

ISF State of Sustainability Report



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June 2004

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Funded by:
USDA Forest Service
Economic Recovery Program
and
Sustainable Northwest
Healthy Forests Healthy Communities

ISF State of Sustainability Report

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Executive Summary

Introduction

For more than 10 years the Institute for Sustainable Forestry (ISF) has worked towards economically viable means to promote sustainable forest management in a market context. ISF focused primarily on two programs: 3rd party certification of sustainable forest management and sustainable development of the California hardwood resource. In the light of recent changes in local timber markets we are reevaluating the potential of these two programs and the scope of our vision.

The following review of recent trends in the timber industry, compiled from numerous sources, provides background for effective strategic planning to promote sustainable resource management that contributes to the long-term ecological, economic and social well being of forest based communities in the Pacific Northwest.

Global Markets / US exports

Producers from the global north and the global south compete for market share in lucrative northern, primarily US, markets. The US softwood market is the largest world market for softwood lumber deriving over 35% of its softwood consumption from imported products. Although once a major importer of US softwood products the European Union currently produces most of the softwood it consumes. The Asian financial crisis, which began in 1997, substantially reduced demand for US exports to Asia. Further declines in Asian consumption are expected.

China is the exception. Much attention is currently focused on potential markets based on China's 8% per year economic growth and government housing construction program. China's harvesting ban substantially increased its demand for softwood sawlogs. Most of that demand is met by Russian sawlogs. Russian softwood production capacity is rising. Russian softwood forests represent 22% of global softwood forest inventory. This area is expected to have a significant impact on global forest products supply and demand in coming years

In 2002 the forest products industry suffered from slumping demand and oversupply cutting profits by 50% throughout the industry placing particular pressure on high cost production regions such as the Pacific Northwest.

In 2003 currency prices (the relative value of the US dollar against foreign currencies such as the Canadian dollar and the Euro) had significant impacts on the relative competitiveness of producers throughout the world. Although the dollar dropped in value over the past year, in the past two months the dollar gained ground.

US Summary

US demand for lumber is *the* dominant factor in global softwood supply and demand curves. Increases and decreases in the demand for US housing significantly impact global lumber prices and investment in global production capacity. New housing starts

are expected to remain strong in the near future in spite of anticipated increases in mortgage and interest rates. Recent increases in the employment rate associated with current US economic growth are expected to maintain demand for new homes in the short to mid term.

US consumption is expected to increase 40% by the year 2050. By 2008 the US will import over 40% of its consumption from foreign producers. A rising share (15% in 2050) of increased consumption will be met by imported softwood products. In spite of generally rising sawlog prices (0.6% per year) markets for small diameter western sawlogs are projected to remain weak.

Although Canada continues to provide the majority of softwood lumber imported into the US, and the volume of Canadian imports continues to increase, Canada's share of total imports has dropped from 97% to 91% by volume. US Foreign Agricultural Service figures show significant increases in imports coming from Canada, Germany, Brazil, Chile, Sweden, Austria and New Zealand. Low cost production centers such as Brazil and Chile played an increasing role in US softwood lumber imports between 1998 and 2002. Analysts expect Russian softwood forests coupled with increasing low cost production capacity in both Russia and China to play a strong role in softwood lumber markets in the near future. US softwood exports fell from 11.01% of US production in 1990 to 1.25% of production in 2003.

Pacific Northwest Summary

In the early 1990's public pressure to protect national forests in the Pacific Northwest (PNW) resulted in an 80% administrative curtailment of federal forest timber sales. Sawlog supplies to private industry were significantly reduced. These reductions in supply have had a significant impact on US demand for imported softwood and on the distribution of productive capacity among timber producing regions in the US.

Since the reduction in timber harvest on federal land, harvest levels on private land have been relatively stable. However PNW mill closures and capacity losses continue. Between 1994 and 2000 Washington and Oregon experienced a 10% drop wood products manufacturing employment. Although other regions posted much larger gains in production capacity, **between 1996 and 2002 the US Pacific Northwest posted a net capacity gain of 0.5%. During the same period 70 mills closed in Montana, Idaho, Washington, Oregon and California.** An additional 28 mills closed in British Columbia—the largest softwood producing province in Canada.

US building starts data show two downturns in the US housing market since 1978 with low points in 1981 and 1991. Recent curtailments, unlike curtailments in '81 and '91, happened during a relatively minor reduction in US housing demand.

According to Henry Spelter from the USDA Forest Products Lab in Madison WI, the Softwood Lumber Agreement (SLA), in effect between 1996 and 2001, helped to protect US industry during the strong housing markets of the mid to late nineties creating a profitable environment for US companies. As a result many North American companies

reinvested in additional capacity and efficiency during those years in spite of reduced access to timber supply coming from Federal Forests. During this same period producers in low-cost regions also intensified production gaining increased market share in both global and US markets.

PricewaterhouseCoopers' 2003 Global Forest and Paper Industry survey showed overproduction and oversupply in global markets that resulted in low market prices in 2001 and 2002. These factors were exacerbated in regional markets by the Canadian response to US tariffs on Canadian lumber applied at the end of the SLA. The Canadian increases in both productivity and production further deflated market prices.

The Softwood Lumber Agreement and the subsequent US tariffs led to decreased US competitiveness in world markets. A positive price differential between US and world softwood lumber markets provided an incentive for increases in production capacity which led to oversupply in 2001 and 2002. As a result products from non-targeted countries or regions gained market share. The SLA also led directly to a substantial increase in US imports of Canadian softwood *sawlogs* from 25 million board feet in 1998 to 250 million board feet in 2000.

Although the Softwood Lumber Dispute is not yet resolved Canadian sawlog export figures and a recent article about British Columbia's discussion of a separate pact with the US suggest that Canadian forest policies are in transition. Some observers feel that the eventual outcome of the dispute will be Canadian forest policy changes that establish a market based pricing system for logs and lumber in Canada and the reduction or elimination of tariffs at the US border.

California Summary

California, even more than the US as a whole, is a net importer of softwood lumber. California consumes nearly 15 percent of all of the wood and paper used in the United States, the most of any state. California consumes approximately 9 billion board feet of softwood annually. With current harvest levels in the 2 billion board foot range California consumes 78% more softwood that it produces. The state imports about 75% of its wood and paper products from Oregon, the U.S. Southeast, Canada and Europe.

Federal timber harvest restrictions have had a significant impact on the California timber harvest levels. Private harvest levels have also been declining (though not as precipitously as public harvest in the early 1990's) in recent years in spite of strong prices in the late 1990's and increasing growing stock on non-industrial ownerships.

As a result of declining timber supply, global competition, and increasing production efficiencies the number of sawmills declined from nearly 100 in 1988 to less than 40 in 2002. Industry curtailments are similar to other areas in the PNW, however capacity in California is declining slightly rather than increasing slightly as in the PNW as a whole. Between 1988 and 1994 employment in the wood products industry dropped 30% in California. However, between 1994 and 2000 employment in the wood products industry increased 24%. Most of these gains appear to be in remanufacturing employment

occurring in southern California. Almost 70% of wood products related employment is now in the five counties of Los Angeles indicating that significant value is being added to forest products within the state, although not necessarily to products of California origin. The industry contributes about 1% of total California's personal income, value added and employment.

The California Department of Forestry's Fire and Resource Assessment Program's (FRAP) *The Changing California: Forest and Range 2003 Assessment* points out:

The social setting of California's forest and rangeland has changed radically since the late 1980s. The State's growing population consumes increasing amounts of forest and rangeland products. At the same time, Californians increasingly demonstrate values and concerns that are redirecting the use of forest and rangeland resources towards more environmental considerations.

While Californians possess extremely diverse viewpoints concerning appropriate methods of forest and rangeland use and management, **nearly all are supportive of conservation.**

A major issue for the future of California's forests and rangelands relates to public perceptions of the appropriate mix of private investments, regulation, public investments, and governance processes needed to achieve desired goals. Innovative strategies to address these concerns and communicate successful approaches to the public will be required from both public and private organizations...
[emphasis added]

FRAP's technical working paper on timber related revenue contributions to local government in California notes:

Given the growth in California's economy and changes in the funding structure of local government, timber-related revenue has become an increasingly small percentage of total revenue sources for local governments. Statewide, these funds amount to less than 1% of all revenue sources.

North Coast Resource Area / Humboldt County Summary

Humboldt County is a net exporter of softwood lumber providing up to 30% of California's total timber production by value. Wood products manufacturing represented 4% of total (wage and salary) employment in the county —2,000 out of 50,000 jobs in March 2003.

As the previous sections show sawlog markets on the north coast are significantly impacted by forces beyond the control of the state of California or even the federal government. Global market dynamics and regional trade disputes, in particular the Softwood Lumber Dispute between the US and Canada, drive curtailments in the local and regional industry, availability of imported sawlogs in local markets and cycles in sawlog prices at surviving northcoast mills.

Both the 2003 FRAP report and the 2003 UC report (*Forestry, Forest Industry, and Forest Products Consumption in California*) base their estimates of standing timber

inventory and net growth across public and private ownerships on survey data collected by the Pacific Northwest Research Station in 1984 and 1994. (Updated 2004 data is not expected until 2005) Review of Karen Waddell's 1996 report on the North Coast Resource Area (Sonoma, Mendocino, Humboldt and Del Norte counties) show these figures on the status of standing inventories:

Aggregate net change in growing stock on all private land (growth – mortality – removal = net change) showed a net gain of 159 million cubic feet. Net change on industrial ownerships showed a net loss of 475 million cubic feet. Net change on other private (non-industrial) ownerships showed a net gain of 634 million cubic feet.

National Forests in the North Coast Resource Area comprised 16% of total timberland acreage in the area in 1994, yet 85% of standing sawtimber inventory over 100 years of age was on National Forest land. On forest industry timberland 71% by area is in even aged management, 26% uneven aged and 3% non-stocked. On even aged forest industry acreage 60.3% of stands were stocked with trees less than 50 years old in 1994. On non-industrial ownerships 41.9% of even aged stands were stocked with trees less than 50 years old. More recent data is not available.

Industry Responses / Capital Constraints

How is the industry responding to the constraints, cycles and industry dynamics outlined above?

Industry managers evaluate the economic potential of management decisions based on an assessment of the potential economic returns. In order to secure adequate capital to invest in timberland or processing capacity companies must provide, or at least project, adequate potential returns on the investment: returns that are competitive with other potential investment opportunities.

Ray Raphael in his conclusion to *More Tree Talk* further clarifies the issue:

In economic terminology, we speak of the opportunity cost of capital: there is always an opportunity to do something else with your money. The opportunity cost of timber is extremely high because the capital is tied up for such a long period of time. Depending on the interest which could be made in other investments (called the guiding rate of interest, the hurdle rate, or, misleadingly, the discount rate) the opportunity can become a prohibitive factor in any long-term forest investment. For every dollar initially invested, a tree that takes 80 years to mature will have to return \$23 at 4% interest, \$224 at 7% interest, and \$2,048 at 10% interest. If the guiding rate of interest is high, investments in the future resource base become financially untenable, since they won't be able to compete with other capital investments. When the cost of interest is taken into account, there is no genuine "long term" in the practical world of business. (Raphael 1994)

Gordon Robinson, in his book *The Forest and the Trees*, responds to the pressure placed on foresters to justify good forestry based on capital returns:

Good forestry is not a lucrative business. Trees growing on our better lands become marketable for pulp in as short a period as 25 years. Trees can be mass-produced for

pulp, rough lumber, and construction-grade plywood under sustained yield in 50 to 75 years. However, since it takes much longer to grow high-quality wood, a forest being managed for this purpose will seem uneconomical because it will always contain a large inventory of low-quality timber that could be sold. The higher the quality of wood one wants, the higher the inventory will be; it takes a lot of low-quality marketable timber to grow high-quality wood. Consequently, the value of the amount of timber that can be sold annually under a high level of sustained yield will never represent a high percentage of the *total* value of the forest because as the price of lumber rises, the value of one's entire inventory rises with it. Generally, the value of the sustained yield or the annual income of a well-managed forest will range from 1 to 2 percent of the cash value of the entire forest inventory. Likewise, a 1960 survey determined that the annual return on investment in commercial timberland in the United States was only 2.5 to 3.5 percent, far less than the 10 to 15 percent for other industries. (Robinson 1988)

Forest industry managers face volatile prices and exchange rates, supply constraints, and business cycles brought on by poorly timed changes in production capacity. Mergers and acquisitions assist companies in maintaining positive cash flows.

A March 2000 Reuters article titled *Globalization Catches Up with the Timber Industry* indicates that “a wave of consolidation has swept the industry.” The article states:

The strongest competitors are looking for ways to counter the increasing threat of cheap imports in their home markets, high taxes and transportation costs and the need to quickly expand production capacity in good times—before the cyclical timber business turns sour...

“When companies from low-cost producing countries send imports (into the US), then domestic companies have to compete with those products,” [Henson] Moore [chief executive officer of the American Forest & Paper Association] said. “Acquiring plants in those countries is a way of keeping some of the imports in check and also take advantage of the low cost. With globalization you have greater control over other countries’ production.”

For larger players mergers and acquisitions achieve several strategic purposes:

- » Mitigation of the impacts of currency volatility.
- » Mitigation of the impact of trade tariffs and other trade barriers.
- » Mitigation of national restrictions on foreign access to resources and raw materials.
- » And, for the largest players, mitigation of the business cycle itself through increasingly centralized control over the rise and fall of regional production capacity.

The *Who Will Own the Forest?* conference in 2003 discussed several trends in the ownership structure of both the timberland base and forest product manufacturing companies.

In response to market dynamics the major industry players, traditionally “vertically integrated” firms that both manage timberland and manufacture product are considering

the costs and benefits of “disintegration.” This trend is most noticeable in the US south where over 1 million acres of industrial timberlands have changed hands. Many of these properties have been sold to TIMO’s, (timber investment management organizations) who buy, improve and then sell timberland over periods ranging from 5-15 years.

Wood products manufacturing and timber management businesses also have different risk profiles. Investments in wood products manufacturing require tolerance for volatile markets, erratic cashflows, high capital intensity, and overall financial performance that is tightly integrated with the business cycle. Timberland investments offer lower volatility, steadier cashflows, limited capital requirements, and, for institutional investors such as mutual funds, low correlation with many other financial assets helping to diversify portfolios. Timberland investors appear able to accept lower returns for less risk. Forest products manufacturing investors expect higher returns to compensate for high risk. As a result institutional ownership of productive timberland is expected to continue to grow as long as industry consolidation trends continue.

Among these institutional investors are several conservation organizations. The potential for conservation organizations to funnel appropriate investment capital to long-term timber management focused on maintaining conservation values within a productive working landscape is just beginning to be realized. Again, as the FRAP report states:

In public opinion polls, an overwhelming majority view overall environmental problems such as air and water pollution, growth, traffic, and water supply as a threat to their health and well-being.... A major issue for the future of California’s forests and rangelands relates to public perceptions of the appropriate mix of private investments, regulation, public investments, and governance processes needed to achieve desired goals.

Current Policy Context

Achieving and maintaining economically viable and sustainable levels of production in California’s forests and in California’s forest products industry, if possible, will need to be accomplished by developing strategic objectives that are feasible, working with and within these trends, industry dynamics and constraints:

Globally

- » Increasing horizontal financial integration of global forest products manufacturing..
- » Increasing production in low cost regions.
- » Increasing liberalization of international trade rules.
- » Increasing productivity per worker – fewer jobs.
- » Increasing global demand – China.
- » Increasing vertical “dis-integration” of timberland ownership and forest products manufacturing.

Nationally

- » Repercussions from the current Softwood Lumber Dispute.
- » Increasing liberalization of US trade policy.
- » Increasing US demand/consumption.
- » Increasing competition for global supply – China.

- » Increasing competition from low cost imports/producers including Canada and the US South.
- » Increasing environmental constraints on supply: particularly in the US South.
- » Continued restraint of timber harvests on federal forestland in the PNW.
- » Ongoing business cycles in the global industry.

Key policy issues at the state and local level:

Lists of key policy issues and challenges at the state and local level tend to emphasize challenges and obstacles to industrial timber harvests. The FRAP report's focus on California's high volume of consumption and risks associated with high stocking levels tends to justify increased harvests of existing inventory. FRAP's focus on the declining productive land base due to timberland conversions, conservation constraints, and administrative withdrawals of land available for timber production identifies obstacles to increased harvest levels of existing inventory. FRAP's focus on the complexity of regulatory oversight and limited policy integration identifies a significant cost center for timber producers.

Given the industry trends, dynamics and constraints identified in this report it is important to point out:

- » Increased access to California supply will not solve periodic overcapacity and oversupply conditions associated with global markets,
- » Increased harvest of existing inventory will not increase the capacity of California's operable private forestlands to produce high quality timber,
- » Increased lumber production in globally competitive and highly efficient production facilities will not return rural communities to historic levels of resource based socio-economic well-being.
- » Intensive short rotation forestry will not increase fire safety in California forests.
- » Simplification and reduction of California's regulatory processes and costs will not counteract global industry dynamics affecting states and provinces throughout the PNW.
- » None of these actions will raise sawlog prices for California landowners.

ISF Response

ISF's mission is to promote sustainable forest management that contributes to the long-term ecological, economic and social well being of forest based communities in the Pacific Northwest.

ISF defines Sustainable Forest Management as:

Long rotation, uneven-aged, selection management that maintains:

- » *stocking of diverse species in the full range of age classes up to 120 years or more for softwoods,*
- » *habitat for sensitive species within the working landscape,*
- » *high quality water through stream buffers and restoration of old roads and slides to stable conditions,*
- » *fire safety through management practices that mimic natural fire conditions and include planned fire breaks, and*
- » *forest productivity emphasizing high quality sawlogs.*

Sustainable Forest Management provides:

- » Increased productivity in California's forests to meet California's wood product needs.
- » Reduced fire risk to both ecological and economic equity.
- » Maintenance and improvement of water quality to protect both ecological equity and downstream economic equity in homes and businesses, the recreational value of our streams and rivers, and native salmon populations.
- » Maintenance habitat for sensitive species of plants and animals to protect ecological and economic equity.

Within the economic and policy context outlined in this report, north coast forest landowners and sustainable resource managers plan for harvests that may take place 30, 50 or 100 years from now.

Sustainable Forest Managers face:

- » periodic business cycles that include short-term downward pressure on sawlog prices.
- » potential loss of sawlog markets if existing mills close.
- » mid-term downward pressure on prices from increasing industry investment and lumber production in low cost production areas.
- » long-term prices projected to "continue to be weak for small-diameter logs."
- » growing stock of primarily younger age classes on private ownerships.
- » increasingly monopsonistic conditions in sawlog markets (consolidating infrastructure / fewer buyers).
- » a relatively (to other softwood lumber producing regions) high harvesting cost structure.
- » costly and burdensome regulatory procedures.
- » no income from meeting social and political demands for ecosystem services.

Business cycles and long term tendencies towards increasing global competition both lead to lower prices in sawlog and lumber markets. Even periodic low prices are likely to encourage current trends including: decreasing harvests on non-industrial private ownerships, the break up of family ranches. Sawlog income may not be sufficient to carry the cost of regulation and the capital costs of maintaining large ownerships. Industry trends towards "dis-integration" of industrial ownerships and the loss of processing capacity and markets for local sawlogs are also critically important, both environmentally and economically.

To accomplish sustainable forest management objectives in the business climate outlined in this report, it will be necessary to increase income to forest landowners and forest managers.

An Opportunity: Potential Support for Sustainable Forest Management***Ecosystem services / Conservation priorities***

For those who practice Sustainable Forest Management public demand (social and political, not economic) for conservation practices and environmental integrity can

represent an opportunity, rather than a constraint. If the social benefits, economic income, and ecosystem services that Sustainable Forest Management provides can be clearly documented, public support for environmental concerns and conservation values identified in the FRAP report can potentially be linked to programs that develop funds to support Sustainable Forest Management on private ownerships.

The challenge is to turn political and regulatory demand for social and conservation priorities into predictable income streams, established in relation to landowners costs, targeted at specific and documentable environmental and conservation objectives.

Environmental advocates, non-industrial landowners and sustainable resource managers all stand to benefit from a clear-eyed evaluation of methods to support Sustainable Forest Management that use market principles to allocate resources to the long-term benefit of California's citizens, forests, forest landowners, rural communities, and wood products consumers.

Possible forms of support for sustainable forest management

Regulatory relief

The Buckeye Forest Project policy proposals include 1) lengthen the time frame that THP's are active and 2) extend the acreage limitations on NTMP's to enable landowners to choose when they will harvest to avoid selling timber at the bottom of market cycles. These two proposals could provide significant benefits to landowners without compromising environmental integrity, particularly for Smartwood / FSC certified resource managers.

As stated earlier, based on overall industry trends it does not appear that regulatory relief alone will be enough to significantly alter the impact of global trends in production, prices and trade on California forest landowners and producers.

Additional forms of support for Sustainable Forest Management

- » Increased funding for easements and other forms of conservation incentives.
- » Develop markets for domestic carbon credits
- » Financial assistance that offsets long term interest costs for investment in active sustainable forest management on high site forestland.
- » Policies that support clustered residential development and tradeable development credits in conjunction with working easements on productive timberland – particularly on low site or constrained TPZ forestland.
- » Policies that support recreation, eco-tourism and other types of economic and rural development compatible with long rotation Sustainable Forest Management on low site timberland.
- » Policies that support stream and slope restoration and restorative forestry in economic development priorities as aspects of maintaining and protecting the forest products and commercial fishing economic clusters.

Introduction

For more than 10 years the Institute for Sustainable Forestry (ISF) has worked towards economically viable means to promote sustainable forest management in a market context. ISF focused primarily on two programs: 3rd party certification of sustainable forest management and sustainable development of the California hardwood resource. Both of these programs intend to offer market advantages to landowners and sustained employment for wood and woods workers. ISF met many specific objectives in these efforts. In the expanding markets of the mid-nineties these strategies to support sustainable forest productivity offered a strong vision of sustained, ecologically sound, economically viable, forest products manufacturing on the North Coast. In the light of recent changes in local timber markets we are reevaluating the potential of these two programs and the scope of our vision.

The following review of recent trends in the timber industry, compiled from numerous sources, provides some background for effective strategic planning to promote sustainable resource management that contributes to the long-term ecological, economic and social well being of forest based communities in the Pacific Northwest.

Sustainable forest managers on California's north coast face dramatically different economic challenges than just three years ago. Producers from the global north and the global south compete for market share in lucrative northern, primarily US, markets. Periodic business cycles, reduced access to local log supply, the availability of imported sawlogs in local log markets, oversupply of logs, lumber and production capacity in global markets, and the California regulatory environment are among the factors that combine to create a difficult competitive environment for sustainable non-industrial forest management operations northern California. Strong market prices in the late 1990's encouraged investments in capacity leading to excess supply in world markets in 2001 and 2002. Curtailments and mill closures occurred throughout the Pacific Northwest (PNW) even as the US housing market reached towards record highs. During low points in business cycles non-industrial landowners are caught between the relatively high cost of meeting environmental and labor standards in the developed world and low prices in global markets. As a result conflict over costly regulatory requirements intensifies, even as Californians statewide voice their support for sustainability, conservation easements, clean air, and habitat restoration in surveys and through the initiative process.

In spite of its strong regulatory environment California is not unique. Forest managers and mill operators throughout the Pacific Northwest (PNW) face many of the same issues and difficulties, even those in states with much less stringent regulatory requirements. Relief from regulatory costs alone may not be sufficient to maintain production capacity and local sawlog production for Sustainable Resource Managers. Effective strategies to support Sustainable Forest Management on non-industrial ownerships need to look beyond regulatory relief and respond to dynamics impacting the industry as a whole. Both forest managers and environmental advocates stand to benefit from an informed discussion focused on forming strategies to support sustainable forest management in current and projected economic, social and ecological contexts.

Industry Overview:

Global

Today the term globalization is commonplace. A quick Google search on the internet yields numerous definitions of the term. Most focus on one or both of these concepts:

- 1) the acceleration and intensification of interaction and integration among the people, companies, and governments of different nations.
- 2) the tendency toward a worldwide investment environment, and the integration of national capital markets.

Some view globalization as positive and even inevitable. They believe the process brings cheaper products to consumers as each country allocates resources to the products it can produce the best. Others see globalization as the driving force behind job losses in the US. However, the idea that globalization is taking place is broadly acknowledged.

The California Department of Forestry's 2003 Forest and Rangeland Assessment recognized the growing impact of globalization in its opening comments:

California's first Forest and Rangeland Assessment in 1978 did not cover world or national trade trends in detail. The 2003 Assessment cannot avoid it. Markets, production, and investment decisions in the forest products and range livestock industry in California are influenced by global factors. Global production networks and information and trade flows are at the center of many of these influences.

Observations of sawlogs flowing into King Salmon landing south of Eureka include speculation that Humboldt County, which historically produces more timber than any other county in California, is a net importer of timber.

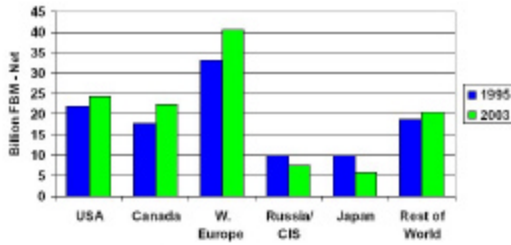
As Craig Campbell from PricewaterhouseCoopers (PwC) put it in a Seattle Time article on PwC's March 31st, 2004 Annual Global Forest and Paper conference this year: "Forest and paper products companies are truly operating in a global marketplace. Survival in the industry largely depends upon being a low-cost producer."

Are these processes impacting north coast forest managers? If so, what are the implications of globalization for sustainable resource managers in Northern California?

Global softwood markets

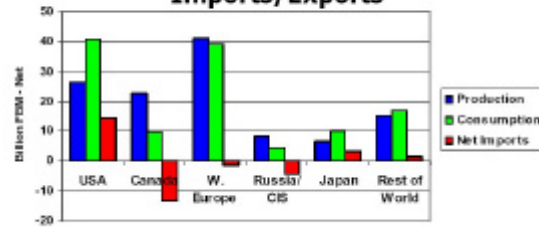
Producers from North America, South America, Asia, Russia and the European Union compete for market share in major markets in the US, Asia, and the European Union. The US softwood market is the largest world market for softwood lumber followed by Europe, Japan and Canada. The US and Japan are by far the largest net importers of softwood lumber, Canada and Russia the largest net exporters.

Global Softwood Lumber Production By Major Region



Source: WOOD Markets, IRI, WPI

Global Softwood Lumber 2003: Production, Consumption & Net Imports/Exports

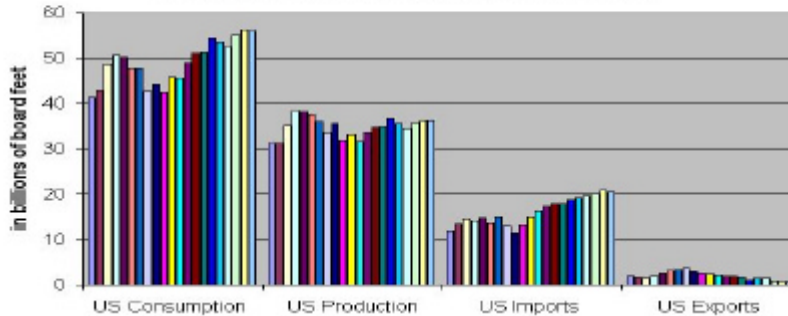


Source: WOOD Markets

US Consumption

Although US production levels are high, US consumption levels are much higher. To meet demand the US imports 37% of its overall consumption. During the early 1990's the US was also a major softwood exporter, particularly premium quality softwood logs to Japan, however between 1994 and 2003 US softwood lumber exports declined by over 70%.

US Softwood Lumber Consumption, Production, Imports and Exports 1983 - 2003
Source: United States International Trade Commission



Asian Consumption

The Asian financial crisis, which began in 1997, substantially reduced demand for US exports to Asia. (Boardman 2002) According to the US Exporters Delegation's Report to the European Softwood Conference in Noordwijk, Netherlands:

Exports to Japan—which for decades was the United States' largest export market—fell by 34% in 2001 after sliding at a similar pace each of the previous four years. European suppliers gained much of the US share of the Japanese market. The strong dollar, new housing laws in Japan that require kiln-dried lumber were contributing factors.

According to Fraser West's presentation at the 2004 PwC conference in Vancouver weak economic growth and poor demographics indicate likely further declines in Japanese consumption.

CINTRAFOR's *Changing Export Trends and the Health of the Pacific Northwest Forest Sector* publication also notes:

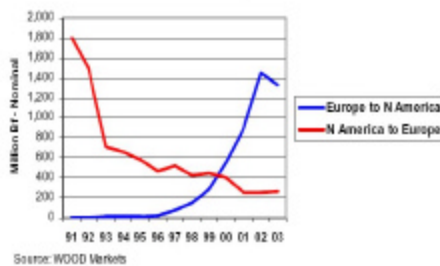
Exports to South Korea, the third largest market for US wood products, declined from \$963 million to \$538 million (-52%). The only Asian market to avoid the crisis was China. US exports to China increased from \$474 million in 1996 to \$538 million in 1998 (+13%).

European Consumption

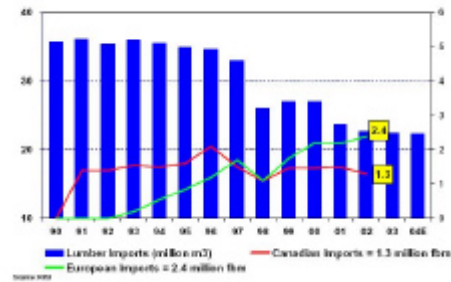
European production and consumption is relatively balanced. The Exporters Delegation's Report notes:

Once a major export market for US softwood US exports to Europe also fell sharply in 2001. Here too a strong US dollar is a significant factor. Other trends which curtailed exports to this region include Italian substitution of US softwoods for competitively priced Eastern European softwoods, weakness in German housing and window manufacturing, and increased competition from Scandinavian softwoods and African hardwoods.

Lumber Exports Between N. America & Europe



A Weak Economy and Poor Demographics Will Cause Further Declines in Japanese Consumption

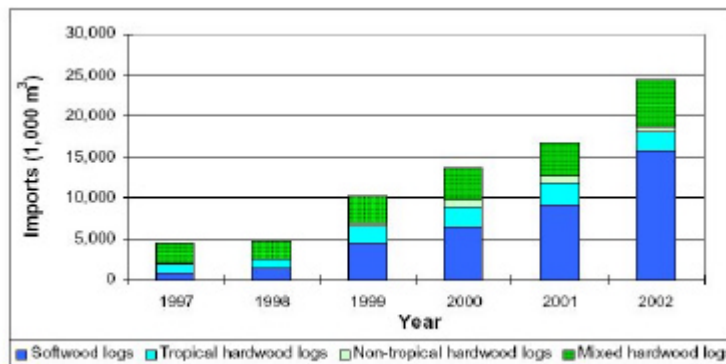


China's Consumption – Something New

China's booming economy introduces a significant new trend in global softwood demand. With China's economy growing at 8% per year, China's ban on softwood harvesting due to environmental degradation and flooding, a government backed housing program generating significant building activity, and a strong and rapidly growing secondary wood products manufacturing sector (which has already captured 40% of the US furniture market) China's demand for softwood log and lumber is skyrocketing. From 1997 to 2002, imports of softwood logs jumped by 15 times from merely 93,000 cubic meters in 1997 to 15.8 million cubic meters in 2002. (Sun 2004)

Chinese Log Imports 1997 – 2002

Source: Forest Trends: China's Forest Product Import Trends 1997-2002



Most of this softwood is coming from Russia. After a period of severe economic dislocation following the breakup of the Soviet Union, Russian softwood production capacity is rising. According to a March 2003 news release by Wood Markets magazine:

During the next five years, Russian log exports are projected to continue to increase and, in the Russian Far East, are predicted to easily double due to the large volumes of high quality, mature timber available and growing demand in China. Russian log export profits are expected to finance the construction of the required forestry infrastructure and construction of new mills. Due to the major investments required for new or improved sawmill capacity to replace the old, inefficient and abandoned mills of the Soviet era, sawn lumber production in Russia is expected to increase by about 20% during the next two to three years. Investments being made in Russian wood product manufacturing plants are based mainly on lucrative export markets in Asia and Europe. It is likely that lumber exports will increase by at least 50%, based mainly on the number of announced capacity expansions in 2003 and 2004. This could increase Russian lumber exports by about 2 million m³ by 2005 (i.e., a 25% increase over 2002 lumber export volume of 8.4 million m³)

The proximity of Russia's forests (22% of world softwood forests) to Chinese markets, improving trade relations between Russia and China, and Chinese commitments to maintaining and developing its own softwood processing capacity is a powerful combination being closely watched by producers and analysts around the world. With Russian supply, Chinese markets and increasing capacity on both sides of the border low cost production from this area is likely to have a significant impact on global forest products supply and demand in coming years.

Environmental Constraints

Two environmental constraints on global production have had a significant impact on the distribution of supply and production capacity in softwood producing regions. The curtailment of timber sales on federal forestland in the early nineties in the PNW and China's 1998 ban on harvesting following severe flooding slope in stability on over harvested landscapes.

2002 evaluation of overall production and demand

In a June 27th 2003 Seattle Times interview on PricewaterhouseCoopers 2003 Forest Products Industry Survey, Craig Campbell stated that the industry as a whole is facing oversupply in global forest products markets. Profits in the industry as a whole dropped 50% in 2002. The article states:

An oversupply of wood and slumping demand sawed in half the total profit of the world's top 100 forest-products companies last year and is likely to mean more job losses at sawmills across the United States and Canada... "The worldwide industry probably needs to cut 10 percent of capacity for all its products — including lumber, paper and pulp — and most cuts would be in the U.S. and Canada, where costs are high and economic growth is stalled," said Craig Campbell, a partner in the consulting company's forest-industry group."

Current outlook

According to an article from the CanadaNewsWire website regarding the industry outlook shared at PwC's March 31st, 2004 Annual Global Forest and Paper conference in

Vancouver, currency prices (the relative value of the US dollar against foreign currencies such as the Canadian dollar and the Euro) had significant impacts on the relative competitiveness of producers throughout the world in 2003. As the strength of the dollar declines against other currencies US industry maintains a favorable competitive position in export markets and some protection from low priced imports.

The single biggest impact on the global industry in 2003 was the dramatic increase in value of the Euro and the Canadian dollar against the U.S. dollar, and the trickle-down impact this had on the entire industry," said Craig Campbell, leader of PricewaterhouseCoopers' global forest and paper industry performance improvement practice. "If this trend continues, the impact in the European industry will be more widespread as some important lumber producing countries, such as Estonia, Latvia and Lithuania, join the European Union in May.

The Canadian dollar has appreciated almost 12%, or 8 cents, on average since 2002. For Canadian forest and paper producers, this increase in value against the U.S. dollar has translated into a revenue reduction of over CAD 4 billion on an annual basis." European producers have also been impacted by the drastic appreciation of the Euro, which increased 20% on average in 2003 against the U.S. currency and 6% on average in 2002. Like Canadian producers, the increase in the value of the Euro puts European producers at a disadvantage to those in the U.S. as the global industry prices its products in U.S. dollars.

Last year saw mortgage rates continue to hold at record lows, pushing U.S. and Canadian housing starts towards record highs. Despite this trend driving increased demand for lumber, volatility due to ongoing fragmentation and resultant oversupply continued to plague any sustained growth in the industry. The Canadian industry also suffered as a result of ongoing countervailing and anti-dumping duties of 27% on average on softwood lumber shipments to the U.S. since May 2002. Lumber prices peaked at USD 340(*) in September 2003. In spite of this, lumber market price volatility due to oversupply kept the average price at USD 268, up only 2% from the 2002 average of USD 262. As lumber prices rose, the Canadian dollar strengthened, enabling Canadian producers to realize positive returns from relatively constant prices in 2003.

"Forest and paper products companies are truly operating in a global marketplace," said Campbell. "Survival in the industry largely depends upon being a low-cost producer. North American forest and paper products producers are now carefully watching emerging global competitors such as Russia. Russian sawmills have some of the world's lowest costs for logs and sawmilling and currently they only cut about 16% of their annual sustainable harvest.

Currency Exchange Rates

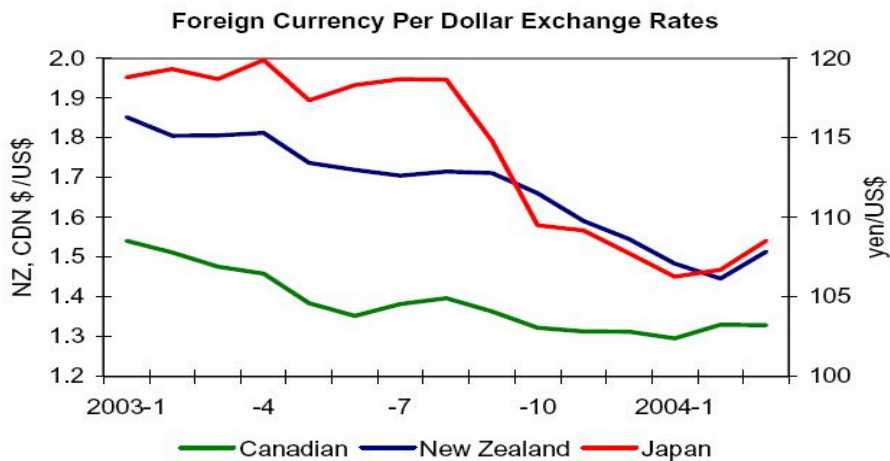
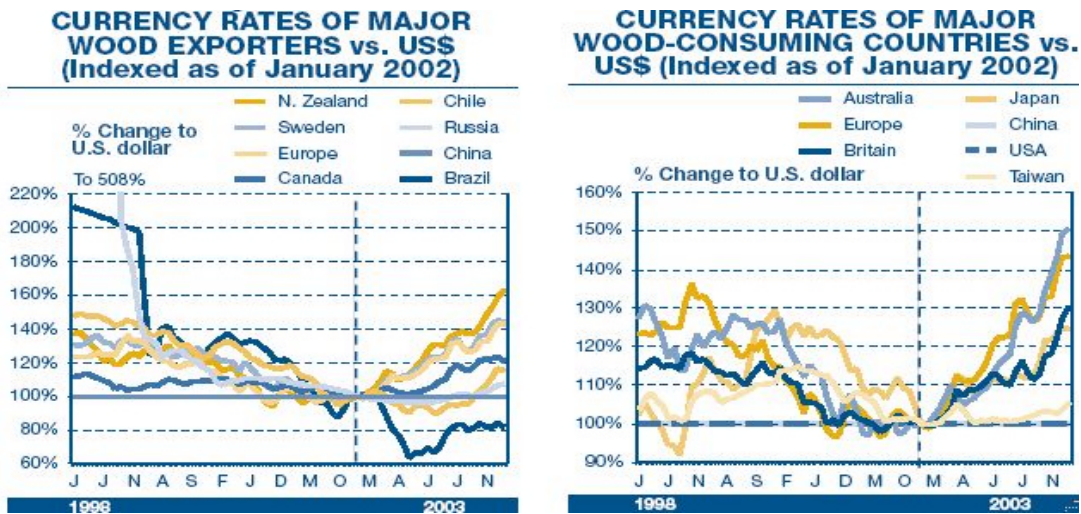
Although the dollar has been dropping in value for over a year, in the past two months the dollar has gained ground.

Wood Monthly March 2004:

The steady weakening of the U.S. dollar over the past 12 to 24 months has slowed — and in some cases reversed — the direction of global wood products trade from that witnessed during the period 1998 to 2001. Since the beginning of 2003, exporters from all around the world have been curtailing their shipments to the U.S. due to the weaker financial returns they have been achieving when paid in U.S. dollars.

Smaller currency gains have occurred with respect to the Russian ruble: it's up by 7% in value to the U.S. dollar (107% of its value in February/04 versus January/02). Larger gains have occurred in Chile (+14%), Canada (+20%), Europe (the euro +43%), Sweden (+44%) and New Zealand (up a staggering 63%). In contrast, the Brazilian real has actually been devalued by 19%.

Just as the U.S. market has lost some of its buying power, alternative consuming markets have correspondingly gained in their ability to pay more in U.S. dollars (figure 2). The countries whose currencies are rising most notably include Australia (+50%), Britain (+30%) and Japan (+24%). Only China, with its rembin pegged to the U.S. dollar, has not had a change in its U.S. dollar rate. It is now U.S. exporters' turn to be able to sell competitively in overseas market, for the first time in many years.



Source: Campbell Group – Timber Trends April 2004

Resources

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National

As a single county the US is the largest producer and consumer of softwood lumber in the world. By 2008 the US will import over 40% of its consumption from foreign producers. The majority of that softwood is projected to come from Canada, but an increasing share of US imports comes from other producers. US demand for lumber is the dominant factor in global softwood supply and demand curves. Increases and decreases in the demand for US housing significantly impact global lumber prices and investment in global production capacity.

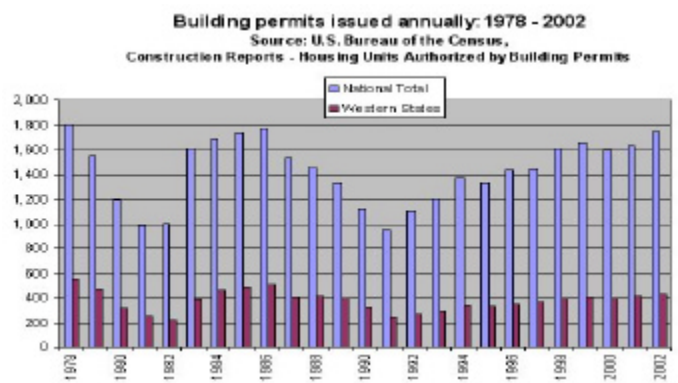


Craig Campbell from PwC commented in 2004:

Last year saw mortgage rates continue to hold at record lows, pushing U.S. and Canadian housing starts towards record highs. Despite this trend driving increased demand for lumber, volatility due to ongoing fragmentation and resultant oversupply continued to plague any sustained growth in the industry.

Housing market

New housing starts are expected to remain strong in the near future in spite of anticipated increases in mortgage and interest rates. Recent increases in the employment rate associated with current economic growth are expected to maintain demand for new homes in the short to mid term.



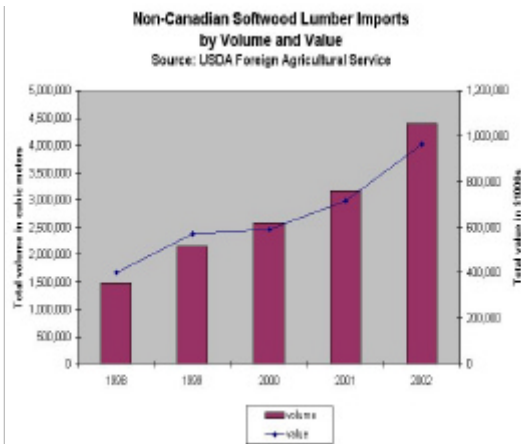
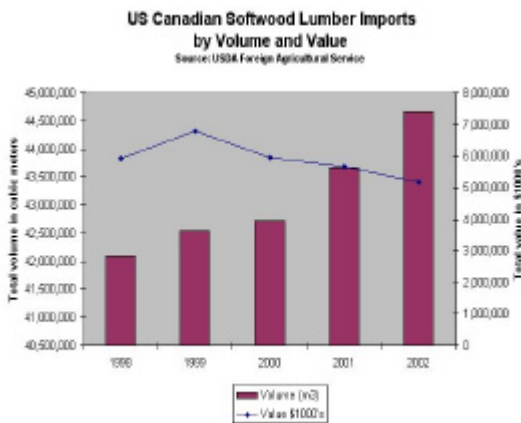
Many analysts including Franklin D. Raines, CEO of the *Federal National Mortgage Corporation* which encourages banks to make loans to low-income Americans by agreeing to purchase those mortgages, the *Prudential Real Estate Investors* group, and the *Myers Group* analysis of the *National Home Builders Association* Housing Market Indices project continued stability and modest increases in national housing markets in the short to mid-term.

Nevertheless other analysts point to dangerously high median income to median home price ratios in up to 20 key real estate markets in the US. Perhaps more importantly home mortgage refinancing has done a booming business as the federal government moved to keep interest rates low in an effort to boost the overall economy. Consumer credit spending, buoyed by the ability of homeowners to convert equity from rising real estate prices into cash to pay off credit obligations played an important role in both the expanding economy of the Clinton years and the in the current recovery. Even a slight increase in mortgage rates will significantly reduce homeowner refinancing activities and may have an impact on overall consumer spending. (Wallace-Wells 2003)

Imports

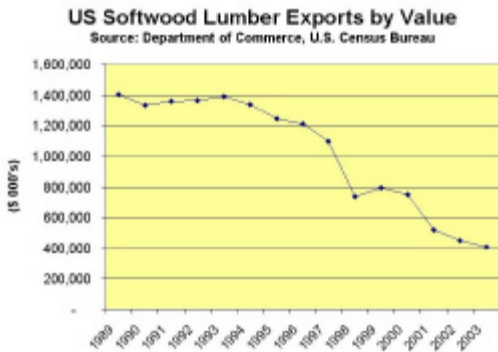
Although Canada continues to provide the large majority of softwood lumber imported into the US, and the volume of Canadian imports continues to increase, Canada’s share of total imports has dropped from 97% to 91% by volume. (Warren 2002)

Low cost production centers such as Brazil and Chile played an increasing role in US softwood lumber imports between 1998 and 2002. USDA Foreign Agricultural Service figures show significant increases in imports coming from Canada, Germany, Brazil, Chile, Sweden, Austria and New Zealand. Russian softwood forests, (22% of world softwood resources) when coupled with increasing low cost production capacity in both Russia and China, are expected to play an increasing role in softwood lumber markets in the near future.



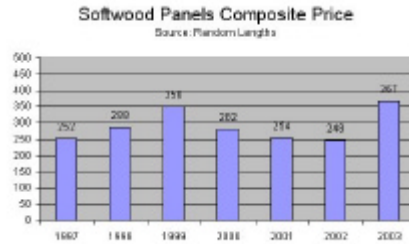
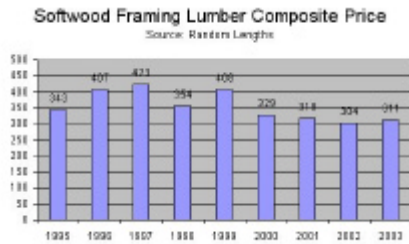
Exports

As already discussed in the previous section US softwood exports fell from 11.01% of production in 1990 to 01.25% of production in 2003. Due in part to capacity investments made in low cost production centers during the strong markets of the late 1990's and the relatively high cost of production in US companies lost market share in both export and US domestic markets between 1998 and 2002.



Recent Prices

Recent increases in lumber and panel prices are anecdotally attributed to increases in demand for wood products in the reconstruction of Iraq in addition to the strong housing market. (Random Lengths 2004)



Overall economic outlook

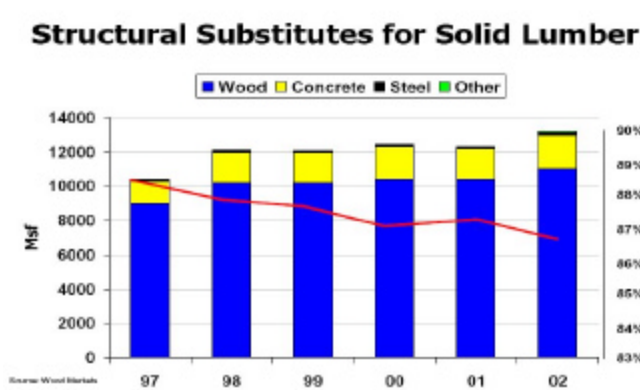
An analysis of the overall health of the US economy is beyond the scope of this report. Recent indicators show the economy is improving with a growing stock market, steady building starts and home sales. It is worth noting here that 1) the recent overall performance of the US economy and the forest products sector are, to a degree, mutually interdependent, and 2) that recent developments such as surging energy prices and increasing mortgage rates could impact both the overall economy and the forest products sector specifically.

Housing trends currently support overall economic performance in two ways: The first is the actual economic activity and markets for building products created by strong markets for new homes. The second is the discretionary income made available to consumers by refinancing mortgages at lower rates and higher equity values. Current upticks in interest

rates will significantly reduce mortgage refinancing activities. However, recent increases in employment figures are expected to offset declines in demand for new housing resulting from higher interest rates.

Substitution

Anecdotal evidence indicates that alternative materials substituted for softwood building materials including steel, reinforced concrete and plastic-fiber lumber increased, and engineered wood products are gaining market share. Data presented at the 2004 PwC annual forest products conference indicates that substitute materials have not as yet made significant inroads at the national level. However, a 1998 CINTRAFOR survey of manufacturers offers evidence of increasing willingness to substitute among larger businesses and increasing dissatisfaction with the perceived decline in the quality and value of softwood building materials. Respondents in the western US were particularly open to product substitution. (Fleischman 1999)



US Timber Outlook

A recent (February 2003) USDA FS report *An Analysis of the Timber Situation in the United States: 1952-2050* concludes with these long term projections:

Projections to 2050 show the forest products sector changing and expanding to meet a **40-percent increase in U.S. consumption of forest products by 2050**. The rate of increase is less than one-third the annual rate of increase over the last 33 years owing, in part, to declining use of paper and paperboard per dollar of gross domestic product, and projected relatively stable housing starts. Increasing **consumption needs would be met by (1) an increase in U.S. timber harvest of 23 percent, (2) an increase in log, chip, and product imports of 85 percent, and (3) an increase in use of recovered paper of 85 percent....** The proportion of total roundwood needed for domestic product consumption that comes from domestic timber harvest decreases from 80 to 73 percent by 2050. The remainder is provided by harvest in other countries....

Relatively stable forest product prices are expected over the next five decades. **Softwood sawtimber prices are projected to increase over the next 50 years, but at a rate (0.6 percent per year) considerably below that of the past 50 years (1.9 percent per year)**. Market-based adjustments on private timberlands plus increased imports help meet expected increases in U.S. consumption. **Despite generally rising prices, stumpage markets in the West will continue to be weak for small-diameter logs....**

Most (80 percent in 1997) of timber harvest takes place in the Eastern United States. Most of the expected increase in harvest will come from managed stands primarily in the South. By 2050, about 60 percent of the softwood timber harvest from private timberlands will come from plantations (both in the South and the Pacific Northwest West) that occupy about 30 percent of the softwood timberland area and less than 20 percent of the total timberland area....

Canada is expected to provide the primary source of imports (over 75 percent), but imports from other sources also are expected to increase. **Canada will provide roughly 30 percent of U.S. softwood lumber consumption over the next 50 years, but imports from other countries (Eastern Europe, the Nordic countries, Southern Hemisphere countries) are expected to increase to 15 percent of U.S. softwood lumber consumption....**

The magnitude and speed of change in forest products markets, especially response to business cycles, is often greater than expected or recognized by resource managers or policymakers. As a result, market-based "disturbance" events, such as economic recessions, the introduction of new technologies or products, the opening of new markets, or shifts in exchange rates often have unanticipated effects on forests that are an order of magnitude greater than those resulting from endemic biophysical processes....

These projections assume that the U.S. dollar will retain its strength relative to other currencies. **The trade, consumption, production, and resource projections of this assessment would change if there were significant changes in the exchange value of the U.S. dollar, or in other factors affecting international trade.**
[emphasis added]

These final caveats are important to note. Unforeseen variables such political instability or unforeseen changes in existing variables such as steep increases in energy prices could have broad impacts on both the forest industry and the global economy.

Environmental Constraints

Harvest constraints on existing inventory due to environmental considerations have had a significant impact on supply availability in the PNW. According to a Campbell Group analysis of US timber supplies, increasing regulation of harvest activities in the southern US may also impact supply availability in the south.

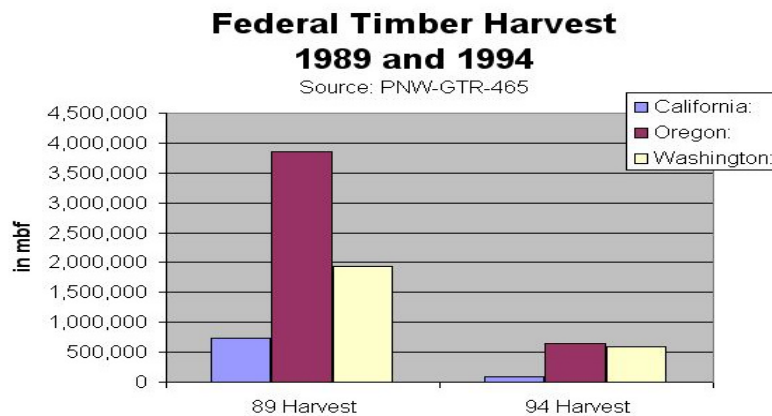
Resources

- » Warren, Debra D. 2002. Production, prices, employment, and trade in Northwest forest industries, all quarters of 2000. Resour. Bull. PNW-RB-236. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 171 p.
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Pacific Northwest

Environmental Constraints: Federal Forests

In the early 1990's public pressure to protect national forests in the Pacific Northwest resulted in an 80% administrative curtailment of federal forest timber sales. Sawlog supplies to private industry were significantly reduced.



Softwood Lumber Agreement 1996 - 2002

Although it's tempting to blame federal harvest curtailments for mill closures and reduced employment in the PNW forest products industry, the Softwood Lumber Agreement (SLA) between the US and Canada has also had significant, and for some unanticipated, impact on remaining mills. It can be argued that the SLA is responsible for many of the mill closures that have taken place since 1996 as production volumes from private land have remained comparatively stable relative to the precipitous decline in harvest levels on public land.

Protection of US markets by the SLA resulted in higher US prices. Strong demand during the late 1990's supported and encouraged investments in an additional 13% capacity overall in Canada and the US, and a 6% capacity gain in the PNW. Other producers, unaffected by the SLA, also found US market prices sufficient motivation to increase investment in capacity. Housing demand took a slight downturn in 1999 and 2000 leading to excess supply in world markets in 2001 and 2002 and a steep decline in prices. Curtailments and mill closures occurred throughout the PNW in the late 1990's and on into 2002. Even as the US housing market reached towards record highs in 2003, US producers continued to lose market share in domestic and export markets.

Competitiveness

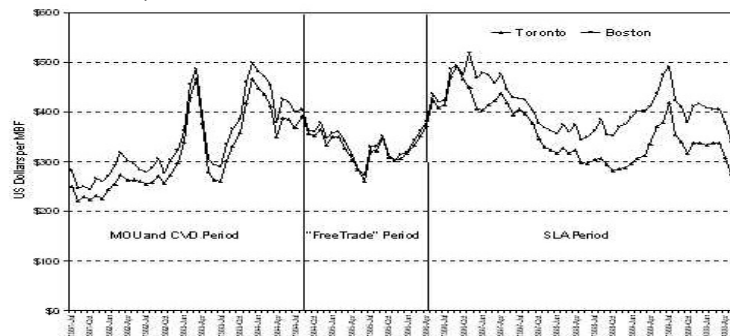
The countervailing duty and quota agreement between the US and Canada has affected both US primary and secondary product competitiveness in international markets. The agreement limits the amount of lumber Canada can export to the US duty free. While this quota provides protection for US lumber manufacturers, it forces Canadian producers to sell excess supply at lower prices to offshore markets, taking away the transportation and quality advantages the [US] PNW once held. As Canada's domestic lumber prices have dropped, Canadian producers exported more lumber and secondary products to the

Pacific Rim. The quota limitation on Canadian lumber to the US accelerated the shift from US log exports to lumber exports from Canada and Europe as Japanese buyers saw high US log and lumber prices relative to other suppliers. When US markets ultimately weaken PNW log and lumber producers will feel the full effects of this loss in competitiveness in the Asian markets they once dominated. The US market share of logs and lumber in Japan has declined from 56% in 1989 to 31% in 1998, a 25% decline, as Europe gained share by 11%, Canada by 7%, and other suppliers by 7%. (Lipke 2001)

Price differential

Since the SLA was implemented, softwood lumber exports from the four major provinces to the US have been restricted below the volume imported prior to the implementation of the SLA. While the two fixed bases (the "established base" without export fee, and the "lower fee base" with a \$50/mbf export fee) were mostly filled, the volume exported under the "upper fee base," with a \$100/mbf export fee, fluctuated in response to price changes in the US. Despite the shift of softwood lumber production from western to eastern Canada, the composition of exported volume among the four major provinces has been consistent.

An analysis of the price data shows that the SLA has increased the price of softwood lumber products in the US relative to Canada, Figure 1. A comparison of the price trends of identical softwood lumber products (i.e., eastern SPF 2x4s, KD, #1&2) in two closely located markets (i.e., Toronto and Boston) demonstrates this two-tiered price structure. The price trends show that since the SLA was implemented, the price for softwood lumber in Boston has been nearly 15% higher than the identical product sold in Toronto. However, there was virtually no difference in the price of softwood lumber in these two markets during the period leading up to the SLA implementation (August 1994 March 1996). (Fukuda 2001)



In addition to the direct effects that the SLA has had on the softwood lumber market in the US, it has also had several indirect, and unintended, effects as well. Strong demand for softwood lumber in the US, coupled with restricted exports from the four major provinces in Canada, provided other foreign suppliers with an opportunity to enter and compete in the US market. While softwood lumber exports from the four major provinces have been relatively stable, the SLA-exempt provinces (New Brunswick, Nova Scotia, Saskatchewan, and Manitoba) took advantage of their position to increase their softwood lumber exports into the US from 1.4 bbf during the first year of the SLA to 2.9 bbf during the fourth year. As a result, the share of the SLA-exempt provinces in total Canadian softwood lumber exports to the US jumped from 7.9% during the first year of the SLA to 15.6% during the fourth year. Similarly, exports from non-Canadian countries have jumped from 389 million board feet (mmbf) to 912 mmbf during the same period. (Fukuda 2001)

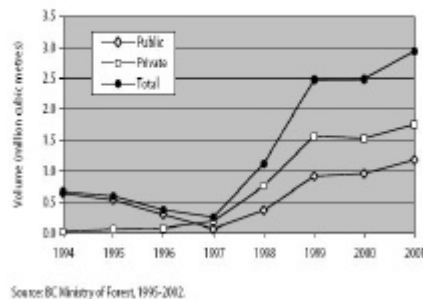
Log Exports

To avoid the voluntary export restrictions specified in the SLA, some Canadian producers have responded to the SLA by increasing their exports of softwood logs and value-added wood products to the US. **US imports of softwood logs from Canada have increased substantially since the SLA was implemented, increasing from 63 mmbf in 1995 to almost 467 mmbf in 1999.** (Fukuda 2001)

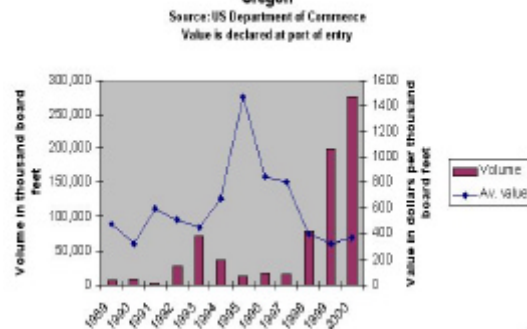
[emphasis added]

[Editors note: see particularly the volume increase of softwood log imports to Oregon and Washington from Canada which increased from approximately 25 MMBF/year between 1989 and 1998, to approximately 250 MMBF between 1999 and 2000.]

Figure 1: Raw Log Exports in BC (1994-2000)



Softwood log imports from Canada to Washington and Oregon



Efficiency / Productivity

According to Joseph Carson (Alliance Capital Senior Vice President and US economist) technological unemployment resulting from increased investments in production efficiencies increased across all sectors and in all parts of the globe.

Between 1995 and 2002 roughly 22 million jobs were lost globally, a decline of 11%. Yet over the same period, global industrial production jumped more than 30% — a remarkable gain in productivity. Losses in the US of 2 million jobs over the same period matched the global average of 11%.

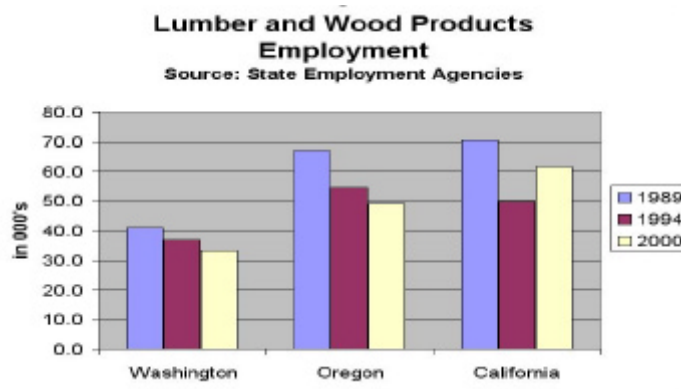
The forest products industry is no exception.

Curtailments / Capacity

Since the reductions in timber harvests on federal land, harvest levels on private land have been relatively stable. However PNW mill closures and capacity losses continue. The following table shows PNW capacity losses between 1996 and 2002 in thousands of cubic meters along with mill closures. These losses are only part of the picture. Additional capacity due to mill improvements at surviving mill more than compensated for capacity losses in the PNW. Although other regions posted much larger gains in production capacity, and in spite of the reduction in federal timber harvest on timberlands in the PNW, **there was a net capacity gain within the US Pacific Northwest of 0.5% between 1995 and 2002.** **During the same period 70 mills closed in Montana, Idaho, Washington, Oregon and California.** An additional 28 mills closed in British Columbia—the largest softwood producing province in Canada. (Spelter 2003)

State/Province	Capacity loss	# Mills closed	Region	1996-2002 Capacity Gain
British Columbia	4846	28	US West	0.5%
Oregon	3483	27	US South	13.0%
California	1940	12	US North	9.0%
Idaho	1258	15	British Columbia	4.0%
Washington	975	9	Eastern Canada	34.0%
Montana	467	7		

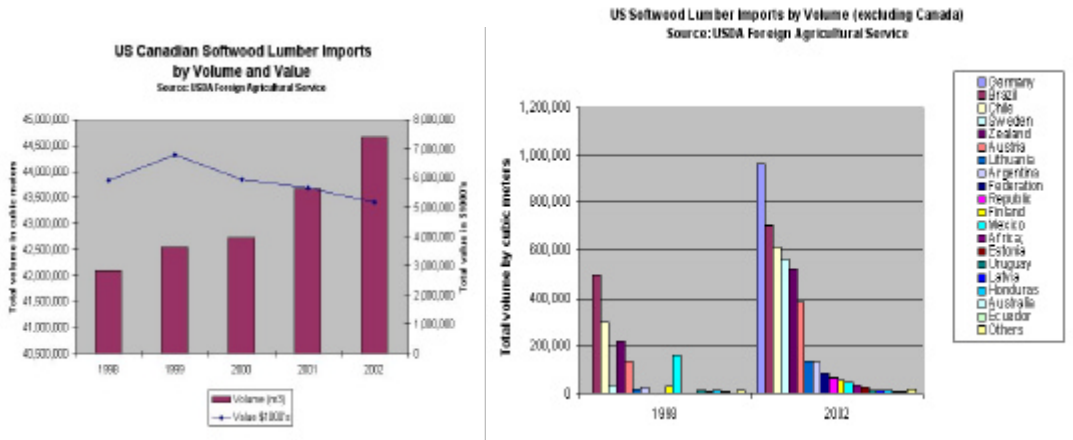
While capacity increased, wood products manufacturing employment declined in both Washington and Oregon between 1994 and 2000. (Warren 2002) Increases in wood products manufacturing employment in California between 1994 and 2000 is attributed to increased remanufacturing activity in southern California rather than increased mill capacity in northern California's timber producing counties which actually declined slightly. (FRAP 2003)



Commenting on the rash of mill closures in the PNW Richard Haynes, an economist at the U.S. Forest Service's Pacific Northwest Research Station in Portland stated in a Spokane Spokesman-Review article on 2/16/2003: "Mills here are less cost competitive. There are three major players -- Canada, the South and the West. Two of them are doing better than the third, because they can do things cheaper." Survivors in the battle of the mills are extremely efficient. They've cut labor costs and increased production through automation... "The ones that closed tended to be older mills, mostly smaller mills," Spelter said. "They weren't making money relative to the cost of doing business."

US/Canada Softwood Lumber Dispute

The end of the SLA between Canada and the US resulted in 27% tariffs being applied on softwood lumber imports from Canada to the US. In response Canada increased production to lower per unit operating costs thus increasing supply in US markets and lowering US market prices.



As Henry Spelter from the USDA Forest Products Lab in Madison, WI notes: discussion of “softwood lumber industry capacity over the period 1995–2001 cannot take place without consideration of the influence of the 5-year agreement regulating the imports of Canadian lumber into the United States.”



It follows that discussions regarding current conditions in the industry needs to be understood in the context the termination of the SLA and the current softwood lumber dispute between Canada and US.

When the Softwood Lumber Agreement expired in 2001 the US Department of Commerce (US DOC) determined that elements of Canadian forest policy subsidized Canadian lumber coming into the US. In May 2002 the US Customs Service began collecting a countervailing duty on Canadian lumber to correct for Canadian Provincial subsidies that currently stands at 18.79%. In addition the US DOC determined that individual Canadian firms are “dumping” lumber at below-cost prices in US markets. Individual companies face anti-dumping penalties ranging from 2.18% to 12.79%, companies not specifically listed pay anti-dumping penalties of 8.43%. The total

average tariff is over 27%. The US indicates it will remove these barriers to trade between the US and Canada when Canada brings its forest policy inline with market-based principles.

At issue are stumpage prices paid to the Canadian Provinces by Canadian forest product companies. If stumpage paid is artificially low this constitutes a government subsidy, which is illegal under the North American Free Trade Agreement.

The US recently released a policy bulletin whose stated purpose is to “to provide an incentive for Canadian provinces to move to market-based systems of timber sales that ensure that the provinces receive adequate remuneration for their sales of standing timber to Canadian producers of softwood lumber.” According to the bulletin: “Softwood lumber from Canada is, with certain exceptions, currently subject to countervailing duties, based on the Department’s determination that the Canadian provinces provided their lumber producers with a subsidy by selling timber from provincial lands for less than “adequate remuneration,” i.e., for less than fair market value.”

Canadian forest policy is based on a system of non-transferable “tenure” in which Canadian forest products companies make a commitment to provide stable employment to rural communities in exchange for access to timber supply in government owned forests. Although environmental restrictions are few, various limits are placed on company activities: minimum cut requirements, restocking conditions, mill closure restrictions, minimum processing requirements, and sawlog export restrictions. Curtailment of production or closure of a portion of company production capacity, a rational response to market oversupply, violates the terms of tenure.

The US contends that eliminating sawlog export and mill closure restrictions, minimum cut and processing requirements and allowing companies to transfer tenure rights would establish market-based pricing for Canadian sawlogs and stumpage. Provinces receiving “adequate remuneration” according to prices set in such a market would be exempt from countervailing duties. (DOC 2003)

US policy is in line with the US based Coalition of Fair Lumber Imports (FLI) lobbying group objectives:

The U.S. lumber industry has consistently made clear that all that is needed to resolve the softwood lumber dispute is for the Canadian provinces to sell their timber in a truly open and competitive market...Canada's trade practices in softwood lumber are not fair and won't be until the subsidies end and there is open and free competition for timber as well as lumber.

A recent Canadian study submitted to the US Secretary of Commerce by the BC Lumber Trade Council and the Province of British Columbia, concludes: “Log export restrictions do not confer a competitive advantage upon BC softwood lumber producers.” But the liberal Canadian government is having difficulty holding the line on export restrictions. (BC Lumber Trade Council 2001)

In the past few years US pressure on Canada to open its sawlog market to foreign buyers has been increasingly successful. Two factors, the weakening US dollar, and the 27% border tariff on Canadian lumber, create an untenable situation for the Canadian forest products industry.

When faced with 27% tariffs at the border many Canadian companies responded by increasing production volumes and efficiencies (Stevens 2003) to lower their unit production costs and maintain mill operations and tenure rights. This response, in an already oversupplied market, only intensified the drop in prices and the rate of mill closures on both sides of the border in 2001 and 2002. To create a “perfect storm” of pressure on Canadian producers, the weakening US dollar deflated Canadian prices still further. Unable to sell lumber at profitable prices Canadian companies are more than ready to sell sawlogs across the border, eliminate their commitments to rural communities, and see US tariffs lifted.

In February 2002 the British Columbia Ministry of Forests issued notification to tenure holders that Order In Council #121 came into effect to provide opportunities for the export of up to 35% of the total annual harvest of timber for each tenure. (Collingwood 2003)

While the US pursued an effective strategy in breaking down the resistance of Canadian industry and government agencies to market liberalization, damages from the “perfect storm” of pressure on Canadian forest policy has not been confined to the Canadian side of the border.

US Department of Commerce countervailing duties and anti-dumping penalties push for changes in Canadian forest policy that will bring Canadian forest policy in line with market principles, weaken current tenure agreements between Canadian producers and timber dependent communities in Canada and open up access to provincial sawlogs for foreign (US and others) buyers.

The Softwood Lumber Dispute is being adjudicated in NAFTA and WTO trade tribunals. Although the dispute is not yet resolved Canadian sawlog export figures and a recent article about British Columbia’s discussion of a separate pact with the US Doc suggest that Canadian forest policies are in transition. (Hamilton 2004)

Some observers feel that the eventual outcome of the dispute will be Canadian policy changes that establish a market based pricing system for logs and lumber in Canada and reduction or elimination of tariffs at the US border. (Stevens 2003)

Resources

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California

Global Influences

According to *The Changing California: Forest and Range Assessment 2003* report completed by California Department of Forestry and Fire Protection Forest and Range Assessment Program California's forest products industry performance reflects global and regional industry dynamics:

In the 1990s, a number of factors altered the context of forest and rangeland issues. Continued population growth, environmental and regulatory costs, global competition, trade, and technology became even stronger forces. While Silicon Valley and Hollywood are the largest and most visible symbols of California's global role, the same forces driving global integration have an impact on the forest and rangeland regions of California. Local availability of natural resources is no longer the major source of competitive economic advantage for the State's forest and rangeland dominated regions. Technology, research and development, and new commodities that add value and adapt to distant markets now give the competitive edge.

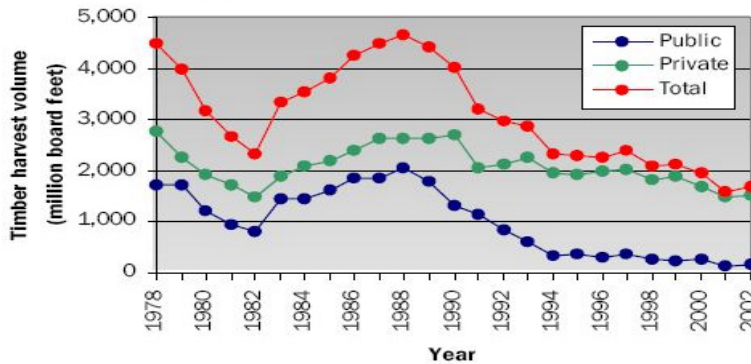
As a result of declining timber supply, global competition, and production efficiencies, production of timber products in California has changed significantly. California imports nearly all of its paper, pulp and structural wood products and although lumber remains the dominant forest product produced from trees grown in California, the number of sawmills has declined from nearly 100 large mills in 1988 to less than 40 in 2002. Related employment has also declined as sawmills have installed more efficient equipment better suited to handling smaller diameter trees and have reduced operating hours as harvest levels declined. Employment related to the forest products industry in most rural counties has also declined as local economies have lost forest products as a viable economic contributor. The negative impacts have been most noticeable in smaller counties far from regional transport corridors.

As sawmill employment has declined, the wood remanufacturing industry has become the major employer of timber-related workers in California. Remanufacturing employment fluctuates with consumer demand and is typically located closer to the final markets in urban areas. Within California, wood remanufacturing employment (e.g. mill work, windows and doors, and moulding) is primarily located in southern California. Almost 70 percent of California's wood products-related employment is now in the five counties of Los Angeles, Orange, Riverside, San Bernardino, and San Diego.

Federal Harvest Levels

As this chart from the FRAP "Changing California" report shows, restrictions on federal timber harvests have had a significant impact on the California forest products industry.

Figure 3. Volume of timber harvested on public and private ownerships, and total, 1978-2002

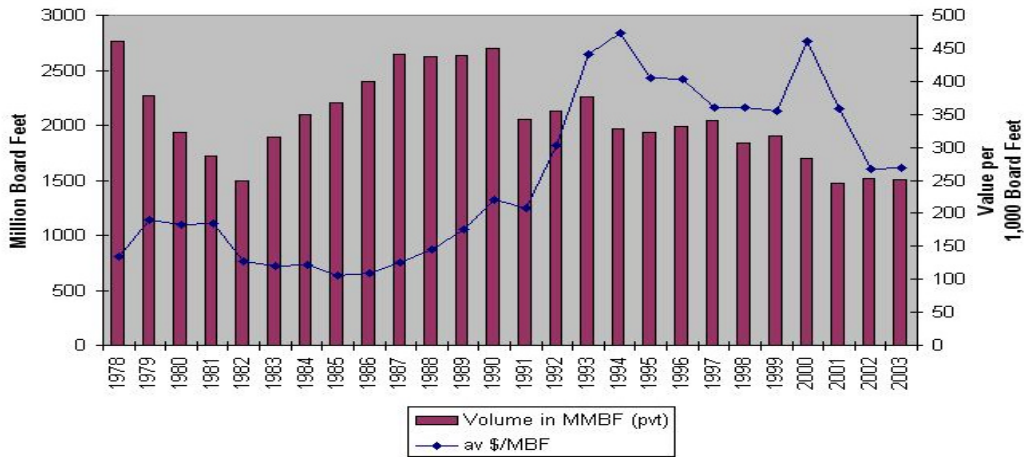


Source: California State Board of Equalization, 2003

Private Harvest Levels

According to California State Board of Equalization figures private harvest levels have also been declining (though not as precipitously as public harvest in the early 1990's) in recent years in spite of strong prices in the late 1990's and increasing growing stock on non-industrial ownerships.

**California Private Land
Harvest Volume and Value, 1978-2003**
Source: California State Board of Equalization

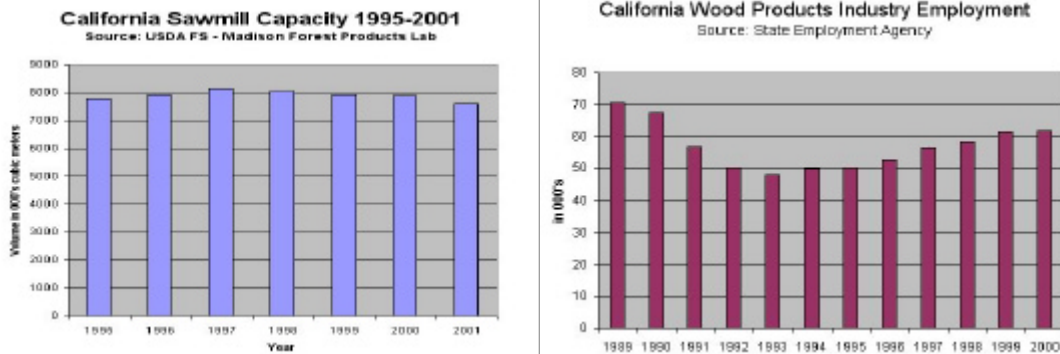


California Curtailments / Wood Products Employment

As a result of declining timber supply, global competition, and increasing production efficiencies the number of sawmills has declined from nearly 100 sawmills in 1988 to less than 40 in 2002. (FRAP 2003)

However exact figures on current California capacity are difficult to estimate. USDA figures for 1995 and 2001 indicate a loss of 4 sawmills and an overall 2% loss in capacity. However USDA capacity figures, from the same author, for 1995 through 2002 show a loss of 12 mills, with 9 mills closing prior to 2001. This apparently revised data

does not include information on capacity increases in surviving mills specific to California. (Spelter 2001, 2002)



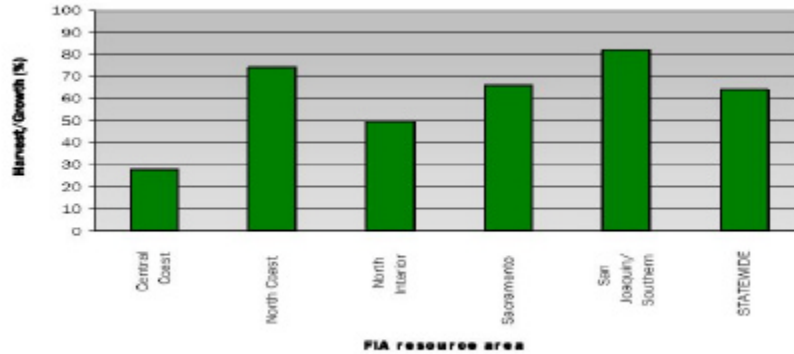
Between 1988 and 1994 employment in the wood products industry dropped 30% in California. Between 1994 and 2000 employment in the wood products industry increased 24%. (Warren 2002) Most of these gains appear to be in remanufacturing employment occurring in southern California. Almost 70% of wood products related employment is now in the five counties of Los Angeles indicating that significant value is being added to forest products within the state, although not necessarily to products of California origin. (FRAP 2003)

Timber Inventory

Excerpted from the 2003 FRAP Timberland Inventory Report:

On a statewide basis, total inventories were declining until the mid-1970s when the net growth of second growth forests surpassed total harvests. The net volume of growing stock declined by 18 percent across all ownerships between 1952 and 1977, but increased by 16 percent to 57 billion cubic feet from 1977 to 1997. During the most recent decadal measurement period (1984 to 1994), the net volume of growing stock increased 11 percent. The current net volume of growing stock consists of a higher proportion of hardwood in 1997 as compared to earlier years. Statewide, hardwood volume climbed from five percent net volume of growing stock in 1952 to 16 percent in 1997. While the proportion of hardwoods increased across all ownerships, most of the increases occurred on private lands. Hardwood proportion of total volume increased four-fold on forest industry and three-fold on other private timberland from 1952 to 1997. This increase in hardwoods could be due to the rising frequency of conifer forest destruction by wildfire, the absence of conifer regeneration after wildfires, and logging practices that result in unsuccessful regeneration of conifer trees.

Figure 17. Harvest as a percentage of growth on private timberlands by resource area and statewide, 1984-1994



Source: compiled by FRAP from Waddell and Bassett, 1996, 1997a, 1997b, 1997c, and 1997d

California Production and Consumption

California consumes nearly 15 percent of all of the wood and paper used in the United States, the most of any state. The state imports about 75 percent of its wood and paper products from Oregon, the U.S. Southeast, Canada and Europe. (FRAP 2003)

California Softwood Lumber Production

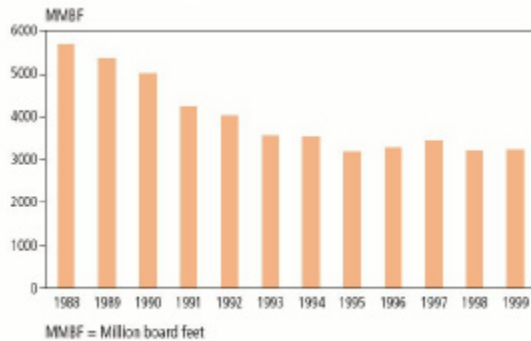


Figure 9. Softwood lumber production in California, 1988-1999 (WWPA 1999).

California Softwood Lumber Consumption

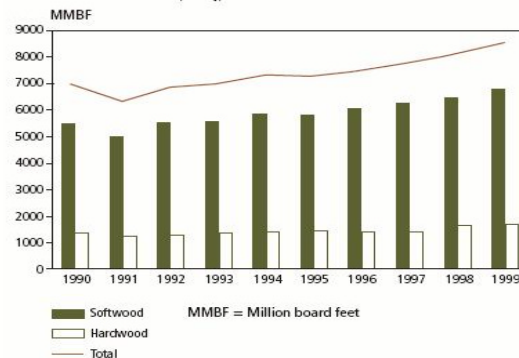


Figure 13. Lumber consumption in California, 1990-1999.

A recent University of California Division of Agriculture and Natural Resources study *Forestry, Forest Industry, and Forest Products Consumption in California* estimated that California consumes approximately 9 billion board feet of softwood annually. With harvest levels in the 2 billion board foot range California consumes 78% more softwood that it produces.

The study came to these conclusions:

In 1994 the net volume of growing stock in California was estimated to be 340 BBF, and annual growth was estimated at 8 BBF, or 2.4 percent. The timber harvest in 2000 was 2 BBF, significantly less than the highest timber harvest on record, 6 BBF in 1955, or the almost 5 BBF of 1988. In the 1990s, the downward trend in timber harvest was attributable to the declining harvest of timber on public lands, whereas private harvest levels stayed relatively stable (California Board of Equalization 1991-2000, 2001). Consolidation and increasing efficiency in the forest products industry has significantly

decreased the number of mills operating in California. The production of forest products and employment in the forest industry in the state, however, have not undergone so pronounced a decline. Both board and pulp production in California have diminished, but, especially since the mid-1990s, lumber production has stabilized at about 3 BBF per year.

The consumption of most forest products increased steadily during the 1990s. For example, estimated lumber consumption in California was almost 9 BBF per year. This suggests that about one-third of the lumber consumed was produced in California. California producers' share of state consumption of other forest products seems to be smaller than for lumber.

The overall economic impact of forestry and the forest industry is not very great in California. The forest products industry contributes only about 1 percent to total personal income, value added, and employment figures in the state. There are considerable regional differences in the relative economic effects of the forest products industry, however. Economic impact results indicate that the forest products industry contributes almost one-sixth of all employment and income in many Northern California counties.

Changing population, society values, and institutions

Excerpted from FRAP executive summary:

The social setting of California's forest and rangeland has changed radically since the late 1980s. The State's growing population consumes increasing amounts of forest and rangeland products. At the same time, Californians increasingly demonstrate values and concerns that are redirecting the use of forest and rangeland resources towards more environmental considerations. Accommodating these shifting values requires innovations in resource management, significant reductions in commodity outputs or both. Continued population growth adds to concerns over water quantity, water quality, preservation of open space and habitat, species extinction, and wildfire risk. Implementation of the Federal Endangered Species Act, Clean Water Act, and Clean Air Act have made the provision of biological diversity, conservation of species habitat, and protection of air and water quality increasingly important forest and rangeland management themes—especially on public lands.

As a result of these emerging themes, the framework of laws and governmental structures that existed in the 1970s and 1980s has been stretched. Through litigation, ballot initiative, private sector innovation, legislative action, and administrative implementation a variety of modified and even new institutions have emerged. These include coordinated agency and private projects, watershed groups, fire safe councils, land trusts, and other non-profit organizations. Additional approaches, such as habitat acquisition, working forest and other conservation easements, forest certification, and trading of carbon credits are also being integrated into business operations.

Understanding how these themes play out requires that analysis be done at the watershed and landscape levels, using information systems to provide the full range of necessary data and analyses. Application of science, research, and technology transfer are becoming increasingly important as the methods are still evolving.

Many of these changes show up in the evolving status of the forest products industry and related employment. They can be seen in the decrease in the area available for timber production, decreased timber harvests, declining mill numbers and capacity, increased unemployment, and restructuring of local economies and revenue.

Public Support for Conservation and the Environment

Excerpted from FRAP executive summary:

A major issue for the future of California's forests and rangelands relates to public perceptions of the appropriate mix of private investments, regulation, public investments, and governance processes needed to achieve desired goals. In public opinion polls, an overwhelming majority view overall environmental problems such as air and water pollution, growth, traffic, and water supply as a threat to their health and well-being. Residents also believe that insufficient progress has been made over the past 20 years in solving environmental problems. On forestry-related issues, a 2000 survey by the Public Policy Information Center found that nearly half of the respondents said that urban growth and air pollution damage to the forests in the Sierra Nevada mountains are a "big problem," and an additional third were "concerned." Moreover, approximately one-third had significant concerns regarding the logging of old growth redwoods in the North Coast, while two-thirds of the respondents rated the issue at least "somewhat of a problem." Innovative strategies to address these concerns and communicate successful approaches to the public will be required from both public and private organizations...

While Californians possess extremely diverse viewpoints concerning appropriate methods of forest and rangeland use and management, **nearly all are supportive of conservation.** This fact is reflected in the growth of land trusts during the last decade. Such trusts were created for a variety of protective purposes such as open space, farm and working forests, endangered species and habitat, and watersheds. **According to the Land Trust Census, in 2000, California had 132 land trusts protecting 1.25 million acres.** Applying national percentages of the proportion of farmland and rangeland trusts (46 percent) to California, between 500,000 and 600,000 acres of trusts are devoted to the protection of farmland and rangelands.

State conservancies also support land trusts. California has authorized seven State conservancies. Each is a subunit of the California Resources Agency. One goal of conservancies is to purchase and protect undeveloped lands that are threatened by development and develop appropriate management plans for their use. A strength of State conservancies is that they apply statewide resources to protect assets in a specific geographical area of high public value. While money originates from a wide variety of sources, funding for easements or other forms of land conservation usually stems from shared private, non-profit, and public resources. Landowners usually are compensated in the form of cash and/or tax credits for donating conservation easements. **Proposition 40 (the California Clean Water, Clean Air, Safe Neighborhood Parks, and Coastal Protection Act of 2002) was passed by 57 percent of the voters in March 2002, despite a recession, and is providing \$445 million in funding for these conservancies over five years.** [emphasis added]

Timber Tax Revenue

Excerpts from FRAP Technical Report

In past decades, tax revenue associated with timber harvesting and timberland has been a source of significant revenue to many local rural governments in California. Over time, the amounts of local revenue have fluctuated with changes in timber value and timber volume harvested. For several reasons, local revenue from private timberlands has been relatively stable for the last decade. Until passage of the Secure Rural Schools and Community Self Determination Act of 2000 (PL 106–393), federal payments to counties

with National Forest lands under the historic 25 percent program had declined dramatically. With the passage of PL 106–393, payments to most qualifying local governments have increased and been stabilized through fiscal year 2006. **Given the growth in California’s economy and changes in the funding structure of local government, timber-related revenue has become an increasingly small percentage of total revenue sources for local governments.** While revenues will fluctuate with timber and timberland values, the total annual tax and in-lieu of tax revenues from timberlands in 2000 was approximately \$100 million. This revenue includes \$65 million in lieu payments from national forest timberlands, \$26 million from timber yield taxes, \$8 million from timberland property taxes for lands with Timberland Production Zone (TPZ) status, less than \$1 million BLM lands, and a smaller amount of property taxes from minor fraction of timberlands without TPZ designation. **Statewide, these funds amount to less than 1 percent of all revenue sources.**

U.S. Forest Service (USFS) and Bureau of Land Management (BLM) payments to local government

Federal ownership precludes local governments from collecting property taxes. Since the early 1900s, more than 20 laws have been passed mandating that states or counties be compensated for federal land ownership within their boundaries. This compensation can be termed “in lieu payments” for being in lieu of property taxes. Federal law controls the basis, method, and timing of compensation but often allows states to direct the use and distribution of payments (GAO, Land Management Agencies Revenue Sharing to States and Counties, GAO/RCED–98–261, September 1998). It is estimated that the federal government owns over 43 million acres in California for which it is responsible for in-lieu payments. Three agencies oversee over 99 percent of this acreage: USFS (34 percent), BLM (48 percent), and National Park Service (NPS) (17 percent). In-lieu payments from the USFS provides the largest source of timber-related funds from land management agencies in California. The BLM makes payments from several different sources; only a small part is related to timber. Payments for the NPS come through BLM.

Relative significance of timber related revenues to local government

Three factors have led to decreased importance of timber-based revenues for counties and school districts: 1) increased availability and reliance on non-timber sources of local revenue; 2) changes in state funding for education that make up for yield tax declines; and 3) federal legislation that provides a floor to revenue floor to rural governments formerly dependent on national forest receipts. [emphasis added]

Figure 1: California timber yield tax estimates from 1978 to 2000 and projections from 2001 to 2008 (as in year 2000 dollars)

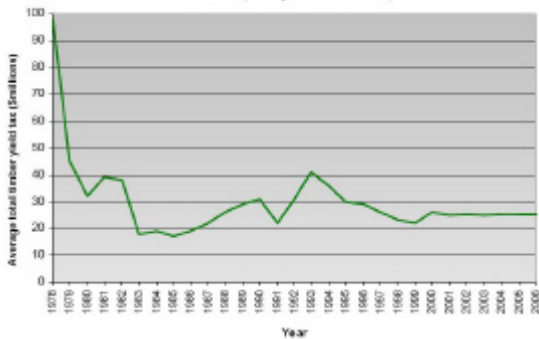
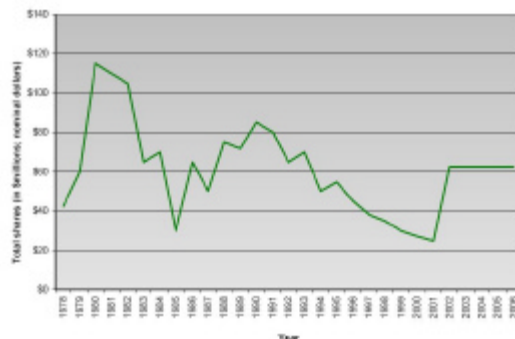


Figure 3: County shares from national forest receipts in California



Resources

- » Spelter, Henry; McKeever, Tim. 2001. Profile 2001: Softwood sawmills in the United States and Canada. Res. Pap. FPL-RP-594. Madison, WI: U.S. Department of Agriculture, Forest Service, Forest Products Laboratory. 73 p.
- » Spelter, H. 2002. Sawmill Closures, Openings, and Net Capacity Changes in the Softwood Lumber Sector, 1996–2003. FPL-RP-603. Madison, WI: U.S. Department of Agriculture, Forest Service, Forest Products Laboratory.
- » Warren, Debra D. 2002. Production, prices, employment, and trade in Northwest forest industries, all quarters of 2000. Resour. Bull. PNW-RB-236. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 171 p.
- » Fire and Resource Assessment Program (FRAP). The Changing California: Forest and Range 2003 Assessment: Assessment Summary. Sacramento, CA.
- » Fire and Resource Assessment Program (FRAP). The Changing California: Forest and Range 2003 Assessment: Timberland Inventory Report. Sacramento, CA.
- » Laaksonen-Craig, Susana., Goldman, George. E., McKillop, William. 2003. Forestry, Forest Industry, and Forest Products Consumption in California. Oakland, CA. University of California Division of Agriculture and Natural Resources. 19p
- » Dean Cromwell and Tian–Ting Shih. 2002. Contributions of Timber–Related and Other Revenue to Local Governments in California. Sacramento, CA. Technical Working Paper 1–04–02 Fire and Resource Assessment Program California Department of Forestry and Fire Protection.
- » Tian–Ting Shih. 2002. Timberland Site Class on Private Lands Zoned for Timber Production. Technical Working Paper 1-03-02. Fire and Resource Assessment Program California Department of Forestry and Fire Protection.

North Coast Resource Area / Humboldt County

“The North Coast...is in the economic slow lane. Household income in Humboldt County grew at 65 percent the rate of California as a whole from 1979 to 1998.... The big question facing Humboldt and other North Coast counties is: Can we have a more robust economy AND keep our beautiful natural areas, our agricultural lands, and our small town quality?”

Prosperity Journal 9, Winter 2001

Global and regional patterns

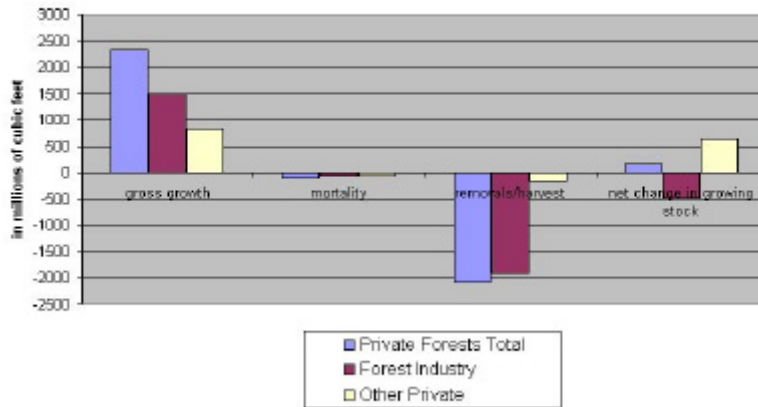
As the previous sections show sawlog markets on the north coast are significantly impacted by forces beyond the control of the state of California or even the US government. Global market dynamics and regional trade disputes, in particular the Softwood Lumber Dispute between the US and Canada, are the forces driving curtailments in the local and regional industry and cycles in sawlog prices at surviving north coast mills.

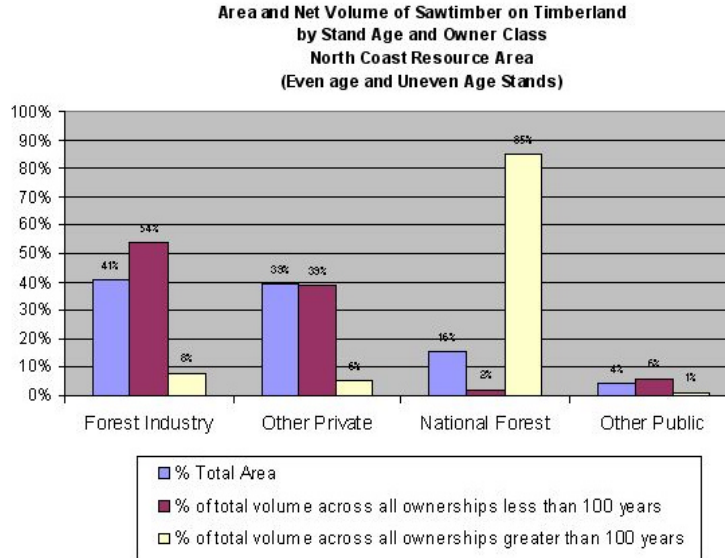
North Coast Resource Area Inventory

Both the 2003 FRAP report and the 2003 UC report base their estimates of standing timber inventory and net growth across public and private ownerships on survey data collected by the Pacific Northwest Research Station in 1984 and 1994. (Updated 2004 data on the North Coast Resource Area is not expected until 2005) Review of Karen Waddell’s 1996 report on the North Coast Resource Area (Sonoma, Mendocino, Humboldt and Del Norte counties) show these figures on the status of standing inventories:

Aggregate net change in growing stock on all private land (growth – mortality – removal = net change) showed a net gain of 159 million cubic feet. Net change on industrial ownerships showed a net loss of 475 million cubic feet. Net change on other private (non-industrial) ownerships showed a net gain of 634 million cubic feet.

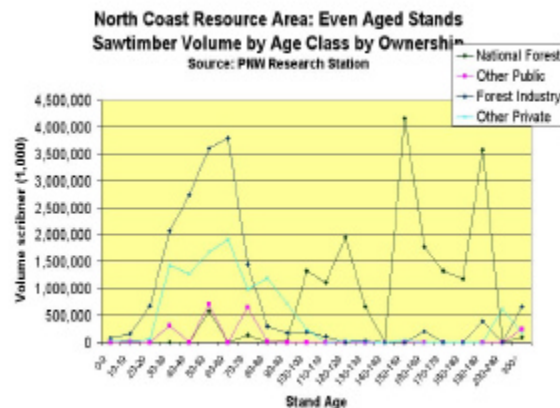
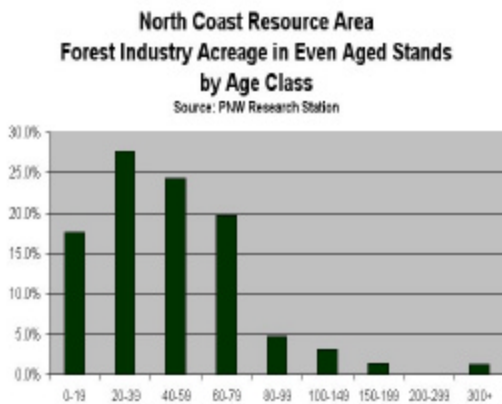
**North Coast Resource Area - Private Land
Growth, Mortality, Removals, Net Change of Growing Stock**
Source: PNW Research Station





National Forests in the North Coast Resource Area comprised 16% of total timberland acreage in the area in 1994, yet 85% of standing sawtimber inventory over 100 years of age was on National Forest land. On forest industry timberland 71% by area is in even aged management, 26% uneven aged and 3% non-stocked. On even aged forest industry acreage 60.3% of stands were stocked with trees less than 50 years old in 1994. On non-industrial ownerships 41.9% of even aged acreage is stocked with trees less than 50 years old. (Waddell 1996)

PNW age class data on private ownerships and California State Board of Equalization data indicate that previous profitability of the timber industry was based on harvesting high-quality older logs. By 1994 the majority of “export quality” old growth logs on private land had been harvested. As recently as 1989 over 50% of green harvest was old growth timber. By 1994 that number had fallen to 26%. In 2000 the proportion of old growth to young growth harvest dropped to 10%. (2000 was the last year records tracking old growth and young growth harvest volumes were kept and published at the state BOE.) (BOE 2004)

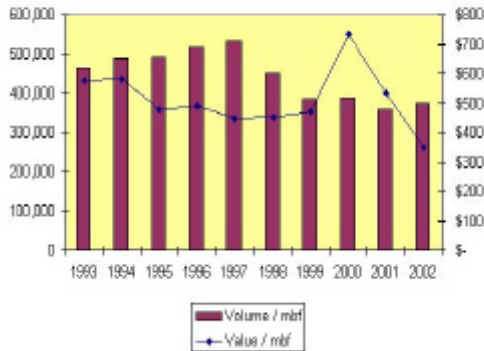


Humboldt County's Forests and Forest Products Industry

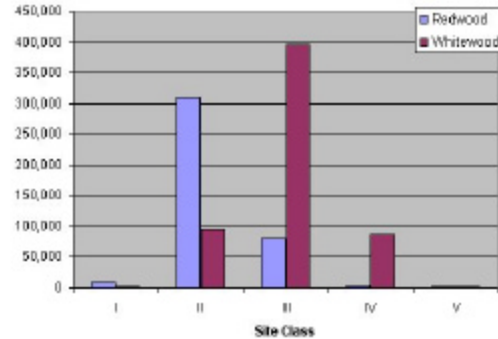
Excepted from the Humboldt County General Plan Update Process *Natural Resources and Hazards Report: Chapter 3, Forest Resources:*

There are 1.9 million acres of forested land in Humboldt County, covering more than 80 percent of the county's total land area. National Forests encompass nearly 338,000 acres within the county; National and State Parks include 70,000 and 72,000 acres, respectively. National and State Wildlife Areas cover 2,600 and 2,000 acres. County and Community Parks account for 1,000 acres. The Bureau of Land Management's Forest Reserves cover 7,600 acres. Altogether, these public forested lands (also including reserves, parks, and other holdings) total over 679,500 acres or 35.5 percent of all forested lands in Humboldt County. In 2000, the County's total gross value of timber production was \$285,232,953, for which Humboldt County is ranked first in the state. The increased value of harvested timber in recent years has led to a dramatic increase in overall agricultural value.

Humboldt County Timber Harvest and Value
Source: Board of Equalization



Timberland Production Zone (TPZ) acreage by Site Class in Humboldt County as of 2000-2001
Source: FRAP



Timber Production Zoning

Humboldt TPZ Acreage by Site Class						
	I	II	III	IV	V	Total
Redwood	9,014	309,102	80,876	2,864	1,151	403,006
Whitewood	1,222	94,588	395,191	87,450	1,717	580,167
Total	10,236	403,689	476,066	90,314	2,868	983,173
Percent of Total TPZ	1.0%	41.1%	48.4%	9.2%	0.3%	100%

Curtailments

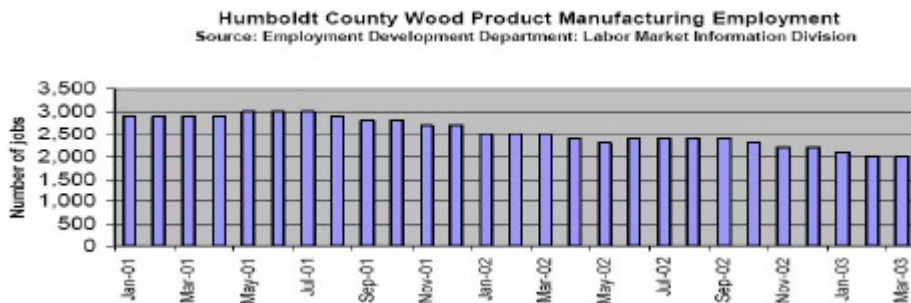
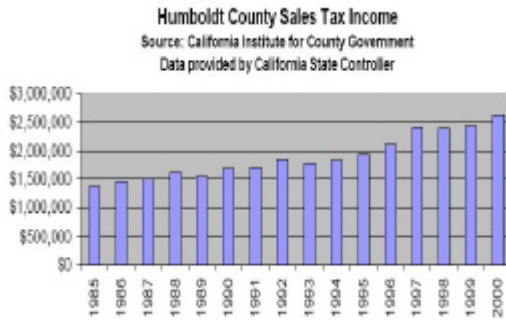
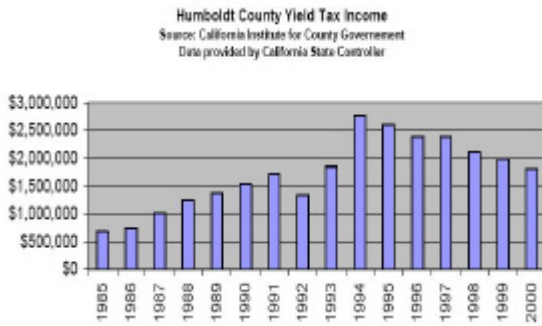
Of the twelve California mills listed as closed between 1995 and 2003 in USDA data four were in Humboldt County: Eel River, Scotia, Samoa and Trinidad. These four mills accounted for 43.8% of capacity losses in California during that period. Eel River is operating again at a reduced scale: no specific capacity is currently available. Sierra Pacific Industries (SPI) closed two mills in Humboldt county between 1995 and 2003, however overall SPI capacity increased by 4.5% to 38.2% of statewide capacity. Three companies own 82% of Humboldt County processing capacity: Pacific Lumber, 50%; Sierra Pacific, 17%; and Blue Lake Forest Products, 15%. (Spelter 2001 2002)

Production

As noted in the 2003 FRAP report: “Large private ownerships are most likely to grow and harvest timber on a continuing basis. Smaller owners are much more varied and typically also have numerous non-timber related management goals. Increased planning requirements, operational limitations, and habitat protection have increased the expense of timber growing and harvesting on private land.” (FRAP 2003)

	# of parcels	# of acres	% of total private ownership
Forty Largest Private Land Ownerships	4359	934,737	59%
Other Private Lands > 640 Acres	1958	229,689	14%
Other Private Lands < 640 Acres	37205	429,417	27%

Humboldt County produces more timber than any other county in California. Logs and lumber harvested and produced in Humboldt comprised almost 30% of the state harvest by value in 2002. Nevertheless the local timber industry plays a much smaller role in county economy than in years past. Though timber continues to be a significant part of the manufacturing base in the county, manufacturing provided only 3,500 of the 50,000 wage and salary jobs in Humboldt County in March 2003 – forest products manufacturing provided 2,000 jobs. Steadily increasing sales tax revenue and steadily decreasing income from yield taxes provide evidence that the Humboldt economy is moving away from a direct dependence in timber industry income. (CICG 2003)



Log Imports

Although no specific date was cited, Prosperity’s webpage on the Lumber and Wood Products Industry Cluster indicates that over 2 million dollars worth of sawlogs per month are presently imported into Humboldt County.

Demographics

Although official population growth statistics project steady though moderate increase in population, others point to the high quality of life on the north coast and convenient access to wilderness amenities as indicators of a potential surge in population and demand for residential housing. (Hedin 2003)

Timberland conversion: Development/Conservation

The statewide environmental concerns driving increased conservation measures at the state level can be seen at the Humboldt County level as well. Rising real estate prices (June 2004) and increasing regulatory expenses raise concerns regarding conversions of timberland from timber production to alternative economic uses. Although significant Certificate of Compliance and lot line adjustments affecting 34 thousand acres reflect the breakup of family ranch properties most properties remain viable for timber production. As yet conversion from TPZ classification for alternative economic purposes is limited in Humboldt County. The most significant conversion from TPZ resulted from the acquisitions of the Headwaters Forest Reserve for conservation purposes.

Timberland conversion, the transfer of timberland to other uses, occurs as a result of General Plan amendments and new subdivisions, as well as through the Certificate of Compliance process, which involves recognition of historic parcels that may be substandard to minimum parcel sizes and densities established by the General Plan. One quarter of all the Certificate of Compliance applications submitted since 1985 have been on agricultural properties and timberlands, affecting more than 18,000 acres. Also, more than one half (53 percent) of all the lot line adjustment applications since 1985 have been on agricultural and timberlands, affecting more than 16,000 acres. These changes are primarily reflective of the breakup of old family ranches. Timber production on these areas is likely still viable; therefore, these changes are not deeply significant with respect to the timber economy. Direct land use conversions by rezone out of TPZ (Timber Production Zone) have been more limited, on the order of 1,000 acres over the last 25 years, 910 acres of which were part of the County's Eureka Community Plan in 1995. An additional conversion issue that has long been a topic of debate is conversion by public acquisition, highlighted most recently by the Headwaters Forest Reserve acquisition, which removed 7,500 acres from timber production. While such conversions maintain the open space values of the lands, they are lost to the economic sector. (Humboldt 2000)

Resources

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- » Cromwell, Dean and Shih, Tian-Ting. 2002. Contributions of Timber-Related and Other Revenue to Local Governments in California. Sacramento, CA. Technical Working Paper 1-04-02 Fire and Resource Assessment Program California Department of Forestry and Fire Protection.
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- » Shih, Tian-Ting. 2002. Timberland Site Class on Private Lands Zoned for Timber Production. Technical Working Paper 1-03-02. Fire and Resource Assessment Program California Department of Forestry and Fire Protection.
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- » Spelter, H. 2003. Sawmill Closures, Openings, and Net Capacity Changes in the Softwood Lumber Sector, 1996-2003. FPL-RP-603. Madison, WI: U.S. Department of Agriculture, Forest Service, Forest Products Laboratory.
- » Hedin, J. 2003. Personal notes regarding June, 6 2003 Buckeye Forest Project workshop: The wide open spaces of Humboldt County: Going, going, gone?. HSU professor Mike Smith's presentation: Open Space Case Studies Across the West.
- » Humboldt County Planning Department. 2000. Humboldt County General Plan Update Process: Natural Resources and Hazards Report. <http://planupdate.org>. Eureka, CA
- » Humboldt County Economic Development Forum. 2003. Prosperity! – The North Coast Strategy. Eureka, CA. Website accessed June, 2003.
- » California Institute for County Government. 2003. Online County Data. Sacramento, CA. <http://www.cicg.org/>. Accessed May, 2003.

Industry Response / Capital constraints

How is the industry responding to the constraints, cycles and industry dynamics outlined above? Timber companies are in business to make profits. Many individuals are justifiably proud of the contribution their work or their investment in the timber industry makes to the society by providing lumber, paper and numerous other forest products that we have come to depend on. But, this is not an altruistic endeavor. When timber companies fail to make a profit, they fail to make payments on debt, they fail to pay wages to timber workers, and they go out of business. Publicly traded companies have a legal obligation to provide economic benefits to shareholders. Failure to maximize income potential is a culpable offense that opens managers to shareholder lawsuits.

Industry managers evaluate the economic potential of management decisions based on an assessment of the potential economic returns. In order to secure adequate capital to invest in timberland or processing capacity companies must provide, or at least project, adequate potential returns on the investment: returns that are competitive with other potential investment opportunities.

Several descriptions of the method used to evaluate potential returns and the impact those evaluations have on timber management practices follow:

PNV discount calculations

Ray Raphael in his conclusion to *More Tree Talk* further clarifies the issue:

In economic terminology, we speak of the opportunity cost of capital: there is always an opportunity to do something else with your money. The opportunity cost of timber is extremely high because the capital is tied up for such a long period of time. Depending on the interest, which could be made in other investments (called the guiding rate of interest, the hurdle rate, or, misleadingly, the discount rate), the opportunity can become a prohibitive factor in any long-term forest investment. For every dollar initially invested, a tree that takes 80 years to mature will have to return \$23 at 4% interest, \$224 at 7% interest, and \$2,048 at 10% interest. If the guiding rate of interest is high, investments in the future resource base become financially untenable, since they won't be able to compete with other capital investments. When the cost of interest is taken into account, there is no genuine "long term" in the practical world of business. (Raphael 1994)

Impact on management practices:

The Forestry Reform Project's discussion paper on Economics and Private Forest Management also addresses the issue of discounting calculations:

Quality and quantity of ecosystem services, production of quality timber outputs, and job opportunities important to the vitality of local communities are not priorities for today's industrial forest owners. It is important to remind ourselves of what actually determines forest practices. The normal business goal of profit maximization drives private Coast Range forest management. This translates into short harvest rotations and silvicultural practices designed to maximize short-term profits. Private forestry's singular emphasis on economic efficiency occurs with far-reaching consequences for the silviculture practiced and the range of potential goods and services available from the forested landscape. It is important to understand that profit maximization is not about profits per se, but rather

about achieving the greatest amount of profit relative to the amount of capital invested. Therefore, **return on equity** is the actual goal of forest-growing firms.

Competition for investment dollars within financial markets requires that industrial forest companies continually demonstrate that their long-term profit from investments is equal to or greater than that of other alternative uses of capital. To compare the relative value of various investment projects in consistent terms, managers “discount” projected profits by a rate of interest (profit) expected to apply to their alternative opportunities. This ordinary business practice of discounting places a huge burden on foresters to justify the wisdom of their silvicultural strategy. (Willer 2000)

Gordon Robinson, in his book *The Forest and the Trees*, responds to the pressure placed on foresters to justify good forestry based on capital returns:

Good forestry is not a lucrative business. It never was and never will be, because it takes longer than a lifetime to grow high-quality timber, longer than anyone can wait for a return on investment. It takes 75 to 150 years to grow timber in sizes useful for lumber and plywood; it takes twice that long to grow high-quality wood for fine furniture and musical instruments. The large spruce trees in Alaska that are being cut and shipped to Japan for piano sounding boards, guitars, and exquisite residential paneling are often as much as 1,000 years old.

Trees growing on our better lands become marketable for pulp in as short a period as 25 years. Trees can be mass-produced for pulp, rough lumber, and construction-grade plywood under sustained yield in 50 to 75 years. However, since it takes much longer to grow high-quality wood, a forest being managed for this purpose will seem uneconomical because it will always contain a large inventory of low-quality timber that could be sold. The higher the quality of wood one wants, the higher the inventory will be; it takes a lot of low-quality marketable timber to grow high-quality wood. Consequently, the value of the amount of timber that can be sold annually under a high level of sustained yield will never represent a high percentage of the *total* value of the forest because as the price of lumber rises, the value of one's entire inventory rises with it. Generally, the value of the sustained yield or the annual income of a well-managed forest will range from 1 to 2 percent of the cash value of the entire forest inventory. Likewise, a 1960 survey determined that the annual return on investment in commercial timberland in the United States was only 2.5 to 3.5 percent, far less than the 10 to 15 percent for other industries. (Robinson 1988)

Horizontal Consolidation and Financial Integration

Managers face volatile prices and exchange rates, supply constraints, and business cycles brought on by poorly timed changes in production capacity. Mergers and acquisitions can assist companies in maintaining positive cash flows.

A March 2000 Reuters article titled *Globalization Catches Up with the Timber Industry* points out that “a wave of consolidation has swept the industry,” noting that the industry is a “cyclical business long dominated by dozens of regional producers.” The article continues:

“A year-ago nobody was global and now you have major companies that are global,” said Henson Moore, chief executive officer of the American Forest & Paper Association...

The strongest competitors are looking for ways to counter the increasing threat of cheap imports in their home markets, high taxes and transportation costs and the need to quickly expand production capacity in good times—before the cyclical timber business turns sour...

“The high dollar is a risk and makes exports difficult ... and imports could continue to rise,” said Matt Berler, analyst at Morgan Stanley Dean Witter, referring to the outlook for U.S. producers to ship products overseas.

“When companies from low-cost producing countries send imports (into the US), then domestic companies have to compete with those products,” Moore said. “Acquiring plants in those countries is a way of keeping some of the imports in check and also take advantage of the low cost. With globalization you have greater control over other countries’ production.”

That was one of the reasons behind a deal announced in mid-February in which Europe's second-biggest paper and board maker UPM-Kymmene agreed to buy Champion International for more than \$6 billion. U.S.- based Champion would extend the Finnish company's reach beyond Europe and Asia -- where it already has a mill in China -- into South America....

...in October, US based Weyerhaeuser Co. (NYSE:WY) proposed a merger with Canada's MacMillan Bloedel Ltd (Toronto:MB:TO)....

During the same month, International Paper Co. (NYSE:IP), the industry leader, said it was buying Shorewood Packaging Corp. (NYSE:SWD), a leading U.S. packaging producer.

Last week, market sources said International Paper, which has said it intends to remain the world's market leader, was looking to make another major acquisition soon.

“We have said on numerous occasions that IP wants to double its size within five years. IP needs to make quite a few acquisitions to get that done. You do the math,” said Jack Cox, a spokesman at International Paper.

Paper and forest products companies in North America in recent months have cut capacity to keep supply low. At the same time, overall demand has started to increase as well, sparked by an economic recovery in Asia and Europe. Both factors have helped to push up prices, which in turn have helped returns. Most analysts see the trend extending through 2000 and possibly beyond.

“This should continue in the next 24 months, maybe beyond,” said Berler, but added that North American companies' cutting capacity may not deter developing countries to boost output. “Low-cost producing countries may still increase capacity in such a strong market,” Berler said.

For larger players such as Weyerhaeuser, with significant production capacity on both sides of the US / Canadian border, company acquisitions can achieve several strategic purposes:

- » Mitigation of the impacts of currency volatility. For instance a Canadian mill whose debt is denominated in US dollars gains an important advantage relative to other Canadian producers when the Canadian dollar gains against the US dollar. While the negative impact on export sales to the US remains, the ability to pay down US dollar debt with stronger Canadian dollars represents a significant cost

- savings. Conversely when the US dollar is strong, the company will have a competitive edge in US markets. This will also be true for companies making investments in low cost production areas such as Brazil, Russia, China, or Chile.
- » Mitigation of the impact of trade tariffs and other trade barriers.
 - » Mitigation of national restrictions on foreign access to resources and raw materials.
 - » And, for the largest players, mitigation of the business cycle itself through increasingly centralized control over the rise and fall of regional production capacity.

Vertical “Dis-integration” – TIMOs

In response to market dynamics the major industry players, traditionally “vertically integrated” firms that both manage timberland and manufacture product are considering the costs and benefits of “disintegration.” Over 19 million acres of timberland changed hands in the past five years. Integrated firms sold timberland assets and Timber Investment Management Organizations (TIMOs) purchased. TIMO’s buy and sell timberland, usually holding lands for 10-15 years while one or two harvests are implemented generally to improve the value of the property. TIMO’s make money by selling timber, but the greatest profit center for TIMO’s is selling lands after the improvement harvests. Investors in TIMO’s are often timberland owners who sell their land to the TIMO and receive shares in return. The TIMO concept is most active in the South. TIMOs offer focused timber management expertise to timberland investors.

Consolidation trends within the industry have left some companies with substantial debt. Companies recognize that timberland ownership may not be a required asset as markets for raw materials “mature.” In addition favorable tax structures available to timberland ownerships help lower supply costs and increase profitability for timber management operations.

Wood products manufacturing and timber management businesses also have different risk profiles. Investments in wood products manufacturing require tolerance for volatile markets, erratic cashflows, high capital intensity, and overall financial performance that is tightly integrated with the business cycle. Timberland investments offer lower volatility, steadier cashflows, limited capital requirements, and, for institutional investors such as mutual funds, low correlation with many other financial assets helping to diversify portfolios. Timberland investors appear able to accept lower returns for less risk. Forest products manufacturing investors expect higher returns to compensate for high risk.

Comparative studies of integrated and nonintegrated firms showed little or slightly negative correlation between integrated timberland ownership and financial performance. Possible reasons for negative correlation include the hypothesis that below market transfer pricing between timber management operations and mill operations contributed to mill inefficiencies.

Linking investors focused on generating relatively secure long term returns and able to tolerate lower investment returns increases capital available to the industry as a whole. Disintegrating timber production from wood products manufacturing also limits the pressure to harvest timber during low points in the business cycle when manufacturing operations are struggling to maintain market share and cover operational overhead on reduced margins. As a result institutional ownership of productive timberland is expected to continue to grow as long as industry consolidation trends continue.

Among these institutional investors are several conservation organizations. The potential for conservation organizations to funnel appropriate investment capital to long-term timber management focused on maintaining conservation values within a productive working landscape is just beginning to be realized. As the FRAP report states:

In public opinion polls, an overwhelming majority view overall environmental problems such as air and water pollution, growth, traffic, and water supply as a threat to their health and well-being.... A major issue for the future of California's forests and rangelands relates to public perceptions of the appropriate mix of private investments, regulation, public investments, and governance processes needed to achieve desired goals.

Resources

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- » Wilde, Mark. 2003. Who Will Own the Forest? Origins and Implications of Changing Ownership presentation. January 21-23, 2003. Portland, OR
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Current Policy Issues

Policy Context:

It is beyond the scope of this report to address policy issues at the global, international, or national level. In the foreseeable future California's timber industry will continue to be impacted by global industry dynamics, international, and national policy decisions over which, Californian's non-industrial forest landowners and sustainable resource managers have little direct control. Achieving and maintaining economically viable and sustainable levels of production in California's forests and in California's forest products industry, if possible, will need to be accomplished by developing strategic objectives that are feasible, working with and within these trends, industry dynamics and constraints:

Global

- » Increasing horizontal financial integration of global forest products manufacturing..
- » Increasing production in low cost regions.
- » Increasing liberalization of international trade rules.
- » Increasing productivity per worker – fewer jobs.
- » Increasing global demand – China.
- » Increasing vertical “dis-integration” of timberland ownership and forest products manufacturing.

National

- » Repercussions from the current Softwood Lumber Dispute.
- » Increasing liberalization of US trade policy.
- » Increasing US demand/consumption.
- » Increasing competition for global supply – China.
- » Increasing competition from low cost imports/producers including Canada and the US South.
- » Increasing environmental constraints on supply: particularly in the US South.
- » Continued restraint of timber harvests on federal forestland in the PNW.
- » Ongoing business cycles in the global industry.

Key policy issues at the state and local level:

Lists of key policy issues and challenges at the state and local level tend to emphasize challenges and obstacles to industrial timber harvests. The FRAP report's focus on California's high volume of consumption and risks associated with high stocking levels tends to justify increased harvests of existing inventory. FRAP's focus on the declining productive land base due to timberland conversions, conservation constraints, and administrative withdrawals of land available for timber production identifies obstacles to increased harvest levels of existing inventory. FRAP's focus on the complexity of regulatory oversight and limited policy integration identifies a significant cost center for timber producers.

Given the industry trends, dynamics and constraints identified in this report it is important to point out:

- » Increased access to California supply will not solve periodic overcapacity and oversupply conditions associated with global markets,

- » Increased harvest of existing inventory will not increase the capacity of California's operable private forestlands to produce high quality timber,
- » Increased lumber production in globally competitive and highly efficient production facilities will not return rural communities to historic levels of resource based socio-economic well-being.
- » Intensive short rotation forestry will not increase fire safety in California forests.
- » Simplification and reduction of California's regulatory processes and costs will not counteract global industry dynamics affecting states and provinces throughout the PNW.
- » None of these actions will raise sawlog prices for California landowners.

California: Key Policy Issues

California's Department of Fire and Forestry's Fire and Resource Assessment Program (FRAP) document, *The Changing California: Forest and Range 2003 Assessment* identifies these key policy challenges for California's forest and rangelands:

California's Forest and Rangeland Policy Challenges

Source: The Changing California: Forest and Range Assessment 2003 (FRAP 2003)

1 Biological Diversity

Gaps in wildlife habitat structure, Decline in some native species, Using all landscapes to meet biological diversity goals.

2 Productive Capacity

Declining land base and administrative withdrawals of land available for timber and range production, Risks and Impacts from increased forest stocking levels, Decline in rangeland area and availability.

3 Forest Health

Managing forest structure for productivity, habitat, and forest health goals, Management of metropolitan and interface forests and rangelands, Public understanding of management practices, Forest and rangeland conversions, **Fuels buildup risks to ecosystems and human assets,** Elevated pest damage related to forest stocking levels, Emerging pest and disease threats to unique habitats and livestock health, Impacts of exotic and invasive species to biological diversity and rangeland productivity, Increasing air pollution in several regions.

4 Soil Conservation and Water Quality

Measuring cumulative watershed impacts, Improving watershed condition and restoring fish habitat

5 Forests and Climate

Understanding and responding to climate change

6 Socio-Economic Well Being

Increasing consumption and statewide limitation on California commodity output, Meeting changing demands for recreation and open space, Meeting costs of resource protection, Incentives for private production of ecosystem services, Maintaining large landholdings in resource industries
Weak economies in rural communities.

7 Governance

Complexity of regulatory oversight, Limited policy integration, Conflicts over forest and rangeland management practices, Coordination in research and information sharing, Standardized comprehensive information systems.

[emphasis added]

Humboldt County: Key Policy Issues

Chapter Three of the Humboldt County General Plan Update Process Natural Resources and Hazards Report focuses on Forest Resources. The chapter presents background information and identifies several key policy issues including timberland conversion and land use conflicts between small landowners whose use is primarily residential and larger landowners whose use is primarily timber production. Humboldt County's Forest Review Committee listed these key issues in Appendix A of the Natural Resources and Hazards Report:

Appendix A: Forest Review Committee Issues

At their November 15, 2000 meeting the Humboldt County Forest Review Committee identified the following timberland issues.

PUBLIC SERVICE ISSUES

- Law enforcement needs to address public safety, vandalism, trespass, theft, toxic dumping, and public and private costs associated with protests in timberland areas.
- A Fire Safe Element needs to be prepared which uses the State fire safe standards as a model.
- Recreation opportunities on timberlands need to be reviewed for compatibility with timber production.

PUBLIC IMPROVEMENT ISSUES

- Public roads need to be improved to reduce hauling costs and address traffic safety. Costs of maintaining public roads in timberland areas should be apportioned based on use.
- Drainage facilities need to be maintained on public and private roads to protect roads and water quality.
- Public water systems need to be developed to minimize water withdrawals from sensitive habitats and land use conflicts between timber producers and residential users who are concerned about erosion and water quality.
- Public roads need to be improved to minimize erosion and water quality problems.
- Materials for road building from quarries and surface mining need to remain available in adequate quantities to keep construction costs down.
- Utility companies should support timber production on adjacent timberlands.

PUBLIC POWERS/LAND USE CONFLICTS

- Dwellings on residential lots are not compatible with timber production on adjacent or nearby lots because residential landowners have concerns about: traffic safety, dust, erosion control, slope stability, noise, smoke, water quality, sensitive habitats, views and aesthetic values. Litigation costs increase in the interface between timberland and residential lots.
- Utility companies manage their easements in ways that are not always compatible with timber production on adjacent lands. They have concerns about impacts to utility lines.
- Subdivisions to create small lots in or adjacent to timberlands increase the land use conflicts between timberland and non-timberland property owners.
- Allowing small lots into TPZ may discourage timber production because these lots are purchased and used primarily for residential purposes and adjacent to small parcels with landowners who may object to timber harvesting activities. These lots would also benefit from tax relief that could encourage excessive harvesting rotation periods. Note: the Humboldt Watershed Council may support including smaller lots into TPZ to discourage timber harvesting driven by increased taxes.

ISF Response

ISF's mission is to promote sustainable forest management that contributes to the long-term ecological, economic and social well being of forest based communities in the Pacific Northwest.

ISF defines Sustainable Forest Management as:

Long rotation, uneven-aged, selection management that maintains:

- » *stocking of diverse species in the full range of age classes up to 120 years or more for softwoods,*
- » *habitat for sensitive species within the working landscape,*
- » *high quality water through stream buffers and restoration of old roads and slides to stable conditions,*
- » *fire safety through management practices that mimic natural fire conditions and include planned fire breaks, and*
- » *forest productivity emphasizing high quality sawlogs.*

Sustainable Forest Management provides:

- » Increased productivity in California's forests to meet California's wood product needs.
- » Reduced fire risk to both ecological and economic equity.
- » Maintenance and improvement of water quality to protect both ecological equity and downstream economic equity in homes and businesses, the recreational value of our streams and rivers, and native salmon populations.
- » Maintenance habitat for sensitive species of plants and animals to protect ecological and economic equity.

Within the economic and policy context outlined in this report, north coast forest landowners and sustainable resource managers plan for harvests that may take place 30, 50 or 100 years from now.

Sustainable Forest Managers face:

- » periodic business cycles that include short-term downward pressure on sawlog prices.
- » potential loss of sawlog markets if existing mills close.
- » mid-term downward pressure on prices from increasing industry investment and lumber production in low cost production areas.
- » long-term prices projected to "continue to be weak for small-diameter logs."
- » growing stock of primarily younger age classes on private ownerships.
- » increasingly monopsonistic conditions in sawlog markets (consolidating infrastructure / fewer buyers).
- » a relatively (to other softwood lumber producing regions) high harvesting cost structure.
- » costly and burdensome regulatory procedures.
- » no income from meeting social and political demands for ecosystem services.

Business cycles and long term tendencies towards increasing global competition both lead to lower prices in sawlog and lumber markets. Even periodic low prices are likely to encourage current trends including: decreasing harvests on non-industrial private

ownerships, the break up of family ranches. Sawlog income may not be sufficient to carry the cost of regulation and the capital costs of maintaining large ownerships. Industry trends towards “dis-integration” of industrial ownerships and the loss of processing capacity and markets for local sawlogs are critically important, both environmentally and economically.

To accomplish sustainable forest management in the business climate outlined in this report, it is necessary to increase income to forest landowners and forest managers.

An Opportunity: Potential Support for Sustainable Forest Management

Ecosystem services / Conservation priorities

For those who practice Sustainable Forest Management public demand (social and political, not economic) for conservation practices and environmental integrity can represent an opportunity, rather than a constraint. If the social benefits, economic income, and ecosystem services that Sustainable Forest Management provides can be clearly documented, public support for environmental concerns and conservation values identified in the FRAP report can potentially be linked to programs that develop funds to support Sustainable Forest Management on private ownerships.

The challenge is to turn political and regulatory demand for social and conservation priorities into predictable income streams targeted at specific social and conservation objectives. *Environmental advocates, non-industrial landowners, and sustainable resource managers all stand to benefit from a clear-eyed evaluation of methods to support sustainable forest management that utilize market principles to allocate resources to the long-term benefit of California’s forests, forest landowners, rural communities, and wood products consumers.*

Possible forms of support for sustainable forest management

Regulatory relief

State and Federal regulatory processes are costly, burdensome and may have unintended consequences. Many non-industrial landowners do not actively practice forestry on their land. Some that do find that after completing the lengthy process they are committed to harvesting in a time frame that commits them to selling during a significant downturn in sawlog prices. Others find that they must harvest at unsustainable levels when they do harvest in order to recover sufficient income to justify the harvest.

The Buckeye Forest Project policy proposals include 1) lengthen the time frame that THP’s are active and 2) extend the acreage limitations on NTMP’s to enable landowners to choose when they will harvest to avoid selling timber at the bottom of market cycles. These two proposals could provide significant benefits to landowners without compromising environmental integrity.

However, based on this report on the impact of global trends in production, prices and trade on California forest landowners and producers it does not appear likely that

regulatory relief alone will be enough ensure the economic viability of Sustainable Forest Management in California.

Additional forms of support for Sustainable Forest Management

- » Increased funding for easements and other forms of conservation incentives.
- » Develop markets for domestic carbon credits
- » Financial assistance that offsets long term interest costs for investment in active sustainable forest management on high site forestland.
- » Policies that support clustered residential development and tradeable development credits in conjunction with working easements on productive timberland – particularly on low site or constrained TPZ forestland.
- » Policies that support recreation, eco-tourism and other types of economic and rural development compatible with long rotation Sustainable Forest Management on low site timberland.
- » Policies that support stream and slope restoration and restorative forestry in economic development priorities as aspects of maintaining and protecting the forest products and commercial fishing economic clusters.