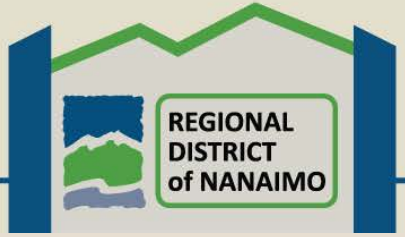


Solid Waste Management Plan 2017-2027

Presentation to Municipal Partners







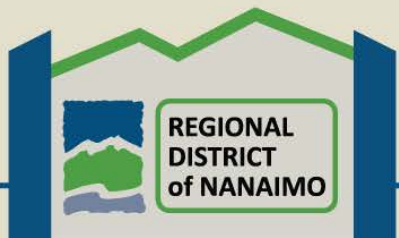
Solid Waste Management Plan Update

- Update of 2004 SWMP
- Review began in 2013
- Update guided by Regional Solid Waste Advisory Committee
- Community engagement throughout update



New Programs










- HHW
- Enhanced IC&I and C&D Waste Strategy
- Mandatory Waste Source Separation
- Waste Hauler Licensing
- Zero Waste Recycling



Household Hazardous Waste

- Most HHW accepted through ReGeneration
- RDN proposes:
 - HHW “Roundup”
 - Contracted drop off

Projected Costs to Manage Non-Stewarded HHW	Yearly Estimated Budget
Total	\$100,000
Tax Rate per \$100,000 assessment	\$0.28
Estimated Diversion	<1%

	Exploding bomb (for explosion or reactivity hazards)		Flame (for fire hazards)		Flame over circle (for oxidizing hazards)
	Gas cylinder (for gases under pressure)		Corrosion (for corrosive damage to metals, as well as skin, eyes)		Skull and Crossbones (can cause death or toxicity with short exposure to small amounts)
	Health hazard (may cause or suspected of causing serious health effects)		Exclamation mark (may cause less serious health effects or damage the ozone layer*)		Environment* (may cause damage to the aquatic environment)





Enhanced IC&I and C&D Waste Strategy

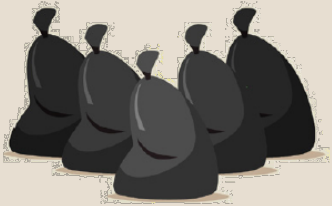
- Education, differential Tipping Fees
- Increased enforcement of existing bans

ICI Waste Diversion	Yearly Estimated Budget
Total	\$200,000
Tax Rate per \$100,000 assessment	\$0.54
Estimated Diversion	3%

Construction and Demolition Waste	Yearly Estimated Budget
Total	\$40,000
Tax Rate Increase per \$100,000 assessment	\$0.11
Estimated Diversion	3%



Mandatory Waste Source Separation



- Commercial
- Multi-Family Homes
- Institutions



Mandatory Source Separation Regulation	Yearly Estimated Budget
Total	\$373,000
Tax Rate Increase per \$100,000 assessment	\$0.99
Estimated Diversion	10% (with hauler licensing)



Waste Hauler Licensing



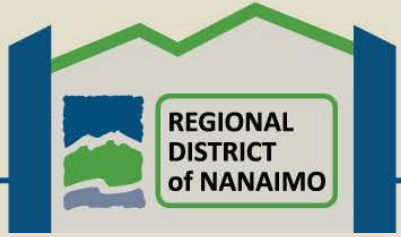
Reduced Tip Fee



Disposal Levy



Waste Hauler Licensing	Yearly Estimated Budget
Total	\$469,000
Tax Rate Increase per \$100,000 assessment	\$1.25
Estimated Diversion	10% (with source separation)

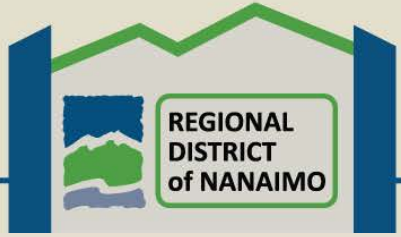


Zero Waste Recycling

Zero Waste Recycling

- Wastes that currently have little or no commercial value; typically end up in the landfill
- Funding for Nanaimo Recycling Exchange to act as a research/recycling hub

Zero Waste Recycling	Yearly Estimated Budget
Total	\$300,000
Tax Rate Increase per \$100,000 assessment	\$0.81
Estimated Diversion	<1%



Cost of Solid Waste Services

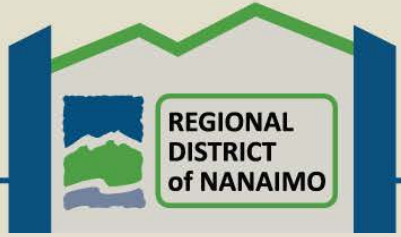
	Annual Net Cost (\$ Million)	Per Capita Cost (\$)
Current Zero Waste Strategy	\$3.3	\$53.66
Proposed Zero Waste Strategy	\$4.9	\$63.69
Difference	\$1.6	\$10.03

	Average RDN Tax Rate
Total New Zero Waste Program	\$4.10
Total Ongoing Solid Waste Programs	\$3.04
Total Solid Waste Services Tax Rate per \$100,000	\$7.14
Total Solid Waste Services Tax Rate per \$500,000	\$35.71



Consultation To Date

- 10 public meetings
 - 60,000 invites; 100+ attendees
- 6 Stakeholder meetings
 - 100+ meeting invitations;
 - 29 to waste industry meeting
- Two surveys
 - Landfill, transfer station
 - On-line



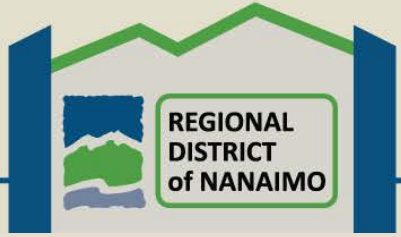
Consultation To Date Cont'd

- 2 Newsletters to over 24,000 homes
- Presented SWANA AGM (Vancouver)
- Two interviews with Shaw TV
- Social Media (Get Involved RDN)
- Public events
- Communication material (factsheets)
- Travelling display (10 locations in RDN)
- Poster Ads in RDN Transit busses



What We've Heard

- General support
 - Diversion goal, services and cost
- Industry feedback
 - Support 90% target
 - Varied opinion on licensing; general objection to increased regulation



Survey Results

Surveys

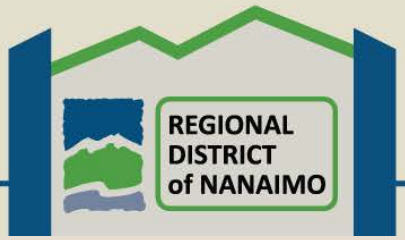
Online @ 153; In Person @ 516

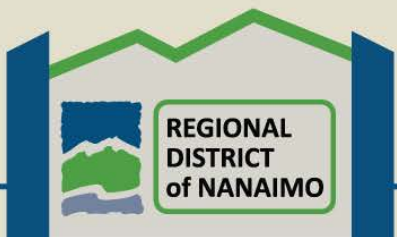
31% - Aware of the SWMP being updated

97% - Supportive of the 90% waste diversion goal

77% - Supportive of cost of around \$10/person/year

5% - Moderately or slightly supportive





Summary of Programs

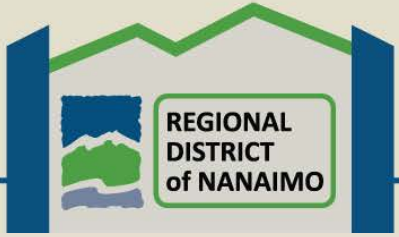
New Zero Waste Programs	Implementation Year	Estimated Diversion
Expanded Zero Waste Education	2018	Not Quantifiable
Household Hazardous Waste	2018	<1%
Expanded Industrial, Commercial and Institutional Waste Management Diversion Increased education of existing landfill bans and a relaunch of Commercial Organics Diversion Strategy and Multi-Family Diversion Strategy Increased enforcement of existing landfill bans targeted at the ICI sector	2018 2018	3 %
Expanded Construction and Demolition Waste Diversion Improve and reintroduce education and communication regarding CD waste in the region Enhanced enforcement of landfill bans related to CD materials	2018 2018	3%
Waste Haulers Licensing	2019-20	10%
Mandatory Waste Source Separation ⁹	2019-21	
Solid Waste Emergency/Disaster Response Plan	2022	N/A
Zero Waste Recycling	2019	1%
New Program Diversion		17%
Existing Diversion		68%
Anticipated Diversion Through Federal/Provincial Programs		5%
Total		90%



Annual Per Capita Costs

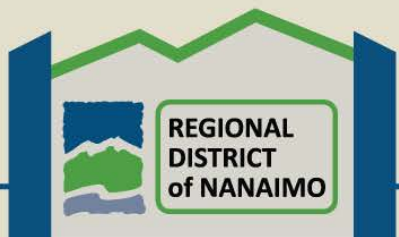
	ANNUAL NET COST (\$ MILLION)	PER CAPITA COST (\$)
Current Zero Waste Strategy (68%)	\$3.3	\$53.66
Proposed Zero Waste Strategy (90%)	\$4.9	\$63.69
DIFFERENCE	\$1.6	\$10.03
Current Residential Curbside	\$5.1	\$32.51
Proposed Residential Curbside	\$5.1	\$32.51
DIFFERENCE	\$0.0	\$0.00
Current Disposal Operations	\$6.4	\$40.78
Future Disposal Operations	\$6.4	\$40.78
DIFFERENCE	\$0.0	\$0.00
Total Current SWMP	\$14.7	\$94.44
Total Proposed SWMP	\$16.3	\$104.47
DIFFERENCE	\$1.6	\$10.03

Based on 10 year budget 2017 - 2026



Costs of Services if Paid for By Taxation

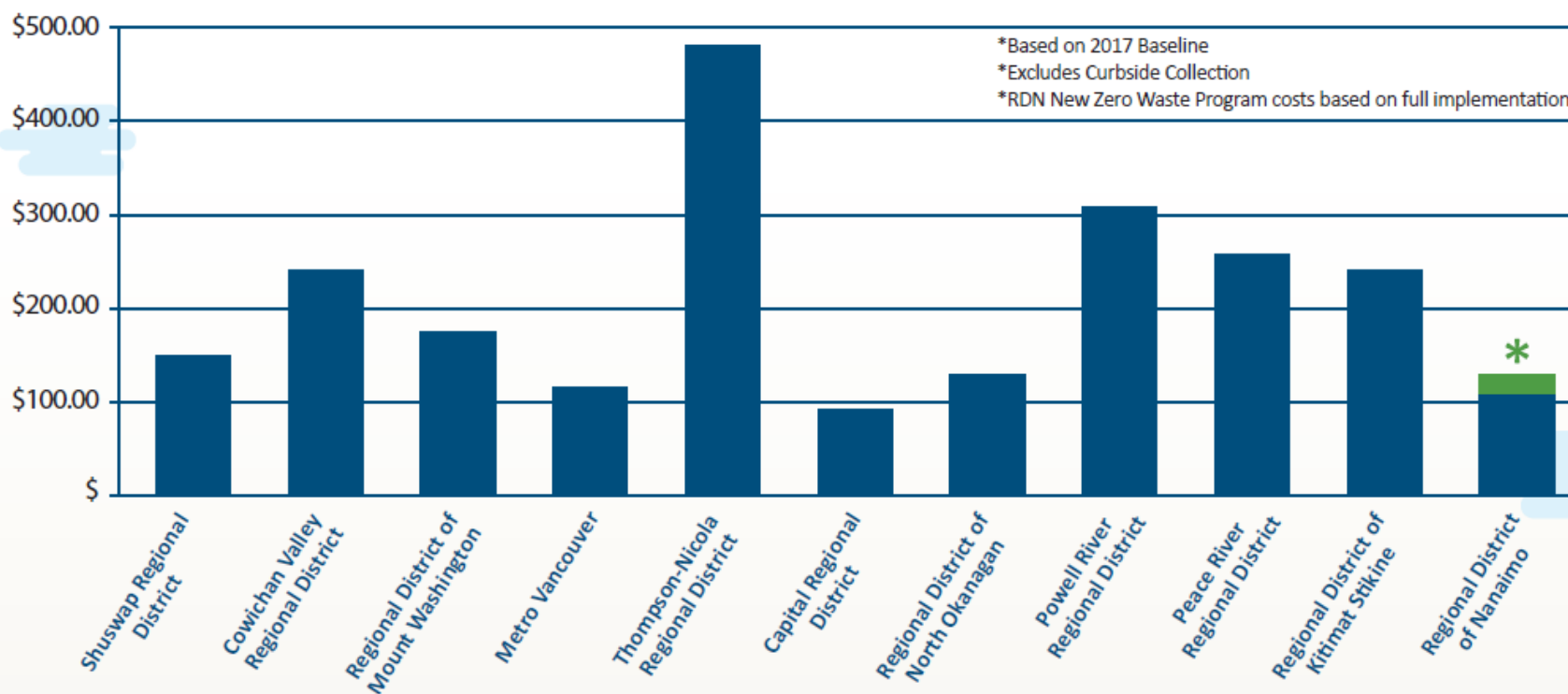
	Average RDN Tax Rate
Zero Waste Education	\$0.11
Household Hazardous Waste	\$0.28
ICI Waste Management	\$0.54
CD Waste Management	\$0.11
Waste Source Regulation	\$0.99
Waste Hauler Licensing	\$1.25
Zero Waste Recycling	\$0.81
Total New Zero Waste Program	\$4.10
Total Ongoing SW Programs	\$3.04
Total SW Services Tax Rate	\$7.14
Cost per \$100,000	\$7.14
Cost per \$500,000	\$35.71

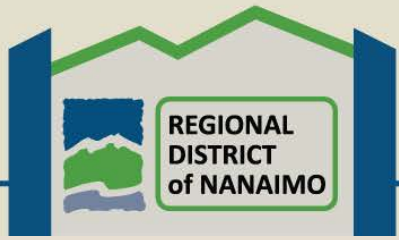


Cost of Solid Waste Services

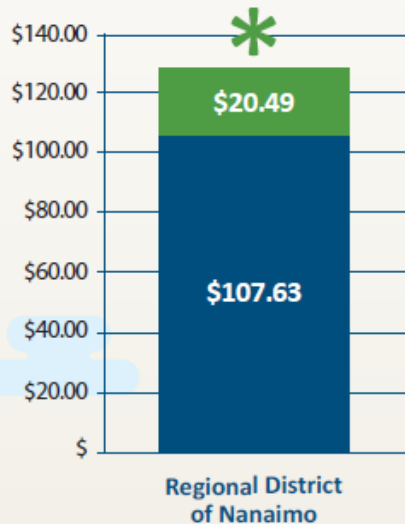
AVERAGE FAMILY SOLID WASTE SERVICES COSTS

BASED ON \$500,000 HOUSEHOLD

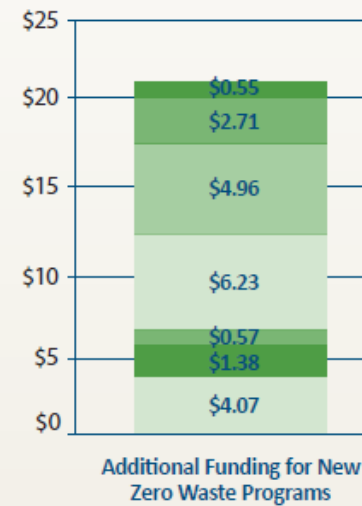




Financing the Plan



- Additional Funding for Zero Waste Programs
- Total Cost per Household Tipping Fee + Tax Req



- Zero Waste Education
- ICI Waste Management
- Waste Source Regulation
- Waste Haulers As Agents
- CD Waste Management
- Household Hazardous Waste
- Zero Waste Recycling



How are Solid Waste Services Paid For?

