



# ● MINERAL ● AGGREGATES ● IN ONTARIO

Statistical Update

**2 0 0 4**

Prepared by:



**THE ONTARIO AGGREGATE  
RESOURCES CORPORATION**



# **MINERAL AGGREGATES IN ONTARIO**

## **PRODUCTION STATISTICS**

**2004**

**Prepared by**

**The Ontario Aggregate Resources Corporation**



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## MINERAL AGGREGATES IN ONTARIO

### Overview

Mineral aggregate is an indispensable commodity to the infrastructure of our modern ‘built environment’. High quality aggregate is a key ingredient in the production of ready-mixed concrete, manufactured concrete products of all types (block, brick, precast, etc.), asphalt pavements and sub-surface fill which is so important in providing drainage and load bearing base for structures. Aggregates literally provide the basis for a \$37 billion construction industry that employs over 270,000 people in Ontario. The aggregate industry employs an estimated 7,000 people directly and some 34,000 people indirectly in services such as transportation and equipment. The aggregate industry also makes a significant contribution to the \$1.9 billion cement and concrete manufacturing industry, the \$1.3 billion glass and glass products industry, and a \$2.9 billion pharmaceutical and medicine manufacturing industry in Ontario.

In 2004, this basic non-renewable resource was supplied from 2,752 licensed aggregate sites on private land in designated parts of the Province and 3,314 permitted sites on Crown land. It is estimated that over 50% of all aggregate produced in the Province is sold to public authorities for the construction and maintenance of the public infrastructure such as roads, bridges, etc.

### Management of Ontario’s Mineral Aggregate Resources

At the Provincial level, the management of Ontario’s aggregate resources is the responsibility of the Ministry of Natural Resources (MNR). In 1997, in an effort to better focus resources on the delivery of core programs, the MNR took steps to build a partnership with private industry to manage certain administrative functions. Accordingly, subsections 6.1 (1) and 6.1 (3) of the *Aggregate Resources Act*, R.S.O. 1990, Chap. A.8, as amended (the “Act”), gave the Minister the power to create the Aggregate Resources Trust (the “Trust”) and appoint a trustee to look after its affairs. TOARC was incorporated in 1997 to act as trustee of the Aggregate Resources Trust, a trust created under the authority of the Aggregate Resources Act and pursuant to a trust indenture between the Corporation and the Minister of Natural Resources for the Province of Ontario.

The Trust Purposes include:

1. The rehabilitation of land for which a Licence or Permit has been revoked and for which final rehabilitation has not been completed;
2. The rehabilitation of abandoned pits and quarries, including surveys and studies respecting their location and condition;
3. Research on aggregate resources management, including rehabilitation;
4. Payments to the Crown in right of Ontario and to regional municipalities, counties and local municipalities in accordance with regulations made pursuant to the Act;
5. The management of the Abandoned Pits and Quarries Rehabilitation Fund;

6. Such other purposes as may be provided for by or pursuant to Paragraph 6.1(2) 5 of the Act.

In August of 1999, Addendum 1 to the Original Trust Indenture was signed to expand the Trust Purposes to include:

- (a) The education and training of persons engaged in or interested in the management of the aggregate resources of Ontario, the operation of pits or quarries, or the rehabilitation of land from which aggregate has been excavated;
- (b) The gathering, publishing and dissemination of information relating to the management of the aggregate resources of Ontario, the control and regulation of aggregate operations and the rehabilitation of land from which aggregate has been excavated.

TOARC is governed by a multi-stakeholder board of directors. The seven-member Board is composed of directors from the Aggregate Producer's Association of Ontario (APAO), representatives from environmental groups, municipalities and non-APAO member aggregate producers. TOARC maintains its own office facilities and management staff. TOARC as the ARA trustee is responsible to the Minister of Natural Resources to fulfill the Trust purposes as outlined in Bill 52. The MNR maintains a presence on the Board with an ex officio representative.

Since its inception in 1997, TOARC has focused upon the efficient collection and disbursement of aggregate resource charges, the auditing of production reports, the rehabilitation of abandoned pits and quarries through the MAAP program, the creation of an inventory of sites where licences have been revoked, as well as their rehabilitation, and the general management of the Trust assets.

### **Role of the Ministry of Natural Resources**

While the MNR has developed certain external partnerships for the delivery of portions of their Aggregate Resources Program, their mission remains:

- To protect the provincial interest in aggregate resources and develop, maintain and enforce appropriate technical standards.
- To provide leadership in the development of partnerships with key stakeholders for the effective management of aggregate resources to benefit the people of Ontario.

With the guidance of the mission statements, a number of program objectives have been created which drive MNR's daily business practices. These program objectives include:

- Promote exploration and ensure availability through the conservation and orderly development of aggregate resources.



- Ensure that aggregate resources are developed with a high standard of environmental protection and public safety.
- Upgrade and maintain current information databases essential for sound technical and scientific decisions.
- Ensure fair revenue from the production of Crown resources.
- Ensure industry compliance with technical standards.
- Train staff and external clients in skills and knowledge essential for the effective delivery of the Aggregate Resources Program.

The continued business approach for the Aggregate Resources Program is based on the following principles:

- The core business of the program is:
  - Standards and policy development
  - Technical approvals
  - Ensuring compliance with standards
- Private industry clients assume responsibility and accountability for:
  - Compliance reporting
  - Financial management
  - Operations

The delegation of authority policy approved in July of 1998 continues. The objective of this policy is to delegate Ministerial authority to the level that provides the best efficiencies and customer service. Standing committees with the industry continue to encourage ongoing communication and customer service.

Core program staff responsible for the standards and policy development, program design and program coordination, evaluation and monitoring are part of the Aggregate and Petroleum Resources Section, Lands and Waters Branch, Natural Resource Management Division. The districts that have either Aggregate Resources Officers or Aggregate Technicians deliver this program. The specialists and technicians, who are designated inspectors, are the core staff responsible for the acceptance of applications and are leads when dealing with compliance. These inspectors often have responsibility beyond the administrative boundaries of their districts. Also, at the district level, reporting to the Compliance Supervisor, Conservation Officers take an active role in enforcement actions under the Aggregate Resources Act.

In 1997, certain responsibilities with respect to the issuing and administration of permits and wayside permits were delegated to the Ontario Ministry of Transportation (MTO), specific to MTO contracts and needs.

## **Aggregate Production**

Production of mineral aggregates in 2004 totaled approximately 173 million tonnes, up 4.3% from the previous year. Production from licensed operations was up 6.8 million tonnes compared to 2003, an increase of 4.7%. Wayside permit production decreased by 69.5% from 2003 but on a small overall tonnage (.3 million in 2003 compared to .1 million in 2004). Production from aggregate permits on Crown Land decreased marginally from 2003 (7.5 million in 2003 to 7.4 million tonnes in 2004).

Table 1

**AGGREGATE PRODUCTION IN ONTARIO - 1992 - 2004**  
(rounded to nearest million tonnes)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
<b>Licences</b>	101	105	113	109	114	124	124	131	145	145	141	143	150
<b>Wayside Permits*</b>	2	2	2	2	2	1	2	1	1	0	0	0	0
<b>Aggregate Permits</b>	13	12	10	9	9	8	9	11	10	7	7	7	7
<b>Category 14 (Forest Industry)</b>	-	-	-	-	-	-	-	2	3	3	4	3	4
<b>Private Land Non-Designated (estimated)</b>	12	12	11	10	11	11	11	12	12	12	12	12	12
<b>ONTARIO TOTAL</b>	<b>128</b>	<b>131</b>	<b>136</b>	<b>130</b>	<b>136</b>	<b>144</b>	<b>146</b>	<b>157</b>	<b>171</b>	<b>167</b>	<b>164</b>	<b>165</b>	<b>173</b>

\*Wayside Permit production is reported as the 'total applied for' tonnage of all permits issued, adjusted where actual tonnages for completed contracts are known.

\*Actual production for Wayside Permits was .2 million tonnes for 2001, .3 million tonnes for 2002 and .3 million tonnes for 2003, .1 million tonnes for 2004

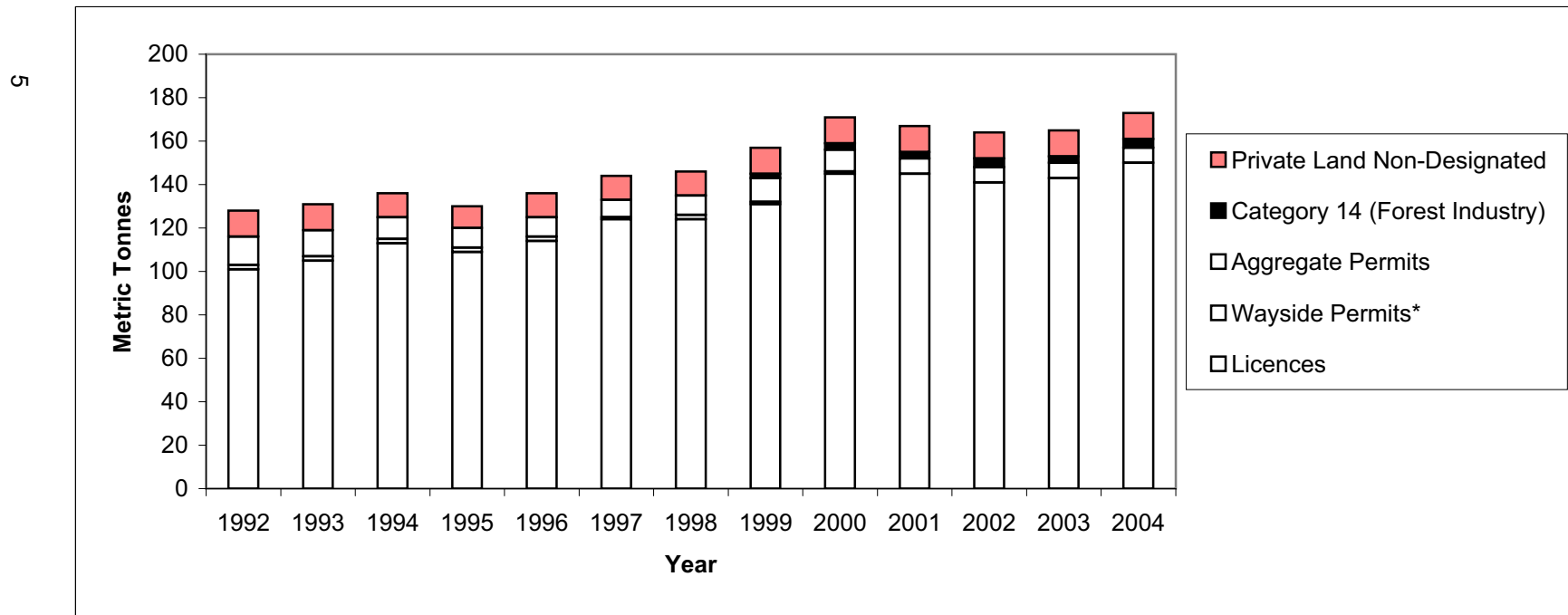




Table 2

**LICENCE AND WAYSIDE PERMIT PRODUCTION  
BY LOWER TIER MUNICIPALITY**

(Reported in Metric Tonnes)

Municipality	Licences	Wayside Permits	Total
<b>Algoma District</b>			
Algoma District, Unorganized	71,980.73		71,980.73
Hilton Tp	48,654.21		48,654.21
Jocelyn Tp	11,819.64		11,819.64
Johnson Tp/Tarbutt & Tarbutt Add'l Tp	27,043.10		27,043.10
Laird Tp/St. Joseph Tp	40,131.72		40,131.72
Macdonald, Meredith & Aberdeen Add'l Tp	67,214.30		67,214.30
Sault Ste. Marie, City of	541,785.48		541,785.48
<b>Sub-Total</b>	<b>808,629.18</b>	<b>0.00</b>	<b>808,629.18</b>
<b>Brant</b>			
Brant, County of/Brantford, City of	2,002,679.25		2,002,679.25
<b>Sub-Total</b>	<b>2,002,679.25</b>	<b>0.00</b>	<b>2,002,679.25</b>
<b>Bruce</b>			
Arran-Elderslie, Municipality of	151,639.01	17,175.00	168,814.01
Brockton, Municipality of	101,232.78		101,232.78
Huron-Kinloss Tp	325,601.77		325,601.77
Kincardine, Municipality of	61,925.56		61,925.56
Northern Bruce Peninsula, Municipality of	200,478.89		200,478.89
Saugeen Shores, Town of	307,683.91		307,683.91
South Bruce, Municipality of	382,692.71		382,692.71
South Bruce Peninsula, Town of	364,139.86		364,139.86
<b>Sub-Total</b>	<b>1,895,394.49</b>	<b>17,175.00</b>	<b>1,912,569.49</b>
<b>Chatham-Kent</b>			
Chatham-Kent, Municipality of	304,718.76		304,718.76
<b>Sub-Total</b>	<b>304,718.76</b>	<b>0.00</b>	<b>304,718.76</b>
<b>Dufferin</b>			
Amaranth Tp/East Luther Grand Valley Tp	223,912.27		223,912.27
East Garafraxa Tp	1,287,485.81		1,287,485.81
Melancthon Tp	363,835.37		363,835.37
Mono Tp	462,164.86		462,164.86
Mulmur Tp	309,812.29		309,812.29
<b>Sub-Total</b>	<b>2,647,210.60</b>	<b>0.00</b>	<b>2,647,210.60</b>
<b>Durham</b>			
Brock Tp	1,485,387.48		1,485,387.48
Clarington, Municipality of	5,307,092.70		5,307,092.70
Oshawa, City of/Scugog Tp/Whitby, Town of	296,473.38		296,473.38
Uxbridge Tp	5,548,825.07		5,548,825.07
<b>Sub-Total</b>	<b>12,637,778.63</b>	<b>0.00</b>	<b>12,637,778.63</b>
<b>Elgin</b>			
Bayham/West Elgin, Municipality of/Malahide Tp	274,168.90		274,168.90
Central Elgin, Municipality of	414,115.65		414,115.65
<b>Sub-Total</b>	<b>688,284.55</b>	<b>0.00</b>	<b>688,284.55</b>

Table 2

**LICENCE AND WAYSIDE PERMIT PRODUCTION  
BY LOWER TIER MUNICIPALITY**

(Reported in Metric Tonnes)

Municipality	Licences	Wayside Permits	Total
<b>Essex</b>			
Amherstburg, Town of/Leamington, Municipality of/Pelee Tp	1,460,523.97		1,460,523.97
Kingsville, Town of	458,351.90		458,351.90
<b>Sub-Total</b>	<b>1,918,875.87</b>	<b>0.00</b>	<b>1,918,875.87</b>
<b>Frontenac</b>			
Frontenac Islands Tp	35,868.44		35,868.44
Kingston, City of	1,747,592.34		1,747,592.34
South Frontenac Tp	431,163.68		431,163.68
<b>Sub-Total</b>	<b>2,214,624.46</b>	<b>0.00</b>	<b>2,214,624.46</b>
<b>Greater Sudbury</b>			
Greater Sudbury, City of	2,157,959.67		2,157,959.67
<b>Sub-Total</b>	<b>2,157,959.67</b>	<b>0.00</b>	<b>2,157,959.67</b>
<b>Grey</b>			
Chatsworth Tp	294,752.17		294,752.17
Georgian Bluffs, Tp	692,848.32		692,848.32
Grey Highlands, Municipality of	620,446.12		620,446.12
Meaford, Municipality of	402,525.40		402,525.40
Southgate Tp	320,317.59		320,317.59
The Blue Mountains, Town of	433,217.96		433,217.96
West Grey, Municipality of	403,478.15		403,478.15
<b>Sub-Total</b>	<b>3,167,585.71</b>	<b>0.00</b>	<b>3,167,585.71</b>
<b>Haldimand</b>			
Haldimand, County of	1,561,178.26		1,561,178.26
<b>Sub-Total</b>	<b>1,561,178.26</b>	<b>0.00</b>	<b>1,561,178.26</b>
<b>Halton</b>			
Burlington, City of/Halton Hills, Town of	5,820,222.01		5,820,222.01
Milton, Town of	5,604,902.96		5,604,902.96
<b>Sub-Total</b>	<b>11,425,124.97</b>	<b>0.00</b>	<b>11,425,124.97</b>
<b>Hamilton</b>			
Hamilton, City of	6,273,185.24	73,945.00	6,347,130.24
<b>Sub-Total</b>	<b>6,273,185.24</b>	<b>73,945.00</b>	<b>6,347,130.24</b>
<b>Hastings</b>			
Belleville, City of	581,640.24		581,640.24
Centre Hastings, Municipality of	148,950.13		148,950.13
Madoc Tp	607,302.94		607,302.94
Marmora & Lake, Municipality of/Stirling-Rawdon, Tp	27,382.60		27,382.60
Quinte West, City of	714,233.72		714,233.72
Tyendinaga Tp	153,762.62		153,762.62
Tweed, Municipality of	28,657.80		28,657.80
<b>Sub-Total</b>	<b>2,261,930.05</b>	<b>0.00</b>	<b>2,261,930.05</b>

Table 2

**LICENCE AND WAYSIDE PERMIT PRODUCTION  
BY LOWER TIER MUNICIPALITY**

(Reported in Metric Tonnes)

Municipality	Licences	Wayside Permits	Total
<b><i>Huron</i></b>			
Ashfield-Colborne-Wawanosh Tp	784,297.07		784,297.07
Bluewater, Municipality of/South Huron, Municipality of	37,475.12		37,475.12
Central Huron, Municipality of	586,200.58		586,200.58
Howick Tp	165,990.47		165,990.47
Huron East, Municipality of	741,642.68		741,642.68
Morris-Turnberry, Municipality of	124,172.34		124,172.34
North Huron Tp	50,841.17		50,841.17
<b>Sub-Total</b>	<b>2,490,619.43</b>	<b>0.00</b>	<b>2,490,619.43</b>
<b><i>Kawartha Lakes</i></b>			
Kawartha Lakes, City of	6,803,719.72		6,803,719.72
<b>Sub-Total</b>	<b>6,803,719.72</b>	<b>0.00</b>	<b>6,803,719.72</b>
<b><i>Lambton</i></b>			
Enniskillen/Warwick Tp/Plympton-Wyoming, Town of	350,225.89		350,225.89
Lambton Shores, Municipality of	110,328.43		110,328.43
<b>Sub-Total</b>	<b>460,554.32</b>	<b>0.00</b>	<b>460,554.32</b>
<b><i>Lanark</i></b>			
Beckwith Tp	84,437.74		84,437.74
Drummond-North Elmsley Tp	190,310.04		190,310.04
Lanark Highlands Tp	1,621,376.69		1,621,376.69
Mississippi Mills, Town of	147,476.41		147,476.41
Montague Tp	243,761.30		243,761.30
Tay Valley Tp	21,476.92		21,476.92
<b>Sub-Total</b>	<b>2,308,839.10</b>	<b>0.00</b>	<b>2,308,839.10</b>
<b><i>Leeds &amp; Grenville</i></b>			
Athens Tp/Front of Yonge Tp	153,994.94		153,994.94
Augusta Tp	131,460.15		131,460.15
Edwardsburgh-Cardinal Tp	156,260.86		156,260.86
Elizabethtown-Kitley Tp	675,722.59		675,722.59
Leeds and the Thousand Islands Tp	572,809.02		572,809.02
Merrickville-Wolford, Village of	110,482.29		110,482.29
North Grenville Tp	310,486.33		310,486.33
Rideau Lakes Tp	93,538.54		93,538.54
<b>Sub-Total</b>	<b>2,204,754.72</b>	<b>0.00</b>	<b>2,204,754.72</b>
<b><i>Lennox &amp; Addington</i></b>			
Greater Napanee, Town of	309,657.86		309,657.86
Loyalist Tp/Stone Mills Tp	1,497,099.53		1,497,099.53
<b>Sub-Total</b>	<b>1,806,757.39</b>	<b>0.00</b>	<b>1,806,757.39</b>

Table 2

**LICENCE AND WAYSIDE PERMIT PRODUCTION  
BY LOWER TIER MUNICIPALITY**

(Reported in Metric Tonnes)

Municipality	Licences	Wayside Permits	Total
<b>Middlesex</b>			
Adelaide Metcalfe Tp	18,794.00		18,794.00
London, City of	2,180,361.94		2,180,361.94
Lucan Biddulph Tp	22,685.56		22,685.56
Middlesex Centre Tp	624,682.33		624,682.33
North Middlesex, Municipality of	164,572.24		164,572.24
Strathroy-Caradoc Tp	23,988.00		23,988.00
Thames Centre, Municipality of	3,160,415.61		3,160,415.61
<b>Sub-Total</b>	<b>6,195,499.68</b>	<b>0.00</b>	<b>6,195,499.68</b>
<b>Niagara</b>			
Fort Erie, Town of/Pelham, Town of/Port Colborne, City of/ Wainfleet Tp	1,948,669.84		1,948,669.84
Lincoln, Town of/Niagara-on-the-Lake, Town of	1,456,416.70		1,456,416.70
Niagara Falls, City of	1,330,539.64		1,330,539.64
<b>Sub-Total</b>	<b>4,735,626.18</b>	<b>0.00</b>	<b>4,735,626.18</b>
<b>Norfolk</b>			
Norfolk, County of	526,035.50		526,035.50
<b>Sub-Total</b>	<b>526,035.50</b>	<b>0.00</b>	<b>526,035.50</b>
<b>Northumberland</b>			
Alnwick-Haldimand Tp	197,039.77		197,039.77
Brighton, Municipality of	316,166.86		316,166.86
Cramahe Tp	2,181,716.24		2,181,716.24
Hamilton Tp	323,131.23		323,131.23
Port Hope, Municipality of	38,227.04		38,227.04
Trent Hills, Municipality of	238,489.59		238,489.59
<b>Sub-Total</b>	<b>3,294,770.73</b>	<b>0.00</b>	<b>3,294,770.73</b>
<b>Ottawa</b>			
Ottawa, City of	9,873,354.66		9,873,354.66
<b>Sub-Total</b>	<b>9,873,354.66</b>	<b>0.00</b>	<b>9,873,354.66</b>
<b>Oxford</b>			
Blandford-Blenheim Tp	317,500.01		317,500.01
East Zorra-Tavistock Tp/Norwich Tp/Woodstock, City of	271,865.58		271,865.58
South-West Oxford Tp	589,117.67		589,117.67
Zorra Tp	3,593,808.51		3,593,808.51
<b>Sub-Total</b>	<b>4,772,291.77</b>	<b>0.00</b>	<b>4,772,291.77</b>
<b>Peel</b>			
Caledon, Town of/Mississauga, City of	5,272,675.30		5,272,675.30
<b>Sub-Total</b>	<b>5,272,675.30</b>	<b>0.00</b>	<b>5,272,675.30</b>
<b>Perth</b>			
North Perth, Town of/St. Marys, Separated Town of	79,553.73		79,553.73
Perth East Tp	347,807.25		347,807.25
Perth South Tp	1,373,230.72		1,373,230.72
West Perth Tp	233,876.78		233,876.78
<b>Sub-Total</b>	<b>2,034,468.48</b>	<b>0.00</b>	<b>2,034,468.48</b>



Table 2

**LICENCE AND WAYSIDE PERMIT PRODUCTION  
BY LOWER TIER MUNICIPALITY**

(Reported in Metric Tonnes)

<b>Municipality</b>	<b>Licences</b>	<b>Wayside Permits</b>	<b>Total</b>
<b><i>Peterborough</i></b>			
Asphodel-Norwood Tp	295,165.00		295,165.00
Cavan-Millbrook-North Monaghan Tp	132,570.40		132,570.40
Douro-Dummer Tp	843,945.98		843,945.98
Galway-Cavendish-Harvey Tp	379,280.55		379,280.55
Havelock-Belmont-Methuen Tp	17,865.95		17,865.95
Otonabee-South Monaghan Tp	198,860.86		198,860.86
Smith-Ennismore-Lakefield Tp	584,294.64		584,294.64
<b>Sub-Total</b>	<b>2,451,983.38</b>	<b>0.00</b>	<b>2,451,983.38</b>
<b><i>Prescott &amp; Russell</i></b>			
Alfred & Plantagenet Tp	265,491.20		265,491.20
Champlain Tp	427,661.88		427,661.88
Clarence-Rockland, City of	282,958.16		282,958.16
East Hawkesbury Tp	76,112.92		76,112.92
Russell Tp	159,641.73		159,641.73
The Nation, Municipality of	153,174.26		153,174.26
<b>Sub-Total</b>	<b>1,365,040.15</b>	<b>0.00</b>	<b>1,365,040.15</b>
<b><i>Prince Edward Co</i></b>			
Prince Edward, County of	2,236,954.78		2,236,954.78
<b>Sub-Total</b>	<b>2,236,954.78</b>	<b>0.00</b>	<b>2,236,954.78</b>
<b><i>Renfrew</i></b>			
Admaston-Bromley Tp/Greater Madawaska Tp/ Renfrew, Town of	140,067.13		140,067.13
Horton Tp	396,451.08		396,451.08
Laurentian Valley Tp	248,425.30		248,425.30
McNab-Braeside Tp	639,971.85		639,971.85
Petawawa, Town of	141,305.48		141,305.48
Whitewater Region Tp	172,042.65		172,042.65
<b>Sub-Total</b>	<b>1,738,263.49</b>	<b>0.00</b>	<b>1,738,263.49</b>
<b><i>Simcoe</i></b>			
Adjala-Tosorontio Tp/Barrie, City of	475,372.10		475,372.10
Bradford West Gwillimbury, Town of/ Wasaga Beach, Town of/Orillia, City of	7,985.60		7,985.60
Clearview Tp	1,675,358.19		1,675,358.19
Essa Tp	51,448.71		51,448.71
Innisfil, Town of	57,937.79		57,937.79
Midland, Town of/Penetanguishene, Town of	232,619.57		232,619.57
New Tecumseth, Town of	61,378.78		61,378.78
Oro-Medonte Tp	2,835,568.15		2,835,568.15
Ramara Tp	3,135,260.15		3,135,260.15
Severn Tp	2,204,523.46		2,204,523.46
Springwater Tp	1,455,843.47		1,455,843.47
Tay Tp	167,556.74		167,556.74
Tiny Tp	292,793.04		292,793.04
<b>Sub-Total</b>	<b>12,653,645.75</b>	<b>0.00</b>	<b>12,653,645.75</b>

Table 2

**LICENCE AND WAYSIDE PERMIT PRODUCTION  
BY LOWER TIER MUNICIPALITY**

(Reported in Metric Tonnes)

Municipality	Licences	Wayside Permits	Total
<b><i>Stormont, Dundas &amp; Glengarry</i></b>			
North Dundas Tp	603,257.17		603,257.17
North Glengarry Tp	316,530.18		316,530.18
North Stormont Tp	1,051,658.52		1,051,658.52
South Dundas Tp	276,096.88		276,096.88
South Glengarry Tp	321,743.18		321,743.18
South Stormont Tp	964,054.48		964,054.48
<b>Sub-Total</b>	<b>3,533,340.41</b>	<b>0.00</b>	<b>3,533,340.41</b>
<b><i>Sudbury District</i></b>			
Baldwin Tp/ St. Charles, Municipality of	37,885.50		37,885.50
French River, Municipality of/Nairn & Hyman Tp	11,361.85		11,361.85
Markstay-Warren, Municipality of	51,170.44		51,170.44
Sables Spanish Rivers Tp/Espanola, Town of	53,781.54		53,781.54
Sudbury District, Unorganized	464,121.51		464,121.51
<b>Sub-Total</b>	<b>618,320.84</b>	<b>0.00</b>	<b>618,320.84</b>
<b><i>Waterloo</i></b>			
Cambridge, City of/Kitchener, City of	1,114,006.07		1,114,006.07
North Dumfries Tp	4,413,179.04		4,413,179.04
Wellesley Tp	2,044,689.11		2,044,689.11
Wilmot Tp	1,241,470.73		1,241,470.73
Woolwich Tp	662,867.26		662,867.26
<b>Sub-Total</b>	<b>9,476,212.21</b>	<b>0.00</b>	<b>9,476,212.21</b>
<b><i>Wellington</i></b>			
Centre Wellington Tp	1,130,464.64		1,130,464.64
Erin, Town of	1,926,880.04		1,926,880.04
Guelph-Eramosa Tp	126,214.23		126,214.23
Mapleton Tp	81,124.00		81,124.00
Minto, Town of	391,236.71		391,236.71
Puslinch Tp	5,233,905.56		5,233,905.56
Wellington North Tp	205,970.67		205,970.67
<b>Sub-Total</b>	<b>9,095,795.85</b>	<b>0.00</b>	<b>9,095,795.85</b>
<b><i>York</i></b>			
East Gwillimbury, Town of	239,478.11		239,478.11
Georgina, Town of	73,992.14		73,992.14
King Tp/Vaughan, City of/Whitchurch-Stouffville, Town of	1,532,601.53		1,532,601.53
<b>Sub-Total</b>	<b>1,846,071.78</b>	<b>0.00</b>	<b>1,846,071.78</b>
<b>GRAND TOTAL</b>	<b>149,760,755.31</b>	<b>91,120.00</b>	<b>149,851,875.31</b>

Table 3

**LICENCE AND WAYSIDE PRODUCTION  
BY UPPER TIER MUNICIPALITY  
(Million Tonnes)**

<b>Municipality</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>
Algoma, District of	0.6	0.6	0.6	0.8	0.8	0.6	0.8	0.6	0.8
Brant Co.	1.7	2.1	1.5	1.5	2.1	2.0	1.8	2.1	2.0
Bruce Co.	1.2	1.3	1.6	1.5	1.7	1.6	1.7	1.7	1.9
Chatham-Kent, R. M. of	0.4	0.5	0.4	0.5	0.5	0.3	0.5	0.4	0.3
Dufferin Co.	1.5	1.5	1.8	2.1	2.6	2.4	2.3	3.0	2.7
Durham, R. M. of	7.6	8.7	7.8	9.2	10.2	11.4	11.0	11.8	12.6
Elgin Co.	0.5	0.7	0.4	0.6	0.7	0.6	0.5	0.6	0.7
Essex Co.	2.2	2.7	2.0	1.9	2.0	2.2	1.9	1.9	1.9
Frontenac Co.	1.6	1.5	1.2	1.3	1.4	1.3	1.6	2.0	2.2
Greater Sudbury, City of	2.7	2.5	2.3	2.9	2.3	1.8	2.3	1.7	2.2
Grey Co.	2.0	2.1	2.1	2.8	2.5	2.6	2.6	3.1	3.2
Haldimand Co.	-----	-----	-----	-----	-----	1.5	1.9	1.8	1.6
Haldimand-Norfolk, R. M. of	1.7	2.1	1.8	2.0	2.0	-----	-----	-----	-----
Halton, R. M. of	12.3	14.4	13.4	13.8	15.5	15.8	12.1	10.7	11.4
Hamilton, City of	4.0	5.2	4.7	4.6	6.3	6.0	5.5	6.0	6.3
Hastings Co.	1.6	2.0	1.9	2.2	2.0	2.0	2.1	2.4	2.3
Huron Co.	2.8	2.4	2.6	2.8	2.7	3.0	2.7	2.8	2.5
Kawartha Lakes, City of	-----	-----	-----	-----	-----	6.4	6.4	6.7	6.8
Lambton Co.	0.4	0.5	0.6	0.6	0.5	0.5	0.7	0.4	0.5
Lanark Co.	1.2	1.2	1.3	1.5	1.6	1.7	2.0	2.4	2.3
Leeds & Grenville Co.'s	2.0	2.1	4.2	2.2	3.0	2.3	2.0	1.9	2.2
Lennox & Addington Co.	1.8	1.7	1.9	1.7	1.8	1.8	1.7	1.9	1.8
Middlesex Co.	4.5	5.3	6.1	5.6	6.4	6.0	5.4	5.6	6.2
Niagara, R. M. of	4.7	4.9	4.6	4.3	4.6	4.6	4.9	4.6	4.7
Norfolk Co.	-----	-----	-----	-----	-----	0.4	0.4	0.4	0.5
Northumberland Co.	3.0	3.2	3.2	3.6	3.2	3.1	3.0	3.4	3.3
Ottawa, City of	6.1	6.7	7.1	8.1	10.7	10.1	10.7	10.0	9.9
Oxford Co.	4.6	5.3	4.9	5.1	5.4	4.9	4.8	4.9	4.8
Peel, R. M. of	3.8	4.3	4.2	4.5	5.2	5.2	4.3	4.5	5.3
Perth Co.	1.9	1.7	1.7	1.6	2.1	2.0	2.1	2.0	2.0
Peterborough Co.	1.8	1.8	1.8	1.8	2.2	2.4	3.2	2.5	2.5
Prescott & Russell Co.'s	1.2	1.4	1.1	1.2	1.4	1.4	1.3	1.4	1.4
Prince Edward Co.	1.8	2.1	2.0	2.0	2.1	2.0	2.1	2.2	2.2
Renfrew Co.	1.5	1.2	1.3	1.5	1.5	1.2	1.8	1.6	1.7
Simcoe Co.	7.4	7.6	9.0	9.0	9.3	10.6	11.4	11.8	12.7
Stormont, Dundas & Glengarry Co.'s	2.1	2.4	2.4	2.8	3.0	2.7	2.6	2.7	3.5
Sudbury, District of	0.3	0.2	0.2	0.4	0.5	1.0	0.6	0.6	0.6
Victoria Co.	6.0	6.5	6.6	6.0	7.1	-----	-----	-----	-----
Waterloo, R. M. of	5.8	5.6	5.8	7.3	7.7	8.2	7.8	8.0	9.5
Wellington Co.	6.0	6.4	6.9	7.5	8.4	8.9	8.9	9.1	9.1
York, R. M. of	2.0	2.6	2.2	2.7	3.0	2.4	2.4	2.0	1.9
<b>TOTAL</b>	<b>114.3</b>	<b>125.0</b>	<b>125.2</b>	<b>131.5</b>	<b>146.0</b>	<b>144.9</b>	<b>141.8</b>	<b>143.2</b>	<b>149.8</b>

Note: As of January 1, 2001 Victoria County is now known as The City of Kawartha Lakes.  
As of January 1, 2001 Haldimand-Norfolk has been split into two different counties;  
Haldimand County and Norfolk County.

Table 4

**LICENCE PRODUCTION IN 2004  
THE TOP TEN PRODUCING MUNICIPALITIES  
(Rounded to nearest million tonnes)**

	Municipality	County/Region	2004 Production	Production				
				2003	2002	2001	2000	1999
1	City of Ottawa <sup>(1)</sup>	City of Ottawa	9.9	10.0	10.7	10.1	10.6	8.1
2	City of Kawartha Lakes <sup>(2)</sup>	City of Kawartha Lakes	6.8	6.7	6.4	6.4	7.1	6.0
3	City of Hamilton <sup>(3)</sup>	City of Hamilton	6.3	5.9	5.4	6.0	6.3	4.6
4	City of Burlington/ Town of Halton Hills	Halton	5.8	5.5	6.3	7.0	6.5	6.1
5	Town of Milton	Halton	5.6	5.2	5.9	8.8	9.0	7.7
6	Township of Uxbridge	Durham	5.5	4.9	4.7	5.0	4.1	3.4
7	Municipality of Clarington	Durham	5.3	5.6	4.7	4.7	4.3	3.8
8	City of Mississauga/ Town of Caledon	Peel	5.3	4.5	4.3	5.2	5.2	4.5
9	Puslinch Township	Wellington County	5.2	5.1	5.3	5.5	4.1	3.9
10	Township of North Dumfries	Waterloo	4.4	3.9	3.3	3.7	3.5	3.2
	<b>Total</b>		60.1	57.3	57.0	62.4	60.7	51.3

Note: Municipalities are ranked in order of their licenced production for 2004

Production statistics for 1999 - 2001 include tonnage of the pre-amalgamated cites and townships of :

<sup>(1)</sup> Cities of Ottawa, Gloucester and Neapean, Townships of Cumberland, Goulborn, Osgoode, Rideau and West Carleton

<sup>(2)</sup> Townships of Bexley, Laxton, Digby & Longford, Bobcaygeon, Carden/Dalton, Eldon, Emily, Fenelon, Manvers, Mariposa, Somerville

<sup>(3)</sup> Cities of Hamilton and Stoney Creek, Towns of Ancaster, Dundas and Glanbrook

Table 5

**NUMBER AND TYPE OF AGGREGATE LICENCES  
(Reported by MNR District)**

District	No. of Licences	Category		Type of Operation			
		Class A	Class B	Pit	Quarry	Pit & Quarry	Underwater
Aurora (GTA)	170	146	24	154	16	0	0
Aylmer	310	233	77	292	12	6	0
Bancroft	42	18	24	23	14	5	0
Guelph (Cambridge)	455	375	80	417	35	3	0
Kemptville	502	273	229	360	120	22	0
Midhurst	465	346	119	419	42	4	0
Pembroke	112	56	56	98	8	6	0
Peterborough (Tweed)	492	271	221	394	83	15	0
Sault Ste. Marie	65	31	34	59	1	5	0
Sudbury	139	98	41	113	6	20	0
<b>TOTAL</b>	<b>2,752</b>	<b>1,847</b>	<b>905</b>	<b>2,329</b>	<b>337</b>	<b>86</b>	<b>0</b>

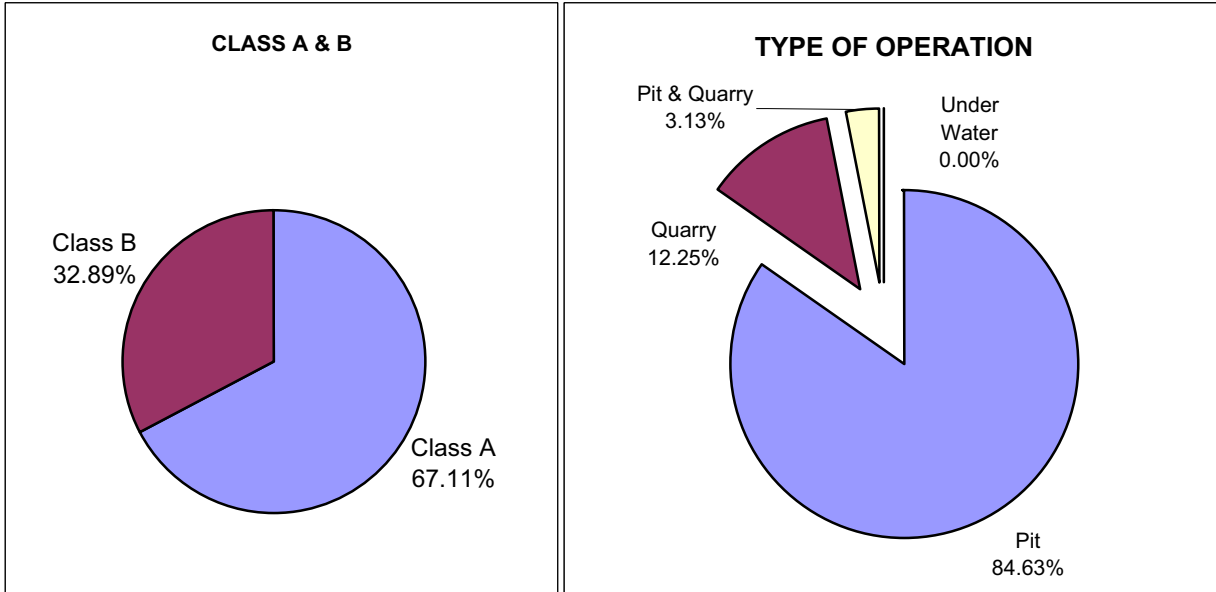


Table 6

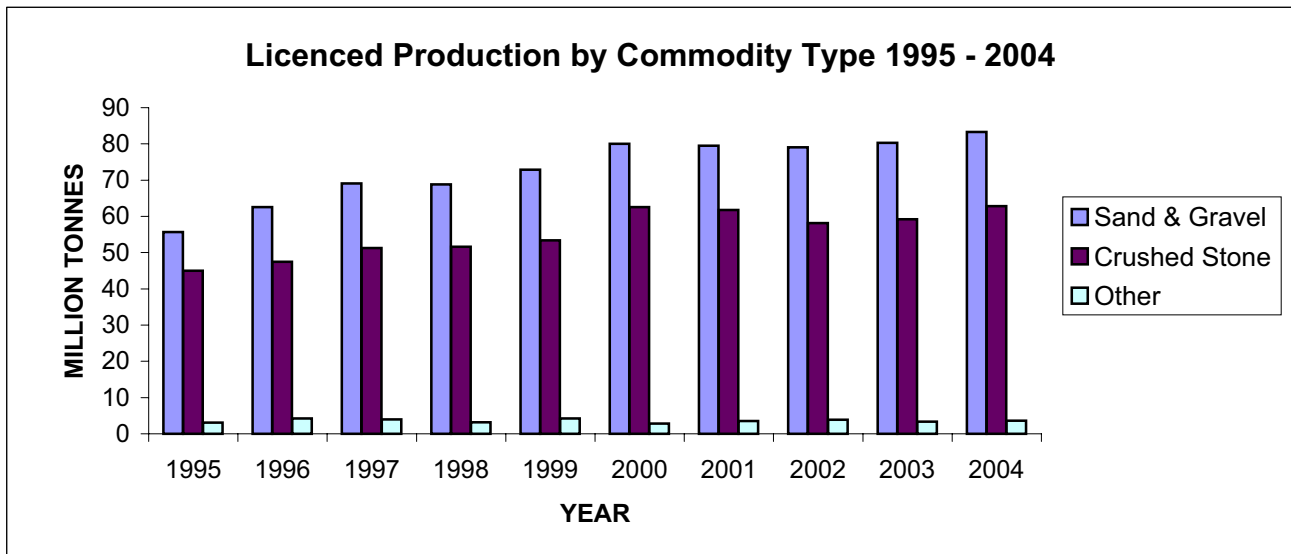
**2004 LICENCED AGGREGATE PRODUCTION  
BY COMMODITY TYPE  
(Reported by MNR District)**

District	Total	Sand & Gravel	Crushed Stone	Clay/ Shale	Other Stone
Aurora (GTA)	31,181,650.68	16,246,212.81	13,051,818.74	1,403,565.12	480,054.01
Aylmer	14,870,785.62	10,872,588.61	3,991,696.35	6,255.33	245.33
Bancroft	2,725,360.90	103,059.82	2,575,038.00	819.20	46,443.88
Guelph (Cambridge)	37,779,486.39	24,705,385.80	12,882,122.86	170,844.82	21,132.91
Kemptville	19,152,884.04	5,682,542.72	12,338,306.55	105,519.00	1,026,515.77
Midhurst	20,249,589.89	13,026,632.00	6,935,728.08	53,888.24	233,341.57
Pembroke	1,870,708.49	1,213,689.70	655,055.79	0.00	1,963.00
Peterborough	18,345,379.61	8,238,169.35	10,019,567.36	56,211.53	31,431.37
Sault Ste. Marie	808,629.18	787,885.90	17,367.72	0.00	3,375.56
Sudbury	2,776,280.51	2,401,867.17	359,800.08	14,141.76	471.50
<b>TOTAL</b>	<b>149,760,755.31</b>	<b>83,278,033.88</b>	<b>62,826,501.53</b>	<b>1,811,245.00</b>	<b>1,844,974.90</b>

Note: Totals may not equal due to rounding

Other Stone includes building stone, industrial stone, dimensional stone

Reported in metric tonnes



**Yearly Production for Aggregate Licences  
(in Million Tonnes)**

	Total	Sand & Gravel	Crushed Stone	Other
1995	103.80	55.70	45.01	3.09
1996	114.27	62.52	47.48	4.27
1997	124.29	69.05	51.23	4.01
1998	123.68	68.84	51.64	3.20
1999	130.53	72.87	53.40	4.26
2000	145.49	80.07	62.57	2.85
2001	144.76	79.46	61.76	3.54
2002	141.17	79.09	58.19	3.89
2003	142.91	80.30	59.25	3.36
2004	149.75	83.28	62.83	3.65

Table 7

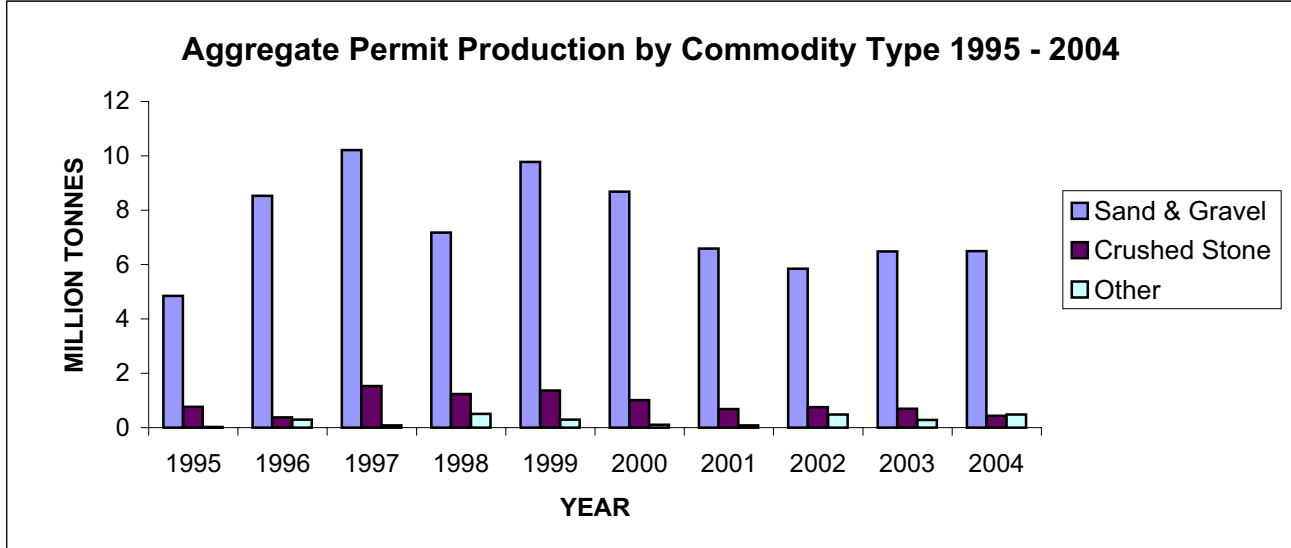
**2004 AGGREGATE PERMIT PRODUCTION  
BY COMMODITY TYPE  
(Reported by MNR District)**

<b>Region/District</b>	<b>Total Production</b>	<b>Sand &amp; Gravel</b>	<b>Crushed Stone</b>	<b>Clay/Shale</b>	<b>Other Stone</b>
<b>NORTHEAST</b>					
Chapleau	542,193.79	542,193.79	-	-	-
Cochrane	307,836.09	273,453.53	34,252.00	130.56	-
Hearst	260,545.70	167,472.70	92,828.00	245.00	-
Kirkland Lake	186,735.64	186,735.64	-	-	-
North Bay	389,469.21	368,501.00	20,217.14	-	751.07
Sault Ste. Marie	258,999.69	258,989.69	-	-	10.00
Sudbury	529,006.79	510,909.17	15,577.22	20.40	2,500.00
Timmins	863,284.34	783,924.71	-	-	79,359.63
Wawa	872,625.41	617,913.96	146,922.45	107,754.00	35.00
<b>Sub-Total</b>	<b>4,210,696.66</b>	<b>3,710,094.19</b>	<b>309,796.81</b>	<b>108,149.96</b>	<b>82,655.70</b>
<b>NORTHWEST</b>					
Dryden	884,870.52	664,279.52	-	-	220,591.00
Fort Frances	337,459.12	334,566.12	1,656.00	-	1,237.00
Kenora	154,179.39	137,535.19	-	-	16,644.20
Nipigon	728,495.77	663,222.43	62,167.00	550.00	2,556.34
Red Lake	257,060.60	256,663.00	-	-	397.60
Sioux Lookout	253,701.42	237,807.80	14,404.00	-	1,489.62
Thunder Bay	288,564.82	288,551.32	-	-	13.50
<b>Sub-Total</b>	<b>2,904,331.64</b>	<b>2,582,625.38</b>	<b>78,227.00</b>	<b>550.00</b>	<b>242,929.26</b>
<b>SOUTHCENTRAL</b>					
Algonquin Park	61,612.80	61,612.80	-	-	-
Aurora (GTA)	-	-	-	-	-
Aylmer	898.12	898.12	-	-	-
Bancroft	94,111.29	44,954.00	8,330.33	-	40,826.96
Guelph (Cambridge)	-	-	-	-	-
Kemptville	342.72	342.72	-	-	-
Midhurst	-	-	-	-	-
Parry Sound	84,201.54	51,411.04	32,701.00	-	89.50
Pembroke	38,501.76	38,501.76	-	-	-
Peterborough (Tweed)	2,245.00	-	2,245.00	-	-
<b>Sub-Total</b>	<b>281,913.23</b>	<b>197,720.44</b>	<b>43,276.33</b>	<b>0.00</b>	<b>40,916.46</b>
<b>TOTAL</b>	<b>7,396,941.53</b>	<b>6,490,440.01</b>	<b>431,300.14</b>	<b>108,699.96</b>	<b>366,501.42</b>

Note: Amounts shown are in metric tonnes

Table 8

**2004 LICENCED AGGREGATE PERMIT PRODUCTION  
BY COMMODITY TYPE  
(Reported By Year)**



**Yearly Production for Aggregate Permits  
(in Million Tonnes)**

	Total	Sand & Gravel	Crushed Stone	Other
1995	5.63	4.85	0.76	0.02
1996	9.21	8.53	0.38	0.30
1997	11.82	10.21	1.53	0.08
1998	8.92	7.18	1.23	0.51
1999	11.44	9.78	1.37	0.29
2000	9.80	8.68	1.01	0.11
2001	7.35	6.59	0.68	0.08
2002	7.08	5.85	0.75	0.48
2003	7.45	6.48	0.69	0.28
2004	7.40	6.49	0.43	0.48



Table 9

**2004 AGGREGATE PERMIT PRODUCTION  
BY COMMODITY TYPE  
(Reported by CPCA\* Geographic Areas)**

<b>Area</b>	<b>Total</b>	<b>Sand &amp; Gravel</b>	<b>Crushed Stone</b>	<b>Clay/ Shale</b>	<b>Other Stone</b>
Southwest (1)	898	898	0	0	0
Peninsula (2)	0	0	0	0	0
West Central (3)	0	0	0	0	0
GTA (4)	0	0	0	0	0
East Central (5)	113,705	62,213	10,575	0	40,916
East (6)	39,684	39,684	0	0	0
Northeast (7)	3,211,161	2,932,579	195,575	396	82,611
Northwest (8)	4,031,493	3,455,065	225,149	108,304	242,974
<b>TOTAL</b>	<b>7,396,942</b>	<b>6,490,440</b>	<b>431,300</b>	<b>108,700</b>	<b>366,501</b>

Note: Totals may not equal due to rounding  
 Other Stone includes building stone, industrial stone, dimensional stone  
 Amounts shown are in metric tonnes

\*CPCA - Canadian Portland Cement Association

**2004 AGGREGATE LICENCE PRODUCTION  
BY COMMODITY TYPE  
(Reported by CPCA\* Geographic Areas)**

<b>Area</b>	<b>Total</b>	<b>Sand &amp; Gravel</b>	<b>Crushed Stone</b>	<b>Clay/ Shale</b>	<b>Other Stone</b>
Southwest (1)	18,865,313	14,031,101	4,788,955	41,939	3,317
Peninsula (2)	15,098,704	2,979,763	12,084,864	34,077	0
West Central (3)	38,935,845	31,593,742	6,935,728	154,972	251,403
GTA (4)	31,181,651	16,246,213	13,051,819	1,403,565	480,054
East Central (5)	17,049,359	7,865,008	9,110,266	24,794	49,291
East (6)	25,044,974	7,372,454	16,477,702	137,756	1,057,063
Northeast (7)	2,776,281	2,401,867	359,800	14,142	472
Northwest (8)	808,629	787,886	17,368	0	3,376
<b>TOTAL</b>	<b>149,760,755</b>	<b>83,278,034</b>	<b>62,826,502</b>	<b>1,811,245</b>	<b>1,844,975</b>

Note: Totals may not equal due to rounding  
 Other Stone includes building stone, industrial stone, dimensional stone  
 Amounts shown are in metric tonnes

\*CPCA - Canadian Portland Cement Association

Table 10

**REHABILITATION OF  
LICENCED AGGREGATE SITES IN 2004  
(Reported by MNR District)**

District	Total No. of Licences	Total Licenced Area	Original Disturbed Area	New Disturbed Area	New Rehab. Area	Total Disturbed Area
Aurora (GTA)	170	9,245.19	3,707.87	91.25	182.11	3,617.01
Aylmer	310	8,408.01	3,018.63	99.63	166.82	2,951.45
Bancroft	42	2,019.40	308.52	16.82	0.89	324.45
Guelph (Cambridge)	455	16,272.68	4,494.54	268.56	151.70	4,611.40
Kemptville	502	14,194.92	3,936.72	120.83	82.28	3,975.27
Midhurst	465	13,881.64	3,420.82	134.47	139.34	3,415.96
Pembroke	112	3,428.27	484.65	39.63	13.48	510.80
Peterborough (Tweed)	492	13,271.18	3,387.48	79.43	29.70	3,437.21
Sault Ste. Marie	65	2,708.21	331.08	18.46	3.57	345.98
Sudbury	139	10,085.29	816.90	17.25	15.20	818.95
<b>TOTAL</b>	<b>2,752</b>	<b>93,514.79</b>	<b>23,907.22</b>	<b>886.33</b>	<b>785.08</b>	<b>24,008.48</b>

Note: Areas shown are in hectares

These statistics are compiled from information supplied by licencees and are not independently checked for accuracy.

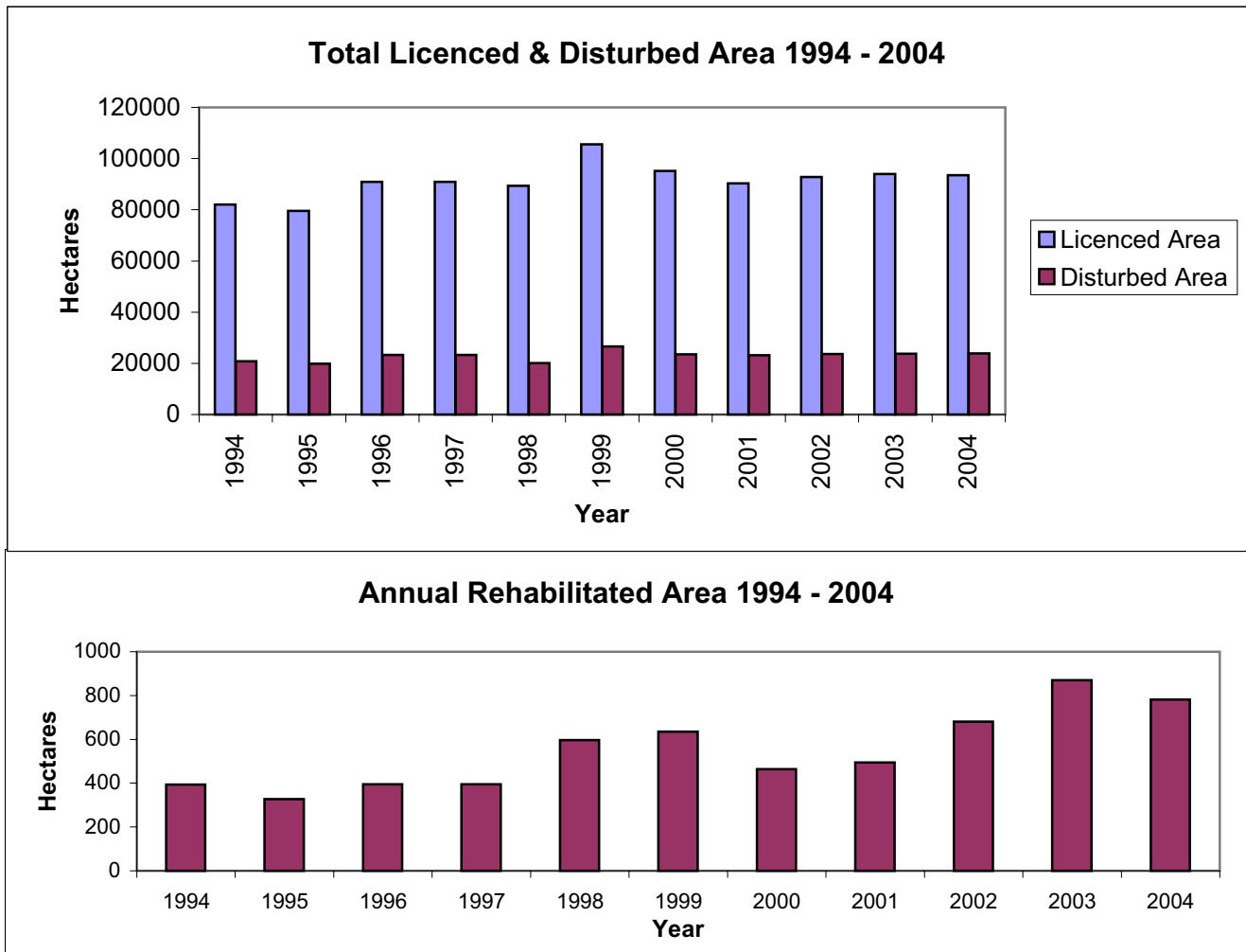


Table 11

**NUMBER AND TYPE OF AGGREGATE PERMITS  
(Reported by MNR District)**

<b>Region/District</b>	<b>Total Hectarage</b>	<b>Total No. of Permits</b>	<b>Pit</b>	<b>Quarry</b>	<b>Pit &amp; Quarry</b>	<b>Underwater</b>
<b>NORTHEAST</b>						
Chapleau	1,083.07	193	191	2	0	0
Cochrane	2,665.12	122	110	7	5	0
Hearst	3,444.34	168	145	19	4	0
Kirkland Lake	1,846.39	163	155	6	2	0
North Bay	2,351.79	200	177	18	5	0
Sault Ste. Marie	886.10	110	106	2	2	0
Sudbury	4,144.52	181	153	18	10	0
Timmins	1,961.85	165	155	7	3	0
Wawa	2,501.07	269	257	4	8	0
<b>Sub-Total</b>	<b>20,884.25</b>	<b>1,571</b>	<b>1,449</b>	<b>83</b>	<b>39</b>	<b>0</b>
<b>NORTHWEST</b>						
Dryden	2,159.04	244	231	7	6	0
Fort Frances	2,524.35	297	283	6	8	0
Kenora	2,844.62	208	173	24	11	0
Nipigon	3,478.54	323	305	15	3	0
Red Lake	1,246.46	120	119	1	0	0
Sioux Lookout	1,295.43	87	85	2	0	0
Thunder Bay	2,659.65	201	187	10	4	0
<b>Sub-Total</b>	<b>16,208.09</b>	<b>1,480</b>	<b>1,383</b>	<b>65</b>	<b>32</b>	<b>0</b>
<b>SOUTHCENTRAL</b>						
Algonquin Park	25.06	32	32	0	0	0
Aurora (GTA)	0.00	0	0	0	0	0
Aylmer	0.10	1	0	0	0	1
Bancroft	882.41	78	67	11		0
Guelph (Cambridge)	620.50	2	0	0	0	2
Kemptville	7.00	2	1	0		1
Midhurst	1.00	1	0	0	0	1
Parry Sound	796.81	102	75	13	4	10
Pembroke	119.17	43	43	0	0	0
Peterborough (Tweed)	31.40	2		1	1	0
<b>Sub-Total</b>	<b>2,483.45</b>	<b>263</b>	<b>218</b>	<b>25</b>	<b>5</b>	<b>15</b>
<b>TOTAL</b>	<b>39,575.79</b>	<b>3,314</b>	<b>3,050</b>	<b>173</b>	<b>76</b>	<b>15</b>



## APPENDIX A

### GLOSSARY OF TERMS

For actual definitions, please refer to the Aggregate Resources Act.

#### Active Licence

A licence that has been issued, being transferred, or under suspension at the end of the calendar year.

#### Aggregate

Includes sand, gravel, limestone, dolostone, crushed stone, rock other than metallic ores, and other prescribed material.

#### Aggregate Permit

A permit for a pit or quarry issued under the Aggregate Resources Act allowing for the excavation of aggregate that is the property of the Crown, on land where the surface rights are the property of the Crown, or from land under water. There are three types of aggregate permits, they are commercial, public authority and personal.

#### ALPS

The Aggregate Licence and Permit System (ALPS) is an automated data base that facilitates the management of mineral aggregate production and related information, for individual licences, aggregate permits and wayside permits across the province.

#### Building Dimension

A slab or block of rock, flagstone if foliated and dimension stone if massive, generally rectangular, and cut to specified measurements for ornamental surfacing in buildings or other construction applications.

#### Clay/Shale

Clay is a fine-grained, natural, earthy material composed primarily of hydrous aluminum silicates. It is plastic when moist and hardens when dried. Shale is fine-grained sedimentary laminated rock predominantly composed of clay grade and other fine minerals.

#### Class A Licence

A licence under the Aggregate Resources Act to allow excavation of more than 20,000 tonnes of aggregate annually from a pit or quarry within parts of Ontario that have been designated under the Aggregate Resources Act.

#### Class B Licence

A licence under the Aggregate Resources Act to allow excavation of 20,000 tonnes or less of aggregate annually from a pit or quarry within parts of Ontario that have been designated under the Aggregate Resources Act.

#### Crown Land

Ownership of land which is vested in the Crown or owned by the Province of Ontario.

#### Crushed Stone

Rock or stone mechanically crushed to specified sizes and grading.

#### Designated Area

An area of the Province identified by regulation under the Aggregate Resources Act where a person requires a licence for the excavation of aggregate from private land.

### Disturbed Area

An area within a site that has been, or is being excavated to operate a pit or quarry, and has not been rehabilitated.

### Gravel

Small stones and pebbles or a mixture of sand and small stones. More specifically, fragments of rock worn by the action of air and water, larger and coarser than sand. MTO specifications define gravel as unconsolidated granular material greater than 4.75mm.

### Housing Starts

The number of housing units started where construction has advanced to 100 per cent of footings. In case of multiple dwellings, a "start" implies the commencement of individual structures.

### Inactive Licence

A licence that has been revoked or surrendered prior to the end of the calendar year.

### Licence

A licence for a pit or quarry issued under the Aggregate Resources Act allowing for the extraction of aggregate in designated areas.

### Licensed Area

A specific area for which a licence has been issued for the extraction of mineral aggregates under the Aggregate Resources Act.

### Pit

Land or land under water from which unconsolidated aggregate is being or has been excavated, and has not been rehabilitated.

### Private Land

Land owned by an individual or corporation, as opposed to land which is owned by the Crown.

### Progressive Rehabilitation

As per the requirements of the Aggregate Resources Act, sequential rehabilitation completed within reasonable time over disturbed land from which aggregate has been extracted. The rehabilitation is carried out according to the Act, the regulations, the site plan, and the conditions of the licence or permit during the period that aggregate is being extracted.

### Pits & Quarries Control Act

An Act to manage and regulate mineral aggregate extraction in Ontario. The Act had been automatically repealed and replaced by the Aggregate Resources Act as of January 1, 1990.

### Quarry

Land or land under water from which consolidated rock is or has been excavated and the site has not been rehabilitated.

### Rehabilitation

To treat the land from which aggregate has been excavated to a pre-excitation condition or use, or to a condition compatible with adjacent land.

### Royalty

A payment made to the Crown in recognition of the extraction of aggregates owned by the Crown. Under the Aggregate Resources Act, the royalty is set at a minimum of 25 cents per tonne. The Minister may set a higher rate or may allow exemption.

### Sand

Any hard granular rock material finer than gravel and coarser than dust. MTO specifications define sand as granular material ranging in size from .075mm to 4.75 mm.

### Wayside Permit

A permit issued to a public authority or a person who has a contract with a public authority for a temporary road project or an urgent project for which no alternative source of aggregate is available under licence or permit. A wayside permit expires 18 months from the date of issue or upon completion of the project, whichever comes first.

**APPENDIX B**

**HISTORICAL DESIGNATION OF PRIVATE LAND UNDER THE  
PITS AND QUARRIES CONTROL ACT AND  
THE AGGREGATE RESOURCES ACT  
(by Geographic Twp)**

*Designations under the Pits and Quarries Control Act (1971-1989)*

**DECEMBER 19, 1971**

Adjala	Euphrasia	Nottawasaga
Albemarle	Flamborough East	Osprey
Albion	Flamborough West	Pelham
Amabel	Grantham	Reach
Ancaster	Grimsby North	Saltfleet
Artemesia	Holland	Stamford
Barton	Keppel	St. Edmunds
Beverly	Lindsay	St. Vincent
Caledon	London	Sydenham
Chinguacousy	Louth	Thorold
Clinton	Melancthon	Toronto Gore
Collingwood	Mono	Trafalgar
Derby	Mulmur	Westminster
Eastnor	Nassagaweya	West Nissouri
Erin	Nelson	Whitby
Esquesing	Niagara	Whitchurch

**MARCH 3, 1972**

Brock	Lobo	Pickering
East Whitby	Markham	Toronto
Gloucester	Nepean	Vaughan
Hallowell	Osgoode	

**MAY 9, 1972**

Brantford	Pittsburgh	South Dumfries
Guelph	Puslinch	Waterloo
Kingston	North Dumfries	

**AUGUST 15, 1973**

Anderdon	Dereham	Humberstone
Bertie	Dunn	Huntley
Blenheim	Eramosa	King
Brighton	Fitzroy	Malden
Clarke	Gosfield South	Manvers
Colchester North	Gosfield North	March
Colchester South	Haldimand	Mersea
Cramahe	Hamilton	Murray
Crowland	Harwich	Nichol
Darlington	Hope	North Cayuga



North Gower  
North Oxford  
Oneida  
Orillia  
Oro  
Pilkington  
Raleigh  
Romney

Sidney  
Sunnidale  
Thurlow  
Tilbury East  
Tyendinaga  
Uxbridge  
Vespra  
Walpole

Wellesley  
West Oxford  
Willoughby  
Wilmot  
Woodhouse  
Woolwich  
Yarmouth

**FEBRUARY 15, 1974**

Delaware  
North Dorchester

**MAY 17, 1974**

Pelee

**MAY 1, 1975**

Alnwick  
Amaranth  
Arran  
Arthur  
Asphodel  
Balfour  
Bayham  
Belmont  
Bexley  
Biddulph  
Binbrook  
Blandford  
Blanshard  
Blezard  
Bowell  
Broder  
Burford  
Caistor  
Camden  
Capreol  
Cartwright  
Cavan  
Charlotteville  
Chatham  
Creighton  
Cumberland  
Denison  
Dieppe  
Dill  
Douro  
Dover  
Dowling  
Drury

Dryden  
Dummer  
East York  
East Garafraxa  
East Nissouri  
East Luther  
East Gwillimbury  
East Oxford  
East Zorra  
Eldon  
Emily  
Ennismore  
Essa  
Etobicoke  
Fairbank  
Falconbridge  
Fenelon  
Flos  
Gainsborough  
Garson  
Georgina  
Glanford  
Glenelg  
Goulburn  
Graham  
Hanmer  
Harvey  
Houghton  
Howard  
Hutton  
Innisfil  
Levack  
Lorne

Louise  
Lumsden  
MacLennan  
Maidstone  
Malahide  
Mara  
Mariposa  
Marlborough  
Maryborough  
Matchedash  
McKim  
Medonte  
Middleton  
Minto  
Morgan  
Moulton  
Neelon  
Norman  
North Monaghan  
North Walsingham  
North Norwich  
North Gwillimbury  
North York  
Oakland  
Onondaga  
Ops  
Orford  
Otonabee  
Peel  
Percy  
Proton  
Rainham  
Rama

Rawden  
Rayside  
Rochester  
Sandwich, East  
Sandwich, West  
Scarborough  
Scott  
Scugog  
Seneca  
Seymour  
Sherbrooke  
Smith  
Snider  
South Walsingham

South Cayuga  
South Dorchester  
South Grimsby  
South Norwich  
South Monaghan  
Sullivan  
Tay  
Tecumseh  
Thorah  
Tilbury, North  
Tilbury, West  
Tiny  
Torbolton  
Tosorontio

Townsend  
Trill  
Tuscarora  
Verulam  
Wainfleet  
Waters  
West Luther  
West Garafraxa  
West Gwillimbury  
West Zorra  
Windham  
Wisner  
York  
Zone

#### **APRIL 6, 1976**

Great LaCloche Island  
Little LaCloche Island

#### **AUGUST 27, 1976**

Avenge  
Bosanquet  
Carden

Korah  
Parke  
Prince

Rankin  
St. Mary's  
Tarentorus

#### **JANUARY 1, 1981**

Adelaide  
Aldborough  
All of the County of Perth  
All of the County of Huron  
All of the County of Lanark  
Ameliasburgh  
Athol  
Bentinck  
Brant  
Brooke  
Bruce  
Carrick  
City of Belleville  
Culross  
Dawn  
Dunwich  
E. Williams  
Egremont  
Elderslie  
Elzevir and Grimsthorpe

Enniskillen  
Euphemia  
Exfrid  
Greenock  
Hillier  
Hungerford  
Huntingdon  
Huron  
Kincardine  
Kinloss  
Madoc  
Marmora and Lake  
McGillivray  
Moore  
Mosa  
Normanby  
North Marysburgh  
Plympton  
Sarnia  
Saugeen

Separated Town of Trenton  
Sombra  
Sophiasburgh  
South Marysburgh  
Southwold  
Town of Deseronto  
Tudor  
United Counties of Prescott  
and Russell  
United Counties of Stormont,  
Dundas & Glengarry  
United Counties of Leeds and  
Grenville  
Villages of Deloro, Frankford,  
Madoc, Marmora, Stirling  
and Tweed  
W. Williams  
Walford  
Warwich  
Wyoming

#### **JULY 1, 1984**

Storrington

*Designations under the Aggregate Resources Act (Jan. 1, 1990)*

**APRIL 1, 1992**

Adolphustown	Howe Island	Somerville
Amherst Island	Laxton	South Fredericksburgh
Bedford	Longford	Town of Napanee
Camden East	Loughborough	Villages of Bath and
Dalton	North Fredericksburgh	Newburgh
Digby	Portland	Wolfe Island
Ernestown	Richmond	

**SEPTEMBER 1, 1993**

Admaston		Towns of Arnprior and
Alice and Fraser	McNab	Renfrew
Bagot and Blithfield	Pembroke	Villages of Beachburg,
Bromley	Petawawa	Braeside, Cobden and
City of Pembroke	Ross	Petawawa
Horton	Stafford	Westmeath

**JANUARY 1, 1998**

Anderson	Gaudette	Ley
Appleby	Gough	Loughrin
Archibald	Hagar	Macdonald
Aweres	Hallam	May
Awrey	Harrow	McKinnon
Baldwin	Harty	Meredith and Aberdeen
Burwash	Haviland	Additional
Cartier	Hawley	Merritt
Cascaden	Hendrie	Mongowin
Casimir	Henry	Nairn
Chesley Additional	Herrick	Pennefather
Cleland	Hess	Ratter
Cosby	Hilton	Secord
Curtin	Hodgins	Servos
Delamere	Hoskin	Shakespeare
Dennis	Hyman	Shields
Deroche	Jarvis	St. Joseph
Duncan	Jennings	Street
Dunnet	Jocelyn	Tarbutt and Tarbutt
Eden	Johnson	Additional
Fenwick	Kars	Tilley
Fisher	Kehoe	Tilton
Foster	Laird	Tupper
Foy	Laura	VanKoughnet

**DECEMBER 4, 1999**

Village of Hilton Beach

**JULY 22, 2004**

Andre  
Bostwick  
Franchere  
Groseilliers  
Legarde

Levesque  
Macaskill  
Menzies  
Michipicoten  
Musquash

Rabazo  
St. Germain  
Warpula

Please refer to the Revised Regulations of Ontario for accuracy.

# CANADIAN PORTLAND CEMENT ASSOCIATION GEOGRAPHIC AREAS



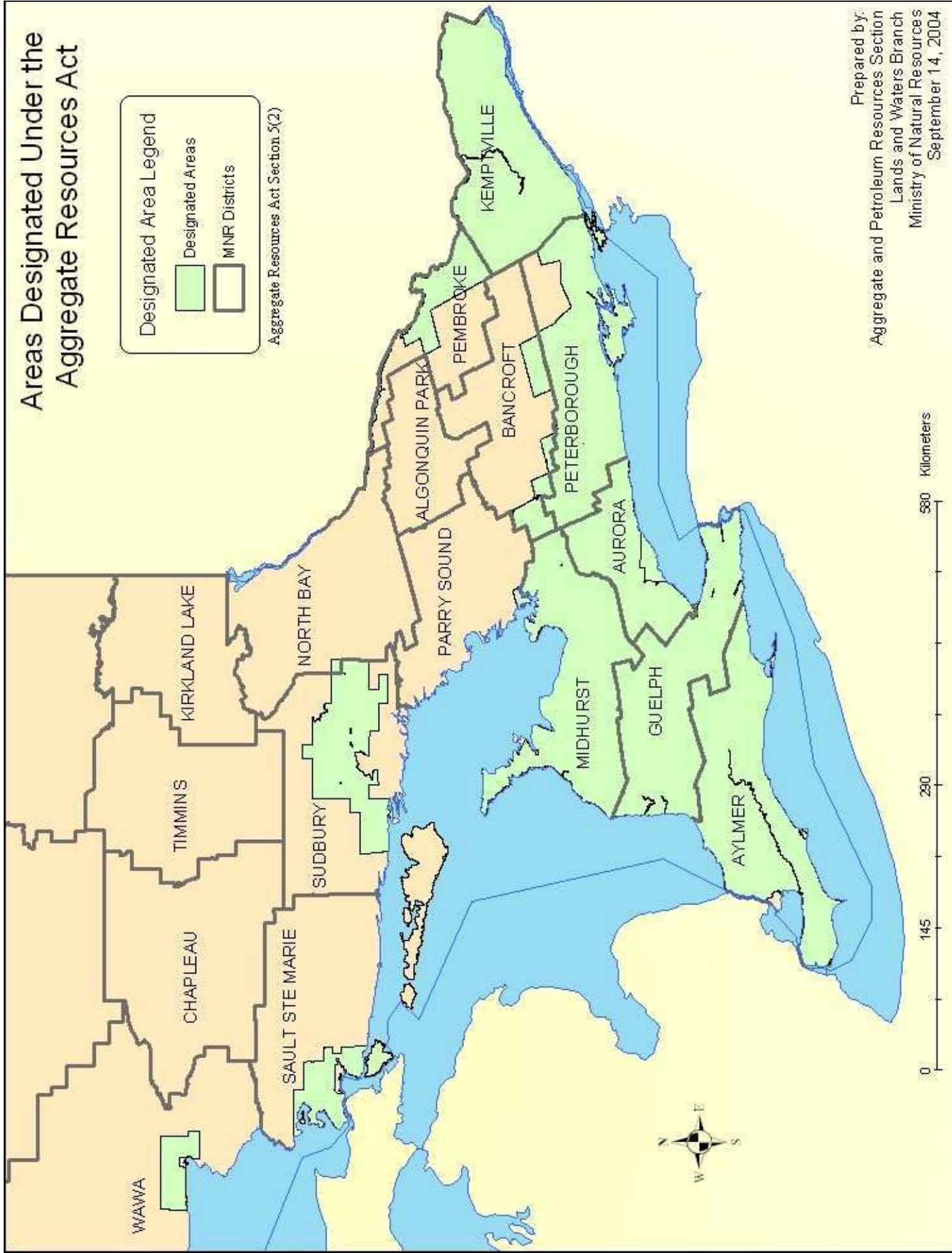
Area 1 Southwest	Area 2 Peninsula	Area 3 West Central	Area 4 GTA	Area 5 East Central	Area 6 East	Area 7 Northeast	Area 8 Northwest
Essex	Niagara	Bruce	Metro Toronto	Kawartha Lakes	Prescott & Russell	Nipissing	Algoma
Chatham-Kent	Brant	Grey	Peel	Peterborough	Leeds & Grenville	Parry Sound	Thunder Bay
Lambton	Haldimand	Simcoe	York	Haliburton	Stormont, Dundas, & Glengarry	TIMISKAMING	Kenora
Elgin	Norfolk	Dufferin	Durham	Northumberland	Frontenac	Cochrane	Rainy River
Middlesex	Hamilton	Wellington	Halton	Hastings	Greater Ottawa	Sudbury District	
Huron		Waterloo		Prince Edward	Lanark	Greater Sudbury	
Perth				Muskoka	Renfrew	Manitoulin	
Oxford					Lennox & Addington		

# Areas Designated Under the Aggregate Resources Act

Designated Area Legend

- Designated Areas
- MNR Districts

Aggregate Resources Act Section 5(2)



Prepared by:  
Aggregate and Petroleum Resources Section  
Lands and Waters Branch  
Ministry of Natural Resources  
September 14, 2004

# Aggregate Officers of Ontario

