St Marys Cement Inc.

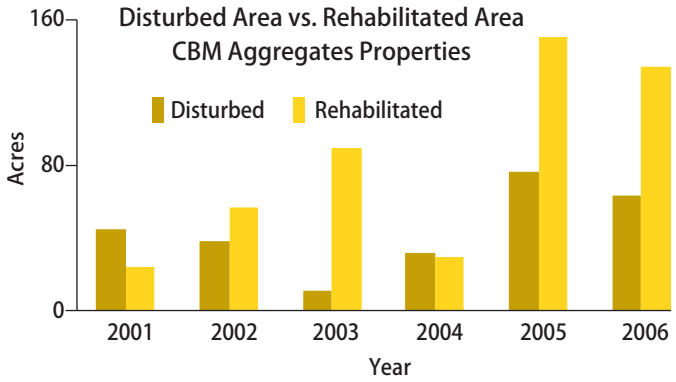
REHABILITATION

Outstanding Examples by St. Marys Cement / CBM Aggregates

What Is Rehabilitation?

Rehabilitation is the treatment of land from which aggregate has been excavated so that the use or condition of the land:

- is restored to its former use or condition, or
- is changed to another use or condition that is or will be compatible with the use of adjacent land.



From 2001 to 2006 on CBM aggregate properties, the amount of land stripped for extraction was increased 66% and the amount of land rehabilitated increased by 576%.

The site plans for aggregate operations outline the specific requirements for rehabilitation. While the Operational Standards contained in the Aggregate Resources of Ontario Provincial Standards set out minimum rehabilitation requirements, CBM strives to achieve higher quality rehabilitation to encourage biodiversity and promote after uses that blend with the surrounding landscape. CBM's award winning efforts in aggregate rehabilitation are evidence of the company's commitment to good land stewardship.

With good planning, as aggregate is removed areas can be progressively rehabilitated. Planned stripping and replacement of topsoil, subsoil and overburden materials allows CBM to establish vegetation in as much area as possible, and a start can be made towards developing the site for a particular after use.

During final rehabilitation, all equipment, stockpiles and buildings (in most cases) are removed and there may be additional tree planting or shoreline planting.

Aberfoyle Pit Rehabilitation

The Aberfoyle pit has been in operation since the 1950's and progressive rehabilitation has returned portions of the site to a naturalized state. In the late 1970's, trees were planted which are now large and mature, providing wildlife habitat and ecological diversity. Rehabilitation along the edges of the pond areas has been designed to support fish species such as trout and bass. To enhance the habitat in near shore areas, CBM recently installed Aquamats in the ponds.

Over 30 ha have been progressively rehabilitated at this site. Areas where extraction is complete now support a variety of potential after uses, which include agriculture, naturalized areas, ponds and a thriving aquatic environment.

Rehabilitation of the site involves:

- Landshaping
- Wetland and shoreline creation
- Seeding
- Using aquamats to increase aquatic rehabilitation
- Ongoing tree planting

Aquatic Enhancements
To enhance the habitat in near shore areas, CBM recently installed Aquamats to the ponds.

Naturalization
Areas where extraction is complete now support a variety of potential after uses, which include naturalized areas.

Tree Planting
Since the 1970's, many trees have been planted which provide wildlife habitat and ecological diversity.

The Stouffville pit's north face after seeding

Stouffville Pit Rehabilitation

Excavator loading material

Seeding the north slope.

CBM's Stouffville pit is located in the Township of Whitchurch –Stouffville, in the Region of York, near the intersection of Bloomington Road and Hwy 48. The 22 hectare site is within the Oak Ridges Moraine. The pit was operated between 1990 and 2001.

Rehabilitation of the site included,

- Grading the setbacks around the extraction area to create gentle side slopes.
- Replacing the topsoil using material that was stored on site.
- Harrowing and seeding the area to re-establish ground cover.

Before rehabilitation.

After rehabilitation.

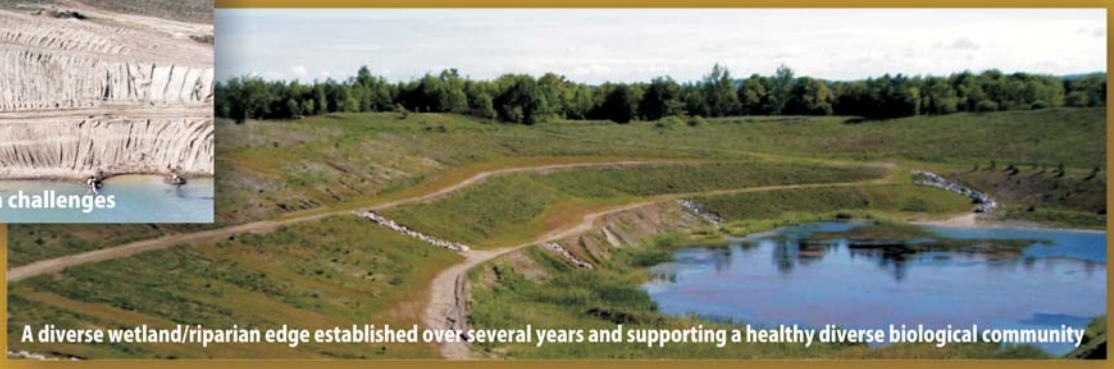
Lakefield Pit Rehabilitation

CBM Aggregates Lakefield Pit has been in operation since 1950. The pit is located in Smith Township, Peterborough County just four km west of the Town of Lakefield.

Rehabilitation of the Lakefield Pit included,

- Completing rehabilitation of 8.5 ha in 2007. This work complemented the 2 hectares undertaken in 2006.
- Allowing for future use of the land for agriculture or recreational use.
- Naturalizing the pit floor and shoreline by establishing a solid base of overburden and topsoil.
- Spreading a grass seed mixture of timothy, perennial rye and sweet clover and planting sixteen hundred native trees including white cedar, white spruce and sugar maple.
- Placing oversized stones along the pond edge. The final grade of the floor was 6:1.
- Planting trees in windrows to allow agricultural crops to be planted.

Slope stabilization challenges



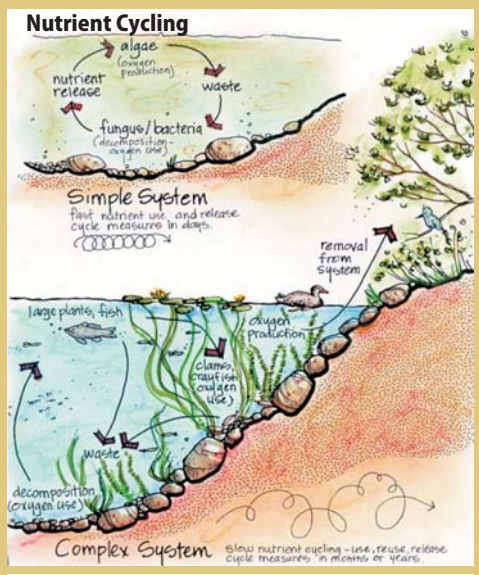
A diverse wetland/riparian edge established over several years and supporting a healthy diverse biological community

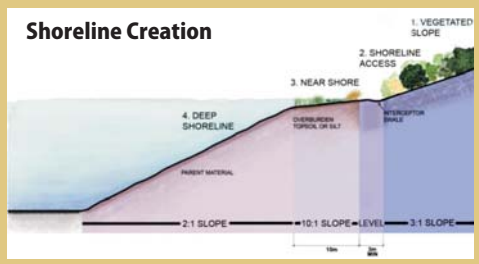
Sunderland Pit Rehabilitation

CBM Aggregates Sunderland Pit, located in Brock Township, Durham Region has been in operation since 1954. The north section of the pit has presented many rehabilitation challenges. The hurdles included eroding slopes and clear, nutrient poor water in the pond. Rehabilitation of the 11 hectare area began in the late 1990's and was completed in 2006.

Rehabilitation of the site included,

- Stabilizing the slopes by creating terraces and several trenches that were lined with filter cloth and boulders. The terraces were designed to slope inward, catching water and directing it into the trenches. Channeling the water into the appropriate drainage locations greatly minimized the amount of soil erosion.
- In 2003 pond rehabilitation began with the installation of aquamats to increase nutrient levels, promote aquatic vegetation growth, while creating fish and invertebrate habitat.
- Soil bioengineering (live fascine) to stabilize the high water line and develop a shrubby riparian cover.
- Creating new habitat diversity by utilizing logs and rocks to add structural diversity and these created micro-habitat diversity.
- Installation of wetland (aquatic) plants in the near shoreline to begin re-vegetation.
- In the spring of 2005 brook trout were stocked in the pond.
- Zooplankton, forage fish and predators were added to the lake sequentially as each population stabilized.
- Hydroseeding the slopes in 2003 and again in the spring of 2005.





Soil bioengineering (live fascine)

Structural and Micro-habitat diversity

Zooplankton and forage fish are added

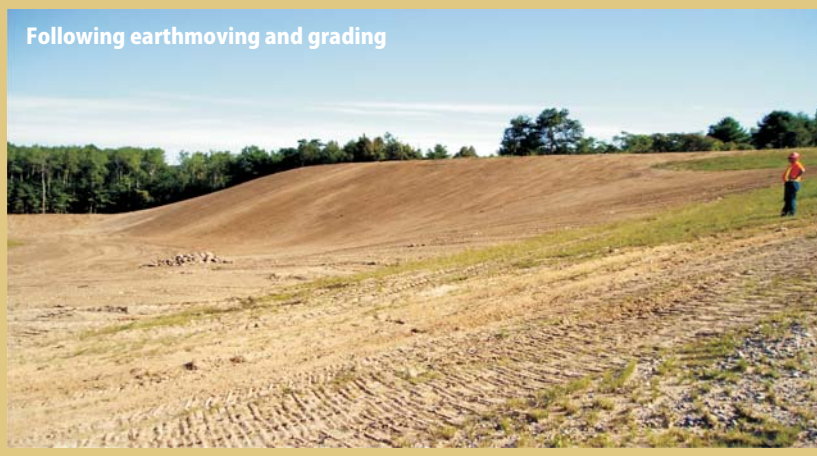
McDonnell Pit Rehabilitation

CBM Aggregates McDonnell Pit, located in Murray Township, Northumberland County, began operation in the spring of 1991. When extraction was complete along the northeast floor and face, the slope was steep. The area rehabilitated was 2.7 hectares.

Rehabilitation of the site included,

- Stabilization and grading of the northeast floor and face began in September 2005. The project was completed a year later.
- A new gentler side slope was created, as the old extraction face was benched from the bottom up.
- Once the slopes were established, the overburden and topsoil were spread and fine graded.
- A seed spreader distributed seed over the 2.7 hectare area.
- The seed mix consisted of 20% Perennial Ryegrass and 80% Red Fescue.

Before rehabilitation



Following earthmoving and grading

The finished product

St Marys Cement Inc.

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