Coastal British Columbia Log Exports: Policy Review and Analysis

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Abstract
Log exports have been an important issue for the forest industry of coastal British Columbia, which is the source of a majority of the province’s log exports. They account for a relatively small proportion of the province’s annual harvest, normally less than 5%, yet garner a lot of attention from the government, industry and the public. British Columbia log export policies were first enacted in 1891. Policies were introduced to restrict log exports in order to promote the development of the domestic manufacturing industry. Surplus to domestic manufacturing has been the main criterion for receiving an export permit since the government introduced exemptions to the restrictions in 1901. Log export volumes tend to increase during recessionary times to stimulate economic activity in the forest industry and normally rise and fall inversely with the demand for manufactured wood products. In 1995 the largest importer of forest products from coastal British Columbia, Japan, went into recession. Following that, Japanese builders moved away from the use of hemlock lumber when new building codes were introduced there. This caused lumber exports to Japan to collapse and the price of hemlock, which makes up 60% of the inventory on the coast, to go down by almost half in three years. The coastal forest industry has been struggling since then. The volume of logs exported from the coast has increased dramatically from the lows of 1997 and many coastal mills have shutdown. This has brought a lot of attention to log export policy. A common perception is that log exports are akin to exporting manufacturing jobs. Log exports increase harvesting activity by giving companies access to markets that are willing to pay more for logs than domestic manufacturers can afford. Without access to export markets many stands would not be harvested because the domestic log price is below the cost of harvesting them. The logs that are not exported, which was 76% in 2010, are sold domestically. Exports essentially subsidize domestic log prices and generate harvesting activity that would not have occurred otherwise. All sectors of the forest industry benefit from fewer log export restrictions.

Keywords: Exporting, Timber, Harvesting, Coastal, Restrictions
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Introduction
The exporting of un-manufactured logs from British Columbia (BC) has been an important and often controversial issue in the province for almost as long as BC has been a part of Canada. Since 1891 the province has had legislation restricting log exports in order to promote the domestic manufacturing industry. This has been of particular importance for coastal BC, as it is the source of a majority of the log exports from the province due to its proximity to overseas shipping routes.

Figure 1 – Map of British Columbia Coastal Forest Region (shown in green) (Ministry of Forests, Lands and Natural Resource Operations, 2013)

Economic factors have always been a primary consideration when determining log export policy in BC. Developing and maintaining a log supply for the domestic processing industry has been a central theme in log export policies since the late 1800s. Provisions have been in place for most of that time to allow export exemptions for logs that are surplus to domestic manufacturing requirements. Export policies tend to be relaxed during slowdowns in the forest industry like those experienced in 1908, during World War I and the Great Depression (Shinn, 1993). More recently area exemptions have been introduced for stands that are not economically feasible to harvest due to a combination of high harvesting costs and low timber values. These exemptions have played a vital role in generating economic activity for the coastal forest industry during the present economic decline.

Since the 1990s BC’s coastal forest industry has faced many economic challenges which have caused it to become increasingly dependent on log exports to make a profit. Markets for forest products,
particularly lumber, have decreased from BC’s biggest customers. In 2007 the collapse of the US housing market reduced their demand for softwood lumber and logs. As the United States (US) economy recovers and housing starts increase, the demand for BC forest products will hopefully follow. The situation with BC’s second largest forest products consumer, Japan, is quite different. Their demand for lumber, especially hemlock, decreased substantially in 1997 when Japan went into recession. Prior to that coastal sawmills exported 50% of their lumber to Japan (Dumont & Wright, 2006). Exports to Japan have continued to decline since the recession and new building codes there have caused builders to use alternate species to hemlock from other suppliers. This has made a resurgence of the Japanese hemlock market unlikely for the coastal forest industry.

The decline of the Japanese market, coupled with a strong Canadian dollar and increased foreign competition, has reduced the selling price of hemlock, the most abundant species on the coast. This has resulted in the closure of mills and reduced harvesting throughout the coast. To generate economic activity companies have increasingly turned to log exports. Foreign log buyers have been willing to pay more for logs than domestic manufacturers can afford. Although controversial, the premium paid for exported logs has resulted in increased harvesting on the coast that would not have occurred otherwise. Domestic manufacturers also benefit from the additional harvesting that takes place because the premium price that exports realize subsidizes the cost of harvesting other logs that are used domestically. Without exports the supply of logs available to manufacturers would likely be lower than they are with exports due to low domestic log prices making harvesting many stands uneconomic. When the demand for lumber eventually increases, so will its price. Sawmills will be able to pay more for logs, reducing the need to export.

This essay describes the history of log export policies and the process for exporting logs in BC. Statistical information is reviewed for log exports, log demand and harvest rates on the coast. Economic factors that contribute to log exporting and the impact they have on employment and manufacturing are also examined.

**British Columbia’s Log Export Policy**

Throughout BC’s relatively short history log exports have been a contentious issue with much legislation written and policies enacted to restrict it. The following sections summarize the log export policies that have been enacted in BC from the 1800’s to 2013. Also, the process for exporting logs from BC is outlined.

**History of Log Export Restrictions**

British Columbia’s policy of restricting log exports has been in place since the late 1800’s in order to promote the domestic processing of logs in order to provide jobs and to develop the manufacturing industry within the province (Davies, 1977). This underlying theme continues to be at the heart of log export policy in BC.

Amendments in 1891 to the Land Act of 1888 established the first ban on log exports in BC (Shinn, 1993). Since that time further amendments to the Land Act were made, followed by further legislative
enactments and the creation of the Forest Act. With each enactment, modifications to policy were made that allowed provisions for log exports of varying degrees.

**Log Export Restrictions Prior to the Forest Act**

The British North America Act of 1867 conveyed the right to manage forest resources to the province, while the federal government retained the authority to regulate international trade (Shinn, 1993). This enabled the province to grant timber licenses on Crown land and also control the use of timber from that land. Although the federal government had control over international trade, the province could restrict the use of timber harvested to domestic manufacturing as it did with amendments to the Land Act in 1891 (Shinn, 1993). This was the province’s first policy to restrict log exports.

In 1901 the Land Act was amended again to allow for exemptions that had required timber cut in the province be manufactured in the province (Davies, 1977). It introduced the possibility of exporting logs to the Land Act with the notion that the logs be surplus to domestic manufacturing requirements. This was the first of many policy amendments made to modify export policy.

The 1906 Timber Manufacture Act incorporated the provisions of the Land Act that required domestic manufacturing of logs, but also introduced provisions that differentiated Crown land granted before and after March 12, 1906 (Davies, 1977). Logs harvested from land granted before 1906 could be exported without restrictions and those from land granted after 1906 were subject to the province’s export policy (Shinn, 1993). The following year Order-in-Council 901 was passed, which stopped the granting of Crown land to the private sector (Shinn, 1993). The remainder of Crown land that was not granted before 1906 has remained vested to the Crown to this day. Figure 2 shows the distribution of Crown and private land.

![Figure 2 - Percent of British Columbia in Various Ownership and Management Classes (Ministry of Forests, Mines and Lands, 2010)](image)

Like the Land Act, the Timber Manufacture Act was amended to provide exemptions to policies restricting log exports in the face of decreasing lumber demand (Dumont & Wright, 2006). In 1912 provisions from both of these Acts were incorporated into the province’s first Forest Act.
The Establishment of the Forest Act
The first Forest Act in BC was established in 1912 with the same intent to restrict log exports as previous Acts (Dumont & Wright, 2006). Section 100 of the Forest Act stated: “All timber cut on Crown lands [granted after March 12, 1906]... shall be used in this Province, or be manufactured in the Province...” (Dumont & Wright, 2006). In 1914, due to the poor economy at the time the province introduced the Timber Royalty Act to collect royalties from log exports from Crown land to generate revenue for the government (Shinn, 1993). The Timber Royalty Act was annulled in 1924 and royalties were amended into the Forest Act (Shinn, 1993).

In 1916, due to economic hardships caused by World War I, the Forest Act was amended to permit the Lieutenant Governor in Council to make exemptions by Order in Council to allow log exports under the recommendation of the Minister of Lands (Shinn, 1993). For the duration of the war a blanket exemption permitted logs to be exported from Crown land. This was the first time that a surplus criterion was not required to export logs. The Lieutenant Governor rescinded the blanket exemption with another Order in Council following the war in 1918 (Dumont & Wright, 2006).

Also in 1918, the BC government established the Log Export Advisory Committee (LEAC) to review and make recommendations regarding log export applications from Crown land based on the criteria of being surplus to domestic requirements (Davies, 1977). If the committee recommended a provincial export application it was forwarded to the Minister of Lands for approval. Upon approval by the minister an Order in Council was passed to approve the export permit (Davies, 1977). Logs from private land were not included in this process as they did not require provincial consent for export.

The surplus criteria that LEAC based its recommendation on would remain the same for decades with some procedural changes in the methods for determining surplus. Originally committee members based their decision on personal knowledge of log markets (Shinn, 1993). In the 1930s it was changed to the three refusals policy which required the exporter to show that boomed logs had been offered for sale to three mills and that the offers were rejected (Shinn, 1993). The policy remained the same until 1969 when it was rephrased to add the condition that the logs were to be offered to the mills that were actually using the species and size of logs that were being offered (Dumont & Wright, 2006). In 1974, how LEAC determined surplus was changed again to mean not receiving an offer after two weeks of advertising in local newspapers (Shinn, 1993). Major policy changes did not occur until the implementation of the new Forest Act in 1978.

Federal Log Export Restrictions
Federal log export restrictions were not introduced until 1940, following the first year of World War II (Davies, 1977). Before this only logs under provincial jurisdiction, on Crown lands granted after 1906, were subject to export restrictions. The War Measures Act of July 1940 was the first federal legislation that restricted all log exports from the province, either for reasons of national security or for domestic wartime requirements (Shinn, 1993) (Dumont & Wright, 2006). It first restricted the export of Douglas-fir, followed by all true firs by the end of 1940, and then all species in 1942, unless specifically exempted (Shinn, 1993).
After the war, in 1945, the export restrictions of the War Measures Act were transferred into the National Emergency Transitions Power Act and then transferred again, in 1947, to the Export and Import Permits Act (Davies, 1977). This act continues to be the basis for federal log exports controls (Shinn, 1993). It gave the federal Minister of Industry, Trade and Commerce the authority to allow export permits for logs and other items on the export control list (Shinn, 1993). After World War II, the export restrictions that were in place during the war were lifted and export volume quotas, which had been increased, were the sole criteria for receiving federal export permits (Shinn, 1993). Even with these restrictions, logs from private lands continued to be the primary source of exports from the province (Dumont & Wright, 2006).

Federal log export policy remained essentially unchanged after World War II until 1969, when the federal government adopted restrictions similar to those of the provincial government that required log exports be surplus to domestic consumption (Shinn, 1993). The responsibility of making this determination was that of the federal Minister of Industry who was advised by LEAC. Further legislation in 1974 amended the wording of the log export restrictions within the Federal Export and Import Permit Act changed to parallel those of the province – to promote domestic manufacturing, as opposed to reasons of national security (Shinn, 1993). In 1975 LEAC was divided into provincial LEAC, chaired by a provincial representative, and federal LEAC, chaired by a federal representative for export applications from federal jurisdictions only (Shinn, 1993). Log exports from Indian reserves were exempt from these proceedings and remain unrestricted (Dumont & Wright, 2006).

In 1984 the federal government reiterated its policy, with Serial Notice 23 under the Federal Export and Import Permit Act, that log exports were only permitted from private land if they were surplus to domestic requirements (Dumont & Wright, 2006). This notice was introduced after provincial log export exemptions were added to include economic rational for export (Dumont & Wright, 2006). Notice 23 also restricted the export of cedar from private land.

In 1998, as a response to an internal review and a federal court case that found flaws in the export decision process of Notice 23, it was replaced by Notice 102 (Dumont & Wright, 2006). Notice 102 re-established the surplus criteria and a committee was formed (described in further detail in the following section), independent from the provincial committee, to make recommendations regarding export applications from private land (Dumont & Wright, 2006). Also, restrictions prohibiting cedar exports were not carried over to Notice 102. This resulted in a dramatic increase in cedar exports after 1998, as shown in Figure 3. Notice 102 is still in effect to this day.

Rewriting the Forest Act
In 1978 the Forest Act was rewritten and included changes to provincial log export policy following recommendations from Dr. Peter Pearse’s report of the Royal Commission on Forest Resources in 1976 (Shinn, 1993). At the time the act was rewritten the industry was thriving and the provincial government had little desire to remove export restrictions as Pearse had suggested (Shinn, 1993). He recommended limiting the role of LEAC and controlling the permit process through a tax (referred to as fee-in-lieu of manufacture) based on the difference between the domestic and export log prices (Dumont & Wright, 2006).
Surplus to domestic requirements was still the main criteria for export and export applications were still only applicable to sorted and boomed timber. Notable changes in the Forest Act included provisions to write export permits for standing timber and granting the Minister of Forests the ability to grant log export exemptions through an order-in-council (Shinn, 1993).

In 1983 the provincial government ordered a review into its log export policy. Some of the recommendations from the review were amended into the Forest Act in 1984 and changed the log export criteria. Standing green exemptions allowed a percentage of hemlock and balsam stands to be exported, as well as, logs from remote and decadent areas if they could not be harvested economically without receiving premium export prices (Shinn, 1993). These amendments were not implemented until March 1986 and replaced the surplus criterion that had been in place since the early 20th century. The surplus criterion was reinstated in September 1986 (Shinn, 1993).

To advise the Minister of Forests on export applications based on the new economic criteria, in particular standing green exemptions, the province created the Timber Export Advisory Committee (TEAC) (Shinn, 1993). The role of TEAC broadened following the reinstatement of the surplus criteria to include advising on surplus applications, a role previously preformed by the now dissolved LEAC (Shinn, 1993). TEAC also advertises logs for sale (domestically) as part of the export application and considers the fairness of offers received to determine if an application will be given an export permit (Shinn, 1993). TEAC still advises the minister on provincial export applications today.

To advise the federal government on export applications from private lands the Federal Timber Export Advisory Committee (FTEAC) was created in 1998, following the rewriting of the federal export procedures (Dumont & Wright, 2006). FTEAC is independent of LEAC and only considers export applications based on the federal government’s sole criterion for export from private land, which is surplus to domestic requirements. (Dumont & Wright, 2006).

Following the amendment of the Forest Act in 1984 many log export applications have been made under the new economic criteria, as well as, the surplus criterion that existed prior to it. In 1985, the North Kalum (now Nass) Timber Supply Area (TSA), bordering the northern extent of the Coast Forest Region, was given the first blanket exemption that allowed all logs produced in the TSA to be exported due to the lower economic viability of the area because of its remoteness and low stand values (Dumont & Wright, 2006). The blanket exemption in this area precluded the need for standing green applications for export permits. The order in council that permits this exemption is still in effect (Ministry of Forests, Lands and Natural Resource Operations, 2013).

In 1986 blanket exemptions were issued for areas in the northern portion of the Coast Forest Region, including the Mid Coast, North Coast and Queen Charlotte TSAs (Dumont & Wright, 2006). Since then, exemptions have varied in duration and have had conditions on volumes, species and log grades that are allowed to be exported under the blanket exemption (Dumont & Wright, 2006). Currently, Orders in Council for blanket exemptions are in effect for Nass, Mid Coast, North Coast, Northwest Interior and Haida Gwaii TSAs (Ministry of Forests, Lands and Natural Resource Operations, 2013). Of them, the Nass TSA exemption still allows the export of all logs from the area, the other TSAs are restricted to 35% of
the harvest and do not include western red cedar or cypress. For all other log export applications not included in the blanket exemptions the surplus criteria would apply.

**Exporting Logs from British Columbia**

As mentioned in the previous sections, the provincial government has jurisdiction over log export applications from Crown land and the federal government over those from private land. This section reviews the process for exporting logs from both jurisdictions.

**Process for Exporting Logs**

The provincial and federal governments have similar, yet independent processes for log export applications from their respective jurisdictions. Both applications are based on the criterion of surplus to domestic requirements, unless a blanket exemption by Order in Council is applicable to a log export application from Crown land.

Provincial surplus log export applications are governed by Part 10, Section 128(3) (a) of the Forest Act (Ministry of Forests, Lands and Natural Resource Operations, 2013). It states that applications can only be made for Douglas fir, hemlock and spruce graded H or lower, or for balsam, pine and deciduous species of all grades. Applications are not accepted for any amounts of western red cedar or cypress.

Once an application is made it is reviewed by the ministry and they advertise the sale of the logs for two weeks to seek a domestic buyer for them (Ministry of Forests, Lands and Natural Resource Operations, 2013). If no offer is made the logs are deemed surplus. If an offer is received, it is reviewed by the Timber Export Advisory Committee (TEAC) who makes recommendations to the Minister of Forests, that the logs are surplus or not. The Minister makes the final surplus determination. If the logs are deemed surplus, the fee in lieu of manufacturing is collected and a provincial permit is issued. A federal export permit is also required for all log exports regardless of jurisdiction. This is usually just a formality if a provincial permit has been issued. The entire process takes 7 to 13 weeks depending on whether or not offers are received. This can contribute to significant carrying costs and risks associated with decreases in market value over short periods of time.

Log export applications for logs from private land are governed by the Department of Foreign Affairs and International Trade (DFAIT) under Serial Notice 102 (Foreign Affairs and International Trade Canada, 1998). Applications can only be made for harvested timber that is sorted and boomed. The federal government only allows applications based on surplus - standing green and blanket exemptions are not considered in federal policy. The application process is very similar to the provincial one, except recommendations on the validity of the application are made by the Federal Timber Export Advisory Committee (FTEAC) to the federal Minister. The Minister then allows or disallows the application. The federal government does not charge a fee in lieu of manufacturing.

**The Timber Export Advisory Committee**

TEAC and FTEAC review offers to purchase logs, generally from wood processors, that are advertised as part of the export application process and make recommendations to the provincial and federal Ministers, respectively, as to whether or not the offers are fair (Ministry of Forests, Lands and Natural Resource Operations, 2013). TEAC and FTEAC are made up of members with background knowledge in
logging operations, wood products manufacturing and log markets. They determine the fairness of offers based on their knowledge of domestic log prices and use that to make a recommendation to the Minister as to whether or not the logs are surplus.

Offers that are deemed acceptable and consequently block the export are non-binding; meaning neither the buyer nor the seller has to complete the transaction (Dumont & Wright, 2006). For the seller this can be costly due to the capital carrying costs of having logs sit idle for 6 to 10 weeks and the loss of revenue from the lower price that the seller is presumably getting on the domestic market. The seller may also choose to sell to another domestic buyer out of spite for blocking the export.

The Minister of Forests makes the final decision on surplus applications and may reject the recommendations of TEAC. In 2012 MLA Bill Routley, the NDP forest critic, cited 86 occurrences in two months where the Minister of Forests overruled TEAC and allowed logs to be exported (Gordon, 2012). Steve Thomson, the Minister of Forests, suggested that TEAC changed their policy to favour domestic buyers over exporters (Gordon, 2012). This highlights the subjective nature of such decisions by both politicians and TEAC.

**Log Export Taxes**

In addition to the economic and surplus restrictions on log exports, the provincial government exerts control over these exports by levying log export taxes on logs originating from Crown land. The first one, known as the timber tax, was introduced in the 1950s and levied a flat rate of $0.50 per cunit (equal to 100 cubic feet) of logs exported (Davies, 1977). In the mid 1970s the flat rate was changed to a levy that reflected the difference in price between various species. The tax ranged from $2.00 per cunit for lower valued pulpwood to $40.00 per cunit for high priced cypress, with most species set at $10.00 per cunit (Pearse, 1976). This method of taxation charged a flat rate for each species. The price difference between varying grades of logs of the same species was not considered until the late 1970s.

Following the enactment of the new Forest Act in 1978, the export tax for surplus applications was changed to reflect the price difference for each species and grade of logs by levying an export tax based on a percentage of the 3 month average domestic selling price for the logs (Dumont & Wright, 2006). Also, at this time the timber tax became known as the fee in lieu of manufacture. The fee in lieu of manufacture was initially set at 15% in 1978 and increased gradually over the years to 30% in 1985 (Dumont & Wright, 2006). In 1987 the fee was changed to a percentage of the difference between the domestic and export price (Shinn, 1993). It was initially set at 30% and by 1989 it had increased to 100% of the difference (Shinn, 1993). The fee in lieu remained at 100% until 2004 when it was changed back to being based on a percentage of just the domestic price (Dumont & Wright, 2006).

As of March 1, 2013 the province has revised its fee in lieu of manufacturing rates. The following summarizes how the rates are determined according to the Ministry of Forest, Lands and Natural Resources Operations (2013) for surplus logs from the coast:

- A Base Rate is calculated by taking a percentage of the 3 month average domestic value ($/m³) for the species and grade of logs the export application is for. The
percentage is 15% for all Douglas fir, 10% for all other conifers above U grade, and 5% for all conifers U grade and lower.

- The minimum Base Rate is $1/m³
- The Base Rate is multiplied by a factor determined by the difference between the average export and domestic value of all logs (per m³) in the previous 3 months. For a difference of less than $10 the factor is 1.0, $10-$20 is 1.1, $20-$30 is 1.2, $30-$40 is 1.3, $40-$50 is 1.4, and over $50 is 1.5.
- The multiplication factor applicable at any given time is published by the government and reviewed quarterly. As of March 1, 2013 it was 1.2.

An example of the fee in lieu for a Douglas fir ‘H’ grade is: $102.16/m³ (3 month average domestic value) x 15% x 1.2 = $18.39. Therefore the export price would have to be above $120.55/m³ to make it worth exporting.

This rate structure is too new to know how it will affect log exports.

For logs being exported from an area where an Order in Council has granted a blanket exemption for certain species and grades of logs, the fee in lieu is specified within the Order in Council. For species and grades not exempted the fee in lieu is based on the surplus fee in lieu calculation.

Federal export applications for logs from private lands and Indian reserves are not subject to a fee in lieu of manufacture.

**Summary of Log Exports and Harvest Rates for Coastal British Columbia**

The Coastal Forest Region of British Columbia, as illustrated in Figure 1, is the origin of a majority of the logs exported from the entire province. In 2005, 91.5% of the log exports from BC originated from the coast (Dumont & Wright, 2006). According to Davies (1977), between 1966 and 1975, 95.6% of provincial log exports originated from the coast. In 2010 it was 85.8% and 12.9% came from the northern interior, mostly from areas adjacent to the northern portion of the Coastal Forest Region that have blanket exemptions (Ministry of Forests, Lands and Natural Resource Operations, 2011).

In relation to the overall provincial harvest, log exports make up a relatively small proportion. In 2010 7.3% of the total harvest was exported (Ministry of Forests, Lands and Natural Resource Operations, 2011). Of that 7.3%, 44.8% came from land under federal jurisdiction – either private lands or Indian reserves. Historically, log exports from BC have normally remained under 5% of the annual provincial harvest (Shinn, 1993).

The following sections show graphs of export and harvest volumes with a brief synopsis of the data.

**Volume and Species Composition**

As shown in Figure 3, annual log exports have varied from less than 200,000 m³ in 1995 to over 5.7 million m³ in 2012. Hemlock, balsam fir and Douglas fir are the most abundant and exported species on the coast.
Hemlock and balsam made up a significant proportion of log exports – between 27% and 83% of the annual total log exports from 1988 to 2012. Up until 2009 log export volumes tended to fluctuate inversely to the price of hemlock and balsam. Since then exports of it to China and South Korea have increased, but the price has remained low. Hemlock and balsam prices have gone down by more than 50% since the peak in 1995 due to the collapse of the Japanese market (Dumont & Wright, 2006).

In the last ten years Douglas-fir exports have substantially increased most likely due to its high export price. From 1988 to 1996, log exports of Douglas fir were below 3% of the total annual exports.

Figure 3 – Volume of logs exported from British Columbia by species, 1988 to 2012. (BC Stats - Ministry of Citizens’ Services and Open Government, 2013)

Figure 4 shows the annual coast harvest in relation to log exports. From 2000 to 2012 log exports varied from 2.2 million m³ to 5.4 million m³, representing between 9% and 28% of the harvest (Girvan, 2011). Between 2004 and 2009 harvesting on the coast has steadily declined by more than half. Government harvest statistics show that it began to rebound in 2010 to 16.3 million m³ and 19.1 million m³ in 2011 (Ministry of Forests, Lands and Natural Resource Operations, 2011) (2012). The increases in harvest volumes from 2009 to 2011 were not entirely attributable to log export. Exports made up less than half of the increases in harvesting; the majority was exported as lumber.
The annual allowable cut (AAC) on the coast has not been harvested since 1992 (Lewis, 2011). From 1997 to 2006, 35 million m$^3$ of AAC have not been harvested, mostly in stands of hemlock and balsam fir (Dumont & Wright, 2006). Figure 5 shows the widening gap between the AAC and the actual harvest from 2006 to 2010. The forecasted harvest is between 3 and 4 million m$^3$ below the ACC.
Most of the undercut is due to the decline of the Japanese market for hemlock, which has had quite a negative impact on the coastal forest industry. It has caused the price of hemlock to drop, often below the cost of harvesting it in many areas of the region. Hemlock makes up 60% of the coastal timber inventory.

It should be noted that BC is also an importer of logs, mostly from the US. BC had been a net importer of logs until the late 1990s. More logs were imported into the province than exported to supply domestic manufacturers, particularly ones close to the border. From 1996 to 2005 log imports were 18% of the volume exported (Dumont & Wright, 2006). In 2005 log imports had dropped to 41,500 m³.

**Export Markets**
The primary markets for BC logs are the US, Japan, China (and Hong Kong), and South Korea, as shown in Figure 6. These four nations import more than 99% of all the logs exported from BC, with the balance going to several different countries. Japan and the US have been the top log importers for decades until recently. They are still the two biggest buyers of forest products from BC, but China has surpassed them in terms of log exports.

*Figure 6 – Volume of logs exported from British Columbia to primary log export markets, 1988 to 2012. (BC Stats - Ministry of Citizens’ Services and Open Government, 2013)*
In the last three years log exports to China have increased significantly. They have been importing mostly large quantities of hemlock because of its low price and they have also been increasingly buying Douglas fir. In 2011 Canada was the sixth largest exporter of logs to China, with 6% of the market representing 2.87 million m$^3$ (Ilim Timber, 2012). In terms of softwood lumber, BC is the largest exporter to China with 32% of the market, representing 7.22 million m$^3$, most of it being hemlock (BC Stats - Ministry of Citizens' Services and Open Government, 2013).

South Korea has also become an important destination for BC logs. In 2009 they surpassed the US in export volume. Like China, South Korea buys mostly low priced, low quality hemlock that is used for concrete forming (Hamilton, 2011). Concrete is still their primary building material for homes.

**Economic Factors Contributing to Log Exporting from Coastal British Columbia**

Since the mid 1990s the coastal forest industry has been suffering from declining Japanese demand for BC's forest products, followed by the decline of the US market. At the same time the value of the Canadian dollar has increased reducing the competitive advantage that Canadian exports once had. Global log exports are also growing which has increased competition for BC exports with other conifer growing nations. The softening market for forest products, especially lumber, has been the leading factor contributing to increased log exports (Dumont & Wright, 2006).

Log export volumes tend to fluctuate inversely with the demand for forest products produced by the manufacturing sector (Pearse, 1976). When the demand for forest products is high, domestic manufacturers typically receive higher values for their products and can pay more for logs. They are also able to use more logs, which reduces log exports. On the other hand, when the demand for forest products is low, the domestic price for logs tends to drop. If domestic log prices become too low, log producers often rely on the higher prices realized by exporting logs to maintain sustainable harvesting operations.

In 1997, when log export volumes were at their lowest point in the last twenty five years, the value of lumber exports was at its peak. The US and Japan accounted for 93% of BC's lumber exports (BC Stats - Ministry of Citizens' Services and Open Government, 2013). In 2005, at the peak of log exporting, prior to the surge in the last two years, lumber exports were at their highest volumes ever, but most of it was from the interior. Lumber production on the coast has been steadily declining since 1987 when it peaked at 11.1 million m$^3$ and has since dropped to 2.6 million m$^3$ in 2009 (Taylor, 2012). Most of the decline can be attributed to the collapse of the Japanese hemlock market and increased production of interior sawmills.

The following sections examine BC's log export markets and how declining log values have contributed to log exports.
Foreign Log Demand

Asian demand for BC logs has increased dramatically over the last few years, especially in the emerging Chinese market which surpassed Japan in 2011 as the top destination for BC log exports, as shown in Figure 6. China bought 50.6% of BC’s log exports in 2012 (BC Stats - Ministry of Citizens' Services and Open Government, 2013). BC log exports to China appear to be levelling off, with only marginal increases in 2012 over 2011. The Chinese market has been credited with bolstering the coastal forest industry as demand from the US and Japan wane.

Russian log exports to China are expected to increase depending on how much the Russian’s anticipated tax decrease on log exports is (Ekstrom, 2011). Russia, which is the world’s largest log exporter, began increasing export taxes in 2007 causing companies in China to seek other log suppliers (Ekstrom, 2011). To gain membership in the World Trade Organization (WTO) Russia began reducing its log export tax in 2011 (Ekstrom, 2011). As their export tax is decreased BC could lose some of the Chinese market share it has gained over the last few years.

The decrease in Russia’s log export taxes could also affect BC’s log exports to Japan and South Korea, which accounted for 37.4% of all log exports from BC in 2012 (BC Stats - Ministry of Citizens’ Services and Open Government, 2013). With Russia’s accession into the WTO in 2012 it is expected that their log exports to Japan, South Korea and China will increase in the coming years because of reduced export taxes and a reduction in trade restrictions (Ilim Timber, 2012). Before Russia started increasing its log export tax in 2006 they exported 51 million m³ of logs (Ekstrom, 2011). As they raised their export tax it went down to 22 million m³ in 2010 (Ekstrom, 2011). Aside from regaining market share it lost due to increased taxes, Russia can also gain market share by increasing their harvest levels. In 2012 Russia harvested 150 million m³ of timber of an available annual sustainable harvest of over 550 million m³ (Tice, 2012).

Although Russia is in a position to regain some of the log trade it lost with China, BC log exporters will probably continue to see strong demand from China in the future. The demand is being driven by plans to build 35 million homes for peasants that are moving into urban areas (Hamilton, 2011). To meet the demand for all the lumber that is needed, thousands of small sawmills have been built in China in recent years (Hamilton, 2011). Many of these sawmills are similar in size to portable sawmills that are common in North America, which are operated by one or two people. China also has many larger scale sawmills, including one that is currently under construction which is poised to be the largest sawmill in the world (Tice, 2012).

The proliferation of sawmill construction in China will likely lead to an increase in log imports from China’s main suppliers. In 2011 BC supplied 6% of the logs imported to China – Russia and New Zealand supplied the most at 34% and 19%, respectively (Ilim Timber, 2012). Increases in log demand from China to supply all their new sawmills could help offset any decreases in log exports from BC due to Russia regaining market share. However, the increase in Chinese wood processing capacity may come at the expense of BC’s wood processors, which supply China with 32% of their lumber imports (Ilim Timber, 2012). Rather than buying lumber from BC they could produce their own by buying logs from whomever they can get them from.
Like China, South Korean log imports from BC logs have increased significantly over the last few years (see Figure 6) due mostly to increases in Russian log export taxes (Jeong, 2012). In 2009 log exports to South Korea surpassed those to the US for the first time. As Russian log export taxes decrease, so could BC log exports to South Korea. BC must also compete with New Zealand and the US who exported 60.5% and 13.3%, respectively, of South Korea’s total log imports in 2011 (Jeong, 2012).

China and South Korea are important log export markets for coastal BC because they consume large volumes of hemlock. In 2012 they imported 92% of BC’s hemlock exports (BC Stats - Ministry of Citizens' Services and Open Government, 2013). The premium BC log producers receive for these logs on the export market increases the economic viability of harvesting stands that have a high composition of hemlock. For many areas of the coast the cost of harvesting hemlock is below the domestic selling price, making it uneconomic to harvest (Girvan, 2011).

Exports to Japan continue to provide a major market for BC logs, as shown in Figure 6. For the last ten years Japan has consistently imported more than a million $m^3$ of logs from BC annually. Before that, log exports to Japan were significantly reduced in the years leading up to and following their major recession in 1997 (Dumont & Wright, 2006). New building codes following the Kobe earthquake in 1995 also caused the Japanese to move away from the use of hemlock lumber for home construction in favour of kiln dried lumber from Scandinavia (Pearse, 2001). As the Japanese market for hemlock and balsam declined, Douglas fir logs became the predominant species imported from BC after 2003 (BC Stats - Ministry of Citizens' Services and Open Government, 2013).

From 1999 until the collapse of the US housing market in 2007 the US was the top importer of BC logs, as shown in Figure 6. Since 2003 Douglas fir exports to the US have gradually increased in proportion to other species they import. In 2012 it made up 61% of the log imports to the US, followed by hemlock at 16% (BC Stats - Ministry of Citizens' Services and Open Government, 2013). The premium price paid by the US (and other countries) for Douglas fir has subsidized the harvest of lower value species on the coast.

The US has historically been the largest customer for softwood lumber from BC and continues to be despite decreasing log imports from BC. The Softwood Lumber Agreement, which taxes BC lumber sold to the US, has encouraged exporting logs to the US. Logs are not subject to the US import tax and would also avoid the export levy if they originated from private lands on southern Vancouver Island, which are within a short distance to US sawmills. If lumber exports to the US exceed certain quotas then the tax goes up by 50%, further encouraging log exports to the US (Dumont & Wright, 2006).

Viability of Harvesting Low Value Species
One of the biggest challenges facing the coastal forest industry is being able to profitably harvest the lowest value species on the coast, western hemlock and balsam fir. These species, commonly referred together as hembal, make up approximately 60% of the forest inventory on the coast (Pearse, 2001). Since the mid 1990s the Japanese market for hemlock lumber, which accounted for 50% of the coastal lumber production in 1995, has declined significantly (Dumont & Wright, 2006). As a result the price of hembal logs has dropped below the cost of harvesting it. In 1995 hembal prices were over $120/m$^3$ and
dropped to about $50/m\textsuperscript{3} in 2012 (Ministry of Forests, Lands and Natural Resource Operations, 2012). In 2009 the average cost of harvesting and delivering logs to a mill on the coast was $74/m\textsuperscript{3} (Girvan, 2011). In more remote areas it can be over $100/m\textsuperscript{3}, despite efforts by industry that have reduced harvesting costs by 20% from 1998 to 2008 (Lewis, 2011).

In order to make a profit companies have relied on exporting logs to buyers that pay more than the domestic sawmills are willing to pay for them and targeting stands with enough high value species to bring the average stand value up to a profitable level (Lewis, 2011). Many people in the industry, including Bill Dumont, claim that “there would be no logging going on without log exports” (Gordon, 2012). That may be an exaggeration, but domestic sawmills rely on the premium prices that exported logs receive to subsidize log prices for many of their operations. Also, without exports many stands would not be harvested, resulting in a reduced log supply for domestic sawmills.

**Impact of Log Export Policy on the Coastal Forest Industry**

Restrictive log export policies have been effective in limiting exports from BC for over a century to promote domestic manufacturing. It is a widely held belief that log exports negatively affect manufacturing and export jobs from the province. Others argue that log exports are sustaining the coastal forest industry in these tough economics times. This section examines these issues.

**Log Exports in Relation to Employment**

A common perception is that exporting logs equates to exporting jobs. This assumes that the log importer would have purchased a manufactured product instead of making it themselves or that domestic manufacturers would not have enough logs to meet the demand for their products. Based on the current export markets and the domestic supply of timber, both of these assumptions would be unlikely.

BC’s primary log export markets, China, Japan, South Korea and the US, have the manufacturing capacity to process logs to supply part of their own domestic requirements for forest products. If they do not buy logs from BC they will probably buy them elsewhere. Many nations currently export coniferous logs that are similar to those that are exported from the coast, including the US, Russia and New Zealand (Ilim Timber, 2012). With the rapid expansion of the global log trade the movement of logs between various countries is expected to increase (Dumont & Wright, 2006).

Harvest levels on the coast have been below the Annual Allowable Cut (AAC) since 1992 (Lewis, 2011). Since 2005 the difference between the AAC and the annual harvest has fluctuated significantly (as shown in Figure 5) and the difference is forecast to remain well into the future suggesting that timber supply is not an issue for domestic manufacturers. At the present capacity of coastal manufacturers, which is 16 million m\textsuperscript{3}, there could be potentially 8 million m\textsuperscript{3} of sustainable harvest left over for exporting. Fully utilizing the AAC by increasing log exports would create additional jobs in harvesting and those related to shipping.
Reduced log export restrictions increase employment in harvesting by allowing log producers to access foreign markets that pay higher prices. The higher prices stimulate harvesting of timber that in many cases would not have occurred otherwise. At domestic prices many stands are not economically feasible to harvest. By reducing export restrictions harvesting can be expanded into lower value timber, increasing the log supply without compromising employment in manufacturing.

**Effects on Domestic Manufacturers**

Log export restrictions have been viewed as being beneficial to domestic manufacturers by limiting the number of buyers, thereby reducing the demand and price for logs that would be realized in an open market. Export restrictions shelter manufacturers from the higher global log prices and essentially subsidize them at the expense of log producers (Davies, 1977).

Relaxed log export restrictions are generally perceived as only benefiting the harvesting sector at the expense of the manufacturing sector. A common perception is that log exports decrease the amount of timber available to manufacturers. In fact, exports have enabled log producers to justify harvesting stands that have a large enough component of high export premium timber to subsidize the harvesting costs of the stand (Lewis, 2011). The logs that are not exported are sold to domestic manufacturers at lower prices. Increasing exports helps by raising the average stand values and increasing the overall harvest levels which provide more logs for domestic manufacturers.

For the integrated forest companies exporting provides revenue from the sale of some logs to purchase ones that are more suitable to their manufacturing needs (Girvan, 2011). This improves a manufacturer’s profitably by reducing their average log costs. Without log exports a company’s ability to reduce timber costs diminishes and threatens the viability of both their harvesting and processing operations.
Conclusion
Developing a wood manufacturing industry and providing jobs has been at the heart of BC’s log export policy since the first export restrictions were introduced as part of the Land Act in 1891. In 1901 amendments to the Land Act allowed export exemptions if the logs were surplus to domestic manufacturing. The premise of this legislation persists to this day and has been carried forward in the Forest Act which has governed provincial log export policy since 1912.

The implementation of export restrictions has varied since the early 20th century. Log export policy has been modified over the years in response to changing economic conditions. When markets are favourable for manufactured products log exports tend to decrease. When those markets are poor export restrictions are usually relaxed to increase economic activity in the forest industry. In general, log export volumes tend to fluctuate opposite to the demand for manufactured products.

The policy of restricting log exports to promote the manufacturing industry seems to have been effective in the past. The coastal forest industry has built up a large manufacturing sector that has employed thousands of people for many decades. However, export restrictions no longer seem to be promoting the development of the industry or employment, but rather isolating it from open market log prices. Log export restrictions lower the demand for logs which reduces their domestic value. By paying less for logs than the export price manufacturers are essentially receiving a subsidy from the log producer.

A log export policy that reduces export restrictions would increase harvesting by giving producers access to higher prices on the export market. The policy should reduce restrictions to increase harvesting of the lowest value timber, which is the least likely to be harvested at domestic prices. This would increase employment in harvesting without reducing the log supply to domestic manufacturers.

Log exports are not the answer to all of the coastal forest industries problems, but they certainly provide relief for an industry that is struggling to deal with a downturn in the economy. If history repeats itself log exports will inevitably decrease when the market for manufactured improves.
Works Cited


