



The Past Paves Way to the Future

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Who we are:

- The Ontario Aggregate Resources Corporation, TOARC, is the Trustee of the Aggregate Resources Trust.

MAAP PROGRAM

- TOARC, through the MAAP Program, rehabilitates former aggregate pits and quarries (deemed to be abandoned 'legacy') in areas of Ontario that are designated under the Aggregate Resources Act and conducts and funds rehabilitation research.



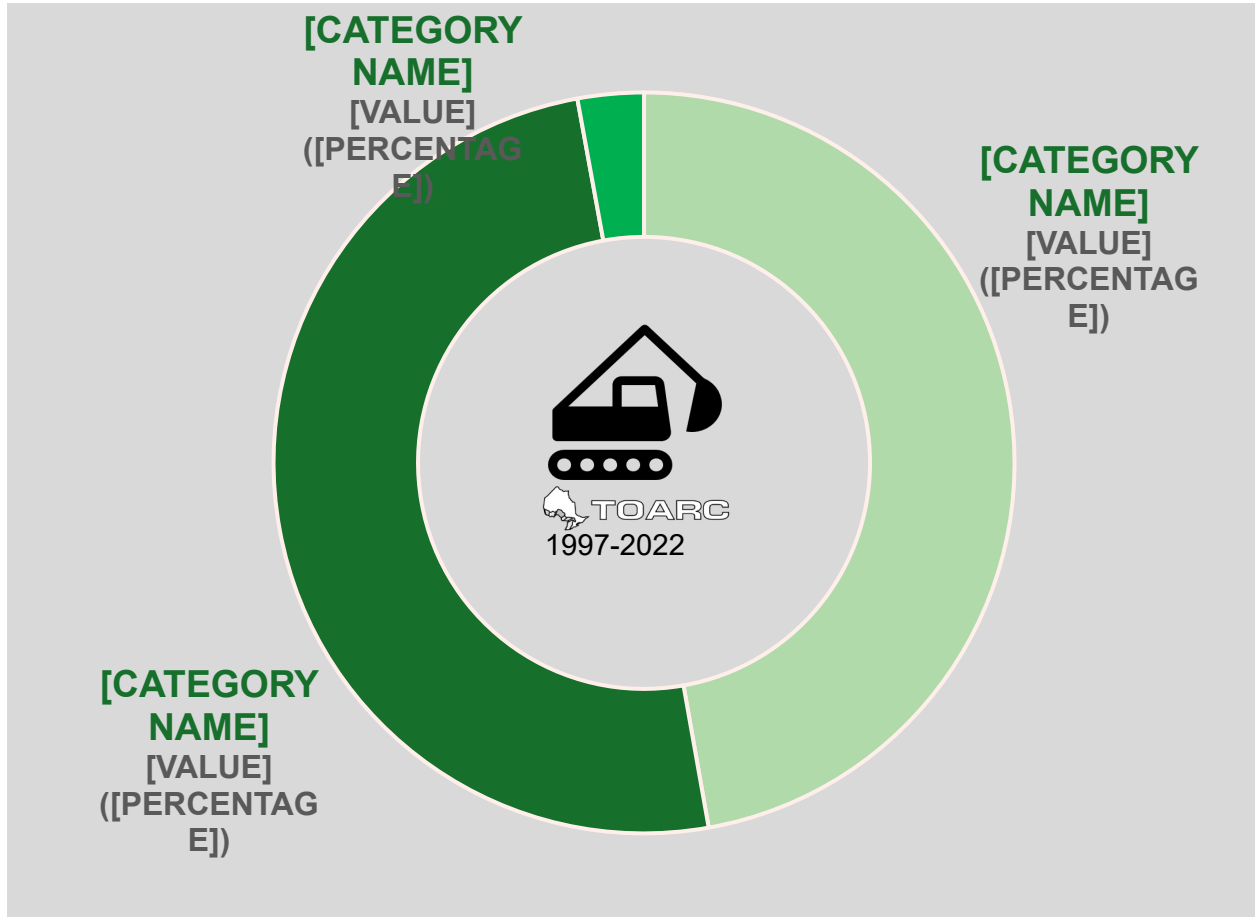
Exactly
what is
aggregate?

FUNDING

- MAAP is funded through the Abandoned Pits & Quarries Rehabilitation Fund by a portion of the annual licence fee paid by aggregate producers. In 2020 that amounted to \$1.1 million.



Legacy Pit Rehabilitation



Rehabilitation

Review of all MAAP rehabilitation projects between 1997- 2022, includes 555 projects, 800 ha and \$11.1 million.

Agriculture end use:

135 were returned to crop and 61 were returned to pasture (66 unclassified).

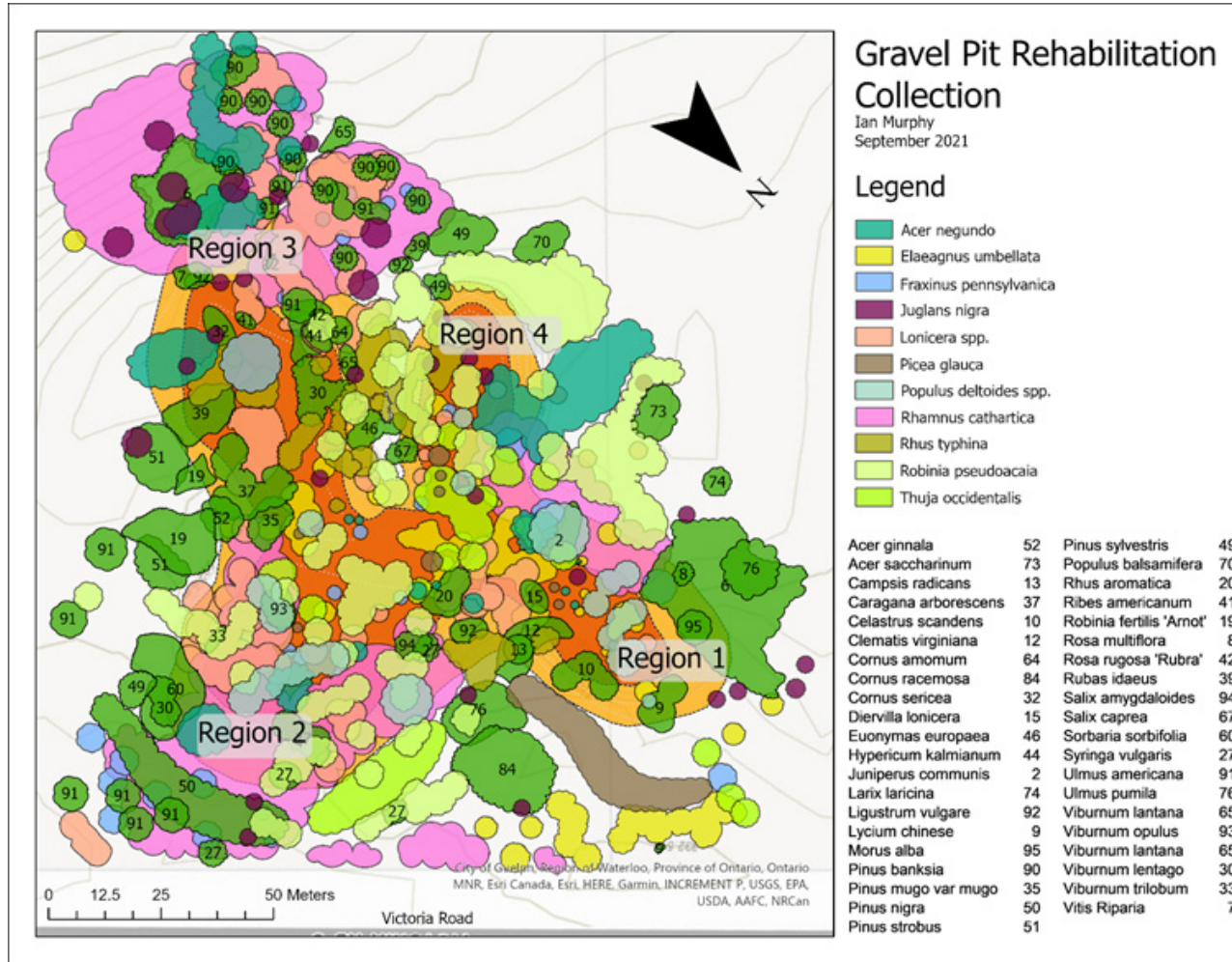
Naturalization end use:

Subcategorized into 9 land uses including alvars, forested meadows, meadow grasslands, wetlands, etc.

Recreational end use:

Sites included nature trails, residential lawns and horse paddocks

45- Year Naturalization Review



The Site:

Legacy aggregate pit naturalized in 1978 at the University of Guelph Arboretum.

Utilized best practices at the time to create a living demonstration project of species that can withstand the conditions of aggregate pits.

Found that 60% of species survived, and 77% of them were showing signs of spreading.

Majority of new growth within the site was from only a few species, including invasives.

Result:

Use of native species is critical to sustainable rehabilitation projects.

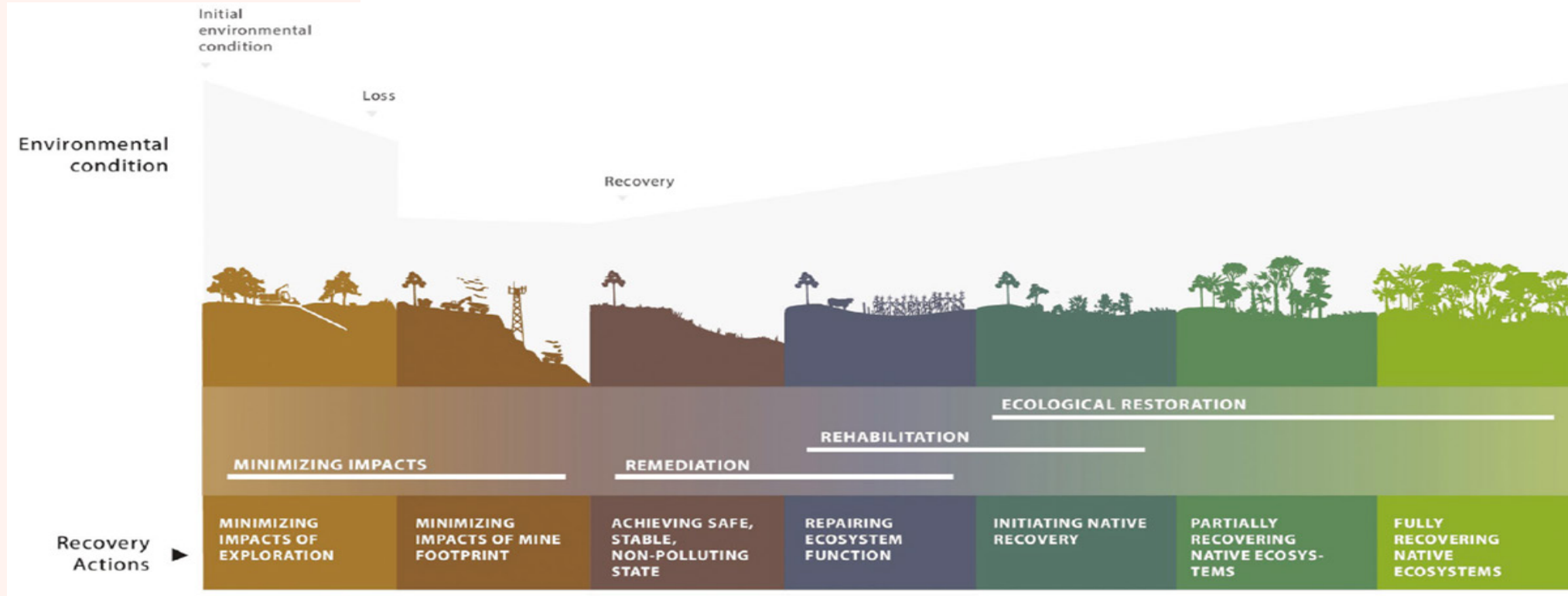
Rehabilitation



Rehabilitation



Recovery Trajectory



We have this opportunity through the vision of the Act to develop our knowledge and reach out to other community groups and partners to grow in our knowledge and relationships.

Project overview

Problem

There is little information on the ecological status of these nearly 600 remediated projects

Goal

- **determine key ecosystem functions.**
- examine which of these functions can **be estimated through remote sensing**
- **develop a methodology** for a process of evaluation

Result

Mosaicked drone imagery and cloud-based image analysis shows promise in defining recovery strategy success

Repetition is required to increase the reproducibility of the results and ensure representation of other recovered sites



Thank you

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