

## MINERAL AGGREGATES IN ONTARIO

## **PRODUCTION STATISTICS**

2000

## **READER'S NOTE**

The information in this document is based on production statistics reported from January 1, 2000 to December 31, 2000.

Prepared by

The Ontario Aggregate Resources Corporation

## **TABLE OF CONTENTS**

Ove	erview	1
Mai	nagement of Ontario's Mineral Aggregate Resources	1
	le of the Ministry of Natural Resources	2
	gregate Production	4
TA	BLES AND GRAPHS	
1.	Aggregate Production in Ontario 1988-2000	5
2.	Licence and Wayside Permit Production by Lower Tier Municipality	6
3.	Licence and Wayside Permit Production by Upper Tier Municipality	13
4.	The Top 10 Producing Municipalities	
5.		15
6.	Licenced Aggregate Production by Commodity Type (MNR Districts)	16
7.	20 0	17
8.		18
9.	Rehabilitation of Licenced Aggregate Sites	19
	Number and Type of Aggregate Permits	
	71 - 60 - 60 - 60 - 60 - 60 - 60 - 60 - 6	
API	<u>PENDICES</u>	
A.	Glossary of Terms	
B.	Historical Designation of Private Land under the Pits and Quarries Control	Act
	and the Aggregate Resources Act	
C.	Map of CPCA Geographic Areas	
D.	Map of Areas Designated under the Aggregate Resources Act	
Ε.	Map of Aggregate Officers of Ontario	

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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 \$30 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.

In 2000, this basic non-renewable resource was supplied from 2,799 licensed aggregate sites on private land in designated parts of the Province and 2,963 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. An indenture signed in June of 1997 between the Aggregate Producers' Association of Ontario (APAO) and the MNR established the Aggregate Resources Trust and appointed The Ontario Aggregate Resources Corporation (TOARC) to act as trustee. 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 owned by the APAO as the single shareholder, but is directed by a multi-stakeholder board of directors. The seven-member Board is composed of APAO directors and representatives from environmental groups, municipalities and non-APAO member aggregate producers. TOARC is arms-length from APAO in terms of separate 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 developing systems for the efficient collection and disbursement of aggregate resource charges, the rehabilitation of abandoned pits and quarries through the MAAP program, the creation of an inventory of sites where licences have been revoked 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

Regional technical committees have been established that provide continuous feedback and solutions to technical issues in the delivery of the Aggregate Resources Program. The Aggregate and Petroleum Resources Section provides coordination and leadership to these committees.

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**

The production of mineral aggregates in 2000 totaled approximately 171 million tonnes, up 8.9% from the previous year. Production from licensed operations increased by 14 million tonnes in 2000 to 145 million tonnes. Wayside Permit production remained substantially unchanged from last year while production from Aggregate Permits on Crown Land decreased by approximately 1 million tonnes compared to 1999.

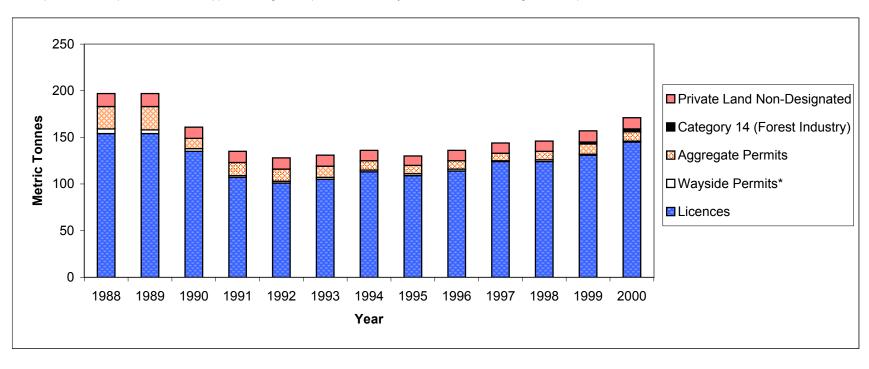
Table 1

AGGREGATE PRODUCTION IN ONTARIO - 1988 - 2000

(rounded to nearest million tonnes)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Licences	154	154	135	107	101	105	113	109	114	124	124	131	145
Wayside Permits*	5	4	3	2	2	2	2	2	2	1	2	1	1
Aggregate Permits	24	25	11	14	13	12	10	9	9	8	9	11	10
Category 14 (Forest Industry)	-	-	-	-	-	-	-	-	-	-	-	2	3
Private Land Non-Designated	14	14	12	12	12	12	11	10	11	11	11	12	12
(estimated)													
ONTARIO TOTAL	197	197	161	135	128	131	136	130	136	144	146	157	171

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



## LICENCE AND WAYSIDE PERMIT PRODUCTION BY LOWER TIER MUNICIPALITY

	(Reported in Metric Tonnes)	Moveide	
Municipality	Licences	Wayside Permits	Total
, ,			
Algoma District			
Algoma District, Unorganized	71,403.55		71,403.55
Hilton Tp	58,463.48		58,463.48
Jocelyn Tp	54,977.92		54,977.92
Johnson/Tarbutt & Tarbutt Add'l Tp	44,199.92		44,199.92
St. Joseph/Laird Tp	29,002.88		29,002.88
Macdonald, Meredith & Aberdeen Add'l Tp	2,155.80		2,155.80
Sault Ste. Marie, City of	544,116.27		544,116.27
Sub-Total	804,319.82	0.00	804,319.82
Brant			
Brant, County of/Brantford, City of	2,119,960.77		2,119,960.77
Sub-Total	2,119,960.77	0.00	2,119,960.77
oub-rotal	2,110,000.77	0.00	2,113,300.77
Bruce			
Arran-Elderslie, Municipality of	127,209.06		127,209.06
Brockton, Municipality of	227,276.31		227,276.31
Huron-Kinloss Tp	189,954.94		189,954.94
Kincardine, Municipality of	70,036.38		70,036.38
Northern Bruce Peninsula, Municipality of	125,924.30		125,924.30
Saugeen Shores, Town of	196,680.33		196,680.33
South Bruce, Municipality of	531,972.33	30,000.00	561,972.33
South Bruce Peninsula, Town of	189,955.34		189,955.34
Sub-Total	1,659,008.99	30,000.00	1,689,008.99
Chatham-Kent			
Chatham-Kent, Municipality of	474,298.36		474,298.36
Sub-Total	474,298.36	0.00	474,298.36
	,		,
Dufferin			
Amaranth/East Luther Grand Valley Tp	255,062.32		255,062.32
East Garafraxa Tp	954,373.72		954,373.72
Melancthon Tp	186,166.48	95,000.00	281,166.48
Mono Tp	546,650.04		546,650.04
Mulmur Tp	514,308.76		514,308.76
Sub-Total	2,456,561.32	95,000.00	2,551,561.32
Durham			
Brock Tp	1,324,980.73		1,324,980.73
Clarington, Municipality of	4,350,266.87		4,350,266.87
Oshawa, City of/Whitby, Town of/Scugog Tp	453,180.71		453,180.71
Uxbridge Tp	4,078,236.83		4,078,236.83
Sub-Total	10,206,665.14	0.00	10,206,665.14

## LICENCE AND WAYSIDE PERMIT PRODUCTION BY LOWER TIER MUNICIPALITY

	(Reported in Metric Torines)	Wayside	
Municipality	Licences	Permits	Total
Elgin			
Bayham, Municipality of/Malahide Tp	67,146.04		67,146.04
Central Elgin, Municipality of	440,032.99		440,032.99
West Elgin, Municipality of	144,521.15		144,521.15
Sub-Total	651,700.18	0.00	651,700.18
_			
Essex	4 5 40 500 40		4 = 40 = 00 40
Amherstburg/Kingsville, Town of/Pelee Tp	1,543,588.16		1,543,588.16
Leamington, Municipality of	482,048.79	0.00	482,048.79
Sub-Total	2,025,636.95	0.00	2,025,636.95
Frontenac			
Frontenac Islands Tp	48,748.34		48,748.34
Kingston, City of	1,054,419.52		1,054,419.52
South Frontenac Tp	300,827.93		300,827.93
Sub-Total	1,403,995.79	0.00	1,403,995.79
oub-10tal	1,400,000.70	0.00	1,400,000.70
Grey			
Artemesia Tp	102,662.19		102,662.19
Blue Mountains, Town of	207,817.15		207,817.15
Chatsworth Tp	348,533.07		348,533.07
Derby Tp	200,441.70		200,441.70
Euphrasia/St. Vincent/Sarawak Tp	175,738.90		175,738.90
Keppel Tp	270,173.79	20,000.00	290,173.79
Osprey Tp	176,519.70	,	176,519.70
Southgate Tp	285,005.76		285,005.76
Sydenham Tp	301,666.25		301,666.25
West Grey Tp	416,563.44		416,563.44
Sub-Total	2,485,121.95	20,000.00	2,505,121.95
Haldimand-Norfolk			
Delhi Tp/Dunnville, Town of	263,208.55		263,208.55
Haldimand/Simcoe, Town of	1,478,527.00		1,478,527.00
Nanticoke, City of	296,302.68		
Sub-Total	2,038,038.23	0.00	2,038,038.23
Halton			
	6 465 400 00		C 465 466 00
Burlington, City of/Halton Hills, Town of	6,465,166.90		6,465,166.90
Milton, Town of Sub-Total	9,024,127.53 15,489,294.43	0.00	9,024,127.53
Sub-10lai	15,469,294.43	0.00	15,489,294.43

## LICENCE AND WAYSIDE PERMIT PRODUCTION BY LOWER TIER MUNICIPALITY

	(Reported in Metric Tonnes)	\Massa:da	
Municipality	Licences	Wayside Permits	Total
Hamilton-Wentworth			
Flamborough, Town of/Stoney Creek, City of	6,285,547.00		6,285,547.00
Sub-Total	6,285,547.00	0.00	6,285,547.00
Hastings	050 500 07		050 500 07
Belleville, City of	350,522.67		350,522.67
Centre Hastings, Municipality of	120,739.88		120,739.88
Madoc Tp	694,223.01		694,223.01
Marmora & Lake Tp	4,426.51		4,426.51
Quinte West, City of	543,644.08		543,644.08
Stirling-Rawdon/Tyendinaga Tp	253,711.94		253,711.94
Tweed, Municipality of	16,440.13	0.00	16,440.13
Sub-Total	1,983,708.22	0.00	1,983,708.22
Huron			
Ashfield Tp	101,416.87		101,416.87
Colborne Tp	362,074.35		362,074.35
East Wawanosh Tp	69,563.51		69,563.51
Grey Tp	321,121.10		321,121.10
Goderich Tp	523,574.54		523,574.54
Hay/Stanley/Turnberry Tp	50,937.84		50,937.84
Howick Tp	160,595.56		160,595.56
Hullett Tp	126,047.28		126,047.28
McKillop Tp	474,905.53		474,905.53
Morris Tp	206,000.52		206,000.52
Tuckersmith Tp	72,789.00		72,789.00
Usborne Tp	76,299.88		76,299.88
West Wawanosh Tp	190,743.24		190,743.24
Sub-Total	2,736,069.22	0.00	2,736,069.22
Gub-1 Otal	2,730,009.22	0.00	2,730,009.22
Lambton			
Bosanquet, Town of	98,773.45		98,773.45
Enniskillen/Plympton/Warwick Tp	408,873.44		408,873.44
Sub-Total	507,646.89	0.00	507,646.89
Lanark			
Bathurst, Burgess, Sherbrooke Tp	34,874.90		34,874.90
Beckwith Tp	47,281.77		47,281.77
Drummond-North Elmsley Tp	130,689.87		130,689.87
Lanark Highlands Tp	1,271,406.79		1,271,406.79
Mississippi Mills, Town of	13,154.10		13,154.10
Montague Tp	96,061.38		96,061.38
Sub-Total	1,593,468.81	0.00	1,593,468.81

## LICENCE AND WAYSIDE PERMIT PRODUCTION BY LOWER TIER MUNICIPALITY

(Reported in Metric 1	Tonnes)		
Municipality	Licences	Wayside Permits	Total
mamorpanty	Licences	1 Cilinto	Total
Leeds & Grenville			
Augusta Tp	193,867.16		193,867.16
Edwardsburgh Tp	471,777.24		471,777.24
Elizabethtown Tp	681,423.93		681,423.93
Front of Escott/Front of Yonge/Rear of Yonge & Escott/Kitley Tp	163,317.18		163,317.18
Front of Leeds & Lansdowne Tp	72,407.12		72,407.12
Merrickville-Wolford, Village of	145,993.99		145,993.99
North Grenville Tp	474,074.64		474,074.64
Rear of Leeds & Lansdowne Tp	706,820.02		706,820.02
Rideau Lakes Tp	78,045.38		78,045.38
Sub-Total	2,987,726.66	0.00	2,987,726.66
Lennox & Addington			
Greater Napanee, Town of	354,895.13		354,895.13
Loyalist/Stone Mills Tp	1,482,968.50		1,482,968.50
Sub-Total	1,837,863.63	0.00	1,837,863.63
Middle			
Middlesex	405.004.00		405 004 00
Adelaide/Lucan Biddulph Tp	135,084.26		135,084.26
Caradoc Tp	23,139.00		23,139.00
London, City of	2,957,874.88		2,957,874.88 39,936.52
McGillivray Tp Middlesex Centre Tp	39,936.52 1,016,547.50		1,016,547.50
North Dorchester Tp	1,193,139.36		1,193,139.36
West Nissouri Tp	978,975.07		978,975.07
West Williams Tp	94,543.75		94,543.75
Sub-Total	6,439,240.34	0.00	6,439,240.34
our rotal	0, 100,2 10.0 1	0.00	0, 100,2 10.0 1
Niagara			
Fort Erie, Town of/Port Colborne, City of/Wainfleet Tp	1,492,470.60		1,492,470.60
Lincoln/Niagara-on-the-Lake/Pelham, Town of	1,948,593.80		1,948,593.80
Niagara Falls, City of	1,173,473.81		1,173,473.81
Sub-Total	4,614,538.21	0.00	4,614,538.21
Northumberland			
Alnwick/Hope Tp	93,141.18	150,000.00	243,141.18
Brighton Tp	396,739.16		396,739.16
Campbellford-Seymour, Municipality of	125,240.03		125,240.03
Cramahe Tp	1,871,566.32		1,871,566.32
Haldimand Tp	180,677.72		180,677.72
Hamilton Tp	287,140.19		287,140.19
Percy Tp	89,842.99		89,842.99
Sub-Total	3,044,347.59	150,000.00	3,194,347.59

## LICENCE AND WAYSIDE PERMIT PRODUCTION BY LOWER TIER MUNICIPALITY

(Reported in Met	tric Lonnes)	Mayaida	
Municipality	Licences	Wayside Permits	Total
Ottawa-Carleton			
Cumberland Tp	660,270.18		660,270.18
Gloucester, City of	1,997,712.30		1,997,712.30
Goulbourn Tp	750,432.48		750,432.48
Nepean, City of	3,534,503.25		3,534,503.25
Osgoode Tp	324,582.22		324,582.22
Rideau Tp	4,276.00		4,276.00
West Carleton Tp	3,390,600.02		3,390,600.02
Sub-Total	10,662,376.45	0.00	10,662,376.45
Oxford			
Blandford-Blenheim Tp	310,450.77		310,450.77
East Zorra-Tavistock/Norwich Tp/Woodstock, City of	160,880.10		160,880.10
South-West Oxford Tp	1,072,675.80		1,072,675.80
Zorra Tp	3,762,162.87	115,247.00	3,877,409.87
Sub-Total	5,306,169.54	115,247.00	5,421,416.54
Pool			
Peel Brampton/Mississauga, City of	315,436.18		315,436.18
Caledon, Town of	4,851,394.46		4,851,394.46
Sub-Total	5,166,830.64	0.00	5,166,830.64
Sub-10tal	3,100,030.04	0.00	3,100,030.04
Perth			
North Perth, Town of/St. Marys, Separated Town of	143,122.08		143,122.08
Perth East Tp	335,151.90		335,151.90
Perth South Tp	1,501,850.77		1,501,850.77
West Perth Tp	154,542.03		154,542.03
Sub-Total	2,134,666.78	0.00	2,134,666.78
Peterborough			
Asphodel-Norwood Tp	192,715.45		192,715.45
Douro-Dummer Tp	550,659.76		550,659.76
Galway-Cavendish-Harvey Tp	203,821.06		203,821.06
Havelock-Belmont-Methuen Tp	322,630.33		322,630.33
Cavan-Millbrook-North Monaghan Tp	97,831.51		97,831.51
Otonabee-South Monaghan Tp	362,092.80		362,092.80
Smith-Ennismore Tp	478,137.26		478,137.26
Sub-Total	2,207,888.17	0.00	2,207,888.17
Prescott & Russell			
Alfred & Plantagenet Tp	159,620.76		159,620.76
Champlain Tp	364,594.94		364,594.94
Clarence-Rockland, City of	326,108.29		326,108.29
East Hawkesbury Tp	74,226.00		74,226.00
The Nation, Municipality of	206,182.09		206,182.09
Russell Tp	283,887.13		283,887.13
Sub-Total	1,414,619.21	0.00	1,414,619.21

## LICENCE AND WAYSIDE PERMIT PRODUCTION BY LOWER TIER MUNICIPALITY

(Reported in Metric	: Tonnes)	\ <b>A</b> /!-!-	
Municipality	Licences	Wayside Permits	Total
Prince Edward Co			
Prince Edward, County of	2,110,052.49		2,110,052.49
Sub-Total	2,110,052.49	0.00	2,110,052.49
Renfrew			
Admaston/Bromley Tp	65,399.79		65,399.79
Bagot-Blythfield-Brougham Tp	9,510.00		9,510.00
Horton Tp	354,673.81		354,673.81
Laurentian Valley Tp	256,462.42		256,462.42
McNab-Braeside Tp	291,460.81		291,460.81
Petawawa, Town of	341,843.08		341,843.08
Ross Tp/Renfrew, Town of	68,492.92		68,492.92
Westmeath Tp	118,325.97		118,325.97
Sub-Total	1,506,168.80	0.00	1,506,168.80
Simcoe			
Adjala-Tosorontio Tp/Collingwood, Town of/Barrie, City of	541,826.35		541,826.35
Bradford West Gwillimbury/Midland/Wasaga Beach, Town of	208,160.15		208,160.15
Clearview Tp	1,313,587.03		1,313,587.03
Essa Tp	126,619.65		126,619.65
Innisfil, Town of	144,331.93		144,331.93
New Tecumseth, Town of	70,231.20		70,231.20
Oro-Medonte Tp	1,986,819.69		1,986,819.69
Ramara Tp	2,086,360.58		2,086,360.58
Severn Tp	1,346,462.97		1,346,462.97
Springwater Tp	1,152,545.68		1,152,545.68
Tay Tp	97,213.46		97,213.46
Tiny Tp	191,118.13		191,118.13
Sub-Total	9,265,276.82	0.00	9,265,276.82
Stormont, Dundas & Glengarry			
North Dundas Tp	679,136.92		679,136.92
North Glengarry Tp	74,398.52		74,398.52
North Stormont Tp	660,171.65		660,171.65
South Dundas Tp	216,844.81		216,844.81
South Glengarry Tp	508,128.36		508,128.36
South Stormont Tp	886,881.36		886,881.36
Sub-Total	3,025,561.62	0.00	3,025,561.62
Sudbury			
Nickel Centre, Town of	1,131,655.87		1,131,655.87
Onaping Falls, Town of	680,004.00		680,004.00
Rayside-Balfour, Town of/Sudbury, City of	184,065.39	77,466.00	261,531.39
Valley East, City of	249,269.88	, . 50.00	249,269.88
Walden, Town of	16,407.96		16,407.96
Sub-Total	2,261,403.10	77,466.00	2,338,869.10
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## LICENCE AND WAYSIDE PERMIT PRODUCTION BY LOWER TIER MUNICIPALITY

(Reported in	Metric Tonnes)	Waysido		
Municipality	Licences	Wayside Permits	Total	
Sudbury District				
Baldwin Tp/ St. Charles, Municipality of	20,617.66		20,617.66	
French River, Municipality of/Nairn & Hyman Tp	103,944.72		103,944.72	
Markstay-Warren, Municipality of	41,855.88		41,855.88	
Sables Spanish Rivers Tp	13,353.44	2,335.00	15,688.44	
Sudbury District, Unorganized	245,988.78		245,988.78	
Sub-Total	425,760.48	2,335.00	428,095.48	
Victoria				
Bexley/Laxton, Digby & Longford Tp	81,317.54		81,317.54	
Bobcaygeon/Verulam, Municipality of	76,514.66		76,514.66	
Carden/Dalton Tp	1,730,769.72		1,730,769.72	
Eldon Tp	156,559.67		156,559.67	
Emily Tp	572,294.17		572,294.17	
Fenelon Tp	236,767.33		236,767.33	
Manvers Tp	3,373,389.86		3,373,389.86	
Mariposa Tp	694,678.81		694,678.81	
Somerville Tp	194,561.99		194,561.99	
Sub-Total	7,116,853.75	0.00	7,116,853.75	
Waterloo				
Cambridge/Kitchener, City of	1,268,718.23		1,268,718.23	
North Dumfries Tp	3,520,907.89		3,520,907.89	
Wellesley Tp	1,184,977.20		1,184,977.20	
Wilmot Tp	853,468.93		853,468.93	
Woolwich Tp	855,625.65		855,625.65	
Sub-Total	7,683,697.90	0.00	7,683,697.90	
Wellington				
Centre Wellington Tp	1,047,893.32		1,047,893.32	
Erin, Town of	1,708,772.43		1,708,772.43	
Guelph-Eramosa Tp	752,733.35	100,000.00	852,733.35	
Mapleton Tp	91,392.66		91,392.66	
Minto, Town of	394,775.17		394,775.17	
Puslinch Tp	4,133,573.61		4,133,573.61	
Wellington North Tp	151,631.60	100 000 00	151,631.60	
Sub-Total	8,280,772.14	100,000.00	8,380,772.14	
York			406 5=5 5=	
East Gwillimbury, Town of	483,053.05		483,053.05	
Georgina, Town of	100,993.56		100,993.56	
King Tp/Vaughan, City of	296,435.27		296,435.27	
Whitchurch-Stouffville, Town of	2,192,206.00		2,192,206.00	
Sub-Total	3,072,687.88	0.00	3,072,687.88	
GRAND TOTAL	145,485,544.27	590,048.00	146,075,592.27	

Table 3

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

Municipality	1992	1993	1994	1995	1996	1997	1998	1999	2000
Algoma, District of	0.5	0.4	0.5	0.5	0.6	0.6	0.6	8.0	8.0
Brant Co.	1.4	1.1	1.3	1.6	1.7	2.1	1.5	1.5	2.1
Bruce Co.	2.0	2.0	1.8	1.5	1.2	1.3	1.6	1.5	1.7
Chatham-Kent, R. M. of	0.3	0.4	0.5	0.5	0.4	0.5	0.4	0.5	0.5
Dufferin Co.	1.1	1.3	1.6	1.4	1.5	1.5	1.8	2.1	2.6
Durham, R. M. of	5.7	6.6	7.1	7.2	7.6	8.7	7.8	9.2	10.2
Elgin Co.	0.5	0.6	0.5	0.4	0.5	0.7	0.4	0.6	0.7
Essex Co.	2.7	2.8	2.7	2.4	2.2	2.7	2.0	1.9	2.0
Frontenac, Management Board	1.6	1.4	1.5	1.2	1.6	1.5	1.2	1.3	1.4
Grey Co.	2.6	2.4	2.7	2.4	2.0	2.1	2.1	2.8	2.5
Haldimand-Norfolk, R. M. of	1.7	1.8	1.9	1.9	1.7	2.1	1.8	2.0	2.0
Halton, R. M. of	7.0	9.2	9.7	10.7	12.3	14.4	13.4	13.8	15.5
Hamilton-Wentworth, R. M. of	3.6	3.4	3.9	4.0	4.0	5.2	4.7	4.6	6.3
Hastings Co.	1.6	1.5	1.2	1.4	1.6	2.0	1.9	2.2	2.0
Huron Co.	2.9	2.1	2.9	2.8	2.8	2.4	2.6	2.8	2.7
Lambton Co.	0.5	0.4	0.6	0.6	0.4	0.5	0.6	0.6	0.5
Lanark Co.	1.2	0.9	1.1	1.3	1.2	1.2	1.3	1.5	1.6
Leeds & Grenville Co.'s	2.0	2.0	2.4	2.3	2.0	2.1	4.2	2.2	3.0
Lennox & Addington Co.	1.4	1.9	1.7	2.0	1.8	1.7	1.9	1.7	1.8
Middlesex Co.	4.4	5.0	4.9	4.5	4.5	5.3	6.1	5.6	6.4
Niagara, R. M. of	3.3	3.5	4.1	3.6	4.7	4.9	4.6	4.3	4.6
Northumberland Co.	3.3	3.0	3.0	2.6	3.0	3.2	3.2	3.6	3.2
Ottawa-Carleton, R. M. of	8.7	9.2	9.3	8.4	6.1	6.7	7.1	8.1	10.7
Oxford Co.	4.5	4.9	4.6	5.0	4.6	5.3	4.9	5.1	5.4
Peel, R. M. of	2.7	2.9	3.1	3.7	3.8	4.3	4.2	4.5	5.2
Perth Co.	1.3	1.4	1.7	1.6	1.9	1.7	1.7	1.6	2.1
Peterborough Co.	2.4	2.6	2.2	1.8	1.8	1.8	1.8	1.8	2.2
Prescott & Russell Co.'s	1.5	1.7	1.9	1.3	1.2	1.4	1.1	1.2	1.4
Prince Edward Co.	1.7	1.5	1.9	2.2	1.8	2.1	2.0	2.0	2.1
Renfrew Co.	ND	ND	1.1	1.3	1.5	1.2	1.3	1.5	1.5
Simcoe Co.	8.0	6.9	6.2	6.8	7.4	7.6	9.0	9.0	9.3
Stormont, Dundas & Glengarry Co.'s	2.4	2.6	2.6	2.3	2.1	2.4	2.4	2.8	3.0
Sudbury, District of	0.5	0.5	0.5	0.3	0.3	0.2	0.2	0.4	0.5
Sudbury, R. M. of	2.7	2.2	2.9	2.9	2.7	2.5	2.3	2.9	2.3
Victoria Co.	4.7	5.1	5.4	4.9	6.0	6.5	6.6	6.0	7.1
Waterloo, R. M. of	4.1	4.7	5.8	5.8	5.8	5.6	5.8	7.3	7.7
Wellington Co.	4.9	5.5	5.6	4.9	6.0	6.4	6.9	7.5	8.4
York, R. M. of	1.6	1.4	1.9	2.2	2.0	2.6	2.2	2.7	3.0
TOTAL	103.0	106.8	114.3	112.2	114.3	125.0	125.2	131.5	146.0

ND: Not Designated under the Aggregate Resources Act.

Table 4

LICENCE PRODUCTION IN 2000

THE TOP TEN PRODUCING MUNICIPALITIES
(Rounded to nearest million tonnes)

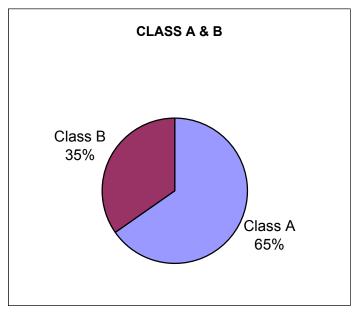
			2000		Production			
Municipality Cou		County/Region	Production	1999	1998	1997	1996	1995
1	Town of Milton	Halton Region	9.0	7.7	7.9	9.6	8.6	5.6
2	City of Burlington/ Town of Halton Hills	Halton Region	6.5	6.1	5.5	4.7	3.7	5.1
3	City of Stoney Creek/ Town of Flamborough	Hamilton-Wentworth	6.3	4.6	4.7	5.1	4.0	4.0
4	Town of Caledon	Peel Region	5.0	4.2	3.9	4.0	3.5	3.6
5	Municipality of Clarington	Durham	4.3	3.8	3.0	3.9	3.1	3.0
6	Puslinch Township	Wellington County	4.1	3.9	3.8	3.5	3.2	2.0
7	Township of Uxbridge	Durham	4.1	3.4	3.2	3.1	3.3	3.1
8	Zorra Township	Oxford County	3.8	4.1	3.8	3.8	3.3	3.6
9	City of Nepean	Ottawa-Carleton, R. M. of	3.5	2.2	2.1	2.1	2.0	2.5
10	Township of North Dumfries	Waterloo, R. M. of	3.5	3.2	2.5	2.4	2.9	2.5
	Total		50.1	43.2	40.4	42.2	37.6	35.0

Note: Municipalities are ranked in order of their licenced production for 2000

Table 5

NUMBER AND TYPE OF AGGREGATE LICENCES
AS OF DECEMBER 31, 2001

	No. of	Cate	gory	Type of Operation			ation
District	Licences	Class A	Class B		Pit	Quarry	Pit & Quarry
Aurora (GTA)	176	151	25		160	16	0
Aylmer	319	229	90		302	11	6
Bancroft	37	13	24		18	14	5
Guelph (Cambridge)	475	383	92		441	31	3
Kemptville	509	266	243		371	117	21
Midhurst	465	340	125		428	34	3
Pembroke	113	52	61		101	6	6
Peterborough (Tweed)	503	270	233		405	85	13
Sault Ste. Marie	69	31	38		63	1	5
Sudbury	133	92	41		112	5	16
TOTAL	2799	1827	972		2401	320	78



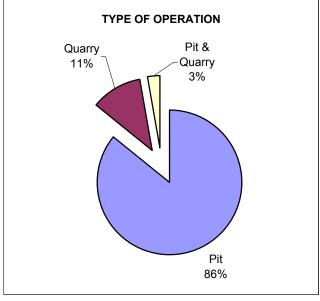


Table 6

## 2000 LICENCED AGGREGATE PRODUCTION BY COMMODITY TYPE

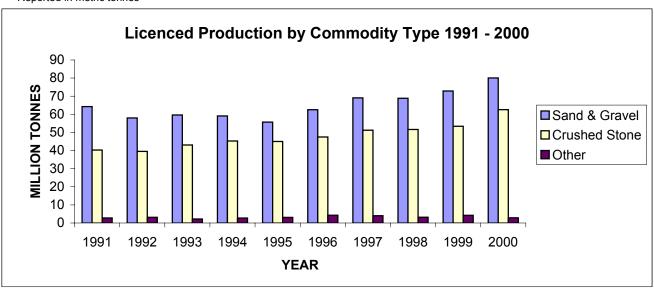
(Reported by MNR District)

		Sand &	Crushed	Clay/	Other
District	Total	Gravel	Stone	Shale	Stone
Aurora (GTA)	33,935,478.09	15,849,306.88	17,259,588.00	822,443.71	4,139.50
Aylmer	15,849,009.62	11,572,555.66	4,274,794.34	1,325.00	334.62
Bancroft	2,148,224.69	73,788.21	2,053,780.08	0.00	20,656.40
Guelph (Cambridge)	35,633,207.30	21,947,801.68	13,152,649.01	160,249.34	372,507.27
Kemptville	19,683,752.75	6,250,269.30	12,420,377.06	158,372.30	854,734.09
Midhurst	15,681,734.67	10,789,936.25	4,511,981.12	94,010.73	285,806.57
Pembroke	1,506,168.80	1,255,198.66	250,845.02	0.00	125.12
Peterborough	17,556,484.95	9,139,858.10	8,370,888.02	38,045.04	7,693.79
Sault Ste. Marie	812,279.82	728,330.78	55,867.70	0.00	28,081.34
Sudbury	2,679,203.58	2,460,144.64	214,840.85	3,687.69	530.40
TOTAL	145,485,544.27	80,067,190.16	62,565,611.20	1,278,133.81	1,574,609.10

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)

	Sand & Gravel	Crushed Stone	Other
1991	64.24	40.26	2.78
1992	57.99	39.52	3.15
1993	59.62	43.04	2.19
1994	59.07	45.28	2.76
1995	55.70	45.01	3.09
1996	62.52	47.48	4.27
1997	69.05	51.23	4.01
1998	68.84	51.64	3.20
1999	72.87	53.40	4.26
2000	80.07	62.57	2.85

2000 AGGREGATE PERMIT PRODUCTION
BY COMMODITY TYPE
(Reported by MNR District)

Region/District	Total Production	Sand & Gravel	Crushed Stone	Clay/Shale	Other Stone
Region/District	Troduction	Giavei	Storie	Clay/Offale	Otone
NORTHEAST					
Chapleau	320,755.16	320,755.16	-	_	-
Cochrane	296,455.00	158,017.60	138,111.00	_	326.40
Hearst	307,413.96	224,981.06	59,146.45	-	23,286.45
Kirkland Lake	781,722.68	744,367.68	-	37,355.00	-
North Bay	1,143,931.76	1,110,804.62	31,101.00	· <u>-</u>	2,026.14
Sault Ste. Marie	347,489.38	347,489.38	-	_	· -
Sudbury	369,930.84	178,230.36	187,497.75	_	4,202.73
Timmins	293,905.14	293,905.14	-	_	· -
Wawa	896,285.76	883,773.76	-	12,512.00	-
Sub-Total	4,757,889.68	4,262,324.76	415,856.20	49,867.00	29,841.72
NORTHWEST					
Dryden	652,831.24	438,731.24	214,000.00	-	100.00
Fort Frances	1,053,378.45	959,697.65	93,333.00	1.00	346.80
Kenora	303,509.50	288,621.54	-	-	14,887.96
Nipigon	823,319.67	772,480.77	44,783.00	-	6,055.90
Red Lake	481,093.68	480,083.48	-	87.00	923.20
Sioux Lookout	531,875.66	531,145.00	-	-	730.66
Thunder Bay	436,296.73	436,284.98	-	-	11.75
Sub-Total	4,282,304.93	3,907,044.66	352,116.00	88.00	23,056.27
SOUTHCENTRAL					
Algonquin Park	31,217.00	31,217.00	-	-	-
Aurora (GTA)	-	-	-	-	-
Aylmer	586.75	586.75	-	-	-
Bancroft	239,978.72	108,272.04	125,655.43	-	6,051.25
Guelph (Cambridge)	-	-	-	-	-
Kemptville	192,186.28	92,186.28	100,000.00	-	-
Midhurst	-	-	-	-	-
Parry Sound	237,456.27	218,889.10	17,120.17	-	1,447.00
Pembroke	55,663.38	55,663.38	-	-	-
Peterborough (Tweed)	61.90			-	61.90
Sub-Total	757,150.30	506,814.55	242,775.60	0.00	7,560.15
TOTAL	9,797,344.91	8,676,183.97	1,010,747.80	49,955.00	60,458.14

Note: Amounts shown are in metric tonnes

Table 8

2000 AGGREGATE PERMIT PRODUCTION
BY COMMODITY TYPE
(Reported by CPCA\* Geographic Areas)

		Sand &	Crushed	Clay/	Other
Area	Total	Gravel	Stone	Shale	Stone
Southwest (1)	587	587	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)	240,041	108,272	125,655	0	6,113
East (6)	247,850	147,850	100,000	0	0
Northeast (7)	4,130,277	3,628,657	432,976	37,355	31,289
Northwest (8)	5,178,591	4,790,819	352,116	12,600	23,056
TOTAL	9,797,345	8,676,184	1,010,748	49,955	60,458

Note: Totals may not equal due to rounding

Other Stone includes building stone, industrial stone, dimensional stone

Amounts shown are in metric tonnes

# 2000 AGGREGATE LICENCE PRODUCTION BY COMMODITY TYPE (Reported by CPCA\* Geographic Areas)

Aroo	Total	Sand & Gravel	Crushed	Clay/ Shale	Other
Area	Total	Gravei	Stone	Silale	Stone
Southwest (1)	20,275,428	15,160,732	5,010,313	103,688	695
Peninsula (2)	15,058,084	3,223,290	11,783,763	51,032	0
West Central (3)	31,830,439	25,926,272	5,145,348	100,866	657,954
GTA (4)	33,935,478	15,849,307	17,259,588	822,444	4,140
East Central (5)	16,462,850	8,797,197	7,630,597	10,726	24,330
East (6)	24,431,781	7,921,917	15,465,293	185,691	858,880
Northeast (7)	2,687,164	2,468,105	214,841	3,688	530
Northwest (8)	804,320	720,371	55,868	0	28,081
TOTAL	145,485,544	80,067,190	62,565,611	1,278,134	1,574,609

Note: Totals may not equal due to rounding

Other Stone includes building stone, industrial stone, dimensional stone

Amounts shown are in metric tonnes

<sup>\*</sup>CPCA - Canadian Portland Cement Association

<sup>\*</sup>CPCA - Canadian Portland Cement Association

Table 9

### REHABILITATION OF LICENCED AGGREGATE SITES IN 2000 (Reported by MNR District)

	Total No. of	Total Licenced	Original Disturbed	New Disturbed	New Rehab.	Total Disturbed
District	Licences	Area	Area	Area	Area	Area
Aurora (GTA)	176	9,433.41	3,597.85	109.25	61.14	3,645.96
Aylmer	319	8,583.13	3,122.76	88.88	107.48	3,104.16
Bancroft	37	1,482.78	254.13	8.60	1.50	261.23
Guelph (Cambridge)	475	16,701.82	4,274.51	241.25	132.24	4,383.53
Kemptville	509	14,149.97	3,689.33	111.46	29.12	3,771.67
Midhurst	465	13,407.44	3,173.79	155.90	85.22	3,244.46
Pembroke	113	3,172.90	382.31	33.09	0.00	415.40
Peterborough (Tweed)	503	13,430.52	3,236.77	68.99	35.57	3,270.19
Sault Ste. Marie	69	2,977.06	297.58	13.82	5.48	305.92
Sudbury	133	9,907.09	800.15	10.04	10.90	799.29
TOTAL	2,799	93,246.12	22,829.18	841.29	468.66	23,201.81

Note: Areas shown are in hectares

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

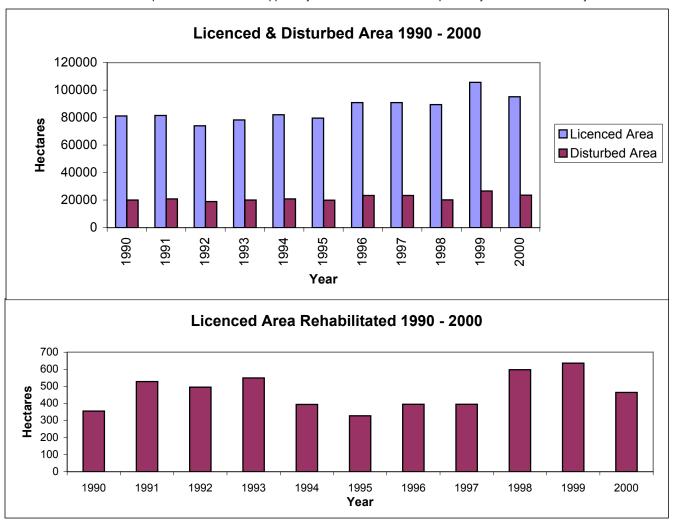


Table 10

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

	Total	Total No.			Pit &	
Region/District	Hectarage	of Permits	Pit	Quarry	Quarry	Underwater
NORTHEAST						
Chapleau	524.83	186	186	0	0	0
Cochrane	2,432.17	108	96	7	5	0
Hearst	2,544.82	158	143	14	1	0
Kirkland Lake	1,079.55	113	113	0	0	0
North Bay	2,146.13	198	183	12	3	0
Sault Ste. Marie	515.41	105	102	2	1	0
Sudbury	3,460.98	180	157	16	7	0
Timmins	1,411.10	142	138	4	0	0
Wawa	1,946.81	252	250	2	0	0
Sub-Total	16,061.80	1,442	1,368	57	17	0
	.,	,	,			
NORTHWEST						
Dryden	1,239.71	171	165	3	3	0
Fort Frances	1,962.76	262	252	4	6	0
Kenora	2,030.10	181	162	15	4	0
Nipigon	2,961.35	309	296	12	1	0
Red Lake	851.13	97	97	0	0	0
Sioux Lookout	993.32	73	73	0	0	0
Thunder Bay	1,434.03	166	152	14	0	0
Sub-Total	11,472.40	1,259	1,197	48	14	0
SOUTHCENTRAL	40.70	40	40	0	0	0
Algonquin Park	10.72	19	19	0	0	0
Aurora (GTA)	0.00	0	0	0	0	0
Aylmer	0.10	1	0	0	0	1
Bancroft	751.50	82	73	9	0	0
Guelph (Cambridge)	620.50	2	0	0	0	2
Kemptville	147.58	5	2	2	0	1
Midhurst	1.00	1	0	0	0	1
Parry Sound	607.57	107	83	12	2	10
Pembroke	116.92	44	43	1	0	0
Peterborough (Tweed)	121.06	1	0	1	0	0
Sub-Total	2,376.95	262	220	25	2	15
TOTAL	29,911.15	2,963	2,785	130	33	15
IOIAL	29,911.10	2,900	2,700	130	33	10

#### 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-excavation 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**

Euphrasia	Nottawasaga
Flamborough East	Osprey
Flamborough West	Pelham
Grantham	Reach
Grimsby North	Saltfleet
Holland	Stamford
Keppel	St. Edmunds
Lindsay	St. Vincent
London	Sydenham
Louth	Thorold
Melancthon	Toronto Gore
Mono	Trafalgar
Mulmur	Westminster
Nassagaweya	West Nissouri
Nelson	Whitby
Niagara	Whitchurch
	Flamborough East Flamborough West Grantham Grimsby North Holland Keppel Lindsay London Louth Melancthon Mono Mulmur Nassagaweya Nelson

#### **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	Норе	North Cayuga

North Gower Sidney Wellesley North Oxford Sunnidale West Oxford Oneida Thurlow Willoughby Tilbury East Wilmot Orillia Oro Tvendinaga Woodhouse Pilkington Uxbridge Woolwich Raleigh Vespra Yarmouth Romney Walpole

#### **FEBRUARY 15, 1974**

Delaware

North Dorchester

#### MAY 17, 1974

Pelee

Drury

#### MAY 1, 1975

Alnwick Dryden Louise Amaranth Dummer Lumsden Arran East York MacLennan Arthur East Garafraxa Maidstone Asphodel East Nissouri Malahide Balfour East Luther Mara Bayham Mariposa East Gwillimbury Belmont East Oxford Marlborough Bexley East Zorra Maryborough Biddulph Matchedash Eldon Binbrook **Emily** McKim Blandford Ennismore Medonte Essa Blanshard Middleton Blezard Etobicoke Minto Bowell Fairbank Morgan Moulton Broder Falconbridge Burford Fenelon Neelon Caistor Flos Norman Camden Gainsborough North Monaghan Capreol North Walsingham Garson Cartwright Georgina North Norwich Cavan Glanford North Gwillimbury Charlotteville Glenelg North York Goulburn Chatham Oakland Creighton Graham Onondaga Cumberland Hanmer Ops Orford Denison Harvey Dieppe Houghton Otonabee Howard Dill Peel Douro Percy Hutton Dover Innisfil Proton Dowling Levack Rainham

Lorne

Rama

Rawden South Cayuga Townsend Rayside South Dorchester Trill Rochester South Grimsby Tuscarora Sandwich, East South Norwich Verulam Sandwich, West South Monaghan Wainfleet Scarborough Sullivan Waters Scott West Luther Tay Scugog Tecumseh West Garafraxa Seneca Thorah West Gwillimbury Seymour West Zorra Tilbury, North Sherbrooke Windham Tilbury, West Smith Wisner Tiny Torbolton York Snider South Walsingham Tosorontio Zone

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

Great LaCloche Island Little LaCloche Island

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

Avenge Korah Rankin
Bosanquet Parke St. Mary's
Carden Prince Tarentorus

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

Adelaide Enniskillen Separated Town of Trenton Aldborough Euphemia Sombra All of the County of Perth Exfrid Sophiasburgh All of the County of Huron Greenock South Marysburgh All of the County of Lanark Southwold Hillier Ameliasburgh Hungerford Town of Deseronto

Athol Huntingdon Tudor

Bentinck Huron United Counties of Prescott

Brant Kincardine and Russell

Brooke Kinloss United Counties of Stormont,
Bruce Madoc Dundas & Glengarry
Carrick Marmora and Lake United Counties of Leeds and

City of Belleville McGillivray Grenville

Culross Moore Villages of Deloro, Frankford,
Dawn Mosa Madoc, Marmora, Stirling

DunwichNormanbyand TweedE. WilliamsNorth MarysburghW. WilliamsEgremontPlymptonWalfordElderslieSarniaWarwichElzevir and GrimsthorpeSaugeenWyoming

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

Storrington

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

#### **APRIL 1, 1992**

Adolphustown Howe Island Somerville

Amherst Island

Bedford

Camden East

Delton

Loughborough

Loughborough

North Fredericksburgh

North Fredericksburgh

North Fredericksburgh

North Fredericksburgh

Dalton North Fredericksburgh Newburgh
Digby Portland Wolfe Island

Ernestown Richmond

#### **SEPTEMBER 1, 1993**

Admaston Towns of Amprior 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**

AndersonGaudetteLeyApplebyGoughLoughrinArchibaldHagarMacdonaldAweresHallamMayAwreyHarrowMcKinnon

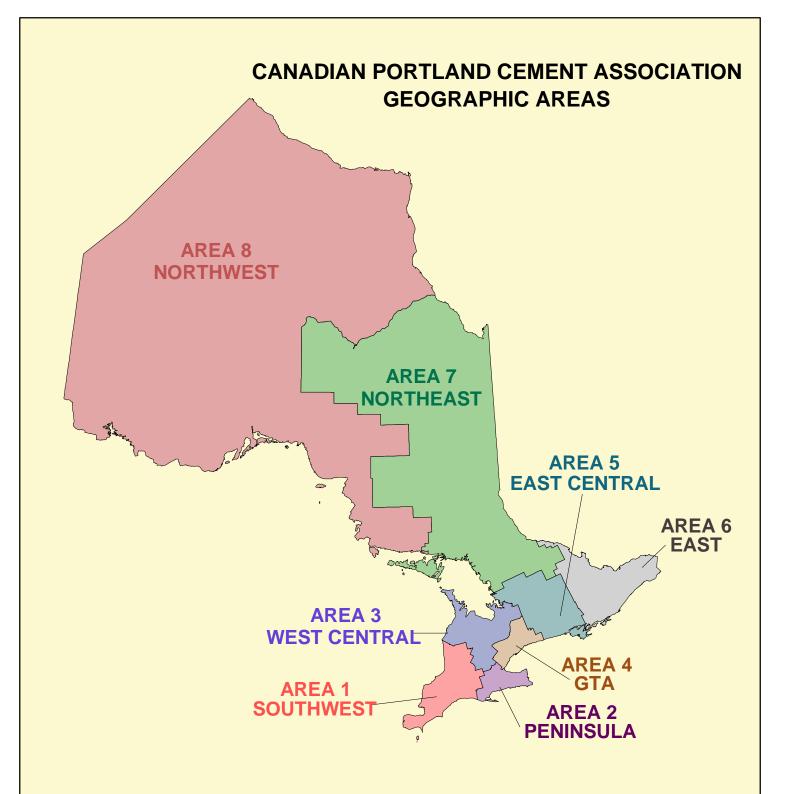
Baldwin Harty Meredith and Aberdeen

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 Street Duncan Jennings

Tarbutt and Tarbutt Dunnet Jocelyn Eden Johnson Additional Fenwick Kars Tilley Fisher Kehoe Tilton Foster Laird Tupper Foy Laura VanKoughnet

#### **DECEMBER 4, 1999**

Village of Hilton Beach



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,	Timiskaming	Kenora
Elgin	Norfolk	Dufferin	Durham	Northumberland	& Glengarry	Cochrane	Rainy River
Middlesex	Hamilton	Wellington	Halton	Hastings	Frontenac	Sudbury District	
Huron		Waterloo		Prince Edward	Greater Ottawa	Greater Sudbury	
Perth				Muskoka	Lanark	Manitoulin	
Oxford					Renfrew		
					Lennox & Addington		

