

CIF Project #462 - Geographical Optimization Project Modeling

Project Background

The 2013 REOI process contemplated releasing approximately \$9 million to municipalities interested in either implementing the results of the MIPC Provincial Infrastructure Study or similar cost saving initiatives. The CIF Committee at its Oct 30th, 2012 meeting directed staff to contract with RSS to provide support services to interested municipalities to evaluate their options under the study and to train CIF staff in the use of the model which was developed as part of the MIPC Study. This service was made available to municipalities on an 'as needed basis'.

Summary of Results

The project was developed into three primary tasks including:

- On-demand support for communities wishing to utilize the model
- Provision of the model, supporting software and training to CIF to allow them to use the model directly
- Follow up support

RRS worked with CIF staff to update the model and original conclusions drawn under the MIPC Optimization Study using current data. The information was used by RRS to prepare a report for MIPC and WDO (CIF Committee Report, *Blue Box Optimization Strategy and Implementation Plan*, amended May 30th, 2013) in response to the WDO directive of Dec 2012: “*Direct MIPC to develop a proposal on how to implement the efficiency improvements over the next five years as identified by the CIF funded Optimization Study and to submit their plans to WDO no later than June 1, 2013.*”

In response to interest from municipalities, RRS modelled the flow of tonnage from Hastings County to various consolidation points and nearby MRFs. This information assisted municipalities in the area to determine the optimal set up for consolidation of tonnage from their various depot operations (refer to CIF Project 607.8). RRS also trained CIF to use the model and supporting GIS software and apply it to the Northwestern Ontario wasteshed to model optimal flow of materials through the area to various MRFs in Winnipeg, Thunder Bay and the USA (CIF Committee Report, *Optimization of NW Ontario Wasteshed*, Oct 29th, 2014).

This information led to successful outcomes for both wastesheds highlighting the value of GIS mapping in long haul decision making but also the associated costs vs 'lower tech' solutions such as basic spreadsheet analysis.