

A Study of Biomass Inventory, Costing,
Processing Logistics and Equipment for the Production of Fuel
Ethanol and Co-Products in Nova Scotia

Volume 1 - Appendices
ANALYSIS OF SELECTED LOCATIONS

Final Report

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Appendix 1. County-by-County Data

Notes and Comments on County-by-County Appendices:

The following section consolidates data from various sources to give an indication of several factors that are important in helping to select a location for a biomass refinery.

Agricultural Capability

Each appendix begins with a brief assessment of the county's agricultural capability, evaluated based on Natural Resources Canada (NRCan) Canada Land Inventory (CLI) data. This inventory uses a geographic information system approach to classify land into various usage classes for agriculture and forestry. The classification use a numeric rating from one to seven (1 to 7), with Class 1 being ideally suited to agriculture or forestry use, and Class 7 being completely unsuitable.

Agricultural Land

Agricultural land use data from the 2001 Statistics Canada Census of Agriculture is then presented, in a tabular format showing the main land-use categories. Data is presented in hectares (ha).

Hay and Field Crop Production

Crop production data from the Census of Agriculture is presented for main crops produced in Nova Scotia. Census data only reveals the quantity of land in production (shown in hectares in the first column). It is possible to give a rough estimate of crops yields by individual crop types by multiplying the amount of land in production by a yield values for each crop type. This data is presented in the second column of the table. Yield values used to calculate this estimate were as follows:

- Cereals crops (wheat, oats, barley, and rye) – 2.5 t/ha
- Corn (grain and silage) - 6 t/ha
- Hay crops (alfalfa and hay) - 5 t/ha
- Potatoes - 5 t/ha

All values are on a dry weight basis. It should be noted these values only serve for estimation purposes, actual yields will vary. Since only a fraction of total crop yield is available as marketable biomass, the values for crop yield were adjusted to give an estimate of biomass in the third column of the table. Cereal crops were considered to produce 1 t/ha of biomass straw, while the total yield of alfalfa was considered as potential biomass. Corn, potatoes, and soybeans were excluded from this estimate because they are not currently harvested as biomass crops.

Inactive Agricultural Land

Data for inactive agriculture land by county is obtained from the NS Department of Agriculture and Fisheries Agricultural Land Identification Project (ALIP), which was undertaken as a one-time study in 1997. The project identifies two types of inactive agriculture land:

Inactive: not currently farmed but readily returnable to agricultural production; examples include goldenrod, alders, or both.

Inactive Transition: land being converted to agricultural production but not growing a crop; examples include newly cleared land and new blueberry fields.

This data was obtained by various direct observation techniques and differs from the Statistics Canada land use data which is obtained by survey questionnaires.

Changes in Land Use

This presents changes in agricultural land use, using Statistics Canada Census data.

Forestry Capability

The next section of each county summary presents selected forestry data beginning with a brief description of the forestry capability ratings from the NRC-Canada Land Inventory data and the percentage of the provincial forestry harvest derived from the county, from NSDNR Registry of Buyers data.

Forest Products Provincial Use and Exports

A table describing in-province hardwood and softwood use and export data follows, giving figures from the NSDNR Registry of Buyers.

Forest Production by Ownership

Ownership of forest products is tallied in the provincial Registry of Buyers. This is broken down into four sectors, Crown (provincial), Federal, Industrial, and Private. The percentage of forest production for each category is presented in the table.

Wood Gross Merchantable Volume

Data from the Registry of Buyers may not coincide with data from the NSDNR Forest Inventory data, shown in the second last table. This table presents the quantity of merchantable wood volume (in thousands of cubic meters). Merchantable wood volume is the quantity of wood that is standing in the forest, and which has economic harvest potential.

Mill Residue

The final table presents data on mill residues (in m³), giving the residue source and the type of residue produced. This data is derived from NS Registry of Buyers data. Mill roundwood volume data was used to estimate a corrected residue value for each mill. The assumptions used were derived from Canadian Forest Service (1999) figures: 22% residue produced from each tonne of wood processed, consisting of 12% bark and 10% a mix of shavings, sawdust, and slabs. Chip material produced from sawmills was calculated as 38% of the processed wood volume recorded in the Registry of Buyers.

Keys to Agricultural and Forestry Capacity Data

A numerical code is used to classify Nova Scotia agricultural and forestry capacity (or capability - the two terms are used interchangeably in the literature). The descriptions of the classes are presented below (Forestry, Table 1.1, and Agriculture, Table 1.2), to aid interpretation of the county information.

Table 1.1: Forestry Capacity Classes for Nova Scotia

Class	Description
1	Lands having no important limitations to the growth of commercial forests.
2	Lands having very slight limitations to the growth of commercial forests.
3	Lands having slight limitations to the growth of commercial forests.
4	Lands having moderate limitations to the growth of commercial forests.
5	Lands having moderately severe limitations to the growth of commercial forests.
6	Lands having severe limitations to the growth of commercial forests.
7	Lands having severe limitations which precludes the growth of commercial forests.

Table 1.2: Agricultural Capacity Classes for Nova Scotia Soils

Class	Description
1	Soils in this class have no significant limitations in use for crops.
2	Soils in this class have moderate limitations that restrict the range of crops or require conservation practices.
3	Soils in this class have moderately severe limitations that restrict the range of crops or require special conservation practices.
4	Soils in this class have severe limitations that restrict the range of crops or require special conservation practices.
5	Soils in this class have very severe limitations that restrict their capability in producing forage crops, and improvement practices are feasible.
6	Soils in this class are capable only of producing perennial forage crops, and improvement practices are not feasible.
7	Soils in this class have no capacity for arable culture or permanent pasture.

Interpreting Mill Residue Calculations

To estimate the quantity of mills residue, we have used sawmills and pulp and paper mills data from the Registry of Buyers 2002. The mills are grouped based on the amount of acquired solid wood per year. The acquisition classes run from over 200,000 m³ per year down to 1-to-1000 m³ per year. For simplification, we have used the median of the range to represent the volume of wood used by each mill. Mills acquiring 20,000 to 30,000 m³ per year, for example, will be assumed acquiring 25,000 m³ year.

Sources

Natural Resources Canada. (NRCan) 2004. CGIS (Canadian Geographic Information Systems) -Canada Land Inventory (CLI) data. Available at <http://geogatis.cgdi.gc.ca>

Statistics Canada. 2002. Census of Agriculture 2001.
<http://www.statcan.ca/english/freepub/95F0301XIE/tables.htm#use>

Nova Scotia Department of Natural Resources (NSDNR). 2004. Registry of Buyers.
<http://www.gov.ns.ca/natr/forestry/registry/2003/ROBAnnRep02.pdf>

Nova Scotia Department of Natural Resources (NSDNR). 2004. Forest Inventory Data Tables.
NSDNR - Post Office Box 68 Truro, NS. B2N 5G8.

Nova Scotia Department of Agriculture and Fisheries. 1998. Agricultural Land Information Project (ALIP). Data Obtained from Dr. Rob Gordon, Nova Scotia Agricultural College, Truro.

Annapolis County

Agricultural capability

Annapolis Valley land, found within Annapolis County, is class 3, indicating that it is fairly productive and suitable for most crops. However, the majority of the county is class seven, which is unsuitable for agricultural production.

Table 1.3: Agricultural Land (ha)

Total area of farms	Area owned	Total area rented, leased or crop shared from all sources	Area leased from governments	Area rented or leased from others	Area crop shared with others
31,766	27,666	4,100	461	3,611	27

Source: Census of Agriculture 2001

Table 1.4: Hay and Field Crops (ha)

Characteristic	Ha in production	Est. Yields	Biomass
Total wheat	211	527.5	211
Spring wheat		0	0
Winter wheat		0	0
Oats	151	377.5	151
Barley;	439	1097.5	439
Mixed grains;	17	42.5	17
Total rye;	51	127.5	51
Fall rye;		0	0
Corn for grain;	377	2262	0
Spring rye;		0	0
Corn for silage;	221	1326	0
Alfalfa or alfalfa mixtures	1,150	5750	5,750
Other hay/fodder crops;	3,870	19350	19,350
Soybeans;		0	
Potatoes;	113	565	
Total	6,600		25,969

Table 1.5: Inactive Agriculture Land Area (ha)

Inactive	Inactive Transition
1,349.7	28.9

Table 1.6: Changes in land use

Total land area (ha)							Change (ha)		
	1971	1981	1986	1991	1996	2001	1971-2001	1991-2001	1996-2001
Crops	7,607	8,636	8,006	6,943	7,272	7,219	-388	276	-53
Pasture	3,877	3,685	2,582	2,204	1,702	2,151	-1726	-53	449

Forestry capability

This area is divided between classes 4 and 5, with small areas of class 3 in prime agricultural areas. Harvested wood volume accounts for approximately 5.4% of total provincial production.

Table 1.7: Forest Products Provincial Use and Exports (m³)

	Use in Province	Export	Total
Softwood	285,047	6,496	291,543
Hardwood	30, 498	6,705	37,203

Table 1.8: Forest Production by Ownership

Crown	Federal	Industrial	Private
1.2%	0.0%	52.2%	46.6%

Source: Registry of Buyers 2003

Table 1.9: Wood Gross Merchantable Volume (thousand cubic metres)

Softwood					Hardwood				
Crown	Large	Small	Fed	Total	Crown	Large	Small	Fed	Total
3,621	9,638	6,300	2,259	21,818	5,138	12,825	10,471	2,961	31,395

Table 1.10: Mill Residue (m³)

Mill	Type	Species	Volume	Residues			Total
				Chips	Slab, Shavings, Sawdust	Bark	
Pearse, Geoffrey	firewood	HW	500	NA	NA	NA	
Heartwood Log Homes Ltd.	other	SW	250	Nav	Nav	Nav	
Small facilities (8)	sawmill	mixed	4,000	1,520	400	480	
Softwood				Nav	Nav	Nav	0
Mixed				1,520	400	480	2400
Hardwood				NA	NA	NA	0
Total				1,520	400	480	2,400

NA = Not applicable

Nav = Not available

Antigonish County

Agricultural capability

Antigonish County has approximately equal areas of class 3, 4, and 7 and is a moderately productive agricultural region.

Table 1.11: Agricultural Land (ha)

Total area of farms	Area owned	Total area rented, leased or crop shared from all sources	Area leased from governments	Area rented or leased from others	Area crop shared from others
29,899	27,035	2,864	na	na	46

Source: Census of Agriculture 2001

Table 1.12: Hay and Field Crops (ha)

Characteristic	ha in production	Est. Yields	Biomass
Total wheat		0	0
Spring wheat		0	0
Winter wheat	0	0	0
Oats	146	365	146
Barley;	420	1,050	420
Mixed grains;		0	0
Total rye;	20	50	20
Fall rye;		0	0
Corn for grain;		0	0
Spring rye;		0	0
Corn for silage;	148	888	0
Alfalfa or alfalfa mixtures	1,877	9,385	9,385
Other hay/fodder crops;	5,328	26,640	26,640
Soybeans;		0	
Potatoes;	3	15	
Total	7,942		36,611

Table 1.13: Inactive Agriculture Land Area (ha)

Inactive	Inactive Transition
761.2	31.8

Table 1.14: Changes in land use

Total land area (ha)							Change (ha)		
	1971	1981	1986	1991	1996	2001	1971-2001	1991-2001	1996-2001
Crop	4,768	6,906	6,624	6,767	7,356	8,695	3,927	1,928	1,339
Pasture	2,175	3,404	2,238	2,383	1,755	1,900	-275	-482	145

Forestry capability

Class 4 dominates the county with small areas of class 3 and 5. Harvested wood volume from Antigonish County accounted for approximately 4.3% of the total provincial production in 2002.

Table 1.15: Forest Products Provincial Use and Exports (m³)

	Use in Province	Export	Total
Softwood	182,981	26,561	209,542
Hardwood	20,314	31,558	51,872

Table 1.16: Forest Production by Ownership

Crown	Federal	Industrial	Private
1.2%	0.0%	52.2%	46.6%

Source: Registry of Buyer 2003

Table 1.17: Wood Gross Merchantable Volume (thousand cubic metres)

Softwood					Hardwood				
Crown	Large	Small	Fed	Total	Crown	Large	Small	Fed	Total
817	398	3,371	9	4,595	1,665	729	5,603	16	8,013

Table 1.18 Mill Residue (m³)

Mill	Type	Species	Volume	Residues			Total
				Chips	Slab, Shavings, Sawdust	Bark	
Small facilities (8)	Sawmill	mixed	4,000	1,520	400	480	
Softwood				0	0	0	0
Mixed				1,520	400	480	2,400
Hardwood				0	0	0	0
Total				1,520	400	480	2,400

NA = Not applicable

Nav = Not available

Cape Breton County

Agricultural capability

Significant areas of class 3 exist around Sydney but class 7 land dominates the area.

Table 1.19: Agricultural Land (ha)

Total area of farms	Area owned	Total area rented, leased or crop shared from all sources	Area leased from governments	Area rented or leased from others	Area crop shared from others
6,282	5,582	700	-	644	56

Source: Census of Agriculture 2001

Table 1.20: Hay and Field Crops (ha)

Characteristic	ha in production	Est. Yields	Biomass
Total wheat	59	147.5	59
Spring wheat	33	82.5	33
Winter wheat	27	67.5	27
Oats	67	167.5	67
Barley;	70	175	70
Mixed grains;		0	0
Total rye;	4	10	4
Fall rye;	4	10	4
Corn for grain;	0	0	0
Spring rye;	0	0	0
Corn for silage;	19	114	0
Alfalfa or alfalfa mixtures	489	2,445	2,445
Other hay/fodder crops;	1,022	5,110	5,110
Soybeans;		0	
Potatoes;		0	
Total	1,794		7,819

Table 1.21: Inactive Agriculture Land Area (ha)

Inactive	Inactive Transition
1,099.8	4.0

Table 1.22: Changes in land use

Total land area (ha)							Change (ha)		
	1971	1981	1986	1991	1996	2001	1971-2001	1991-2001	1996-2001
Crops	1,900	2,065	2,352	1,921	1,744	1,963	63	42	219
Pasture	798	712	626	530	396	600	-197	70	204

Forestry capability

Class 4 is the most dominant class (surrounding Bras D'or Lakes) with classes 5 and 6 existing in the coastal areas of the county. Harvested wood volume accounts for approximately 2.4% of total provincial production.

Table 1.23: Forest Products Provincial Use and Exports (m³)

	Use in Province	Export	Total
Softwood	86,324	36,271	122,595
Hardwood	13,097	7,825	20,922

Table 1.24: Forest Production by Ownership

Crown	Federal	Industrial	Private
5.0%	0.0%	0.2%	94.8%

Source: Registry of Buyers 2003

Table 1.25: Wood Gross Merchantable Volume (thousand cubic metres)

Softwood					Hardwood				
Crown	Large	Small	Fed	Total	Crown	Large	Small	Fed	Total
1,867	174	5,087	285	7,413	2,913	264	8,598	404	12,179

Table 1.26: Mill Residue (m³)

Mill	Type	Species	Volume	Residues			Total
				Chips	Slab, Shavings, Sawdust	Bark	
Silvicon Limited	Firewood	HW	1,800	NA	NA	NA	
Lemoine's Fuelwood	Firewood	HW	500	NA	NA	NA	
Forest Insight Ltd.	sawmill	HW	4,000	1,520		400	480
Small facilities (9)	sawmill	mixed	4,500	1,710		450	540
Softwood				0		0	0
Mixed				1,710		450	2,700
Hardwood				1,520		400	2,400
Total				3,230		850	5,100

NA = Not applicable

Nav = Not available

Colchester County

Agricultural capability

Colchester County encompasses two bands of productive agricultural land along each coast (classes 2-4) with the interior being class 7. The productive classes constitute about two-thirds of the county.

Table 1.27: Agricultural Land (ha)

Total area of farms	Area owned	Total area rented, leased or crop shared from all sources	Area leased from governments	Area rented or leased from others	Area crop shared from others
52,540	46,251	6,288	na	5,806	na

Source: Census of Agriculture 2001

Table 1.28: Hay and Field Crops (ha)

Characteristic	ha in production	Est. Yields	Biomass
Total wheat	115	287.5	115
Spring wheat		0	0
Winter wheat		0	0
Oats	266	665	266
Barley;	991	2,477.5	991
Mixed grains;		0	0
Total rye;		0	0
Fall rye;		0	0
Corn for grain;	326	1,956	0
Spring rye;	0	0	0
Corn for silage;	661	3,966	0
Alfalfa or alfalfa mixtures	2,021	10,105	10,105
Other hay/fodder crops;	8,909	44,545	44,545
Soybeans;	299	747.5	
Potatoes;	7	35	
Total	13,595		56,022

Table 1.29: Inactive Agriculture Land Area (ha)

Inactive	Inactive Transition
2,651.6	415.1

Table 1.30: Changes in land use

Total land area (ha)							Change (ha)		
	1971	1981	1986	1991	1996	2001	1971-2001	1991-2001	1996-2001
Crops	13,736	13,641	15,537	13,954	15,325	16,782	3,046	2,828	1,457
Pasture	6,318	7,066	5,100	4,788	4,205	3,541	-2,777	-1,247	-664

Forestry capability

Class 4 and 5 dominate the County area, indicating this to be a productive forestry area. Harvested wood volume accounts for approximately 14.1% of total provincial production.

Table 1.31: Forest Products Provincial Use and Exports (m³)

	Use in Province	Export	Total
Softwood	571,100	155,437	726,537
Hardwood	41,389	86,618	128,007

Table 1.32: Forest Production by Ownership

Crown	Federal	Industrial	Private
4.5%	0.0%	45.2%	50.3%

Source: Registry of Buyers 2003

Table 1.33: Wood Gross Merchantable Volume (thousand cubic metres)

Softwood					Hardwood				
Crown	Large	Small	Fed	Total	Crown	Large	Small	Fed	Total
2,907	5,764	9,223	63	17,957	4,687	8,873	13,137	78	26,775

Table 1.34: Mill Residue (m³)

Mill	Type	Species	Volume	Residues			Total
				Chips	Slab, Shavings, Sawdust	Bark	
Keyword Recovery Incorporated	chip	Mixed	219,000		Competitor		
H. C. Haynes Inc. Truro Colchester	export	HW	150,000		Competitor		
T & M Forestry Resources Ltd.	export	Nav	3,500	NA	NA	NA	
Small facilities (4)	export	Mixed	4,000	NA	NA	NA	
Good Wood Fuel	firewood	HW	1,800	NA	NA	NA	
North-Lumber-Land Resources Ltd.	other	Nav	20,000	Nav	Nav	Nav	
Stella Jones Inc.	other	HW	250	Nav	Nav	Nav	
Truro Lumber Limited	sawmill	HW	418,800	159,144	41,880	50,256	
Julimar Lumber Co. Ltd.	sawmill	HW	135,000	51,300	13,500	16,200	
Brookfield Lumber Co. Ltd.	sawmill	SW	50,000	19,000	5,000	6,000	
Two Rivers Lumber Ltd.	sawmill	HW	15,000	5,700	1,500	1,800	
Edwin Blaikie Lumber Ltd.	sawmill	SW	7,500	2,850	750	900	
New Arbor Products Ltd.	sawmill	Nav	4,000	1,520	400	480	
Small facilities (18)	sawmill	mixed	9,000	3,420	900	1,080	
Softwood				2,1850	5,750	6,900	34,500
Mixed				4,940	1,300	1,560	7,800
Hardwood				216,144	56,880	68,256	341,280
Total				242,934	63,930	76,716	383,580

NA = Not applicable

Nav = Not available

Cumberland County

Agricultural capability

The northern portion of the county is rich farmland consisting of class 2 to 4. Class 7 dominates the smaller southern region. The greatest concentration of fields is found in the northern part of Cumberland County. The area between Amherst and River Hebert hosts the densest field coverage.

Table 1.35: Agricultural Land (ha)

Total area of farms	Area owned	Total area rented, leased or crop shared from all sources	Area leased from governments	Area rented or leased from others	Area crop shared from others
68,941	60,286	8,656	1,601	6,874	181

Source: Census of Agriculture 2001

Table 1.36: Hay and Field Crops (ha)

Characteristic	Ha in production	Est. Yields	Biomass
Total wheat		0	0
Spring wheat		0	0
Winter wheat	0	0	0
Oats	629	1,572.5	629
Barley;	747	1,867.5	747
Mixed grains;	239	597.5	239
Total rye;		0	0
Fall rye;		0	0
Corn for grain;		0	0
Spring rye;		0	0
Corn for silage;	134	804	0
Alfalfa or alfalfa mixtures	1,044	5,220	5220
Other hay/fodder crops;	9,821	49,105	49,105
Soybeans;		0	
Potatoes;	210	1,050	
Total	12,824		55,,940

Table 1.37: Inactive Agriculture Land Area (ha)

Inactive	Inactive Transition
2,610.5	640.0

Table 1.38: Changes in land use

Total land area (ha)							Change (ha)		
	1971	1981	1986	1991	1996	2001	1971-2001	1991-2001	1996-2001
Crops	12,855	16,306	17,161	19,344	19,596	22,017	9,162	2,673	2,421
Pasture	5,767	6,834	6,113	4,712	2,964	3,728	-2,039	-983	764

Forestry capability

Class 4 and 5 cover almost the entire Cumberland area. Harvested wood volume accounts for approximately 11.2% of total provincial production in 2002.

Table 1.39: Forest Products Provincial Use and Exports (m³)

	Use in Province	Export	Total
Softwood	257,678	291,782	549,460
Hardwood	47,385	82,032	129,417

Table 1.40: Forest Production by Ownership

Crown	Federal	Industrial	Private
1.6%	0.0%	42.6%	55.7%

Source: Registry of Buyers 2003

Table 1.41: Wood Gross Merchantable Volume (thousand cubic metres)

Softwood					Hardwood				
Crown	Large	Small	Fed	Total	Crown	Large	Small	Fed	Total
3,787	5,714	8,410	68	17,979	5,901	9,315	13,844	100	29,160

Table 1.42: Mill Residue (m³)

Mill	Type	Species	Volume	Residues			Total
				Chips	Slab, Shavings, Sawdust	Bark	
River Philip Contracting Ltd.	export	Nav	95,000	NA	NA	NA	
Athol Forestry Cooperative	export	Mixed	95,000	NA	NA	NA	
Advocate Contracting Ltd.	export	Nav	3,500	NA	NA	NA	
Small facilities (4)	export	Mixed	4,000	NA	NA	NA	
Purdy Resources Ltd.	firewood	HW	500	NA	NA	NA	
C.E. Harrison & Sons Ltd.	sawmill	Nav	50,000	19,000	5,000	6,000	
Hoeg Bros. Lumber Ltd.	sawmill	SW	50,000	19,000	5,000	6,000	
Wentworth Lumber Ltd.	sawmill	Mixed	7,500	2,850	750	900	
Small facilities (5)	sawmill	Mixed	2,500	950	250	300	
Softwood				38,000	10,000	12,000	60,000
Mixed				950	250	300	1,500
Hardwood				2,850	750	900	4,500
Total				41,800	11,000	13,200	66,000

NA = Not applicable

Nav = Not available

Digby County

Agricultural capability

Near Weymouth and the Annapolis Valley there is some class 3 and 4 land capability. However, the area is dominated by class 7.

Table 1.43: Agricultural Land (ha)

Total area of farms	Area owned	Total area rented, leased or crop shared from all sources	Area leased from governments	Area rented or leased from others	Area crop shared from others
5,016	4,511	505	na	391	na

Source: Census of Agriculture 2001

Table 1.44: Hay and Field Crops (ha)

Characteristic	ha in production	Est. Yields	Biomass
Total wheat	0	0	0
Spring wheat	0	0	0
Winter wheat	0	0	0
Oats	0	0	0
Barley;	0	0	0
Mixed grains;	0	0	0
Total rye;	0	0	0
Fall rye;	0	0	0
Corn for grain;	0	0	0
Spring rye;	0	0	0
Corn for silage;	0	0	0
Alfalfa or alfalfa mixtures	0	0	0
Other hay/fodder crops;	501	2505	2505
Soybeans;	0	0	0
Potatoes;	0	0	0
Total	501	2,505	2,505

Table 1.45: Inactive Agriculture Land Area (ha)

Inactive	Inactive Transition
1315.8	8.5

Table 1.46: Changes in land use

Total land area (ha)							Change (ha)		
	1971	1981	1986	1991	1996	2001	1971-2001	1991-2001	1996-2001
Crops	927	1,083	848	299	629	582	-345	283	-47
Pasture	761	1014	477	210	125	x	-636	-85	x

Forestry capability

Lands are split evenly between class 4 (Weymouth, coastal areas) and 5 (interior). Harvested wood volume accounts for approximately 6.7% of total provincial production in 2002.

Table 1.47: Forest Products Provincial Use and Exports (m³)

	Use in Province	Export	Total
Softwood	337,021	28,631	365,652
Hardwood	37,763	2859	40,622

Table 1.48: Forest Production by Ownership

Crown	Federal	Industrial	Private
5.1%	0.0%	34.1%	60.8%

Source: Registry of Buyers 2003

Table 1.49: Wood Gross Merchantable Volume (thousand cubic metres)

Softwood					Hardwood				
Crown	Large	Small	Fed	Total	Crown	Large	Small	Fed	Total
4,296	3,744	5,778	546	14,364	5,461	5,506	9,343	733	21,043

Table 1.50: Mill Residue (m³)

Mill	Type	Species	Volume	Residues			Total
				Chips	Slab, Shavings, Sawdust	Bark	
J. D. Irving Ltd. - Weymouth Chip Plant	chip	SW	219,000	NA	NA	NA	
J. D. Irving Ltd.	export	Mixed	95,000	NA	NA	NA	
Small facilities (1)	export	Nav	1,000	NA	NA	NA	
Conway Workshop Association	firewood	HW	500	NA	NA	NA	
La Foret Acadienne Limitee	firewood	HW	500	NA	NA	NA	
LeBlanc, Anselm	firewood	HW	500	NA	NA	NA	
J.D. Irving Ltd. - Weymouth Sawmill	sawmill	mixed	418,800	159,144	41,880	50,256	
Comeau Lumber Ltd.	sawmill	SW	50,000	19,000	5,000	6,000	
Lewis Mouldings & Wood Specialists	sawmill	SW	15,000	5,700	1,500	1,800	
Small facilities (14)	sawmill	mixed	7,000	2,660	700	840	
Softwood				24,700	6,500	7,800	39,000
Mixed				16,180	42,580	51,096	255,480
Hardwood				0	0	0	0
Total				186,504	49,080	58,896	294,480

NA = Not applicable

Nav = Not available

Guysborough County

Agricultural capability

Nearly all of Guysborough are class 7 with small areas of class 3. Hence, this is an unproductive area for agriculture.

Table 1.51: Agricultural Land (ha)

Total area of farms	Area owned	Total area rented, leased or crop shared from all sources	Area leased from governments	Area rented or leased from others	Area crop shared from others
14,430	13,564	866	na	na	-

Source: Census of Agriculture 2001

Table 1.52: Hay and Field Crops (ha)

Characteristic	ha in production	Est. Yields	Biomass
Total wheat	0	0	0
Spring wheat	0	0	0
Winter wheat	0	0	0
Oats	15	37.5	15
Barley;		0	0
Mixed grains;		0	0
Total rye;		0	0
Fall rye;	0	0	0
Corn for grain;		0	0
Spring rye;		0	0
Corn for silage;		0	0
Alfalfa or alfalfa mixtures	247	1,235	1,235
Other hay/fodder crops;	412	2,060	2,060
Soybeans;		0	
Potatoes;		0	
Total	674		3,310

Table 1.53: Inactive Agriculture Land Area (ha)

Inactive	Inactive Transition
144.7	0

Table 1.54: Changes in land use

Total land area (ha)							Change (ha)		
	1971	1981	1986	1991	1996	2001	1971-2001	1991-2001	1996-2001
Crops	944	938	881	698	815	1,336	392	638	521
Pasture	382	501	647	394	490	326	-56	-68	-164

Forestry capability

This county contains low forest capability classes, ranging from 4 to 7, yet is dominated by class 6 and 7. Harvested wood volume accounts for approximately 6.3% of total provincial production in 2002.

Table 1.55: Forest Products Provincial Use and Exports (m³)

	Use in Province	Export	Total
Softwood	341,740	8,913	350,653
Hardwood	5,972	27,628	33,600

Table 1.56: Forest Production by Ownership

Crown	Federal	Industrial	Private
45.7%	0.0%	8.8%	45.5%

Source: Registry of Buyer 2003

Table 1.57: Wood Gross Merchantable Volume (thousand cubic metres)

Softwood					Hardwood				
Crown	Large	Small	Fed	Total	Crown	Large	Small	Fed	Total
8,848	1,706	5,128	-	15,682	12,820	2,329	6,987	-	22,136

Table 1.58: Mill Residue (m³)

Mill	Type	Species	Volume	Residues			Total
				Chips	Slab, Shavings, Sawdust	Bark	
Small Facilities (12)	sawmill	mixed	6,000	2,280	600	720	
Softwood				0	0	0	0
Mixed				2,280	600	720	3,600
Hardwood				0	0	0	0
Total				2,280	600	720	3,600

NA = Not applicable

Nav = Not available

Halifax County

Agricultural capability

Class 7 dominates Halifax County, although there are small clusters of class 3 land.

Table 1.59: Agricultural Land (ha)

Total area of farms	Area owned	Total area rented, leased or crop shared from all sources	Area leased from governments	Area rented or leased from others	Area crop shared from others
13,298	12,199	1,099	na	864	na

Table 1.60: Hay and Field Crops (ha)

Characteristic	ha in production	Est. Yields	Biomass
Total wheat		0	0
Spring wheat		0	0
Winter wheat		0	0
Oats	142	355	142
Barley;	135	337.5	135
Mixed grains;		0	0
Total rye;	6	15	6
Fall rye;		0	0
Corn for grain;		0	0
Spring rye;		0	0
Corn for silage;	162	972	0
Alfalfa or alfalfa mixtures	400	2,000	2,000
Other hay/fodder crops;	2,716	13,580	13,580
Soybeans;	0	0	
Potatoes;	3	15	
Total	3,564		15,863

Table 1.61: Inactive Agriculture Land Area (ha)

Inactive	Inactive Transition
810.4	0.8

Table 1.62: Changes in land use

Total land area (ha)							Change (ha)		
	1971	1981	1986	1991	1996	2001	1971-2001	1991-2001	1996-2001
Crops	3,444	4,136	3,662	3,703	4,288	3,813	369	110	-475
Pasture	1,990	2,039	1,558	1,359	1,157	800	-1,190	-558	-357

Forestry capability

This county has a diverse collection of capability classes from 4 to 7. The majority is class 4 and 5 but classes 6 and 7 are also present. In general, this makes for an unproductive county. Harvested wood volume accounts for approximately 12.4% of total provincial production.

Table 1.63: Forest Products Provincial Use and Exports (m³)

	Use in Province	Export	Total
Softwood	644,140	20,291	664,431
Hardwood	36,936	49,261	86,197

Table 1.64: Forest Production by Ownership

Crown	Federal	Industrial	Private
7.8%	0.0%	63.9%	28.3%

Source: Registry of Buyers 2003

Table 1.65: Wood Gross Merchantable Volume (thousand cubic metres)

Softwood					Hardwood				
Crown	Large	Small	Fed	Total	Crown	Large	Small	Fed	Total
12,432	7,787	13,747	136	34,102	14,640	9,296	16,647	195	40,778

Table 1.66: Mill Residue (m³)

Mill	Type	Species	Volume	Residues			Totals
				Chips	Slab, Shavings, Sawdust	Bark	
Northern Fibre Terminal Inc.	chip	Mixed	219,000		Competitor		
MacKay, David M.	firewood	HW	1,800	NA	NA	NA	
Barrett Enterprises	firewood	SW	1,800	NA	NA	NA	
Conform Limited	firewood	HW	1,800	NA	NA	NA	
Riverside Forestry Limited	export	Mixed	3,500	NA	NA	NA	
Small facilities (1)	export	—	1,000	NA	NA	NA	
Ledwidge Lumber Co. Ltd.	sawmill	Mixed	418,800	159,144	41,880	50,256	
MacTara Ltd.	sawmill	SW	418,800	159,144	41,880	50,256	
Hefler Forest Products Ltd.	sawmill	SW	50,000	19,000	5,000	6,000	
Barrett Lumber Company Ltd.	sawmill	SW	25,000	9,500	2,500	3,000	
F.W. Taylor Lumber Ltd.	sawmill	SW	25,000	9,500	2,500	3,000	
Laurie Isenor & Sons Ltd.	sawmill	HW	4,000	1,520	400	480	
Small facilities (5)	sawmill	Mixed	2,500	950	250	300	
Softwood				197,144	51,880	62,256	311,280
Mixed				160,094	42,130	50,556	252,780
Hardwood				1,520	400	480	2,400
Total				358,758	94,410	113,292	566,460

NA = Not applicable

Nav = Not available

Hants County

Agricultural capability

Almost the entire county is productive agricultural land in classes 2 to 4 (3 dominants).

Table 1.67: Agricultural Land (ha)

Total area of farms	Area owned	Total area rented, leased or crop shared from all sources	Area leased from governments	Area rented or leased from others	Area crop shared from others
36,228	31,776	4,452	108	4,238	106

Source: Census of Agriculture 2001

Table 1.68: Hays and Field Crops (ha)

Characteristic	ha in production	Est. Yields	Biomass
Total wheat	49	122.5	49
Spring wheat		0	0
Winter wheat		0	0
Oats	244	610	244
Barley;	290	725	290
Mixed grains;	53	132.5	53
Total rye;	14	35	14
Fall rye;		0	0
Corn for grain;	135	810	0
Spring rye;		0	0
Corn for silage;	597	3,582	0
Alfalfa or alfalfa mixtures	1,657	8,285	8,285
Other hay/fodder crops;	8,242	41,210	41,210
Soybeans;		0	
Potatoes;	8	40	
Total	11,289		50,145

Table 1.69: Inactive Agriculture Land Area (ha)

Inactive	Inactive Transition
1845.6	49.0

Table 1.70: Changes in land use

Total land area (ha)							Change (ha)		
	1971	1981	1986	1991	1996	2001	1971-2001	1991-2001	1996-2001
Crops	10,420	12,036	11,639	11,798	12,648	12,702	2,282	904	54
Pasture	5,141	4,541	4,268	3,361	2,753	1,983	-3,158	-1,378	-770

Forestry capability

Class 4 dominates the county with smaller areas of class 3 and 5, indicating productive forestry land. Harvested wood volume accounts for approximately 6.1% of total provincial production.

Table 1.71: Agricultural Land (ha)

	Use in Province	Export	Total
Softwood	284,637	32,464	317,101
Hardwood	26,663	27,505	54,168

Table 1.72: Forest Products Provincial Use and Exports

Crown	Federal	Industrial	Private
7.9%	0.0%	35.3%	56.8%

Source: Registry of Buyer 2003

Table 1.73: Wood Gross Merchantable Volume (thousand cubic metres)

Softwood					Hardwood				
Crown	Large	Small	Fed	Total	Crown	Large	Small	Fed	Total
2,551	7,028	8,546	84	18,209	3,400	9,804	12,712	123	26,039

Table 1.74: Mill Residue (m³)

Mill	Type	Species	Volume	Residues			Total
				Chips	Slab, Shavings, Sawdust	Bark	
E & M Burgess Enterprises Ltd.	other	HW	20,000	Nav	Nav	Nav	
Corkum's Forest Products Ltd.	other	Nav	250	Nav	Nav	Nav	
Elmsdale Lumber Co., Ltd.	sawmill	SW	135,000	51,300	13,500	16,200	
Russell White Lumber Ltd.	sawmill	SW	4,000	1,520	400	480	
Small facilities (12)	sawmill	mixed	6,000	2,280	600	720	
Softwood				52,820	13,900	16,680	83,400
Mixed				2,280	600	720	3,600
Hardwood				0	0	0	0
Total				55,100	14,500	17,400	87,000

NA = Not applicable

Nav = Not available

Inverness County

Agricultural capability

Class 7 covers about three-quarters of the county with the remainder being class 3. Considering the dominance of class 7 this makes for a low productivity county.

Table 1.75: Agricultural Land (ha)

Total area of farms	Area owned	Total area rented, leased or crop shared from all sources	Area leased from governments	Area rented or leased from others	Area crop shared from others
16,480	14,699	1,781	na	1,335	na

Source: Census of Agriculture 2001

Table 1.76: Hay and Field Crops (ha)

Characteristic	ha in production	Est. Yields	Biomass
Total wheat	0	0	0
Spring wheat	0	0	0
Winter wheat	0	0	0
Oats	42	105	42
Barley;	86	215	86
Mixed grains;		0	0
Total rye;	0	0	0
Fall rye;	0	0	0
Corn for grain;	0	0	0
Spring rye;	0	0	0
Corn for silage;	32	192	0
Alfalfa or alfalfa mixtures	448	2,240	2,240
Other hay/fodder crops;	3,204	16,020	16,020
Soybeans;	0	0	
Potatoes;	13	65	
Total	3,825		18,388

Table 1.77: Inactive Agriculture Land Area (ha)

Inactive	Inactive Transition
3,000.2	0.0

Table 1.78: Changes in land use

Total land area (ha)							Change (ha)		
	1971	1981	1986	1991	1996	2001	1971-2001	1991-2001	1996-2001
Crops	3,288	3,141	2,978	3,250	3,192	4,061	773	811	869
Pasture	1,881	1,784	2,215	1,301	1,245	720	-1,161	-580	-525

Forestry capability

Classes 4 and 5 dominate the southern part of the county with classes 5 to 7 dominating the northern part. Inverness is one of the poorer forestry areas in the province. Harvested wood volume accounts for approximately 3.4% of total provincial production (6.066 million m³).

Table 1.79: Forest Products Provincial Use and Exports (m³)

	Use in Province	Export	Total
Softwood	156,425	740	157,165
Hardwood	14,089	31,979	46,068

Table 1.80: Forest Product Ownership

Crown	Federal	Industrial	Private
16.6%	0.0%	7.3%	76.1%

Source: Registry of Buyer 2003

Table 1.81: Wood Gross Merchantable Volume (thousand cubic metres)

Softwood					Hardwood				
Crown	Large	Small	Fed	Total	Crown	Large	Small	Fed	Total
3,134	547	6,754	687	11,122	7,936	1,225	13,782	1,488	24,431

Table 1.82: Mill Residue (m³)

Mill	Type	Species	Volume	Residues			Total
				Chips	Slab, Shavings, Sawdust	Bark	
B. A. Fraser Lumber Ltd.	sawmill	HW	7,500	2,850	750	900	
Small facilities (2)	sawmill	mixed	1,000	380	100	120	
Softwood				0	0	0	0
Mixed				380	100	120	600
Hardwood				2,850	750	900	4,500
Total				3,230	850	1,020	5,100

NA = Not applicable

Nav = Not available

Kings County

Agricultural capability

The majority of the area is productive agricultural land in classes 2 to 4 (class 3 is dominant). An area of class 7 land can be found towards the interior of the province.

Table 1.83: Agricultural Land (ha)

Total area of farms	Area owned	Total area rented, leased or crop shared from all sources	Area leased from governments	Area rented or leased from others	Area crop shared from others
52,584	41,895	10,689	631	9,828	230

Source: Census of Agriculture 2001

Table 1.84: Hay and Field Crops (ha)

Characteristic	ha in production	Est. Yields	Biomass
Total wheat	2,292	5,730	2,292
Spring wheat	694	1,735	694
Winter wheat	1,597	3,992.5	1,597
Oats	631	1,577.5	631
Barley;	1,153	2,882.5	1,153
Mixed grains;	59	147.5	59
Total rye;	450	1,125	450
Fall rye;		0	0
Corn for grain;	1,745	10,470	0
Spring rye;		0	0
Corn for silage;	819	4,914	0
Alfalfa or alfalfa mixtures	2,058	10,290	10,290
Other hay/fodder crops;	7,082	35,410	35,410
Soybeans;	316	790	
Potatoes;	1,689	8445	
Total	20,585		52,576

Table 1.85: Inactive Agriculture Land Area (ha)

Inactive	Inactive Transition
3,000.2	0.0

Table 1.86: Changes in land use

Total land area (ha)							Change (ha)		
	1971	1981	1986	1991	1996	2001	1971-2001	1991-2001	1996-2001
Crops	23,463	26,130	24,401	22,624	23,588	23,865	402	1,241	277
Pasture	5,827	5,925	4,140	4,025	3,453	3,162	-2,665	-863	-291

Forestry capability

Class 4 dominates with smaller areas of class 5 and class 3, indicating that Kings County is productive forestry land. Harvested wood volume accounts for approximately 5.13% of total provincial production.

Table 1.87: Forest Products Provincial Use and Exports (m³)

	Use in Province	Export	Total
Softwood	236,056	8,076	244,132
Hardwood	46,675	20,659	67,334

Table 1.88: Forest Product Ownership

Crown	Federal	Industrial	Private
5.0%	0.0%	49.9%	45.1%

Source: Registry of Buyer 2003

Table 1.89: Wood Gross Merchantable Volume (thousand cubic metres)

Softwood					Hardwood				
Crown	Large	Small	Fed	Total	Crown	Large	Small	Fed	Total
1,705	2,079	5,255	68	9,107	3,690	3,420	9,676	136	16,922

Table 1.90: Mill Residue (m³)

Mill	Type	Species	Volume	Residues			Total
				Chips	Slab, Shavings, Sawdust	Bark	
Porter, Eugene B.	firewood	HW	1,800	NA	NA	NA	
Wilfred H. Kinsman Forest Products	firewood	HW	1,800	NA	NA	NA	
E. B. Corkum Farm & Forest Ltd.	firewood	HW	500	NA	NA	NA	
Timberstone Log Homes	other	SW	20,000	Nav	Nav	Nav	
Clifford Long & Sons Ltd.	sawmill	SW	15,000	5,700	1,500	1,800	
S. G. Levy & Sons Ltd.	sawmill	SW	4,000	1,520	400	480	
Small facilities (6)	sawmill	mixed	500	190	50	60	
Softwood				5,700	1,500	1,800	9,000
Mixed				190	50	60	300
Hardwood				1,520	400	480	2,400
Total				7,410	1,950	2,340	11,700

NA = Not applicable

Nav = Not available

Lunenburg County

Agricultural capability

The land area immediately around Lunenburg township is class 3 but the vast majority of the county is class 7.

Table 1.91: Agricultural Land (ha)

Total area of farms	Area owned	Total area rented, leased or crop shared from all sources	Area leased from governments	Area rented or leased from others	Area crop shared from others
28,796	25,903	2,894	na	2,187	na

Source: Census of Agriculture 2001

Table 1.92: Hay and Field Crops (ha)

Characteristic	ha in production	Est. Yields	Biomass
Total wheat	10	25	10
Spring wheat	10	25	10
Winter wheat	0	0	0
Oats	52	130	52
Barley;		0	0
Mixed grains;	0	0	0
Total rye;		0	0
Fall rye;	2	5	2
Corn for grain;		0	0
Spring rye;		0	0
Corn for silage;	16	96	0
Alfalfa or alfalfa mixtures	144	720	720
Other hay/fodder crops;	3,384	16,920	16,920
Soybeans;	0	0	
Potatoes;		0	
Total	3,618		17,714

Table 1.93: Inactive Agriculture Land Area (ha)

Inactive	Inactive Transition
988.2	6.2

Table 1.94: Changes in land use

Total land area (ha)							Change (ha)		
	1971	1981	1986	1991	1996	2001	1971-2001	1991-2001	1996-2001
Crops	3,253	3,794	3,694	3,161	3,486	3,913	660	752	427
Pasture	1,737	1,835	1,192	1,171	1,396	1,037	-700	-134	-359

Forestry capability

The majority of the county is class 3 and 4 with smaller areas of class 5 and 6. Harvested wood volume accounts for approximately 5.6% of total provincial production.

Table 1.95: Forest Products Provincial Use and Export (m³)

	Use in Province	Export	Total
Softwood	300,454	4,947	305,401
Hardwood	26,490	4,906	31,396

Table 1.96: Forest Production by Ownership

Crown	Federal	Industrial	Private
0.2%	0.0%	21.8%	77.9%

Source: Registry of Buyers 2003

Table 1.97: Wood Gross Merchantable Volume (thousand cubic metres)

Softwood					Hardwood				
Crown	Large	Small	Fed	Total	Crown	Large	Small	Fed	Total
2,418	3,059	15,201	91	20,769	3,687	3,869	19,753	121	27,430

Table 1.98: Mill Residue (m³)

Mill	Type	Species	Volume	Residues			Total
				Chips	Slab, Shavings, Sawdust	Bark	
Small facilities (1)	export	Nav	1,000	NA	NA	NA	
Louisiana-Pacific Canada Limited	other	HW	150,000		Competitor		
BMPC Oakhill Sawmill	sawmill	Nav	418,800	159,144	41,880	50,256	
J.A. Turner & Sons (1987) Ltd.	sawmill	mixed	25,000	9,500	2,500	3,000	
Turner and Turner Lumber Limited	sawmill	mixed	25,000	9,500	2,500	3,000	
Elmer Lohnes Lumbering Ltd.	sawmill	SW	15,000	5,700	1,500	1,800	
Wayne B. Millet Lumber and Boxes	sawmill	SW	7,500	2,850	750	900	
L. E. Elliott Lumber Ltd.	sawmill	mixed	4,000	1,520	400	480	
Lester D. Collicut Forest Products (95)	sawmill	Nav	4,000	1,520	400	480	
Maurice Bruhm Ltd.	sawmill	SW	4,000	1,520	400	480	
Murray A. Reeves Forestry Ltd.	sawmill	mixed	4,000	1,520	400	480	
Small facilities (14)	sawmill	mixed	7,000	2,660	700	840	
Softwood				10,070	2,650	3,180	15,900
Mixed				185,364	48,780	58,536	292,680
Hardwood				0	0	0	0
Total				195,434	51,430	61,716	308,580

NA = Not applicable

Nav = Not available

Pictou County

Agricultural capability

The county is divided evenly between productive agricultural land (classes 2-4) and completely unsuitable land (class 7).

Table 1.99: Agricultural Land (ha)

Total area of farms	Area owned	Total area rented, leased or crop shared from all sources	Area leased from governments	Area rented or leased from others	Area crop shared from others
30,148	26,495	3,653	254	3,210	190

Source: Census of Agriculture 2001

Table 1.100: Hay and Field Crops (ha)

Characteristic	ha in production	Est. Yields	Biomass
Total wheat		0	0
Spring wheat		0	0
Winter wheat	40	100	40
Oats	310	775	310
Barley;	390	975	390
Mixed grains;	141	352.5	141
Total rye;		0	0
Fall rye;		0	0
Corn for grain;		0	0
Spring rye;	0	0	0
Corn for silage;		0	0
Alfalfa or alfalfa mixtures	977	4,885	4,885
Other hay/fodder crops;	5,751	28,755	28,755
Soybeans;		0	
Potatoes;		0	
Total	7,609		34,521

Table 1.101: Inactive Agriculture Land Area (ha)

Inactive	Inactive Transition
3,734.0	204.7

Table 1.102: Changes in land use

Total land area (ha)							Change (ha)		
	1971	1981	1986	1991	1996	2001	1971-2001	1991-2001	1996-2001
Crops	8,498	10,452	9,236	9,165	9,845	9,232	734	67	-613
Pasture	4,752	4,879	3,693	3,272	2,642	1,890	-2,862	-1,382	-752

Forestry capability

Class 4 is dominant with smaller areas of class 5 and 3. Harvested wood volume accounts for approximately 8.2 % of total provincial production.

Table 1.103: Forest Products Provincial Use and Exports (m³)

	Use in Province	Export	Total
Softwood	360,778	32,738	393,516
Hardwood	41,782	59,311	101,093

Table 1.104: Forest Production by Ownership

Crown	Federal	Industrial	Private
11.8%	0.0%	27.5%	60.6%

Table 1.105: Wood Gross Merchantable Volume (thousand cubic meters)

Softwood					Hardwood				
Crown	Large	Small	Fed	Total	Crown	Large	Small	Fed	Total
1,743	2,927	7,120	16	11,806	2,752	4,628	11,053	27	18,460

Table 1.106: Mill Residue (m³)

Mill	Type	Species	Volume	Residues			Total
				Chips	Slab, Shavings, Sawdust	Bark	
Small facilities (3)	export	Mixed	3,000	NA	NA	NA	
Berichon Fence Co.	other	SW	20,000	Nav	Nav	Nav	
Kimberly-Clark Nova Scotia	P&P	SW	352,000	Minimal	Min	Min	
Deniso Lebel Inc.	sawmill	mixed	135,000	51,300	13,500	16,200	
Groupe Savoie Westville Division	sawmill	mixed	50,000	19,000	5,000	6,000	
Williams Brothers (1986) Ltd.	sawmill	SW	50,000	19,000	5,000	6,000	
Prime Lumber Ltd.	sawmill	SW	25,000	9,500	2,500	3,000	
Hugh E. Parks & Sons Ltd.	sawmill	SW	7,500	2,850	750	900	
Dave's Lumber Ltd.	sawmill	Nav	7,500	2,850	750	900	
Small facilities (11)	sawmill	mixed	5,500	2,090	550	660	
Softwood				31,350	8,250	9,900	49,500
Mixed				75,240	19,800	23,760	118,800
Hardwood				0	0	0	0
Total				106,590	28,050	33,660	168,300

Min = Minimal

NA = Not applicable

Nav = Not available

Queens County

Agricultural capability

The county is almost entirely class 7, hence it is unsuitable for agriculture.

Table 1.107: Agricultural Land (ha)

Total area of farms	Area owned	Total area rented, leased or crop shared from all sources	Area leased from governments	Area rented or leased from others	Area crop shared from others
5,095	4,579	516	na	na	-

Source: Census of Agriculture 2001

Table 1.108: Hay and Field Crops (ha)

Characteristic	ha in production	Est. Yields	Biomass
Total wheat	0	0	0
Spring wheat	0	0	0
Winter wheat	0	0	0
Oats	13	32.5	13
Barley;	0	0	0
Mixed grains;	0	0	0
Total rye;	0	0	0
Fall rye;	0	0	0
Corn for grain;	0	0	0
Spring rye;	0	0	0
Corn for silage;	0	0	0
Alfalfa or alfalfa mixtures	68	340	340
Other hay/fodder crops;	329	1,645	1,645
Soybeans;	0	0	
Potatoes;	0	0	
Total	410		1,998

Table 1.109: Inactive Agriculture Land Area (ha)

Inactive	Inactive Transition
107.8	4.1

Table 1.110: Changes in land use

Total land area (ha)							Change (ha)		
	1971	1981	1986	1991	1996	2001	1971-2001	1991-2001	1996-2001
Crops	293	765	612	588	675	889	596	301	214
Pasture	193	215	x	164	104	233	40	69	129

Forestry capability

Harvested wood volume accounts for approximately 3.9% of total provincial production.

Table 1.111: Forest Products Provincial Use and Exports (m³)

	Use in Province	Export	Total
Softwood	188,605	996	189,601
Hardwood	16,764	29,924	46,688

Table 1.112: Forest Production by Ownership

Crown	Federal	Industrial	Private
2.4%	0.0%	47.1%	50.6%

Source: Registry of Buyers 2003

Table 1.113: Wood Gross Merchantable Volume (thousand cubic metres)

Softwood					Hardwood				
Crown	Large	Small	Fed	Total	Crown	Large	Small	Fed	Total
4,195	6,900	6,455	1,244	18,794	5,374	8,566	8,746	1,668	24,354

Table 1.114: Mill Residue (m³)

Mill	Type	Species	Volume	Residues			Total
				Chips	Slab, Shavings, Sawdust	Bark	
Brooklyn Power	power plant	mixed	450,000		Competitor		
Rowter, Wayne	firewood	HW	1,800	NA	NA	NA	
Bowater Mersey Paper Co. Ltd.	P&P	SW	352,000	Minimal	Minimal	Minimal	
Harry Freeman & Son Ltd.	sawmill	HW	418,800	159,144	41,880	50,256	
N.F. Douglas Lumber Ltd.	sawmill	SW	50,000	19,000	5,000	6,000	
Holdright Lumber Products	sawmill	SW	25,000	9,500	2,500	3,000	
Small facilities (7)	sawmill	mixed	3,500	1,330	350	420	
Softwood				28,500	7,500	9,000	45,000
Mixed				1,330	350	420	2,100
Hardwood				159,144	41,880	50,256	251,280
Total				188,974	49,730	59,676	298,380

NA = Not applicable

Nav = Not available

Richmond County

Agricultural capability

The county has an uneven division of useful agricultural capability (classes 3 and 4) and unsuitable class 7 land.

Table 1.115: Agricultural Land (ha)

Total area of farms	Area owned	Total area rented, leased or crop shared from all source	Area leased from governments	Area rented or leased from others	Area crop shared from others
1,078	1,062	15	-	na	na

Source: Census of Agriculture 2001

Table 1.116: Hay and Field Crops (ha)

Characteristic	ha in production	Est. Yields	Biomass
Total wheat	0	0	0
Spring wheat	0	0	0
Winter wheat	0	0	0
Oats	0	0	0
Barley;	0	0	0
Mixed grains;	0	0	0
Total rye;	0	0	0
Fall rye;	0	0	0
Corn for grain;	0	0	0
Spring rye;	0	0	0
Corn for silage;	0	0	0
Alfalfa or alfalfa mixtures	0	0	0
Other hay/fodder crops;	86	430	430
Soybeans;	0	0	
Potatoes;		0	
Total	86		430

Table 1.117: Inactive Agriculture Land Area (ha)

Inactive	Inactive Transition
380.5	0.0

Table 1.118: Changes in land use

Total land area (ha)							Change (ha)		
	1971	1981	1986	1991	1996	2001	1971-2001	1991-2001	1996-2001
Crops	236	451	279	211	152	115	-121	-96	-37
Pasture	207	255	138	58	29	42	-166	-17	13

Forestry capability

Forestlands in Richmond are divided into equal amounts of class 4 and 5. Harvested wood volume accounts for approximately 0.7% of total provincial production.

Table 1.119: Forest Product Provincial Use and Export (m³)

	Use in Province	Export	Total
Softwood	41,477	389	41,836
Hardwood	1,661	1,044	2,705

Table 1.120: Forest Production by Ownership

Crown	Federal	Industrial	Private
2.7%	0.0%	52.1%	45.2%

Source: Registry of Buyers 2003

Table 1.121: Wood Gross Merchantable Volume (thousand cubic meters)

Softwood					Hardwood				
Crown	Large	Small	Fed	Total	Crown	Large	Small	Fed	Total
1,719	31	3,449	21	5,220	2,157	41	4,402	26	6,626

Table 1.122: Mill Residue (m³)

Mill	Type	Species	Volume	Residues			Total
				Chips	Slab, Shavings, Sawdust	Bark	
Small facilities (1)	export	—	1,000	NA	NA	NA	
Joseph L. Pottier Enterprises Ltd.	firewood	HW	500	NA	NA	NA	
Stora Enso Port Hawkesbury Ltd.	pulp & paper	SW	352,000	Minimal	Minimal	Minimal	
Small facilities (1)	sawmill	—	500	190	50	60	
Softwood				0	0	0	0
Mixed				190	50	60	300
Hardwood				0	0	0	0
Total				190	50	60	300

NA = Not applicable

Nav = Not available

Shelburne County

Agricultural capability

Over 90% class 7 with pocket areas of class 3. Shelburne County is not capable of producing a viable amount of biomass.

Table 1.123: Agricultural Land (ha)

Total area of farms	Area owned	Total area rented, leased or crop shared from all sources	Area leased from governments	Area rented or leased from others	Area crop shared from other
1,911	1,752	159	na	na	na

Source: Census of Agriculture 2001

Table 1.124: Hay and Field Crop (ha)

Characteristic	ha in production	Est. Yields	Biomass
Total wheat	0	0	0
Spring wheat	0	0	0
Winter wheat	0	0	0
Oats	0	0	0
Barley;	0	0	0
Mixed grains;	0	0	0
Total rye;	0	0	0
Fall rye;	0	0	0
Corn for grain;	0	0	0
Spring rye;	0	0	0
Corn for silage;	0	0	0
Alfalfa or alfalfa mixtures		0	0
Other hay/fodder crops;	24	120	120
Soybeans;	0	0	
Potatoes;	0	0	
Total	24		120

Table 1.125: Inactive Agriculture Land Area (ha)

Inactive	Inactive Transition
119.8	0

Table 1.126: Changes in land use

Total land area (ha)							Change (ha)		
	1971	1981	1986	1991	1996	2001	1971-2001	1991-2001	1996-2001
Crops	75	75	34	84	53	126	51	42	73
Pasture	59	49	x	28	x	x	-59	x	0

Forestry capability

Shelburne County hosts poor biomass quality and potential, with forest capability ranging mainly from class 4 to 7 (dominantly 5 and 6). Harvested wood volume accounts for approximately 0.8% of total provincial production.

Table 1.127: Forest Products Provincial Use and Exports (m³)

	Use in Province	Export	Total
Softwood	43,450	470	43,920
Hardwood	2,224	0	2,224

Table 1.128: Forest Products Provincial Use and Exports (m³)

Crown	Federal	Industrial	Private
12.6%	0.0%	39.6%	47.8%

Source: Registry of Buyers 2003

Table 1.129: Wood Gross Merchantable Volume (thousand cubic metres)

Softwood					Hardwood				
Crown	Large	Small	Fed	Total	Crown	Large	Small	Fed	Total
5,794	1,796	4,043	—	11,633	7,715	2,295	5,452	—	15,462

Table 1.130: Mill Residue (m³)

Mill	Type	Species	Volume	Residues			Total
				Chips	Slab, Shavings, Sawdust	Bark	
Small facilities (13)	sawmill	mixed	6,500	2,470	650	780	
Softwood				0	0	0	0
Mixed				2,470	650	780	3,900
Hardwood				0	0	0	0
Total				2,470	650	780	3,900

NA = Not applicable

Nav = Not available

Victoria County

Agricultural capability

Class 7 is dominant and, appropriately, there is little existing agriculture.

Table 1.131: Agricultural Land (ha)

Total area of farms	Area owned	Total area rented, leased or crop shared from all sources	Area leased from governments	Area rented or leased from others	Area crop shared from others
5,891	2,930	2,961	na	na	-

Source: Census of Agriculture 2001

Table 1.132: Hay and Field Crop (ha)

Characteristic	ha in production	Est. Yields	Biomass
Total wheat	0	0	0
Spring wheat	0	0	0
Winter wheat	0	0	0
Oats		0	0
Barley;		0	0
Mixed grains;	0	0	0
Total rye;	0	0	0
Fall rye;	0	0	0
Corn for grain;	0	0	0
Spring rye;	0	0	0
Corn for silage;	0	0	0
Alfalfa or alfalfa mixtures	141	705	705
Other hay/fodder crops;	531	2,655	2,655
Soybeans;	0	0	
Potatoes;	2	10	
Total	674		3,360

Table 1.133: Inactive Agriculture Land Area (ha)

Inactive	Inactive Transition
565.0	4.2

Table 1.134: Changes in land use

Total land area (ha)							Change (ha)		
	1971	1981	1986	1991	1996	2001	1971-2001	1991-2001	1996-2001
Crops	1,107	950	700	866	719	725	-382	-141	6
Pasture	425	383	388	246	181	198	-226	-48	17

Forestry capability

This county is dominated by low classes for forest capability (4-7) with class 5 and 6 dominating and significant portions of class seven. Harvested wood volume accounts for approximately 1.3% of total provincial production.

Table 1.135: Forest Products Provincial Use and Export (m³)

	Use in Province	Export	Total
Softwood	77,436	42	77,478
Hardwood	2,067	30	2,097

Table 1.136: Forest Production by Ownership

Crown	Federal	Industrial	Private
20.3%	0.0%	0.2%	79.5%

Source: Registry of Buyers 2003

Table 1.137: Wood Gross Merchantable Volume (thousand cubic metres)

Softwood					Hardwood				
Crown	Large	Small	Fed	Total	Crown	Large	Small	Fed	Total
3,264	121	3,215	580	7,180	6,481	176	5,903	1,277	13,837

Table 1.138: Mill Residue (m³)

Mill	Type	Species	Volume	Residues			Total
				Chips	Slab, Shavings, Sawdust	Bark	
Small facilities (4)	sawmill	mixed	2,000	760	200	240	
Softwood				0	0	0	0
Mixed				760	200	240	1,200
Hardwood				0	0	0	0
Total				760	200	240	1,200

NA = Not applicable

Nav = Not available

Yarmouth County

Agricultural capability

Class 3 and 4 can be found around the town of Yarmouth. Class 7 dominates the rest of the county.

Table 1.139: Agricultural Land (ha)

Total area of farms	Area owned	Total area rented, leased or crop shared from all sources	Area leased from governments	Area rented or leased from others	Area crop shared from others
6,663	5,600	1,064	na	579	na

Source: Census of Agriculture 2001

Table 1.140: Hay and Field Crops (ha)

Characteristic	ha in production	Est. Yields	Biomass
Total wheat	0	0	0
Spring wheat	0	0	0
Winter wheat	0	0	0
Oats		0	0
Barley;		0	0
Mixed grains;	0	0	0
Total rye;	0	0	0
Fall rye;	0	0	0
Corn for grain;	0	0	0
Spring rye;	0	0	0
Corn for silage;		0	0
Alfalfa or alfalfa mixtures	80	400	400
Other hay/fodder crops;	873	4,365	4,365
Soybeans;	0	0	
Potatoes;		0	
Total	953		4,765

Table 1.141: Inactive Agriculture Land Area (ha)

Inactive	Inactive Transition
1040.5	18.8

Table 1.142: Changes in land use

Total land area (ha)							Change (ha)		
	1971	1981	1986	1991	1996	2001	1971-2001	1991-2001	1996-2001
Crops	1,439	1,277	873	859	979	1,182	-257	323	203
Pasture	1,168	985	554	519	x	463	-706	-57	-57

Forestry capability

There is an even division between forestry classes 3 through 6 in this county. Harvested wood volume accounts for approximately 2.2% of total provincial production.

Table 1.143: Forest Products Provincial Use and Exports (m³)

	Use in Province	Export	Total
Softwood	117,738	10,784	128,522
Hardwood	4,389	1,305	5,694

Table 1.144: Forest Product Ownership

Crown	Federal	Industrial	Private
3.8%	0.1%	20.0%	76.1%

Source: Registry of Buyers 2003

Table 1.145: Wood Gross Merchantable Volume (thousand cubic metres)

Softwood					Hardwood				
Crown	Large	Small	Fed	Total	Crown	Large	Small	Fed	Total
4,195	752	3,918	1	8,866	6,087	1,306	5,597	1	12,991

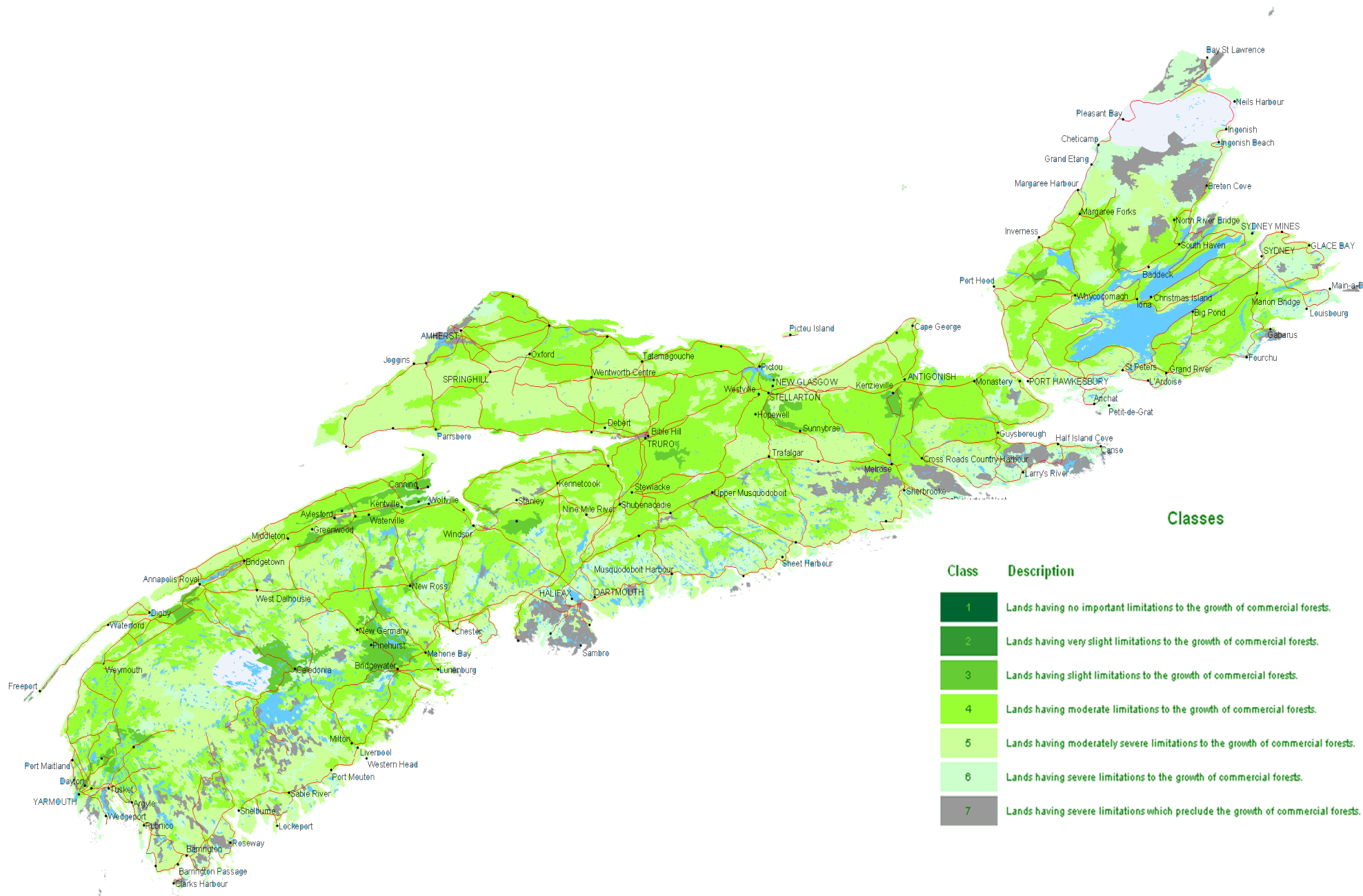
Table 1.146: Mill Residue (m³)

Mill	Type	Species	Volume	Residues			Total
				Chips	Slab, Shavings, Sawdust	Bark	
Brazil Lake Enterprises	firewood	HW	500	NA	NA	NA	
Ibbitson Sawmills Inc.	sawmill	-	25,000	9,500	2,500	3,000	
Austin Hurlburt & Son Lumber Ltd.	sawmill	HW	7,500	2,850	750	900	
Small facilities (3)	sawmill	mixed	1,500	570	150	180	
Softwood				0	0	0	0
Mixed				10,070	150	180	10,400
Hardwood				2,850	750	900	4500
Total				12,920	900	1,080	14,900

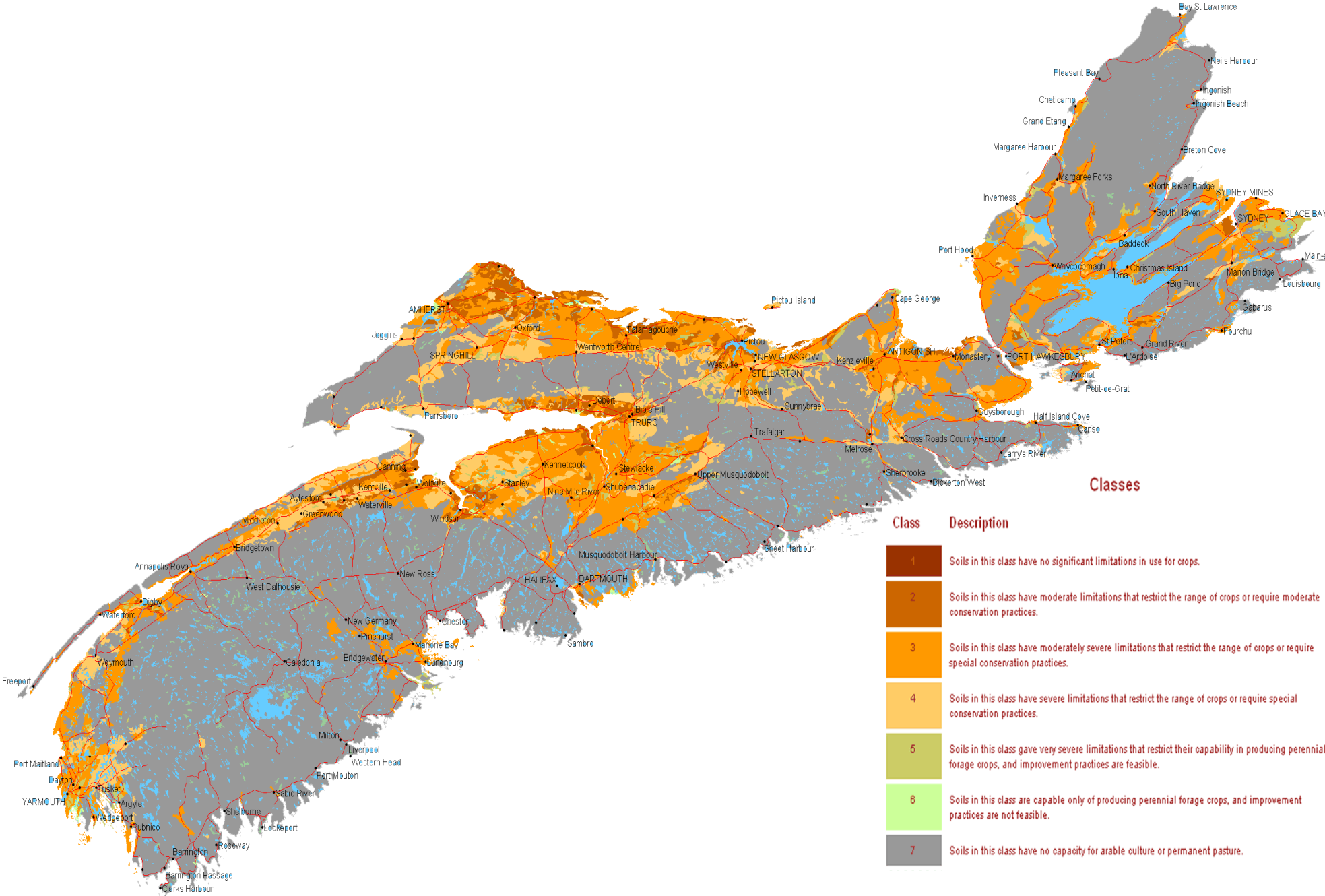
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Appendix 2. Forestry Capacity Classes for Nova Scotia Soils



Appendix 3. Agricultural Capacity Classes for Nova Scotia Soils



Appendix 4. Sawmill Sites and Residue

Amherst

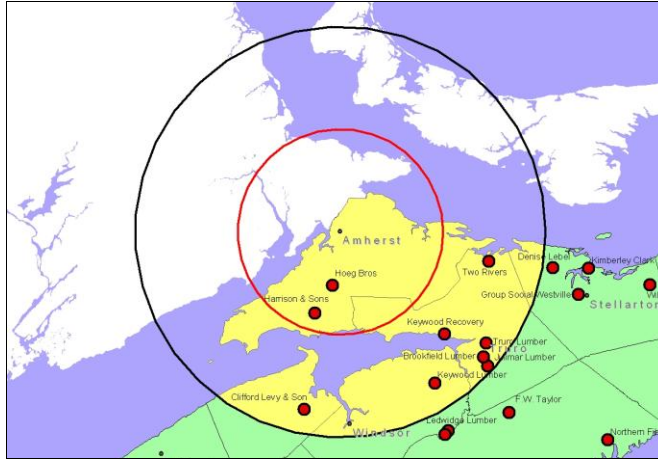


Figure 4.1 Sawmill locations

Table 4.1 Sawmill Residue (m³)

Within Radius	Mill	Type	Species	Volume	Residues			Total
					Chips	Slab, Shavings, Sawdust	Bark	
50km	Hoeg Bros. Lumber Ltd.	sawmill	SW	50,000	19,000	5,000	6,000	
	C.E. Harrison & Sons Ltd.	sawmill	Nav	50,000	19,000	5,000	6,000	
Total 50km					38,000	10,000	12,000	60,000
100km	Keywood Recovery Inc.	chip	mixed	219,000		Competitor		
	Truro Lumber Limited	sawmill	HW	418,800	159,,144	41,880	50,256	
	Julimar Lumber Co. Ltd.	sawmill	HW	135,000	51,300	13,500	16,200	
	Brookfield Lumber Co. Ltd.	sawmill	SW	50,000	19,000	5,000	6,000	
	Two Rivers Lumber Ltd.	sawmill	HW	15,000	5,700	1,500	1,800	
	Clifford Long & Sons Ltd.	sawmill	SW	15,000	NA	NA	NA	
Total 100km					235,144	61,880	74,256	371,280
Softwood					38,000	10,000	12,000	60,000
Mixed					19,000	5,000	6,000	30,000
Hardwood					216,144	56,880	68,256	341,280
Total					273,144	71,880	86,256	431,280

NA = Not applicable

Nav = Not available

Bridgetown

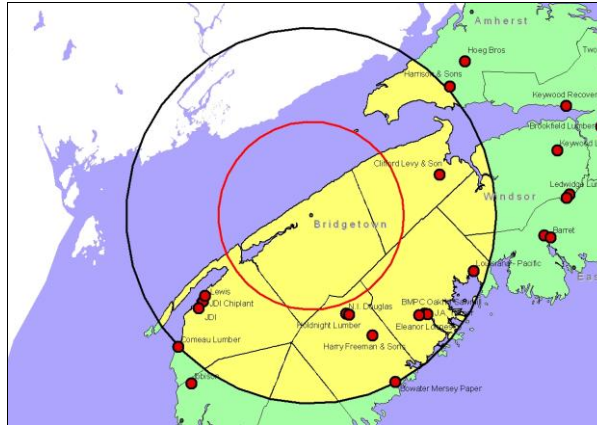


Figure 4.2 Sawmill locations

Table 4.2 Sawmill Residue (m³)

Within Radius	Mill	Type	Species	Volume	Residues			Total
					Chips	Slab, Shavings, Sawdust	Bark	
50km	NA							
100km	Brooklyn Power	power plant	mixed	450,000		Competitor		
	J. D. Irving Ltd. - Weymouth Chip Plant	chip	SW	219,000	NA	NA	NA	
	J. D. Irving Ltd.	export	mixed	95,000	NA	NA	NA	
	Louisiana-Pacific Canada Limited	other	HW	150,000		Competitor		
	Bowater Mersey Paper Company Limited	pulp & paper	SW	352,000	Minimal	Minimal	Minimal	
	BMPC Oakhill Sawmill	sawmill	Nav	418,800	159,144	41,880	50,256	
	Harry Freeman & Son Ltd.	sawmill	HW	418,800	159,144	41,880	50,256	
	J.D. Irving Ltd. - Weymouth Sawmill	sawmill	mixed	418,800	159,144	41,880	50,256	
	Comeau Lumber Ltd.	sawmill	SW	50,000	19,000	5,000	6,000	
	N.F. Douglas Lumber Ltd.	sawmill	SW	50,000	19,000	5,000	6,000	
	Holdright Lumber Products	sawmill	SW	25,000	9,500	2,500	3,000	
	J.A. Turner & Sons (1987) Ltd.	sawmill	mixed	25,000	9,500	2,500	3,000	
	Turner and Turner Lumber Limited	sawmill	mixed	25,000	9,500	2,500	3,000	
	Elmer Lohnes Lumbering Ltd.	sawmill	SW	15,000	5,700	1,500	1,800	
	Clifford Levy & Son	sawmill	SW	15,000	5,700	1,500	1,800	
	Lewis Mouldings & Wood Specialists	sawmill	SW	15,000	5,700	1,500	1,800	
Total 100km					561,032	147,640	177,168	885,840
Softwood					64,600	17,000	20,400	102,000
Mixed					337,288	88,760	106,512	532,560
Hardwood					159,144	41,880	50,256	251,280
Total					561,032	147,640	177,168	885,840

NA = Not applicable

Nav = Not available

Eastern Passage

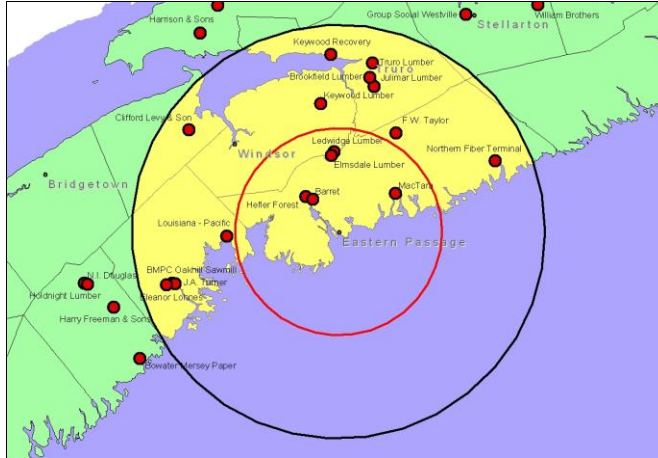


Figure 4.3 Sawmill locations

Table 4.3 Sawmill Residue (m³)

Within Radius	Mill	Type	Species	Volume	Residues			Total
					Chips	Slab, Shavings, Sawdust	Bark	
50km	Barrett Lumber Company Ltd.	sawmill	SW	25,000	9,500	2,500	3,000	
	Ledwidge Lumber Co. Ltd.	sawmill	mixed	418,800	159,144	41,880	50,256	
	MacTara Ltd.	sawmill	SW	418,800	159,144	41,880	50,256	
	Turner and Turner Lumber Limited	sawmill	mixed	25,000	9,500	2,500	3,000	
Total 50km					337,288	88,760	106,512	532,560
100km	Keywood Recovery Inc.	chip	mixed	219,000		Competitor		
	Northern Fibre Terminal Inc.	chip	mixed	219,000		Competitor		
	Louisiana-Pacific Canada Limited	other	HW	150,000		Competitor		
	BMPC Oakhill Sawmill	sawmill	Nav	418,800	159,144	41,880	50,256	
	Truro Lumber Limited	sawmill	HW	418,800	159,144	41,880	50,256	
	Julimar Lumber Co. Ltd.	sawmill	HW	135,000	51,300	13,500	16,200	
	Elmsdale Lumber Co., Ltd.	sawmill	SW	135,000	51,300	13,500	16,200	
	Brookfield Lumber Co. Ltd.	sawmill	SW	50,000	19,000	5,000	6,000	
	Hefler Forest Products Ltd.	sawmill	SW	50,000	19,000	5,000	6,000	
	F.W. Taylor Lumber Ltd.	sawmill	SW	25,000	9,500	2,500	3,000	
	J.A. Turner & Sons (1987) Ltd.	sawmill	mixed	25,000	9,500	2,500	3,000	
	Elmer Lohmes Lumbering Ltd.	sawmill	SW	15,000	5,700	1,500	1,800	
	Two Rivers Lumber Ltd.	sawmill	HW	15,000	5,700	1,500	1,800	
	Clifford Long & Sons Ltd.	sawmill	SW	15,000	5,700	1,500	1,800	
Total 100km					494,988	130,260	156,312	781,560
Softwood					278,844	73,380	88,056	440,280
Mixed					337,288	88,760	106,512	532,560
Hardwood					216,144	56,880	68,256	341,280
Total					832,276	219,020	262,824	1314,120

NA = Not applicable

Nav = Not available

Port Hawkesbury

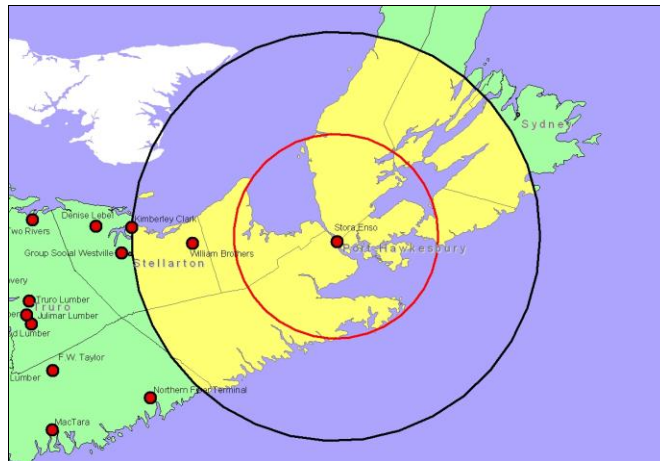


Figure 4.4 Sawmill locations; Port Hawkesbury site

Table 4.4 Sawmill Residue (m³)

Within Radius	Mill	Type	Species	Volume	Residues			Total
					Chips	Slab, Shavings, Sawdust	Bark	
50km	Stora Enso Port Hawkesbury Ltd.	pulp & paper	SW	352,000	Minimal	Minimal	Minimal	
Total 50km					Minimal	Minimal	Minimal	Minimal
100km	Kimberly-Clark Nova Scotia	pulp & paper	SW	352,000	Minimal	Minimal	Minimal	
	Williams Brothers (1986) Ltd.	sawmill	SW	50,000	19,000	5,000	6,000	
Total 100km					19,000	5,000	6,000	30,000
Softwood					19,000	5,000	6,000	30,000
Mixed					0	0	0	0
Hardwood					0	0	0	0
Total					19,000	5,000	6,000	30,000

NA = Not applicable

Nav = Not available

Stellarton

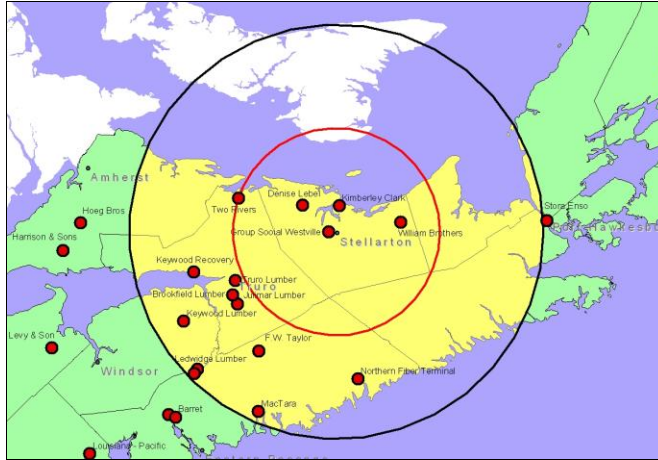


Figure 4.5 Sawmill locations

Table 4.5 Sawmill Residue (m³)

Within Radius	Mill	Type	Species	Volume	Residues			Total
					Chips	Slab, Shavings, Sawdust	Bark	
50km	Kimberly-Clark Nova Scotia	pulp & paper	SW	352,000	Minimal	Minimal	Minimal	
	Deniso Lebel Inc.	sawmill	mixed	135,000	51,300	13,500	16,200	
	Groupe Savoie Westville Division	sawmill	mixed	50,000	19,000	5,000	6,000	
	Williams Brothers (1986) Ltd.	sawmill	SW	50,000	19,000	5,000	6,000	
	Prime Lumber Ltd.	sawmill	SW	25,000	9,500	2,500	3,000	
	Two Rivers Lumber Ltd.	sawmill	HW	15,000	5,700	1,500	1,800	
Total 50km					104,500	27,500	33,000	165,000
100km	Keywood Recovery Incorporated	chip	mixed	219,000		Competitor		
	Northern Fibre Terminal Inc.	chip	Mixed	219,000		Competitor		
	H. C. Haynes Inc. Truro Colchester	export	HW	150,000		Competitor		
	Ledwidge Lumber Co. Ltd.	sawmill	mixed	418,800	159,144	41,880	50,256	
	MacTara Ltd.	sawmill	SW	418,800	159,144	41,880	50,256	
	Truro Lumber Limited	sawmill	HW	418,800	159,144	41,880	50,256	
	Julimar Lumber Co. Ltd.	sawmill	HW	135,000	51,300	13,500	16,200	
	Elmsdale Lumber Co., Ltd.	sawmill	SW	135,000	51,300	13,500	16,200	
	Brookfield Lumber Co. Ltd.	sawmill	SW	50,000	19,000	5,000	6,000	
	F.W. Taylor Lumber Ltd.	sawmill	SW	25,000	9,500	2,500	3,000	
Total 100km					608,532	160,140	192,168	960,840
Softwood					267,444	70,380	84,456	422,280
Mixed					229,444	60,380	72,456	362,280
Hardwood					216,144	56,880	68,256	341,280
Total					713,032	187,640	225,168	1,125,840

NA = Not applicable

Nav = Not available

Sydney

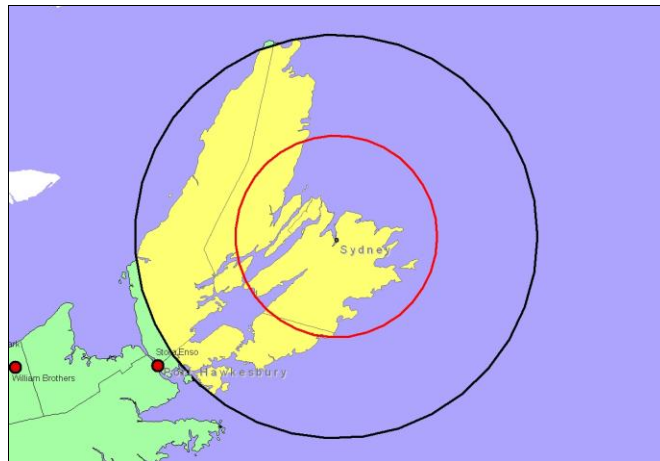


Figure 4.6 Sawmill locations; Sydney site

There are no sawmills within either the 50km or 100km radii for Sydney.

Truro

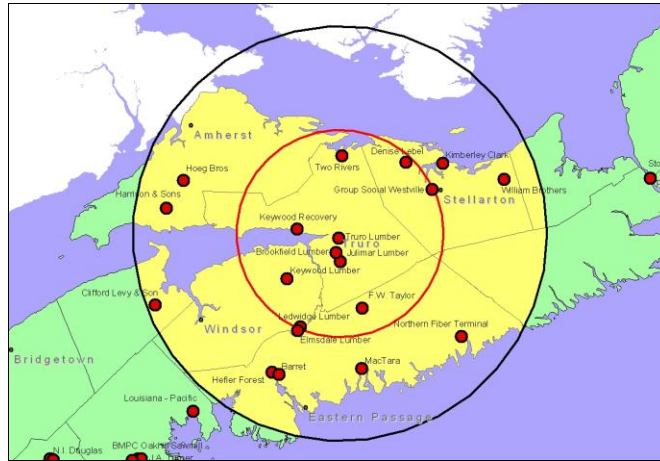


Figure 4.7 Sawmill locations

Table 4.6 Sawmill Residue (m³)

Within Radius	Mill	Type	Species	Volume	Residues			Total
					Chips	Slab, Shavings, Sawdust	Bark	
50km	Keywood Recovery Incorporated	chip	mixed	219,000		Competitor		
	H. C. Haynes Inc. Truro Colchester	export	HW	150,000		Competitor		
	Ledwidge Lumber Co. Ltd.	sawmill	mixed	418,800	159,144	41,880	50,256	
	Truro Lumber Limited	sawmill	HW	418,800	159,144	41,880	50,256	
	Deniso Lebel Inc.	sawmill	mixed	135,000	51,300	13,500	16,200	
	Elmsdale Lumber Co., Ltd.	sawmill	SW	135,000	51,300	13,500	16,200	
	Julimar Lumber Co. Ltd.	sawmill	HW	135,000	51,300	13,500	16,200	
	Brookfield Lumber Co. Ltd.	sawmill	SW	50,000	19,000	5,000	6,000	
	Groupe Savoie Westville Division	sawmill	mixed	50,000	19,000	5,000	6,000	
	F.W. Taylor Lumber Ltd.	sawmill	SW	25,000	9,500	2,500	3,000	
	Two Rivers Lumber Ltd.	sawmill	HW	15,000	5,700	1,500	1,800	
Total 50km					525,388	138,260	165,912	829,560
100km	Northern Fibre Terminal Inc.	chip	Mixed	219,000		Competitor		
	Kimberly-Clark Nova Scotia	pulp & paper	SW	352,000	Minimal	Minimal	Minimal	
	MacTara Ltd.	sawmill	SW	418,800	159,144	41,880	50,256	
	Hefler Forest Products Ltd.	sawmill	SW	50,000	19,000	5,000	6,000	
	Williams Brothers (1986) Ltd.	sawmill	SW	50,000	19,000	5,000	6,000	
	Barrett Lumber Company Ltd.	sawmill	SW	25,000	9,500	2,500	3,000	
	Prime Lumber Ltd.	sawmill	SW	25,000	9,500	2,500	3,000	
	Clifford Long & Sons Ltd.	sawmill	SW	15,000	5,700	1,500	1,800	
Total 100km					221,844	58,380	70,056	350,280
Softwood					301,644	79,380	95,256	476,280
Mixed					229,444	60,380	72,456	362,280
Hardwood					216,144	56,880	68,256	341,280
Total					747,232	196,640	235,968	1179,840

NA = Not applicable

Nav = Not available

Windsor

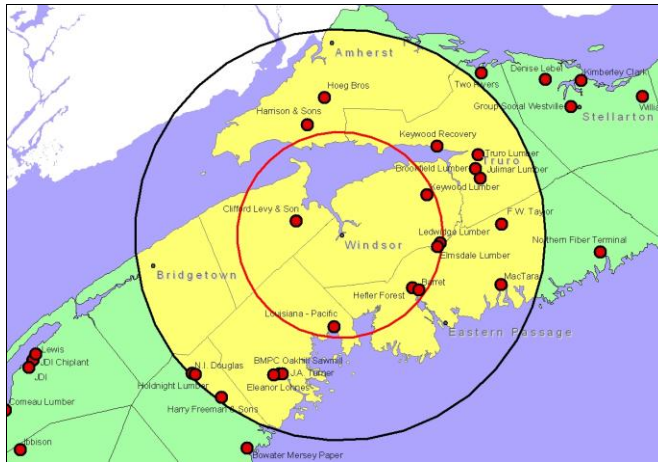


Figure 4.8 Sawmill locations

Table 4.7 Sawmill Residue (m³)

Within Radius	Mill	Type	Species	Volume	Residues			Total
					Chips	Slab, Shavings, Sawdust	Bark	
50km	Clifford Long & Sons Ltd.	sawmill	SW	15,000	5,700	1,500	1,800	
	Louisiana-Pacific Canada Limited	other	HW	150,000		Competitor		
Total 50km					5,700	1,500	1,800	9,000
100km	Keywood Recovery Incorporated	chip	mixed	219,000		Competitor		
	H. C. Haynes Inc. Truro Colchester	export	HW	150,000		Competitor		
	F.W. Taylor Lumber Ltd.	sawmill	SW	25,000	9,500	2,500	3,000	
	BMPC Oakhill Sawmill	sawmill	Nav	418,800	159,144	41,880	50,256	
	Harry Freeman & Son Ltd.	sawmill	HW	418,800	159,144	41,880	50,256	
	Truro Lumber Limited	sawmill	HW	418,800	159,144	41,880	50,256	
	Julimar Lumber Co. Ltd.	sawmill	HW	135,000	51,300	13,500	16,200	
	Brookfield Lumber Co. Ltd.	sawmill	SW	50,000	19,000	5,000	6,000	
	N.F. Douglas Lumber Ltd.	sawmill	SW	50,000	19,000	5,000	6,000	
	C.E. Harrison & Sons Ltd.	sawmill	Nav	50,000	19,000	5,000	6,000	
	Hoeg Bros. Lumber Ltd.	sawmill	SW	50,000	19,000	5,000	6,000	
	Holdright Lumber Products	sawmill	SW	25,000	9,500	2,500	3,000	
	J.A. Turner & Sons (1987) Ltd.	sawmill	mixed	25,000	9,500	2,500	3,000	
	Turner and Turner Lumber Limited	sawmill	mixed	25,000	9,500	2,500	3,000	
	Elmer Lohnes Lumbering Ltd.	sawmill	SW	15,000	5,700	1,500	1,800	
Total 50km					648,432	170,640	204,768	1,023,840
Softwood					87,400	23,000	27,600	138,000
Mixed					197,144	51,880	62,256	311,280
Hardwood					369,588	97,260	116,712	583,560
Total					654,132	172,140	206,568	1,032,840

NA = Not applicable

Nav = Not available

Yarmouth

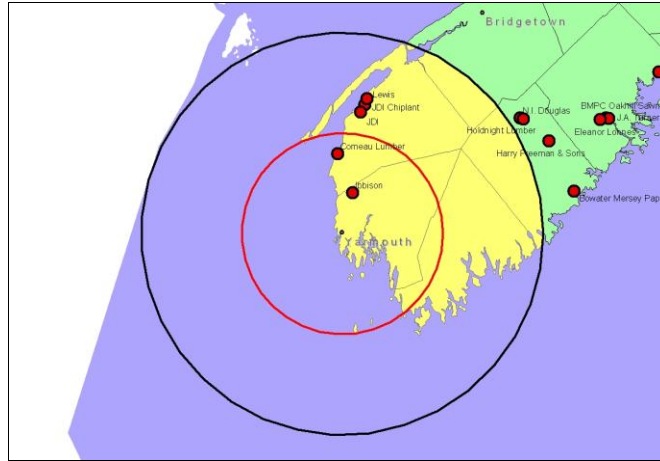


Figure 4.9 Sawmill locations

Table 4.8 Sawmill Residue (m³)

Within Radius	Mill	Type	Species	Volume	Residues			Total
					Chips	Slab, Shavings, Sawdust	Bark	
50km	Comeau Lumber Ltd.	sawmill	SW	50,000	19,000	5,000	6,000	
	Ibbitson Sawmills Inc.	sawmill	Nav	25,000	9,500	2,500	3,000	
Total 50km					28,500	7,500	9,000	45,000
100km	J. D. Irving Ltd. - Weymouth Chip Plant	chip	SW	219,000	NA	NA	NA	
	J.D. Irving Ltd. - Weymouth Sawmill	sawmill	Mixed	418,800	159,144	41,880	50,256	
	Lewis Mouldings & Wood Specialists	sawmill	SW	15,000	5,700	1,500	1,800	
Total 100km					164,844	43,380	52,056	260,280
Softwood					24,700	6,500	7,800	39,000
Mixed					168,644	44,380	53,256	266,280
Hardwood					0	0	0	0
Total					193,344	50,880	61,056	305,280

NA = Not applicable

Nav = Not available

Appendix 5. Road Density

Amherst

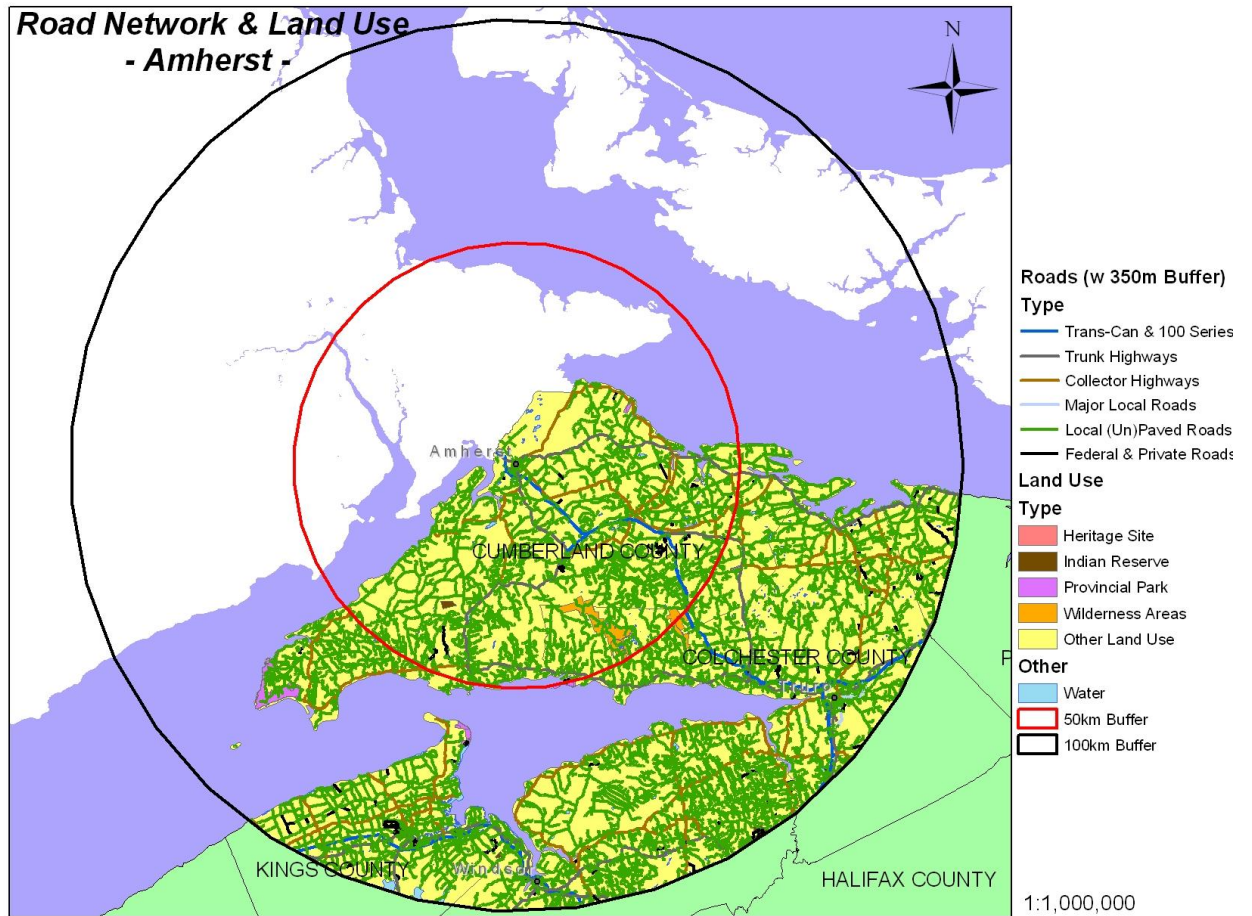


Table 5.1 Total length of roads by type

Road Type	50 km	100 km
Highways & Arterials (100 series)	151	453
Trunk (200 series)	179	543
Collector (300 series)	231	835
All Other Roads (i.e. Local & Unpaved Roads)	3,157	10,049
Total	3,718	11,880

Bridgetown

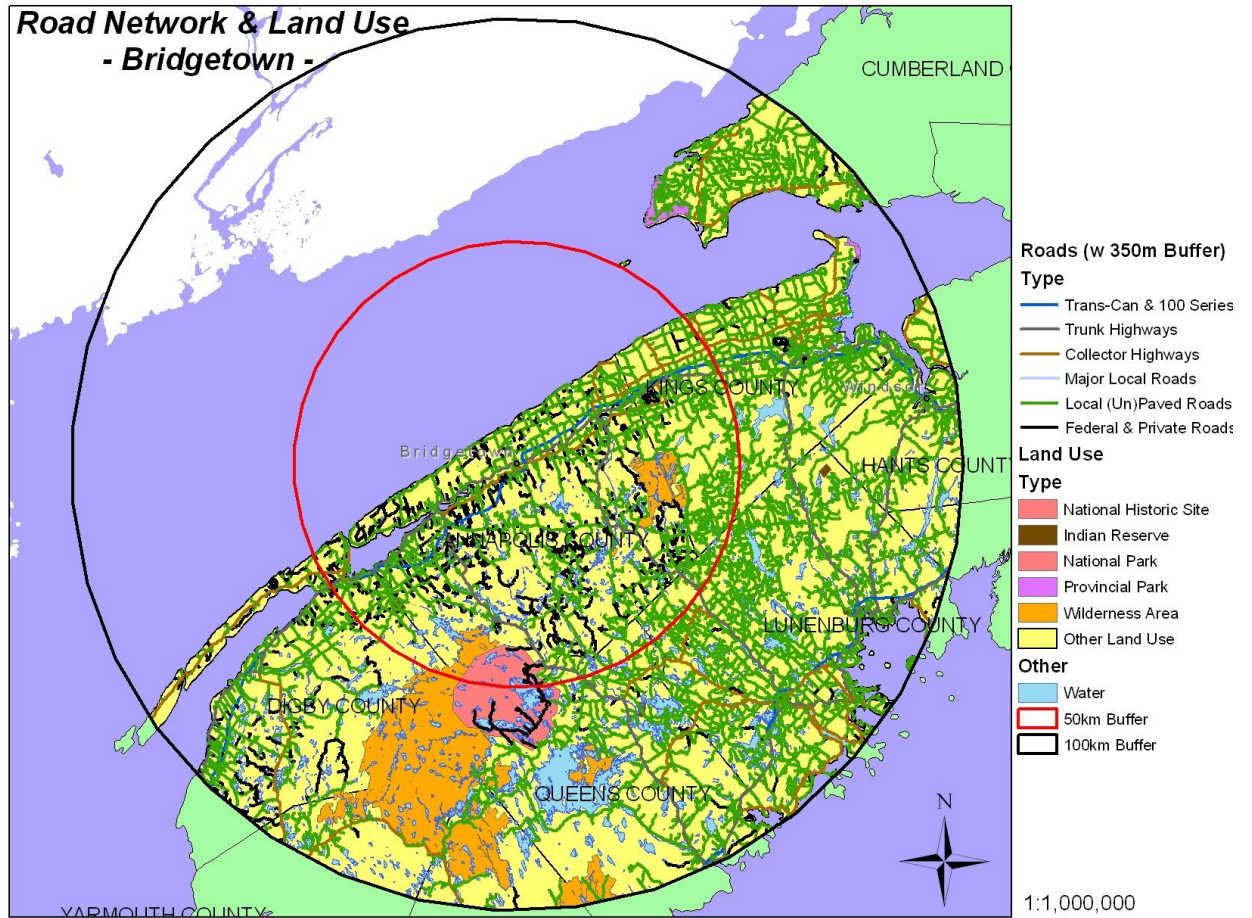


Table 5.2 Total length of roads by type

Road Type	50 km	100 km
Highways & Arterials (100 series)	151	453
Trunk (200 series)	179	543
Collector (300 series)	231	835
All Other Roads (i.e. Local & Unpaved Roads)	3,912	11,424
Total	4,474	13,254

Eastern Passage

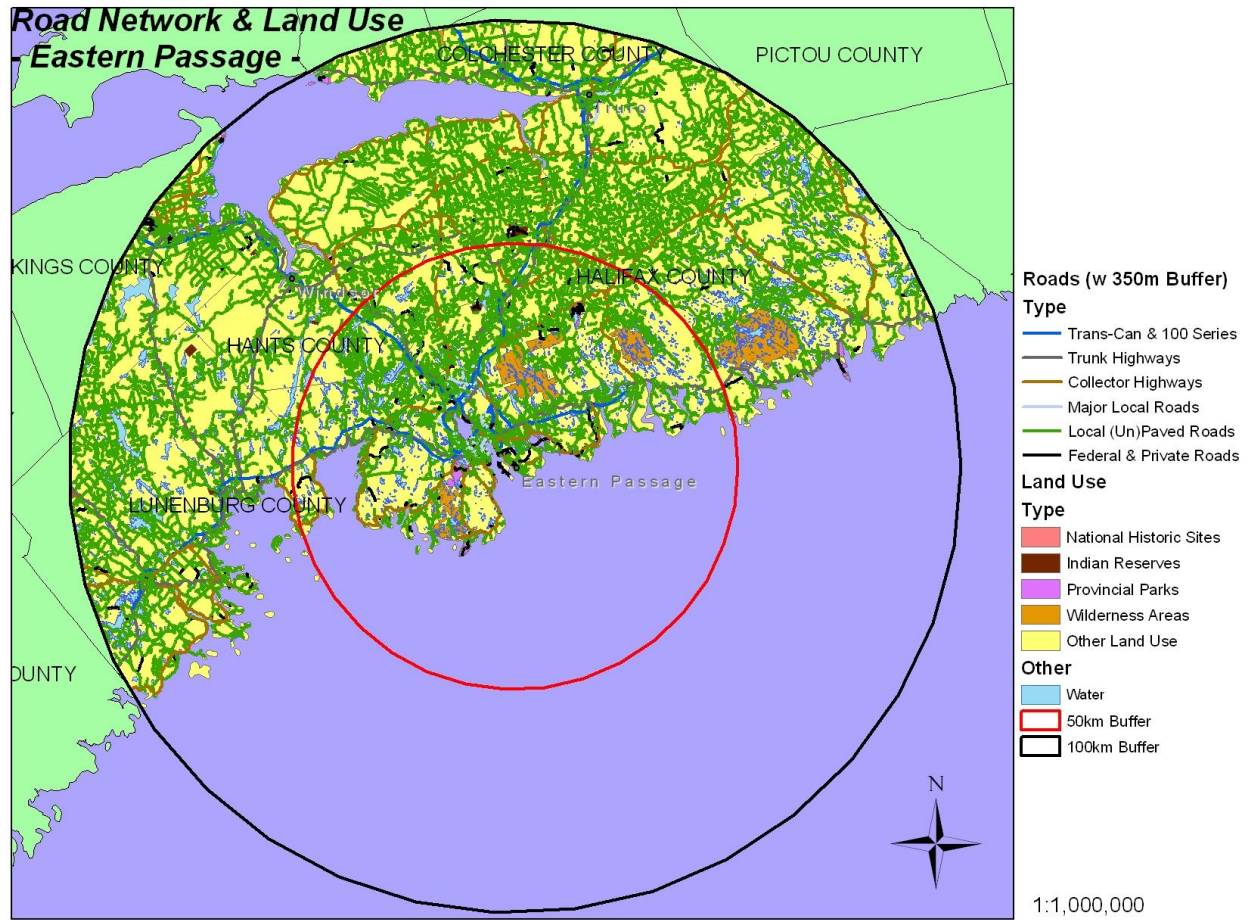


Table 5.3 Total length of roads by type

Road Type	50 km	100 km
Highways & Arterials (100 series)	397	769
Trunk (200 series)	254	827
Collector (300 series)	383	1,067
All Other Roads (i.e. Local & Unpaved Roads)	5,230	15,889
Total	6,264	18,551

Port Hawkesbury

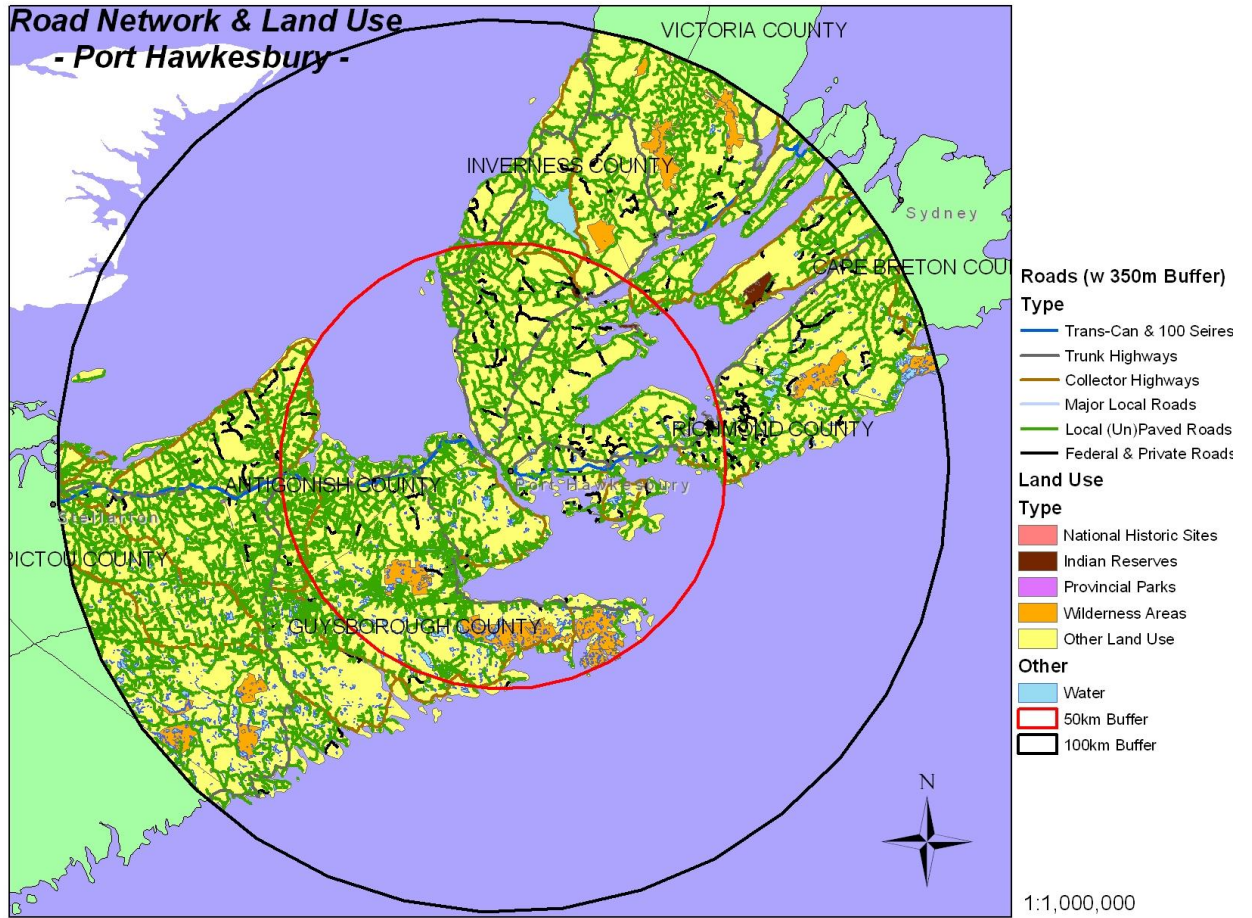


Table 5.4 Total length of roads by type

Road Type	50 km	100 km
Highways & Arterials (100 series)	78	161
Trunk (200 series)	328	717
Collector (300 series)	248	808
All Other Roads (i.e. Local & Unpaved Roads)	4,051	10,833
Total	4,705	12,519

Stellarton

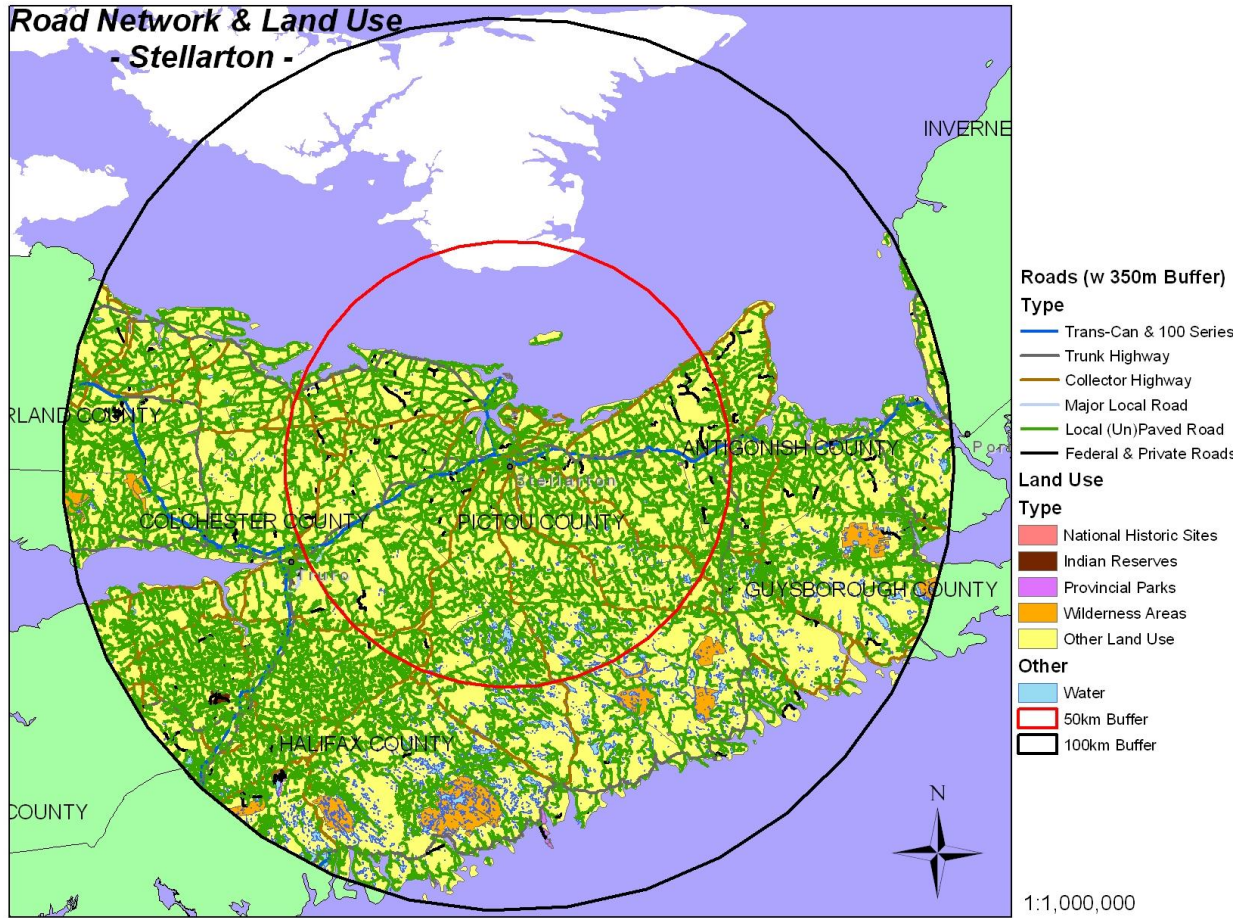


Table 5.5 Total length of roads by type

Road Type	50 km	100 km
Highways & Arterials (100 series)	204	560
Trunk (200 series)	163	769
Collector (300 series)	474	1,263
All Other Roads (i.e. Local & Unpaved Roads)	5,553	16,691
Total	6,394	19,283

Sydney

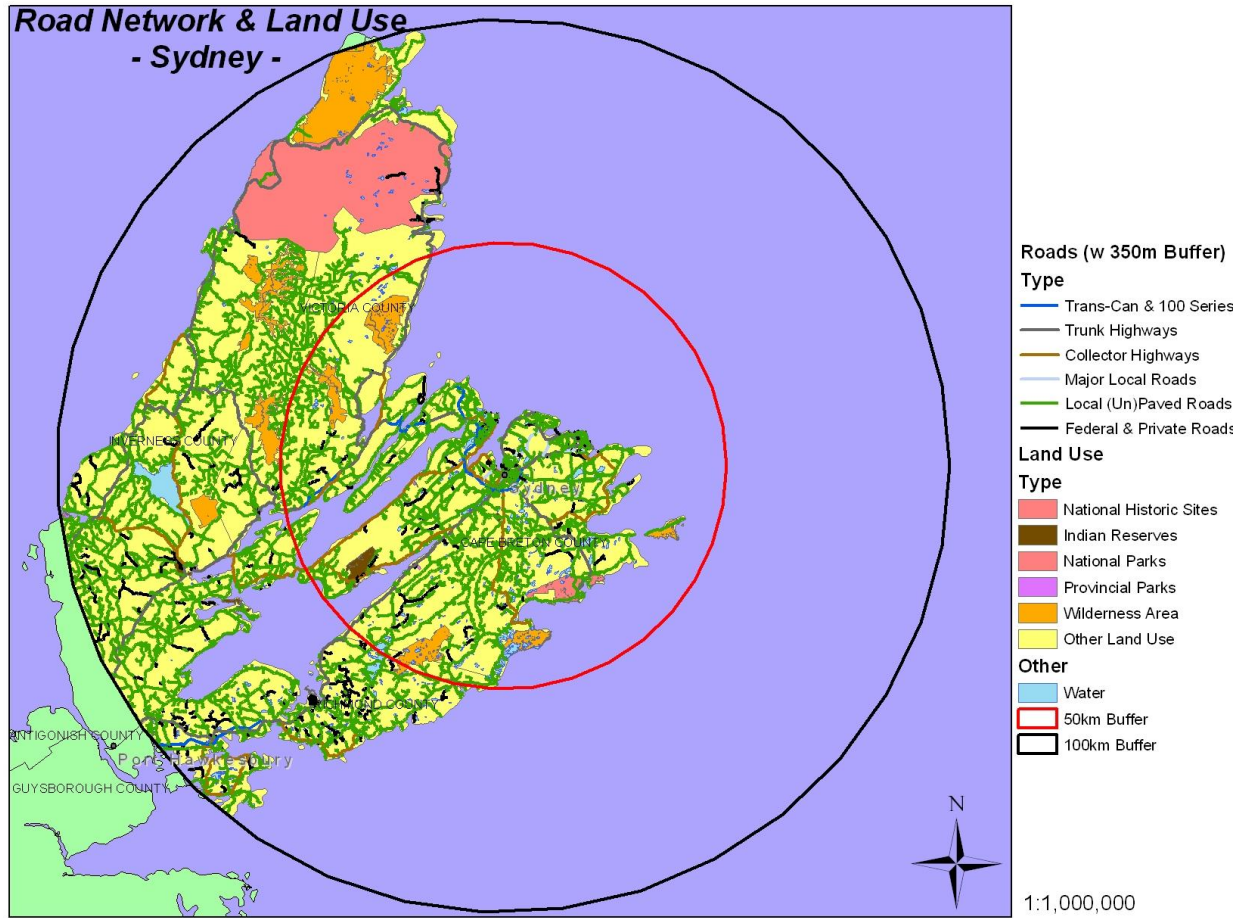


Table 5.6 Total length of roads by type

Road Type	50 km	100 km
Highways & Arterials (100 series)	96	125
Trunk (200 series)	239	644
Collector (300 series)	235	409
All Other Roads (i.e. Local & Unpaved Roads)	3,157	7,052
Total	3,726	8,231

Truro

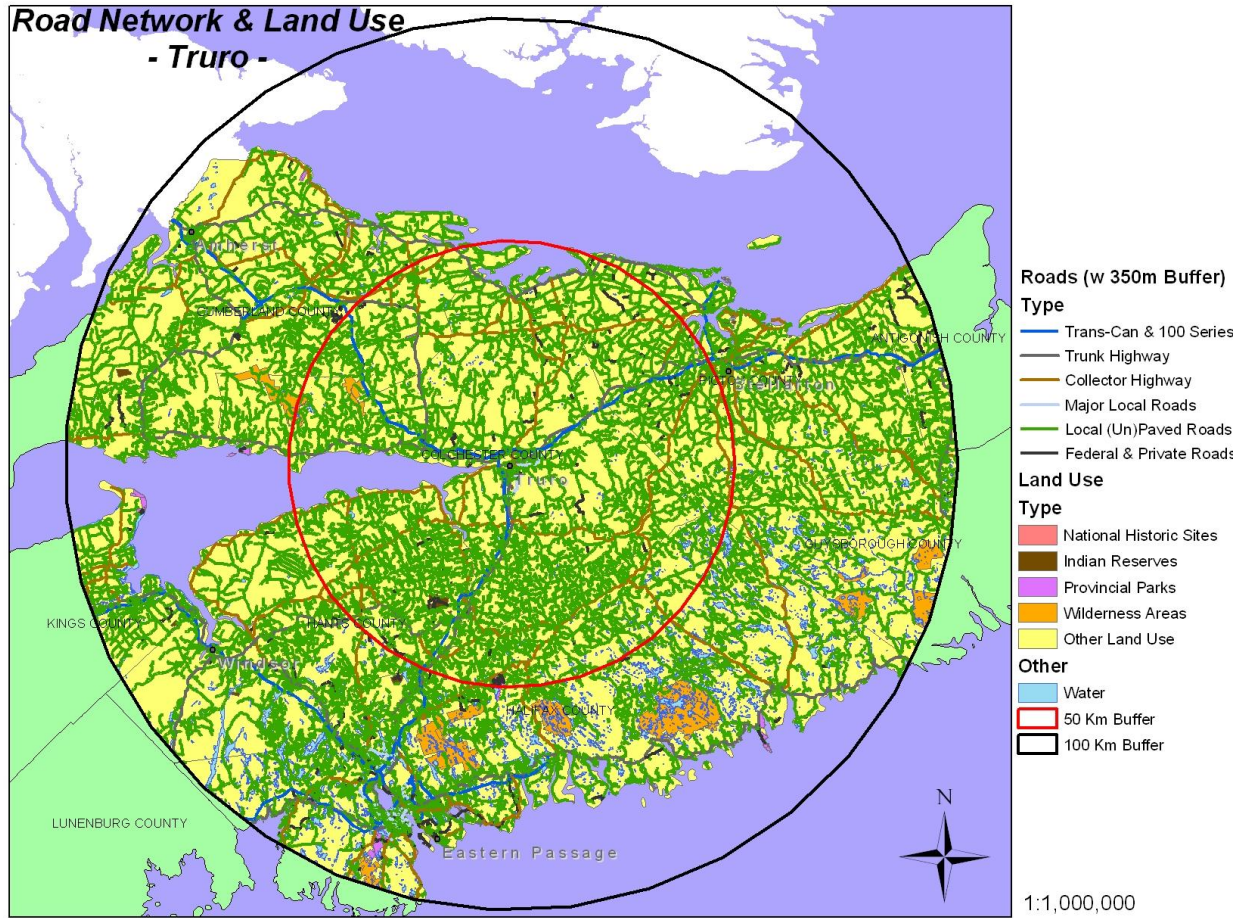


Table 5.7 Total length of roads by type

Road Type	50 km	100 km
Highways & Arterials (100 series)	369	1,002
Trunk (200 series)	288	1,006
Collector (300 series)	611	1,547
All Other Roads (i.e. Local & Unpaved Roads)	7,907	21,309
Total	9,175	24,863

Windsor

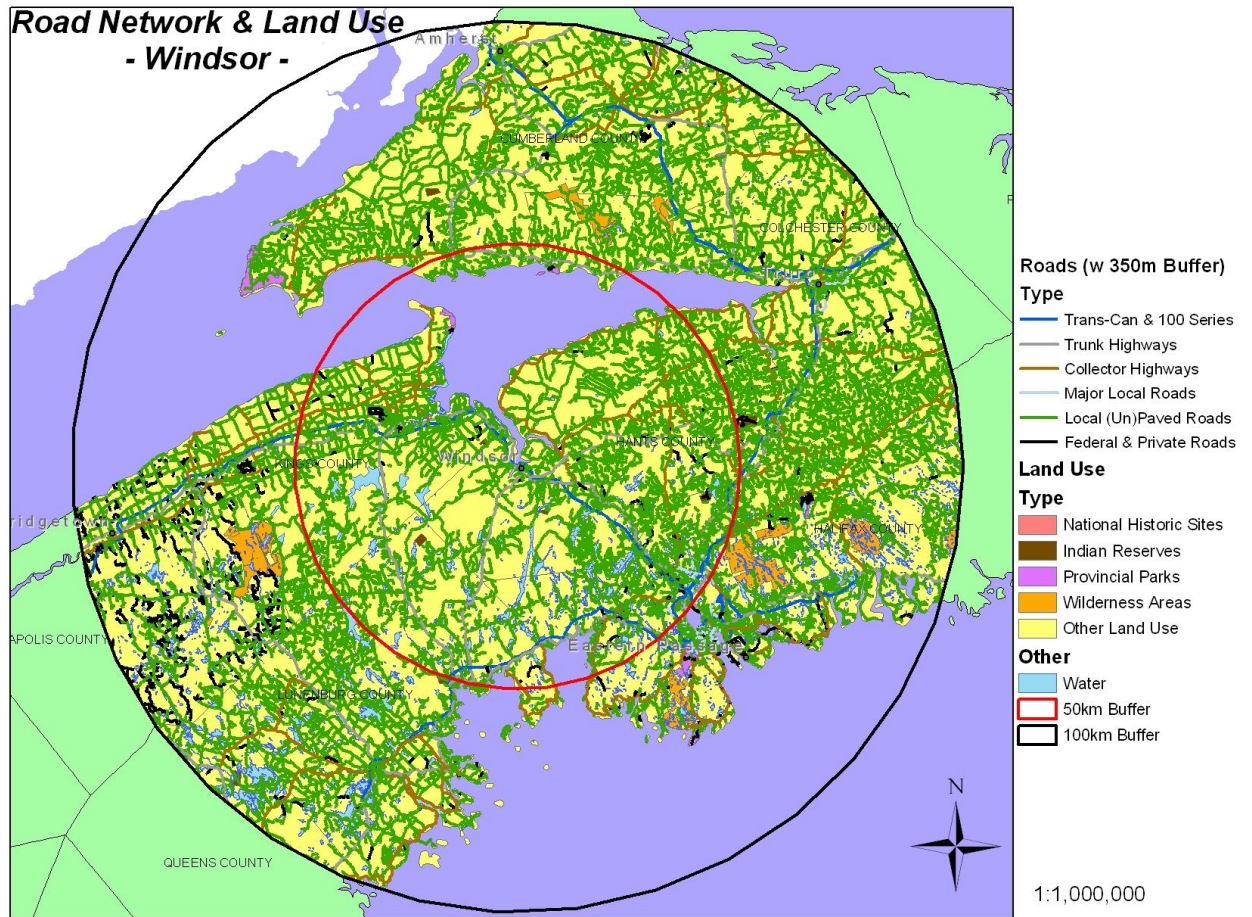


Table 5.8 Total length of roads by type

Road Type	50 km	100 km
Highways & Arterials (100 series)	318	1,020
Trunk (200 series)	441	1,073
Collector (300 series)	361	1,496
All Other Roads (i.e. Local & Unpaved Roads)	6,610	21,907
Total	7,729	25,496

Yarmouth

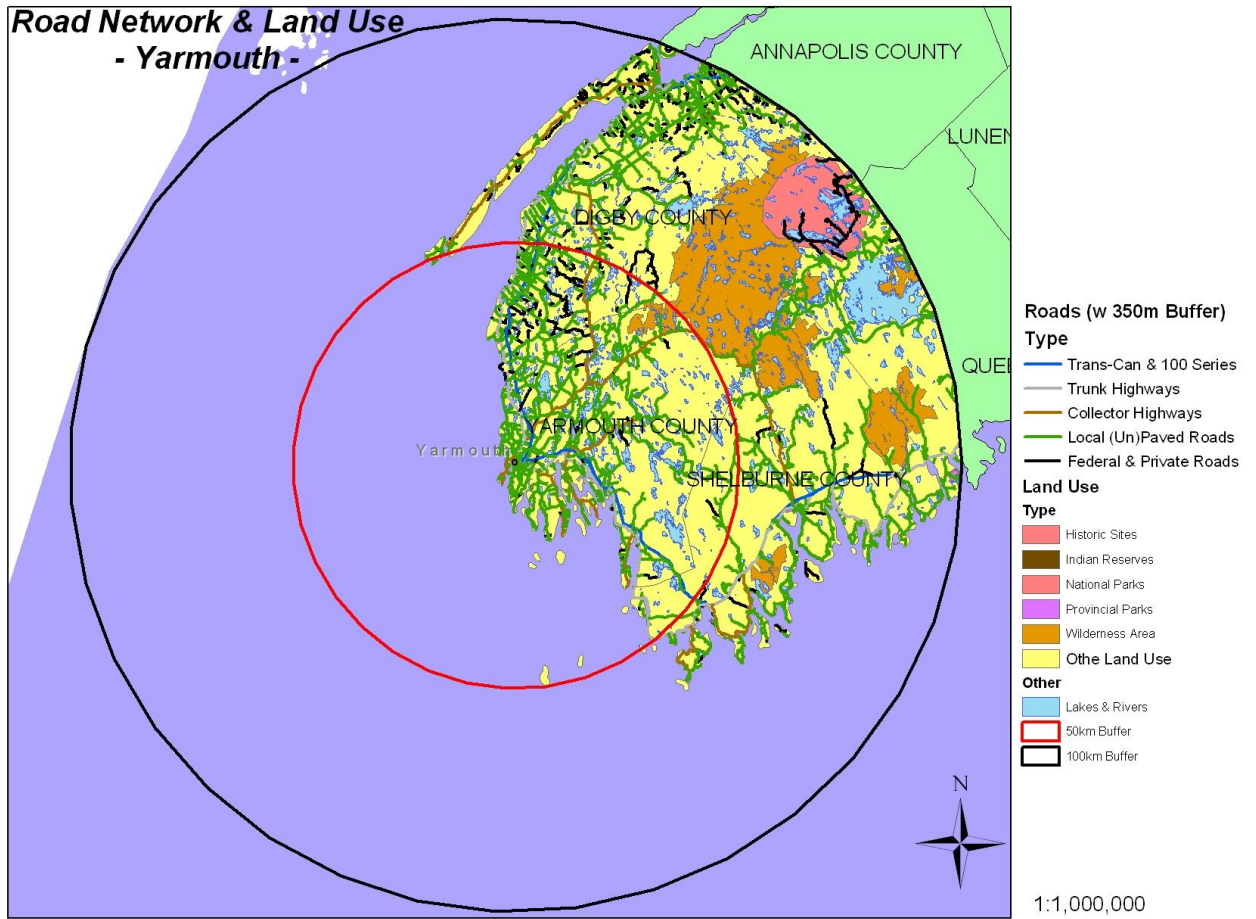


Table 5.9 Total length of roads by type

Road Type	50 km	100 km
Highways & Arterials (100 series)	118	193
Trunk (200 series)	126	309
Collector (300 series)	161	352
All Other Roads (i.e. Local & Unpaved Roads)	1,553	3,933
Total	1,958	4,786