



Presentation to Council

March 26, 2008



Overview

- Results of Public Survey
- Overview of Waste Diversion Plan
- Overview of Waste Disposal Options
- Input from Public Meeting on January 26, 2008
- Recommended Next Steps

Survey Results

297 respondents

Recycling

- Virtually all of the respondents recycle.
- Satisfied with the recycling program.
- Wish it accepted more materials.

Backyard Composting

- More than half of respondents say they compost.

Survey Results

Opinions on Managing and Disposing of Waste

- Support the principles of reduce, reuse and recycle.
- Food and yard wastes should be composted.
- Support reaching the provincial waste diversion goal of 60%.
- Town should manage its own garbage and oppose managing the waste of others.
- Generally in favour of expanding the Town's landfill, or locate a new one within Town boundaries.
- Support among respondents for industry stewardship.

Waste Diversion Plan

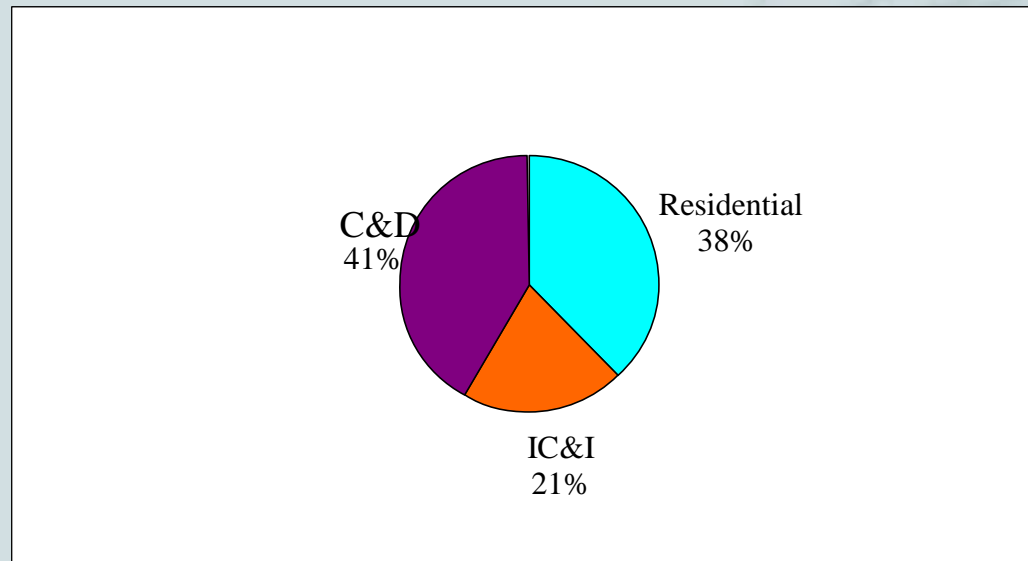
- Ontario's waste diversion goal is 60%.
- The Town's current waste diversion rate varies between 27-37%.
- The goal of the Waste Diversion Plan is:

“To define a system and criteria that will allow the Town to achieve or exceed the Provincial waste diversion target of 60%.”

- In setting this goal, the Town recognizes that additional waste diversion can come from:
 - Strengthening existing waste diversion programs.
 - Identifying and developing new waste diversion programs.

Existing Waste Management System

- Wastes generated in three sectors.
- IC&I (business) and C&D (construction) have been decreasing likely due to:
 - Increased diversion
 - Wastes being managed elsewhere



Alternative Waste Management Systems

- Five alternative Systems have been developed and are as follows:
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 - System 1 - Status Quo;
 - System 2 - Existing System with Enhanced Capture;
 - System 3 - Enhanced Blue/Grey Box;
 - System 4 - Centralized Composting of SSO and Leaf and Yard Wastes; and
 - System 5 - Enhanced C&D Recycling.

System 1

Status Quo – 37%

- Curbside collection of garbage;
- Curbside collection of recyclables (Blue/Grey Box);
- Communications and Education (C&E) program;
- Landfill recycling (curbside recyclables, scrap wood, scrap metal, concrete blocks and other masonry, appliance, propane tanks, E-waste, HHW, bale wrap);
- Landfill drop-off of leaf and yard and fruit wastes waste for composting; and
- Backyard composting.

System 2

Existing System with Enhanced Capture – 38%

- System 1
- This System is based on maximizing the existing residential waste management system that is operating in the Town.
- It focuses on the increased capture of Blue/Grey Box recyclables and HHW.
- This diversion would be stimulated through the development of an enhanced and sustained Communications and Education (C&E) program.

System 3

Enhanced Blue/Grey Box – 39%

- System 1 and 2
- Additional recyclables would be added to the Blue/Grey Box.
- Proposed additional recyclables to be added include paper coffee cups/ice cream containers, other paper, plastic bags, steel aerosol cans, steel paint cans and other metal.
- These recyclables were selected because there are available quantities and end markets.

System 4

Centralized Composting of SSO and Leaf and Yard Wastes – 49%

- System 1,2 and 3
- Includes the curbside collection and processing of residential Source Separated Organics (SSO) (i.e food and some non-recyclable paper wastes such as tissue).
- The receipt of IC&I SSO and leaf and yard waste at the Town's composting facility.
- The processing of these wastes could either be done by expanding the Town's windrow composting facility at the Landfill or by delivering these wastes to a third party compost facility, for a transport/tipping fee.
- This System assumes that the Town's composting facility at the Landfill would be expanded to accommodate up to 3,000 tonnes/year of organic waste (i.e. currently has a capacity for 1,000 tonnes/year).

System 5

Enhanced C&D Recycling– 64%

- System 1,2, 3 and 4
- There are current diversion programs for C&D wastes that arrive at the Landfill in a segregated fashion.
- At this point there is no infrastructure for mixed loads.
- It is proposed to add a C&D recycling facility at the Landfill to separate mixed loads of C&D wastes into components that can be recycled and to allow further processing of sorted loads of C&D wastes.
- Alternately C&D wastes could be delivered to a third party processor for a tipping fee.

Estimated Capital & Operating Costs

System	Total Cost \$000s	Tonnes Diverted Tonnes	Diversion Rate %	Diversion Increase %	Cost Increase %
1	542	2,670	37	0	0.0
2	546	2,762	38	1	0.7
3	550	2,866	39	3	1.3
4	729	3,523	49	12	34.3
5	807	4,616	64	27	48.9

Conclusions

- Present waste diversion about 37%
- Provincial goal is 60%
- System 4 will help achieve 50% with a 34.3% increase in costs
- System 5 will help achieve 60% with a 48.9% increase in costs

Residual Waste Disposal

- Even with 60% diversion the municipality will require residual disposal capacity of 120,000 tonnes or approximately 200,000 cubic metres over the next 20 years.

Waste Disposal Options

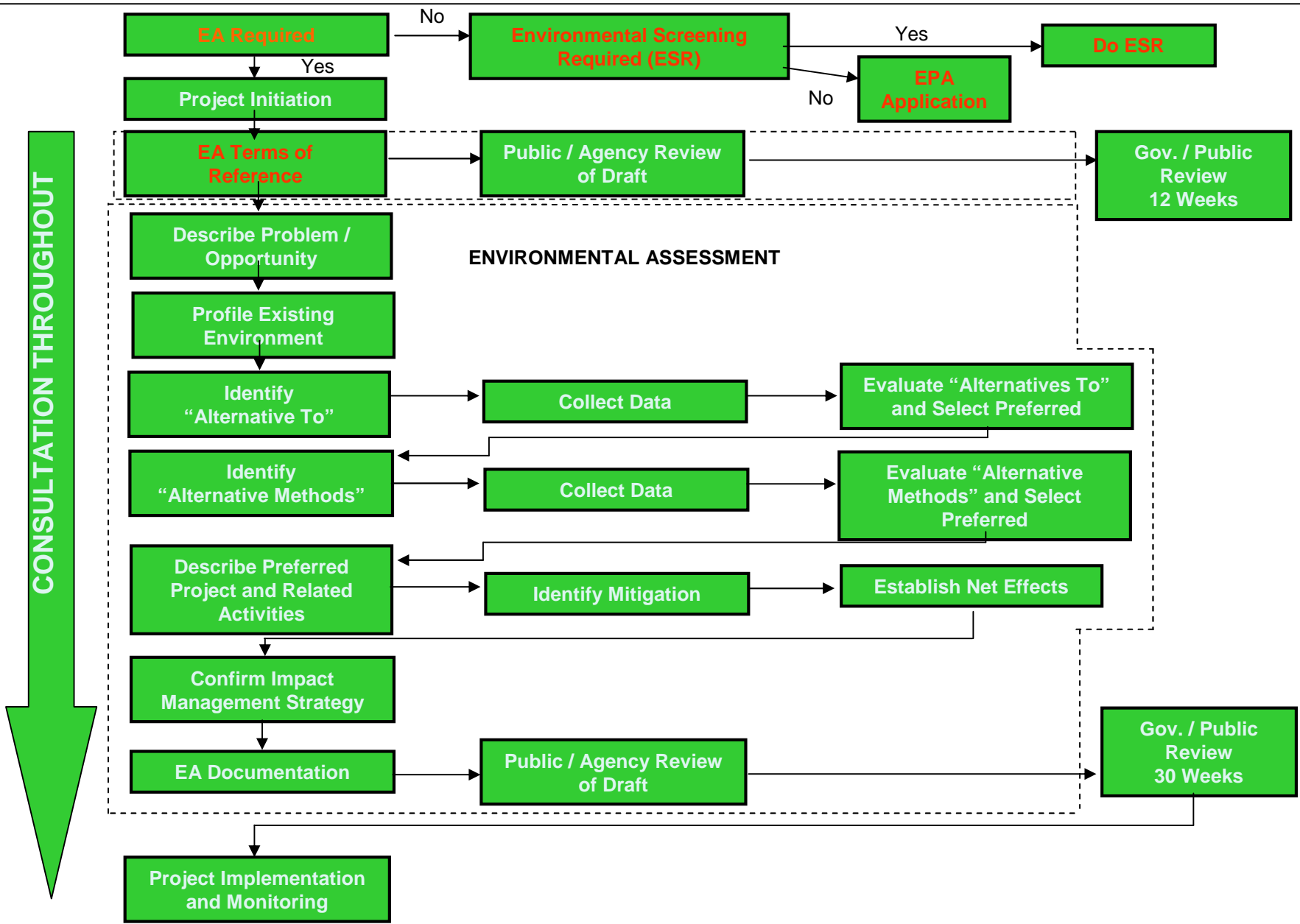
- Energy from Waste (EFW)
- Export to another Landfill in Ontario
- New Greenfield Landfill
- Expansion of Existing Site
- Mining of Existing Site

Provincial Approvals Process

- Environmental Assessment Act (EAA)
- Environmental Protection Act (EPA)

Environmental Assessment Act

- Individual EA
- Environmental Screening
- No EA



Individual EA

- New landfills over 100,000 m³
- Landfill expansions over 100,000 m³
- Thermal facilities with no energy recovery

Environmental Screening Process

- Landfill expansion < 100,000 m³
- Landfill mining 100,000 cubic metres or less
- Thermal Treatment Site with energy recovery
- Waste processing or transfer stations that ship over 1000 tonnes/day of waste for disposal

No EAA Requirements

- Organic facilities under 1,000 tonnes of residual per day
- Recycling facilities
- Transfer Stations under 1,000 tonnes/day

Public Meeting Input

- Approximately 25 people signed in at the meeting.
- Most people indicated that they supported waste reduction, enhanced recycling, source separated organics collection as the preferred system, with landfill mining to conserve the landfill space at the existing site. In addition, recycling of construction and demolition waste was supported. One individual developed a “hybrid” plan, including maximizing waste reduction and recycling, and implementing recycling of C & D wastes, based on cost efficiency and availability of composting facilities elsewhere.
- Participants advised that the Town consider the merits of other facilities in the region, if they come on line (for example if new facilities are built around the area, e.g. composting plant, EFW).

Public Meeting Input

- There is a need to carefully consider environmental and social effects when considering mining the landfill.
- Focus has to be on waste reduction and extended responsibility, and people reducing waste at source.
- Participants would like to see an educational component included.
- People need more technical information on the environmental and social impacts of the proposals.

Conclusions

- Support for a local solution to waste.
- Increased diversion strongly supported.
- Landfill mining/expansion is supported with appropriate studies.

Recommendations

- Implement pilot composting study.
- Undertake Environmental Screening for mining/expansion of existing site.