

TO: Committee of the Whole **MEETING:** June 12, 2018
FROM: Larry Gardner, ASCT, Eng.L
 Manager, Solid Waste Services **FILE:** 5365-42
SUBJECT: Solid Waste Management Plan Adoption

Please note: the Solid Waste Management Plan will be distributed under separate cover

RECOMMENDATION

That the Solid Waste Management Plan be adopted and that the Plan be sent to the Minister of Environment & Climate Change Strategy for approval.

SUMMARY

The Solid Waste Management Plan ("Plan") (Attachment 1) sets out a ten year vision on how the Regional District of Nanaimo proposes to manage municipal solid waste and recyclable material with a goal of diverting waste. The Environmental Management Act requires that all regional districts prepare and submit a solid waste management plan for approval by the Minister of Environment & Climate Change. Subject to the Minister being satisfied that there has been adequate public and stakeholder consultation, the Minister may approve all or part of a solid waste management plan and may attach conditions to the plan.

Community consultation was also carried out through the review process with increased intensity between the Fall of 2017 and the Spring of 2018. During this final period of the Plan development, various media were used to reach out to the community which resulted in the Regional District of Nanaimo (RDN) engaging 4000 residents. Third party expert review of the consultation process acknowledged this as a "very high level of direct engagement"¹.

The Plan proposes a 90% waste diversion target from the 1980's baseline annual per capita disposal rate of 1084 kg of waste going to landfill. Achieving this target would result in an annual per capita disposal rate of 109 kg. The RDN's current diversion is 68% with an annual per capita disposal rate of 347 kg. Strategies include the continuation and enhancement of existing programs such as education, disposal bans, Waste Stream Management Licensing and residential curbside collection. The Plan also proposes a number of new strategies such as household hazardous waste collection, mandatory waste source separation regulation and Waste Hauler Licensing. The latter two items require additional authorities to be granted to the RDN by the Province of which Plan approval by the Minister of Environment & Climate

¹ Maura Walker & Associates, Environmental Consultants, *Review of Stage 3 Solid Waste Management Plan Consultation Efforts*, letter report, May 1, 2018

Change Strategy is the first step. The second step will be to develop draft bylaws through consultation with potentially impacted stakeholders, and finally, a second level of provincial approvals will be required before mandatory source separation and Waste Hauler Licensing can be implemented.

BACKGROUND

The RDN has updated the Plan which sets out the strategies for managing municipal solid waste within the region. This is the third update since the original Plan was developed in 1988; subsequent updates were in 1996 and 2004. The plan was also amended in 2010 to include the Design and Operations plan for the Regional Landfill.

The Province's *A Guide to Solid Waste Management Planning*, September, 2016 sets guiding principles as follows:

The principles guiding the development and implementation of this plan are (RDs may replace this list with their own set of guiding principles that are complementary to the provincial set):

- Promote zero waste approaches and support a circular economy.
- Promote the first 3 Rs (Reduce, Reuse and Recycle).
- Maximize use of waste materials and manage residuals appropriately.
- Support polluter and user-pay approaches and manage incentives to maximize behavior outcomes.
- Prevent organics and recyclables from going in the garbage.
- Collaborate with other Regional Districts wherever practical.
- Develop collaborative partnerships with interested parties to achieve regional targets set in plans.
- Level playing field within regions for both private and public solid waste management facilities.

The RDN's Plan combines and replaces the first two Provincial principals with: *Promote the Zero Waste Hierarchy of highest and best uses and support a circular economy*; and, the Plan adopts the balance of the provincial principals. The Zero Waste Hierarchy is adopted from the *Zero Waste International Alliance* as presented below:



Program costs on full implementation and expected waste diversion is presented in the following table:

Strategies, Costs and Potential Diversion Projected by the Solid Waste Management Plan		
New Zero Waste Programs	Diversion Potential	Annual Cost on Full Implementation
Expanded Zero Waste Education	Not quantifiable	\$40,000
Household Hazardous Waste	<1%	\$100,000
Expanded Industrial, Commercial and Institutional (ICI) Waste Management Diversion <ul style="list-style-type: none"> - Increased education of existing landfill bans and a relaunch of the commercial/multi-family organics strategy - Increased enforcement of existing landfill bans 	3%	\$100,000 \$100,000
Expanded Construction and Demolition (CD) Waste Diversion <ul style="list-style-type: none"> - Education and communication - Increased enforcement of existing landfill bans 	3%	\$20,000 \$20,000
Waste Hauler Licensing	10%	\$469,000
Mandatory Waste Source Separation		\$373,000
Zero Waste Recycling	1%	\$300,000
Total New Programs	17%	\$1.6 million
Anticipated Diversion Through Federal/Provincial Programs²	5%	\$0
Total Existing Programs	68%	\$14.7 million
Total	90%	\$16.3 million

The objective of the Plan is to achieve higher levels of waste diversion with a focus on maximizing source separation to promote the best use of recyclables. Most of the diversion will be realized through the synergistic programs of Waste Hauler Licensing and Mandatory Waste Source Separation. Before either of these programs can be introduced, the RDN must be granted additional authority from the Province of which Plan approval is the first step. Subject to Plan approval, the RDN will carry out additional consultation on each of the programs and gain subsequent provincial approvals before the programs can be launched.

² October 29, 2009, the Canadian Council of Ministers approved the Canada-wide Action Plan for *Extended Producer Responsibility* they and are continuing with the action plan. BC has implemented Phase 1 projects (packaging, printed material, etc.); Phase 2 products include demolition, furniture, textiles and carpet.

Consultation

Community consultation was carried out through the Plan review process and is documented in the *Stage 3 Solid Waste Management Plan Consultation Report* which forms Appendix H of the Plan. The Regional Solid Waste Advisory Committee (RSWAC), made up of both technical and public representatives, provided advice on the process and ultimate content of the Plan.

During the final stages of the review process, between the Fall of 2017 and Spring of 2018, the RDN provided opportunities for the community to learn about the planning process and directly engaged with 4000 residents through activities such as:

- Get Involved Website
- Video Summary
- Social Media
- Online and in person surveys
- Online, newspaper and bus advertising
- Travelling display
- Mail-outs
- Community Events
- Conference presentation
- Public/Mainstream media
- Open houses
- Stakeholder meetings

Cost implications of the new and expanded programs were presented as part of the consultation. Costs were presented in several ways including overall costs, costs expressed as per capita costs, and costs paid for by taxation.

Two surveys were carried out with a total of 726 respondents with the summary of results as follows:

- 32% (234) were aware of the Plan being updated.
- 97% (700) were supportive of the 90% diversion goal.
- Of those supportive of the diversion goal, 77% (562) were supportive of the increased cost of around \$10 per year per person.

Although the survey sample size was small, the results were indicative of the sentiments expressed through all other staff engagement (i.e. correspondence, public meetings, stakeholder meeting) which is estimated to be in the order of 4000 individuals. The results of the consultation can be characterised as follows:

- Common support for:
 - 90% diversion by 2027.
 - Programs and cost implications outlined in the Plan, specifically, mandatory source separation, education, zero waste recycling and household hazardous waste recycling.
- Mixed support for Waste Hauler Licensing
 - Varied support from the waste industry, and
 - Support from all other stakeholder groups.

The only substantive change to programs presented in the draft Plan as an outcome of consultation resulted from the February 2018 Board meeting where the draft Plan was revised to specify the Nanaimo Recycling Exchange as the recipient of \$300,000 per year for 5 years, to act as research and recycling hub for items not commercially marketable. Consultation carried out after February 2018 included this revision to the Plan.

The results of the consultation were presented and accepted by the RSWAC at their meetings of April 19, 2018.

At the Solid Waste Management Select Committee meeting on May 15, 2018, the following motion was passed:

It was moved and seconded that the draft Solid Waste Management Plan, as presented, be forwarded to the Regional District of Nanaimo Committee of the Whole for approval.

Post Plan Approval

If the Board approves the Plan, the Plan will be forwarded to the Minister of Environment & Climate Change for approval. This approval process is expected to take 4 to 6 months. In the interim, staff will develop a 2019 budget on the basis of the Plan as presented to the Board.

As per the terms of reference, the RSWAC will conclude its work when the Plan has been approved by the RDN Board. Following this, a Plan Monitoring Advisory Committee will be established consistent with the provincial guidelines. The purpose of the Plan Monitoring Advisory Committee is to monitor the implementation of the Plan and make recommendations to increase its effectiveness. The Terms of Reference for the Plan Monitoring Advisory Committee are included in Schedule C of the Plan.

ALTERNATIVES

- 1) That the Solid Waste Management Plan be approved and forwarded to the Minister of Environment & Climate Change for approval.
- 2) That Solid Waste Management Plan not be approved and alternate direction be provided.

FINANCIAL IMPLICATIONS

The Plan proposes to add approximately \$1.6 million annually to the Solid Waste Services budget which is currently \$14.7 million, an 11% increase. The increase would be phased in over 3 years. Cost implications presented to the community as part of the consultation were in both per capita costs and tax requisition (if the programs were fully funded through taxation) as set out in the following table:

Projected Zero Waste Strategy Cost Per Capita	
Current (68% diversion)	\$53.66
Proposed (90% diversion)	\$63.69
Increase	\$10.03
Projected Costs if Funded by Taxation (per \$100,000 property assessment)	
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 Existing Zero Waste Programs	\$3.04
Total SW Services Tax Rate	\$7.14

Cost projections include staff equivalent costs to administer programs and one to two additional staff are likely required to deliver the programs. Actual staffing needs will be determined by the roll out of the programs as directed by the Board.

Funding for Solid Waste Services is provided through a combination of utility fees, tipping fees and taxation. Should the Plan be approved, staff will develop a proposed 5 year financial plan for Board consideration that apportions costs through the available funding mechanisms.

STRATEGIC PLAN IMPLICATIONS

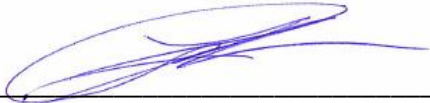
The Solid Waste Management Plan aligns with the RDN Strategic Priorities in the following ways:

1. *Focus on the Environment* – the RDN has already achieved world class waste diversion at a per capita disposal rate of 347 kg per year. This Plan sets a per capita target of 109 kg year and adopts the zero waste hierarchy of highest and best use of materials. Waste diversion conserves resources and, depending on the implementation schedule and success of programs, could extend the life of the landfill 10 to 15 years beyond its current projected timeline.
2. *Focus on Economic Health* – the Plan strategies propose an economic model that encourages private sector growth around waste diversion, consequently resulting in more and better services to the community and progress towards a circular economy. A 2013 report³ prepared

³ Innes Hood Consulting Inc., *Zero Waste Business Case, Draft for Expert Review*, May 2013

for the Ministry of Environment predicted that provincial diversion between 62% and 81% by 2025 will produce between \$56 million and \$126 million of annual net economic benefit.

3. *Focus on Service and Organization Excellence* - this Plan has been developed over a 5 year period with considerable community involvement to adopt a waste reduction target, and strategies to achieve the target, that meet the unique needs of the community.



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May 31, 2018

Reviewed by:

- R. Alexander, General Manager, RCU
- P. Carlyle, Chief Administrative Officer

Attachment

Solid Waste Management Plan