Final Report
of the
COMMITTEE TO STUDY NEW PAYMENT MODELS
FOR THE LOGGING INDUSTRY

April 2004

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EXECUTIVE SUMMARY

House Paper 724 - Joint Order Directing the Joint Standing Committee on Agriculture, Conservation and Forestry to Study New Payment Models for the Logging Industry, initiated this study. The joint order identified 3 areas for study: 1) current payment methods and new payment models for loggers; 2) public policies relating to forest practices and the resulting incentives and disincentives for improved forest management; and 3) state labor policies and training and apprenticeship programs for loggers.

The scope of this report is more limited than that envisioned in the study order. Data and people knowledgeable of the logging industry consistently report a downward trend in terms of both the number of jobs and earnings for woods workers. This has been occurring at the same time productivity per worker and equipment investments have increased. With a limited number of meetings, the committee decided to focus on logger payments with an emphasis on contracts for logging services between major landowners and loggers. This report provides information basic to an understanding of the logging industry, the changes that have caused particular concern over the past few years, and the more recent indications of a decline in logging capacity.

Logging contractors operating in areas of the state with a concentration of forestland owned or managed in large tracts have few opportunities to purchase stumpage. Contractors compete with each other to secure contracts for logging services with a small number of landowners. Contractors have little negotiating power in a region dominated by one large landowner. Subsequently they may have little profit to disburse among their employees in the form of higher wages or piece rates. In April of 2004, legislation that addresses the issue of loggers' negotiating power is pending enactment in the Maine Legislature. LD 1318, An Act to Promote the Public Interest by Providing for Reasonable Rates of Compensation for Forest Products Harvesting and Hauling Services, authorizes forest products haulers and harvesters to organize and collectively negotiate with a forest landowner who owns more than 400,000 acres within a labor market area.

In northern and western Maine, proximity to Quebec provides access to a Canadian work force with a strong tradition of woods work. Availability of Canadian loggers has had an adverse impact on Maine workers in the St John Valley. This impact was acknowledged in a 1999 study funded by the U.S. and Maine Departments of Labor (MDOL). Recommended changes to the federal H-2 bonded labor program have not been implemented. MDOL does not routinely collect and compile information on the actual number of H-2 bonded laborers employed, the geographic areas in which they work, or the equipment used by them. A better understanding of the use of bonded laborers, the number working as employees and the number coming in with their own equipment to work as independent contractors or subcontractors would be helpful in assessing the program’s potential impact on Maine workers.

In the winter of 2003-04, Maine mills reported low wood inventories and difficulty getting wood. Changes in landownership, mill inventory patterns and the availability of loggers and logging equipment to respond to surges in wood demand are factors discussed in this report as contributing to the shortage. Of particular interest to this study is diminished logging capacity. The number of idle machines and operators that in the past responded to open gates and calls for more wood are
apparently no longer available. With the magnitude of investment needed, people cannot enter or expand a logging business quickly to take advantage of what could be a short-term increase in demand and pay rates.

Of perhaps more importance in the long run are survey results indicating that loggers are not encouraging their children to enter logging professions. This should be a wake-up call to the mills that depend on a supply of wood. In a global economy, it is everyone’s interest to keep Maine mills competitive. To do this, loggers must be recognized as stakeholders in the forest products industry and paid rates commensurate with the skills and capital investment required by their profession.
I. INTRODUCTION

This study was initiated by House Paper 724 - Joint Order Directing the Joint Standing Committee on Agriculture, Conservation and Forestry to Study New Payment Models for the Logging Industry. Representative Troy Jackson was the primary sponsor of the study order.

Joint Study Order H.P. 724 was referred to the Joint Standing Committee on Agriculture, Conservation and Forestry (ACF Committee) and had a public hearing before the committee on March 19, 2003. The committee endorsed passage of the study order as submitted. Three areas were identified for study: 1) current payment methods and new payment models for loggers; 2) public policies relating to forest practices and the resulting incentives and disincentives for improved forest management; and 3) state labor policies and training and apprenticeship programs for loggers.

The study order received the approval of the Legislative Council with a recommended amendment to specify that the committee would conduct the study during the authorized interim committee meetings and report to the Legislature no later than December 3, 2003. The Joint Study Order H.P. 724 was amended by Senate Amendment A, S-263 and enacted on June 11, 2003. (See Appendix A.)

Legislative policy committees were authorized to meet 4 times during the 121st legislative interim. Prior to adjournment the ACF committee met and discussed its priorities for the study. Members believed that it was essential to hear from loggers. They also decided that with a limited number of meetings, the group would focus on logger payments.

The first meeting was held on September 12th at the University of Maine in Fort Kent to facilitate participation by loggers in the St. John River Valley. This area was chosen because of an acknowledged imperfect market, which has kept logger wages low (Pan Atlantic, 1999). The second meeting was held in Augusta on October 24th. At that meeting the decision was made to request an extension to allow the committee to continue its work in January after the convening of the Second Session of the 121st Legislature.

Over the course of this study, testimony and discussions with people knowledgeable of the industry have consistently recognized a downward trend in terms of both number of jobs and earnings for woods workers. This report presents our understanding of contractual relationships between landowners and loggers and factors affecting logger pay. The emphasis of the study is decidedly on contracts for logging services between major landowners and loggers. Although the scope of this report is more limited than that envisioned in the study order, we hope that the report will contribute to policy makers’ understanding of the logging industry, the changes that have caused particular concern over the past few years, and the more recent indications of a decline in logging capacity.
II. BACKGROUND

Several recent studies relating to forest management and the forest products industry in Maine have touched on trends in the number of woods jobs and rates of pay. A 1999 study focused specifically on the impact of the bonded labor program on Maine woods workers. The Joint Standing Committee on Agriculture, Conservation and Forestry reviewed the most recent studies as it began its deliberations. We offer brief comments on 2 studies and a summary of recent legislative action in this part of our report. We also provide information basic to understanding the logging industry under Section C.

A. Recent Studies

The Round Table to Study Economic and Labor Issues Relating to the Forest Products Industry was established by the 119th Legislature (Resolve 1999, chapter 124 with an effective date of May 8, 2000). The Round Table met during 2000 and 2001 and submitted its report to the Legislature in December of 2001.

Members of the Round Table presented their report to both the Agriculture, Conservation and Forestry Committee and the Labor Committee. The Round Table found that “logging in Maine is under pressure from complex global and statewide forces that impact all aspects of the forest industry from mills and landowners to logging contractors and their employees” (Round Table, 2001). The Round Table further reported that the decline in real wages in the 1980’s and 1990’s “occurred despite major increases in productivity over the same period and in conjunction with a logger labor shortage in some regions of the state that allowed importation of foreign workers through the federal H-2 Bonded Labor program.”

In 1999 a study was performed by Pan Atlantic Consultants and the Irland Group, under contract with the Maine Department of Labor and funded by the United States Department of Labor. The PAC/TIG study was conducted to help the state and federal Departments of Labor (1) understand the wages and working conditions of logging professionals in Maine; and (2) determine whether the wages being paid to H-2 visa loggers in Maine were having an adverse effect on the wages and working conditions of similarly employed U.S. workers.

A brief summary of the PAC/TIG report, Maine Logging Industry and the Bonded Labor Program: An Economic Analysis, is found in Appendix B. This committee has drawn on the data presented in that report but disagrees with its conclusion that a labor shortage of U.S. logging workers exists and raising wages would not attract sufficient workers. This conclusion contradicts the basic economic relationship of supply and demand. The validity of this conclusion is discussed in Part III of this report.

B. Actions During the First Session of the 121st Legislature Relating to Logger Payment

In addition to passing Joint Study Order H.P. 724, the Maine Legislature adopted a Joint Resolution requesting that Congress direct the U.S. Department of Labor to establish reimbursement rates for heavy equipment operation under the H-2 program and examine the methodology for calculating wage rates in the annual woods wage survey. The joint resolution
also requests Maine’s Congressional delegation to submit and support legislation to clarify provisions in federal law pertaining to independent contractor status. The directives in the Joint Resolution are consistent with recommendations in the PAC/TIG study. (See Appendix C for a copy of the Joint Resolution).

LD 1318, An Act to Provide Collective Bargaining Rights to Certain Forest Products Workers, was introduced in the 1st Session of the 121st Legislature and referred to the Joint Standing Committee on Labor. After carrying the bill over, the Labor Committee sent a divided report to the full Legislature. As of April 9, 2004, Committee Amendment “C” (the majority report) has been adopted and engrossed in both the House and Senate. The Minority Report was “Ought Not to Pass”. The engrossed version of LD 1318 alleviates anti-trust concerns by establishing a state rate-setting board in order to conform to the “state action immunity” doctrine under federal anti-trust law. The bill as amended is entitled "An Act to Promote the Public Interest by Providing for Reasonable Rates of Compensation for Forest Products Harvesting and Hauling Services." The bill summary reads:

“This amendment is based on a legislative finding that a forest landowner with economic control of more than 400,000 acres in a labor market area possesses market power sufficient to prevent the market for forest products hauling and harvesting services from functioning normally. The amendment establishes a mechanism to displace existing market forces by authorizing administrative rate-setting for forest products haulers and harvesters providing services to landowners who control such acreage.

The amendment authorizes forest products haulers and harvesters to organize associations and to negotiate collectively with certain landowners, provided their activities are preparatory to and for the purpose of an authorized rate-setting proceeding. To the extent that their collective activities are directed toward implementing authorized ratesetting, forest products haulers and harvesters have immunity from federal antitrust liability.”

See Appendix D for a copy of the LD 1318 as amended and engrossed.

C. Basics for Understanding the Logging Industry in Maine.

The 2-person crew of a chain saw operator and a skidder operator prevalent 30 years ago continues to harvest throughout Maine but is no longer the norm in the industrial forest. Feller bunchers, cut-to-length processors and forwarders account for 90% or more of production on large land ownerships.

Heavier reliance on mechanical harvesting has resulted in:

- A safer work environment for machine operators;
- Less damage to residual stand and less disruption of soils;
- Significantly greater equipment cost to enter the logging business as a contractor half a million dollars for one piece of equipment is not uncommon); and
- A higher degree of training needed to operate equipment

Logging crews working as company employees for large landowners and company operated logging camps have disappeared. Wood is harvested on a contractual basis on both large and small
ownerships. A logger’s status as an “independent logging contractor” or an employee of a logging contractor determines the benefits and OSHA standards that apply.

1. **Contracts between landowners and loggers.** In general, wood is harvested under one of 2 basic arrangements.

**Purchase of stumpage** – A logger buys standing timber from a landowner. The contract between the landowner and logger states the prices the logger will pay the landowner for wood cut. Prices are usually specified by unit (cords, weight or board feet) by product (pulpwood, sawlogs, boltwood). The logging contractor markets and coordinates trucking of the wood. The logger provides the landowner with copies of scale slips stating the volume or weight of each load of wood coming off the parcel under contract.

**Contract for logging services (CLS)** – The landowner enters into an agreement with a logging contractor to harvest wood on that landowner’s property. The contract specifies the payment the logging contractor will receive for cutting and yarding the wood and other specified services. Other services generally include delimbing, cutting to product length, and sorting by product. Trucking may be provided by a trucking company under a separate contract or by the logging contractor under the CLS. Under CLS, the landowner retains ownership of the wood after it is cut and markets the wood. The wood may be delivered to a mill or mills owned by that landowner or marketed to a variety of mills.

Large landowners typically contract for logging services rather than selling stumpage. Private non-industrial landowners with small or dispersed ownerships are more likely to sell stumpage.

Wood is harvested under several variations on these 2 arrangements. For example, a landowner may put out a bid package to sell stumpage. A party with wood processing facilities may buy the stumpage and then contract for logging services to have the wood harvested. The CLS may specify that the party owning the stumpage receives all wood of a certain product class at facilities owned by that party and the contractor gets to market the rest of the wood.

2. **Negotiating prices, estimating logging costs.** Stumpage contracts and contracts for logging services specify the trees to be harvested, the products to be separated and any road construction or road maintenance to be done under the contract. Prior to negotiating prices to be paid to the landowner in stumpage sales or to be received from the landowner under a CLS, a logging contractor typically walks the parcel to be harvested and assesses the following:

- Quality and volume of wood to be harvested
- Terrain – slope, soils, ledge, wet areas, riparian zones
- Access – condition of roads, need to extend roads, skidding or forwarding distances

In addition, knowledge of current product markets is essential for the contractor buying stumpage. Prices paid at the mill and an estimate of logging costs will determine how much the contractor can pay the landowner for stumpage. A contractor with lower production costs can bid higher for stumpage. Estimating logging costs is key to negotiating prices and being profitable under both stumpage contracts and contracts for logging services.
Computer models have been developed to calculate per unit costs of production when fixed costs and variable costs are plugged in. The model generates a cost per ton or cubic meter of wood produced under different scenarios. Some key factors in determining cost are finance amounts and rates on equipment, productive machine hours, operator wages, insurance rates, maintenance costs, fuel consumption and fuel price. This degree of sophistication in estimating logging costs can benefit both the landowner and logging contractor in improving productivity and reducing costs. Its usefulness in negotiating rates, however, depends on the accuracy of and access to the information.

A logging contractor cannot operate indefinitely under a CLS at piece rates that do not cover costs. There are situations in which a logging contractor might sign a CLS with payment rates that are below that contractor’s estimated logging cost. For example, this might occur if:

- The contractor is competing with other contractors who have lower costs;
- There is a scarcity of land to work on; and
- The contractor wants to keep crews working during a slow season, or the contractor has equipment payments to make and cannot afford to let the equipment sit idle.

3. Measurement of Wood. Measurement of wood in commercial transactions must comply with state laws and the wood measurement rules adopted by the Division of Quality Assurance within the Maine Department of Agriculture, Food and Rural Resources. The rules detail 11 methods of measuring wood and the authorized use of each method (Maine DAFRR, Wood Measurement Rules, Chapter 382, Section 6; <http://www.maine.gov/agriculture/qar/wtsmeas-regs.html#Wood%20Rules>). Weight scale has largely replaced all other methods of measurement at the mill for pulpwood. It has also become the standard form of measure for softwood logs in northern Maine and Quebec. Weight scale may be used to measure wood in any production form when the contracting parties agree on this method.

Log scale is still the predominant form of measure for hardwood sawlogs. A log rule uses a standard table that estimates in board feet the amount of lumber that can be sawn from a log based on the diameter and length of the log. The International ¼ Inch Rule is the State standard for measurement of log-length wood. Parties may agree to the use of one of 3 other authorized log rules: the Bangor Rule, the Maine Rule also known as the Holland rule, or the International 1/8 rule. No log rule gives the actual number of board feet that will be sawn from the log. Log rules simply provide a uniform standard of measure.

4. Payment methods. Logging payments are 2-fold under contracts for logging services. First the landowner pays the logging contractor and then the contractor pays the loggers working as employees of or subcontractors to that contractor. Some basic points relating to payment methods are made below.

Piece rate by product and grade - Logging contractors working under a CLS are generally paid on a piece rate system. They are usually paid weekly based on the volume or weight of wood produced. For example, a logging contractor might be paid $50 per ton of softwood pulpwood cut.
and delivered to a mill. If a contractor does not provide trucking, the dollar figure per ton would be lower but payment is still likely to be based on weight scale at the mill.

Requiring wood to be sorted at the landing or yard into a variety of products - such as pulpwood, spruce sawlogs, pine sawlogs, and hardwood logs by species - adds considerably to the cost of production. The landowner realizes a greater return on the resource by marketing wood for its highest value use. A logging contractor generally receives higher piece rates for higher valued products, compensating the contractor and subsequently the logging crews for the additional time required to cut the wood to appropriate lengths and sort for trucking to different destinations.

Theoretically, the piece rates negotiated in a contract would cover logging costs and allow a reasonable profit for the contractor and the contractor’s employees. The employees might be paid on a production basis or an hourly wage. Payment on an hourly rate is common for operators of mechanical harvesters.

Factors affecting rate of pay and payment methods - A landowner is more likely to enter into a contract with generous piece rates, bonuses or some other payment structure when the landowner’s harvest objective goes beyond supplying a mill owned by the landowner or maximizing revenue from that harvest. The landowner is willing to compensate loggers for the extra time required to minimize damage to the trees left or as an incentive to attract or retain logging contractors known to do a good job. In addition to paying premium rates, long-term contracts are an incentive for loggers.

Some examples of situations in which a landowner might pay in excess of the normal piece rate are:

- The landowner has a long-term management goal and is conducting a harvest to improve the stand. Although some commercial wood is being cut, the volume and/or quality of the wood will not provide fair compensation to the logger at normal piece rates.

- A logging contractor has a good reputation and the right equipment for working in a particular stand. Perhaps the site is environmentally sensitive. Perhaps, the products harvested are of high value and extra care is needed in bucking and sorting for the landowner to realize maximum value. The landowner is willing to pay more to get the services of this particular contractor.

Each parcel of land to be harvested comes with a set of variables affecting logging costs. In addition, there are regional differences in the number of landowners who manage for timber production and the number of logging contractors available. It is reasonable to expect that differing methods of payment and rates of pay would be used to compensate loggers.
III. Logging in Northern Maine

This section of the report focuses on logging in northern Maine. Northern and western Maine differ from the rest of the state in 2 aspects of particular importance for this study:

1. Proximity to Quebec and a Canadian work force with a strong tradition of woods work; and

2. A high percentage of forestland in large ownerships.

The map in Figure 1 indicates the holding of landowners and managers with over 100,000 acres.

Testimony on logging issues before the Joint Standing Committee on Agriculture, Conservation and Forestry had emphasized the impact of the above 2 factors on loggers in the St. John Valley and the committee chose to hold its public hearing in Fort Kent. Additional hearings in other areas of the state were not possible due to time and budget constraints. Although quantitative data is presented on a statewide or regional basis as indicated in the tables and figures provided, this part (Part III) of the report also presents information specific to the St John Valley. The reader must continue to be aware both in this section and throughout this report of the geographic areas to which the discussion applies.

The proximity to a Canadian work force is discussed below in the context of the federal H-2 Bonded Labor program, a program administered on a regional basis but with local impacts of differing magnitude. The contractual relationship between large land ownerships and logging contractors is discussed under the heading “Concentration of land and negotiating power” with emphasis on the practices of Irving Woodlands.

A. Bonded Labor Program (H-2 Program).

The federal H-2 bonded labor program allows U.S. employers to hire Canadian loggers if the H-2 program criteria are met. An employer anticipating a shortage of U.S. workers must apply to the Maine Department of Labor (MDOL) a minimum of 80 days prior to bringing in foreign labor. An applicant must advertise the position and contact former employees. The employer is certified to hire foreign labor only if there is a shortfall of U.S. workers applying for the advertised positions. Appendix E contains information prepared by the Maine Department of Labor in response to questions from the committee.

MDOL administers the program for the Northeastern region, consisting of Maine, New Hampshire, Vermont and New York. Prevailing wage rates are set for the region based on the annual Northeast Regional Woods Wage Survey. The new prevailing wage rate becomes effective May 1st of each year. A person who employs woods workers under the H 2 program must pay bonded workers and any U.S. workers hired by that employer at least the established prevailing rate for the type of work performed.
The prevailing rate at its simplest is “a rate of pay which accounts for the wages paid to 40 percent or more of those employed in a given activity.” If no single rate accounts for 40 percent of workers covered by the survey, then the prevailing rate is determined by adding the number of workers, starting with the number at the lowest rate of pay until 51 percent of the workers covered in the survey are included. Employers applying to hire H2 bonds must advertise at and pay a rate equal or greater than the prevailing rate.

Evaluating the methodology for establishing the prevailing wage and understanding the impact of the H2 program on local labor markets is complicated. The 1999 PAC/TIG study concluded that 1) a shortage of U.S. logging workers exists in Maine and raising wages would not attract sufficient workers and 2) the H-2 program does not depress wages statewide but it is likely that the H-2 bonded labor program has a slightly negative effect on incomes for Northern Maine, primarily the St. John Valley. The study criticized the methods used in the wage survey and questioned the justification for the regional boundaries. The report suggested establishing the Saint John Valley, northern and western most Maine as a region to better reflect labor market conditions divergent from the rest of the larger region currently used to determine prevailing wage (PAC/TIG, p. 224).

Several people who addressed the committee in Ft Kent disputed the conclusion of a shortage of U.S. loggers in Northern Maine. This committee agrees and contends that the establishment of prevailing rates by USDOL and the availability of bonded labor in certain areas of Maine is a significant factor in keeping wages for woods work artificially low. Tables and graphs presenting prevailing hourly wage rates from 1988 to 2003 are found in Appendix F. In a perfect market, a labor shortage would result in wage increases attracting enough Maine workers to meet the annual demand for wood. Recent trends towards increased mechanization and worker productivity also would lead one to expect an abundance of labor.

Loggers in the St. John Valley understand that some contractors seek bonded labor because they cannot afford to pay a living wage for U.S. workers. The contractor’s profit margin simply does not allow it. Canadian workers can afford to work for less because of their Canadian health care coverage and the exchange rate. For example on 4/8/04, the exchange rate of US to Canadian dollar was $1.326; wages of $500 paid in U.S. dollars would translate to $663 in Canadian dollars.

Members of this committee were frustrated in attempts to get the number of H2 bonded workers actually working in Maine and a break down of numbers by region within Maine. MDOL responded, “It is difficult to tell what area the H-2 workers are working in because they are certified for the State of Maine, and not a specific location.” Table 1 presents the number of H-2 bonded workers for the period 1998 to 2003. The committee understands based on communication with MDOL that the numbers represent requests for bonds that were, in fact filled. The numbers do not include any emergency authorization for additional workers.
TABLE 1
H-2 Bonded Woods Workers in Maine

<table>
<thead>
<tr>
<th>Year</th>
<th># Companies with H-2 Workers</th>
<th># H-2 Workers</th>
<th>% Change from previous Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>41</td>
<td>670</td>
<td></td>
</tr>
<tr>
<td>1999</td>
<td>44</td>
<td>482</td>
<td>-28%</td>
</tr>
<tr>
<td>2000</td>
<td>42</td>
<td>416</td>
<td>-14%</td>
</tr>
<tr>
<td>2001</td>
<td>47</td>
<td>490</td>
<td>+18%</td>
</tr>
<tr>
<td>2002</td>
<td>50</td>
<td>573</td>
<td>+17%</td>
</tr>
<tr>
<td>2003</td>
<td>52</td>
<td>644</td>
<td>+12%</td>
</tr>
</tbody>
</table>

The committee had questions that remained unanswered regarding types and ownership of equipment used by the H-2 workers. The PAC/TIG report had recommended that MDOL request additional information at the end of each operating year. Quoting from the report “at the close of each operating year (probably each April or May, during “mud season”) MDOL should request the actual number of bonds employed from every H-2 employer. This is a basic starting point for continuing to monitor the impact of the H-2 program on the State. Also in keeping with efforts to monitor the state of mechanization and equipment ownership, it would be advisable to require a list of machines by contractor, listed according to equipment ownership (i.e., firm, employees, other” (PAC/TIG, page 226).

Although Maine’s Department of Labor administers the H-2 program for the Northeast Region, federal law and regulation govern the program. Neither the Maine Legislature nor MDOL can change the criteria or process for approving requests for bonds. Recognizing this limitation, in May of 2003, the Legislature adopted a Joint Resolution requesting the members of Maine’s Congressional delegation to:

1. Submit and support legislation requiring USDOL to establish reimbursement rates for heavy equipment operation under the H-2 program;
2. Urge the USDOL to examine the current methodology for calculating various rates in the annual Woods Wage Survey for the H-2 program, particularly for calculating hourly rates and to specifically examine the Woods Wage Survey methodology for accuracy, rigor and types of workers included;
3. Submit and support legislation to clarify and increase consistency in definitions, applications and criteria for independent contractors in federal law; and
4. Review Section 530 of the Federal Revenue Act of 1978 pertaining to independent contractor status and exemptions from labor law requirements relating to worker health and safety.

MDOL certainly does have the authority to monitor use of the H-2 program. This committee recommends that MDOL collect and compile information annually on the actual number of H-2 bonded laborers employed, the geographic areas in which they work, or the equipment used by them. A better understanding of the use of bonded laborers, the number working as employees
and the number coming in with their own equipment to work as independent contractors or subcontractors would be helpful in assessing the program's potential impact on Maine workers. This committee has sent a letter to Commissioner Fortman stating this recommendation and requesting a response to this committee and the Joint Standing Committee on Labor during the First Session of the 122
nd Legislature. (see Appendix M for a copy of the letter)

B. Concentration of land and negotiating power. One of the primary market conditions affecting woods workers in northern Maine is the concentration of land under a few large ownerships. In 1999, Irving Woodlands bought 1, 015,565 acres of land from Bowater, land previously owned by Great Northern Paper Co. With this purchase Irving catapulted ahead of other forest products companies, nonindustrial landowners and investor groups to become Maine’s largest landowner. Irving has sold some parcels since 1999 but remains Maine’s largest landowner with approximately 1.1 million acres. Irving has expanded its presence in Maine at a time when other forest products companies have been selling their land holdings. In addition to buying land, Irving has acquired manufacturing facilities in Maine: including a hardwood lumber mill in Strong, a pine mill in Dixfield and a softwood dimension lumber mill just north of Ashland.

Throughout the last century, a handful of forest products and land management companies owned vast tracts of forestland in Northern Aroostook. Many employed their own logging and road crews, operating from camps in remote areas. Although landowners have changed, the pattern of ownership and commercial use remain fairly stable. The transition away from company logging crews has been to contracts for logging services (CLS), not to stumpage sales. There are few landowners in the area who sell stumpage.

Has the emergence of Irving Woodlands as the dominant industrial landowner had an impact on logging businesses in Northern Maine? Loggers and truckers who work for Irving testified that they are working longer hours, incurring higher equipment costs and watching their financial gains decrease. Appendix G summarizes testimony heard and issues raised at the study meeting in Fort Kent on September 12, 2003.

In December of 2003, truckers, whose contracts with Irving were due to expire on December 31st, met and agreed to make demands for higher rates than were being offered by the company. A work stoppage by the truckers began Monday, January 5th. Several logging contractors cutting on Irving land joined the stoppage to demonstrate solidarity with the truckers and seek rate increases in logging contracts, which expire in the spring. On January 23rd, the loggers and truckers met and agreed to return to work for Irving. They also agreed to continue working together as the International Loggers Association to assist one another and to lobby state lawmakers on issues of importance to them collectively. During the period of the work stoppage the company had agreed to increase rates but not by the percent sought by the truckers and loggers. It was reported that some truckers had signed new contracts and some had found work for other landowners during the stoppage. (Bangor Daily News articles relating to the stoppage are found in Appendix H.)

At the time this report is being written, loggers and truckers are anxiously awaiting the disposition of LD 1318 An Act to Promote the Public Interest by Providing for Reasonable Rates of Compensation for Forest Products Harvesting and Hauling Services ( see page 3 for a description
of the bill’s provisions). Proponents for enactment of this legislation contend that allowing a group of loggers or truckers to petition the state for a rate setting action is necessary because the owner of a trucking or logging business has virtually no bargaining power when negotiating a contract with Irving.

Again, the logging and trucking companies who work on Irving land are independent contractors and operate subject to the terms and rates established in a contract signed each year. Information provided to the committee by Irving for 2002 & 2003 indicated that 31 logging contractors were working on Irving land. The largest of these had 10 machines and 10 employees, the average number of employees was 4.5 and the most prevalent size of operation was 5 employees. With relatively small operations, no one contractor cuts or hauls a large percentage of Irving’s harvest. Irving is described as offering “take it or leave it contracts.” Those who want to remain in the St. John Valley have few other landowners to approach for work.

Payment rates are not the only source of discontent in Irving contracts. Provisions, which allow Irving to change rates at any time, to terminate a contract for any reason and to take possession of the contractor’s equipment to finish a job, are items mentioned as particularly offensive. People knowledgeable of the forest products industry recognize the need for a degree of flexibility within a logging or trucking contract. Weather, ground and road conditions as well as markets can change fairly rapidly. It is often necessary to move equipment or change delivery destinations with short notice. We do not know if other landowners’ contracts contain provisions similar to Irving’s. Members of the committee have not, however, heard complaints against any other major landowner that remotely approach the number and vehemence of the complaints against Irving. Whether or not more hearings in different regions of the State would have elicited complaints regarding other landowners, we do not know. We know of no other major landowner who has been the subject of a work stoppage by loggers and haulers during the course of this study.

At the committee’s October meeting, Irving provided information on Irving’s Logger Productivity Program (See Appendix I). This program began as a pilot program in July of 2003 with volunteer contractors participating. The stated goal of the program is to increase the earnings and financial performance of logging and trucking businesses in Maine without increasing the costs of wood to manufacturing facilities.

Some people knowledgeable of the logging industry are skeptical of the final outcome. They suggest that monitoring production and identifying ways to improve productivity may result in the independent contractors being pressured to increase efficiency by purchasing new equipment or operating 2 shifts a day. These may not be business decisions that a truly independent contractor would make, however, once these actions are identified as lowering the cost of production, the next round of contracts may contain lower rates to reflect the new lower costs of production. Whether or not contractors will actually realize an increase in net earnings as a result of the productivity project remains an unanswered question.

In a global economy, it is everyone’s interest to keep production costs low and keep Maine mills competitive. Irving is recognized as a company that invests in its mills to improve efficiency and maintain profitability. Likewise Irving Woodlands are recognized as managed for long-term yield of primary forest products. Ultimately the market will decide the success of Irving’s model.
the company knows what it truly can afford to pay for logging services and what it must pay to harvest at the level it has determined optimal for supplying its own mills and other mills in the region.

Irving is a privately held company and not compelled to report quarterly earnings to stockholders. With forestland and forest products manufacturing facilities in Nova Scotia, New Brunswick and Maine, factors influencing Irving’s business decisions on ownership and management of timberlands understandably differ somewhat from factors affecting U.S. forest products companies with mills in other regions of the U.S. and the world, and land management companies without manufacturing facilities.

It appears that Irving Woodlands will continue to be a strong presence in northern Maine with a direct or indirect impact on wood supply throughout the state. It would be interesting to compare the number of jobs and compensation for jobs associated with harvesting on Irving lands with the number of jobs and compensation associated with other large ownerships. Likewise it would be interesting to compare jobs at forest products mills owned by Irving with jobs at forest products mills owned by other companies. This information, however, is not readily available and perhaps not very useful from a policy standpoint. Suffice it to say that Irving has come to the attention of this committee as a company that uses the full force of its technical expertise and negotiating power to keep costs as low as possible.

IV. Changes in Wood Supply Systems and Logging Production Capacity in Maine

The Fourth Annual Inventory Report on Maine’s Forest characterizes Maine’s forest inventory as improved from 7 years ago. Presentations by the Maine Forest Service to the Joint Standing Committee on Agriculture, Conservation and Forestry have indicated the timber resource is adequate to meet current and anticipated demand for wood. With this understanding, discussion in this report is confined to wood supply rather than timber supply, that is getting wood from the stump to the mills rather than the volume of timber growing and available for harvest.

An understanding of the wood supply systems within a region and wood as an input cost for a mill are important for understanding how loggers fit into the larger forest products industry. This section of the report touches on these dynamic forces in the context of logging production capacity and the experience of Maine mills in the winter of 2003-2004.

The wood supply system, defined, as “a mechanism charged with the long-term responsibility for supplying wood from a large set of tracts to a large set of mills”, is incredibly complex (Laestadius, 1990). Conditions change with ripple effects throughout the system. Total demand for wood changes as mills respond to markets for their products and their competitive positions within those markets change. Wood supply is impacted by a myriad of factors including landowner objectives, prices paid by mills, and the availability of loggers and truckers, but also by the favorability of weather, and ground and road conditions for harvesting and hauling. The degree of control a mill or logging contractor has over these factors obviously vary. A few factors considered important in understanding recent changes in Maine’s wood supply system are discussed in this section.
A. Control Of Land Base

Although acres of forested land in Maine have remained stable, the patterns of ownership have changed substantially in the last decade. Acreage owned by forest industry has decreased with a sharp increase in acres owned by investor groups. Figure 2 provides a graphic illustration of changes. The reduction in wood control by the mills is not however as great as might be anticipated.

Recent sales of large tracts of land previously owned by forest products companies have included long-term agreements for delivery of wood to the companies’ mills. These agreements offer a degree of assurance to the mills that their demand for wood will be met. These agreements, however, do represent a significant change or potentially significant change in control of wood supply. Prices in the contract typically are specified as effective for a much shorter period of time than the agreement (Libbey, 2000). After the designated period, prices are renegotiated. If the parties cannot agree on wood delivery schedules and prices, they may take unresolved issues to arbitration. The impact of changes in land ownership on the wood supply system may increase as supply contracts entered into as part of sales agreements expire. Due to the huge volumes of wood consumed by the pulp and paper producers, they will continue to be major players in the regional wood supply system, drawing low quality wood away from pallet mills and other users by raising prices when necessary to meet demand.
International Paper Company is the only company owning paper mills in Maine that continues to
own in excess of 250,000 acres of forestland in Maine. Generally speaking, pulp and paper mills
no longer have the option of increasing the harvest on company lands to supply their mills when
the price of wood rises. On the market side for paper products, mills face unprecedented global
competition. Maine mills are essentially price takers with prices for grades of printing and writing
paper produced in Maine very close to the cost of production. An increase in raw material cannot
be passed on to buyers. Appendix J provides a graphic illustration of falling prices.

B. Logging Production Capacity

Regardless of whose land is being harvested, a workforce is needed to get the wood from the
stump to the mill. Several surveys conducted in 2000 and 2001, documented an overcapacity in
the logging industry (Greene et al., Forest Resources Association 2001, Egan, 2004). Simply put,
there have been more than enough loggers and logging equipment and truckers and trucking
equipment to cut and deliver the amount of wood demanded by mills in Maine and other regions
of the eastern United States. Logging production data collected in the Southern United States and
Maine between April of 2000 and December of 2001 found the wood supply system in the region
to be using 65% of its capacity (Greene et al., 2003). A majority (77%) of Maine logging
businesses participating in the study reported unused capacity.

This overcapacity was documented at a time when the workforce in Maine had been steadily
shrinking. Figures 3 and 4 below illustrate the decline in the number of loggers, the total timber
harvest and the average production per logger. The increase in productivity as mentioned
previously is in part due to mechanical harvesting. The causes of and potential solutions to unused
capacity vary by region and locale within a region. Regardless of the causes, the existence of
significant unused capacity indicates inefficiency and higher costs in a region’s wood supply
system (Laestadius, 1990). A look at wood inventory patterns in Maine helps understand the
causes of overcapacity and who bears the costs associated with it.

After a look at inventory patterns, the wood shortages reported in December of 2003 are discussed
in Section IV of this report.

C. Wood Inventory Patterns

Again assuming that the timber supply is adequate, this section looks at where the wood is held
prior to being consumed by a mill. Inventory patterns for pulp and paper mills changed radically
with the end of the river drives and the advent of an extensive road network within the industrial
forest. A less dramatic change has occurred over the past 5-7 years with mills typically keeping
less inventory in their wood yards.

In the early to mid-1990’s an inventory of wood equivalent to 40-50 days consumption was
common for a pulp and paper mill. Now it is common for inventories to build to that level only in
February and March in anticipation of mud season. An average of 15-20 days supply in the wood
yard is the norm during the summer and fall. (Rice, 2004 ) People who watch the industry speak
of “just in time deliveries” and acknowledge that smaller inventories have cost advantages for
mills. The tempo of “just in time” deliveries have long been the norm in the Southern U.S.
Mills impose quotas to keep inventories low. This works for the mills as long as idle logging production capacity exists to respond to an increase in demand for the manufactured product or to rebuild inventory if deliveries are curtailed by adverse weather or other conditions beyond the mill’s control. Having the idle capacity to respond to surges in demand does, however, carry costs for the logging industry. Maine logging businesses participating in the Greene study attributed an average cost of $40,257 per year to unused capacity. The Greene manuscript notes that this is an average with individual cost figures varying widely among contractors.

To generalize, a cadre of independent contractors with a surplus of production capacity helps keep wood costs down for mills. The contractors compete with one another to deliver wood. The contractors bear the costs associated with unused capacity, including equipment payments on idle machinery. Regardless of the causes, the existence of significant unused capacity indicates inefficiency and higher costs within a region’s wood supply system. Over the past decade in Maine, it appears that independent loggers and logging contractors in Maine have borne the brunt of costs associated with unused capacity.


In December of 2004, Louisiana–Pacific Corporation announced that its oriented strand board (OSB) mill in Baileyville, Maine would shut down temporarily because it could not get enough wood. Other mills reported low wood inventories and difficulty getting wood. These reports were prior to the work stoppage by truckers and loggers working for Irving (see Appendix K for news articles). What was happening? Among the conditions contributing to the reported shortage in supply of wood in the winter of 2003-2004 were:

- High demand for wood. NexFor Fraser purchased and reopened the Brown Mill in Berlin, New Hampshire in 2003 adding significantly to the regional demand for pulpwood.

- Weather and ground conditions in the fall of 2003 and into January of 2004 were not favorable for harvesting and hauling. These are the months when mills typically begin to build inventory in anticipation of the spring thaw.

- Inventory patterns for pulp and paper mills have changed. Mills have not had an inventory cushion in the wood yard to see them comfortably through periods of uncharacteristically low production due to weather and ground conditions.

- When pulp and paper mills lift quotas and/or raise prices for delivered wood, low quality sawlogs are diverted from other mills. Hardwood destined for OSB mills also becomes pulpwood.

- The ability of the logging industry to respond to surges in demand has diminished. The idle machines and operators that in the past responded to open gates and calls for more wood are no longer available.
With the magnitude of investment needed, people cannot enter or expand a logging business quickly to take advantage of what could be a short-term increase in demand and pay rates.

The last 2 bullets above are of particular importance to this study. These observations are made by people knowledgeable of the logging industry and attempting to explain the experience of 2003-2004. No surveys of loggers and people who have recently exited the logging business have been conducted to confirm these statements.

V. The Future Supply of Loggers

A comprehensive survey of loggers in 2001 provides demographic information on loggers in Maine as well as their perceptions on their profession. The average age of the Maine logger is 44.4 years with 22 years of logging experience. Respondents to the survey reported that they worked as loggers “because they enjoyed working outdoors and the sense of independence, accomplishment and challenge that they associated with logging” (Egan and Taggart, 2004). Survey respondents indicated that the public does not have a good understanding of the logging profession and that the profession lacks prestige among the general public. Sixty nine percent of the Maine loggers responding to the survey indicated that they would not encourage their children to become a logger.

In analyzing the survey results, Egan and Taggart write: “Our results imply that success in retaining current loggers and recruiting future loggers will have less to do with perceptions of logging’s occupational prestige (although these perceptions are not unimportant) and more to do with better wages, prices for wood, and employment benefits” (Egan and Taggart, 2004).

In 1995, loggers initiated a trade association, Professional Logging Contractors of Maine (PLC) to represent the interests and concerns of the logging industry. PLC’s stated mission is to promote professional conduct among loggers, provide a forum for the resolution of issues of concern to professional logging contractors and promote compliance with forestry and harvesting practices, which maintain sustainable forestry (http://www.maineloggers.org). Sandy Brawders, Executive Director of PLC, envisions the group also working to increase the public’s understanding of the profession with a resulting boost in prestige and ability to attract young people into the profession.

The Certified Logging Professional program began in 1991 to improve safety within the logging industry. With certification conventional loggers can reduce their worker’s compensation rates by as much as 38%. It has evolved “to train and certify loggers in safe, efficient, and environmentally sound logging practices” (www.moosehead.net/clp). Initial training and certification under CLP costs $500 with an annual $125 renewal fee. Wood procurement policies at some mills require that the wood be harvested by Certified Logging Professionals. Stipulating in wood contracts that the wood must be harvested by CLPs offers assurance that the loggers have been trained in the use of best management practices (BMPs) and are familiar with environmental regulations. This requirement may become more prevalent as more mills participate in the Sustainable Forestry Initiative. SFI endorses and encourages wood suppliers to participate in the CLP program.
Although CLP training promises to improve the perception and prestige of the profession, some loggers object to the acceptance of this program as a criterion for wood deliveries. The time commitment and cost of training are substantial and although the potential for reductions in workers comp rates is an incentive, other financial incentives have been lacking. Some loggers object philosophically to a policy that requires them to be trained for a job that they have been performing for many years. The number of loggers who have been forced out of business financially because they could not get contracts from major purchasers is unknown. Some familiar with the industry believe the diminished “surge” capacity observed last year when mills lifted quotas in the spring was, in part, due to an exodus of these loggers.

The Governor’s Advisory Council on the Sustainability of the Forest Products Industry in Maine was created by Executive Order in January of 2004. One of 8 directives to the council is to examine “issues relating to the recruitment and retention of loggers, as well as other labor force needs.” The Advisory Council is to submit recommendations to the governor by August 31, 2004. (See Appendix L for a copy of Executive Order 9 FY04/05)

VI. Concluding Thoughts

For decades reports on both the management of Maine’s forest resource and on the health of Maine’s forest products industry have expressed concerns for the logging labor force. More than one report specifically cites logger issues as worthy of study and debate in a public policy arena. (MCFM, 1996; Round Table 2001). This committee in attempting to carry the study of logger payment one step further has developed a keen appreciation for the long hours a logger works, the skill needed to harvest trees responsibly, and the business acuity essential to survive in an extremely competitive industry. We have also developed an appreciation for the complex market forces at work in the wood supply system.

Inadequate payment and looming shortage of loggers are problems, which one would expect the market to correct. Intense competition among logging contractors and pressure from consuming mills to keep the cost of wood down have kept logger payment rates from increasing as the degree of skill and equipment investments have grown. Has logging production capacity now diminished to the point where this dynamic will change? Will wood prices rise substantially and be reflected in higher wages or piece rates for loggers? Will mills and landowners enter into long-term contracts encouraging investment in equipment? Can Maine mills pay more for wood and remain competitive? Will only mills operating efficiently with updated machinery be able to afford the raw material? These are all questions, which we as policymakers cannot answer and in only limited ways attempt to influence.

Those within the wood system – receiving mills, landowners, wood dealers and logging contractors, can control many factors affecting the wood supply system. We endorse the statement “Effective partnerships between stakeholders will be the key to efficiency improvements in the raw material supply chain for the forest products industry.” (Greene et al., 2004) Loggers must be recognized as stakeholders and included as partners to realize improvements and savings throughout the wood supply system. Failure to pay rates that cover logging costs and allow a profit margin commensurate with the required skills and capital investment to enter or remain in
the logging business is short sighted for an industry that plans to continue as a major economic force in this State.
Appendices

A. Joint Study Order (House Paper 724 passed June 11, 2003)
B. Brief Summary of Maine Logging Industry and the Bonded Labor Program: An Economic Analysis, Pan Atlantic Consultants and the Irland Group, 1999
C. Joint Resolution Memorializing the Congress of the United States
D. LD 1318, as engrossed, April 8, 2004, "An Act to Promote the Public Interest by Providing for Reasonable Rates of Compensation for Forest Products Harvesting and Hauling Services."
E. Maine Department of Labor Response Regarding the H-2 Bonded Labor Program
F. Prevailing Hourly Wage Rates for Grapple Skidders, Delimber Operators, and Slasher Operators
G. Summary of Meeting in Fort Kent (September 12, 2003)
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I. Summary of Irving's Logger Productivity Program
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K. News Articles Regarding Lack of Wood Supply for Maine's Mills
L. Executive Order 9FY04/05, An Order Creating the Governor's Advisory Council on the Sustainability of the Forest Products Industry in Maine
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Authorizing Legislation
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APPENDIX B

Brief Summary of Maine Logging Industry and the Bonded Labor Program: An Economic Analysis, Pan Atlantic Consultants and the Irland Group, 1999
APPENDIX C

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