



Waste

Municipal Solid Waste Disposal in B.C.

What is municipal solid waste?

Municipal solid waste includes waste from residential, commercial, institutional, demolition, land clearing and construction sources. It does not include hazardous waste, biomedical waste, agricultural waste, motor vehicles or components, or contaminated soil.

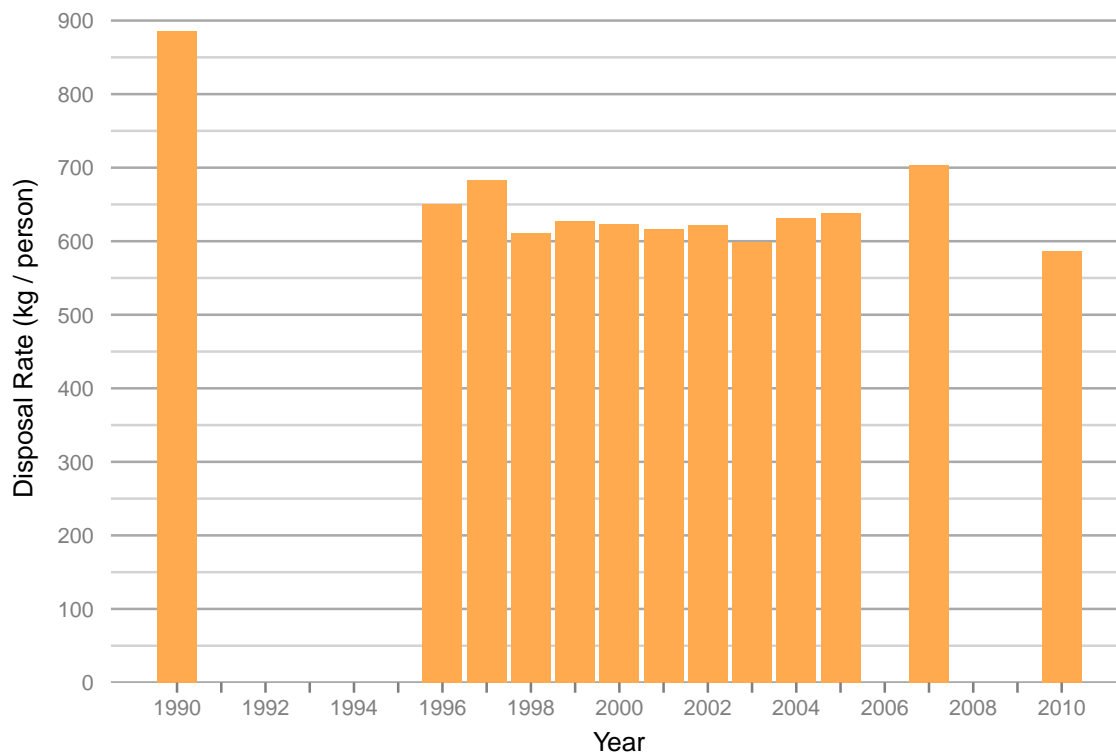
- BC Stats estimates that 2.9 million tonnes of solid waste were disposed of in B.C.'s landfills in 2010 and that disposal will increase by 17.5% by 2025 if current practices continue¹.
- This increasing waste disposal rate will put pressure on local government waste management budgets.
- Much of the waste disposed of could be composted or recycled, or not generated in the first place.
- Tracking waste disposal across B.C. is important as we work to reduce the amount of waste we create and avoid waste disposal where possible.

What is per capita disposal rate?

Per capita disposal rate is an estimate of how many kilograms of solid waste one person sends to a landfill or other disposal site in a given year. It does not include waste that is reused or recycled.

The following chart shows the per-capita municipal solid waste disposal rate in British Columbia, from 1990-2010.

Municipal Solid Waste disposal rates in British Columbia, 1990–2010



Comparisons:

- Japan is the world leader in reducing municipal solid waste, with only 377 kg of municipal solid waste generated per person in 2008².
- Nova Scotians disposed of approximately 401 kg of waste per person in 2010, with a target to [reduce this to 300 kg per person by 2015](#). This is the lowest provincial rate in Canada.
- *The 2010 provincial per capita disposal rate was 587 kg/person.*

The tables below show the per capita weight of solid waste disposed of in each regional district in B.C. for selected years from 1990-2010 (Table 1), and for Metro Vancouver municipalities in 2007 and 2010 (Table 2). For the full dataset, see the “Data” section below.

Table 1: Estimated disposal rates (kg/person) for B.C. regional districts in 1990, 2000, 2005, and 2010

Regional District	1990		2000		2005		2010	
	Population	Rate	Population	Rate	Population	Rate	Population	Rate
Alberni-Clayoquot	30257	550	34000	511	32692	839	31635	734
Bulkley-Nechako	37136	700	44204	610	43933	470	39183	543
Capital	291880	620	334940	408	351022	452	372339	386
Cariboo	58641	400	73549	360	70329	406	65471	706
Central Coast	3500	400	4332	350	3905	256	3174	N/A
Central Kootenay	49587	701	61790	301	60237	494	60378	657
Central Okanagan	103304	1210	152000	643	167936	492	185443	699
Columbia-Shuswap	40510	710	52973	408	53245	603	53680	584
Comox Valley	N/A	N/A	N/A	N/A	N/A	N/A	64642	684
Cowichan Valley	59059	770	76820	366	76523	415	82871	386
East Kootenay	48773	700	62240	716	61862	873	60267	983
Fraser-Fort George	85971	700	106933	711	101601	812	96575	856
Fraser Valley	209641	945	243008	502	264370	499	284995	479
Kitimat-Stikine	39431	700	46870	469	42919	476	39642	N/A
Kootenay Boundary	30425	850	34065	474	33118	471	31885	459
Metro-Vancouver	1610899	990	2041399	722	2188573	706	2351496	595
Mount Waddington	14086	900	15058	528	13684	526	12057	586
Nanaimo	91879	550	137003	406	141080	496	149686	417
North Okanagan	57611	1040	79047	551	80474	654	83139	578
Northern Rockies	4565	1800	6434	1088	6607	1695	6209	N/A
Okanagan-Similkameen	66239	1200	80448	1075	83037	1001	82760	652
Peace River	50083	920	57726	764	62967	969	63368	788
Powell River	18728	690	21060	251	21114	225	20455	542
Skeena-Queen Charlotte	22700	790	25514	541	22464	N/A	19497	806
Squamish-Lillooet	32437	1200	45523	651	54367	554	40356	805
Stikine	N/A	N/A	N/A	N/A	N/A	N/A	614	476
Strathcona	N/A	N/A	N/A	N/A	N/A	N/A	44386	614
Sunshine Coast	19119	900	27438	423	28557	493	29984	433
Thompson-Nicola	104386	670	130192	582	128790	690	131641	655

Table 2: Estimated disposal Rates (kg/person) for Metro-Vancouver municipalities in 2007 and 2010

Municipality	2007		2010	
	Population	Rate	Population	Rate
Anmore	2030	199	2203	537
Belcarra	678	447	690	542
Bowen Island	3522	472	3678	478
Burnaby	214919	719	227389	438
Coquitlam	120249	533	126594	456
Delta	99293	661	100000	519
Langley (City)	25167	664	25858	426
Langley (Mun)	99012	542	104697	461
Lions Bay	1402	529	1395	513
Maple Ridge	72502	359	76418	348
Metro-Vancouver (Uninc)	20573	696	24837	358
New Westminster	61778	544	66892	403
North Vancouver (City)	47277	626	50725	415
North Vancouver (Mun)	85966	465	88370	466
Pitt Meadows	16582	479	18136	462
Port Coquitlam	54971	520	57431	438
Port Moody	29945	455	33933	424
Richmond	186376	670	196858	432
Surrey	422873	509	462345	482
Vancouver	610136	633	642843	446
West Vancouver	42973	590	44058	473
White Rock	18996	704	19278	474

Notes:

- The 2010 disposal rates were provided by regional districts and municipalities, or where data was missing, estimated by the Ministry of Environment based on historic per capita disposal rates in B.C.
- In some cases a verifiable estimate was not available; these cases are marked with N/A.
- The composition of waste counted towards per capita disposal may vary between regional districts. Data comparability may also vary due to other factors such as regional district staff resources and use of weigh scales and landfill tipping fees.
- The per capita disposal data do not account for tourist or visitor populations, which are significant for some areas. For example, the Squamish-Lillooet Regional District's rate would be 576 kg per capita for 2010, if visitors to Whistler are considered.
- The disposal rates cannot be directly compared between years because the data were collected using different methods. However, the data are useful in showing general patterns.
- Metro-Vancouver municipalities were included in the comparison because many are comparable in size to regional districts.

Regional districts that wish to update the waste disposal data reported above should contact the Environmental Standards Branch at eqb@Victoria1.gov.bc.ca. Input from regional districts will also serve to inform future waste reporting methodology development.

References and Other Useful Links:

Find out where to recycle using the Recycling Council of British Columbia's Recyclepedia: <http://www.rcbc.bc.ca/>

Extended Producer Responsibility in B.C.: <http://www2.gov.bc.ca/gov/topic.page?id=BEBA70369C274C8FBA4FB42BE828A9EB&title=Product%20Stewardship>

Solid Waste Management Planning in B.C.: <http://www2.gov.bc.ca/gov/topic.page?id=CBCECCAABAA2401B9FB3B7CE63129709>

¹BC Stats: Solid Waste Generation in British Columbia: 2010-2025 Forecast (report and fact sheet): <http://www.bcstats.gov.bc.ca/Publications/AnalyticalReports.aspx>

²How Canada Performs, Municipal Waste Generation; The Conference Board of Canada; January, 2013: <http://www.conferenceboard.ca/hcp/details/environment/municipal-waste-generation.aspx>

2007: Trends in Municipal Solid Waste Disposed and Recycled: http://www.env.gov.bc.ca/soe/archive/reports/et07/EnvironmentalTrendsBC_2007_fullreport.pdf#page=41

British Columbia's *Environmental Management Act*: <http://www.env.gov.bc.ca/epd/main/ema.htm>

Waste Management in Canada; Statistics Canada (2012); see section 3.1, Municipal solid waste: <http://www.statcan.gc.ca/pub/16-201-x/16-201-x2012000-eng.pdf>

Data

*By accessing these datasets, you agree to the license associated with each file, as indicated below.

- Municipal solid waste disposal, 1990-2010: http://www.env.gov.bc.ca/soe/archive/data/waste/2013_MSW/BC_Municipal_Solid_Waste_Disposal.csv.
License: B.C. OGL (<http://www.data.gov.bc.ca/local/dbc/docs/license/OGL-vbc2.0.pdf>).
Dataset Details: <http://www.data.gov.bc.ca/dbc/catalogue/detail.page?config=dbc&P110=recorduid:178704>.

Published and Available On-Line at Environmental Reporting BC (April 2014): http://www.env.gov.bc.ca/soe/indicators/waste/municipal_solid_waste.html