

BC Municipal Solid Waste Tracking Report

2001/2002

Prepared by:



January, 2004

Acknowledgement

The Ministry of Water, Land and Air Protection and the Recycling Council of BC would like to thank the regional districts who participated in the completion of this report by supplying data. We greatly appreciate their cooperation and efforts, as without their input this project would not have been possible.

For the first time, regional districts were asked to contribute to the cost of producing the report. The ministry particularly wishes to thank the following regional districts, without whose contribution this report could not have been produced:

Alberni-Clayoquot	Mount Waddington
Bulkley-Nechako	Nanaimo
Capital	North Okanagan
Central Kootenay	Northern Rockies
Central Okanagan	Okanagan-Similkameen
Comox-Strathcona	Peace River
Cowichan Valley	Powell River
Fraser Valley	Skeena-Queen Charlotte
Fraser-Fort George	Squamish-Lillooet
Greater Vancouver	Sunshine Coast
Kitimat-Stikine	Thompson-Nicola
Kootenay Boundary	

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Executive Summary

This report presents 2001/2002 municipal solid waste (MSW) tracking data provided to the Ministry of Water, Land and Air Protection (WLAP) by regional districts.

In 2001, the provincial disposal rate was **.612** tonnes per capita. This represents a **30.4%** reduction in the per capita amount of MSW requiring disposal, compared to 1990. In 2002, the provincial disposal rate was **.628** tonnes per capita. This represents a **28.5%** reduction in the per capita amount of MSW requiring disposal, compared to 1990.

Between 1990 and 2002, the total waste disposed per year dropped from 2,890,516 tonnes to 2,600,716 tonnes, a reduction of **10%**. During the same period of time the provincial population increased by **26%**.

Compared to 2000 when the disposal rate was **0.618** tonnes/capita, in 2001 there was a **statistically insignificant** decrease in the total amount of MSW landfilled and incinerated and a **1%** increase in the population. And compared to 2001, in 2002 there was a **3.7%** increase in the total amount of MSW landfilled and incinerated and a **1%** increase in the population. However the trend is more important than annual changes in the disposal rate. Given the margin of error for calculations based on a combination of weighed, estimated and interpolated data, it is probable that the disposal rate has essentially been stable at about 30% since 1998.

Waste reduction rates vary widely from regional district to regional district. This variation can be attributed to different levels of MSW reduction initiatives undertaken by regional districts, the ability of the regional districts to track disposal, and the tracking methodology used.

In 2001 sixteen regional districts had per capita disposal rates lower (better) than the provincial rate, and six regional districts achieved per capita disposal rate reductions greater than 50%, compared to their 1990 base rate. In 2002 fifteen regional districts had per capita disposal rates lower (better) than the provincial rate, and four regional districts achieved per capita disposal rate reductions greater than 50%, compared to their 1990 base rate.

1.0 Introduction

1.1 Background

In 1990, WLAP established the Municipal Solid Waste (MSW) tracking system to monitor British Columbia's progress toward reducing the amount of MSW requiring disposal. An annual MSW Tracking Report is published by WLAP, based on data supplied by the regional districts.

Since 1996, the Recycling Council of BC (RCBC) has prepared the tracking reports under contract to WLAP. RCBC is a multi-sectoral, non-profit organization which works towards waste avoidance while also supporting waste management solutions through research and information exchange services.

1.2 Objectives and Purpose

The primary objective of the tracking process is to monitor the amount of MSW landfilled or incinerated within each regional district and the province as a whole.

The purpose of this report is to present the 2001/2002 MSW tracking results as provided by the regional districts.

1.3 Data Uncertainties and Limitations

The data included in this report reflect the amount and type of waste that regional districts are able to track. However, the accuracy of the data provided varies according to local circumstance such as the availability of staff and/or weigh scales at disposal sites. As a result, some regional districts are able to provide more rigorous data than others.

Information is generally more accurate for urban areas than for rural areas. This reflects the larger and more sophisticated waste facilities serving urban areas, most of which have weigh scales and tipping fees. In contrast, many rural facilities are not staffed and/or lack scales or tipping fees.

As the most relevant analysis when studying MSW tracking results is to consider yearly trends rather than absolute numbers, it is important to acknowledge the factors that affect the accuracy of one year's data compared to the next. Such factors could result in either more accurate or less accurate data. A good example is the addition of a weigh scale to a disposal facility that did not have one previously.

A sensitivity analysis was carried out for the 1997/1998 report. The results of this analysis indicated that the larger the population of a regional district, the larger its per cent contribution to the total waste disposed in the province, and thus the larger the potential impact of uncertainty in its disposal figures on the provincial disposal rate

reduction. For a more complete explanation of the effect of regional district populations see Section 3.1.2 in the BC Municipal Solid Waste Tracking Report 1997/1998.

The ministry acknowledges the above uncertainties as an inherent part of the tracking system. Attention is thus focused on the amount of waste disposed, rather than the amount of waste recycled, as the former is the most rigorous and relevant to the waste reduction goal. A set of guidelines also accompanies each data collection form with the assumption that this will establish a standard for the information provided by the regional districts.

Although every attempt has been made to confirm anomalous figures with the regional district, the ministry does not accept responsibility for verifying the accuracy of submitted data. That responsibility rests with the regional district.

2.0 Methodology

2.1 Collection of 2001/2002 Data

The format of the 2001/2002 data collection sheet was modified from that used in the 2000 study. This data collection sheet only included information on waste disposed; information on recycling materials and programs was not collected.

The form was distributed to each regional district electronically. Data received from regional districts was formatted in the output model and returned for verification. Verified data is labelled as 'Confirmed by Regional District.'

2.2 Accounting for Missing Disposal Data

In the 1996 and 1997/98 Tracking Reports, where a regional district was unable to provide disposal data, its waste disposed figure was calculated by multiplying the regional population for that year by a per capita disposal rate considered reasonable in comparison to regional districts with similar characteristics. For the 2001/2002 Tracking Reports, calculations for regional districts that did not supply disposal data were based on the assumption that regional waste per capita disposal rates had not changed from the last year with good data. Accordingly, the total waste disposed values for each regional district with missing data was calculated by multiplying its 2001 and 2002 populations by its 2000 disposal rate.

Five regional districts did not submit any and one regional district provided only partial disposal data for the 2001/2002 report, with their combined population being 9% of the provincial total. Regional district disposal rates calculated using these methods are labelled as 'Estimated Per Capita Disposal Rate.'

2.3 Calculations

The per capita disposal rate was calculated as follows:

$$\text{Per Capita Disposed} = \text{Regional MSW Disposed} \div \text{Regional District Population}$$

The total MSW disposed includes amounts disposed within the regional district, as well as any amount incinerated or exported via transfer stations.

For the provincial figures, the BC STATS estimate of the 2001 and 2002 population was used, so as to minimize the compounding of error that would result if the sum of all 27 regional districts populations had been used.

3.0 Discussion and Analysis

3.1 Provincial MSW Overview

3.1.1 Provincial MSW Trends

The provincial disposal rate in 2001 was **0.612** tonnes per capita, and in 2002 was **0.628** tonnes per capita which are insignificant changes from 2000 (**0.618**).

The 1990 population value used in this report is the same as the value used in the 2000 report, based on revisions to provincial population estimates for 1990 by BC STATS. This changed the 1990 baseline reduction rate from **0.944** used previously to **0.879** tonnes per capita. Consequently, the disposal rate in 2001 represents a **30.4%** reduction compared to 1990 and in 2002 represents a **28.5%** reduction compared to 1990.

The percentage reduction in each year is not as important as the trend. As seen from the chart in Section 3.1.3, the disposal rate over time curve has remained stable for the past two years. The variations shown for previous years, at least to 1996, may not be significant in consideration of the margin for error in calculations based on a combination of weighed, estimated and interpolated data. The curve from 1991 to 1995 may also be closer to flat, at a higher level; which may be attributed to the difference in tracking methodology used for the 1991 through 1995 reports.

The provincial disposal rate reduction was therefore likely stable at about **30%** since 1996 and this trend has continued in 2001 and 2002. This suggests that early implementation of curbside recycling collection programs has accounted for the bulk of this reduction in disposal rate. Any new programs introduced by BC municipalities since 1998 have not been able to create a significant decrease in disposal of MSW. This suggests that new approaches will be necessary for municipalities to achieve significant reductions in the amount requiring disposal.

Comparing 2002 to 2000, there was a **3.7%** increase in the total amount of MSW disposed in landfills and a **2%** increase in the population. Table 1 illustrates the percentage of the provincial population that resides in regional districts where the total waste disposed and per capita waste disposed increased, decreased or remained virtually the same.

Table 1: Changes in the amount of waste disposed in landfills and per capita disposal rate by regional district from 2000 to 2002

from 2000 to 2001	Increase in Total Waste Disposed	Decrease in Total Waste Disposed	0-1% Change	Increase in Tonnes Per Capita Disposed	Decrease in Tonnes Per Capita Disposed	0-1% Change
Number of Regional Districts	8	14	5	8	11	8
Percentage of BC population	18.25	77.68	4.07	18.25	17.35	64.4

from 2001 to 2002	Increase in Total Waste Disposed	Decrease in Total Waste Disposed	0-1% Change	Increase in Tonnes Per Capita Disposed	Decrease in Tonnes Per Capita Disposed	0-1% Change
Number of Regional Districts	18	5	4	15	5	7
Percentage of BC population	90.5	7.54	1.96	86.14	7.54	6.32

Between 1990 and 2001, the total waste disposed per year dropped from 2,890,516 tonnes to 2,509,088 tonnes, a **13.2%** reduction. During the same period of time the provincial population increased by **24.7%**.

Between 1990 and 2002, the total waste disposed per year dropped from 2,890,516 tonnes to 2,602,716 tonnes, a **9.96%** reduction. During the same period of time the provincial population increased by **25.9%**.

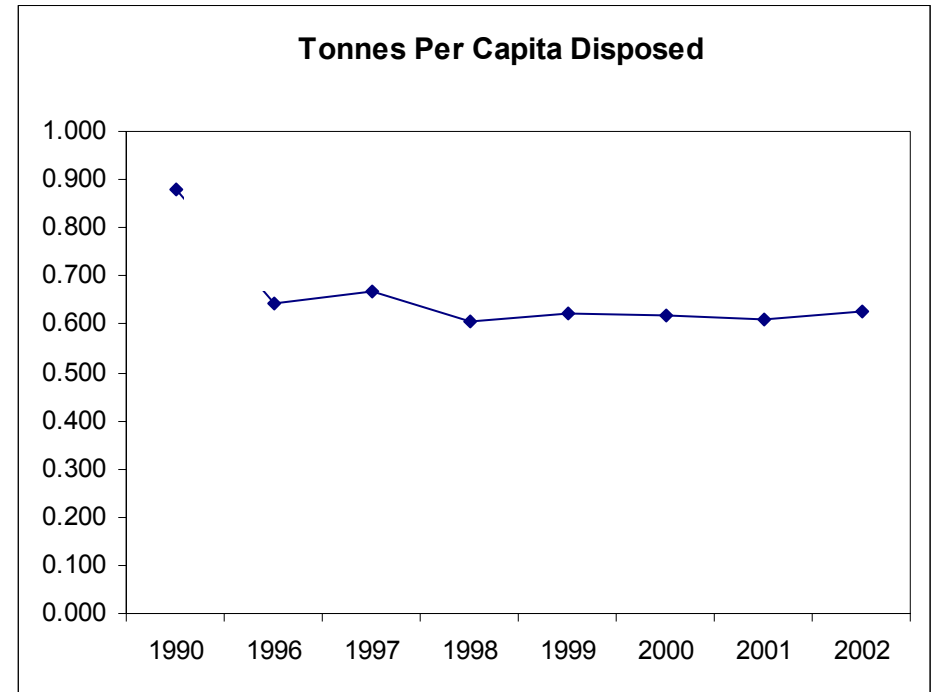
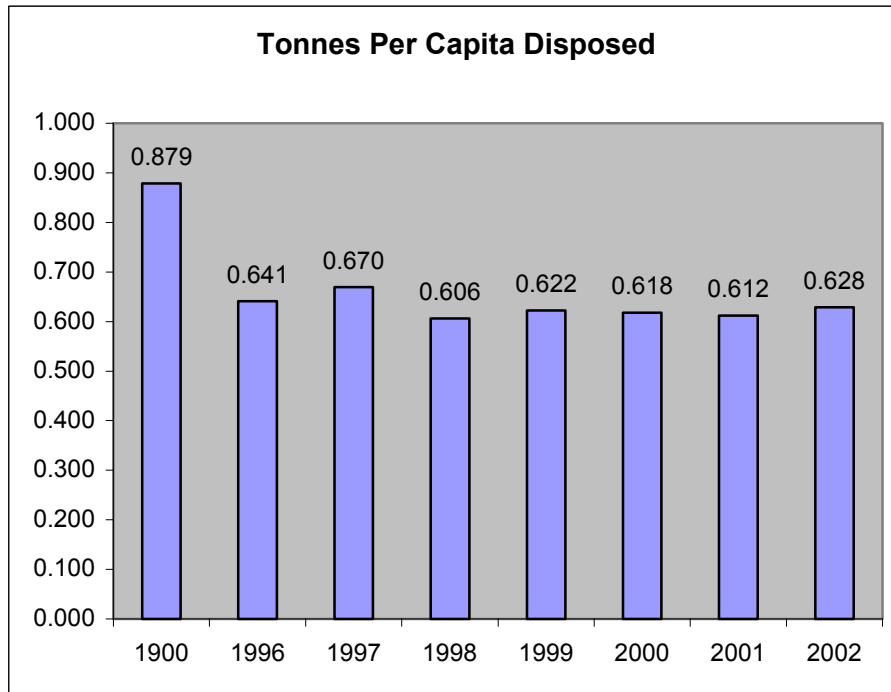
Between 2001 and 2002 the total amount of MSW disposed has increased from 2,509,088 tonnes to 2,602,716 tonnes, a **3.73%** increase. During the same period of time the provincial population increased by **0.97%**. And the provincial per capita disposal rate increased from **0.612** to **0.628**, a **2.78%** change.

3.1.2 British Columbia Municipal Solid Waste Data Summary

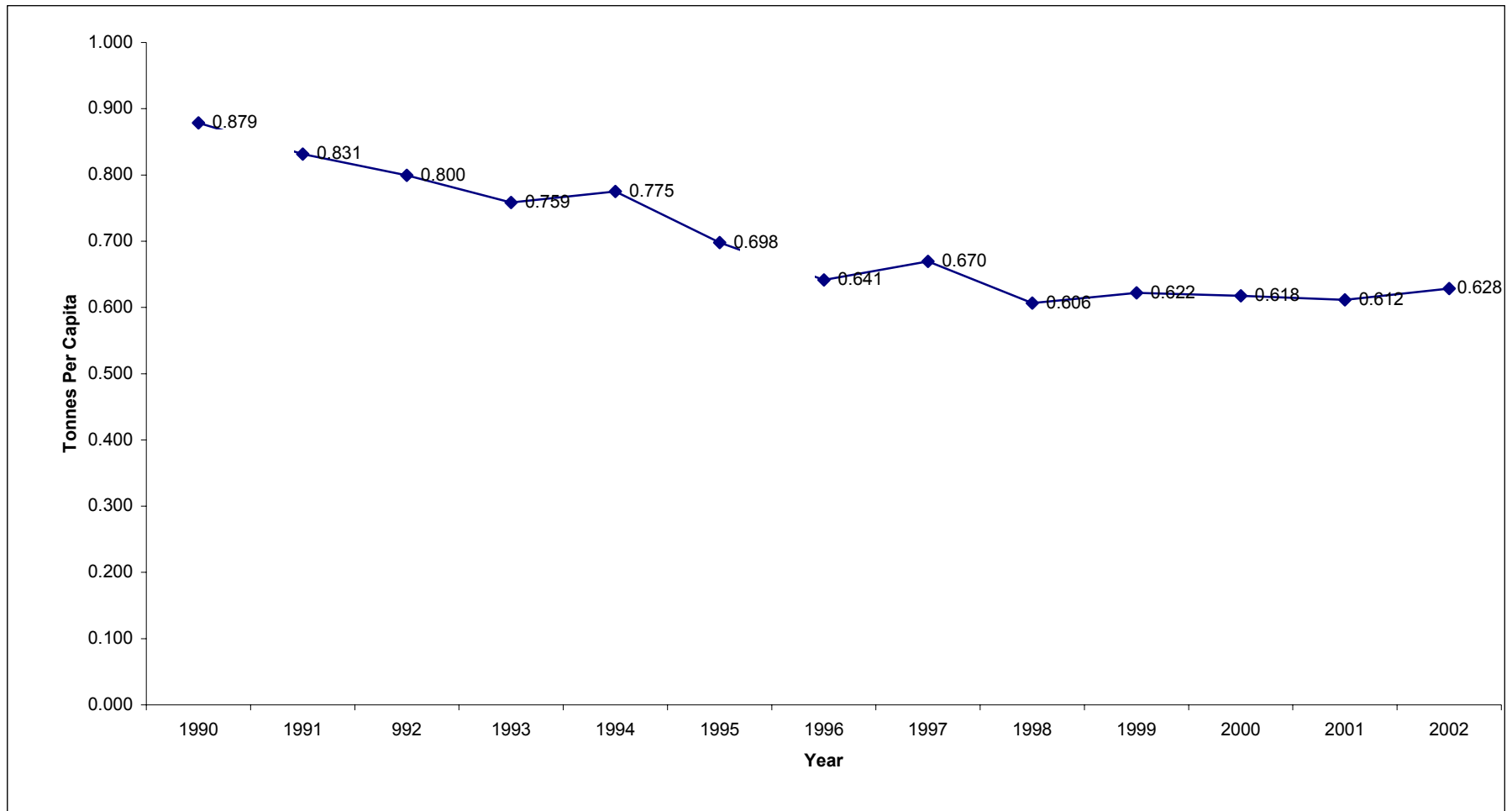
British Columbia Municipal Solid Waste Data Summary

Year	Population	% change from prev. year	Total Waste disposed (in tonnes)	% change from prev. year	Tonnes per capita disposed	% change from 1990
1990	3,289,259		2,890,516		0.879	
1996	3,880,593		2,488,741		0.641	-27.0
1997	3,958,217	2.0	2,650,108	6.5	0.670	-23.8
1998	3,996,030	1.0	2,423,524	-8.5	0.606	-31.0
1999	4,026,657	0.8	2,504,667	3.3	0.622	-29.2
2000	4,062,270	0.9	2,509,112	0.2	0.618	-29.7
2001	4,101,579	1.0	2,509,088	0.0	0.612	-30.4
2002	4,141,272	1.0	2,602,716	3.7	0.628	-28.5

% Reduction in per capita disposal from 1990 rate: **-30.4** in 2001 & **-28.5** in 2002



3.1.3 British Columbia, Tonnes Per Capita Disposed, 1990-2000



*Note: Please see Section 2.1 of the 2000 Report for an explanation of the disposal rate data for 1990-1995. The 1996-2002 data is from the tracking reports for those years, as reported in Section 3.1.2. SWMP means Solid Waste Management Plan.

3.2 Regional MSW Overview

3.2.1 Regional District MSW Trends

In 2001 five regional districts achieved per capita disposal rate reductions greater than 50%, and in 2002 three regional districts achieved per capita disposal rate reductions greater than 50%, compared to their 1990 base rate.

Table 2 below shows the per capita disposal rates for all regional districts in order of increasing disposal rate. This shows that nineteen regional districts in 2001 had per capita disposal rates lower (better) than the provincial rate, comprising **37.23%** of the population. In 2002 eighteen regional districts had per capita disposal rates lower (better) than the provincial rate, comprising **34.18%** of the total population.

A summary of per capita disposal rates for all regional districts in 1990 and 1996-2002 and separated into two groups based on population for the purposes of ranking is included in Appendix A.

In any comparison among regional districts it should be recognized that regionally specific circumstances, resources and infrastructure are paramount in determining the capacity of each regional district to provide waste diversion programs.

Table 2: Per Capita Disposal rates, 2000, 2001, and 2002

Rank 2000	Regional District	Disposal Rate (in tonnes) 2000	Rank 2001	Regional District	Disposal Rate (in tonnes) 2001	Rank 2002	Regional District	Disposal Rate (in tonnes) 2002
1	Powell River	0.256	1	Powell River	0.256	1	Powell River	0.256
2	Central Kootenay	0.312	2	Central Kootenay	0.288	2	Central Kootenay	0.372
3	Central Coast	0.378	3	Cowichan Valley	0.371	3	Central Coast	0.378
4	Cariboo	0.381	4	Central Coast	0.378	4	Cariboo	0.381
5	Comox-Strathcona	0.404	5	Cariboo	0.381	5	Cowichan Valley	0.382
5	Capital	0.404	6	Capital	0.393	6	Bulkley-Nechako	0.399
7	Nanaimo	0.424	7	Bulkley-Nechako	0.420	7	Capital	0.412
8	Columbia Shuswap	0.429	8	Columbia Shuswap	0.429	8	Nanaimo	0.426
9	Sunshine Coast	0.438	9	Nanaimo	0.440	9	Columbia Shuswap	0.429
10	Kootenay Boundary	0.482	10	Sunshine Coast	0.441	10	Sunshine Coast	0.453
11	Fraser Valley	0.497	11	Comox-Strathcona	0.450	11	Comox-Strathcona	0.465
12	Kitimat-Stikine	0.505	12	Kootenay Boundary	0.500	12	Kitimat-Stikine	0.500
13	Cowichan Valley	0.543	13	Fraser Valley	0.506	13	Mount Waddington	0.518
14	Alberni-Clayoquot	0.544	14	Kitimat-Stikine	0.514	14	Kootenay Boundary	0.528
15	Mount Waddington	0.573	15	North Okanagan	0.515	15	Alberni-Clayoquot	0.544
16	Skenna-Queen Charlotte	0.593	16	Alberni-Clayoquot	0.544	16	North Okanagan	0.554
17	North Okanagan	0.597	16	Thompson-Nicola	0.544	17	Fraser Valley	0.555
18	Thompson-Nicola	0.606	18	Mount Waddington	0.562	18	Squamish-Lillooet	0.630
19	Bulkley-Nechako	0.623	19	Squamish-Lillooet	0.620	19	Skeena-Queen Charlotte	0.646
20	Central Okanagan	0.642	20	Central Okanagan	0.640	20	Greater Vancouver	0.692
21	Squamish-Lillooet	0.651	21	Skenna-Queen Charlotte	0.648	21	Thompson-Nicola	0.710
22	Greater Vancouver	0.697	22	Greater Vancouver	0.679	22	Central Okanagan	0.717
23	Fraser-Fort George	0.746	23	Fraser-Fort George	0.729	23	Fraser-Fort George	0.752
24	Peace River	0.762	24	East Kootenay	0.763	24	East Kootenay	0.763
25	East Kootenay	0.763	25	Peace River	0.886	25	Peace River	0.901
26	Okanagan Similkameen	1.068	26	Okanagan Similkameen	1.025	26	Okanagan-Similkameen	1.000
27	Northern Rockies	1.160	27	Northern Rockies	1.334	27	Northern Rockies	1.591
	Province	0.618		Province	0.611		Province	0.628

3.2.1.1 2001/2002 Data

Twenty-one of the 27 regional districts returned MSW disposal data for the years 2001 and 2002. Five regional districts that did not submit data. Alberni-Clayoquot, Cariboo, Central Coast, Columbia Shuswap, and East Kootenay, stated explicitly that no data would be provided. Powell River provided insufficient data, and thus their disposal data was estimated. It can be assumed that these regional districts were unable to provide data due to lack of resources, monetary or otherwise.

In 2002, **91%** of the waste disposed was weighed at regional facilities. The remaining **9%** was quantified using conversions of volumes to mass or other estimation techniques. Landfilling accounted for **81%** of the waste disposed while the other **19%** was incinerated in either the Burnaby incinerator or private DLC burn pits.

3.2.1.2 Waste Disposal Facilities

In 2002, there were **108** landfills operating within BC compared to 236 in 1988. Of this total, **75%** charge tipping fees, which range from \$5-150 per tonne, and **41%** have weigh scales. Only **10%** operate with no staff present. **78%** of the landfills accept DLC waste, **41%** have a salvage area open to the public and **35%** have electric fences to keep wildlife away from covered refuse.

3.2.1.3 Status of Waste Management Plans

Most regional districts that supplied data for this report also had approved solid waste management plans as of 2002. **Two** regional districts, Bulkley-Nechako and Skeena-Queen Charlotte, made significant progress on the implementation of their SWMP, such that its state of implementation status increased. **Fourteen** regional districts have an approved SWMP that has been implemented between 76 and 100%.

The Central Coast and East Kootenay regional districts did not have an approved plan for the whole regional district in 2002.

3.2.2 Regional District Data

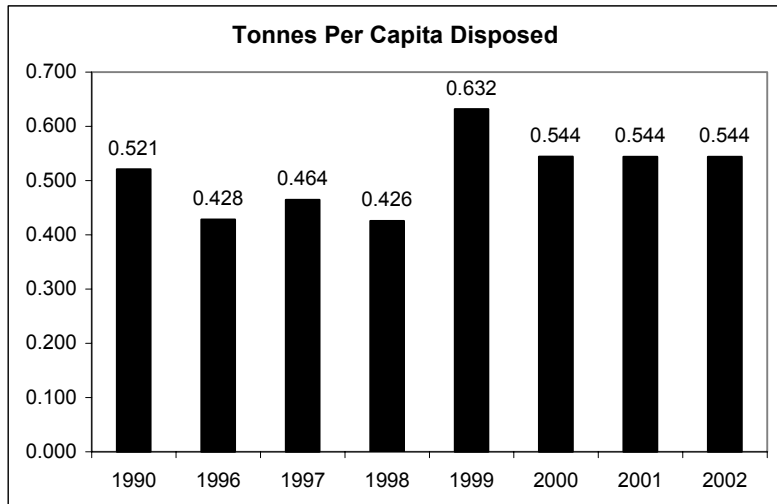
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Alberni-Clayoquot Regional District

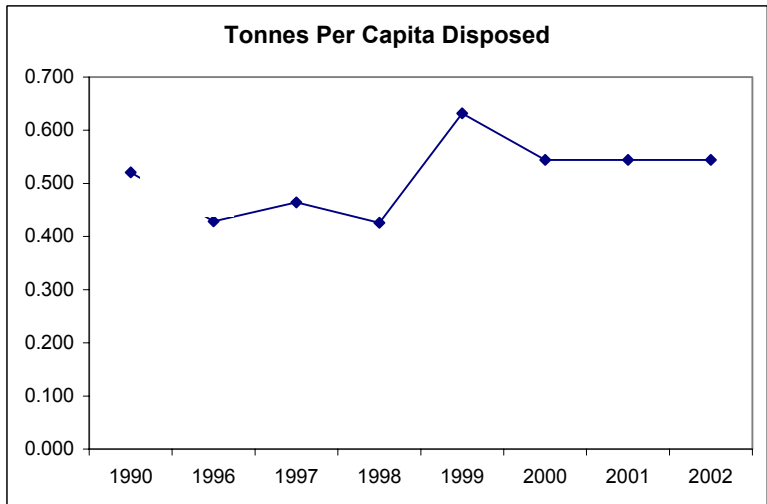
Regional District km sq. 7,738

Year	Population	% change from previous year	Total Waste Disposed	% change from previous year	Tonnes per capita disposed	% change from 1990
1990	31,961		16,641		0.521	
1996	32,906		14,097		0.428	-17.72
1997	32,847	-0.18	15,254	8.21	0.464	-10.81
1998	32,586	-0.79	13,874	-9.05	0.426	-18.23
1999	32,186	-1.23	20,336	46.58	0.632	21.35
2000	31,886	-0.93	17,358	-14.64	0.544	4.55
2001	31,718	-0.53	17,255	-0.60	0.544	4.48
2002	31,753	0.11	17,274	0.11	0.544	4.48

Approved solid waste management plan: **YES** SWMP State of implementation: **51-75%** Date SWMP approved: **February 13, 1997**



Data status: See note on source of 2001/2002 data



Source of the Data: 1990 Grouping/ Previous MSW Tracking reports
 1996-2000 Regional District
 2001-2002 Estimated Per Capita Disposal Rate

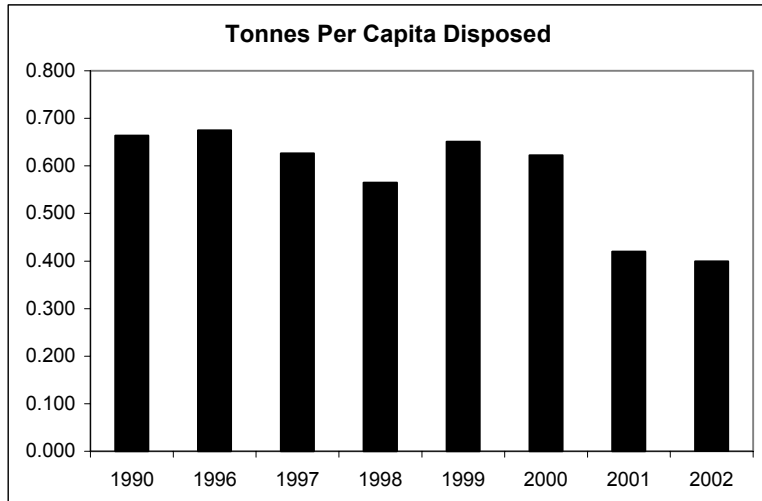
Bulkley-Nechako Regional District

Regional District km sq. 72,101

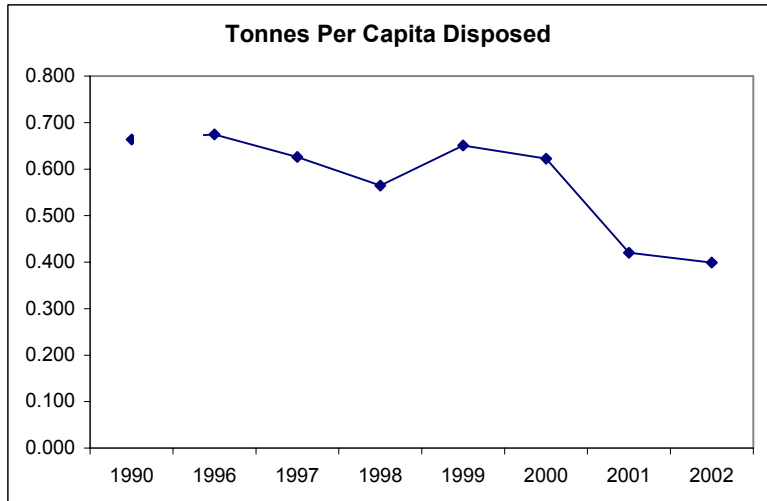
Year	Population	% change from previous year	Total Waste Disposed	% change from previous year	Tonnes per capita disposed	% change from 1990
1990	39,172		25,995		0.664	
1996	43,383		29,272		0.675	1.68
1997	43,899	1.19	27,493	-6.08	0.626	-5.63
1998	43,902	0.01	24,789	-9.84	0.565	-14.91
1999	43,530	-0.85	28,337	14.31	0.651	-1.90
2000	43,315	-0.49	26,964	-4.85	0.623	-6.19
2001	42,890	-0.98	18,021	-33.17	0.420	-36.68
2002	43,513	1.45	17,371	-3.61	0.399	-39.84

Notes:
 Since 2001, better estimation practices have been in place at landfills. It was found that previous estimates were higher than actual disposal rates. Because of this, disposal rates before 2001 can be assumed to have been over-reported. Old estimates have been retained here as the regional district has not submitted updated data.

Approved solid waste management plan: **YES** SWMP State of implementation: **26-50%** Date SWMP approved: **November 1, 1997**



Data status: Confirmed by Regional District



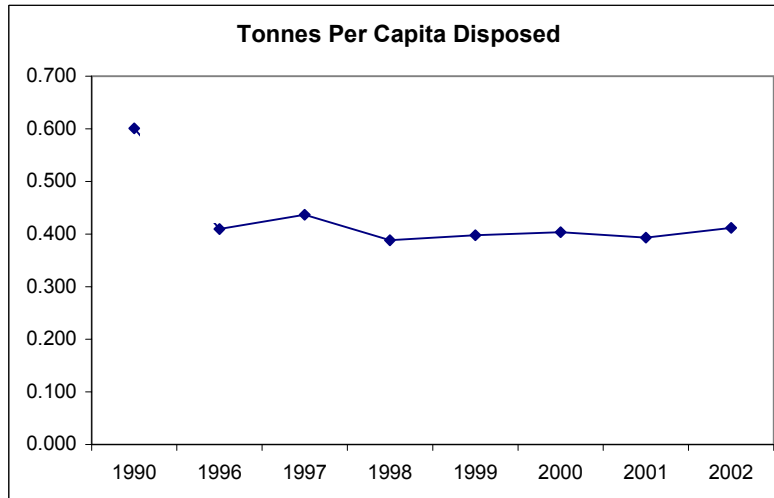
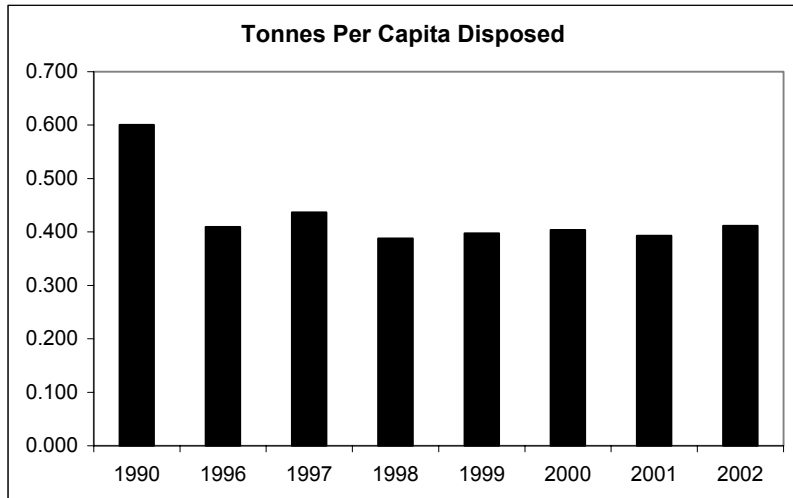
Source of the Data: 1990 Grouping/ Previous MSW Tracking reports
 1996-2000 Previous MSW Tracking Reports
 2001-2002 Regional District

Capital Regional District

Regional District km sq. 2,420

Year	Population	% change from previous year	Total Waste Disposed	% change from previous year	Tonnes per capita disposed	% change from 1990
1990	301,186		180,966		0.601	
1996	331,761		135,869		0.410	-31.84
1997	335,466	1.12	146,442	7.78	0.437	-27.35
1998	336,560	0.33	130,604	-10.82	0.388	-35.41
1999	337,665	0.33	134,257	2.80	0.398	-33.83
2000	338,458	0.23	136,654	1.79	0.404	-32.80
2001	344,567	1.80	135,425	-0.90	0.393	-34.59
2002	347,095	0.73	142,940	5.55	0.412	-31.46

Approved solid waste management plan: **YES** SWMP State of implementation: **76-100%** Date SWMP approved: **December 22, 1995**



Data status: Confirmed by Regional Districts

Source of the Data: 1990

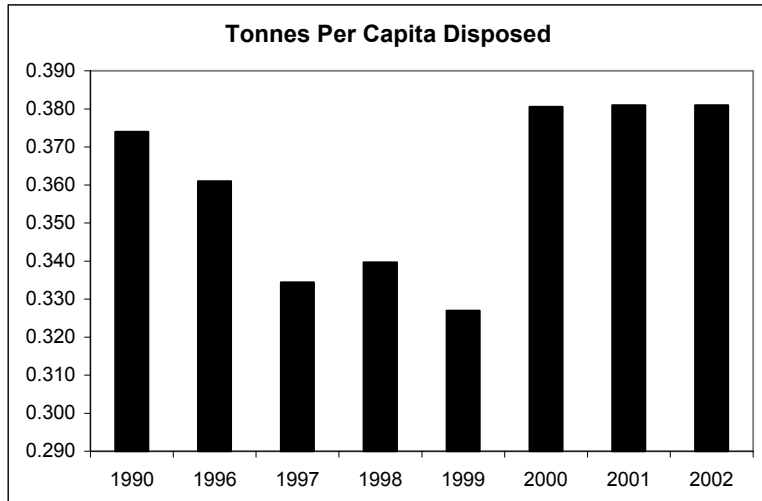
Grouping/ Previous MSW Tracking reports
 1996-2000 Previous MSW Tracking Reports
 2001-2002 Regional District

Cariboo Regional District

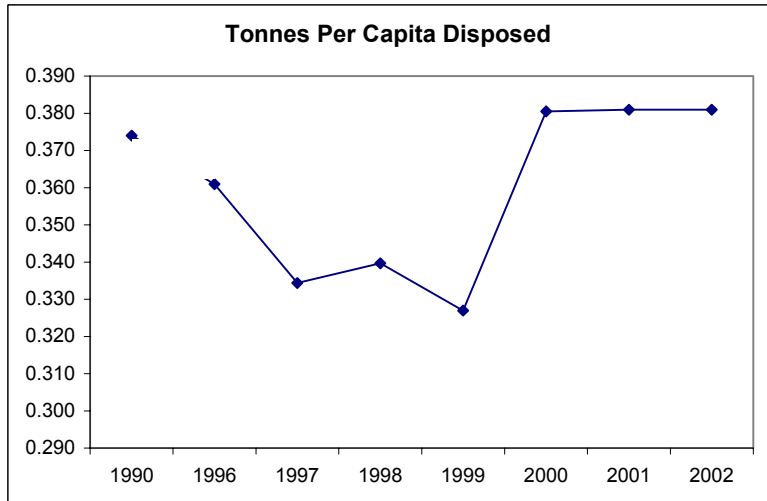
Regional District km sq. 82,523

Year	Population	% change from previous year	Total Waste Disposed	% change from previous year	Tonnes per capita disposed	% change from 1990
1990	62,718		23,456		0.374	
1996	69,976		25,261		0.361	-3.48
1997	71,027	1.50	23,751	-5.98	0.334	-10.59
1998	70,820	-0.29	24,056	1.28	0.340	-9.17
1999	69,940	-1.24	22,867	-4.94	0.327	-12.58
2000	69,551	-0.56	26,466	15.74	0.381	1.75
2001	68,728	-1.18	26,185	-1.06	0.381	1.87
2002	69,558	1.21	26,502	1.21	0.381	1.87

Approved solid waste management plan: **YES** SWMP State of implementation: **76-100%** Date SWMP approved: **October 24, 1995**



Data status: See note on source of 2001/2002 data



Source of the Data: 1990 Grouping/ Previous MSW Tracking reports
 1996-2000 Regional District
 2001-2002 Estimated Per Capita Disposal Rate

Cariboo Regional District

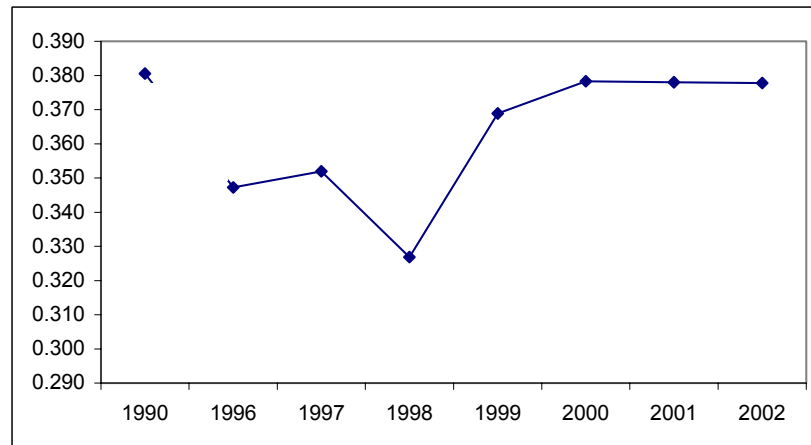
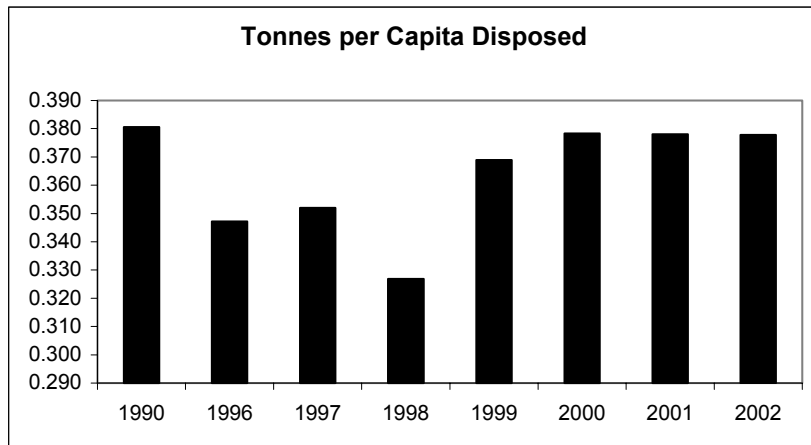
Disposed Waste Breakdown by Facility Type													
Disposal Facility	Disposal Method (LF/IN/XP)	Tipping Fee (\$/N/NA)	Staffed (Y/N)	DLC Accepted (Y/N)	Salvage Area (Y/N)	Electric Fencing (Y/N)	Weigh Scales (Y/N)	Landfill Gas Management		Expected Year of Closure	Design Capacity (tonnes)	Total Waste Disposed (tonnes)	
								Collection/Flaring (Y/N)	Utilization (Y/N)			2001	2002
Carson Pit, Quesnel	LF	N					N						
Williams Lake	LF	N					Y						
Hundred Mile House	LF	N					N						
Lone Butte	TS	N					N						
Sheridon Lake	LF	N					N						
Watch Lake	LF	N					N						
Riske Ck.	TS	N					N						
Alexis	LF	N					N						
Nemaiah Valley	LF	N					N						
Tatia Lake	LF	N					N						
Punpzi Lake	LF	N					N						
Nimpo Lake	LF	N					N						
TOTAL											26,466	26,466	

Central Coast Regional District

Regional District km sq. 25,000

Year	Population	% change from previous year	Total Waste Disposed	% change from previous year	Tonnes per capita disposed	% change from 1990
1990	3,679		1,400		0.381	
1996	4,087		1,419		0.347	-8.76
1997	4,288	4.92	1,509	6.34	0.352	-7.52
1998	4,198	-2.10	1,372	-9.08	0.327	-14.12
1999	4,099	-2.36	1,512	10.20	0.369	-3.07
2000	4,007	-2.24	1,516	0.26	0.378	-0.58
2001	3,973	-0.85	1,502	-0.94	0.378	-0.67
2002	4,013	1.01	1,516	0.95	0.378	-0.73

Approved solid waste management plan: **NO** SWMP State of implementation: **N/A** Date SWMP approved: **N/A**



Data status: See note on source of 2001/2002 data

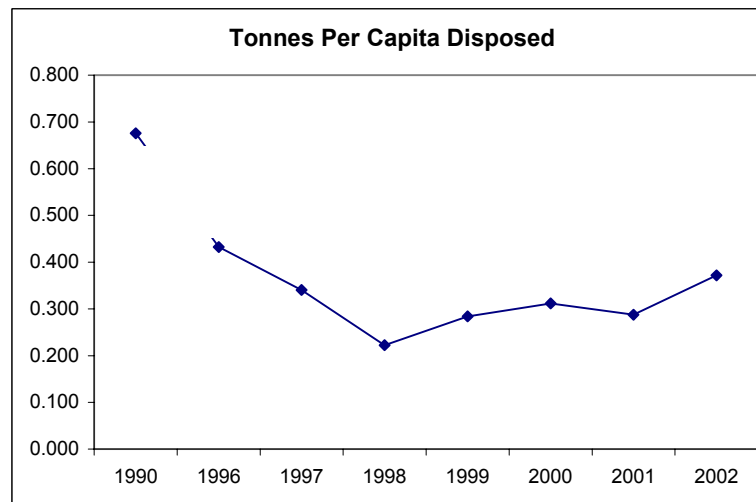
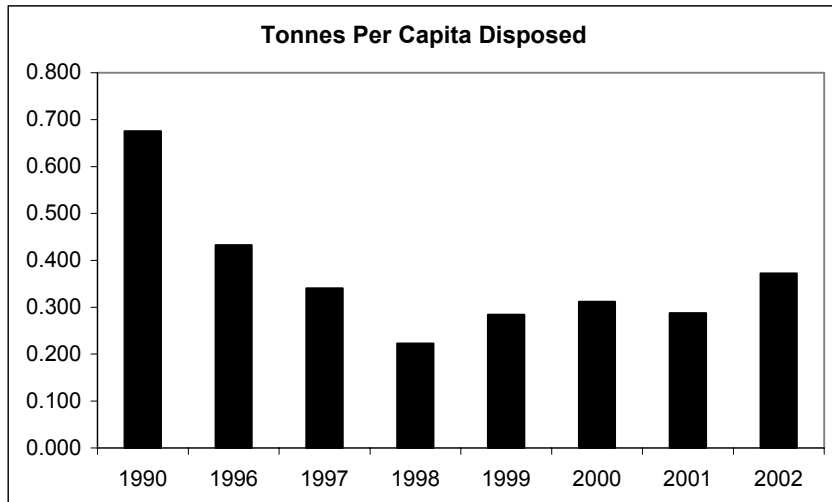
Source of the Data: 1990 Grouping/ Previous MSW Tracking reports
 1996-2000 Regional District
 2001-2002 Estimated Per Capita Disposal Rate

Central Kootenay Regional District

Regional District km sq. 23,158

Year	Population	% change from previous year	Total Waste Disposed	% change from previous year	Tonnes per capita disposed	% change from 1990
1990	51,456		34,760		0.676	
1996	60,324		26,083		0.432	-35.99
1997	60,523	0.33	20,591	-21.06	0.340	-49.64
1998	60,300	-0.37	13,421	-34.82	0.223	-67.05
1999	59,995	-0.51	17,039	26.96	0.284	-57.96
2000	59,703	-0.49	18,600	9.16	0.312	-53.88
2001	59,540	-0.27	17,121	-7.95	0.288	-57.43
2002	59,245	-0.50	22,038	28.72	0.372	-44.93

Approved solid waste management plan: YES SWMP State of implementation: 76-100% Date SWMP approved: July 12, 1996



Data status: See note on source of 2001/2002 data

Source of the Data: 1990 Grouping/ Previous MSW Tracking reports
 1996-2000 Previous MSW Tracking Reports
 2001-2002 Regional District

Central Kootenay Regional District

Disposed Waste Breakdown by Facility Type													
Disposal Facility	Disposal Method (LF/IN/XP)	Tipping Fee (\$/N/NA)	Staffed (Y/N)	DLC Accepted (Y/N)	Salvage Area (Y/N)	Electric Fencing (Y/N)	Weigh Scales (Y/N)	Landfill Gas Management		Expected Year of Closure	Design Capacity (tonnes)	Total Waste Disposed (tonnes)	
								Collection/Flaring (Y/N)	Utilization (Y/N)			2001	2002
Nelson Transfer	XP	\$65/tonne	Y	N	N	N	Y	N	N	NA	NA	3,724	7044.8
Balfour Transfer	XP	\$12/m ³	Y	N	Y	N	N	N	N	NA	NA	557.2	489.5
Kaslo Transfer	XP	\$12/m ³	Y	N	N	N	N	N	N	NA	NA	643.5	562.7
Marblehead Transfer	XP	\$12/m ³	Y	N	N	N	N	N	N	NA	NA	130.8	157.1
Ymir Transfer	XP	\$12/m ³	Y	N	N	N	N	N	N	NA	NA	74.5	66.4
Canex Landfill	LF	\$8.40/m ³	Y	Y	N	Y	N	N	N	2025		1796.5	1716.2
Crawford Bay Transfer	XP	\$12/m ³	Y	N	N	N	N	N	N	NA	NA	290.8	149.5
Destiny Bay Transfer	XP	\$12/m ³	N	N	N	N	N	N	N	NA	NA	69.6	43.2
Creston Landfill	LF	\$12/m ³	Y	Y	N	N	N	N	N	Unknown		1424.3	2210.2
Ootischenia Landfill	LF	\$60/tonne	Y	Y	N	Y	Y	N	N	Unknown		7050.53	8124.7
Slocan Transfer	XP	\$12/m ³	Y	N	N	N	N	N	N	NA	NA	320.5	326.8
Rosebery Transfer	XP	\$12/m ³	Y	N	N	N	N	N	N	2003		176.4	178.7
Nakusp Landfill	LF	\$12/m ³	Y	Y	N	Y	N	N	N	2025		862.1	968.4
TOTAL												17,121	22,038

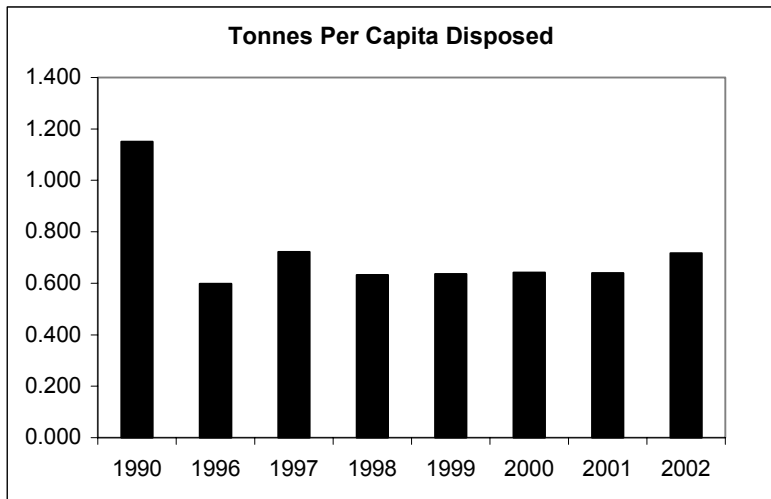
Central Okanagan Regional District

Regional District km sq. 2,886

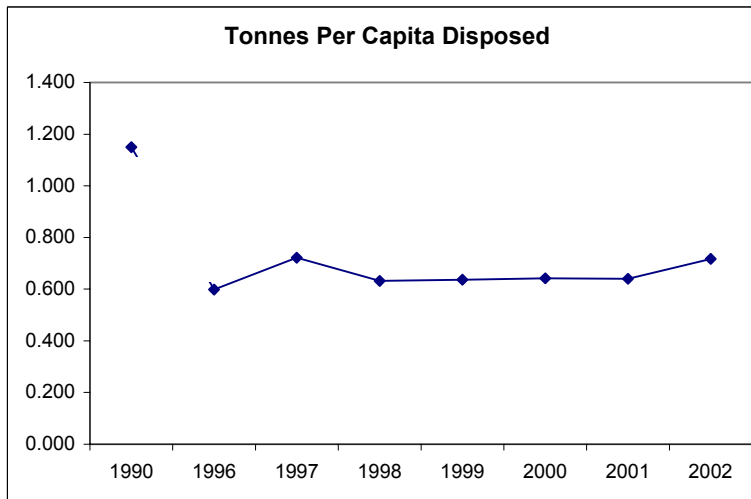
Notes:
It is believed that disposal rates prior to 2000 were under estimated. As well, increased landfilling in the regional district may be a result of the high rate of construction of new homes and offices in the area.

Year	Population	% change from previous year	Total Waste Disposed	% change from previous year	Tonnes per capita disposed	% change from 1990
1990	108,700		124,998		1.150	
1996	141,912		84,924		0.598	-47.96
1997	145,743	2.70	105,259	23.94	0.722	-37.19
1998	149,020	2.25	94,216	-10.49	0.632	-45.02
1999	150,538	1.02	95,825	1.71	0.637	-44.64
2000	152,349	1.20	97,775	2.03	0.642	-44.19
2001	154,440	1.37	98,819	1.07	0.640	-44.36
2002	156,033	1.03	111,863	13.20	0.717	-37.66

Approved solid waste management plan: **YES** SWMP State of implementation: **76-100%** Date SWMP approved: **August 1, 1992**



Data status: Confirmed by Regional District



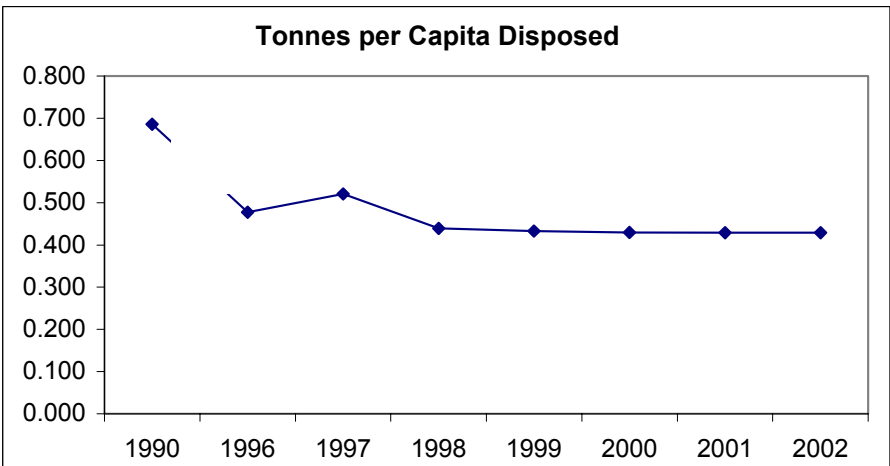
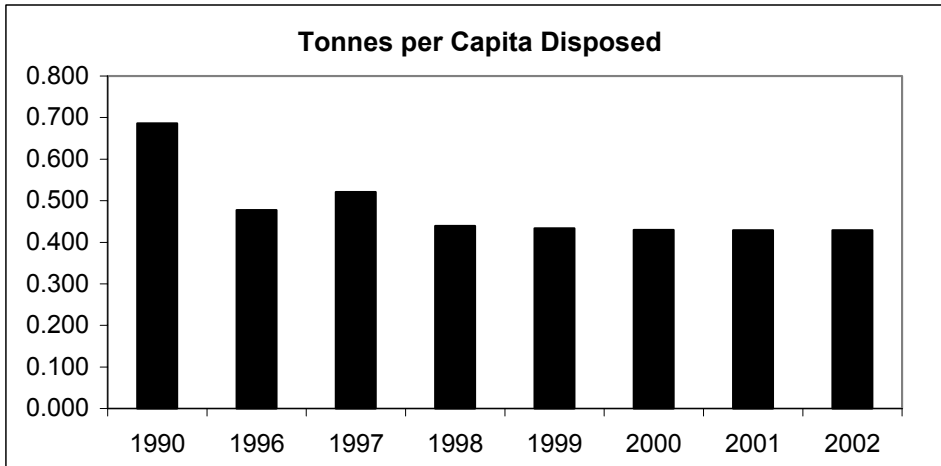
Source of the Data: 1990 Grouping/ Previous MSW Tracking reports
1996-2000 Previous MSW Tracking reports
2001-2002 Regional District

Columbia-Shuswap Regional District

Regional District km sq. : 30,107

Year	Population	% change from previous year	Total Waste Disposed	% change from previous year	Tonnes per capita disposed	% change from 1990
1990	41,943		28,762		0.686	
1996	49,962		23,852		0.477	-30.38
1997	50,382	0.84	26,224	9.94	0.521	-24.10
1998	50,436	0.11	22,140	-15.57	0.439	-35.99
1999	50,209	-0.45	21,746	-1.78	0.433	-36.84
2000	50,352	0.28	21,623	-0.57	0.429	-37.38
2001	50,305	-0.09	21,581	-0.19	0.429	-37.44
2002	50,826	1.04	21,804	1.04	0.429	-37.44

Approved solid waste management plan: **YES** SWMP State of implementation: **76-100%** Date SWMP approved: **August 1, 1994**

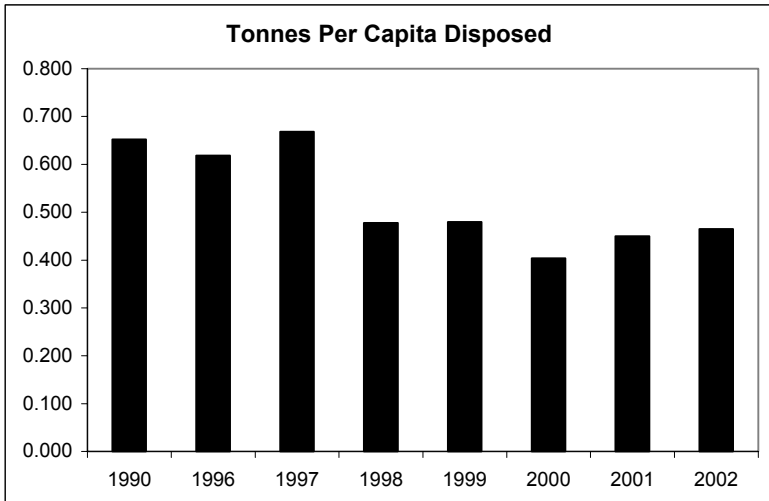


Comox- Strathcona Regional District

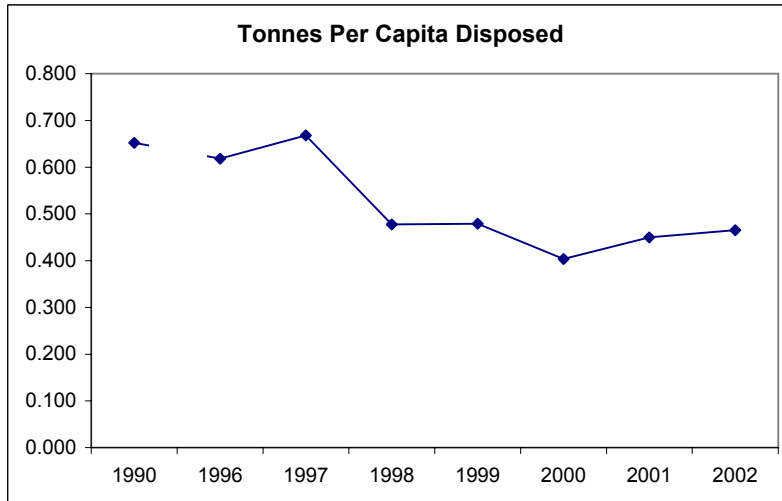
Regional District km sq. 20,202

Year	Population	% change from previous year	Total Waste Disposed	% change from previous year	Tonnes per capita disposed	% change from 1990
1990	82,101		53,546		0.652	
1996	101,520		62,779		0.618	-5.18
1997	102,717	1.18	68,637	9.33	0.668	2.46
1998	102,811	0.09	49,092	-28.48	0.477	-26.79
1999	101,679	-1.10	48,735	-0.73	0.479	-26.51
2000	100,549	-1.11	40,588	-16.72	0.404	-38.11
2001	105,000	4.43	47,240	16.39	0.450	-31.02
2002	106,000	0.95	49,305	4.37	0.465	-28.68

Approved solid waste management plan: **YES** SWMP State of implementation: **76-100%** Date SWMP approved: **September 1, 1995**



Data status: Confirmed by Regional District



Source of the Data: 1990 Grouping/ Previous MSW Tracking reports
 1996-2000 Previous MSW Tracking Reports
 2001-2002 Regional District

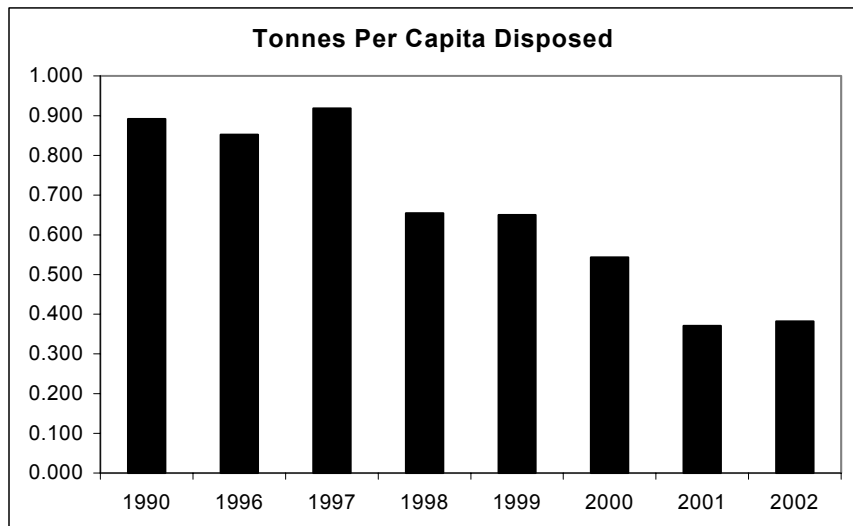
Cowichan Valley Regional District

Regional District km sq. 3,730

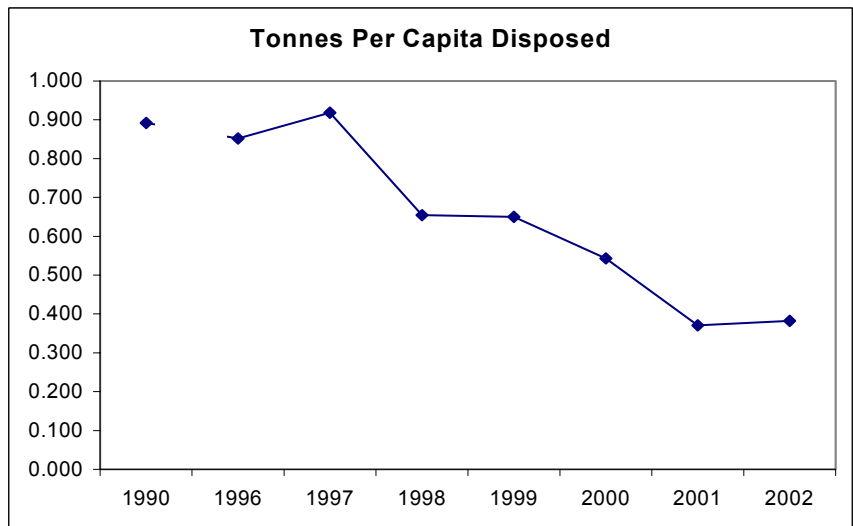
Year	Population	% change from previous year	Total Waste Disposed	% change from previous year	Tonnes per capita disposed	% change from 1990
1990	60,048		53,546		0.892	
1996	73,676		62,779		0.852	-4.44
1997	74,759	1.47	68,637	9.33	0.918	2.96
1998	74,989	0.31	49,092	-28.48	0.655	-26.59
1999	74,964	-0.03	48,735	-0.73	0.650	-27.09
2000	74,765	-0.27	40,588	-16.72	0.543	-39.12
2001	71,998	-3.70	26,699	-34.22	0.371	-58.41
2002	73,129	1.57	27,941	4.65	0.382	-57.15

Notes:
 A disposal ban on paper products was implemented in 2000. A new commercial composting facility has opened and commercial organics have been banned from waste collection.

Approved solid waste management plan: **YES** SWMP State of implementation: **26-50%** Date SWMP approved: **2002**



Data status: Confirmed by Regional District



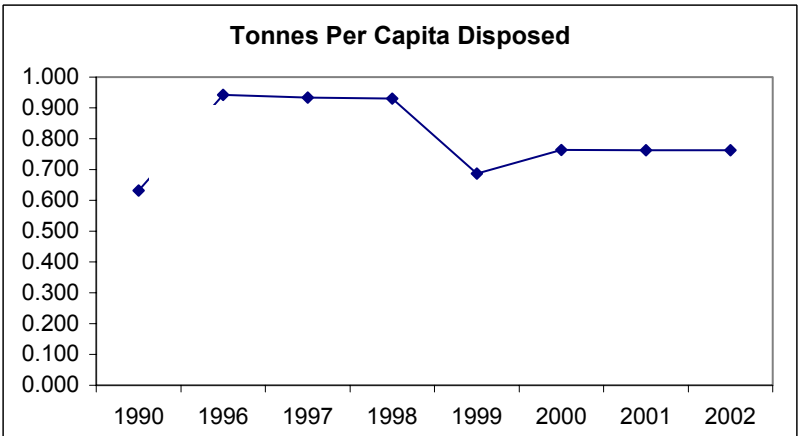
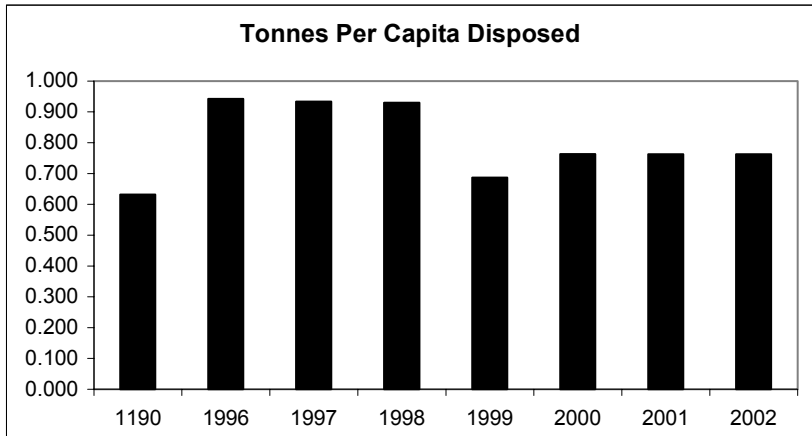
Source of the Data: 1990 Grouping/ Previous MSW Tracking reports
 1996-2000 Previous MSW Tracking Report
 2001-2002 Regional District

East Kootenay Regional District

Regional District km sq. 27,658

Year	Population	% change from previous year	Total Waste Disposed	% change from previous year	Tonnes per capita disposed	% change from 1990
1990	54,055		34,141		0.632	
1996	58,608		55,209		0.942	49.15
1997	58,555	-0.09	54,675	-0.97	0.934	47.84
1998	58,219	-0.57	54,167	-0.93	0.930	47.31
1999	58,428	0.36	40,123	-25.93	0.687	8.73
2000	58,526	0.17	44,677	11.35	0.763	20.86
2001	58,903	0.64	44,943	0.60	0.763	20.80
2002	60,234	2.26	45,959	2.26	0.763	20.80

Approved solid waste management plan: **NO** SWMP State of implementation: **N/A** Date SWMP approved: **N/A**



Data status: See note on source of 2001/2002 data

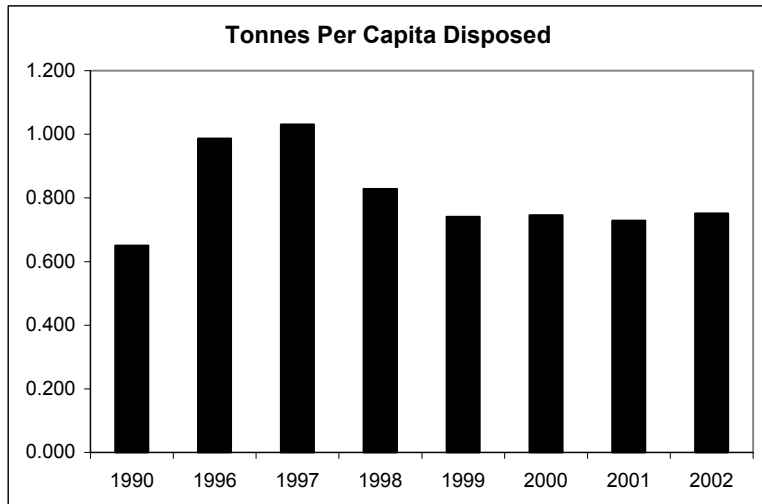
Source of the Data: 1990 Grouping/ Previous MSW Tracking reports
 1996-2000 Grouping/ Previous MSW Tracking reports
 2001-2002 Estimated Per Capita Disposal Rate

Fraser-Fort George Regional District

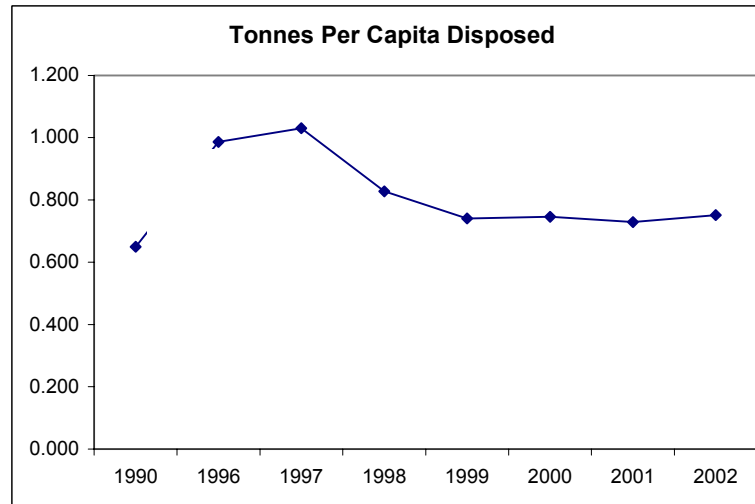
Regional District km sq. 52,000

Year	Population	% change from previous year	Total Waste Disposed	% change from previous year	Tonnes per capita disposed	% change from 1990
1990	92,607		60,180		0.650	
1996	103,202		101,782		0.986	51.77
1997	103,846	0.62	107,044	5.17	1.031	58.62
1998	102,721	-1.08	85,041	-20.56	0.828	27.40
1999	102,122	-0.58	75,650	-11.04	0.741	13.99
2000	101,945	-0.17	76,027	0.50	0.746	14.76
2001	100,224	-1.69	73,055	-3.91	0.729	12.17
2002	100,366	0.14	75,429	3.25	0.752	15.65

Approved solid waste management plan: **YES** SWMP State of implementation: **76-100%** Date SWMP approved: **October 16, 1997**



Data status: Confirmed by Regional District



Source of the Data: 1990 Grouping/ Previous MSW Tracking reports
 1996-2000 Previous MSW Tracking Reports
 2001-2002 Regional District

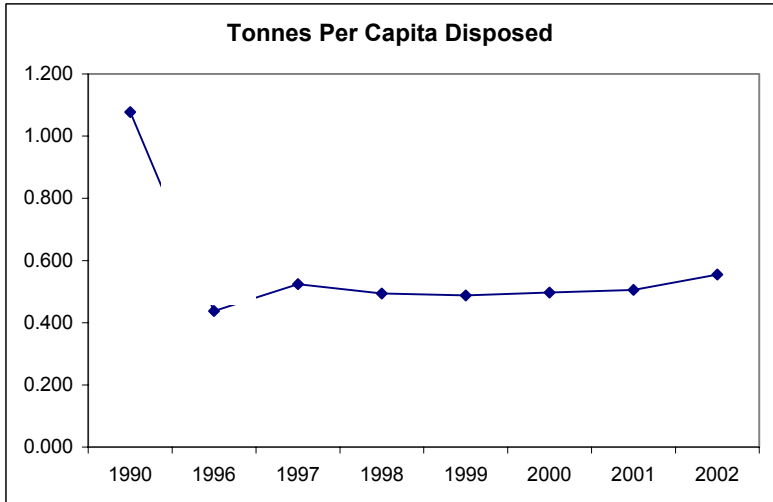
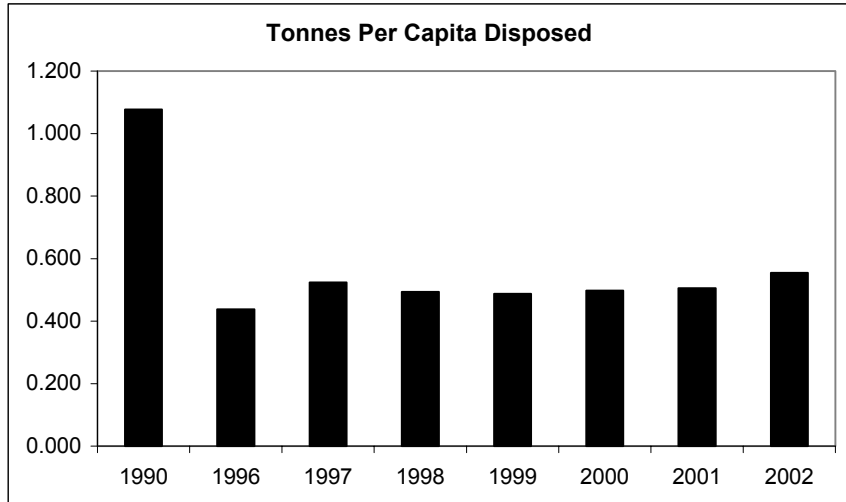
Fraser Valley Regional District

Regional District km sq. 13,000

Year	Population	% change from previous year	Total Waste Disposed	% change from previous year	Tonnes per capita disposed	% change from 1990
1990	183,887		198,111		1.077	
1996	231,440		101,273		0.438	-59.38
1997	236,947	2.38	124,066	22.51	0.524	-51.40
1998	239,715	1.17	118,309	-4.64	0.494	-54.19
1999	242,759	1.27	118,365	0.05	0.488	-54.74
2000	245,353	1.07	121,983	3.06	0.497	-53.85
2001	248,964	1.47	125,856	3.18	0.506	-53.08
2002	251,921	1.19	139,733	11.03	0.555	-48.52

Notes:
 The waste generation and waste disposal rate may be underestimated as actual waste migration from the Regional District (waste not entering authorized FVRD Landfills and Transfer Stations) is unknown. These statistics use an estimated waste migration of 20,000 Tonnes (migration to unauthorized disposal facilities). Waste generated as landclearing debris was not included as part of the waste stream in the base year (1990) and therefore has never been calculated or estimated. For this reason, estimates include Construction and Demolition wastes and only extremely conservative estimates for Land Clearing Debris.

Approved solid waste management plan: YES SWMP State of implementation: 76-100% Date SWMP approved: November 14, 1996, ammendments adopted 2000



Data status: Confirmed by Regional District

Source of the Data: 1990

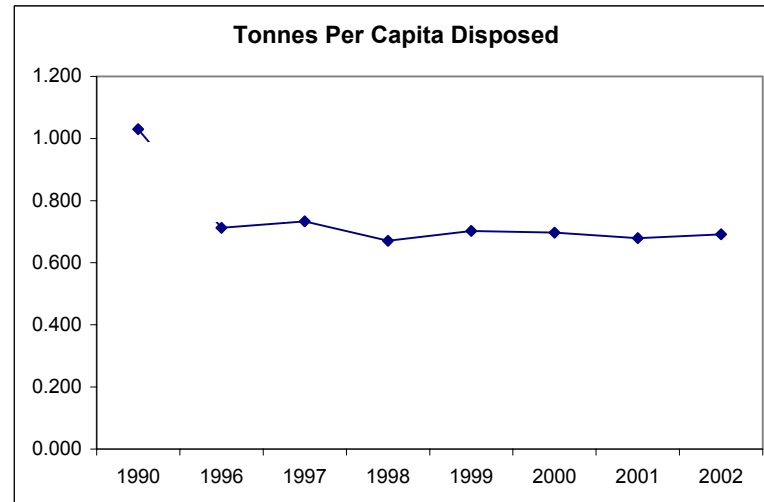
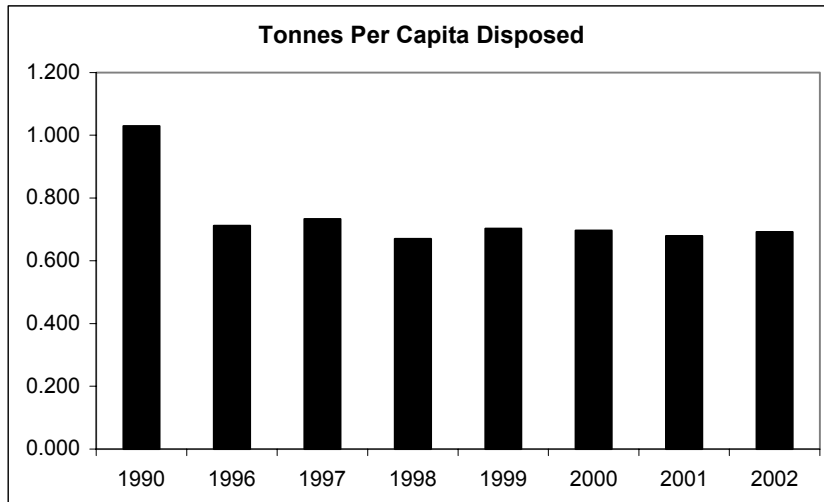
Grouping/ Previous MSW Tracking reports
 1996-2000 Previous MSW Tracking Reports
 2001-2002 Regional District

Greater Vancouver Regional District

Regional District km sq. 2,930

Year	Population	% change from previous year	Total Waste Disposed	% change from previous year	Tonnes per capita disposed	% change from 1990
1990	1,548,831		1,594,790		1.030	
1996	1,910,314		1,360,682		0.712	-30.82
1997	1,961,221	2.66	1,438,608	5.73	0.734	-28.76
1998	1,994,074	1.68	1,336,671	-7.09	0.670	-34.90
1999	2,025,168	1.56	1,422,779	6.44	0.703	-31.77
2000	2,056,540	1.55	1,433,383	0.75	0.697	-32.31
2001	2,091,080	1.68	1,420,784	-0.88	0.679	-34.01
2002	2,114,314	1.11	1,462,653	2.95	0.692	-32.81

Approved solid waste management plan: YES SWMP State of implementation: 76-100% Date SWMP approved: November 28, 1995



Data status: See note on source of 2001/2002 data

Source of the Data: 1990

Grouping/ Previous MSW Tracking reports
 1996-1999 Regional District
 2000-2002 Estimated Per Capita Disposal Rate

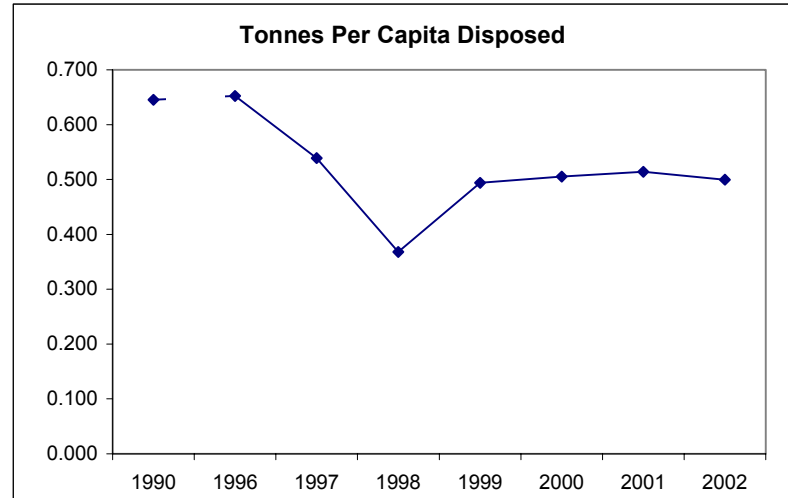
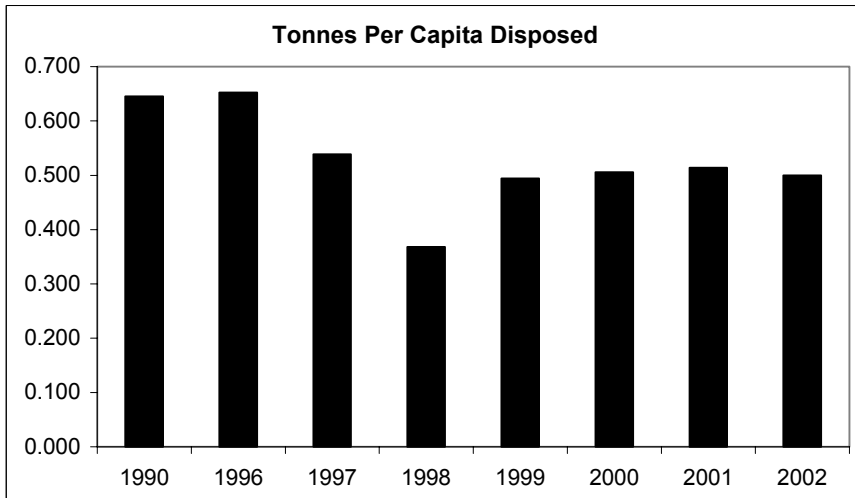
Kitimat-Stikine Regional District

Regional District km sq. 91,909

Year	Population	% change from previous year	Total Waste Disposed	% change from previous year	Tonnes per capita disposed	% change from 1990
1990	42,776		27,602		0.645	
1996	45,457		29,660		0.652	1.12
1997	45,579	0.27	24,559	-17.20	0.539	-16.50
1998	44,789	-1.73	16,489	-32.86	0.368	-42.95
1999	44,141	-1.45	21,800	32.21	0.494	-23.46
2000	43,487	-1.48	21,982	0.83	0.505	-21.66
2001	40,876	-6.00	21,012	-4.41	0.514	-20.34
2002	40,876	0.00	20,426	-2.79	0.500	-22.56

Notes:
 Total waste disposed estimated by starting with 0.6 tonnes per capita per year and subtracting known diverted materials. Total averaged over Regional District. Landfill Diversion Program approved in 2003. Program will provide \$12.75 per tonne for eligible materials. Current eligible materials include paper products, organics and plastics. This pilot program will be evaluated in 2004.

Approved solid waste management plan: **YES** SWMP State of implementation: **51-75%** Date SWMP approved: **February 26, 1996**



Data status: See note on source of 2001/2002 data

Source of the Data: 1990

Grouping/ Previous MSW Tracking reports
 1996-2000 Regional District
 2001-2002 Estimated Per Capita Disposal Rate

Kitimat-Stikine Regional District

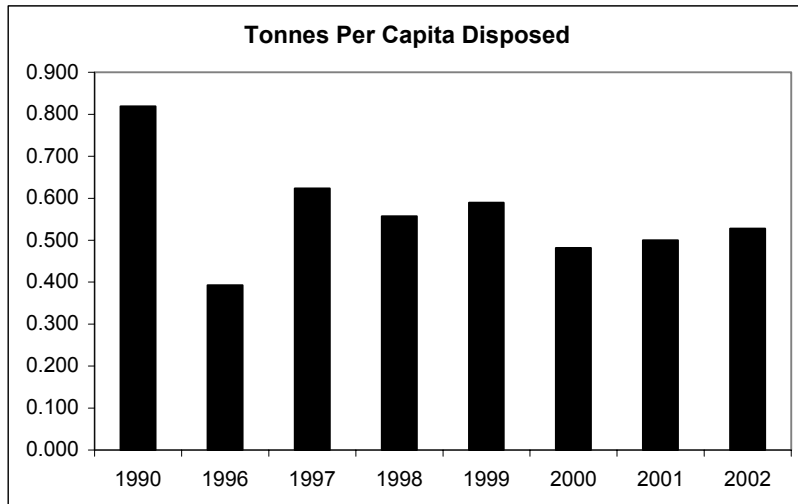
Disposed Waste Breakdown by Facility Type													
Disposal Facility	Disposal Method (LF/IN/XP)	Tipping Fee (\$/N/NA)	Staffed (Y/N)	DLC Accepted (Y/N)	Salvage Area (Y/N)	Electric Fencing (Y/N)	Weigh Scales (Y/N)	Landfill Gas Management		Expected Year of Closure	Design Capacity (tonnes)	Total Waste Disposed (tonnes)	
								Collection/Flaring (Y/N)	Utilization (Y/N)			2001	2002
Thornhill	LF	\$12.50-50/load	Y	Y	Y	Y	N	N	N	2007			
Hazelton	LF		Y	Y	Y	Y	N	N	N				
Kitiwanga	LF		Y	Y	Y	Y	N	N	N	2007			
Rosswood	LF		Y	Y	Y	Y	N	N	N	2025	3,000		
Iskut	LF			Y	Y		N	N	N	2035	12,000		
Terrace	LF	\$12.50-50/load	Y	Y		Y	N	N	N	2007			
Kitimat	LF	\$	Y	Y		Y	N	N	N				
Stewart	LF	\$	Y	Y		Y	N	N	N				
Telegraph/Bob	LF			Y			N	N	N				
Nass	LF		Y	Y		Y	N	N	N				
											TOTAL	21,012	20,426

Kootenay Boundary Regional District

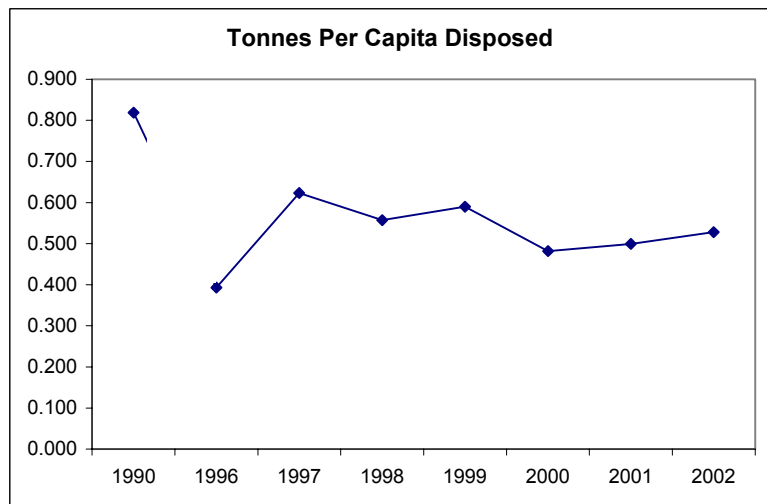
Regional District km sq. 8,300

Year	Population	% change from previous year	Total Waste Disposed	% change from previous year	Tonnes per capita disposed	% change from 1990
1990	31,577		25,861		0.819	
1996	34,134		13,409		0.393	-52.03
1997	34,001	-0.39	21,197	58.08	0.623	-23.88
1998	33,883	-0.35	18,873	-10.96	0.557	-31.99
1999	33,727	-0.46	19,886	5.37	0.590	-28.01
2000	33,496	-0.68	16,134	-18.87	0.482	-41.19
2001	31,843	-4.93	15,910	-1.39	0.500	-38.99
2002	31,843	0.00	16,805	5.63	0.528	-35.56

Approved solid waste management plan: YES SWMP State of implementation: 76-100% Date SWMP approved: 1999



Data status: Confirmed by Regional District



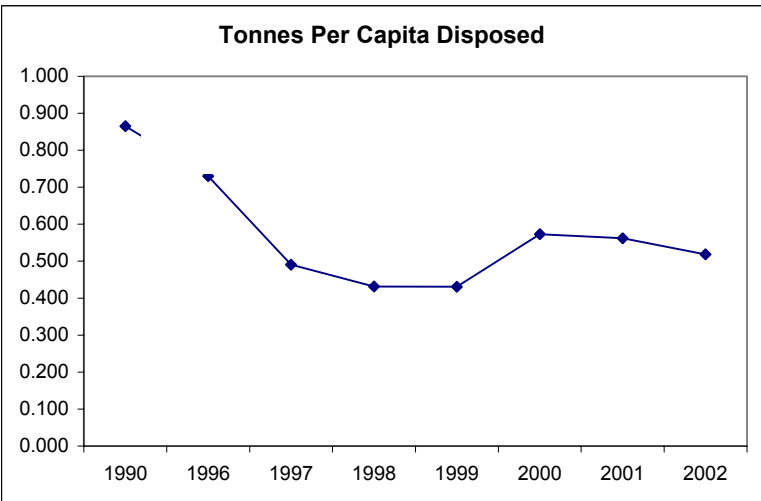
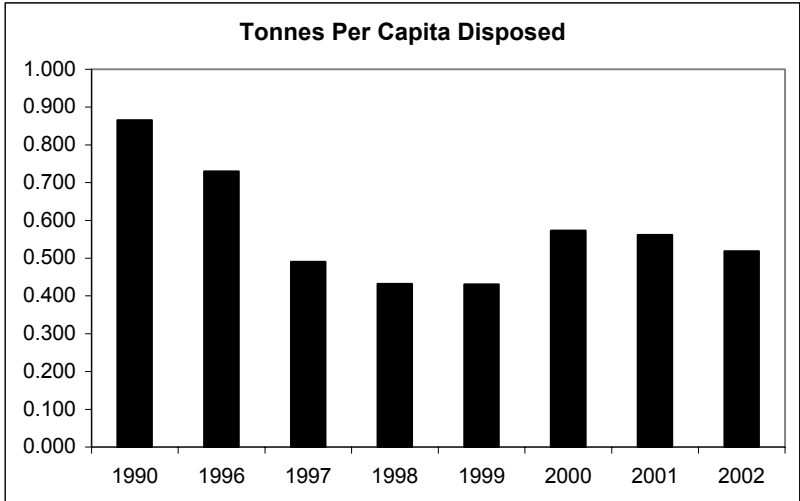
Source of the Data: 1990 Grouping/ Previous MSW Tracking reports
 1996-2000 Previous MSW Tracking Reports
 2001-2002 Regional District

Mount Waddington Regional District

Regional District km sq. 21,464

Year	Population	% change from previous year	Total Waste Disposed	% change from previous year	Tonnes per capita disposed	% change from 1990
1990	14,654		12,677		0.865	
1996	15,224		11,117		0.730	-15.59
1997	14,998	-1.48	7,359	-33.80	0.491	-43.28
1998	14,654	-2.29	6,328	-14.01	0.432	-50.08
1999	14,297	-2.44	6,162	-2.62	0.431	-50.18
2000	13,879	-2.92	7,952	29.05	0.573	-33.77
2001	13,111	-5.53	7,365	-7.38	0.562	-35.07
2002	13,111	0.00	6,794	-7.75	0.518	-40.10

Approved solid waste management plan: YES SWMP State of implementation: 76-100% Date SWMP approved: July 22, 1996



Data status: Confirmed by Regional District

Source of the Data: 1990

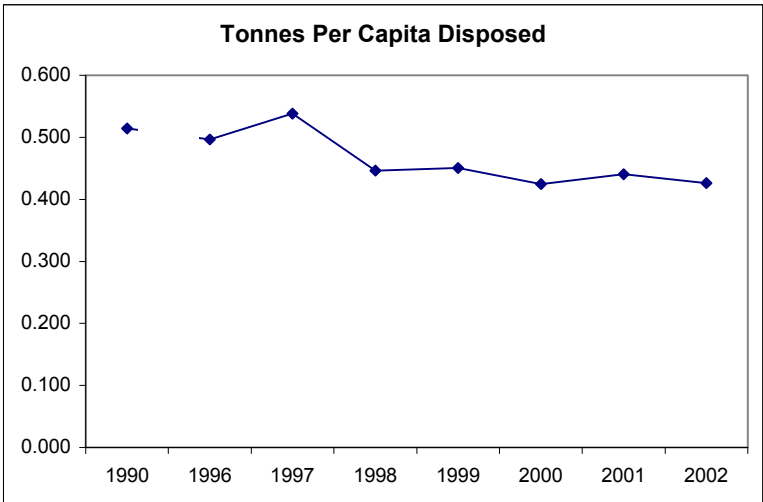
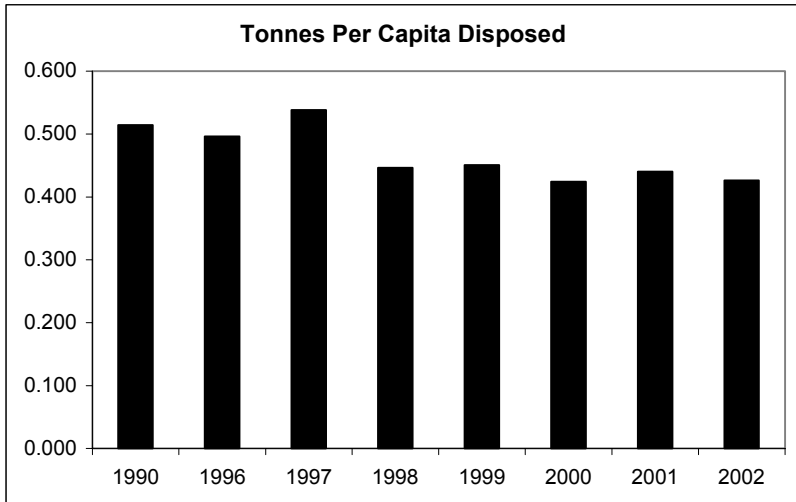
Grouping/ Previous MSW Tracking reports
 1996-2000 Previous MSW Tracking Reports
 2001-2002 Regional District

Nanaimo Regional District

Regional District km sq. 2,041

Year	Population	% change from previous year	Total Waste Disposed	% change from previous year	Tonnes per capita disposed	% change from 1990
1990	98,278		50,533		0.514	
1996	126,483		62,788		0.496	-3.46
1997	129,230	2.17	69,535	10.75	0.538	4.65
1998	130,089	0.66	58,058	-16.51	0.446	-13.20
1999	130,696	0.47	58,885	1.42	0.451	-12.38
2000	131,192	0.38	55,682	-5.44	0.424	-17.46
2001	132,456	0.96	58,314	4.73	0.440	-14.38
2002	133,988	1.16	57,080	-2.12	0.426	-17.15

Approved solid waste management plan: **YES** SWMP State of implementation: **51-75%** Date SWMP approved: **underway**



Data status: Confirmed by Regional District

Source of the Data: 1990

Grouping/ Previous MSW Tracking reports
 1996-2000 Previous MSW Tracking Reports
 2001-2002 Regional District

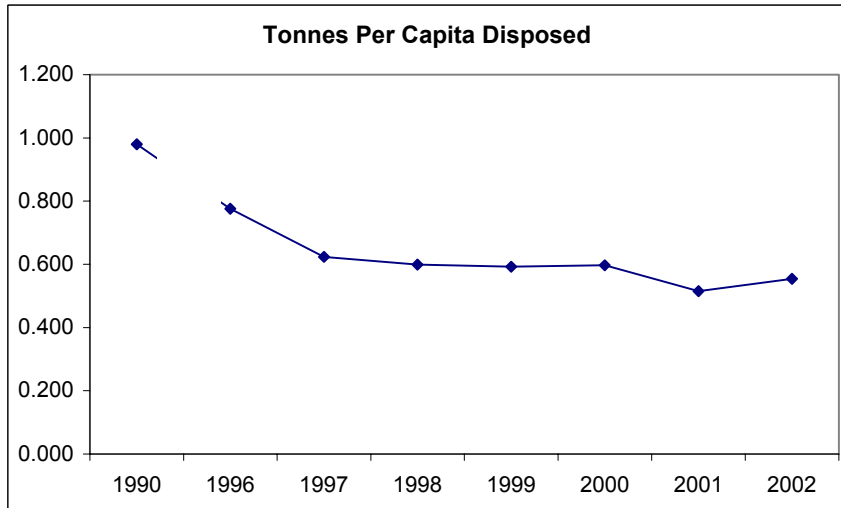
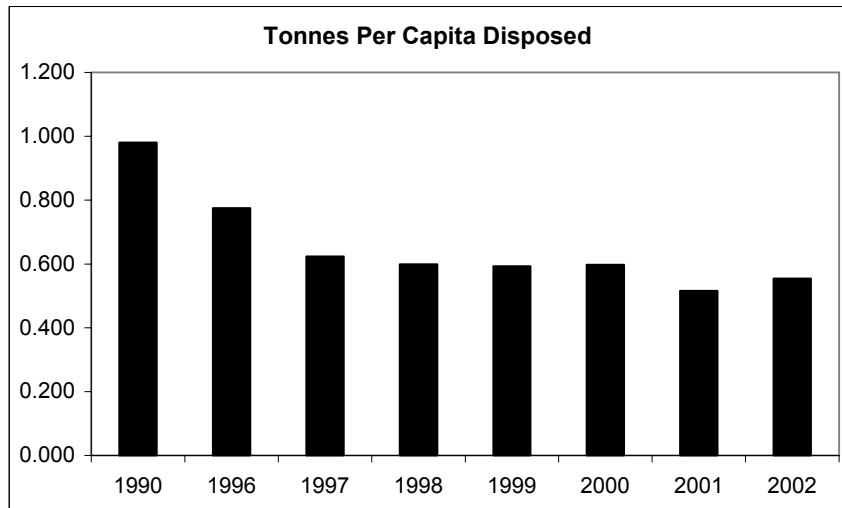
North Okanagan Regional District

Regional District km sq. 7,872

Year	Population	% change from previous year	Total Waste Disposed	% change from previous year	Tonnes per capita disposed	% change from 1990
1990	61,128		59,915		0.980	
1996	71,607		55,541		0.776	-20.87
1997	71,928	0.45	44,875	-19.20	0.624	-36.35
1998	72,251	0.45	43,272	-3.57	0.599	-38.90
1999	72,575	0.45	43,001	-0.63	0.593	-39.55
2000	72,900	0.45	43,542	1.26	0.597	-39.06
2001	73,227	0.45	37,737	-13.33	0.515	-47.42
2002	74,691	2.00	41,389	9.68	0.554	-43.46

Notes:
Siting for a new Regional Landfill is underway. Operational/ Closure plans for Lumby and Armstrong/ Spallumcheen Recycling and Disposal Facilities are approved. The Silver Star Transfer Station was constructed.

Approved solid waste management plan: **YES** SWMP State of implementation: **51-75%** Date SWMP approved: **2002**



Data status: Confirmed by Regional District

Source of the Data: 1990

Grouping/ Previous MSW Tracking reports
1996-2000 Previous MSW Tracking Report
2001-2002 Regional District

North Okanagan Regional District

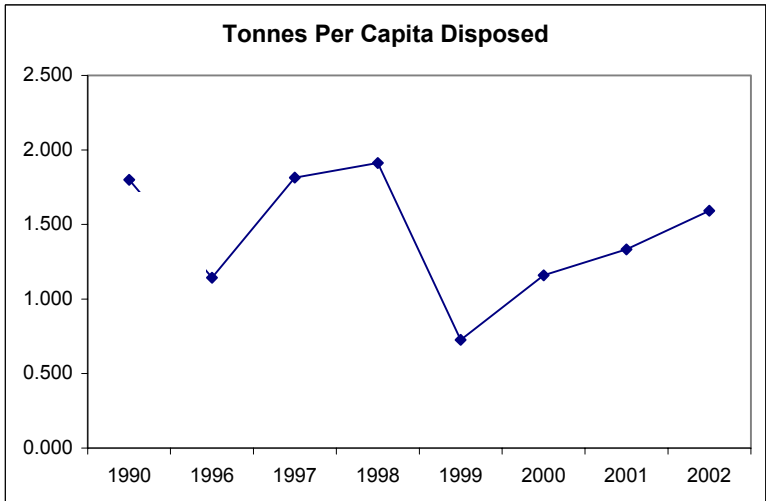
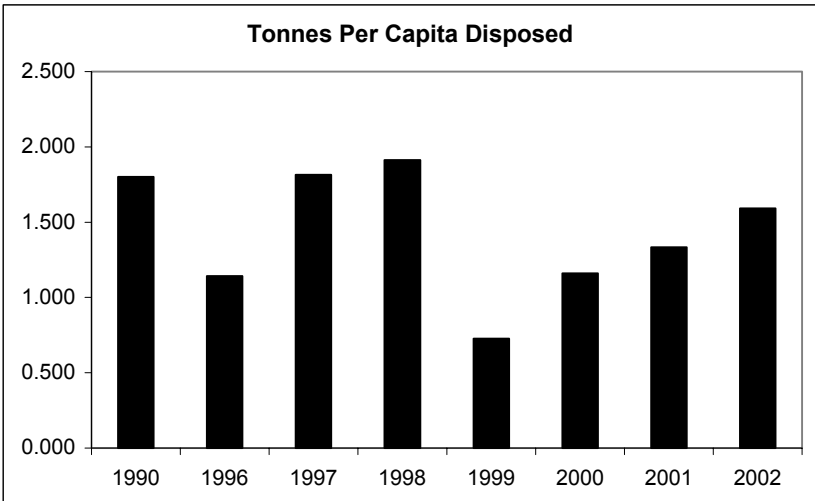
Disposed Waste Breakdown by Facility Type													
Disposal Facility	Disposal Method (LF/IN/TS /XP)	Tipping Fee (\$/N/NA)	Staffed (Y/N)	DLC Accepted (Y/N)	Salvage Area (Y/N)	Electric Fencing (Y/N)	Weigh Scales (Y/N)	Landfill Gas Management		Expected Year of Closure	Design Capacity (tonnes)	Total Waste Disposed (tonnes)	
								Collection/ Flaring (Y/N)	Utilization (Y/N)			2001	2002
Greater Vernon	LF	53\$/ tonne	Y	Y	Y	N	Y	N	N	2017	1,600,000	28,819	31,911
Armstrong / Spallumcheen	LF	53\$/ tonne	Y	Y	Y	N	Y	N	N	2013	450,000	7760	8081
Lumby	LF	53\$/ tonne	Y	Y	Y	Y	N	N	N	2014	77,340	890	1018
Cherryville	LF	53\$/ tonne	Y	Y	Y	N	N	N	N	2011	5,400	184	205
Kingfisher	LF	53\$/ tonne	Y	Y	Y	N	N	N	N	2002	6,960	84	174
Silver Star Transfer Stn.	TS	User Fees & Taxation	N	N	N	N	N	N/A	N/A	N/A	N/A	Transferred to Greater Vernon Disposal Facility	117 tonnes transferred to Greater Vernon RDF
											TOTAL	37,737	41,389

Northern Rockies Regional District

Regional District km sq. 80,000

Year	Population	% change from previous year	Total Waste Disposed	% change from previous year	Tonnes per capita disposed	% change from 1990
1990	4,565		8,217		1.800	
1996	6,127		7,000		1.142	-36.53
1997	6,362	3.84	11,545	64.93	1.815	0.82
1998	6,276	-1.35	12,000	3.94	1.912	6.22
1999	6,198	-1.24	4,500	-62.50	0.726	-59.66
2000	6,037	-2.60	7,000	55.56	1.160	-35.58
2001	6,049	0.20	8,067	15.24	1.334	-25.91
2002	6,131	1.36	9,757	20.95	1.591	-11.59

Approved solid waste management plan: **YES** SWMP State of implementation: **0-25%** Date SWMP approved: **June 17, 1996**



Data status: Confirmed by Regional District

Source of the Data: 1990

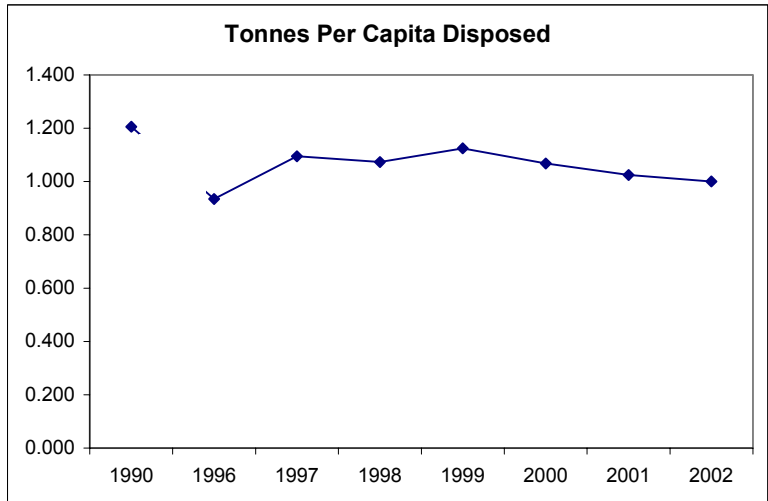
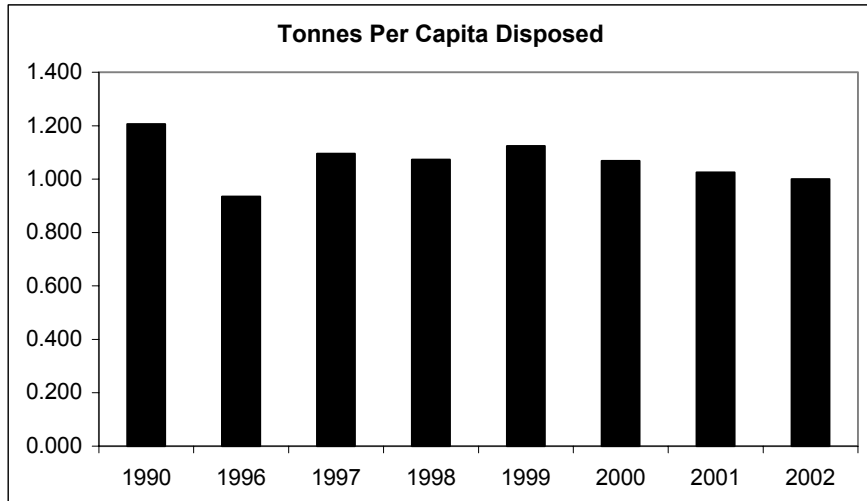
Grouping/ Previous MSW Tracking reports
 1996-2000 Previous MSW Tracking Reports
 2001-2002 Regional District

Okanagan-Similkameen Regional District

Regional District km sq. 10,411

Year	Population	% change from previous year	Total Waste Disposed	% change from previous year	Tonnes per capita disposed	% change from 1990
1990	65,920		79,487		1.206	
1996	78,750		73,623		0.935	-22.47
1997	79,669	1.17	87,236	18.49	1.095	-9.19
1998	79,579	-0.11	85,400	-2.10	1.073	-11.00
1999	79,670	0.11	89,574	4.89	1.124	-6.76
2000	79,501	-0.21	84,921	-5.19	1.068	-11.41
2001	79,645	0.18	81,636	-3.87	1.025	-14.99
2002	79,472	-0.22	79,472	-2.65	1.000	-17.07

Approved solid waste management plan: **YES** SWMP State of implementation: **51-75%** Date SWMP approved: **March 29, 1996**



Data status: Confirmed by Regional District

Source of the Data: 1990

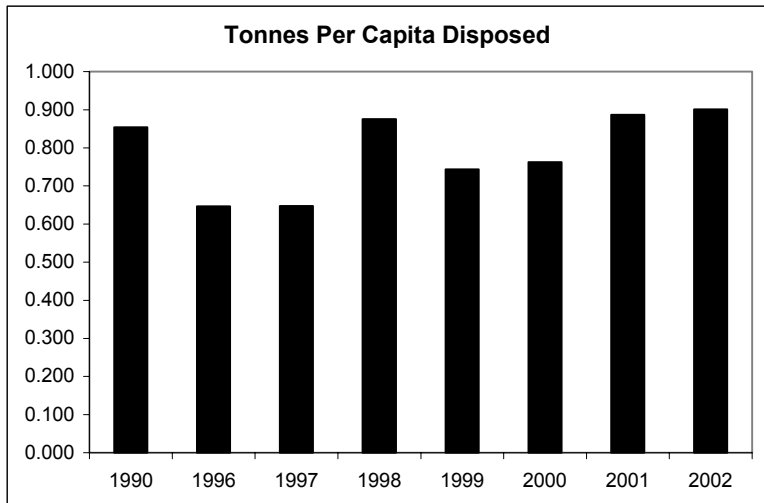
Grouping/ Previous MSW Tracking reports
 1996-2000 Previous MSW Tracking Report
 2001-2002 Regional District

Peace River Regional District

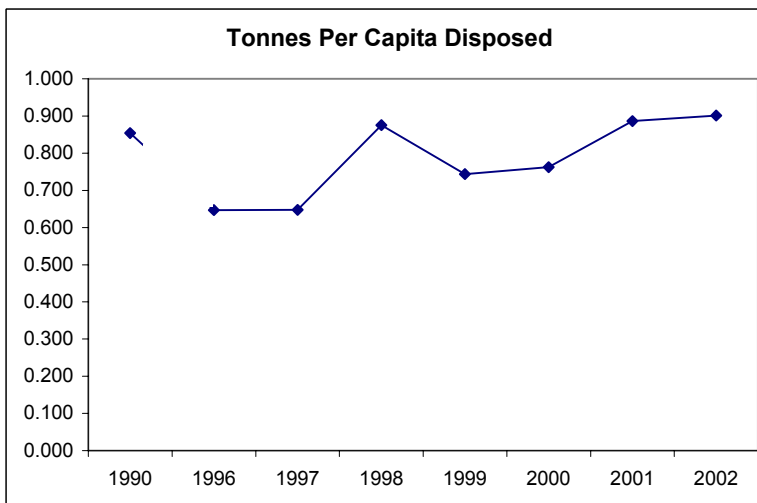
Regional District km sq. 119,337

Year	Population	% change from previous year	Total Waste Disposed	% change from previous year	Tonnes per capita disposed	% change from 1990
1990	53,958		46,076		0.854	
1996	58,887		38,090		0.647	-24.25
1997	59,012	0.21	38,205	0.30	0.647	-24.18
1998	58,831	-0.31	51,500	34.80	0.875	2.51
1999	58,489	-0.58	43,500	-15.53	0.744	-12.90
2000	57,839	-1.11	44,100	1.38	0.762	-10.71
2001	57,957	0.20	51,375	16.50	0.886	3.81
2002	58,997	1.79	53,158	3.47	0.901	5.52

Approved solid waste management plan: **YES** SWMP State of implementation: **76-100%** Date SWMP approved: **June 25, 1996**



Data status: Confirmed by Regional District



Source of the Data: 1990

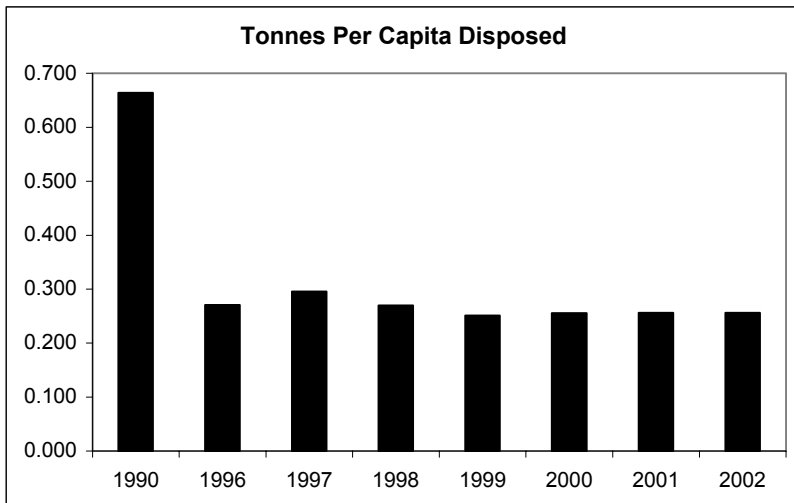
Grouping/ Previous MSW Tracking reports
 1996-2000 Previous MSW Tracking Reports
 2001-2002 Regional Districts

Powell River Regional District

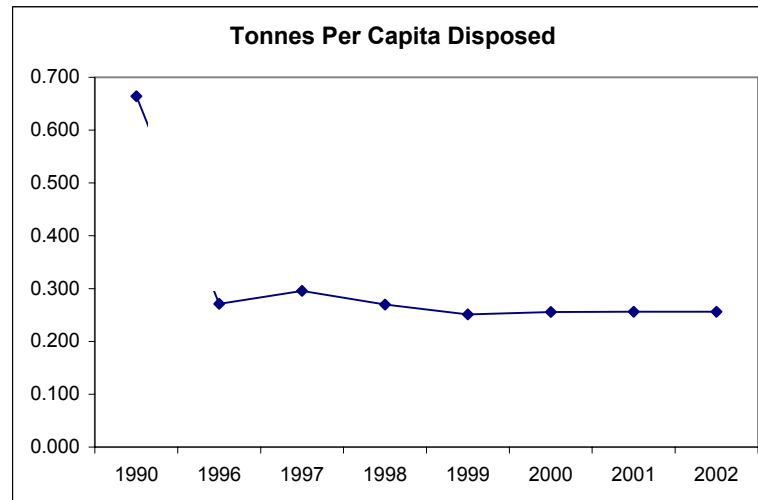
Regional District km sq. 5,101

Year	Population	% change from previous year	Total Waste Disposed	% change from previous year	Tonnes per capita disposed	% change from 1990
1990	19,457		12,922		0.664	
1996	20,699		5,610		0.271	-59.19
1997	21,099	1.93	6,242	11.27	0.296	-55.45
1998	20,921	-0.84	5,645	-9.56	0.270	-59.37
1999	20,809	-0.54	5,229	-7.37	0.251	-62.16
2000	20,668	-0.68	5,283	1.03	0.256	-61.51
2001	20,645	-0.11	5,285	0.04	0.256	-61.45
2002	20,781	0.66	5,320	0.66	0.256	-61.45

Approved solid waste management plan: **YES** SWMP State of implementation: **76-100%** Date SWMP approved: **August 22, 1996**



Data status: See note on source of 2001/2002 data



Source of the Data: 1990

Grouping/ Previous MSW Tracking reports

1996-2000 Regional District

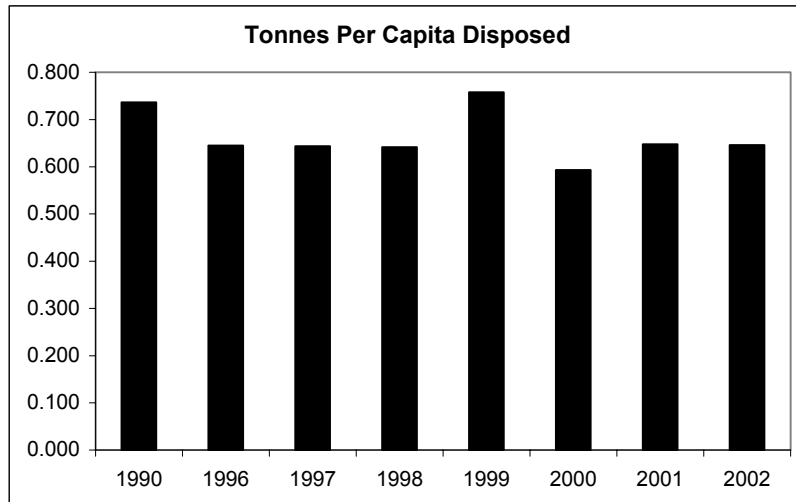
2001-2002 Estimated Per Capita Disposal Rate

Skeena-Queen Charlotte Regional District

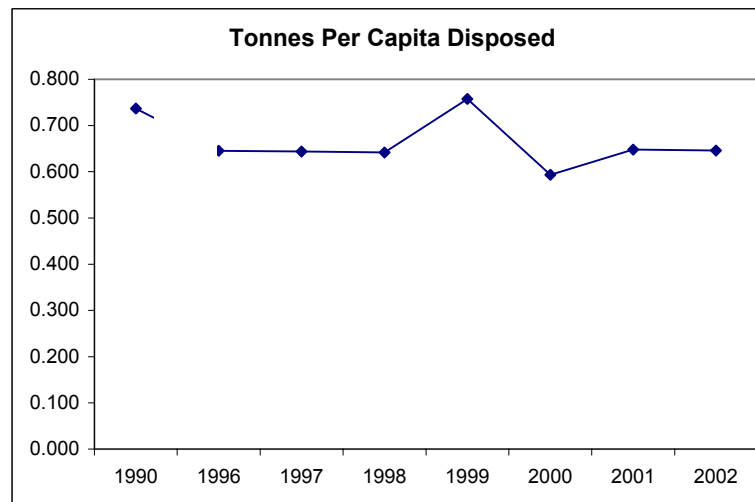
Regional District km sq. 21,000

Year	Population	% change from previous year	Total Waste Disposed	% change from previous year	Tonnes per capita disposed	% change from 1990
1990	24,344		17,933		0.737	
1996	25,863		16,685		0.645	-12.42
1997	25,383	-1.86	16,336	-2.09	0.644	-12.63
1998	24,327	-4.16	15,606	-4.47	0.642	-12.92
1999	23,766	-2.31	18,006	15.38	0.758	2.85
2000	23,266	-2.10	13,800	-23.36	0.593	-19.48
2001	22,788	-2.05	14,760	6.96	0.648	-12.07
2002	22,912	0.54	14,800	0.27	0.646	-12.31

Approved solid waste management plan: YES SWMP State of implementation: 51-75% Date SWMP approved: December 22, 1995



Data status: Confirmed by Regional District



Source of the Data: 1990

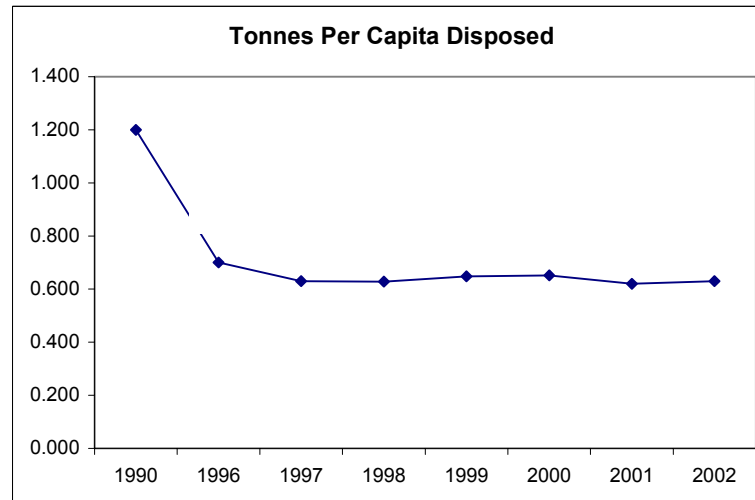
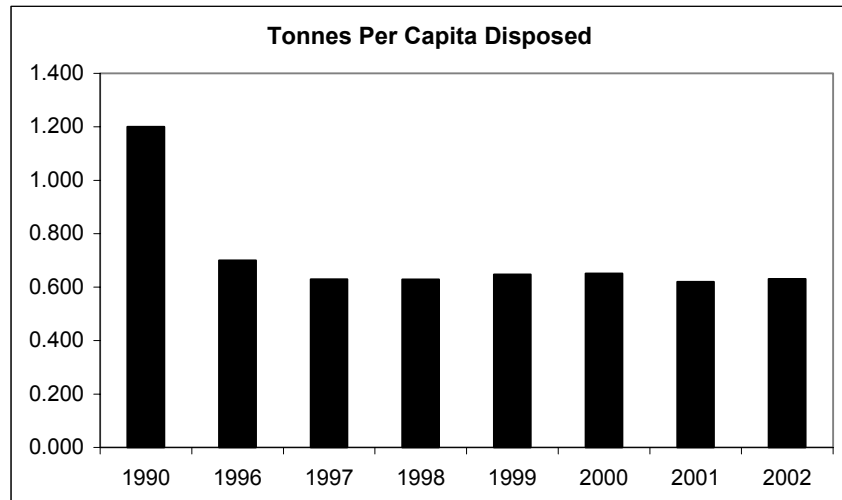
Grouping/ Previous MSW Tracking reports
 1996-2000 Previous MSW Tracking Reports
 2001-2002 Regional District

Squamish-Lillooet Regional District

Regional District km sq. 16,534

Year	Population	% change from previous year	Total Waste Disposed	% change from previous year	Tonnes per capita disposed	% change from 1990
1990	32,437		38,924		1.200	
1996	40,478		28,335		0.700	-41.67
1997	41,895	3.50	26,394	-6.85	0.630	-47.50
1998	42,714	1.95	26,845	1.71	0.628	-47.63
1999	45,165	5.74	29,255	8.98	0.648	-46.02
2000	45,523	0.79	29,655	1.37	0.651	-45.71
2001	46,248	1.59	28,683	-3.28	0.620	-48.32
2002	46,601	0.76	29,376	2.42	0.630	-47.47

Approved solid waste management plan: **YES** SWMP State of implementation: **51-75%** Date SWMP approved: **June 14, 1996**



Data status: Confirmed by Regional District

Source of the Data: 1990

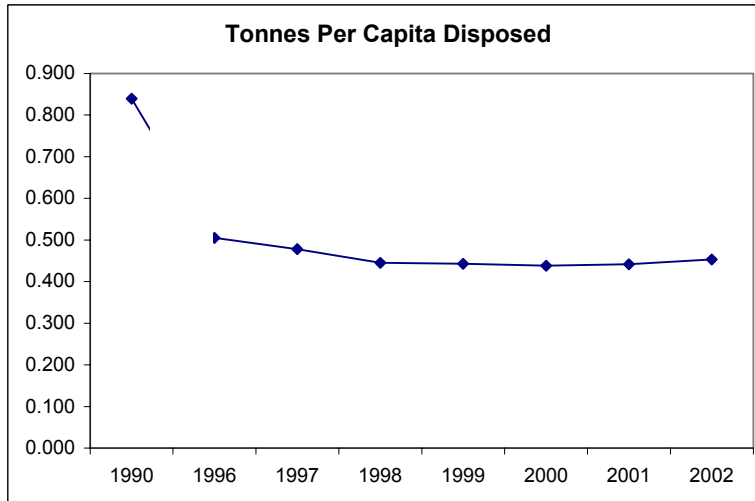
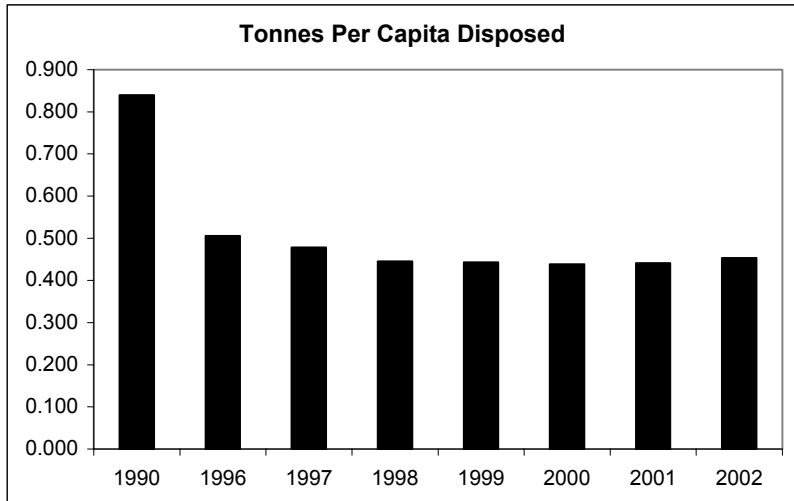
Grouping/ Previous MSW Tracking reports
 1996-2000 Previous MSW Tracking Reports
 2001-2002 Regional District

Sunshine Coast Regional District

Regional District km sq. 3,824

Year	Population	% change from previous year	Total Waste Disposed	% change from previous year	Tonnes per capita disposed	% change from 1990
1990	20,492		17,207		0.840	
1996	25,832		13,054		0.505	-39.82
1997	26,274	1.71	12,560	-3.78	0.478	-43.07
1998	26,507	0.89	11,796	-6.08	0.445	-47.00
1999	26,563	0.21	11,765	-0.26	0.443	-47.25
2000	26,490	-0.27	11,611	-1.31	0.438	-47.80
2001	26,586	0.36	11,735	1.07	0.441	-47.43
2002	27,110	1.97	12,288	4.71	0.453	-46.02

Approved solid waste management plan: **YES** SWMP State of implementation: **51-75%** Date SWMP approved: **May 8, 1997**



Data status: Confirmed by Regional District

Source of the Data: 1990

Grouping/ Previous MSW Tracking reports
 1996-2000 Previous MSW Tracking Reports
 2001-2002 Regional Districts

Thompson-Nicola Regional District

Regional District km sq. 44,872

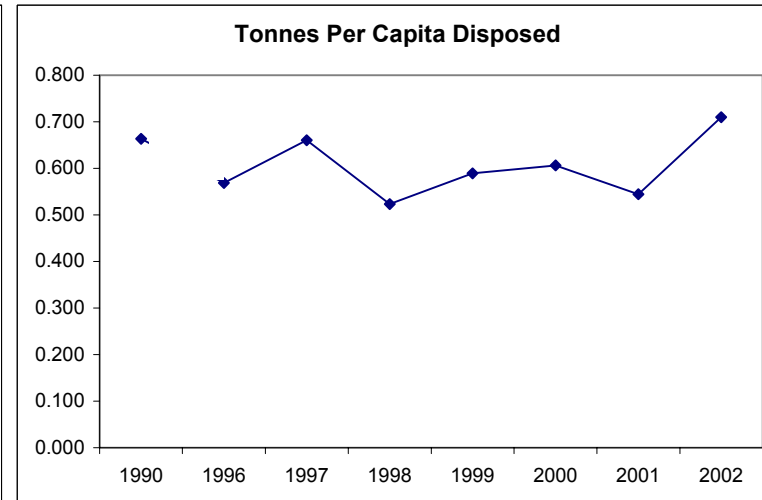
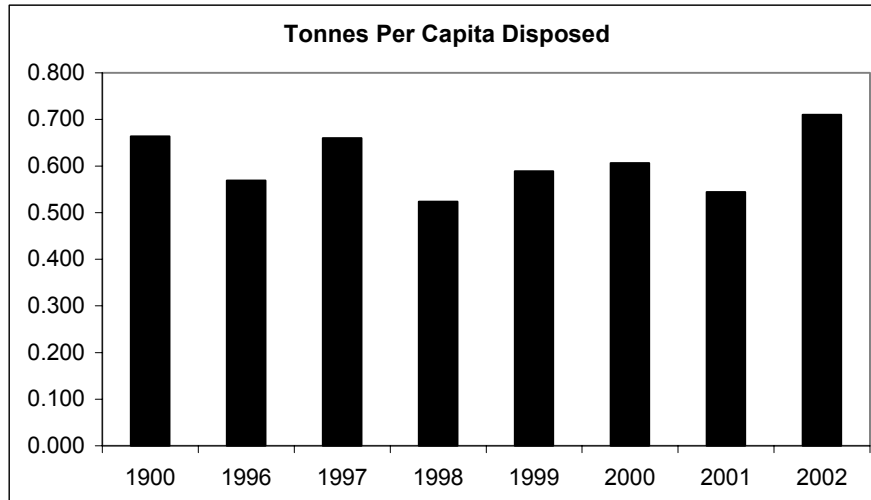
Year	Population	% change from previous year	Total Waste Disposed	% change from previous year	Tonnes per capita disposed	% change from 1990
1990	105,429		69,939		0.663	
1996	123,599		70,295		0.569	-14.27
1997	125,267	1.35	82,694	17.64	0.660	-0.49
1998	125,400	0.11	65,638	-20.63	0.523	-21.10
1999	125,001	-0.32	73,623	12.17	0.589	-11.21
2000	124,919	-0.07	75,747	2.88	0.606	-8.59
2001	124,891	-0.02	67,979	-10.26	0.544	-17.95
2002	126,173	1.03	89,567	31.76	0.710	7.01

Notes

All TNRD landfills (Clearwater, Barriere, Heffley Creek, Chase, Lower Nicola and Westwold and the City of Kamloops Barnhartvale site are surveyed annually & the annual incremental increase is calculated to estimate waste deposited. The City of Kamloops Mission Flats landfill and the Cache Creek/Wastech site have weigh scales. Therefore, 100% of TNRD waste landfilled is estimates whereas the other sites are more accurate.

The Y (yes) under the tipping fee column indicates that there is a tipping fee for commercial users only, but no tipping fee for residential users.

Approved solid waste management plan: **YES** SWMP State of implementation: **51- 75%** Date SWMP approved: **December 21, 1995**



Data status: see note on source of 2001/2002 data

Source of the Data: 1990

Grouping/ Previous MSW Tracking reports
 1996-2000 Previous MSW Tracking reports
 2001-2002 Estimated Per Capita Disposal rate

**Appendix A: REGIONAL DISTRICT POPULATION AND DISPOSAL
STATISTICS, 1990, 1998-2002**

Regional District Per Capita Disposal Rate Summary, 1990, 1996-2002

REGIONAL DISTRICT	1990*			1996			1997			1998			1999			2000			2001			2002		
	pop	disp rate	rank	pop	disp rate	rank	pop	disp rate	rank	pop	disp rate	rank	pop	disp rate	rank	pop	disp rate	rank	pop	disp rate	rank	pop	disp rate	rank
Regional Districts with populations less than or equal to 60,000 in 2001-2002																								
Alberni-Clayoquot	30,257	0.550	2	30,000	0.470	4	28,824	0.529	5	26,914	0.515	7	34,000	0.598	8	34,000	0.511	7	31,186	0.544	9	31,753	0.544	10
Bulkley-Nechako	37,136	0.700	4	43,047	0.680	1	41,642	0.660	12	42,899	0.578	9	43,545	0.651	11	44,204	0.610	10	42,890	0.42	5	43,513	0.399	4
Central Coast	3,500	0.400	1	4,055	0.350	2	4,310	0.350	2	3,921	0.350	2	4,320	0.350	2	4,332	0.350	2	3,973	0.378	3	4,013	0.378	3
Central Kootenay	49,587	0.701	7	58,099	0.449	3	60,725	0.339	1	61,602	0.218	1	61,466	0.277	1	61,790	0.301	1	59,540	0.288	2	59,245	0.372	2
Columbia Shuswap	40,510	0.710	7	48,115	0.496	5	48,115	0.545	6	52,256	0.424	5	52,256	0.416	3	52,973	0.408	3	50,305	0.429	6	50,826	0.429	5
East Kootenay	48,773	0.700	5	58,608	0.942	13	59,557	0.918	13	60,054	0.902	13	61,145	0.656	12	62,240	0.716	12	58,903	0.763	13	60,234	0.763	13
Kitimat-Stikine	39,431	0.700	6	43,618	0.680	8	43,618	0.556	7	46,449	0.369	9	46,449	0.469	6	46,870	0.469	5	42,894	0.505	8	42,914	0.505	7
Kootenay Boundary	30,425	0.850	9	32,906	0.407	3	32,906	0.644	11	34,309	0.550	8	34,156	0.582	7	34,065	0.474	6	33,184	0.5	7	33,013	0.528	9
Mount Waddington	14,086	0.900	10	13,896	0.800	12	15,392	0.478	4	15,000	0.422	4	14,601	0.420	4	15,058	0.528	8	13,768	0.562	10	13,656	0.518	8
Northern Rockies	4,565	1.800	14	5,856	1.195	14	6,414	1.800	14	6,500	1.846	14	6,500	0.692	13	6,434	1.088	14	6,049	1.334	15	6,131	1.591	15
Peace River	50,083	0.920	12	55,545	0.696	9	59,695	0.640	10	60,000	0.858	12	60,000	0.725	14	57,726	0.764	13	57,957	0.886	14	58,997	0.901	14
Powell River	18,728	0.690	3	20,603	0.272	1	19,936	0.313	1	21,124	0.249	1	21,060	0.258	1	21,060	0.251	1	20,645	0.256	1	20,781	0.256	1
Skeena-Queen Charlotte	22,700	0.790	8	23,123	0.722	11	22,814	0.630	8	24,795	0.707	11	25,467	0.629	9	25,514	0.541	9	22,788	0.648	12	22,912	0.646	12
Squamish-Lillooet	32,437	1.200	13	31,548	0.700	10	34,031	0.630	9	42,714	0.620	10	35,911	0.648	10	45,523	0.651	11	35,042	0.620	11	35,565	0.630	11
Sunshine Coast	19,119	0.900	11	24,914	0.505	6	25,911	0.473	3	26,947	0.437	6	27,755	0.432	5	27,438	0.423	4	26,586	0.441	4	27,110	0.453	6
Regional Districts with populations greater than 60,000 in 2001-2002																								
Capital	291,880	0.620	3	328,880	0.413	2	329,135	0.495	3	334,871	0.390	3	339,643	0.395	3	334,940	0.408	5	341,564	0.393	3	341,563	0.412	3
Cariboo	58,641	0.400	1	69,192	0.365	1	66,607	0.357	2	73,024	0.360	2	22,867	0.360	2	73,549	0.360	2	68,728	0.381	2	69,558	0.381	1
Central Okanagan	103,304	1.210	13	141,673	0.599	8	145,213	0.725	10	147,113	0.640	10	150,000	0.639	10	152,000	0.643	10	154,440	0.64	9	156,033	0.717	9
Comox-Strathcona	82,378	0.650	4	97,667	0.643	9	103,995	0.660	9	101,085	0.486	5	105,321	0.463	6	105,439	0.463	6	100,401	0.45	5	101,038	0.465	5
Cowichan Valley	59,059	0.770	8	70,978	0.578	7	72,691	0.575	6	73,735	0.520	8	76,386	0.418	4	76,819	0.366	3	75,077	0.371	1	75,525	0.382	2
Fraser Valley	209,641	0.945	9	222,397	0.455	4	234,159	0.530	5	237,128	0.499	6	240,022	0.493	7	243,008	0.502	7	249,035	0.506	7	253,844	0.555	8
Fraser-Fort George	85,971	0.700	6	98,974	1.028	13	101,349	1.056	12	103,782	0.819	12	106,273	0.712	11	106,933	0.711	11	100,224	0.729	10	100,366	0.752	11
Greater Vancouver	1,610,899	0.990	10	2,007,827	0.717	10	2,046,669	0.744	11	1,978,848	0.675	11	1,990,961	0.715	12	2,011,035	0.713	12	2,091,080	0.494	6	2,114,314	0.498	6
Nanaimo	91,879	0.550	2	125,000	0.502	5	132,000	0.527	4	132,442	0.438	4	137,637	0.428	5	137,003	0.406	4	132,456	0.44	4	133,988	0.426	4
North Okanagan	57,611	1.040	11	73,266	0.758	11	73,266	0.612	7	75,240	0.575	9	77,497	0.555	8	79,047	0.551	8	76,413	0.515	8	77,268	0.554	7
Okanagan-Similkameen	66,239	1.200	12	75,933	0.970	12	80,000	1.130	13	78,700	1.085	13	79,100	1.132	13	80,448	1.075	13	79,645	1.025	12	79,472	1	12
Thompson-Nicola	104,386	0.670	5	124,725	0.564	6	125,681	0.658	8	126,796	0.518	7	128,298	0.574	9	130,192	0.582	9	124,891	0.745	11	126,173	0.745	10
Province	3,263,225	0.879		3,930,445	0.641		4,014,655	0.670		3,988,248	0.606		3,982,636	0.621		4,069,640	0.618		4,099,664	0.517		4,139,805	0.529	

NOTES:

* Regional district disposal rates for 1990 established in the 1998 Tracking Report

** GVRD claims that any comparison with other regional districts should reflect the greater amount of recycling in GVRD prior to 1990. It therefore calculates its disposal rate reduction with respect to waste generation not disposal in 1990 as the baseline, which results in a 48% reduction in the per capita disposal rate

Selected Resources

British Columbia Statistics

<http://www.bcstats.gov.bc.ca>

Guide to the Preparation of Regional Solid Waste Management Plans by Regional Districts

<http://wlapwww.gov.bc.ca/epd/epdpa/mpp/gprswmp1.html>

MSW Tracking Reports, 1996-2000

http://wlapwww.gov.bc.ca/epd/epdpa/mpp/reduction_goals.htm

Waste Management Act

http://www.qp.gov.bc.ca/statreg/stat/W/96482_01.htm