governance of the United States in favor of James Madison's mechanistic model of government, but the agrarian ideal remained a

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<sup>1</sup> See, generally, Sullivan, William. 1986. *Restructuring Public Policy*. (Berkeley: University of California Press).

strong current in American thought. The government made public lands available cheaply for settlers so that each person had the ability to live on his own piece of land if he desired. The government encouraged settlers to move west to new lands and to spread “civilization” farther across the continent. By 1819 European settlements had spread to the Great Bend of the Missouri and trade had been opened up with Sante Fe.<sup>2</sup> Oregon had established settlements prior to 1843, but the discovery of gold in California started such a huge rush of people that Oregon was soon eclipsed in popular fancy and commercial reality.<sup>3</sup> No longer just a trickle of bold adventurers, a steady stream of people moved west. The nation as a whole got caught up in the fervor of Manifest Destiny — the idea that the continent was meant to be “American” from sea to sea — and technological developments such as steam power served to expedite the push across the continent, as they allowed people easier access to land they could call their own.

As technological innovations allowed the steam railroad to lay its lattice across the eastern seaboard and points west, Americans took note of the relative advantages of railroads. Whereas the benefits of a railroad over nonmotorized traffic are somewhat obvious, railways were really not any cheaper than waterway traffic. But the speed, flexibility of service, adaptability to short hauls, and, most importantly, the convenience of locating, all gave the railroad an advantage over

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<sup>2</sup> Atwater, Elizabeth Rodgers. 1937. “Letters of Montgomery Meigs Written While Engaged in the Survey of the Northern Pacific Railroad 1872-1873.” (Unpublished Master’s Thesis, University of Montana, Missoula, Montana) p *ii*.

<sup>3</sup> Cotroneo, Ross. 1966. “The History of the Northern Pacific Land Grant 1900-1952.” (Unpublished Doctoral Dissertation, University of Idaho, Moscow, Idaho) p 10.

water traffic.<sup>4</sup> As industrialization developed, the railroads played an increasingly important role in shipping raw materials and goods from centers of supply to places of demand. In addition, wherever a railroad went, it tended “to attract factors of production to its right of way”; it was, in Keynesian terms, a “multiplier”: Railroads sparked demand for labor and capital goods wherever they went, and hence their presence led to more rapid development of an area.<sup>5</sup>

Congress, in the early-to-mid-19th century, was well aware of the economic boost railroads applied, and was favorably disposed towards railroad development. One avenue Congress could take to encourage development and to offset the high cost of railroad construction was to offer the public domain as security for the inducement of private capital to build the road.<sup>6</sup> As Representative Freeman of Mississippi noted in 1851, the purpose of land ceded to the federal government was to dispose of the public debt and build up new states; offering land grants as security for the development was “the surest mode of increasing the public revenue, and encouraging growth of new Republican states in our domain.”<sup>7</sup> In Congress, though, sectional differences dominated activity; two areas supported land grants, the manufacturing east and the western areas of the public domain. The old South and former frontier states with no public land “had nothing

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<sup>4</sup> Jenks, Leland. 1944. “Railroads as an Economic Force in American Development,” *Journal of Economic History* 4(1):13.

<sup>5</sup> Jenks. p 7.

<sup>6</sup> Harnsberger, John. 1956. *Jay Cooke and Minnesota*. (Ann Arbor: University of Michigan Press). p 2.

<sup>7</sup> Haney, Lewis. 1910. *A Congressional History of Railways in the United States 1850-1887*. (Madison: University of Wisconsin Press) p 16.



to gain and possibly something to lose by handing out what they regarded as the common treasure of the nation.”<sup>8</sup>

By the mid-forties, both the Democrats and the Whigs favored use of public lands to encourage railroad building, and by 1856, the Republican party platform also favored land grant aid to build a railroad to the Pacific.<sup>9</sup> Congress supported the view that the advantage of a railroad lay in its aid to development: If a railroad were in place due to a land grant, adjacent federal lands would increase in value, thus federal income from land sales would increase. Commerce in the area would increase, and states would benefit from tax income gained from land occupants. The US would also benefit from cheaper and improved postal service and military transport, since the land grants issued by Congress included these stipulations. Proponents of land donation had confidence that virtue was on their side, and the railroad enterpriser of the day “considered himself an agent of civilization, and embodiment of collective purpose.”<sup>10</sup>

Even though Congress willingly donated land to aid in construction of railroads, the land grant itself did not guarantee the success of the road. The grants were simply an enticement to attract investors and underwrite construction of the line. No conservative investor would throw his funds into a project without some sort of guarantee on a return. The land associated with a grant gave investors

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<sup>8</sup> Overton, Richard Cleghorn. 1941. *Burlington West: A Colonization History of the Burlington Railroad*. (Cambridge: Harvard University Press) p 77.

<sup>9</sup> Cochran, Thomas. 1950. “Land Grants and Railroad Entrepreneurship,” *Journal of Economic History* 10(supl):54.

<sup>10</sup> Jenks, p 10.

the surety of something solid in return for their investment.<sup>11</sup> Without the security of land, obtaining investors to hazard dollars for the venture would have been next to impossible.

A general concept behind the land grants was essentially that the railroad would sell the granted land and use the money earned through the sale to finance road construction. However, capital for construction had to be raised in advance, and net proceeds from land accrued gradually over time. So in the beginning, land simply provided additional security for mortgage bonds. The railroads did not assume official ownership of the lands (via issuance of a patent from the General Land Office) until they had built a specified length of track. After government inspectors validated the quality and distance of track, the GLO sent out surveyors to plat the land. Only after the land was platted could the railroad select lands that constituted its grant. In the case of the Northern Pacific, after each twenty-five miles of track, the GLO surveyors would come out to plat the land, and only then could NPRR select lands from the area around the previous twenty-five miles. In a sense, the railroad was expected to put the cart before the horse: it had to build the railroad to get the land to sell in order to finance the rail it had just built. Given this lag time in getting return from granted lands, speculative capital, despite its “undesirable moral connotations” and “parasitic” nature, was essential to the growth of a pioneer industry like railroading.<sup>12</sup>

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<sup>11</sup> Cochran, p 60.

<sup>12</sup> Grodinsky, Julius. 1962. *Transcontinental Railway Strategy*. (Philadelphia: University of Pennsylvania Press) p 179.

Speculative investment was necessary because prudent investors “had acquired somewhat of an early prejudice against the value of western land.”<sup>13</sup> Unfortunately for railroads hoping to solve initial financial difficulties via land grants, previous investment in remote and cheap real estate had yielded poorly, and investors were aware that quick and substantial returns were very unlikely from investments in remote areas of public domain.<sup>14</sup> Despite unwillingness on the part of investors, public opinion, as it reflected in Congress, was in favor of railroad development, and if the public had to give up chunks of the public domain to pry speculative investment for railroad construction, it was willing to do so. States’ rights advocates (most of whom were southern) in Congress had reservations about granting federal land directly to a federally-incorporated entity such as the NPRR; they favored granting land to the individual states and allowing the states to distribute grants as they individually saw fit. Congress, therefore, usually found a way to approve land grant requests — either by granting federal land to individual states for them to turn over to corporations of their own creation, or by a direct federal land grant for the transcontinental roads — primarily because it saw gifts of land as the nation’s role in sponsoring railroad development.<sup>15</sup>

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<sup>13</sup> Cochran, p 58.

<sup>14</sup> Cochran, p 58.

<sup>15</sup> Smalley, Eugene V. 1883. *History of the Northern Pacific Railroad*. (New York: GP Putnam’s Sons) p 100.

## ORIGIN OF THE NORTHERN PACIFIC

The concept of a railroad line to the Pacific was intriguing for entrepreneurs as early as 1834, when Dr. Samuel Bancroft Barlow, a practicing physician living in Granville, Massachusetts, wrote numerous articles and editorials in favor of public funds financing a railroad from New York to the mouth of the Columbia.<sup>1</sup> Eleven years passed before Asa Whitney first attempted to influence Congress to sponsor a northern route to the west coast in 1845. Initially, the northern route was a subject of derision; as late as 1852 members of Congress ridiculed the northern route as a plan “to build a railroad through a barren, uninhabited, frozen region.”<sup>2</sup> Proposals from Whitney and several rival groups each had regional backing, and the impending Civil War heated up the intersectional debate. Eventually Congress passed a bill in 1853 authorizing survey of the four most-favored routes to the Pacific because Congress could not agree upon which one route to survey. Upon completion of the surveys, Jefferson Davis, then Secretary of War—whose department had sponsored the surveys—recommended construction along the 32nd parallel.<sup>3</sup> Sectional rivalries, however, still prevented agreement in Congress. After extensive deliberation, in 1862—when southern voices were absent from the vote—Congress awarded the Union and Central Pacific the first land grant to build a railroad to the Pacific.<sup>4</sup>

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<sup>1</sup> Smalley, Eugene V. 1883. *History of the Northern Pacific Railroad*. (New York: GP Putnam’s Sons) p 53.

<sup>2</sup> Schwarm, LL. 1956. “Resume of Northern Pacific Railroad Land Grant Act of July 2, 1864, and Amendatory and Supplemental Legislation, Subsidiary Grants.” Unpublished Document compiled by NRPW Land Commissioner LL Schwarm. p 1.

<sup>3</sup> Smalley, p 78.

<sup>4</sup> Harnsberger, p 8.

Even though Congress did not favor the northern route for the first transcontinental railroad, it did not rule out the possibility of support for a northern route in the future. Josiah Perham, a merchant from Maine who had picked up where Whitney had left off in support of a northern route to the Pacific, won a charter from Congress in 1864 entitled, "An Act granting Lands to aid in the Construction of a Railroad and Telegraph Line from Lake Superior to Puget's Sound, on the Pacific Coast, by the Northern Route" for a line running north of the 45th parallel. Many prominent people of the times, including Ulysses S. Grant, John C. Fremont, John Mullan, and William H. Wallace, were named as incorporators, and Lincoln signed the act on 2 July, 1864. This charter marked the beginnings of the Northern Pacific Railroad (NPRR). The charter granted the NPRR 400 feet of right-of-way for the length of the road, and also granted twenty alternating odd-numbered sections per mile of track (12,800 acres/mile) laid in the states, and forty alternating odd-numbered sections per mile (25,600 acres/mile) constructed in the territories.<sup>5</sup> Of the proposed route of the NPRR at the time of the grant, Minnesota and Oregon were the only states already formed, while North Dakota, Montana, Idaho, and Washington were still territories. Under terms of the charter, NPRR had to select its land grant within fifty miles of the railroad line. The charter also called for initial construction to start by 1866, and required completion by 1876.

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<sup>5</sup> 13 Stat. 356.

Even though Congress placed the guarantee of land behind the Northern Pacific venture, the NPRR had trouble getting the project off the ground. Perham hoped to finance the NPRR through a large number of small stock subscriptions, but his plan failed to get enough supporters to begin construction. It was only when Jay Cooke, the renowned Civil War financier, put the power of his banking firm behind the enterprise that it assumed serious proportions.<sup>6</sup> Cooke sought and received from Congress a two-year extension on initiation and completion of construction in both 1866<sup>7</sup> and 1868,<sup>8</sup> though the 1868 extension set the completion date at 1877.

The original NPRR charter did not allow the issuance of bonds without congressional consent, so Cooke obtained consent to issue a bond to be secured by mortgage in 1869,<sup>9</sup> and a bond to cover construction and equipment in 1870.<sup>10</sup> Construction on the railway finally began on 15 February, 1870, when ground was broken near Duluth. On 1 July, 1870, NPRR mortgaged all of its properties to Jay Cooke as security for the payment of bonds not to exceed \$125 million. NPRR issued \$30 million in bonds to sponsor construction and built 529 miles, from Duluth to Bismarck, and also laid track from Kalama to Portland in the West, in 1870-73. To finance the NPRR, Cooke relied on tactics that he had used with great success to raise funds during the

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<sup>6</sup> Clinch, Thomas. 1965. "The Northern Pacific Railroad and Montana's Mineral Lands," *Pacific Historical Review* 34(3): 325.

<sup>7</sup> 14 Stat. 355.

<sup>8</sup> 15 Stat. 255.

<sup>9</sup> 16 Stat. 346.

<sup>10</sup> 16 Stat. 378.

Civil War.<sup>11</sup> For a short time the bonds sold well enough to supply construction costs, but by late in 1872 the railroad became pressed for funds to continue construction. Cooke's first plan was to sell the bulk of the bonds in Europe, but he could not interest the Rothschilds to make a major investment; later the outbreak of the Franco-Prussian War in Europe halted European investment almost entirely.<sup>12</sup> Cooke then turned to an advertising campaign to sell the lands on the domestic market. The bonds were speculative in nature and fairly high-priced, and this, combined with widespread rumors of mismanagement, contributed to poor sales in the United States.

Under terms of the grant, the company could not sell land to settlers until a stretch of track had been finished and inspected by the government and the land surveyed. Because NPRR President Smith was afraid that the track was not of good quality because workers were building it with unheard of speed, NPRR managers did not invite government inspectors to view the construction until October of 1872 (whereupon inspectors found the track thoroughly favorable), so the NPRR could not receive land sales income until after that time. Without income from land sales, the line was forced to rely on traffic alone for the bulk of its income. By 1872, bonds sales were not bringing in enough money to cover the costs of construction, and workers were often not paid on time.<sup>13</sup> The interest due on the bonds turned out to be more than the profits from the short spans of track could support,

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<sup>11</sup> Renz, Louis. 1973. *The Construction of the Northern Pacific Railroad Main Line during the Years 1870 to 1888*. (Walla Walla, Washington: Self-Published) p 7.

<sup>12</sup> Oberholtzer, Ellis Paxson. 1907. *Jay Cooke, Financier of the Civil War*. (Philadelphia: GW Jabobs) Vol 2, p 147.

<sup>13</sup> Oberholtzer, pp 305, 387.

and Cooke's huge banking firm collapsed under the pressure of trying to support the bond.<sup>14</sup>

The NPRR went into receivership on 1 May, 1875; this meant that the bondholders who had put up all the money for Cooke secured control of the NPRR. The stockholders of the NPRR during Cooke's reign had been only a few very rich people, while the bondholders had been mostly normal middle-class people who put in small amounts of money, largely because of the reputation of Jay Cooke, the financier extraordinaire. These people formed a bondholder's committee, headed by George Cass, James Moorhead, and Frederick Billings, to assume management of the line.<sup>15</sup>

Cooke's attempt to run the NPRR out to the Pacific demonstrates the difficulty of relying on a land grant to finance construction.

...the land grant itself could not by itself solve the problems of financing a railroad in a sparsely settled frontier area, particularly with a depression setting in... and with promoters who were less interested in building the line than in the possible quick profits from stock and land manipulation.... A grant of land would normally stimulate some flow of capital to a railroad project, but it could not by itself guarantee success. Its effectiveness was always conditioned by the state of the development of the territory to be traversed, the availability of other sources of capital to get the road built, and the entrepreneurial and

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<sup>14</sup> Dagget, Stuart. 1908. *Railroad Reorganization*. (New York: Houghton Mifflin) p 265. NP President Smith got sacked for his hesitancy to have the rail inspected, which prevented the NP from receiving grants of land and the subsequent income from land sales. The collapse of Cooke's highly-respected bank led to the widespread Panic of 1873.

<sup>15</sup> All three men thus entered the place-name bonanza. Moorhead, Minnesota, Cass County, North Dakota, and Billings, Montana, and Billings County, North Dakota.



managerial ability of the men in charge of the enterprise.<sup>16</sup>

In order for a railroad to make money, it had to be able to retire debt through sale of grant lands, and if there was no demand for sale—as was the case for the NPRR—the financial state of the railway would be jeopardized.

As long as a railroad kept pace with settlement by expanding with demand instead of rushing ahead of the demand, it could keep a steady market for traffic on the line. Even though railroads could get more land through additional trackbuilding, the smart investor preferred to keep pace with settlement. The best security for the railroads were the lines themselves, and their future as traffic carriers, and not the land grants that came with construction.<sup>17</sup> The method to turn a profit on a railroad was to make sure that a large traffic demand dictated where to lay tracks. Therefore, the NPRR preferred to sell its granted land to settlers, not speculators, and it wanted to sell it quickly and cheaply to create a demand for traffic. Over a period of time the settler's traffic was going to be worth more to the railroad than the initial sale of the land because of the settler's freighting payments. The NPRR recruited settlers heavily to promote this traffic; this resulted in a settler population that stretched out onto the plain along the tracks, instead of a more evenly bunched expansion. Many communities owed their existence to the railroad: The rails took transportation to

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<sup>16</sup> Rae, John. 1952. "The Great Northern's Land Grant," *Journal of Economic History* 12(2):144.

<sup>17</sup> Rae, p 142.

places that would not have had much commercial existence if it were not for the railroad running through it.

Having learned its lesson once, a reorganized NPRR under Frederick Billings set out to complete the line in 1879. The NPRR cautiously arranged separate mortgages to finance small stretches of track (from Bismarck to Glendive and from Wallula to Sandpoint) initially,<sup>18</sup> and construction began anew. By 1880, with the European war over, prosperity had returned to the extent that investors again had money to finance ventures.

On the west coast, meanwhile, an entrepreneur named Henry Villard was running his Oregon Railway & Navigation Company line very near the planned route of the NPRR through Oregon and Washington, and he and the NPRR began to squabble about pre-eminent rights.<sup>19</sup> Villard had experienced a jump in income from \$750,000 to \$2.5 million—too much of a good thing to want to share—so he did not want the NPRR coming into his sphere of trade. Villard settled all arguments by forming a “blind pool” to gather investment capital: He asked potential investors for money, but did not inform them to what purpose he intended to use their capital in hopes of protecting his intentions from the NPRR. Initially, Villard hoped to gather \$8 million, but investors blindly entrusted him with \$12 million. With this capital, Villard created a holding company that

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<sup>18</sup> Schwarm, p 9.

<sup>19</sup> Villard originally had been sent to Oregon to stabilize and reorganize interests held by a group of German bankers. He was so intrigued by the possibilities that he bought out many of the German interests himself. See, generally, Villard's *Memoirs*.

bought the controlling interest in the NPRR in 1881 before the NPRR could act to protect itself.<sup>20</sup> He was elected President of the NPRR board and assumed active direction of the company.

Construction proceeded rapidly under Villard. The tracks reached Billings by 8 September, 1882, and on 8 September, 1883, the Navigation Company joined the NPRR at Gold Creek, Montana, and the Lake Superior to Puget Sound connection was complete.<sup>21</sup> Unfortunately, it seems that Villard did not learn from Cooke's experience, and due to a "grave underestimation" of the costs of construction, Villard's financial empire collapsed, and he resigned on 16 December, 1883, because the company was bankrupt. Once again, the rail traffic volume was not enough to support interest returns for investors. After Villard's holding company collapsed, new management extended the NPRR line through Idaho to Tacoma so that the NPRR would not be dependant upon Villard's Navigation line to reach the coast.<sup>22</sup>

The NPRR took out several more mortgages, in 1883, 1887, and 1889, in efforts to keep the trains rolling, but defaulted on them all during the Great Panic of 1893, whereupon federal court enacted foreclosure proceedings. James Jerome Hill, who had by this time privately financed the construction of the Great Northern (GN) railroad from St Paul to Seattle, and whose line weathered the Great

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<sup>20</sup> Villard, Henry. 1904. *Memoirs of Henry Villard - Journalist and Financier, 1835-1900*. (New York: Houghton Mifflin) Vol 2, pp 85, 299.

<sup>21</sup> Northern Pacific Railroad Company *Annual Report* of 1882 and 1883. Gold Creek is near Garrison, Montana.

<sup>22</sup> Grodinsky, p 141.

Panic of 1893, believed that the NPRR failed because it did not pay attention to “proper development,” by which Hill meant building feeder-branch lines along the main line to encourage increased freight traffic.<sup>23</sup> The NPRR, under pressure of possible forfeiture of its land grant (see discussion in a later section), finished its mainline at the expense of creating a feeder-branch line network. Building such a network would have assured a population increase and increased traffic, as it had for Hill.

JJ Hill, together with a consortium including JP Morgan, had attempted to buy the NPRR in 1895. The consortium made an offer to buy the NPRR to its receiver, Edward D. Adams, and to two representatives of the Deutsche Bank, its financial institution, and the three men decided to accept the offer. However, one GN stockholder, afraid that acquiring the shaky NPRR would hurt his GN stock, tested the buyout based on Minnesota law that unification of parallel and competing railroad lines was against the law. The Supreme Court upheld the stockholder’s opinion, so Hill and his compatriots bought into the NPRR as individuals, and they reorganized the NPRR over into the Northern Pacific Railway Company (NPRW).<sup>24</sup> In a sale of property directed by the court, all properties of the NPRR<sup>25</sup> were sold to the NPRW on 15 October, 1896. JJ Hill thus assumed control of both the GN and NPRW.

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<sup>23</sup> Holbrook, Stewart H. 1955. *James J Hill, A Great Life in Brief*. (New York: Alfred A Knopf) p 125.

<sup>24</sup> Holbrook, p 128 & Pyle, JG. 1917. *Life of James J Hill*. (New York: Doubleday) pp 17, 24.

<sup>25</sup> All lands were sold to the NPRW except the lands in Minnesota and east of the Missouri River in North Dakota, which were not subject to the three mortgages that were foreclosed; NPRW later bought these lands under public sales in 1899.

The Chicago, Burlington & Quincy (CB&Q) operated track from Chicago to Denver, with a line that extended as far north and west as Billings. JJ Hill had his eye on the country covered by the CB&Q as potential markets for timber from the Northwest and grain from the Midwest areas that his lines already covered, and he coveted the CB&Q. EH Harriman, who controlled the Union Pacific Railroad just south of the CB&Q, had the same designs on the CB&Q as Hill, and he offered Hill a chance to split the pie, but Hill wanted it all. In 1904, he started buying up all the loose CB&Q stock that he could under the names of GN and NPRW in equal parts, eventually purchasing \$107,611,000 of the \$110,839,100 total in CB&Q stock, or 97 per cent.<sup>26</sup> Harriman then tried to enter the game via the back door by purchasing all the loose NPRW stock he could find and perhaps gain control of the Northern Pacific and access to the CB&Q that way. Unfortunately for Harriman, his search for NPRW stock pushed the price up enough to alert Hill that something was amiss, and Hill was able to buy up enough NPRW stock to remain in control.<sup>27</sup>

In order to protect his railroad holdings from raids similar to the Harriman attempt on the NPRW, and to reach reapproachment with Harriman, Hill formed the Northern Securities Company on 12 November, 1901. Northern Securities was a huge holding company

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<sup>26</sup> *Moody's Railroad Manual* 1907, p 734. Moody's put out an annual that summarized the business of all railroad companies. Later, the name changed to *Moody's Transportation Manual*, and is only one of several annuals now compiled by Moody's.

<sup>27</sup> Cotroneo, Ross Ralph. 1966. "The History of the Northern Pacific Land Grant 1900-1952." (Unpublished Doctoral Thesis, University of Idaho, Moscow, Idaho) p 27. Arno Press published Cotroneo's dissertation in book form in 1979. Hereinafter referred to as "Cotroneo 1966."

that controlled the NPRW and the GN, and because the GN and NPRW held the majority of stock in the CB&Q, Northern Securities controlled the CB&Q as well, thus Hill controlled most of Montana's railroad trackage.<sup>28</sup> The resulting company was so gigantic that no one could hope to buy or even bother it. Hill viewed the new company as a "labor-saving device" that would lower rates and increase dividends because of the "security, harmony and relief from various forms of waste" that the company would provide.<sup>29</sup> The Supreme Court, however, ruled on 14 March, 1904,<sup>30</sup> that the Northern Securities Company violated the Sherman Anti-Trust Act of 1890. The Court ruled that it was not necessary to prove that competition had been reduced by the formation of the holding company. The offense was obtaining the power that Northern Securities had.<sup>31</sup> Hill then had to break up the company and the Great Northern, Northern Pacific Railway, and the Chicago, Burlington, & Quincy continued on as before.

During World War I the government took over operation of the nation's railroads as a matter of national security, and the railroads were not returned to private management until passage of the 1920 Transportation Act. This Transportation Act exempted railroads from the Sherman Anti-Trust Act of 1890, so GN, NPRW, and the CB&Q

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<sup>28</sup> Martin, Albro. 1971. *Enterprise Denied: Origins of Decline in American Railroads, 1897-1917*. (New York: Columbia University Press) p 100.

<sup>29</sup> Hill, James Jerome. 1910. *Highways of Progress*. (New York: Doubleday, Page & Co.) p 131.

<sup>30</sup> 193 US 197.

<sup>31</sup> Hofsommer, Don. 1989. Public Address, University of Montana, Missoula, Montana, 1 May. Hofsommer is a noted railroad historian whose works include a history of the Great Northern and a history of the Southern Pacific; he currently teaches history at St Cloud State University in Minnesota.

once again attempted consolidation. In 1922, the three roads announced that they had agreed on the terms of consolidation, and that the resultant entity, the Great Northern Pacific Railway Company, would improve service and lower capital costs. Returns on investment in the Northwest were lower than in other areas of the country because they had long stretches of track with relatively few people to serve. At any rate, they argued, it would only affirm reality, because 61% of the capital stock of GN and NPRW was held by the same stockholders.<sup>32</sup>

The Interstate Commerce Commission (ICC) finally ruled early in 1930 that the merger would benefit the public because of reduced rates and better service, and approved the merger. One of the conditions of approval, however, was that the NPRW and GN divest themselves of the CB&Q. The relative value of the CB&Q was greater than that of both the GN and the NPRW—it was the best money maker of the three—and GN and NPRW had no intentions of giving it up, so the case went back for more hearings. As the Stock Market Crash of 1929 deepened into depression, both political figures and labor leaders feared that consolidation would mean fewer jobs, and pressured the ICC to dismiss the merger case, which it did in 1931.<sup>33</sup>

Although the 1920 Transportation Act opened the way for the “natural” consolidation of railroads in the US, the Depression of the 1930s, then World War II, then upgrading stock and converting to

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<sup>32</sup> Hofsommer, 1 May, 1989.

<sup>33</sup> Hofsommer, 1 May, 1989.

diesel-driven motive power kept railroaders' minds occupied with other things.<sup>34</sup> Consolidation of the GN, NPRW, and the CB&Q did not come into serious consideration again until the late 1950s.

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<sup>34</sup> Hofsommer, 1 May, 1989.



## THE NP LAND GRANT

Montanans awaited the arrival of the railroad with great expectations of the enhanced development and faster settlement of the state that was sure to ensue when the railroad arrived, but they also regarded the land grant associated with the railroad with some trepidation. In 1874, the Territorial Assembly asked Congress to rescind the land grant in favor of direct cash subsidies, partially to hasten the arrival of the line, and partially to transfer the land grant into other ownership where territorial legislators felt it might prove more beneficial to Montana:

A half century hence the government will have received directly more than any aid it need render, while indirectly it will have received compensation one hundred fold; but a half century hence the immense grants of land will probably become elements of discord and sources of disturbance to the various states then constraining them....<sup>1</sup>

Whatever apprehensions Montanans may have felt about the huge chunk of Montana land that was scheduled to be turned over to NPRR after it laid track in the state were outweighed by the prospect of having a railroad to ship products from their mines and fields. Several subsidy bills were introduced in the territorial legislature to aid railroad construction in the state. For example, in 1876, the Governor of Montana Territory, BF Potts, signed three subsidy bills, one that offered NPRR \$3 million dollars, secured by bond, to lay 350 miles of track west of Glendive, one that offered the Utah Northern Railroad (a subsidiary

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<sup>1</sup> Montana *Laws* (1874)177-180.

of the Union Pacific) \$1.15 million to connect Helena to the Union Pacific, and one that authorized \$750,000 in county bonds to assist a Helena-Fort Benton railroad. Subsidy proponents justified the bond issues on the increased tax revenues a railroad would bring to the territory. All three were offered in referendum to the electorate, pending railroad acceptance of the subsidy. The Utah Northern rejected the subsidy offer, and the NPRR subsidy as well as the Fort Benton-Helena line subsidy were rejected in referendum. The subsidy offers arose at virtually every session of the territorial legislature, but no subsidies were ever awarded.<sup>2</sup> In 1877, the legislature passed a resolution asking Congress to hasten the construction of the NPRR line through issuance of \$18,720 per mile of US government bonds in lieu of the land grant;<sup>3</sup> this was summarily ignored by Congress. In the end, railroads came to Montana despite any actions of the territorial citizenry: Jay Gould and Sidney Dillon's railroad, the Utah & Northern, became Montana's first railroad when it crossed Monida Pass on 9 March, 1880. The NPRR soon followed Gould's line into Montana.<sup>4</sup>

The NPRR tracks finally crossed the North Dakota border into Montana in early December of 1880 and the line to the Pacific was completed near Garrison, at Gold Creek on the afternoon of 22 August, 1883. A formal celebration and ceremonial last spike followed on 8

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<sup>2</sup> Myers, Rex C. 1972. "Montana: A State and its Relationship with Railroads, 1864-1970." (Unpublished Doctoral Dissertation, University of Montana, Missoula, Montana) pp 20-64. This section of Myers' dissertation deals in depth with the material covered in the above paragraph.

<sup>3</sup> Montana *Laws* (1877)p 440-441, and Myers, p 50.

<sup>4</sup> Myers, p 60.

September, 1883.<sup>5</sup> On 13 September, 1883, the final construction crew of about 200 men received their final paychecks in Missoula, and the town was the “scene of a wild weekend.”<sup>6</sup>

On 21 February, 1872, the NPRR had filed its general right-of-way through Montana with the federal government to indicate its planned route through the state. This right-of-way platt called for construction to cross the Rockies over Deer Lodge Pass, near Butte, and documented the withdrawal of granted lands as provided by the NPRR charter land-grant of 1864. It was NPRR’s understanding that it had first pick of all odd sections that fell within its grant charter limits. However, many settlers were already in place before the NPRR even received its grant, and more moved into what would eventually become the NPRR grants limits long before the NPRR ever got around to construction. The difference between the projected line in 1872 and the definitive line in 1880-1883 also contributed to still more settlers locating in lands that NPRR would later claim as its property. Most of Montana was unsurveyed, and settlers would just settle in likely spots, unaware whether where they lived was in an even or odd section, because most of the state was unsurveyed

As the NPRR began to claim the odd-numbered sections due it under terms of the grant, disputes arose with the inhabitants of many of those sections, who claimed the land was rightfully theirs due to the

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<sup>5</sup> Peterson, Robert L. 1969. “The Completion of the Northern Pacific Railroad System in Montana: 1883-1893,” in *The Montana Past*. Michael Malone & Richard Roeder, eds. (Missoula: The University of Montana Press) p 156.

<sup>6</sup> Renz, p 46.

Pre-emption Act or Homestead Act of 1862. Congress allowed for these settlers with the Indemnity Act of 22 June, 1874,<sup>7</sup> which gave settlers permission to stay on their land even if they were within the grant limits. The Indemnity Act also gave the railroad the right to select lieu lands in compensation for the lands already occupied by settlers. Under this Act, the NPRR was given another ten miles on either side of the line from which to select lieu lands, so the belt of land from which the railroad could select stretched to sixty miles on either side of the track. Congress later passed legislation on 21 April, 1876<sup>8</sup> that confirmed the homestead and pre-emption rights of settlers on grant lands who had been on the land before any railroad land withdrawals were received at the local Land Office. Then the Act of 14 May, 1880,<sup>9</sup> extended pre-emption rights to those who settled with the intent of homesteading on unsurveyed lands.<sup>10</sup>

Congress had favored land grants to aid railroad construction because it believed that it was acting on behalf of the common American. When railroad land grants began in 1850, public domain land was generally available to Americans only if they bought it. Land was quite cheap, but the government still exacted a price for it. As immigration pressures compounded, (and in the absence of Southern legislators) Congress passed the Homestead Act of 1862, which allowed settlers free access and title to surveyed federal lands, provided they put in the requisite time and improvement on the property. As more and

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<sup>7</sup> 18 Stat. 194.

<sup>8</sup> 19 Stat. 35.

<sup>9</sup> 21 Stat. 140.

<sup>10</sup> Schwarm, pp 17, 21.

more homesteaders appeared in the West, the railroads and homesteaders found themselves increasingly in conflict over the ownership of parcels of land claimed by both settlers and the railroads. The courts found themselves faced again and again by suits brought against some settler or another by the NPRR, or initiated by a settler against the NPRR. As in the case of the *Northern Pacific Railroad Company v Amacker*,<sup>11</sup> the Supreme Court consistently ruled in favor of the individual:

It was long ago said by this court that “the policy of the Federal Government in favor of settlers upon public lands has been liberal. It recognizes their superior equity to become the purchasers of a limited extent of land, comprehending their improvements, over that of any other person”....There is no real hardship in enforcing this rule, for if the individual seeking to maintain his homestead entry fails by reason of any defect he has no recourse on the Government for the fees he has paid or for any compensation for the time and labor he has expended, while on the other hand the general provision of railroad land grants is to the effect that if the general title to any tract within the place limits fails the company may reimburse itself by a selection within the indemnity limits. It is not therefore strange that the rulings of the land department, as well as of the courts, have been uniformly favorable to the individual contesting with a railroad company the right to a particular tract of land.

Later, by the Act of 1 July, 1898,<sup>12</sup> NPRR had the right to lieu selections for selected lands already occupied, but the settler was also given an option of swapping his present claim for another somewhere else. Thus the compensation extended to both parties.

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<sup>11</sup> 175 US 564, 567.

<sup>12</sup> 30 Stat. 597,620.

The Homestead Act had been in effect for two years by the time the NPRR received its land-grant from Congress; even though the NPRR was offering land cheaply, federal land was free, so initially the NPRR was not as successful as it had hoped in selling its grant lands.<sup>13</sup> Even by the time that Henry Villard wrested control of the NPRR, he recognized that the NPRR had “two interests to cultivate—that of the company as owner of a line of traffic, and that as a landowner.”<sup>14</sup> Despite its best efforts, the NPRR was in the landownership game to stay.

Congress, meanwhile, went through a heyday of land-grant giveaways from 1850-1871, eventually handing out over 150,000,000 acres for railroad grants, “aside from the scores of applications that were turned down.”<sup>15</sup> Eventually, however, the results of the land grants were not always what Congress intended; many Americans not uncommonly referred to land grants as “steals,” “grabs,” and “land-gouges,” and Congress discerned that land-grants were “no longer economically desirable.”<sup>16</sup> Congress became aware that, over time, once the initial rush that accompanied the arrival of the railroad ended, land grants were hurting and hindering the settlement of the continent, not helping it. The idea to aid individual settlement opportunities had turned into a benefit for the large corporations.

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<sup>13</sup> Gates, Paul. 1954. “The Railroad Land-Grant Legend,” *Journal of Economic History*, 14(2): 145.

<sup>14</sup> Cochran, p. 62.

<sup>15</sup> Overton, p 78.

<sup>16</sup> Haney, p. 23-33.

In fact, a movement began in Congress to return the land grants to the public domain. This movement followed three paths in Congress: One was the forfeiture of all lands that the railroad had not earned by the charter deadline. (For the NPRR, this would have meant forfeiture of all land west of Bismarck.) Another path called for the forfeiture of all lands if the railroad had not met its charter deadline—which was, in fact, what most land-grant charters stipulated. (The NPRR would have forfeited all of its grant under this avenue.) The third and most lenient path pursued in Congress demanded only a forfeiture of those lands granted that the railroad had not yet earned. Sentiment in the House of Representatives reached its apex in the early 1880s, when it passed legislation requiring railroads to forfeit all lands if the charter deadline was not met. The Senate, however, would not pass the bill, and objected to any compromise in joint committee, so the House effort amounted to naught. Eventually this fervor in the House waned, while anti-land-grant sentiment waxed in the Senate until 1890, when Congress passed legislation that forfeited all unearned grants.

The NPRR did, however, build the road, albeit somewhat tardily, and it was not forced to forfeit its land grant. The railroad did its best to sell the land it was granted. As soon as the railroad built a segment of at least 25 miles in length, it could call in government surveyors to survey the area around the road, and upon completion of the survey, it was free to select its 40 odd-numbered sections of land per mile of road. According to provisions of the Act of 31 July, 1876,<sup>17</sup> the

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<sup>17</sup> 19 Stat. 121.

NPRR was also obliged to pay the government for the “selection, survey and conveyance of the land” before the title would be patented to the railroad. The survey had to be a government survey; the NPRR could pay for its own, independent survey, but nothing was official until the government surveyor shot his lines.<sup>18</sup> Incidentally, land was granted to the railroad in units of sections, not acres. If a surveyed section turned out to be 550 acres or 730 acres instead of the usual 640, that was the amount of acreage patented to NPRR. When it selected lieu lands, NPRR selected section or partial section directly in compensation for section or partial section, regardless of acreage. There was no guarantee of 640 acres, and the US was not required to make up deficiencies.<sup>19</sup>

If lieu selections were located in the additional ten mile limit outlined by the granting act in 1864, they were known as First Indemnity selections, and if they were located in the additional ten miles added on by the Act of 1870, they were known as Second Indemnity selections. If NPRR wanted to select lands from the Second Indemnity belt, it had to prove that no selections were available from the First Indemnity belt, the land loss had to have occurred between the granting act and the filing for definite location, and all selections had to occur in the same state as the loss.

Under the conditions of the 1864 grant, the NPRR could not select lands that were “mineral” in nature. That is, lands that were to

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<sup>18</sup> *US v Montana Lumber & Manufacturing Co*, 196 US 573.

<sup>19</sup> 159 US 349.



be determined by government survey to have mining potential that was not beyond the costs of a prudent man to extract with “reasonable expectation of success in developing a paying mine.”<sup>20</sup> Lieu selections for mineral lands could only be located within the boundaries of the First Indemnity. If the lands patented to the NPRR were later found to be mineral in nature, the railroad was allowed to keep the section in question, based on a lawsuit in 1913, unless the original classification as “non-mineral” was found to be fraudulent.<sup>21</sup> This is how the NPRW later found itself in possession of valuable “mineral” land, such as the vast oil reserves in the Williston Basin.

Later, as the US government established some national parks and reserves, lands selected by the NPRR that fell within these boundaries were compensated with lieu selections.<sup>22</sup> In making these lieu selections, the NPRR was not limited by particular mile of track or even state boundaries, it could choose land from within the indemnity limits from anywhere along its route. For example, when the US formed the Mt Rainier National Park Reserve in Washington and the Priest River Forest Reserve in Idaho, some of the land the NPRR chose in compensation lay in Missoula County, Montana.<sup>23</sup> These lieu selection agreements, however, were unusual.

In 1898, the federal government set aside 1,259,151 acres within the First Indemnity limits and 1,174,993 acres within the Second

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<sup>20</sup> *US v. Bullington* 51 LD 605, 1926.

<sup>21</sup> *Burke v. Southern Pacific Railroad Co.* 324 US 669.

<sup>22</sup> 30 Stat. 11, 30 Stat. 34, 30 Stat. 36.

<sup>23</sup> Missoula County Deed #36:493, 36:494.

Indemnity limits as national forest reserves, and withdrew the land from possible lieu selection by the NPRW. The railroad, however, submitted a selection list in 1905 for about 5,000 acres of surveyed land in Montana that fell within the previously-created forest reserve. This opened considerable debate between the government and the railroad.<sup>24</sup> Eventually, the debate whether the federal government, by creating forest reserves, could deprive the railroad of lieu selections, if the land remaining open within the indemnities was not enough to satisfy the losses within the original grant limits, was carried to the Supreme Court. The Court ruled in favor of the Northern Pacific, saying that, in effect, a contract is a contract, and the government had to live up to its contractual obligations despite later designations.<sup>25</sup>

By 1920, the land grant was deficient by about four million acres, and large chunks of the designated national forest reserves fell within the indemnity limits. Then-Secretary of Agriculture Henry C. Wallace, alarmed at the prospect of the potential loss of four million acres out of the public domain, urged both Congress and President Calvin Coolidge to test in court whether the NPRW had complied with its land grant obligations, in the hopes of dismissing any further railroad claims on forest reserve lands. In 1924, Congress established a joint committee of inquiry, which eventually recommended, in 1929, in favor of a suit to bring settlement. Congress then passed a bill<sup>26</sup> to bring suit to alter the

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<sup>24</sup> Cotroneo 1966, p 357.

<sup>25</sup> *US v. NPRW*, 256 US 51, 1921.

<sup>26</sup> 46 Stat. 41.

original grant to allow the US to retain any land within federal reservations.<sup>27</sup>

The United States filed suit in the District Court of Eastern Washington. The courts appointed a Special Master to look into the case, and the Master recommended that the court rule in favor of the NPRW, which it did. The court then sent the case back to the Master to determine adjustments and valuations. The Master reported back to the court that the NPRW was due 1,453,061 acres outside of the forest reserves in compensation for the land that the federal government wished to withhold from selection inside the forest reserves.<sup>28</sup> In general, the right of substitution had to be granted the railroad so it could accrue the proper amount of sections due to it under the terms of the grant.

Meanwhile, Congress had authorized an appeal of the decision to the Supreme Court.<sup>29</sup> In *US v. NPRW*,<sup>30</sup> the Supreme Court ruled that the Master's recommendations were proper. In addition, the Supreme Court also affirmed the right of the federal government to withdraw reserve lands from selection as long as it offered substitute land for selection. Both sides then agreed to a settlement in which the NPRW agreed to relinquish claim on 300,000 acres and the federal government agreed to discharge its contention that portions of the land grant selections were erroneous or ill-gotten.<sup>31</sup>

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<sup>27</sup> Cotroneo 1966, pp 363-365.

<sup>28</sup> *Master's Second Report*, pp 133-140.

<sup>29</sup> 49 Stat. 1369.

<sup>30</sup> 311 US 317, 1941.

<sup>31</sup> *US v. NPRW*, 41 F.Supp. p 273.

Congress had in the meantime passed the Transportation Act of 1940, which gave all land grant railroads one year to file for any lands due them under their land grants. This Act also ended the cut government rates for shipping on land grant railroads, and stated that the railroads would not have to forfeit to the US any lands they had already patented. The final decree on the case was finally issued on 28 August, 1941, by the District Court of Eastern Washington, and the Northern Pacific land case came to an end.

## EARLY MANAGEMENT OF THE GRANT LANDS IN MONTANA

Eventually, the Northern Pacific ended up with 39,021,693 acres of public domain through the land grant, of which 14,729,500 were in Montana. The railroad, of course, hoped to sell it all quickly.<sup>1</sup> (See Figure 1 on page 37 for ownership data over time.) In 1869, NPRR established a Land Department to oversee the sales of the land and to promote settlement, as well as to control the timber and mineral lands. The NPRR was hoping to stimulate both townsite development, through sale of platted sites to potential merchants on pre-determined town sites, and through sale of agricultural land to farmers. By 1897, NPRW gave up on town lot sales and concentrated on agricultural sales, largely because, although so many townsites were dismal failures, the railroad still had to pay a higher tax rate on the land.<sup>2</sup> NPRR/NPRW attempted to limit sales whenever possible to genuine settlers to gain the benefit of the increased freight traffic the settlers would generate, but recurrent bouts of low cash flow in the company made it resort to occasional large sales to land speculators.<sup>3</sup> Lands in Montana were offered for sale through issuance of price lists that indicated which lands were for sale and the price per acre at which NPRR, and after 1896, NPRW, was offering the lands. These lists were widely circulated throughout the US and Europe as advertisements for

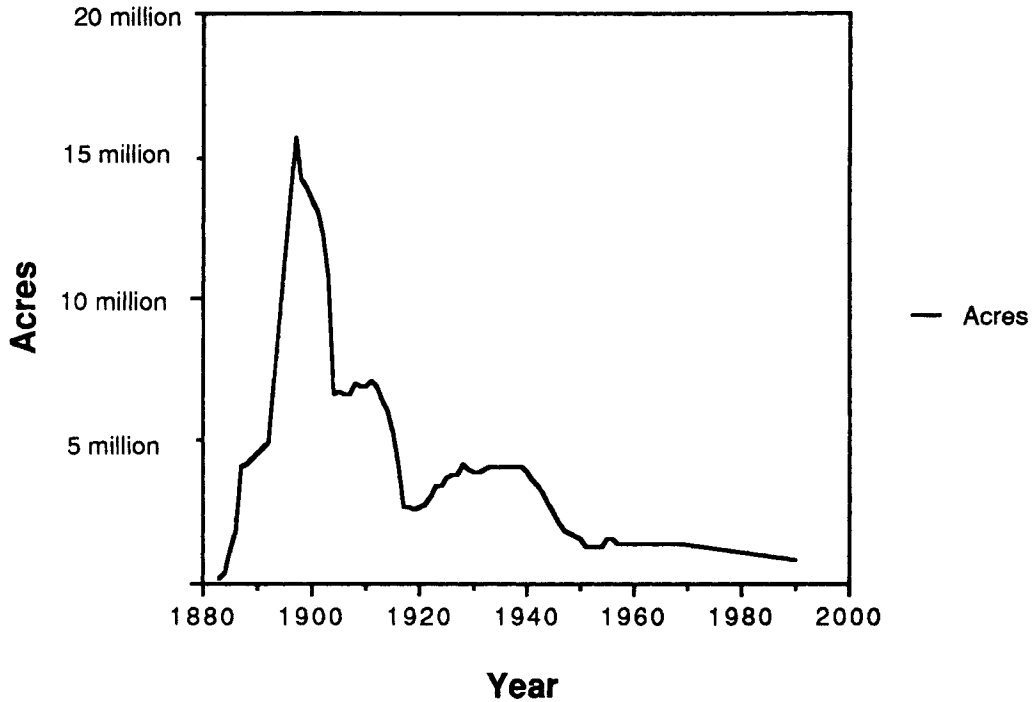
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<sup>1</sup> Schwarm, p 216, & Cotroneo, Ross. "Northern Pacific Railway's Land-Grant Sales Policies," *Montana, The Magazine of Western History*, 37(2): 40. Hereinafter "Cotroneo 1987."

<sup>2</sup> Hudson, John. 1985. "NPRR, Mainstreet of the Yellowstone Valley," *Montana, The Magazine of Western History* 35(4):58, 62.

<sup>3</sup> Cotroneo 1987, p 45.

## TOTAL LAND OWNERSHIP IN ACRES



*This graph depicts the total land ownership of the Northern Pacific Railroad and its corporate heirs over time. The NP sold huge acreages around the turn of the century, which is clearly evident on the graph, to buyers such as Weyerhaeuser and the Anaconda Company. Source: NPRR Annual Reports, NPRW Annual Reports, Moody's Railroad Manual, BN Annual Reports, PC Annual Reports.*

land sales, though the railroad was not above exaggerating the agricultural potential of the eastern Montana plains. A railroad advertisement brochure, *A Guide to the Northern Pacific and its Allied Lines*, boasted that the area crossed by the road was “exceeded by no other part of the United States in its wealth of natural resources, nor surpassed in any of the conditions of the soil which are best adapted to the well being of the human race.”<sup>4</sup>

From its first Montana land sale in 1883, NPRR/NPRW had a general policy of retaining any subsurface rights when it sold land. Although, beginning in 1915, it released these rights on some of the land after it had determined by geological examination that the land held no probable subsurface value.<sup>5</sup>

The general policy of the company was to keep land prices fairly low to expedite sales: “I believe we will be better off with money in the bank than to wait for the possible increase in values,” wrote NP President Thomas Elliott to Second Vice-President JM Hannaford in 1917.<sup>6</sup> Lands in western Montana were considered undesirable compared to lands in the eastern part of the state because of the relatively poor soil. Price lists in 1917 offered western Montana lands at an average of \$3.55/acre while eastern Montana lands were offered

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<sup>4</sup> Northern Pacific Railroad Company. 1880. *A Guide to the Pacific and its Allied Lines*. The railroad used brochures such as this extensively in an effort to attract settlers to the region.

<sup>5</sup> Schwarm, p 216. According to Missoula County deeds, a major exception to this general rule of retaining subsurface rights was NPRW’s sale of over 100,000 acres of timberland to the Anaconda Copper Mining Company in 1899, in which the subsurface rights were transferred as well.

<sup>6</sup> NP Papers, President’s File 176.

at an average of \$6.81/acre. Although sales in the east were fairly steady, sales in the west lagged, simply because most settlers hoped to make their livelihoods on farms, and the eastern landscape was much more conducive to this.<sup>7</sup>

Land sales in Montana followed the general success of the crops in the field; a series of good years would lead to an increase in sales, while a few bad years would lead to slower sales. Sales in the timbered west were always slow. The only people who tried to buy land in the west were lumbermen, and they tried to buy only timber whenever possible.<sup>8</sup> In Montana, NPRW preferred to sell the land itself with all the timber on it in order to relieve itself of the tax burden and get money in the bank rather than accept stumpage bids just to cut and haul away the trees. As NP President Elliott commented, "...I think it would be sound policy in most cases, when we sell timber to try to get the purchaser of the timber to take the mountain lands off our hands."<sup>9</sup> However, the timbered lands in Montana were generally so remote from established means of transportation that they were largely unsalable because of the difficulty of accessing the timber.<sup>10</sup> Even though Montana timber sales were negligible, NPRW had a great deal of success selling its timbered holdings in Washington and Idaho, where demand for the timber was steady from 1900 on. This success made the railroad confident of the future value of its Montana forested land, despite the low demand for it, because timber supplies elsewhere

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<sup>7</sup> Cotroneo 1966, p 193.

<sup>8</sup> Cotroneo 1987, pp 201, 207.

<sup>9</sup> President's File 452E-55.

<sup>10</sup> *Land Department Annual Report*, 1919, p 3.



were diminishing and the demand for timber was increasing.<sup>11</sup> As the demand and, consequently, the value of timbered lands gradually increased, it became more and more worthwhile for the railroad to retain these lands instead of trying to get the lands off the tax rolls.<sup>12</sup>

If a lumberman wanted to cut trees on NPRW land, he would approach the Land Department with an offer for the stumpage on a particular piece of ground, and the company would accept or reject the bid based on a number of factors, as NPRW President Elliott outlined to his Vice-President Charles Donnelly in 1920:

The main factors upon which timber values are based are as follows: species, stand, quality (which includes the elements of defect), accessibility to transportation, local logging conditions, danger from fire (which is accentuated where logging is going on or has been conducted in the vicinity), isolation from other bodies of timber. While these factors must all be taken into consideration, an application to the case in hand is sometimes quite difficult and much depends upon the experience and judgement of the cruiser. It must be remembered that the best Railway timber has been sold. The bulk of what is left is isolated, difficult of access, more or less defective and generally speaking, not particularly attractive.<sup>13</sup>

Timber sales in Montana never amounted to much before the Great Depression of the 1930s, and the Depression slowed things down even more. From 1927 to 1940, sales of land and timber were at a virtual standstill. With the advent of World War II, however, sales picked up, and by 1942, the lumber producers could not keep pace with

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<sup>11</sup> *Land Department Annual Report, 1921*, p 36.

<sup>12</sup> Cotroneo 1966, p 274.

<sup>13</sup> President's File 452E.

the market, due largely to labor shortages since much of the labor force had joined the military and gone off to war. Demand and projected demand for timber grew to such an extent by 1943 that the Land Department adopted a new policy of reserving the bulk of the company's young timber for future needs, and essentially stopped selling timber land. The NPRW also started specifying minimum size limits on its timber sales, and allowed only larger, old-growth trees to be cut by sawyers. Most of the vast tracts of NPRW timberland in Montana were still untouched at that time, and the company earmarked most of it for future cross-tie production.<sup>14</sup>

The timber industry as a whole began to feel, via the US Forest Service, the influence of the federal government in timber management. By the Acts of 20 March, 1922<sup>15</sup> and 28 February, 1925,<sup>16</sup> the Forest Service was allowed to enter into exchanges for privately-held lands within the borders, or within six miles of the borders, of the National Forests. The exchanges could be satisfied by trading an equal amount of public land or by allowing an equal value of timber to be cut from public land. The NPRW had land in several National Forests that was cut-over, burned-over, or contained only scattered amounts of timber, and the railroad wanted to dump the land to get out of tax burdens and fire protection charges that were growing larger than the value of the land. The Forest Service (USFS), of course, wanted title to the lands to facilitate more efficient administration and reforestation,

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<sup>14</sup> Cotroneo 1966, pp 307, 303-304.

<sup>15</sup> 42 Stat. 465.

<sup>16</sup> 43 Stat. 1090.

so title transfers between the NPRW and the USFS were not uncommon.<sup>17</sup>

In the years leading up to the Second World War, the Forest Service began agitating for better logging practices on the nation's timbered lands. Federal agencies started to advocate federal control of all the nation's timberlands, public as well as private, the result of which would have been federal regulation of all forest industries. Several states introduced forest practices acts in their legislatures, but none passed into law until many years later. NPRW recognized the threat that all the attempted regulation posed for it, and tried to beat back the regulatory onslaught by establishing tree farms in some cut over areas, as well as pushing a publicity campaign:

There is a public relations angle to this movement. The lumber industry is now realizing that it is being seriously challenged by the socialistic tendencies of the times, and must make some definitive contribution along conservation lines if the interested public is to be convinced that private industry is just as capable of perpetuating the forests as governmental agencies. If the challenge is not met, further power and authority by the Federal Government over state and private forests may be expected.<sup>18</sup>

NPRW realized then that its timberland holdings were valuable enough to maintain in railroad ownership, and that the earnings potential of the forest land no longer was greatest in the disposition of the land, but rather in its retention and management as timber land.

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<sup>17</sup> Schwarm, pp 247-248.

<sup>18</sup> Land Department File 18880, 1943, pp 41-45.

## TIMBER MANAGEMENT

The primary method of lumbering in western Montana at the turn of the century and into the first four decades of this century was railroad logging, complete with large logging crews and camps. The railroad sold most of its most-easily accessed timberland in Montana to the Anaconda Copper Mining Company, in several big sales, and to the Big Blackfoot Milling Company, in a series of small sales, around the turn of the century. It made small spot sales of timber virtually every year to western Montana lumbermen.<sup>1</sup> Lumbermen would lay a small stretch of railroad track to access these sales, usually along a stream grade, then haul in a locomotive overland with freight draft animals to run on the track. The Big Blackfoot Railway, constructed up the Blackfoot River Valley, was built for logging in this manner.

Typically, sawyers using seven-foot crosscut saws would cut down every merchantable tree within two or three miles of the railroad grade, resulting in an "economic selection cut," in which a tree had to be 14 inches in diameter at breast height (dbh) before it was valuable enough to "pay its way out of the forest."<sup>2</sup> Because cutting down trees with crosscut saw involved a significant energy and time investment, sawyers would generally only cut down trees that were merchantable, and leave the crooked, partially rotten, flawed and small trees standing. Using oxen left over from the construction of the

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<sup>1</sup> Missoula County Deed #57:16,20,138.

<sup>2</sup> Goetz, Hank. 15 November 1991. Personal Interview. Former NP forester and current manager of the University of Montana's Lubrecht Experimental Forest. Potomac, Montana.

Northern Pacific and Great Northern railroad lines, or draft horses, teamsters would then haul the logs to the train track at the valley bottom to be loaded on flatcars for transfer to McNamara Landing, at the present site of Johnsrud Park, on the Blackfoot, where the logs would be dumped in the river and floated, or decked on the ice to await ice breakup. Later, steam donkey yarding equipment allowed some mechanical hauling of logs down to the railroad, but sawyers still had to cut every tree with crosscut saws. When one area of merchantable trees was cut, workers would tear up the track and lay it down somewhere else and cut everything merchantable there: constant, connected high-grading.<sup>3</sup>

After the logging, crews would practice "jackpot burning." The logging crews usually did not methodically slash the remainder of the non-merchantable trees, rather, they would set fire to the bigger accumulations that had been piled inadvertently. Due to all the fuel scattered about, these fires spread widely. Sparks from the railroad locomotive would also ignite slash that could burn for days on end. Loggers cut every big thing in sight and left slash scattered about for miles and miles: a spark's dream landing spot.<sup>4</sup> In the early 1900s, forest fires burned an average of over 40 million acres each year, and in every year up to 1930, at least 20 million acres burned.<sup>5</sup> The first go-

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<sup>3</sup> Goetz, 15 November 1991.

<sup>4</sup> McQuillan, Alan. 11 November 1991. Personal Interview. Forestry Professor, University of Montana, Missoula, Montana.

<sup>5</sup> MacCleery, Douglas. 1973. *The Graphic Facts about the Conditions and Trends of US Forests*. (Washington, DC: USDA Forest Service) p 20. Since 1950, however, forest fires have never burned more than 8 million acres. This gives an idea of how extensive and massive these fires were; it also gives an insight into the motivation of the US Forest Service employees to become aggressive about fire suppression in the early days of the Forest Service.

round of a massive fire event actually was beneficial as a seed source enhancer, but these areas burned again and again, and soon there were no seed sources available nearby.<sup>6</sup> Because of the lack of seed sources, many of these massive cut-over burned-over areas turned into huge brush fields comprised mostly of early seral species that were not rehabilitated into tree stands until the 1960s.<sup>7</sup>

The failing economy of the 1930s slowed the timber harvest to the point that the timber companies could no longer afford to maintain logging camps. When the demand for timber increased again in the 1940s, several technological innovations that had developed in the meantime led to the change in the nature of logging in Montana. Automotive power became more widespread, and particularly, the web of roads began to spread farther out from population centers and closer to the forests, which made automotive transport cheaper than locomotive transport. Railroad hauling then ended in favor of truck hauling. Only a big company could buy a railroad, but trucks were affordable for many individuals, and afforded many more people access to logs.

LH Harvey, a forester who began working for NPRW in 1944, maintains that the pickup truck sounded the death knell of the logging camp, because it allowed loggers to get to cutting sites every day without having to live on site, and allowed companies to discard the

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<sup>6</sup> McQuillan, 11 November 1991.

<sup>7</sup> McQuillan, 11 November 1991.

expense of building housing and feeding loggers.<sup>8</sup> Primitive logging trucks began to haul logs in Montana around 1938, and became common in the 40s. The trucks had bunks similar to modern tractor-trailer rigs, but the bunks were affixed on straight, extended wheelbases, unlike modern rigs, where the bunks are on a trailer that can be detached from the tractor. Consequently, logs were cut to about 32 feet (about 10-20 feet shorter than typical current log lengths), in order to fit on the trucks.<sup>9</sup>

Another important innovation was the gasoline-powered chainsaw. First two-person, and by 1940, one-person chainsaw models allowed two people to cut many more trees in a day than they could with a crosscut saw, thus a small number of sawyers could match the daily output of a whole camp of crosscut sawyers. In addition, people adapted machinery built for construction and agriculture and began using it for logging. In particular, loggers started using Caterpillar tractors—designed for earthmoving and pulling agricultural implements—to skid logs from where they fell out to roads where the logs could be loaded easily on a truck.<sup>10</sup> These technological developments allowed the development of the “gyppo logger,” an independent logger who worked on his own or in consort with just a few more people in the woods, and who contracted for work with timber suppliers or timber buyers for specific sales.

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<sup>8</sup> Harvey, LH. 14 November 1991. Telephone Interview. Former NP/BN forester and forest manager, Missoula, Montana.

<sup>9</sup> Muechal, Bob. 14 November 1991. Personal Interview. Long Range Planner, Lolo National Forest, Missoula, Montana.

<sup>10</sup> Muechal, 14 November 1991.

When logging scaled back from the huge production of railroad logging and large crews of loggers to relatively light equipment operated by only a few people, trained foresters realized their chance to argue for selective cutting. "Everyone associated the industry with massive clearcuts, and clearcuts were destruction" in the minds of many Americans.<sup>11</sup> As discussed previously, NPRW responded to perceived federal and public pressure by implementing gestures of conservation in its timberland management. The 1953 NPRW *Annual Report* states that "the management of the Company's timber properties is in accordance with sound forestry practices." The company also reported in 1953 the establishment of "six certified tree farms, totaling 479,975 acres" on cut-over land, and it hired trained, professional foresters to manage all of this land.<sup>12</sup> Virtually all of these foresters hired by NPRW had been trained in the traditional Germanic ideals of sustained-yield forestry; their "mission in life was the cutting and growing of trees."<sup>13</sup>

Prior to World War II, NPRW's basic method of handling its Montana forests was "custodial"<sup>14</sup>; most remained remote and unlogged at the end of the war. As returning soldiers cashed in their paychecks to build homes, the market value for lumber soared sensationally, and the high values led the Land Department to start looking seriously at the NPRW timber in Montana. It also realized

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<sup>11</sup> McQuillan, 11 November 1991.

<sup>12</sup> Northern Pacific Railway Company 1953 *Annual Report*, p 14.

<sup>13</sup> Goetz, 15 November 1991.

<sup>14</sup> Grove, Byron. 8 November 1991. Personal Interview. Retired NP/BN/PC forester and forest manager, Missoula, Montana.



that “timber was a crop that could be grown and that would be a continuing asset for the railroad.”<sup>15</sup>

First, the NPRW tried to ascertain what it really owned, and embarked on an inventory project in 1954 because “they knew they had a lot of timber but didn’t know too much about it,” reasoned Byron Grove, who began working for the NP in 1954, and who was hired specifically for the inventory project. “Until NP got markets to their land or had mills for their timber they didn’t have anything to do but cruise it and find out what was there and watch over it.”<sup>16</sup> Earlier timber cruisers had gone over some of the NPRW holdings section by section, “But a lot of the lands were never cruised, and the cruisers only really considered merchantable timber [at the time of the cruise]. New merchantability limits had crept in, new species had become acceptable to the public, so the old cruises were obsolete.”<sup>17</sup> The railroad bought a plane and hired SG “Bud” Merryman, a former WWII pilot, to be an inventory forester. The NP set up a photography lab and began to use aerial photometric methods of inventory over its million and a half acres.<sup>18</sup>

The NP had sold most of its easily-accessed lands in Montana by the 1950s, and what was left was remote and away from the market. Large timberland sales to Frederick Weyerhaeuser and Marcus Daly (of the Anaconda Copper Mining Company) around the turn of the

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<sup>15</sup> Merryman, SG. 18 November 1991. Telephone Interview. Former president and CEO of BN Timberlands, Whidbey Island, Washington.

<sup>16</sup> Grove, 8 November 1991.

<sup>17</sup> Grove, 8 November 1991.

<sup>18</sup> Merryman, 18 November 1991.

century had high-graded the most productive and accessible lowland timber lands.<sup>19</sup> What remained was dispersed farther up into the mountains and was difficult to access.<sup>20</sup> In the 1950s, the biggest task for NP foresters, such as LH Harvey, Byron Grove, and David Whitesitt, was developing access to the timber. Foresters “probably devoted more energy to access than to timber management, because we had to get there first.”<sup>21</sup> The lands were in “checkerboard” ownership patterns (due to the specifications of the land grant, the railroad could only choose odd-numbered sections; the USFS held most of the even sections, thus the ownership pattern resembled a checkerboard), and neither the USFS nor the railroad had roads in to the majority of the lands. The USFS was required by law to grant access to anyone with inholdings in the National Forests. However, the cost of building a road across at least one square-mile section, without accessing any timber on the way, made most roads to inheld sections too expensive to build for the amount of harvestable timber the road would access.<sup>22</sup> Both the Forest Service and the NP realized that it was in everyone’s best interest to share access roads to the timber, rather than creating a “Jacob’s ladder road system,” in which a road would zig and zag back and forth within one section to avoid running over adjoining landownership.<sup>23</sup> In 1962, both parties eventually developed an agreement to exchange easements and to enter into a cost-share

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<sup>19</sup> Brady, L James. 20 November 1991. Telephone Interview. Former timber manager and VP of Plum Creek, Issaquah, Washington. Weyerhaeuser only bought land from the railroad that had at least 50,000 board feet per acre.

<sup>20</sup> Merryman, 18 November 1991.

<sup>21</sup> Grove, 8 November 1991.

<sup>22</sup> Goetz, 15 November 1991.

<sup>23</sup> Muechal, 14 November 1991.

arrangement in road construction, since their holdings were so intermingled.<sup>24</sup>

In the mid-1950s, BN executives became increasingly aware of the importance of the non-rail holdings of the company. The company reorganized on 1 January, 1956, and created a Properties and Industrial Development department. Dwight Edgill, a forester, was promoted to general manager of Property and Industrial Development in St Paul and SG "Bud" Merryman, based in Seattle, became manager of Timber and Western Lands. Merryman then began to initiate plans to develop the company's timberlands.<sup>25</sup> Previously, NPRW had set aside its Montana lands in reserve for cross-tie production, but it soon realized that it had "a lot more timber than it needed, so the next thing was how to get it out, and then we had to find a place to take it to."<sup>26</sup> So the railroad systematically set out to develop a market for the timber on its Montana lands.

The NPRW was primarily a railroad company, and the people who ran the company were railroad people; the timberlands were "pretty much the bastard stepchild" of the rolling stock, so when the NP set out to develop a market for its timber resources, it set out to develop a market with its rolling stock in mind, not necessarily the natural resources.<sup>27</sup> The railroad tried to induce companies to invest large sums of money in mill construction near NP holdings by offering

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<sup>24</sup> Muechal, 14 November 1991, and NPRW 1963 *Annual Report*, p 12.

<sup>25</sup> Merryman, 18 November 1991.

<sup>26</sup> Grove, 8 November 1991.

<sup>27</sup> Goetz, 15 November 1991.

them long-term guarantees of a given amount of timber at fair market price. Most of these were ten-year timber commitments, so a mill would have the opportunity to amortize the expense of building or expanding a mill over the value of the timber they were guaranteed to receive. "Fair market price" basically amounted to the amount for which the USFS was selling its timber.<sup>28</sup>

Several Montana-owned mills, such as Missoula White Pine & Sash, and Plum Creek in Pablo, entered into ten-year contracts with the railroad for guarantees, respectively, of five million board feet (mmbf) annually and 25 mmbf annually, and expanded their operations. Yellowstone Pine, a mill in Belgrade, also entered into a supply contract with the railroad. Two companies from outside of Montana, Vancouver Plywood Company and Evans Products Company, built a jointly-operated mill in Missoula that operated under the name of Van-Evans Plywood, and did so largely under the impetus of a ten-year guarantee of 30 mmbf from the NP. Cascade Plywood Corporation bought out a plywood operation in Polson and expanded and modernized it, and entered into a ten-year agreement with the railroad to assure 30 mmbf annually.<sup>29</sup>

The railroad wanted to locate mills that would ship products over the NP line so the rolling stock would make more money. The railroaders figured they could coax the companies in with good offers of timber, but once the mills were located, the mills would have to ship

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<sup>28</sup> Grove, 8 November 1991.

<sup>29</sup> Grove, 8 November 1991, and NPRW 1959 *Annual Report*, p 10.

all their products on the NP, whether or not the original timber was from NP lands. Essentially, the railroad looked on the long-term contracts as a way of guaranteeing a certain amount of freight for not just the ten years, but for as long as the mills operated. The railroad “wasn’t looking at growing trees and being in the natural resource business perpetually or even for a given time frame. Mostly, they were looking at their trees as a method to enhance the rolling stock end of the operation.”<sup>30</sup>

These long-term contracts were all based on stumpage sales. In a stumpage sale, the buyer would pay a given price per board foot for a standing tree (“on the stump”), then cut the tree himself, or hire contractors to cut the tree. During the tenure of the long-term contracts, foresters on the ground located the roads and marked the timber for cutting, while the mill constructed the roads to the timber and contracted its own loggers to remove and haul the trees to the mill. The main duties of the foresters were to “put in timber sales, essentially on a year-round basis.”<sup>31</sup> Foresters would locate the sale primarily to “cut the timber that needed cutting worst,”<sup>32</sup> that is, foresters marked those trees that, in the forester’s opinion, had reached maturity and were near death. There were “no guidelines or manuals to follow,” foresters “did what their best judgement told them to do.”<sup>33</sup> Generally, the objectives of the foresters were to find enough trees to fulfill the contracts set up with the mills.

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<sup>30</sup> Goetz, 15 November 1991.

<sup>31</sup> Goetz, 15 November 1991.

<sup>32</sup> Whitesitt, David. 7 November 1991. Personal Interview. Former NP/BN/PC forester, Seeley Lake, Montana.

<sup>33</sup> Goetz, 15 November 1991.

During the ten-year period of the stumpage contracts, NP foresters relied primarily on partial cuts to meet the contracted harvest for the mills. The NP did use clearcuts, though the amount varies in the anecdotal data from ten percent to thirty percent of all acres treated. Clearcuts were first used by the NP to salvage trees from spruce bark beetle epidemics that spread over western Montana in the early 1960s, and also for fire salvage sales. They were regularly prescribed after that.<sup>34</sup> However, the majority of the acres treated by NP management activities were seed-tree, shelterwood, or selective cuts: uneven-aged management. During this time, the NP relied almost exclusively on natural regeneration, so a prime concern for foresters was to assure a good seed crop for regeneration: "We didn't do any planting, so we left seed trees. I mean, they were good trees. They weren't where you go in and take out all the merchantable and leave all the junk out there, and say, 'Those are our seed trees.' We left prime, good, seed-bearing, valuable trees on site."<sup>35</sup>

Even when NP foresters used clearcuts, the cuts were usually "contour clearcuts" that were long and narrow. The open ground would be about 400 feet wide, and foresters would leave a swath of trees at least 200 feet wide between the cut swaths. This would leave an exposed seed wall the length of the cut for regeneration. "The benefit was that you tended to lie a little lighter on the ground when you were trying to get natural regeneration back."<sup>36</sup> Foresters generally marked

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<sup>34</sup> Harvey, 14 November 1991.

<sup>35</sup> Goetz, 15 November 1991.

<sup>36</sup> Goetz, 15 November 1991.

the trees in the sale, and inspected the loggers as they carried out the cut. Erosion control and merchantability standards were the two major concerns in site inspections: the NP wanted trees to be eight inches in top diameter to cut, and it wanted the loggers to construct erosion controls with their Cats.<sup>37</sup>

In the 1960s, most NP trees were cut with chainsaws and skidded with Cats. The foresters preferred Cat logging, because the Cats would scarify the ground for tree reproduction as a by-product of logging.<sup>38</sup> (In general, young trees germinate and grow better in “mineral” soil, or exposed dirt, than in an organic layer. Scarifying the soil exposes more mineral soil in which seeds can germinate.) If the area of the sale was not practical to road, was too steep, or if the soils were fragile, the foresters would select a different method, usually cable or shovel logging. With the shovel logging, however, roads had to be constructed every 250-300 feet because the reach of the cable was only a few hundred feet, so they “ended up with a lot more roads than they ever needed.” Shovel logging was a short-term phenomenon that lasted about ten years and was obsolete by the end of the 1960s.<sup>39</sup> As sales worked up into steeper and steeper ground, however, foresters demanded more and more use of cable logging systems.<sup>40</sup>

When the long-term contracts in Montana came to an end in 1969, the company foresters were “sure glad to see them expire.”<sup>41</sup> NP

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<sup>37</sup> Harvey, 14 November 1991, and Grove, 8 November 1991.

<sup>38</sup> Whitesitt, 7 November 1991.

<sup>39</sup> Goetz, 15 November 1991.

<sup>40</sup> Grove, 8 November 1991.

<sup>41</sup> Grove, 8 November 1991.

cutting policy then changed “from developing markets and setting up sales geared to the markets we had developed to harvesting what we could grow.”<sup>42</sup> NP also abandoned stumpage sales in favor of direct log sales at this time. Because each mill preferred certain species and sizes, a mill would have to re-sell or trade what it had received from the NP stumpage contracts if the logs were something it did not prefer. Most plywood mills, for example, preferred larch because it peeled easily and did not taper much, and thus, given a choice, would buy larch. Missoula White Pine Sash wanted only pine for its products, and would trade or sell the other species it received from its stumpage contract with the NP to other mills. The NP switched to log sales because timber sales were worth more if NP sorted the logs itself before the logs reached the mill, and because the NP had much more control over the way the land was being operated.<sup>43</sup> So the railroad then contracted loggers to cut, sort and haul the logs. Logs that were sold delivered directly to the mill instead of on the stump created more work out in the field for foresters, but generated more profit for the company.<sup>44</sup>

The railroad had concentrated on selling stumpage and logs from its lands, but as company leaders began to pay more attention to maximizing the results of what could be obtained from timberlands,

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<sup>42</sup> Grove, 8 November 1991.

<sup>43</sup> Binger, C Robert. 8 February 1992. Telephone Interview. Former President, BN Resources Division, Dellwood, MN. The long-term contracts “tied [NP’s] hands,” and essentially took the control over how to manage the land out of the hands of the railroad, according to Binger. The contracts also had no escalation clauses, and Binger remembered that in one of the years in the contract “era,” NP would have earned \$39 million more on the open timber market for the amount of timber it sold under long-term contracts.

<sup>44</sup> Whitesitt, 7 November 1991.



they set out to purchase a manufacturing outlet for company logs in order to obtain more profit from the same amount of wood. Plum Creek, a company with mills in Pablo and Columbia Falls, Montana, had long been a customer for railroad logs, and the owner, DC Dunham, enjoyed a close relationship with NP.<sup>45</sup> When Dunham died, his widow chose to sell the mills rather than operate them, and, because of their amicable relationship, she was favorably disposed to sell to the railroad. NP chose to buy the Plum Creek mills in 1968 because they offered downstream vertical integration in two locations close to BN timber holdings in Montana. Lou Menk, who took over as president of the NP in 1966, felt there should be some “synergisms” between the company’s timberlands and the manufacturing process in order to optimize the results of the timber properties, and so he acquired Plum Creek when the occasion arose.<sup>46</sup> NP decided that the Plum Creek operations were “ideal” as a controlled marketing outlet for NP timberland, and thus entered the wood products manufacturing business.<sup>47</sup>

Menk hired CR “Bob” Binger, previously the Operational Vice President at Boise Cascade, as NP Vice President of Resources in 1968, so that the NP would have someone with a resources background to handle its increasingly valuable resource holdings. Menk sought someone from outside the NP because he judged that no one within the NP was “adequate to manage the resource end of the business.”<sup>48</sup>

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<sup>45</sup> Merryman, 18 November 1991.

<sup>46</sup> Menk, Lou. 5 December 1991. Telephone Interview. Former NP and BN president, CEO, and chairman, Carefree, Arizona.

<sup>47</sup> Merryman, 18 November 1991.

<sup>48</sup> Menk, 5 December 1991.

Binger's first day on the job coincided with the day NP took over operations of Plum Creek (1 January, 1968) much to the relief of the railroad management, because they did not have "anyone who knew anything about sawmills or plywood plants."<sup>49</sup>

At virtually the same time that the ten-year stumpage contracts expired and Binger began working for the railroad, the NPRW merged with the GN, CB&Q, and the Spokane, Portland & Seattle Railway to become Burlington Northern, Inc. (BN) on 2 March, 1970. The railroads had filed a petition to merge with the ICC in 1961, but in 1966 the ICC rejected the merger, saying that the benefits of merger were outweighed by the values of competition. The railroads petitioned for reconsideration on 27 July, 1966, and the ICC approved the merger on 19 April, 1968. The railroads then prepared themselves for a 10 May, 1968, merger.<sup>50</sup> However, the Justice Department opposed the merger and asked the Supreme Court to issue a blockage pending hearing the arguments before the court, which it did. On 2 February, 1970, the Burger Court voted 7-0 in favor of the merger, and consolidation became official.<sup>51</sup>

The formation of BN left Bob Binger as vice president of resources (now called BN Resources). In 1973, Bob Downing, who had been president of the BN since 1971 (see later discussion for company hierarchy), was promoted to Vice-Chairman, and BN created two

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<sup>49</sup> Binger, C Robert. 26 November, 1991. Personal Interview. Former President, BN Resources Division, Dellwood, MN.

<sup>50</sup> Loving, Rush, Jr. 1972. "A Railroad Merger that Worked," *Fortune*, August: 132.

<sup>51</sup> Hofsommer, 1 May 1989.

presidents—one president in charge of transportation and one president in charge of resources. Binger then became the president of BN resources.<sup>52</sup> In this role, Binger was in charge of all real estate, oil and gas, coal, timber, agriculture, and all other non-transportation assets of the BN, and he guided BN's policy and attitude towards its resources until he retired in 1981.<sup>53</sup>

Binger, who now manages several farms in Goodhue County, Minnesota, graduated first from the University of Minnesota, and then from the Yale School of Forestry in 1941. After a military stint in WW II, he worked for Potlatch in Idaho for a short time, but returned to Minnesota in 1945 to work for the Minnesota & Ontario Paper Company. Other than another military commitment in the Korean war, Binger was with this company until 1968. He eventually rose through the ranks to the position of operational vice-president of the Boise Cascade, which bought out Minnesota & Ontario Paper. He worked throughout the company's operations, and "knew almost everybody in the company." Binger was doing the things that he loved to do, but did not feel as challenged as he thought he should have been by his job, so when a headhunter from the NPRW came calling, he accepted the new challenge.<sup>54</sup>

The BN board gave Binger free rein to manage the resources as he saw fit, and backed him "one hundred percent" in anything he

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<sup>52</sup> Downing, Bob. 4 December 1991. Telephone Interview. Former BN president, vice-chairman, and director, Spokane, Washington.

<sup>53</sup> Binger, 26 November 1991.

<sup>54</sup> Binger, 26 November 1991.

wanted to do.<sup>55</sup> Lou Menk felt that Binger was doing an “acceptable” job of managing the company’s resources, and backed his efforts.<sup>56</sup> Most of the board at this time was composed of Menk’s “cronies,”<sup>57</sup> and they lent support to Menk’s decisions. The board’s support for Binger and his land management policies was merely an extension of its support for Menk; “support was directed to Menk and not to Binger specifically.”<sup>58</sup> In some months, resource income was higher than the railroad division’s income, and resource profitability was higher than it had ever been, so the board “did not want to try to fix something that wasn’t broken,” and Menk and the directors let Binger manage as he wished.<sup>59</sup>

Until Lou Menk retired, the BN policy, as carried out by Binger, was “always to manage the timber on a sustained-yield basis, and to always sell the timber at competitive prices.”<sup>60</sup> Not all of the directors followed Menk’s lead, however. Director Norton Simon, a well-known Hollywood art collector and publisher, “wanted to see all the resources liquidated to compensate the stockholders with the increased earnings,”<sup>61</sup> but Binger had a different idea about resource management, and a majority of the board backed him. Interestingly, Simon’s path to the BN board began when he acquired Ohio Match in the early 1950s and tried to get a long-term stumpage contract with NPRW, but the railroad refused to give him a contract. Simon then

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<sup>55</sup> Binger, 26 November 1991.

<sup>56</sup> Menk, 5 December 1991.

<sup>57</sup> Binger, 26 November 1991.

<sup>58</sup> Downing, 4 December 1991.

<sup>59</sup> Binger, 26 November 1991.

<sup>60</sup> Menk, 5 December 1991.

<sup>61</sup> Binger, 26 November 1991.

bought ten per cent of the NP stock and forced himself on the board, and it was he who recruited Menk to the NP presidency.<sup>62</sup> When Menk eventually took over the BN in 1971, Simon pushed him to manage the company's resources more aggressively,<sup>63</sup> but Menk remained satisfied with Binger's methods.

Binger felt that it was his obligation to the shareholders to manage the land "to insure, over the long term, continuous flow of income from these resources." His farming and forestry background had combined to instill a strong conservation ethic in him:

I was governed not so much by careful economic evaluation but by what I thought was right to do, and then try to evaluate the consequences of that in terms of cost. I never saw that we were incurring expenses that were prohibitive, that we weren't competitive. I don't think we were ever uneconomical. It may not have been the cheapest way, but it was the responsible way. I think you have to pay the cost to do what has to be done right in managing lands.<sup>64</sup>

This resulted in BN taking a much wider view of the values of its timber lands, and these lands were "managed on a sustained-yield basis under long-range plans that require balanced planting and harvesting. Water resources, fish and wildlife, soil conservation, scenic and recreation values are also carefully considered in BN's forest management planning."<sup>65</sup>

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<sup>62</sup> Menk, 5 December 1991.

<sup>63</sup> Downing, 4 December 1991. The volatile dissident Simon was, according to Menk, "a large pain in the ass," and "a real rock in the shoe." He soon resigned from the board when he discovered that Menk did not plan to renew his directorship. See, generally, Rush Loving, Jr's article in the August, 1972, *Fortune* for a summary of Norton Simon's relationship with Binger.

<sup>64</sup> Binger, 26 November 1991.

<sup>65</sup> BN 1974 *Annual Report*, p 14.

Binger's forestry training and background led him to take an active role in development of BN timber management policy. Binger "very definitely had ideas about what he wanted done. Through him we developed comprehensive management plans, detailed budgets, and environmental impact studies; all were initiated under his reign."<sup>66</sup> Binger was "very particular about reforestation; he didn't want a tree cut until we had a plan for what we were going to do with the land. He wanted us to know what we were doing, know what we were going to do, and have a plan for reforestation of every sale."<sup>67</sup> By this time, the railroad had developed markets, so, "We could have sold a lot more than we did, but unless we could prove that we could grow more, we couldn't cut more."<sup>68</sup>

Before Binger took over BN resources, "all the decisions were made in St Paul."<sup>69</sup> Ed Stanton, Binger's predecessor, was an old railroader with only scant interest in natural resource management, so he relegated most of the day-to-day management of the resources to his assistant, George Powe. Powe, a geologist, "kind of orchestrated everything that went on out in the field, though he didn't really know much about it."<sup>70</sup> Foresters in the field, including head forester Bud Merryman, were not allowed to make independent decisions. Mason Bruce & Girard, a timber consulting firm in Portland, had to approve all timber sales. "That's how much confidence the railroaders had in

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<sup>66</sup> Grove, 8 November 1991.

<sup>67</sup> Whitesitt, 7 November 1991.

<sup>68</sup> Grove, 8 November 1991.

<sup>69</sup> Binger, 26 November 1991.

<sup>70</sup> Binger, 26 November 1991.

their people.”<sup>71</sup> When Binger arrived, he requested the decision-making authority to “sell timber at the right prices, in the right places, and at the right volumes without an expensive consultant over [his] shoulder double checking,” so the board canceled the consultant contract.<sup>72</sup> This allowed Binger to disseminate decisions down to the field level: “Binger changed management structure from a direct autocratic type of management to a more hierarchical structure,” that allowed management to delegate authority down to the field units, and this expanded the foresters’ flexibility and ability to get the job done<sup>73</sup>: Binger recognized that many decisions made by foresters were site-specific and often needed to be made on the spot: “Where a guy in St Paul might take six months to make a decision, a guy on the ground can alter things in two minutes if something comes up.”<sup>74</sup> Within the parameters of the annual budget, foresters had the freedom to make decisions as they saw fit without being second-guessed.<sup>75</sup>

Binger invited the Montana Fish & Game Department to review planned timber sales on BN land for possible affects on wildlife, and to solicit recommendations to mitigation or enhancement of habitat. At first the Fish & Game was suspicious of BN’s motives, but soon the Department budgeted personnel to go out and inspect every timber sale and make suggestions about what NP could do for the fish, deer and other wildlife.<sup>76</sup> Fish & Game eventually made written

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<sup>71</sup> Binger, 26 November 1991.

<sup>72</sup> Binger, 26 November 1991.

<sup>73</sup> Merryman, 18 November 1991.

<sup>74</sup> Binger, 26 November 1991.

<sup>75</sup> Grove, 8 November 1991.

<sup>76</sup> Whitesitt, 7 November 1991.

recommendations for each sale that, although non-binding, Binger expected each forester to follow within reason. BN left “quite a few” wildlife corridors as a result of this consultation, and “even stayed out of some areas.”<sup>77</sup> BN was “the only company that ever did that, in fact other industrial companies said no way would they ever bring Fish & Game in to view any of their programs.”<sup>78</sup> BN also hired a wildlife biologist, Loren Hicks (who is still employed as a wildlife biologist for Plum Creek), so that it could address wildlife concerns more thoroughly from within the company, and this also lent credibility to BN’s concern for wildlife in its timberland management<sup>79</sup>

At this time, the BN Timber Department, headed by Bud Merryman, was a separate entity from the BN Lands Department. Timber’s main function was accounting, administration, and management of the timberlands, while Lands handled rights-of-way, special leases, recreation sites, and land sales.<sup>80</sup> When the environmental movement started to gather steam, Binger decided to begin writing environmental impact statements (EIS) for company projects, “to get the jump on everybody.”<sup>81</sup> Lands then set up guidelines to compile EISs for the foresters to follow. Timber management employees out on the ground then wrote an EIS for “every road they built, every timber sale, and things like this,”<sup>82</sup> and submitted these to Lands for review. The Land section “had no budget

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<sup>77</sup> Whitesitt, 7 November 1991.

<sup>78</sup> Grove, 8 November 1991.

<sup>79</sup> Binger, 8 February 1992.

<sup>80</sup> Brady, 20 November 1991.

<sup>81</sup> Brady, 20 November 1991.

<sup>82</sup> Brady, 20 November 1991.



constraints, no volume removal goals, no dollars to deal with. Timber had volume requirements and dollar requirements to meet budgets. But if the impact report didn't satisfy Lands, [Timber] had to make whatever methods necessary to adjust them so they would pass."<sup>83</sup> "If [foresters] didn't measure up to the Land Department's standards, then they couldn't put the sale up."<sup>84</sup>

There was not only pre-sale review, but also post-sale monitoring to measure compliance. People from Lands would select several sales for extensive review twice each year. They would go out and take pictures and write reports on EIS compliance on the timber sale. Lands then forwarded these reports back to Binger in St Paul. Binger would review the compliance reports and send comments back to the Timber department, and foresters and administration there had to answer his comments.<sup>85</sup> This was all a part of Binger's efforts to make the company more sensitive to the consequences of its actions.<sup>86</sup>

At this time, BN harvest levels were determined by predicting the growth capabilities of each management unit, then adding all the management unit totals together to get a harvest level.<sup>87</sup> They would find an average amount of board footage from growth predictions to come up with a cut figure. Then the company looked at the average value per thousand board feet of each species it had scheduled to harvest from its management plan to determine its budget. Foresters

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<sup>83</sup> Grove, 8 November 1991.

<sup>84</sup> Grove, 8 November 1991.

<sup>85</sup> Brady, 20 November 1991.

<sup>86</sup> Binger, 26 November 1991.

<sup>87</sup> Grove, 8 November 1991.

would then try to meet both the harvest level and the budget level. Three factors determined harvest volumes: “market forces, natural occurrences, and [BN’s] policy of keeping logging and reforestation in balance.”<sup>88</sup> The management plans were the foundation for the harvest plans, and when foresters applied values to the amounts, they could project income levels.<sup>89</sup>

In the 1960s and 1970s, the timber industry in the Northwest as a whole relied increasingly on clearcuts to get trees to the mills. The USFS had clearcut extensively in the 1960s, and most industrial forest companies followed suit, but BN, under Binger, followed slowly. The USFS had determined that regeneration was, in general, unsatisfactory in partial harvesting cuts. Shade tolerant species were left on site, generally because they were less merchantable (species such as grand fir, spruce, and subalpine fir), and Douglas fir and Ponderosa pine, both shade intolerant species, would not regenerate under the canopy. Regeneration was determined to be unsatisfactory because Douglas fir and Ponderosa pine are generally more desired species than the tolerants. With partial harvesting, standing trees were often “barked up,” or damaged, by skidders or falling trees, and this often led to partial rotting, disease, and death. The USFS found this to be a major drawback of partial harvesting as well. Logging mechanics were also an important factor in the USFS decision to rely on clearcutting. It was easier for loggers to cut and slash and burn everything from ridge to ridge, “sort of mimicking a natural fire,” than make partial cuts.

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<sup>88</sup> BN 1976 *Annual Report*, p 17.

<sup>89</sup> Grove, 8 November 1991.

Primarily, however, the Forest Service thought “it was easier and cheaper to treat a large area at one time, mostly in cost of removal—the short-term cost, not the long-term cost.”<sup>90</sup>

BN clearcut about the same amount of land in the 70s as it had in the 60s, but it was cutting from much steeper ground.<sup>91</sup> As logging got into steeper ground, it became more expensive to build roads, so BN began to use more cable-yarding systems. Even though cable-yarding systems are more expensive than skidders, the cost of road-building on rough and steep terrain more than offsets its use. With cable logging, however, scarification costs for regeneration increase because there are no skidders to scarify incidentally.<sup>92</sup> BN foresters of the time were skeptical about USFS assertions that clearcuts were more economical, due partially to the “small stems” one had to handle, and variety of species composition one was dealing with. Mostly, however, BN foresters felt clearcutting ignored the merchantability of the trees, and this made up the difference in cost of harvest.<sup>93</sup>

As soon as NP’s ten-year contracts in Montana had expired, it began to contract with loggers and haulers so foresters could have more control of who was doing the work on its lands. If one particular logger did not live up to the forester’s satisfaction, the forester did not have to hire that logger again. Foresters put logging jobs out on bid, “but didn’t let just anybody bid,” rather the foresters invited bids from loggers

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<sup>90</sup> Muechal, 14 November 1991.

<sup>91</sup> Grove, 8 November 1991.

<sup>92</sup> Whitesitt, 7 November 1991.

<sup>93</sup> Harvey, 14 November 1991, and Grove, 8 November 1991.

whom they felt could do a good job in the woods. Contracts were quite specific on how the railroad wanted the unit logged, and loggers had to follow the contracts quite closely if they hoped to work on railroad land again.<sup>94</sup> This practice continued under BN ownership as well.

Under Binger's leadership in the 1970s, the BN gradually cut its lands on a sustained-yield basis and constructed enough roads to access almost all of its timber.<sup>95</sup> Binger escalated BN's road-building activity in the 70s as fast as possible because it was becoming increasingly difficult to construct roads "due to environmental people getting more concerned about that, and justifiably so. But you can't manage timber if you don't have roads."<sup>96</sup> From 1973 to 1978, BN built 870 miles of main access roads to allow "more intensified management" of its timberlands.<sup>97</sup> Once the roads were in place, BN could "get in and take small volumes wherever mortality happened to occur," because the timber program mostly amounted to "salvaging mortality."<sup>98</sup> BN was using its old growth stands to "carry it along to the period when the second growth would come in so there wouldn't be a hiatus in the volume of production."<sup>99</sup>

A key component of BN's management objectives for its timber holdings under Binger was the processing plants that it purchased or built. By converting its own trees in its own mills, BN was able to

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<sup>94</sup> Whitesitt, 7 November 1991.

<sup>95</sup> Binger, 26 November 1991.

<sup>96</sup> Binger, 26 November 1991.

<sup>97</sup> BN 1978 Annual Report, p 23.

<sup>98</sup> Binger, 26 November 1991.

<sup>99</sup> Binger, 26 November 1991.

virtually double the amount it realized from the stumpage on its land.<sup>100</sup> In addition, BN could utilize the entire tree by processing in its own mills, and thus make money from every part of every tree; BN could cut boards, convert peeler logs to plywood, small logs to studs, burn any bark and wastings in a bark-burning boiler to generate steam and electricity, process sawdust into medium-density fiberboard, and sell chips to the Frenchtown pulp mill.<sup>101</sup>

In the woods, a computer management model called Timber RAM guided the foresters' harvest in the early 80s. Computer models such as this help managers optimize uses of forestlands, and many private companies and public agencies used Timber RAM in the 1970s and early 1980s. Managers entered data based on acres, productivity and age-class distribution, and the computer model offered managers a range of possibilities and consequences for harvest plans based on the Present Net Value (PNV). The purpose of the computer model was to help bring all the BN land into a managed state; therefore, one constraint on the system was "the harvest of all the older, more decadent stands to get them into a younger forest."<sup>102</sup> As a forecasting

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<sup>100</sup> Binger, 8 February 1992.

<sup>101</sup> Binger, 8 February 1992. Binger attempted to close the loop from raw material to finished product within the company whenever possible. BN sold its sawdust to the LP fiberboard mill in Missoula. Because LP was the only outlet for BN's sawdust, Binger thought that LP was able to manipulate the price levels too much, so BN built its own medium-density fiberboard plant to create its own outlet and maximize the returns on its sawdust. BN also entered into negotiations to buy the Frenchtown mill from Hoener Waldorf, but never reached an agreement; so the chip market was one production loop that BN did not close. BN also bought a mill in Ksanka, and a plywood plant and stud mill in Kalispell.

<sup>102</sup> Johnson, Gary. 20 November 1991. Telephone Interview. Forester, Plum Creek Timber Company, Enumclaw, Washington.

device, Timber RAM “was good to the extent that the economic and growth forecasts fed into it were good.”<sup>103</sup>

BN fluctuated the harvest levels from time to time to take advantage of opportunities in the marketplace. When the market was favorable, foresters increased the cut, and when market conditions were unfavorable, they harvested fewer trees.<sup>104</sup> BN never shut down its operations, “even in bad times,” in order to “maintain the quality of employees and maintain the continuity of operations.”<sup>105</sup> Binger felt that BN could get and keep the best available employees if it treated them well and assured them of work even when the market was down.

Community stability is one of the guiding tenets of the traditional Germanic-type foresters in this country,<sup>106</sup> and Binger believed strongly that it was in the best interests of BN to assure community stability in the areas in which it had operations. Not only did he keep people employed in slack times, but while he was in charge of resources, Plum Creek banked in the town of Kalispell. When BN took over Plum Creek, Binger met with bankers in Kalispell and assured them that Plum Creek would continue to bank in Kalispell as long as the banks were competitive with banks around the country, and as long as the Kalispell banks “accommodated the local needs of

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<sup>103</sup> Sigars, Denny. 3 December 1991. Personal Interview. Missoula District manager, Plum Creek Timber Company, Missoula, Montana.

<sup>104</sup> Binger, 26 November 1991.

<sup>105</sup> Binger, 26 November 1991.

<sup>106</sup> Parry, B Thomas, Henry J Vaux, & Nicholas Dennis. 1983. “Changing Conceptions Of Sustained-Yield Policy On The National Forests,” *Journal of Forestry*, 81(3):153.

the community — to loan local people the money they needed to get a refrigerator and laundry machines,” rather than invest the money out of the area.<sup>107</sup> Binger felt BN had a responsibility to sustain the health of the communities in which its employees lived.

One reason Plum Creek was able to maintain separate banking records was that Binger ran all of the various operations in the resource division as separate profit centers. When Binger began with the NP in 1968, he maintained separate management on the new Plum Creek acquisition, so timberland management was separated from the wood manufacturing management. His experience in the wood-products industry allowed him to recognize how larger wood-products companies that also owned timberlands, such as Weyerhaeuser and Boise Cascade, “made their balance sheets and reports to their shareholders look better by putting their own timber through their mills and charging it as if it was at the going market rate. You never knew if the mills were efficient or whether they weren’t. They were all showing a profit because they got timber for nothing.”<sup>108</sup>

If Plum Creek wanted to buy timber from BN, it had to pay the appraised value of the timber or go someplace else to buy its timber.<sup>109</sup> If Plum Creek could buy timber more cheaply from other suppliers, such as sales from the Forest Service, then it did. In 1974, for example, Plum Creek obtained only 28 per cent of its logs from BN lands.<sup>110</sup> BN

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<sup>107</sup> Binger, 26 November 1991. This was also a very effective local public relations move.

<sup>108</sup> Binger, 26 November 1991.

<sup>109</sup> Grove, 8 November 1991.

<sup>110</sup> BN 1974 *Annual Report*, p 14.

foresters, meanwhile, were free to sell BN timber to the highest bidder on the open market.<sup>111</sup> Binger felt that this forced each operation to become more efficient, and provided “incentive and inducement for the people in the different divisions to really compete very hard to show the results for their own operations.”<sup>112</sup>

Binger’s timber management program proceeded on a sustained-yield basis through the 1970s with no dramatic changes, but both Binger and Menk, the two people most responsible for setting BN’s timber management policy, were approaching retirement by the end of the decade. Lou Menk, the Chairman and CEO of BN, was the controlling influence in the company.<sup>113</sup> The BN board followed his lead in the decision-making process.<sup>114</sup> Menk thought the BN had an “excellent” board: “They knew what we were doing. We kept them well-informed.... They set policy and we abided by the policy. Boards of Directors should not be directing individual officers to do anything.”<sup>115</sup> Binger, by contrast, considered the board lazy and ineffective: “They were all cronies of the chairman. They never asked any intelligent questions. They came to meetings not informed, not prepared, not understanding the information they got between meetings to read.”<sup>116</sup> Menk had assembled a cast of directors who he felt “were the best we could get in all fields....We just tried to get people who had broad

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<sup>111</sup> Grove, 8 November 1991.

<sup>112</sup> Binger, 26 November 1991.

<sup>113</sup> Downing, 4 December 1991.

<sup>114</sup> Binger, 26 November 1991.

<sup>115</sup> Menk, 5 December 1991.

<sup>116</sup> Binger, 26 November 1991.



experiences in their business.”<sup>117</sup> This cast became very accustomed to following Menk’s lead.

When he reached the age of 60 in 1978, Menk “retired at [his] own request as CEO,” though he stayed on as chairman.<sup>118</sup> Bob Downing had retired in 1976, and Norman Lorentson, Menk’s replacement as CEO, was also approaching retirement.<sup>119</sup> As Menk considered a replacement for both Lorentson and himself, he did not find what he was looking for among the ranks of railroad personnel: “We had good railroad people, but I thought that we could use somebody that had another perspective. We decided we needed a generalist.”<sup>120</sup> The generalist who Menk decided to hire was Dick Bressler, an executive vice-president with Atlantic Richfield (ARCO). Bressler was “primarily a brilliant financial guy” with an objective perspective of the business.<sup>121</sup> Menk knew Bressler and was impressed with his financial skills, and “when his name came up in the search firm’s dossier, [Menk] got ahold of him, told him what [BN] was after, and he accepted the job”.<sup>122</sup>

With his experience at ARCO, Bressler was familiar with the oil and gas business. The Arab oil embargo and OPEC constraints on the world oil supply in the 1970s made people at the BN aware that the

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<sup>117</sup> Menk, 5 December 1991.

<sup>118</sup> Menk, 5 December 1991.

<sup>119</sup> Downing, 4 December 1991.

<sup>120</sup> Menk, 5 December 1991. As Binger put it, “We needed a businessman, not an operator.... Someone who could take a fresh look and run the company as a business, rather than follow procedures that had been established 75 years before.”

<sup>121</sup> Menk, 5 December 1991.

<sup>122</sup> Menk, 5 December 1991.

company's oil and gas holdings "seemed to be the place where you could make the most money the fastest. It was generally regarded that the timber was not as important in the long run for profits as the oil and gas."<sup>123</sup> The BN realized that it "had to work hard in oil and gas," but its resource president, Bob Binger, "didn't have those kinds of talents. He was strong in the timber end. He wasn't very good—he wasn't good at all—in the oil end of the business."<sup>124</sup> "To some extent, Bob was a victim of the fact that his experience in oil and gas was no different than the railroad people's. He did not have an oil and gas background."<sup>125</sup> As oil became more important to the profit scheme, BN wanted to make sure that it had someone in charge who could capitalize on the company's petroleum opportunities, and Bressler was Menk's choice to do so.

When he retired, Menk felt that he "had the railroad part in pretty good shape," but that resource development was lacking.<sup>126</sup> Binger, meanwhile, thought that resource development was right on line, but that the railroad was very inefficient.<sup>127</sup> Bressler would later come and squeeze more money out of both the resources and the railroad with a more aggressive management style.

Before Bressler arrived, BN was sluggish in both profits and management style, and the change in management heightened the

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<sup>123</sup> Downing, 4 December 1991.

<sup>124</sup> Menk, 5 December 1991.

<sup>125</sup> Downing, 4 December 1991.

<sup>126</sup> Menk, 5 December 1991.

<sup>127</sup> Binger, 26 November 1991.

responsiveness of the company.<sup>128</sup> The railroad had “a lot of operators and not many managers.” “Instead of managing the resources and assets that the railroad represented — steel and cars and rolling stock, etc — BN had a lot of hobbyists. Hobbyists were great operators — they knew all the timetables and numbers and tie lengths and things — but they didn’t know how to manage that resource to make money.”<sup>129</sup> This was a big factor in bringing in someone from the outside. “Bringing in somebody who didn’t know anything about the railroad was probably a good thing, because somebody from within the industry would have just perpetuated the railroad mindset, while someone from the outside should be more objective about it.”<sup>130</sup> The core of the railroad’s problem was that about fifty cents of every dollar of income went for labor — there were too many employees, and Bressler cut the work force substantially when he arrived in an attempt to increase efficiency.<sup>131</sup>

Menk and the board gave Bressler a seven-year contract to lead the BN.<sup>132</sup> Binger was opposed to the contract because he felt the tendency of someone under a term contract would be to “do whatever they have to do with the resources of the company to enhance their position and their image and their performance by short-term decisions in the company. If you know your contract runs seven years,

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<sup>128</sup> Brady, 20 November 1991.

<sup>129</sup> Binger, 26 November 1991.

<sup>130</sup> Binger, 26 November 1991.

<sup>131</sup> Binger, 26 November 1991. Binger thought that the railroaders were running the company poorly, and that it took someone like Bressler to come in from the outside and put BN on a profitable track by applying modern business management techniques to run the company.

<sup>132</sup> Binger, 26 November 1991.

you can take seven years and liquidate a lot of things in the company and show profitability.”<sup>133</sup> Bressler replaced the retired Norman Lorentson as CEO, while Menk remained chairman. When Lou Menk retired one year later, Bressler replaced him as chairman of the board. Bressler reported to stockholders that, “In the future, we’re going to take a much more aggressive approach on costs and we expect to measure results in terms of annual improvements in railroad return on assets,” and that “greater percentage growth will come from our oil and gas business and our forest management operations during the next five years.”<sup>134</sup>

When Bressler arrived, Binger informed him that the company’s natural resources were “all set to respond in a very effective way to changes in the economy, regardless of what they are.” Binger told Bressler that BN resources had a “wonderful organization” and “excellent, highly motivated people,” whereupon Bressler responded, “Why do you think I came here?”<sup>135</sup> Binger then realized that Bressler intended on “capitalizing on what a lot of outsiders perceived to be a lethargic organization that was not really doing what it could with its resources”: They looked at all this timber and asked, ‘Why carry it for fifteen or twenty or thirty or forty or fifty years when we can strip it all off and run it into the export market and pocket all that money?’”<sup>136</sup> Binger, who had managed timber for perpetual flow, felt that Bressler was an “opportunist,” and that it was an “injustice,” and “irresponsible

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<sup>133</sup> Binger, 26 November 1991.

<sup>134</sup> BN 1980 *Annual Report*, p 1.

<sup>135</sup> Binger, 26 November 1991.

<sup>136</sup> Binger, 26 November 1991.

for management to make decisions based on short-term gain, particularly with natural resources.”<sup>137</sup>

Bob Binger retired from BN in January of 1981 when the company made personnel adjustments to accommodate the appointment of Dick Bressler as president and CEO. Binger, the president of resources, was then 63 and ready to retire, as was Norman Lorentson, so the positions of president of resources and president of transportation were consolidated into one the single president position that Bressler assumed. Binger remained on the payroll as an honorary “consultant” for one year until his “official” retirement in 1982.<sup>138</sup> Thus Binger, who had shepherded resources so conservatively in order to maintain them for the future, turned over the management of the timberlands of the company to Dick Bressler, whose philosophy was to “cut the trees down and sell them as fast as he could.”<sup>139</sup> For the foresters in the field, “There was much more emphasis on good forestry, good management, and good land practices under Binger. Then after he left, why the emphasis swung pretty strongly the other way. Economics was the big question.”<sup>140</sup>

Bressler’s “first priority” was to “increase productivity and get a firm grip on costs.”<sup>141</sup> To accomplish these priorities, Bressler first restructured the BN into a holding company in order to split the company into seven different profit centers: railroad, forest products,

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<sup>137</sup> Binger, 26 November 1991.

<sup>138</sup> Binger, 26 November 1991.

<sup>139</sup> Brady, 20 November 1991.

<sup>140</sup> Whitesitt, 7 November 1991.

<sup>141</sup> BN 1980 Annual Report, p 1.

manufactured products, energy, air freight, forwarding, trucking, and land & real estate. On 26 January, 1981, BN's board voted to form the holding company, to be called Burlington Northern, Inc, and when the BN shareholders overwhelmingly approved the holding company on 15 May, 1981, it became official. Each BN company was left to make or lose money on its own without benefit of income from the other divisions. One of the factors in the decision to split the company and to place it under one big holding company was that government regulations at the time prohibited a railroad from hauling its own coal for other than internal consumption purposes.<sup>142</sup> Separate mining and transportation entities circumvented government regulations and allowed BN to mine its extensive coal holdings in the Fort Union coal seam in Montana and Wyoming.<sup>143</sup> For a railroad company like BN, the holding company organization liberated the non-rail divisions from the regulatory grip of the ICC, a grip that the railroad had found constrictive in the past.<sup>144</sup>

Lou Menk had always planned to form a holding company for the BN, as railroads such as the Penn Central had done. Menk felt that the BN needed to be free of the regulatory restraints that it faced in managing its various resources, and a holding company arrangement would allow the BN "to operate the separate businesses as separate businesses."<sup>145</sup> First, however, he wanted to take care of the BN merger with the St Louis-San Francisco Railway Company (the

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<sup>142</sup> Shirley, Steve. 1982. *Missoulian*, 14 March, p 32.

<sup>143</sup> *Missoulian* 28 January 1981, p 22, and 15 May 1982, p 2.

<sup>144</sup> Taylor, Annette. 1982. *Missoulian*, 21 February, p 9.

<sup>145</sup> Menk, 5 December 1991.

“Frisco”), which eventually became effective on 21 November, 1980. The “penancy of the acquisition of the Frisco” delayed corporate restructuring. However, once the Frisco was “in the fold,” BN, with Bressler at the helm, moved ahead with the holding company.<sup>146</sup>

Congress made this holding company arrangement easier in 1980 when it passed the Staggers Rail Act. The primary purpose of the act was to relax the controls of the ICC and allow railroads to set rates according to the market, not according to ICC regulation. Before the act passed, the ICC had regulatory control over prices, rail maintenance and sales of railroad-owned companies, but the act essentially deregulated railroad industry economics. This deregulatory move also allowed railroad companies to form non-rail entities to exploit their timber and fossil fuel resources more readily. The non-rail entities, because they had nothing to do with transportation, operated outside of the realm of the remaining, relaxed ICC controls.<sup>147</sup> Bressler felt that the Staggers Act improved BN’s prospects of managing the business “in the real world of free market enterprise.”<sup>148</sup>

As the company under the umbrella of the holding company that would be in charge of timberland management, BN Timberlands

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<sup>146</sup> Menk, 5 December 1991. According to Binger, since the time of the merger in 1971, BN had hired lawyers and spent hundreds of thousands of dollars trying to figure out a way to form a holding company. After several years the lawyers determined that it could not be done, and Menk then did not do anything to pursue the concept any further. Bressler, however, found a way to form the holding company almost immediately.

<sup>147</sup> Porterfield, Andrew. 1989. “Railroaded: The LBO trend on Wall Street is playing havoc with the nation’s forests,” *Common Cause*, Sept-Oct: 22. The Act was named after the late Harley Staggers, a Democratic representative from West Virginia and a long-time railroad booster.

<sup>148</sup> BN 1980 *Annual Report*, p 1.

was formed “to make the operation more flexible and responsive to market conditions,” and to simplify corporate structure. The holding company transferred management of the 1.5 million acres of railroad timberlands and all forest products to BN Timberlands.<sup>149</sup> SG “Bud” Merryman, formerly Vice-President in charge of timber and lands at BN, was made President and CEO of the company. Merryman also remained a Vice-President of Burlington Northern, Inc, to satisfy terms of a long-term mortgage placed on the lands and properties of the NPRW in 1897 by JP Morgan, which stipulated that all profits from the lands had to be returned to the operation of the railroad. Merryman's presence as an officer of both companies was designed to bridge the gap between the criteria of the lien and the new corporate structure in 1981.<sup>150</sup>

Deregulation through the Staggers Act threw the BN into a corporate environment fraught with the leveraged buy-outs (LBO), junk bonds, and unfriendly takeovers that marked the beginning of the Reagan-Bush administration. BN Timberlands, with a lot of standing assets, then had to be concerned about looking for a quick way to avoid a hostile takeover.<sup>151</sup> Takeover artists make their money through financing takeovers by offering high-interest bonds to gather speculation capital, then use the money to buy majority interests in companies with undervalued assets, liquidate the assets, pay off the

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<sup>149</sup> *Missoulian*, 1 July 1991, p 9.

<sup>150</sup> Merryman, 18 November 1991. According to Bob Binger, second-growth timber, because it was not on the land at the time of the bond, was exempt from the terms of the bond. In everyday working terms, the bond conditions were mostly a formality. BN reported the earnings of the lands to the trustees, who then made these earnings available to the company, minus interest due on the bonds.

<sup>151</sup> Porterfield, p 22.



bonds, and walk away with the profit. BN Timberlands, which had been tied in safety to the railroad and its massive size for so long, suddenly thought it had to try to make itself an elusive takeover target, by quickly decreasing its standing assets, that is, by accelerating the cutting of its trees:

Economics pushed us, starting with the Booth Kelly land sales in Oregon where somebody moved in and bought up a timber holding and liquidated it off and pocketed the difference, which was many millions of dollars. It then became pretty apparent that BN had to accelerate its cut a little bit in order to not be sitting on top of a pile full of uncut merchantable timber. It was like having money in the bank with no interest. We had to be responsive to the economic demand or somebody would come in there and take over the timber holdings, or they would sell it off and then they would go in and liquidate it anyway. The company had certain things that they did in order to form bitter pills and all of that kind of stuff to prevent takeovers because we still owned a lot of timberland assets at that point in time that would have been sold off or liquidated a lot faster, which would have devastated any kind of long-term interest at all. So it wasn't a desire to continue harvesting timber that caused the acceleration in the timber cutting. I think it was economic pressures. Either you increase the revenues or you lose the opportunity to work on the land.<sup>152</sup>

Scarcely two years after the formation of the holding company, BN merged BN Timberlands with Plum Creek, Inc, and called the weightier amalgamation Plum Creek Timber Company, with headquarters in Seattle. Plum Creek, Inc owned eight sawmills or wood-products plants in Montana: a sawmill, plywood plant, and medium-density fiberboard plant in Columbia Falls, a stud mill at Belgrade, a stud mill, sawmill, and plywood plant at Evergreen, a

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<sup>152</sup> Merryman, 18 November 1991.

sawmill at Pablo, and a sawmill at Fortine. Plum Creek, Inc also owned ten more industrial operations in the other Northwestern states. Bressler installed as the new president David Leland, formerly the vice president of the Building Products Group for Southwest Forest Industries.

BN Timberlands and Plum Creek, Inc, arguably a natural merger, did not join together with the formation of the holding company out of deference to Bud Merryman and Fred Winegar, their respective presidents. "Somebody had to be the boss, and Bud wouldn't work for Winegar and Winegar wouldn't work for Bud," commented Jim Brady. Keeping the two companies separate was a means to "protect" the two so the company would not have to fire one or the other.<sup>153</sup> Merryman eventually left the company "a little early" in April of 1983 over a dispute with Bressler about marketing logs to China:

Bressler wanted to sell logs to the Chinese and I don't think he gave a damn about the price because he wanted to make some inroads with them. He wanted to have a deal going with the Chinese because he visited there a couple of times. He wanted to say, "Hey, we made a deal." Bud [Merryman] said, "We'll see, but we have to negotiate first." Bud didn't want to sell logs to the Chinese for cheap. Bressler didn't like the speed, so he made up his mind that Bud had to go.<sup>154</sup>

Since Fred Winegar had retired and had been replaced by William Black in 1982, Merryman's retirement cleared the way for Bressler to

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<sup>153</sup> Brady, 20 November 1991.

<sup>154</sup> Brady, 20 November 1991.

bring on Leland to assume control and to merge Plum Creek and BN Timberlands.<sup>155</sup>

Leland assured the Montana press that there was “far more probability” that the merger would lead to an increase, rather than decrease, in the size of BN’s forest operations in Montana.<sup>156</sup> Whatever the probability, the reality registered harvest levels on BN land in Montana that jumped from 67mmbf in 1982 to 136 mmbf in 1983 (See Figure 2).<sup>157</sup>

NP/BN/Plum Creek timber harvests in the state of Montana had remained fairly stable through the 1960s and 1970s, but in 1982, under the new corporate structure, the harvest level essentially doubled from the previous year; the Plum Creek cut in Montana eventually grew by another 100 mmbf in three years until it reached 236 mmbf in 1986.<sup>158</sup> From a corporate perspective, Plum Creek found itself sitting on high-risk, low-yield capital, so it instigated an accelerated old-growth liquidation program.<sup>159</sup> Peter Heide, a Plum Creek timberlands superintendent in Roslyn, Washington, told the *New York Times* that it was a market-driven decision: Market forces and the threat of takeover “wouldn’t let [Plum Creek] do otherwise. If

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<sup>155</sup> Brady, 20 November 1991.

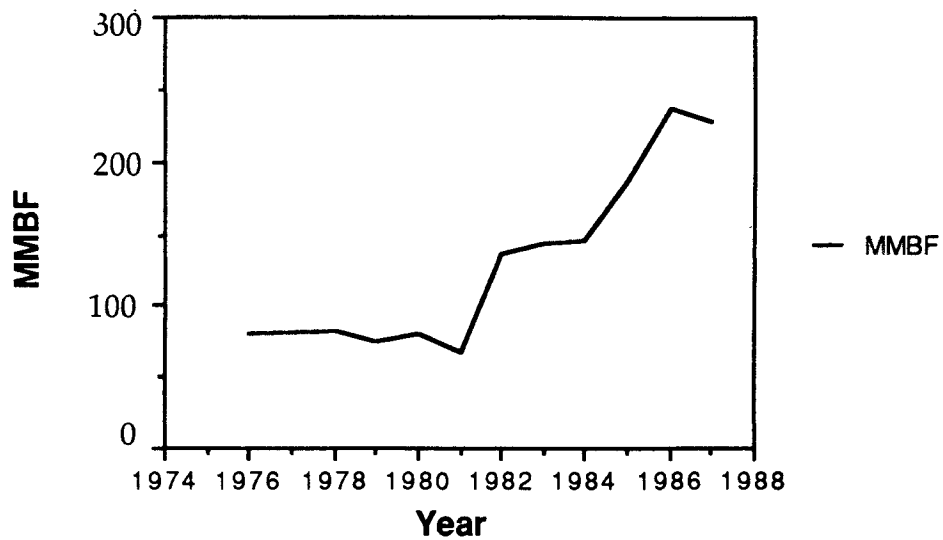
<sup>156</sup> *Missoulian*, 15 July 1983, p 11, 17 July 1983, p 14.

<sup>157</sup> Parson, Bill. 1988. Letter to Dick Manning. Manning was a reporter for the *Missoulian* at the time and writing a series of articles about the rate of harvest of timber in Montana and possible consequences thereof. He requested Plum Creek’s harvest data in the state of Montana, and Parson, the Plum Creek director of timber operations in the Rocky Mountains, gave harvest figures from 1978-1987 to Manning in a letter in October, 1988. Manning later included these experiences in his nonfiction work, *Last Stand* (Gibbs Smith, 1991).

<sup>158</sup> Parson letter to Manning, October 1988.

<sup>159</sup> McQuillan, 11 November 1991.

### PLUM CREEK ANNUAL HARVEST IN MONTANA



*This graph depicts the annual harvest (in millions of board feet) of BN and Plum Creek in Montana. The harvest hovered around 70 to 80 mmbf until 1982, when the cut began to escalate rapidly. Source: BN Annual Reports, Bill Parson letter to Dick Manning, October, 1988.*

you keep a lot of this timber on the books, you're undervalued and you become an easy takeover target."<sup>160</sup> Plum Creek determined that it was in its "best interests to harvest the timber as quickly as [it] could get into it and sell it," at least until it got out of the old-growth backlog.<sup>161</sup> "So the problem wasn't one of forest management; the problem was one of economic management that caused the company to increase its rate of cutting."<sup>162</sup>

Plum Creek was trying to get as much profit as it could out of its trees as fast as it could—maximizing returns on assets—to keep stock prices high in order to ward off leveraged buyouts.<sup>163</sup> In 1985, Charles Hurwitz, a mutual bond trader from Houston, engineered a hostile takeover of Pacific Lumber, a small company that held the largest remaining private stand of redwoods in California. After the junk bond-financed takeover, Hurwitz promptly set out to liquidate assets of the company, and the redwoods began to fall.<sup>164</sup> This takeover alerted the timber industry that the hostile takeover threat was real and intensifying. T Boone Pickens, a buyout specialist, did pick up 2.4% of BN in 1986, and BN worried for a little while, but Pickens sold off most of his shares shortly thereafter without attempting a takeover.<sup>165</sup>

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<sup>160</sup> Egan, Timothy. 1990. *New York Times*, 15 February, p A16.

<sup>161</sup> Manning, Dick. 1988. *Missoulian*, 16 October, p B1.

<sup>162</sup> Merryman, 18 November 1991.

<sup>163</sup> Crooker, David. 1991. Telephone Interview. 19 November. Manager of Strategic Operations, Plum Creek Timber Company, Seattle, Washington.

<sup>164</sup> Peline, Jeff. 1989. "Pac Lumber Chief Reaping Rewards," *San Francisco Chronicle*, 30 November.

<sup>165</sup> Miller, Michael W. 1987. "Corporate Giant Fights the Specter of Robber Baron," *Wall Street Journal*, 20 May, p 6.

From a shareholder's perspective, holding standing timber was simply too risky. A wise and prudent investor would cash in an asset as valuable and as vulnerable as standing timber as soon as possible in order to guarantee return on her investment.<sup>166</sup> Old trees do not add value quickly as they age because they grow so slowly once they reach maturity, and every day that they spend out on the ground is another day that they could possibly be infected with some disease or rot or insects — or they could burn in a forest fire. "If you had that kind of investment in your portfolio, you'd get rid of that and get something that was growing," offered Bill Parson, Plum Creek Rocky Mountain Division chief in 1988, "That's kind of the way we are managing some of our resources out here."<sup>167</sup> Along this line of logic, the market told Plum Creek to cut its assets then and there and take the money, because cash in hand was a lot safer than trees in the woods.

Bressler's business background was in resources development, and the railroad acquired other natural resource holdings, primarily in the petroleum industry, until, by 1984, BN, Inc was just as much a resources company as it was a transportation company.<sup>168</sup> BN, Inc, the holding company, had been searching for a way to separate its resource holdings from its transportation holdings, largely to raise the value of the non-transportation holdings, which were undervalued because they were tied to the railroad's \$2.9 billion in long-term debt and because BN carried the land on its books at its cost, plus value of improvements. Because BN received the land via the land grant, the

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<sup>166</sup> McQuillan, 11 November 1991.

<sup>167</sup> Manning, Dick. 1988. *Missoulian*, 16 October, p B1.

<sup>168</sup> Porterfield, p 22.

original cost was nothing, so the market value of its lands had to be much higher than their book value.<sup>169</sup> To complicate matters, JP Morgan's long-term liens, the same liens that had required Bud Merryman to occupy officer positions in both BN and BN Timberlands, had to be shaken off somehow before the resources could spin off from the railroad. Morgan had made the terms of the 1897 bonds extremely long to reassure nervous investors of the day: one set of bonds carried a 100-year term, and one carried a 150-year term, so Bressler had his work cut out for him.<sup>170</sup>

When Bressler assumed control of BN, he immediately set out to find a way to break the bond indentures so that BN could expand its energy holdings, which many viewed as potentially the most valuable of all the BN properties.<sup>171</sup> In 1985, Bressler convinced the trustees of the bonds, Citibank and Bankers Trust, to allow BN to secure the land with government securities as collateral and untie the lands from indenture, but a group of bondholders immediately sued BN for attempting to rewrite terms of bond issues, and won. Most people, as well as the judge who presided over the case, assumed the bondholders' real aim was to wring out more money for their bonds than the BN deal would have offered.<sup>172</sup> The bondholders and BN bargained and settled on a deal in 1987 that released the land from the terms of the lien and paid the bondholders handsomely for the

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<sup>169</sup> Miller, p 6.

<sup>170</sup> Miller, p 6.

<sup>171</sup> Miller, p 6.

<sup>172</sup> Miller, p 6.

privilege,<sup>173</sup> and BN was free to manipulate the profits from the lands at will.

Not wasting any time, BN spun off a subsidiary company called Burlington Resources, Inc (BRI) in June of 1988. BRI consisted of the non-transportation holdings of the old holding company, including Plum Creek and various oil and gas holdings.<sup>174</sup> Now energy and natural resource investors did not have to put their money into the railroad as a necessary side of investing in energy and natural resources that the company owned. One eager energy investor, Pennzoil—hot off a court settlement with Texaco that had put \$2.5 billion cash in its pockets—garnered 8% of BRI stock on 6 February, 1989, but listed itself as a passive investor. Bressler bristled at what he suspected was “more than a passive invest(ment),” and filed suit, alleging that Pennzoil misstated its intentions. Nothing came of it, however, because Pennzoil sold all of its BRI shares in June of 1989, soon after BRI announced in April that it was spinning off its timber operations into a new company. Pennzoil spokespeople denied that its selloff was related to anything specific, insisting only that it was a good time to sell.<sup>175</sup>

BRI wanted to divest itself of its timber industry holdings because its energy investors found little, if any, added value in the timber, and it found itself faced with three options of divestiture that it considered viable. Selling all the timber to another timber company

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<sup>173</sup> *Spokane Spokesman-Review*, 21 January 1988, p 1.

<sup>174</sup> *Missoulian*, 3 June 1988, p 1.

<sup>175</sup> *Missoulian*, 21 March 1989, p B1, and 9 June 1989, p B2.



was one option, and it had the option of allowing management to purchase Plum Creek through a leveraged buy-out. BRI settled on establishing a limited partnership that would buy out BRI's timber industry holdings.<sup>176</sup> By forming a limited partnership, called Plum Creek Timber Company, LP, BRI tapped into a 1987 tax law that exempts from taxes publicly-traded partnerships that derive 90 per cent of their revenue from natural resources.<sup>177</sup> To take advantage of the tax law, Plum Creek formed two entities, the limited partnership to own the natural resources—in Plum Creek's case this was the timberland—and a traditional corporation to own the wood products manufacturing holdings. The partnership owned 95 per cent of the manufacturing corporation, which was a taxable entity. The terms of the sale from BRI to Plum Creek, however, burdened the corporation with so much debt and interest payments that the mill operated at a loss, so it did not have to pay taxes anyway.<sup>178</sup> Then, in 1990, the IRS ruled that income derived from sawmills constituted qualifying income under the natural resource exemption, so sawmills too could be owned by tax-exempt limited partnerships.<sup>179</sup> Effective 1 January, 1991, Plum Creek formed a second limited partnership to own the manufacturing holdings (Plum Creek Manufacturing, LP) that was 98

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<sup>176</sup> Crooker, 19 November 1991.

<sup>177</sup> Koberstein, Paul. 1990. "Private forests face critical log shortages," *Oregonian* (Portland), 15 October, p 5. Hereinafter "Koberstein 1990a." Plum Creek paid \$117.7 million in federal taxes from 1984-1989, but since formation of the partnership they have paid none.

<sup>178</sup> *Missoulian*, 18 April 1989, p 1. Meridian Oil and Meridian Minerals, both wholly-owned subsidiaries of BRI, retained the subsurface rights to the Plum Creek land in the transfer, according to the Plum Creek *Prospectus*, p 43.

<sup>179</sup> Ludwick, Jim. 1990. "Who owns Plum Creek these days?," *Missoulian*, 16 December, p F1.

per cent owned by Plum Creek Timber Company, LP.<sup>180</sup> The old manufacturing corporation (now 96 per cent owned by the LP), which was renamed Plum Creek Marketing, Inc, would market and distribute the products made by the manufacturing LP.<sup>181</sup> This remains the corporate status of the company today.

Plum Creek's limited partners had to raise \$575 million to purchase 88 per cent of BRI's timber entities (BRI opted to retain 12 per cent). To gather the money, they borrowed \$325 million and raised another \$284 million by offering 14,202,500 depository units at \$20 per unit.<sup>182</sup> As an added incentive to attract potential partners, BRI guaranteed the dividend on the depository units to be a minimum of \$0.60/unit/quarter for five years, that is, until 1994. Because each investor who bought a depository unit was technically one of the limited partners, all of the yield on the investment was tax-free.<sup>183</sup> For the past six quarters, Plum Creek has authorized a distribution of \$0.80/unit. Profitability has been high enough to exceed the guaranteed distribution level.<sup>184</sup>

As BN and Plum Creek organized into their various corporate forms in the 1980s, timber harvest on its lands in Montana rapidly climbed to an apex in 1986, and have slowly declined since then (see Figure 2). Nick Kirkmire, a Plum Creek vice president, claimed in 1984 that, although Plum Creek "may have more intense (cutting) activity

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<sup>180</sup> Crooker, 19 November, 1991.

<sup>181</sup> Plum Creek 1990 *Annual Report*, p 26.

<sup>182</sup> Plum Creek 1990 *Annual Report*, p 26.

<sup>183</sup> Crooker, 19 November 1991.

<sup>184</sup> Plum Creek October 1991 Profile

in some areas..., overall, we're cutting at a level that we feel the lands can maintain and still be consistent with good stewardship and good forest-management practices."<sup>185</sup> What the lands can maintain, however, should not be confused with what the lands can sustain, because "a sustained yield timber program is not economically feasible for Plum Creek," according to Bill Parson. "We are not on a sustained-yield program. We never said we were on a sustained-yield program, and we have never been on a sustained-yield program.... Sure, it is extensively logged, but what is wrong with that?"<sup>186</sup> Plum Creek viewed its accelerated cut as "prudent":

In the early 1980s, Plum Creek began to accelerate the harvesting of its mature and overmature timber, consistent with prudent forest management practices, in order to capture as much value as possible from older timber stands. Harvesting activity of this nature encourages new growth on such stands, thereby increasing levels of harvestable timber in the future. ...The annual rate of timber harvesting is presently declining as the process of harvesting mature and overmature timber nears completion and is expected to stabilize in 1996... and remain at such level for several years thereafter.<sup>187</sup>

Because managed stands of timber produce so much more wood fiber more quickly than old growth stands, Plum Creek determined it was "in its best interests to harvest the timber as quickly as [Plum Creek] can get into it and sell it, at least until [Plum Creek] gets out of this old growth backlog."<sup>188</sup> Productivity in a second-growth stand is generally double that of an old-growth stand,<sup>189</sup> and Plum Creek wanted to

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<sup>185</sup> Cole, Jeff. 1984. *Missoulian*, 4 March, p 1.

<sup>186</sup> Morgan, Bill. 1989. "Plum Creek uses tour to explain timber plans," (Kalispell) *Daily Inter Lake*, 15 October, p 1.

<sup>187</sup> Plum Creek *Prospectus*, p 65.

<sup>188</sup> Manning, Dick. 1988. *Missoulian*, 16 October, p B1.

<sup>189</sup> Sigars, 3 December 1991.

convert its natural, old-growth stands to managed, second-growth stands.<sup>190</sup>

As Plum Creek liquidated its old growth in Montana, a furor among the public in Montana arose over the amount Plum Creek clearcut on its lands, particularly in the Swan Valley. Plum Creek has checkerboard ownership with the USFS in much of the Swan Valley, and “now enormous clearcuts, each a square mile in size, dot the valley” where Plum Creek has cut.<sup>191</sup> However, company records indicate that, on annual average from 1981-1991, thirteen per cent of management prescriptions in the Swan have been clearcuts, and that percentage peaked in 1984, when Plum Creek clearcut 28 per cent of the acreage treated.<sup>192</sup> In all, Plum Creek records indicate that about 20 per cent of its acreage in Montana has been clearcut over the last ten years. Foresters prescribed overstory removal cuts and selective cuts for the remaining 80 per cent.<sup>193</sup>

Plum Creek’s change in approach to its timberlands in the 1980s was accompanied by a drastic changeover in forestry personnel in Montana. The Bressler doctrine of treating the timberlands as assets from which to maximize returns resulted in an accelerated old-growth liquidation, and some people chose to retire rather than see the

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<sup>190</sup> Farney, Dennis. 1990. “Unkindest Cut? Timber Firm Stirs Ire Felling Forests Faster Than They Regenerate.” *Wall Street Journal*, 18 June, p 1.

<sup>191</sup> Koberstein, Paul. 1990. “Plum Creek Timber leaves its mark on Montana,” *Oregonian* (Portland), 15 October, p 5. Hereinafter “Koberstein 1990b”

<sup>192</sup> Sigars, 3 December 1991.

<sup>193</sup> Sigars, 3 December 1991. Management prescriptions other than clearcuts, for all intents and purposes, can often resemble a clearcut. Seed tree and shelter cuts, which can leave as few as five trees to an acre, are not technically clearcuts.

conservation doctrine scrapped; others were laid off or retired early. Early in 1984, Plum Creek Timber Company eliminated 15 jobs (about 25 per cent of the work force) in the Forest Resources Division in Montana through a combination of early retirements, layoffs, and transfers to the Seattle office.<sup>194</sup>

When Leland began working at Plum Creek, he found more foresters in place than he thought necessary to get the cut out. According to Jim Brady, the extra foresters were left over from the Binger days, when all the people were needed to prepare a timber sale due to the extensive and involved EIS preparation. After Binger retired and BN, Inc formed BN Timberlands, Merryman eliminated environmental review as a requirement in timber sale planning. So Leland removed the extra personnel.<sup>195</sup> According to company spokesman Nick Kirkmire, the foresters were removed to create a “final change in emphasis from people who are specialists to people who are generalists (in forest management) and who have more entrepreneurial skills” and to “enhance the firm's competitive posture.” Plum Creek wanted managers who had a sense of how to move timber to market when the market was right for the timber. The company became less interested in forestry from its foresters and more interested in marketing ability and entrepreneurship from its foresters, and put people in the position of forester who could match the new needs of the company.<sup>196</sup> Bob Binger, who had guided these foresters when he was in charge of resources, felt that Plum Creek “didn’t want

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<sup>194</sup> Cole, p 1.

<sup>195</sup> Brady, 20 November 1991.

<sup>196</sup> Cole, p 1.

to go through the throes of trying to change people's mindsets about what they thought was right and wrong. The easiest way to do that was to terminate them and hire foresters who would do their bidding."<sup>197</sup>

Foresters on Plum Creek lands today form harvest plans "jointly" with executives in the company.<sup>198</sup> Foresters inform executives "how much timber there is, and [executives] tell foresters how much to cut."<sup>199</sup> Plum Creek foresters no longer rely on Timber RAM, the harvest scheduling computer model. Plum Creek foresters maintain that "inventory is getting to the point where we know a lot more about what we have today, and we use our own system and a little intuition."<sup>200</sup> Computers are unable to handle the constraints that foresters have to handle today: "Computers can't measure public sentiment."<sup>201</sup> The stated primary objectives of Plum Creek forest management today are to "meet financial obligations, produce a return for shareholders and do it in an environmentally sensitive way."<sup>202</sup>

In areas they know to be sensitive, Plum Creek foresters take more care in their consideration of fisheries, soil stability, watershed concerns, wildlife, and aesthetics. However, "most of [Plum Creek's]

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<sup>197</sup> Binger, 26 November 1991.

<sup>198</sup> Johnson, 20 November 1991.

<sup>199</sup> Plum Creek employee who requested anonymity. Several people whom I interviewed requested anonymity, some because they did not want to be tied personally to a particular bit of information, while others cited job security considerations. Still other Plum Creek employees declined interviews altogether. For considerations of credibility, I have attempted to avoid citing these anonymous interviewees; this is the only anonymous citation in this thesis. I have decided to include this quotation because of its simple candor.

<sup>200</sup> Johnson, 20 November 1991.

<sup>201</sup> Johnson, 20 November 1991.

<sup>202</sup> Crooker, 19 November 1991.

sensitive areas are due to people," and foresters find themselves responding to visual constraints and public relations constraints more often than to any other considerations in planning timber cuts.<sup>203</sup> Since 1990, Plum Creek has been using fewer clearcuts "due to more sensitivity to public opinion," and is "trying to find other ways to do it instead of making people mad at [it] all the time."<sup>204</sup> To this end, Plum Creek foresters practice partial cutting on over 80 per cent of their lands in the Rocky Mountains. This is partially due to the types of timber and landforms encountered by foresters, but it is also due to a greater environmental and social sensitivity. Plum Creek does clearcut, and does think it is a good forestry practice, but wherever it clearcuts, it clearcuts "consciously," because its foresters "feel it is the right thing to do."<sup>205</sup>

Several newspaper and magazine stories covering the extent and severity of the company's clearcutting "slam-dunked" Plum Creek, according to Bill Parson: "Not everyone is out to tell a favorable story or a positive story or even an honest story about Plum Creek."<sup>206</sup> An unfavorable feature in the *Wall Street Journal* on 18 June, 1990, led to a ten per cent drop in the price of Plum Creek depository units on the New York Stock Exchange.<sup>207</sup> Plum Creek considers the negative press exposure largely a result of ineffective public relations work,<sup>208</sup> but also

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<sup>203</sup> Johnson, 20 November 1991.

<sup>204</sup> Crooker, 19 November 1991.

<sup>205</sup> Brady, 20 November 1991.

<sup>206</sup> Parson, Bill. 1991. Telephone Interview. Director of Timberland Operations, Plum Creek Timber Company, Columbia Falls, Montana.

<sup>207</sup> *Missoulian*, 20 June 1990, p C1.

<sup>208</sup> Farney, p 1.

acknowledges the general public's aversion to its methods of operation, and is seeking alternatives that are more palatable to the public.<sup>209</sup>

Plum Creek is now limiting its clearcuts to 90 acres and experimenting with "New Forestry," a system of harvesting that takes more than wood production into account. Jerry Franklin, a USFS researcher, came to the conclusion through studies began in 1970 that "what was good for wood production wasn't necessarily good for other forest values."<sup>210</sup> Plum Creek, which had received primarily negative press for its harvesting methods, decided to employ Franklin's New Forestry techniques on about 20 per cent of its lands — the 20 per cent that it would normally clearcut.<sup>211</sup> Loggers leave about 25 per cent of the stand's value on the ground, leave some snags, and leave slash for biomass retention instead of piling and burning it. New Forestry also allows for re-inoculation of stands quicker than clearcutting and broadcast burning, and over the long run, can protect and increase the overall productivity of a timber stand.<sup>212</sup> Plum Creek chairman Dave Leland decided to employ these techniques because he did not think it was "appropriate to stick our heads in the sand and do things the way we've always done them."<sup>213</sup> Denny Sigars, manager of Plum Creek's Missoula district, maintains that Plum Creek's use of New Forestry is "not a publicity stunt. But if you have a public relations problem and a

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<sup>209</sup> Koberstein, 1990b, p 5.

<sup>210</sup> Durbin, Kathie and Paul Koberstein. 1990. "New Forestry: Trying logging with a lighter touch," *Oregonian* (Portland), 15 October, p 21. Hereinafter "Durbin."

<sup>211</sup> Sigars, 3 December 1991.

<sup>212</sup> Sigars, 3 December 1991.

<sup>213</sup> Durbin, p 22.



scientifically-developed approach coincides with the public relations problem, a firm would be insane not to utilize it.”<sup>214</sup>

Plum Creek foresters today find their greatest expression of freedom in management decisions through growing trees.<sup>215</sup> Tree planting, maintenance, and repair work is “all pretty much up to the foresters.”<sup>216</sup> According to Denny Sigars, Plum Creek foresters have concentrated their efforts on getting superior reforestation results. Foresters allow about 70 per cent of the acreage to regenerate naturally, and they plant about 30 per cent. Normally, foresters allow selectively logged stands to regenerate naturally, and plant clearcuts; this, however, varies with the site and species. Lodgepole pine clearcuts, for example, regenerate best with a broadcast burn that opens the lodgepole’s serotinous cones.<sup>217</sup> Plum Creek grows its seedlings for planting in a large nursery in Pablo, Montana. Seeds for the seedlings are matched by zone and elevation to the site where planters will eventually site them, and usually seeds for the future plantings come from the same drainage in which the seedlings will be planted. This heightens the chances for restocking success.<sup>218</sup> Plum Creek foresters pay so much attention to reforestation success because “we can’t spend as much money as we do on reforestation and then not let the trees grow.”<sup>219</sup>

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<sup>214</sup> Sigars, 3 December 1991.

<sup>215</sup> Johnson, 20 November 1991.

<sup>216</sup> Johnson, 20 November 1991.

<sup>217</sup> Sigars, 3 December 1991.

<sup>218</sup> Sigars, 3 December 1991.

<sup>219</sup> Sigars, 3 December 1991.

About 80 per cent of the volume of the trees harvested on Plum Creek lands in Montana go to Plum Creek mills for processing. The mills fill about 60 per cent of their capacity from company lands, and buy the remainder from the USFS or other private holdings. Foresters try to fill the needs of the company mills as much as possible. Douglas fir logs, if larger than eight inches, go to the sawmills, and if smaller, go to stud mills. All peeler logs harvested go to Plum Creek's plywood plant, and all pine, spruce, and cedar logs (the "board" species) are sent to the sawmills. Lodgepole pine, most of which comes from the Gallatin district, gets shipped to the company's Belgrade stud mill. Plum Creek then sells the remaining 20 per cent of the logs that do not fit the needs of their mills.<sup>220</sup>

Plum Creek mills are now among the most advanced in the industry,<sup>221</sup> and the company has tooled its mills to the "specialty" market.<sup>222</sup> Instead of producing commodity timber — the timber normally associated with frame construction for the housing market — Plum Creek has targeted the specialty market for its wood products. The company markets directly to home improvement centers, where do-it-yourself home remodelers tend to shop for wood products. Do-it-yourselfers generally use higher quality materials than builders, so Plum Creek concentrates on milling highest quality studs and boards and marketing them to home improvement centers.<sup>223</sup> Plum Creek also manufactures carpet strip, marine-grade plywood, RV-grade

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<sup>220</sup> Sigars, 3 December 1991.

<sup>221</sup> Koberstein 1990a, p 5.

<sup>222</sup> Crooker, 19 November 1991.

<sup>223</sup> Sigars, 3 December 1991.

plywood, and high quality van liner — all specialty market targets. Company mills also can cut metric sizes to tap the export market, which, at the moment, is solely Japan. Plum Creek's marketing strategy is to bypass wholesalers and place the company's products closer to "the ultimate consumer or the ultimate point of sale."<sup>224</sup>

According to Charlie Grenier, Plum Creek vice president for the Rocky Mountain Region, the company is "in a business where raw material is available only if you're an efficient producer. [Plum Creek's] goal is to be the low-cost producer in the markets [it] serves."<sup>225</sup> Survival in the wood-products industry in Montana is generally considered to be problematic, so Plum Creek is tightening its efficiency so that it will be the "survivor of the crunch that will occur in the industry."<sup>226</sup> The crunch that the industry expects is a tightening of the timber supply to feed the area's mills. As the two large landholders in Montana, Champion International and Plum Creek, pursued old-growth liquidation programs, they both did so fully aware that there would be a "gap" in timber supply between the period when they finished cutting old growth and when the second growth rotations would be ready for harvest.<sup>227</sup> "Private overcutting makes no sense unless the companies expect to fill with government timber the 'gap' in private supply that will inevitably result."<sup>228</sup>

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<sup>224</sup> Hopkins, Roger. 1988. *Missoulian*, 29 May, p B1.

<sup>225</sup> Woodruff, Steve. 1989. "Plum Creek throws down gauntlet," *Missoulian*, 28 May, p F1.

<sup>226</sup> Woodruff, p F1.

<sup>227</sup> McQuillan, 11 November 1991.

<sup>228</sup> Reinhardt, Forest Lee. 1990. "Forest Products Firms and Their Timber Suppliers: Essays in Economic Organization and Behavior." (Unpublished Doctoral Dissertation, Harvard University, Cambridge, Massachusetts) p 163.

Plum Creek plans to decrease harvest from its own lands by 33 per cent by 1996, and expects to make up the difference by purchasing USFS timber: "...the General Partner expects the Facilities Subsidiary will purchase an increasing amount of timber from the US Forest Service and other third party sources to support its requirements for the Conversion Facilities. The General Partner believes that the close proximity of the Timberlands to US Forest Service acreage has given Plum Creek a competitive advantage in obtaining US Forest Service timber."<sup>229</sup>

Plum Creek has no mills in the western Cascades of Washington, and exports most of the logs cut from that region.<sup>230</sup> The export market was very favorable in the 1980s for Plum Creek, and left them "flush" with profits. Plum Creek also found higher profit margins in the specialty markets that it targeted, and this also contributed to its increased operating income.<sup>231</sup> Additionally, Plum Creek had a competitive edge over other companies because it had a higher profit margin and recovery rate for each tree it logged because it could process the tree in its own mills. These profits allowed Plum Creek to be able to outbid competing mills for USFS timber now,<sup>232</sup> and Plum Creek expects to be able to outbid competitors for federal timber in the future when its own timber harvest wanes in the 1990s.<sup>233</sup> In short, Plum Creek is ready to compete over the long haul.

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<sup>229</sup> Plum Creek *Prospectus*, p 65.

<sup>230</sup> Brady, 20 November 1991.

<sup>231</sup> Plum Creek *Prospectus*, p 65.

<sup>232</sup> Koberstein, 1990a, p 5.

<sup>233</sup> Plum Creek *Prospectus*, p 65.

## CONCLUSION

Private companies in the US generally try to manage their assets to maximize their profits. When changes in its internal corporate environment removed several constraints to timber harvest levels, and with the external corporate environment pushing the company to protect itself by maximizing its returns on investments, Plum Creek responded by accelerating the liquidation of its timber assets in Montana in the early 1980s.

By 1982, Plum Creek had overcome the constraints that had limited its timber harvest in Montana, and it initiated an accelerated old-growth liquidation program. Access to the timber, which posed the largest constraint in the 50s and 60s, was no longer an inhibiting concern by 1982. An extensive road network covered Plum Creek lands, and cost-share agreements with the USFS allowed Plum Creek to reach more remote stands of its timber economically. Technological advances in the logging industry also increased access to Plum Creek timber that would not have been economical to cut with earlier tree cutting, bucking, and loading equipment.

Markets for the timber that grew on PC lands were well-established by 1982. Early harvests had concentrated on stands covered with Ponderosa pine, western larch, and Douglas fir, but markets for Engleman spruce and lodgepole pine (species that predominate in about 25 per cent of Plum Creek's Rocky Mountain timberland)

developed over time until these species were profitable to cut and mill on a large scale.

Passage of the Staggers Act in 1980 and the consequent formation of the BN holding company allowed management of the company's timberlands to escape the regulatory grip of the ICC. Railroad deregulation gave the BN the opportunity to separate its various profit centers into separate companies. Previously, all railroad holdings were subject to the stringent ICC regulations governing railroads.

The most powerful constraint that held Plum Creek timber cutting levels in check was Bob Binger. Binger's forestry philosophy predicated a sustained-yield harvest schedule, which guaranteed a given level of harvest each year into perpetuity at the expense of maximizing short-term profits. Because of his powerful position in the company hierarchy, President of BN Resources, Binger was able to guide company forestry policy until his retirement upon the formation of the BN holding company in 1981. Dick Bressler then took over direction of the company. Bressler, unlike Binger, chose to maximize returns on the company's timber assets in the short run rather than trying to assure sustained leveled of harvest in perpetuity.

In addition to the internal constraints to accelerated timber cutting, Plum Creek responded to the corporate environment in which it found itself in the early 1980s by maximizing its returns on its assets to keep stock and dividend prices high to discourage hostile takeovers. The threat of hostile takeovers also influenced the company to

liquidate its assets to make the company less attractive as a takeover target. (Interestingly, Lou Menk, who remained on the board of directors of BN, Inc until 1986, did not think that BN Timberlands or later, Plum Creek, were ever in any danger of a takeover. In addition, in 1991, Forest Reinhardt of the Harvard Business School, in a study of forest products firms and their timber suppliers, found that although anecdotal information "suggests that there may a positive correlation between the probability that a firm is the object of a takeover and the magnitude of its timberland assets," formal analysis reveals no such relationship.)<sup>1</sup>

After the BN reached a settlement with the bondholders of long-term liens on its land holdings to escape the terms of the bond, the company restructured itself several times to streamline its bureaucracy, to take advantage of changing tax laws, and to leverage itself out of takeover desirability. The end result is that what was once a mostly-ignored asset of a large railroad company is now a separate timber and wood-products company.

By liquidating its old growth timber, Plum Creek increased its profitability, and the company plans to use these profits to out-compete other mills for federal timber when its own harvest diminishes in the mid-1990s. However, as its old-growth liquidation program nears completion, Plum Creek will be increasingly dependent on outside sources of timber for its mills, and will no longer have the cushion of its own timber base on which to fall back if other sources of timber

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<sup>1</sup> Reinhardt, p 236.

(primarily the USFS) run out.<sup>2</sup> As it accelerated its cut to the apparent disregard of all considerations other than wood production, Plum Creek picked up the reputation as the “Darth Vader” of the timber industry: the bad guys. As Binger suggests, however, the best public relations is to treat the land well; regardless of whatever media control Plum Creek may have, if it treats its lands badly, it will have poor public relations.<sup>3</sup> But now that the bulk of its old growth is already cut and the end of its old growth rotation is imminent, Plum Creek is slowing its cut and concurrently spending more time with social and environmental concerns and public relations campaigns.

Plum Creek is certainly in the timber production and wood-products industry for the long term, but not necessarily at its current level.<sup>4</sup> It will out-compete its less monied and more inefficient competitors for an increasingly limited federal timber supply, and all indications point to the company’s survival until its own second-growth rotations will be old enough to harvest. Projected changes in the industry — an increasing dependence on fiber and strand composite products rather than planks, beams, and boards — may decrease the rotation age for the second growth, as firms turn to fiber production — which can come from small trees — instead of board

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<sup>2</sup> The USFS has declared timber harvest moratoria in several checkerboard ownership drainages because of cumulative effects concerns due to previous Plum Creek and/or Champion harvests in the drainage. Plum Creek thus has acted to make federal timber less available for itself to cut because of its management on its own adjacent land.

<sup>3</sup> Binger, 8 February 1992.

<sup>4</sup> Plum Creek is currently engaged in negotiations with the Nature Conservancy to purchase most of its Gallatin-area operations, including the Belgrade mill, which the Nature Conservancy would presumably close. Plum Creek is also planning several land exchanges and sales in this lodgepole-dominated zone, and assumably will close all of its operations in this area if the sales and transfers occur.



production — which must come from bigger trees. Trees do grow and utilization standards keep falling, so it tends to keep timber firms operating longer than they might have anticipated, and it may also bring Plum Creek's second-growth into utilization sooner than planned.<sup>5</sup>

The essential changes in the management of the company's timberlands occurred in first following WWII, when the railroad decided to retain and manage its timberlands, and hence hired foresters, such as Merryman and eventually Binger to oversee management of the lands. This stewardship period lasted until 1981, when Bressler took over from Binger. Binger considered management policy and objectives with the very long term in mind — he managed for perpetuity. As a forester, Binger's management of the timberlands for sustained yields into perpetuity paralleled the age-old railroader mentality that it was in one's own self-interest to protect the shippers and the commodities. From a purely short-term profit view, this is a less-than-efficient approach, but its horizon is always very long-term.

The shift in management from Binger to Bressler marked the shift from the tenets of forestry playing the dominant role in management of the company's timberlands to business considerations governing the management of the timberlands. Forestry wasn't necessarily out to maximize profits from the timber assets, and recognized other values that were important enough to nurture, protect, and sustain. The interests of business management, on the

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<sup>5</sup> Brady, 20 November 1991.

other hand, recognize only the maximizing of profitability from timber assets, with no real concern or consideration for any other values attached to the timber assets that may not be easily measured in dollars. By the admission of the foresters themselves, forestry played only a minor role, if any, in the management of Plum Creek timber lands in the 1980s: "A lot of people were afraid to admit that we were doing this from an economic standpoint. I wasn't afraid to because I figured what I was doing was good for society. My feeling was the trees are there and they should contribute to the welfare of man; we should use them, just like we use steel, gasoline and electricity. It just so happens it was also good for economics."<sup>6</sup>

But Bob Binger cautions that, "The forestry profession is going to be passé if more forestry people don't begin to look beyond the trees."<sup>7</sup> For Plum Creek and its economic-driven harvest in the 1980s, the forestry profession was already mostly passé.

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<sup>6</sup> Brady, 20 November 1991.

<sup>7</sup> Binger, 26 November 1991.

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