

EXECUTIVE SUMMARY

The Township of Madawaska Valley is a small, rural municipality situated in western Renfrew County at the western end of the Ottawa Valley of eastern Ontario. In 2001, the geographic townships of Sherwood, Jones, and Burns, and Radcliffe, joined the urban centre of the Village of Barry's Bay to form the Township of Madawaska Valley.

The region is rich with forested lands, cultural heritage, and recreational opportunities for permanent, seasonal, and visiting residents. The urban centres of Barry's Bay, Combermere, and Wilno provide residents with all basic needs, services, and other amenities typical in small, rural communities.

Prior to amalgamation, the former Village of Barry's Bay was faced with the closure of its municipal waste disposal site and needed a waste management solution for the urban centre. As a result of amalgamation, the three new municipalities were challenged with a deficiency in long-term waste disposal security, with decreasing capacity in the available waste disposal sites within the amalgamated Township.

In 2003, the Township of Madawaska Valley acknowledged its waste management challenges and, in parallel with a comprehensive waste disposal site compliance action program, initiated a Waste Management Strategic Plan to identify the best solution for long-term solid waste management for the residents of the Township. In the meantime, the Township continues to operate its waste management system consisting of two depot locations transferring to one disposal site, Bark Lake, which is now operating under an emergency Provisional Certificate of Approval issued by the Ontario Ministry of the Environment.

In 2004 and in consultation with the public, the Township submitted Terms of Reference to the Ontario Minister of the Environment in accordance with Section 6 (1) of the *Environmental Assessment Act, R.S.O. 1990, Chapter E.18*, which defined the purpose and rationale for the Waste Management Strategic Plan, and the various requirements of the *Environmental Assessment Act* as a framework for the undertaking. The Terms of Reference were approved in November 2004, formally commencing the development of the Waste Management Strategic Plan.

In order to appropriately assess the best solution for long-term waste management, the Township established a set of alternatives for consideration in the project that were reasonable and justifiable for a small, rural municipality with limited resources. These alternatives to the undertaking identified increased waste diversion measures at the forefront, as maximized diversion of waste within the municipality should result in conversely minimized quantities of residual waste to be managed. The alternatives considered for residuals management included: landfill, waste export outside of the Township, waste incineration, and do

nothing. As identified in the approved Terms of Reference, the Township would consider and evaluate the alternatives to the project with regard to the natural, socio-cultural, technical and built, and economic environments. For a small, rural municipality, economics and technical viability of alternatives are fundamental evaluation criteria for any municipal undertaking. Further, public support of these undertakings must be considered, and was elicited throughout the project.

Upon completion of a comprehensive campaign of background data collection and an initial assessment of the alternatives, the incineration alternative was screened out due to economic burden, and the anticipated complicated approvals process for facility permitting. The do nothing alternative was maintained with the understanding that doing nothing was not a responsible approach to the issue; however, would provide a control alternative for consideration if a reasonable residuals management solution were not identified for the Waste Management Strategic Plan.

The remaining alternatives of landfill, and waste export were carried forth for more detailed consideration in the development of the project. These alternatives to the undertaking were complemented by examinations of increased waste diversion that would be feasible for the municipality, with an admirable blue-box diversion rate of over thirty percent. The high diversion rate is attributed to an effective participation rate of Township residents via curbside collection, an established user-pay program, and enhanced material acceptance program through the Ottawa Valley Waste Recovery Centre in Pembroke. Further consideration of mandatory recycling, increased household hazardous/special waste days, and the establishment of bags limits were identified in the early stages. The management of organic waste was also identified for consideration as a method to the diversion alternative.

For residuals management, the landfilling of waste at an expanded (existing) waste disposal site, or the development of a new landfill site was considered. From the background and preliminary studies completed, only the Township's Bark Lake site had potential as an existing site for expansion. Based on a constraint mapping exercise for lands compatible for the development of a new landfill site, only two locations were identified based on key selection criteria including: topography, adjacent land use, and proximity to surface water.

The waste export alternative was identified for managing the Township's residuals with three possible export destinations in Pembroke, Carp, and Moose Creek, Ontario. The export of waste was considered primarily on the aspects of cost, and security of the alternative – could a receiving facility commit to a long-term contract to take the Township's waste?

From a comprehensive set of studies undertaken for the landfill, and waste export alternatives, including an assessment of potential impacts to the natural, socio-cultural, technical/built, and economic environments, one concept for residuals management clearly led all others – the capacity expansion of the Bark Lake waste disposal site.

This report (Volume I), supported by a comprehensive consultation program with the Ontario Ministry of the Environment, government review agencies, First Nations peoples, and the interested public (Volume II), presents the rationale, need, and detailed evaluation of the alternatives considered in the development of the Waste Management Strategic Plan, on the natural, socio-cultural, technical and built, and economic environments, as pertinent to the study.

The best solution for the Township of Madawaska Valley's Waste Management Strategic Plan is to maximize waste diverted via: the establishment of mandatory recycling and bag limits to complement the established user-pay system, and the expansion of the current curbside blue-box program. The most suitable alternative to manage residuals not feasible (currently) for diversion in the Township is with the expansion of the waste disposal area at the Bark Lake waste disposal site.

Based on this conclusion, the recommendation of this report is for the Ontario Minister of the Environment to approve the preferred alternative of the Waste Management Strategic Plan in accordance with the requirements of the *Environmental Assessment Act*, in order for the Township of Madawaska Valley to proceed with the necessary measures for implementation.