

# Calculating Waste Diversion





# Background

- Solid waste goals and reporting trends
- Kelleher Report (March 2010)
- Waste Diversion Calculator Working Group (June 2010)



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# Working Group

- Four Regional Districts (CRD, MV, RDN, RDNO)
- Early commitment to disposal rate reporting
- Working to develop GAP Light



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## Method 1: per-capita disposal target

$$\frac{\text{Total waste disposal}}{\text{Population}}$$



## Method 1: per-capita disposal target

## Example

150,000 tonnes disposed landfill.

Population estimate: 300,000

The kg/capita disposal rate is therefore 500 kg/capita

$$\frac{150,000 \text{ tonnes}}{300,000 \text{ residents}} * 1000 \text{ kg/tonne}$$



## Method 2: Diversion rate (%) – GAP

$$\frac{\text{Waste Diverted}}{\text{Disposal + Waste Diverted}}$$

- Improved overview of system performance
- Better information for public reporting
- Significant data collection requirement



Waste stream	Quantity (tonnes)	Data Source
Refuse landfilled	150,000	Municipal data
<b>Diversion</b>		
Recycling (curbside collection & depots)	73,450	Municipal data
Organics (yard waste & food waste collection)	8,000	Municipal data
HHW collection	50	Industry stewardship program
Encorp (beverage containers)	8,000	Industry stewardship program
Encorp (electronics)	1,000	Industry stewardship program
Scrap tires	3,000	Industry stewardship program
Backyard composters	4,500	Estimate based on common methodology
<b>Total diversion</b>	<b>98,000</b>	
<b>Generation</b>	<b>248,000</b>	
<b>Diversion rate</b>	<b>40%</b>	

$$\frac{98,000 \text{ tonnes diverted}}{(98,000 \text{ tonnes diverted} + 150,000 \text{ tonnes disposed})} \times 100\% = 40\% \text{ diversion}$$



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# The Calculator

- Establishing definition of MSW
- What is disposal? What is diversion?
- Difficult issues
  - Private Facility Reporting
  - Residual Factors
  - Traditionally Landfilled Material
  - Caveats for unique circumstances



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# Moving Forward

- Finalize the calculator
- Adoption by participating regional districts
- Consultation



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Questions