



ONTARIO STONE, SAND  
& GRAVEL ASSOCIATION

## REPORT TO ONTARIO'S COMMUNITIES | 2013





# ABOUT THE ONTARIO STONE, SAND & GRAVEL ASSOCIATION



The Ontario Stone, Sand & Gravel Association (OSSGA) is a non-profit industry association representing nearly 300 sand, gravel, and crushed stone producers and suppliers of valuable industrial products and services. Collectively, our members supply 75 per cent of the approximately 152 million tonnes of aggregate used each year to build and maintain Ontario. OSSGA works in partnership with government and the public to promote a safe and sustainable aggregate industry, contributing to the creation of strong communities in the province.

## IMPORTANCE OF STONE, SAND & GRAVEL

Stone, sand and gravel help create the high standard of living we enjoy in Ontario. Our roadways, homes, schools, hospitals and communities are all built with stone products extracted from Ontario's pits and quarries.

## FACTS AND FIGURES ABOUT ONTARIO'S AGGREGATE INDUSTRY

- More than 7,000 direct jobs (mostly in rural Ontario)
- 34,000 indirect jobs (employment generated by businesses that supply goods and services to Ontario's pits and quarries)
- \$1.6-billion contribution to Ontario's GDP
- Provides essential material to Ontario's \$37-billion construction industry – which employs 292,000 Ontarians and builds your schools, hospitals and homes
- 152 million tonnes of aggregate produced in Ontario (2012)
- That's 12 tonnes per person

Sources: SAROS Report, 2010, Ministry of Natural Resources; Statistics Canada.

# ONTARIO'S AGGREGATE PRODUCERS HELP BUILD ONTARIO



## GOOD NEIGHBOURS, GOOD STEWARDS OF THE LAND

The producers of the stone, sand and gravel used to build Ontario recognize that our industry members must be good neighbours in the communities where we operate, and good stewards of the natural environment.

We also recognize that aggregate extraction is a necessary and responsible interim land use. While there are significant economic spin-offs from Ontario's gravel pits and quarries, the end result of an aggregate operation is never just a hole in the ground. Included in every license for aggregate extraction is a rehabilitation plan detailing exactly how the land will be returned to a use that suits the regional landscape and the local community.

In fact, the rehabilitation plan must always include a plan for "progressive rehabilitation." This means that lands are returned to wood lots, habitat for native plant and animal species, and agricultural lands *while extraction is underway*, throughout the life cycle of the pit or quarry. In our cities, popular parks such as Toronto's Christie Pits Park, Hamilton's Royal Botanical Gardens and trails in Ottawa's Greenbelt provide recreational opportunities for thousands of people from rehabilitated former aggregate sites.

In 2013, members of the Ontario Stone, Sand & Gravel Association have continued to make great strides on the rehabilitation front. As an association, we challenge our members – and they challenge each other – to continue to devise ways to enhance the natural environment. This includes working with neighbours to develop innovative and improved approaches to rehabilitation, as well as working with local municipal

politicians, government agencies, conservation authorities, scientists and naturalist groups. The end result could be creating new forests and grasslands for wildlife habitat, developing recreational areas, restoring farmlands or improving creeks or streams. We promote this through our awards programs.

Working with local communities on rehabilitation plans isn't the only way OSSGA members work closely with their neighbours. Good operators have a regular and ongoing dialogue with their neighbours. Hosting open houses, posting and advising neighbours of the hours of operation and using new technology to mitigate dust and noise are just some of the ways aggregate producers work to ensure they are good neighbours. Plus, operators of Ontario's gravel pits and quarries are strong contributors to many local charities – often this includes donating stone and gravel for recreational projects and parks in the nearby community.

As you can see, there's a lot more to the story than you may have heard. We encourage you to read this report and share it with others. It details just some of the good work OSSGA members have been doing in the last few years, and in 2013 in particular. Your comments are welcome. We know there's more to do, and we look forward to reporting to you again next year.

A handwritten signature in black ink, appearing to read 'Moreen Miller'.

**Moreen Miller**

CEO

Ontario Stone, Sand & Gravel Association



## A CLOSER LOOK AT REHABILITATION

While rehabilitation is a legal requirement to take the property to its next land use, OSSGA recognized that there was little information available about the final land-use condition of rehabilitated pit and quarry sites in Ontario.

That's why the Association initiated the first part of a sizable study of rehabilitated pit and quarry sites in 2010. OSSGA surveyed 337 fully-extracted and rehabilitated aggregate sites in southern and eastern Ontario. The study determined that rehabilitated sites can successfully be integrated into rural or urban landscapes, and that these sites are compatible with neighbouring land uses and overarching provincial land use plans.

### RESPONSIBLE INTERIM LAND USE

OSSGA has now documented 568 of the more than 1,300 sites across Ontario where aggregate was licensed, extracted and now fully rehabilitated in a comprehensive study of the rehabilitation of former pits and quarries.

To download a copy of Part I or Part II of the study, visit [ossga.com/publications/](http://ossga.com/publications/) or [theholestory.ca](http://theholestory.ca)

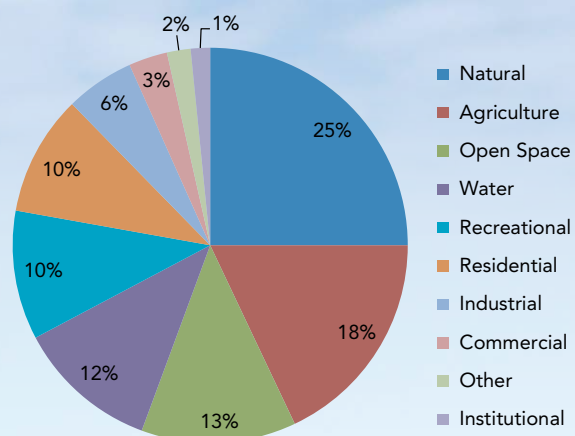




## PART II OF REHAB STUDY IN SUMMER 2013

The second part of the OSSGA rehabilitation study gathered field data on an additional 231 sites across southern Ontario in the summer of 2013. This brings the total number of rehabilitation sites the study has visited and reviewed to 568. An analysis of the data of both parts of the study found that the four most common land uses for the sites were natural (25 per cent), agriculture (18 per cent), open space (13 per cent) and water (12 per cent). The data also demonstrated that rehabilitated agricultural sites were observed to adequately integrate into the surrounding landscape and represent productive final land uses. More research is being done on agricultural rehabilitation by The Ontario Aggregate Resources Corporation (TOARC); and we look forward to collaborating with them to learn more.

Predominant Land Use for Rehabilitated Sites in the Overall Study Area (568 sites)



# COMMUNITY OUTREACH AND COLLABORATION



## THE COUCHICHING CONSERVANCY

### Land conservation

Last year OSSGA raised funds to support the acquisition of the 206-acre Bluebird Ranch, administered by the Couchiching Conservancy land trust. The Association co-sponsored a dinner and silent auction in Sebright, Ontario, which, together with OSSGA member company donations, raised \$12,000 for land acquisition.

## GRAND RIVER CONSERVATION AUTHORITY

### Co-generation – an efficient use of resources

An innovative partnership between the Grand River Conservation Authority (GRCA) and the OSSGA will help build a proposed new hydro facility at the Parkhill Dam in Cambridge. The OSSGA and its member companies last year raised nearly \$250,000 towards their five-year commitment to the project, pending its approval by the provincial power generation authority. Projects like the Parkhill Dam would provide the GRCA with ongoing revenue, through sales of power back to the grid, to fund trails, habitats, tree planting and more.

For more information visit [www.grandriver.ca](http://www.grandriver.ca)

## DID YOU KNOW?

The sum of all the aggregate licensed land in Ontario, at less than 35,000 hectares, represents the equivalent of less than one per cent of all Class 1 to 3 agricultural land in the province (Class 1 to 3 is the most productive land for growing Ontario's crops).







## ONTARIO FEDERATION OF AGRICULTURE

### Learning from our neighbours

The OSSGA recognizes that farmers and aggregate producers share much common ground in rural Ontario. While farmers feed cities, aggregates build cities. In fall 2013, the Ontario Federation of Agriculture (OFA) invited OSSGA to make presentations to OFA regional meetings across the province as part of our ongoing dialogue with farmers. With an increase in the number of former aggregate sites being rehabilitated back to agricultural purposes in recent years, we hope to continue to work together and learn from each other.

## OPENING DOORS

OSSGA has hosted a number of tours with teachers, elected government officials, and representatives of environmental and community organizations. Seeing a gravel pit or quarry first-hand and the fully rehabilitated landscape of former aggregate sites helps foster a better understanding of what's really happening in Ontario's pits and quarries. Also, during the operating season, OSSGA members will often host an annual open house at their gravel pits and quarries.



## ABORIGINAL COMMUNITIES

### Working with our neighbours

OSSGA believes in developing meaningful relationships with Aboriginal communities and organizations. These relationships are based on mutual respect, understanding and dialogue.

Similarly, we encourage our producer members to engage with Aboriginal communities and organizations that have traditional territories in proximity to their operations. Ongoing dialogue with these communities and organizations can benefit both producers and Aboriginal peoples in attempting to develop mutually beneficial solutions.

Throughout the course of 2013, OSSGA and its member companies have held discussions with First Nations about aggregate resource management issues. At the same time, we added our voice to those encouraging the government to engage in meaningful negotiations with First Nations on their outstanding issues related to Aboriginal treaty rights and interests.





# THE BEST OF THE BEST

## OSSGA BRONZE PLAQUE RECIPIENTS

OSSGA's Bronze Plaque award is the highest honour that can be presented to a rehabilitated former aggregate extraction site. The 19 award-winning sites that have been recognized with an OSSGA Bronze Plaque since 1976 are some of the most recognized park, recreation and tourism sites in southern Ontario. These sites demonstrate the work aggregate producers do to transform their former gravel pits and quarries to land uses that serve the surrounding communities well – and will do so for generations to come.



### **Royal Botanical Gardens – Rock Garden**

- Hamilton/Burlington, ON
- Awarded 1976
- From quarry to globally-recognized botanical garden



### **St. Mary's Swimming Quarry**

- St. Mary's, ON
- Awarded 1983
- From quarry to swimming area



### **East Park Golf Gardens**

- London, ON
- Awarded 1977
- From gravel pit to a recreational facility including a golf course and water park



### **Orchard View Golf Club**

- Leamington, ON
- Awarded 1984
- Former gravel pit to golf course



### **Smythe Park**

- Toronto, ON
- Awarded 1977
- From gravel pit to a popular community park named after aggregate operator Conn Smythe – also a former owner of the Toronto Maple Leafs



### **Peninsula Lakes Golf Club**

- Fonthill, ON
- Awarded 1986
- From gravel pit to two 18-hole golf courses



### **Erindale College, University of Toronto**

- Mississauga, ON
- Awarded 1980
- From gravel pit to beautiful university campus with trails and sports fields



### **Lakeland Estates**

- Nepean, ON
- Awarded 1987
- From gravel pit to residential and recreational area



### **Professor's Lake**

- Brampton, ON
- Awarded 1989
- From gravel pit to residential and recreational area





### Standard Aggregates Baseball Diamonds

- Hagersville, ON
- Awarded 1994
- From quarry to recreation area



### University of Guelph Arboretum

- Guelph, ON
- Awarded 1996
- From aggregates to outstanding educational and research asset, includes walking trails



### Spivak Golf Course (now known as FireRock Golf Club)

- London, ON
- Awarded 1997
- From gravel pit to golf course



### Wasaga Sands Golf Community

- Wasaga Beach, ON
- Awarded 1998
- From a sand and gravel operation to a golf course



### Don Valley Brick Works Park

- Toronto, ON
- Awarded 2000
- From quarry to a popular park, heritage site and environmental education asset



### Glen Major Management Tract

- Uxbridge, ON
- Awarded 2003
- From sand and gravel pit to an ecological and recreational area on the Oak Ridges Moraine (managed by Toronto Region Conservation Authority)



### Wainfleet Wetlands Conservation Area

- Wainfleet, ON
- Awarded 2004
- From limestone quarries and clay pit to an ecological enclave and recreational area (managed by Niagara Region Conservation Authority)



### Kerncliff Park

- Burlington, ON
- Awarded 2005
- From a quarry (1948 to 1957) to Burlington's ecological gateway to the Niagara Escarpment (managed by the City of Burlington)



### Green Lane Sports Complex

- Paris, ON
- Awarded 2008
- From sand and gravel pit to complex with four ball diamonds and two soccer fields (managed by the County of Brant)



### The Brampton Esker Park System

- Brampton, ON
- Awarded 2010
- From 12 former gravel pits to a series of interconnected linear parks and natural areas stretching over seven kilometres (occurred progressively over 40 years)



## SUSTAINABILITY IN ACTION



Aggregate producer members of the OSSGA take environmental sustainability to heart – making positive contributions to the local environment and improving the appearance of their sites in ways that regularly go above and beyond what’s required by law.

Each year OSSGA recognizes innovative environmental achievement, property enhancement and community relations projects.

## PROTECTING OUR ENVIRONMENT AND ENHANCING LANDSCAPES

Here are some of the impact projects recognized at the 2013 OSSGA AGM:

### **Sage Creek in Muskoka protected**

Fowler Construction was recognized for preserving a unique natural heritage feature at their Childs Pit in Bracebridge. By voluntarily excluding an approximately 63-hectare parcel of land within their license application and involving local conservation groups, this part of

the Sage Creek – a coldwater creek with a naturally-reproducing population of Brook Trout – will be protected and shared with the local community. Included are walking trails and a buffer zone to protect the creek valley for generations to come.

### **Niagara progressive rehabilitation creates new fruit orchards**

The Lafarge Fonhill Pit in the Niagara-area Town of Pelham is home to an award winning progressive rehabilitation project. Parts of the pit where extraction was completed have been graded using natural overburden material and topsoil. This has been covered by a grass-legume mixture to help stabilize the slopes of the 2.9-hectare area, while aggregate extraction continued in other areas of the pit. Much of the Fonhill Pit has been already rehabilitated to fruit orchards (sour cherry and other fruit trees) and eventually it will all become orchards. The Lafarge lands are the only place in the Pelham area where new orchards are being established, as residential and commercial development overtakes land once used for grapes and tender fruit.

## WHAT IS PROGRESSIVE REHABILITATION?

Progressive rehabilitation is part of every aggregate site plan. It means the land is rehabilitated to wood lots, habitat for native plant and animal species, natural spaces and agricultural lands while extraction is underway – and throughout the life cycle of the pit or quarry.

In addition, some of Ontario’s most popular and widely-used urban parks, golf courses and scenic residential neighbourhoods are also the end result of a rehabilitation process that blends seamlessly into local land uses.





### **Brighton progressive rehabilitation project for future agricultural use**

CBM Aggregates (a division of St. Mary's Cement Inc. Canada) in Brighton carried out a progressive rehabilitation project on their Cramahe Pit. Natural overburden and topsoil were used to cover the side slopes of the pit to an area of 2.53 hectares. The topsoil was covered with a mixture of naturally occurring ground cover (e.g., rye grass and clovers). This rehabilitation work prepared this portion of the pit for future agricultural use – consistent with the predominant land use in the area.

## **GOOD NEIGHBOURS**

Good neighbours talk to each other and it's a two-way street! OSSGA encourages a strong, ongoing dialogue between aggregate producers and their neighbouring communities to devise ways in which they can work together. This is what communities expect, and this is what aggregate producers have a strong track record of doing.

Community Relations award recipients recognized at the 2013 OSSGA AGM demonstrate some of the best examples of aggregate producers communicating well and engaging with their neighbours, and supporting worthwhile causes in their communities. These are just a couple of examples:

- Capital Paving regularly hosts open houses near its Wellington Pit in Puslinch Township. In 2012, the company's first annual Miles for Memories event raised \$63,000 to fight Alzheimer's disease. A strictly enforced dust mitigation policy is also one of the ways this aggregate operator is taking action on community concerns.
- Dufferin Aggregates, a division of Holcim (Canada) Inc. has donated hundreds of tonnes of stone and gravel for local ice pads in Flamborough and has also made significant financial contributions to Halton's hospitals, the Acton Public Library and many other charitable organizations. This demonstrates an ongoing commitment to the communities in which they operate.

For more examples of sustainability in action, visit [theholestory.ca](http://theholestory.ca)





## STUDY CONFIRMS NO ADVERSE IMPACT TO MUNICIPAL WATER SUPPLY FROM AGGREGATE EXTRACTION

In 2012, OSSGA conducted a study that looked at municipal well heads in proximity to aggregate operations. The study was conducted by independent water and wastewater specialists and peer-reviewed by a hydrogeologist in 2013.

Of the more than 6,000 aggregate sites in Ontario, only 57 were located near potentially vulnerable well head protection areas (WHPA-A; WHPA-B). That's less than one per cent. After analyzing data from the municipalities for a cross-section of case study sites, the conclusion was clear: There has been no adverse impact on the drinking water as a result of aggregate operations.

For more information on this study, please read a summary of *Ontario Case Studies – Water Supply and Aggregate Extraction* on [ossga.com](http://ossga.com)

## COMMITMENT TO HEALTH AND SAFETY

Each year, OSSGA recognizes aggregate producers who are leaders in health and safety. Of the OSSGA Health and Safety Awards presented to member companies for 2013, a total of 143 awards were given to aggregate sites with zero lost-time injury. What's more is that many of those sites were recognized for 10-, 15- and 20-year milestones without a lost-time injury.

## DID YOU KNOW?

- Aggregate extraction is a mechanical process, not a chemical process. Stone and gravel is processed by crushing, screening and washing. No chemicals are added to the products or to the water.
- OSSGA actively participated in the public process leading to the development of the Source Water Protection legislation and has a representative on 10 of the Source Water Protection committees across Ontario.





## LOOKING FORWARD



### AGGREGATE RECYCLING

Over the past year, the aggregate industry has been working with municipal governments to increase the use of recycled aggregate. This has occurred through Aggregate Recycling Ontario (ARO), an organization established in 2011 of which the OSSGA is a founding partner.

The Ontario Ministry of Transportation is a recognized leader in the use of recycled aggregate, with up to 25 per cent of the aggregate it uses coming from recycled sources.

Municipalities have been a less proactive partner in using recycled aggregate. ARO strongly supports Bill 56, the *Aggregate Recycling Promotion Act*, which received second reading in the provincial legislature in the fall of 2013. This Act proposes to promote the use of recycled aggregates in public tenders.

ARO also supports the sections of the Aggregate Resources Act Review Report which make nine recommendations about recycling, including calling for an increased use of recycled materials.

Find out more, visit ARO's web site:

**[aggregaterecyclingontario.ca](http://aggregaterecyclingontario.ca)**

### TOP AGGREGATE PRODUCING MUNICIPALITIES IN ONTARIO (TAPMO)

Since 2011, OSSGA has been working collaboratively with mayors and councillors in the top aggregate producing municipalities in the province – those that produce over one million tonnes of aggregate annually.

Areas of common interest have included the levy that producers pay to the provincial government and municipalities for each tonne of aggregate extracted, as well as rehabilitation. OSSGA and TAPMO hope to continue working together on these issues, as well as the use of recycled aggregates at the municipal level, and more, in the years ahead.







## DID YOU KNOW?

- More than 60 per cent of Ontario's aggregate is used in public infrastructure.
- The Greater Toronto and Hamilton Area (GTHA) consumes more than 60 million tonnes of aggregate each year.
- Three million truckloads of aggregate are shipped into the GTHA each year.
- It takes 18,000 tonnes of gravel for each kilometre of highway built.
- It takes 114,000 tonnes of gravel for each kilometre of subway built.
- It takes approximately 440 tonnes of gravel to build an average suburban home.







For more information on how Ontario's aggregate producers are working to be good neighbours and good stewards of the land, please visit: [theholestory.ca](http://theholestory.ca) or contact the aggregate producer in your area – visit their web site, go to their open houses or talk to them by phone.



**OSSGA**  
**Ontario Stone, Sand & Gravel Association**  
**5720 Timberlea Blvd., Unit 103**  
**Mississauga, ON L4W 4W2**  
**905.507.0711**  
**[ossga.com](http://ossga.com)**  
**[theholestory.ca](http://theholestory.ca)**  
***Essential materials for building a strong Ontario***