

SOLID WASTE MANAGEMENT PLAN

Amendment #4

Regional Services Committee

October 24, 2018

Presented By:

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AGENDA

- Solid Waste Management Plan (SWMP) Amendment Context
- Consultation Overview
- Guiding Principles
- Goals and Targets
- Review of Strategies
- Timeline and Budget
- **What's next?**



Community Leadership

- Zero Waste Initiative Since 2002
- Among the first in BC to implement food scraps collection
- Community takes pride in green environment and sustainability
- Carbon neutral status

Problem Statement and Long Term Plan

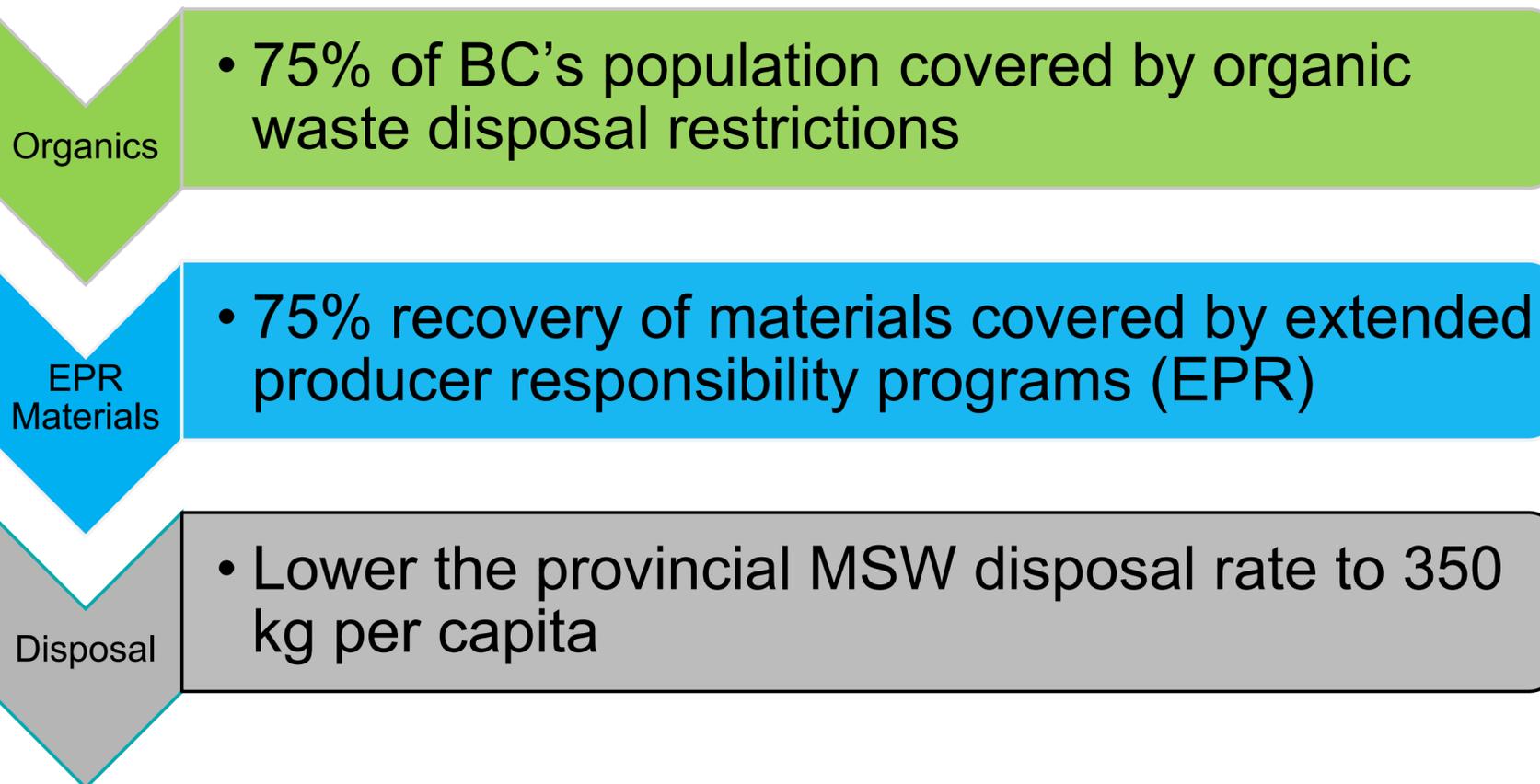
- No landfill – disposal charges on the rise
- Recycle BC – Contamination 15% (allowed < 3%)
- Garbage burning, illegal dumping
- Rules and markets changing – transitioning market for recycling items
- Do we have systems and programs in place for long term vision (25 years)?

Solid Waste Management Plan – History and Future

- Regulatory Requirement to update the SWMP
- Amendment #4
 - 10 Years Plan
 - 25 Year Vision

Goals and Target Setting

Provincial Targets for 2020

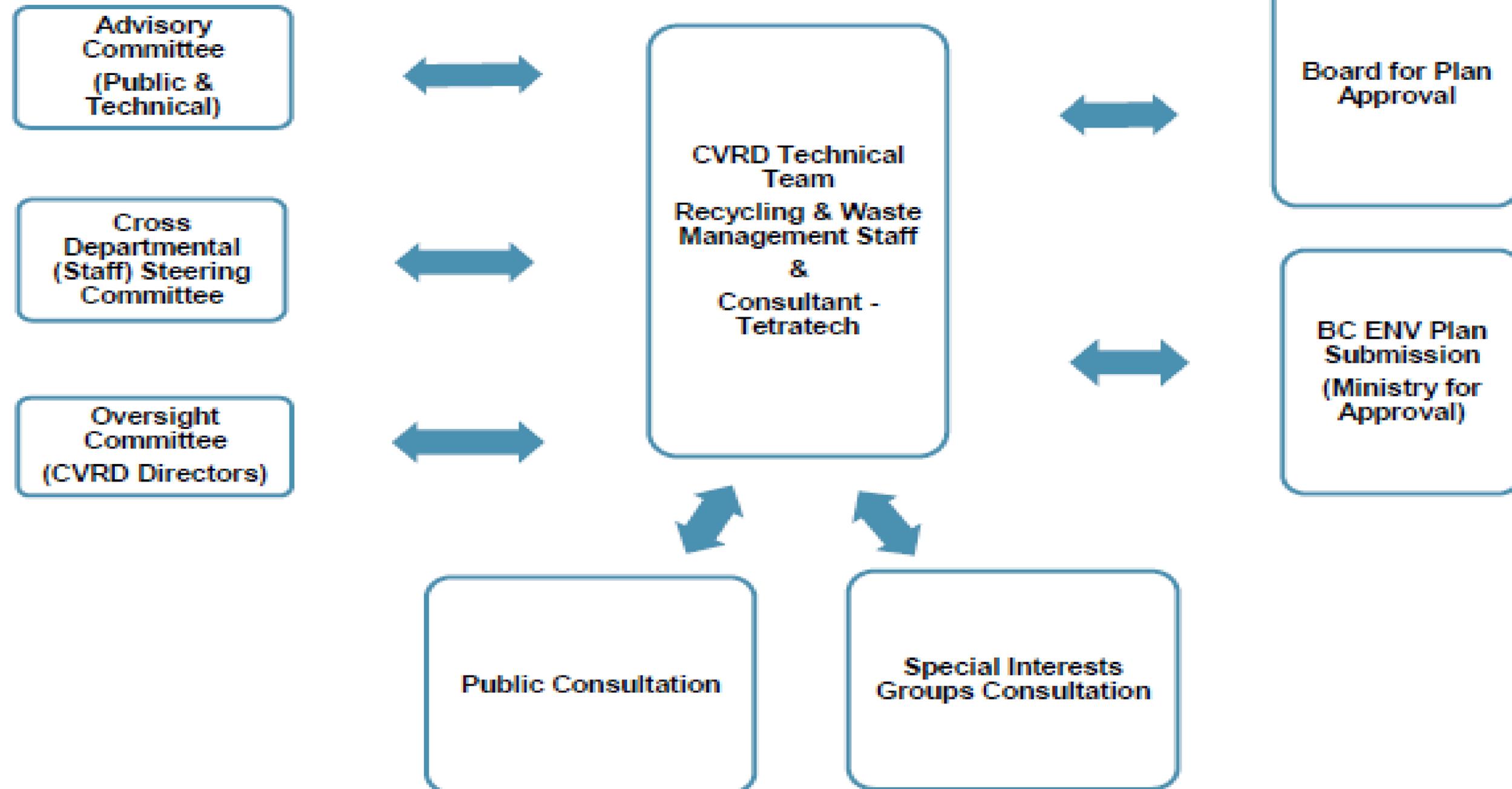


SWMP Amendment Process

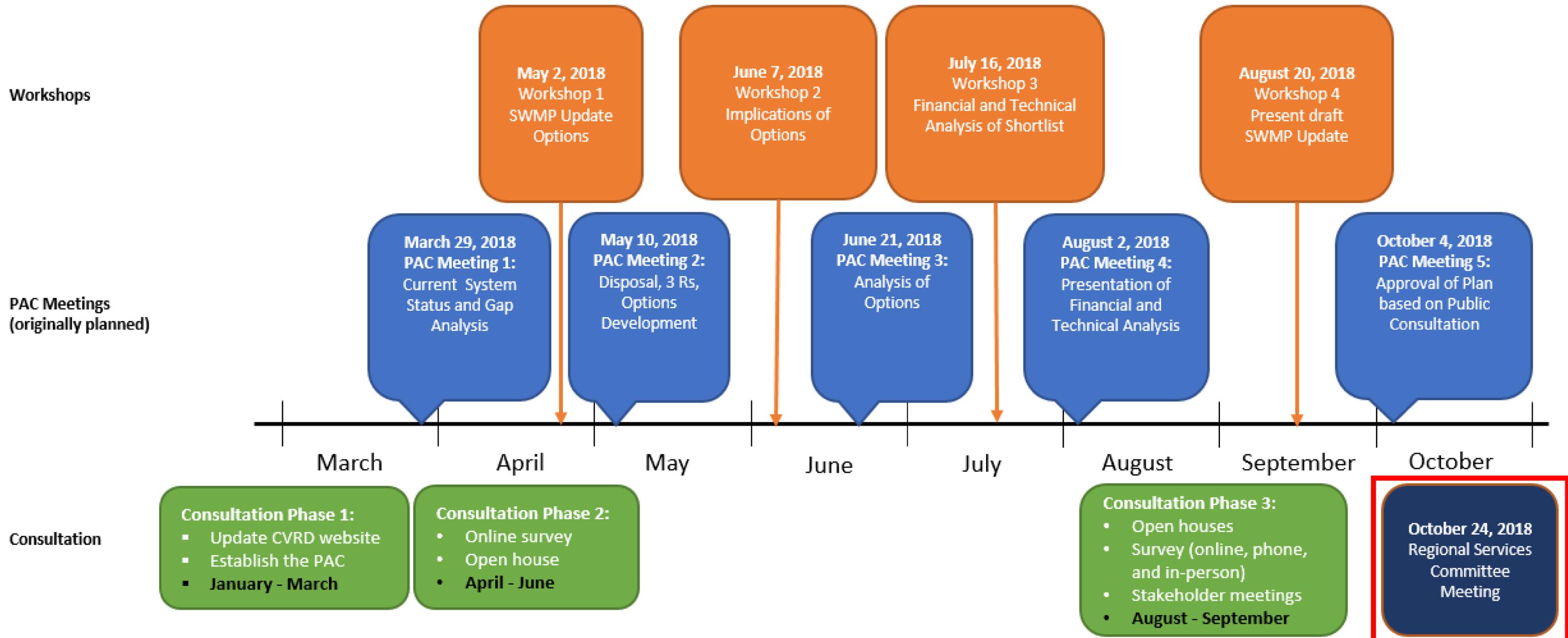




SWMP Amendment #4 Process Flow Chart - 2018



Draft SWMP Development



Consultation – Web-based Participation

Table 5-3: Web-Based Participation

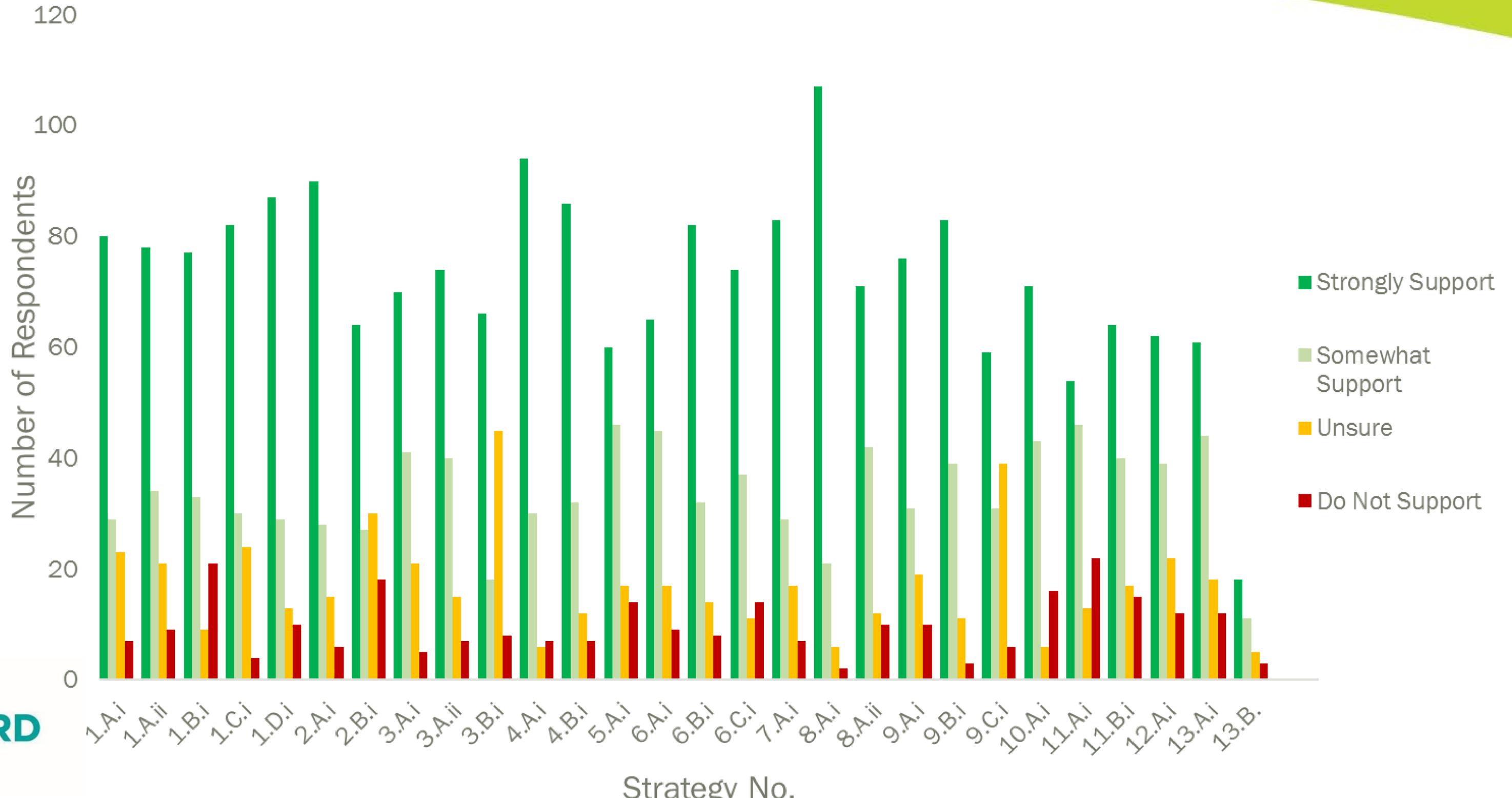
Type	Dates Available	Information Provided or Collected	Participation Numbers
CVRD Community Satisfaction Survey (phone and online)	September, 2016	Resident input on quality of life, delivery of programs and services including solid waste and curbside, and communications	700
CVRD website	February 8, 2018 and ongoing	Amendment process, overview, next steps. Background information including current Plan, technical memorandum, PAC meeting information, open house dates etc.	1,115
Social media promotion (Facebook and Twitter)	February 20, 2018 and ongoing	Project website and PAC nominations, open houses and surveys promoted	17,762
PlaceSpeak website	April 25, 2018 and ongoing	Amendment process, overview, next steps. Background information including current Plan, technical memorandum, PAC meeting information, open house dates etc.	1,023
Survey 1	April 25, 2018	Solid Waste System Overview & Satisfaction	118
Survey 2	August 23, 2018	Feedback on Proposed Strategies	142
Total Web-Based Participation			20,860

Consultation - Engagement Summary

- More than 21,000 reached during consultation process
- 21 in person participation events with 547 people reached
- 3 surveys with 960 responses received
- More than 440 verbal and written comments received

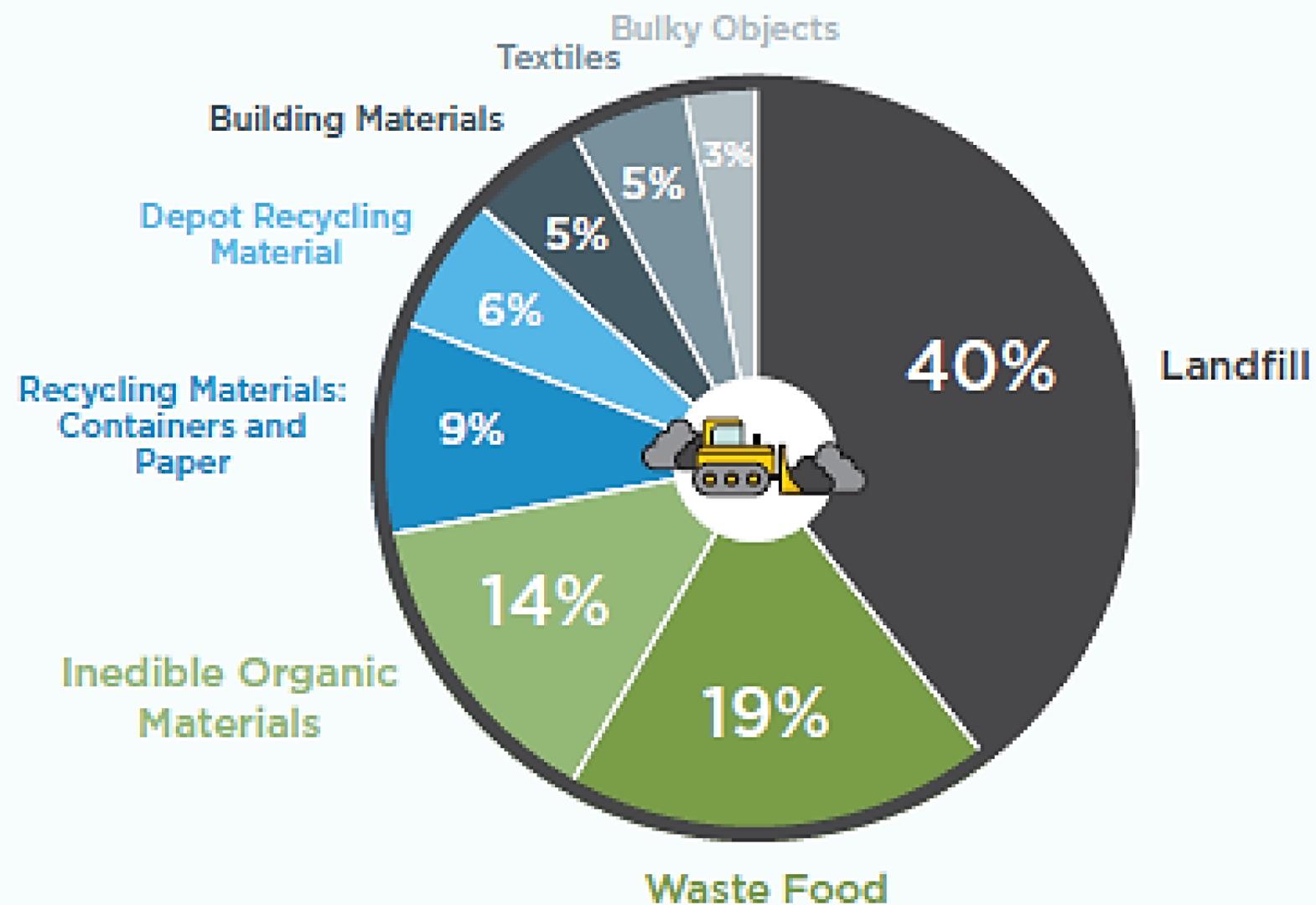


Strategy Feedback – Survey 2



Waste Composition Study

What's going to the landfill?



Waste Composition Study

Residential Organics

Service Level Description	Areas	Proportion of Organics in Garbage
Mandatory organics collection	All municipalities	23%
Optional organics collection	Electoral Areas A-C	30%
No organics collection	Electoral Areas D-I	36%

Estimated Disposal Rates

Sector	Percent of Total Disposed Materials (Garbage Only)	Quantity of Disposed Materials (tonnes)
Single-Family (Municipalities)	10%	3,068
Single-Family (Electoral Areas)	9%	2,627
Multi-Family	8%	2,379
Industrial, Commercial, and Institutional	41%	12,469
Drop-off	16%	5,083
Construction and Demolition	16%	4,991
Total Disposal Rate	100%	30,608

Annual Disposal Rate	30,608 tonnes
Per Capita Disposal Rate	358 kg per capita
Annual Recycling Rate (partial)	46,080 tonnes
Per Capita Recycling Rate	525 kg per capita

Guiding Principles

Promote zero waste approaches and support a circular economy

Promote the first 3 Rs (Reduce, Reuse and Recycle) and consider Recovery before Residuals Management

Maximize beneficial use of discarded materials and manage residuals appropriately

Support structural and systemic changes (e.g. polluter and user-pay approaches) and corresponding behaviour change programs to optimize system changes and promote principles one and two.

Prevent organics and recyclables from going into the garbage wherever practical

Collaborate with other regional districts wherever practical

Develop collaborative partnerships with interested parties to achieve regional targets set in plans

Support practical and effective delivery of waste management services from public and private service providers, and level the playing field within the region for private and public solid waste management facilities.

Target Setting – Proposed Metrics

Interim Target – 2023 (5 year)

- 280 kg/capita disposal rate
- Implementation of Strategies 1-3 (waste reduction, ICI and residential systems with disposal ban)

Plan Target – 2028 (10 year)

- 250 kg/capita disposal rate
- Optimization of Strategies 1-3 (system usage, disposal ban enforcement, and remaining strategies addressed to ensure system resilience)

Long Term Target – 2040

- 150 kg/capita disposal rate
- Continued system and behaviour change improvements
- Zero Waste Community



ZERO WASTE

Proposed Strategies

- Diversion Potential
- Resource Requirements
(Over duration of the 10 year Plan)
- Timeline

Strategy 1: Reduction and Reuse Opportunities

Components:

- A.Reduce Wasted Food from RES and ICI Sectors
- B.Explore Reduction and Reuse Opportunities
- C.Support Bans on Single-Use Items
- D.Advocate for Expansion of EPR Programs



Actions	Operating Cost	Timeline
CVRD Support for above Components	\$101,000	2019-2023

Strategy 2: Reduce Disposal from ICI and Multi-Family Residential Sectors

Components:

A. Mandate source separation for ICI and multi-family residential sector

B. Adopt organics disposal ban and enhance enforcement of existing disposal bans



Actions	Operating Cost	Timeline
Strategies A	\$10,000	2020
Strategy B	\$87,500	2019-2022

Strategy 3: Reduce Disposal from Residential Sector

Components:

- A. Assess opportunities for access to recycling programs at depots
 - i. Evaluate opportunities to increase accessibility for public depots
 - ii. Continue to assess depot service levels for the south end
- B. Adopt universal curbside collection services across the region



Actions	Operating Cost	Timeline
Strategy A	-	2019-2023
Strategy B	\$30,000	2019-2020 (study)
Strategy B	\$22,812,404*	2019-2028

Strategy 4: Improve Organics Processing

Components:

- A. Best Management Practices for odour and leachate management
- B. Ensure capacity for local organics processing



Actions	Operating Cost	Timeline
Strategy A	\$15,000	2021
Strategy B	Embedded	2019-2028

Strategy 5: Investigate Processing and Transfer Capacity for Recyclables

Components:

A. Assess gaps and recommend further opportunities for ICI transfer capacity and processing within the CVRD



Actions	Operating Cost	Timeline
Strategy A	\$15,000	2020

Strategy 6: Improve Management of Construction and Demolition (C&D) Materials

Components:

- A. Monitor C&D disposal and recycling activities in the Region
- B. Develop a C&D Waste Management Strategy
- C. Reduce Barriers to Disposing Hazardous Materials (asbestos, gypsum wallboard)



Actions	Operating Cost	Timeline
Strategies A & B	\$30,000	2022-2023
Strategy C	\$800,000	2021-2028

Recovery and Residuals Management



Strategy 7: Residuals Management

Explore Options for Disposal

Short-Term Disposal Options

Option	Description
Continue Waste Export	Shipping containers are used to transport waste by rail to Washington State for \$140/tonne. Rabanco landfill is available for MSW disposal.
Landfill in BC	Cache Creek Landfill in Ashcroft will be available for MSW disposal in mid-2019. The feasibility of disposal at this landfill facility should be explored.
Waste to Energy (Private Facility)	It is possible that a new private (or public private partnership) WTE facility may be built on the island in two to three years depending on permits.

Long-Term Disposal Options

Option	Description
Landfill Disposal on the Island	A new landfill was recently opened in Comox Valley. The feasibility of disposal at available Vancouver Island landfills should be explored.
Waste to Energy (Public Facility)	Two recent studies reviewed the feasibility of a Waste to Energy (WTE) facility for southern Vancouver Island. Both studies determined that viable technology exists but is not economically feasible. However, if a new technology becomes available, a feasibility assessment should be carried out to further assess the viability of a business case for a public or P3 partnership WTE facility.
Waste to Energy (Private or owned by others Facility)	It is possible that a new private (or owned by others) WTE facility may be built within the Cowichan Valley. The feasibility of disposal at this potential WTE facility should be explored.

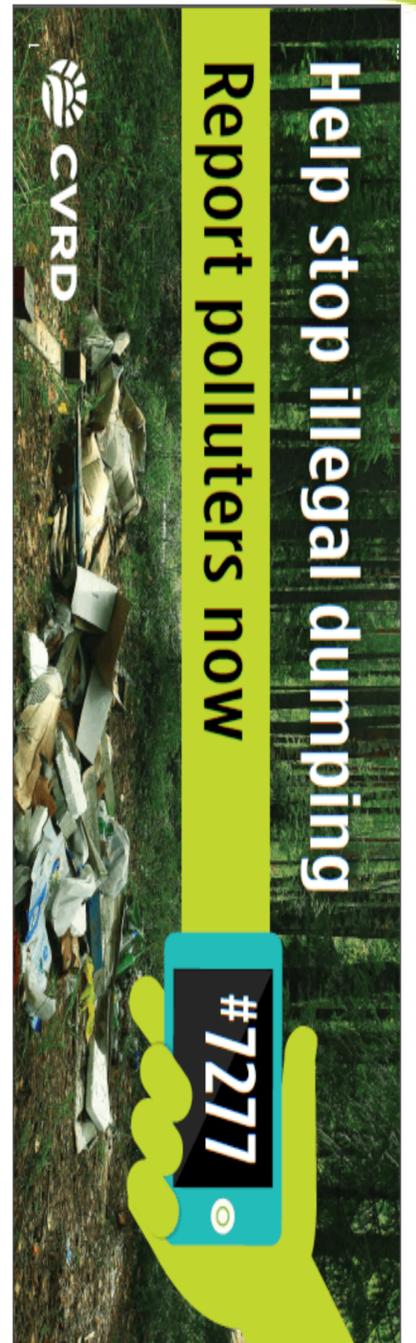
Actions	Operating Cost	Timeline
Disposal Options Assessment	\$20,000	2019

Strategy 8: Augment Illegal Dumping Prevention Strategies

Components:

- A campaign was conducted in 2016 to reduce illegal dumping in Hillcrest
- A “Free Tipping” policy was implemented in the early 2000s to provide financial incentives to non-profit organizations who clean up public lands
- CVRD may wish to analyze costs and ubiquity of illegal dumping to determine whether changes should be made

Actions	Operating Cost	Timeline
Update Strategies	Embedded	2019-2028



Strategy 9: Collection/Drop-off for HHW, Bulky Items and Organic Debris

Components:

A. Improve collection for household hazardous waste (HHW)

B. Improve recycling opportunities for bulky items

C. Assess effective ways to reduce open burning of wood waste



Actions	Operating Cost	Timeline
Strategies A & B	\$1,575,000	2020 - 2028
Strategy C	Embedded	2022

Strategy 10: Monitor Historic Disposal Sites

The CVRD is required to continue monitoring and assessing the state of these historic disposal sites



Actions	Operating Cost	Timeline
Annual Monitoring	Embedded	2019 - 2028

Operational Improvements



Strategy 11: Implement Asset Management Plan

A. Implement Asset Management Plans at CVRD solid waste facilities

B. Develop Bings Creek Transfer Station 10-Year Plan



Actions	Operating Cost	Timeline
Strategy A	\$690,000	2019-2023
Strategy B	\$10,000	2019

Strategy 12: Disaster Debris Management Plan

Developing a Disaster Debris Management Plan for solid waste services and infrastructure.



Actions	Operating Cost	Timeline
Disaster Management Plan	\$15,000	2022

Strategy 13: Education and Behaviour Change

Continued public outreach and community-based social marketing

Tools

- Commitments
- Prompts
- Norms
- Social Diffusion
- Communication
- Incentives
- Convenience



Actions	Est. Operating Cost	Timeline
Education & Behaviour Change	Embedded	2019 - 2028

Summary - Strategies List

Primary Waste Reduction/Diversion

1. Explore Reduce and Reuse Opportunities
2. Reduce Disposal from ICI and Multi-Family Residential
3. Reduce Disposal from Residential Sector

Processing Infrastructure

4. Improve Organics Processing
5. Investigate Processing and Transfer Capacity for Recyclables
6. Improve Management of Construction and Demolition Materials

Recovery and Residuals Management

7. Explore Options for Local Disposal
8. Reduce Illegal Dumping
9. Collection/Drop Off for HHW, Bulky Items and Organics
10. Monitor Historic Disposal Sites

Supporting System Resilience

11. Implement Asset Management Plan
12. Develop Disaster Management Plan
13. Education and Behaviour Change Considerations



Budget Summary

Current Operating Budget

- \$9.83M

Proposed New Budget

- \$195,800 (2019) to \$3.31M (2028)

Combined Operating Budgets (current and proposed)

- \$9.98M (2019) to \$14.47M (2028)

2018 Budget (Combined)

Curbside Collection - Garbage	\$791,112
Curbside Collection - Recycling	\$534,913
CVRD Internal Allocations	\$584,875
Debt	\$786,318
Garbage Disposal	\$2,491,200
Legal & Administrative	\$208,150
Operations - Disposal	\$2,726,135
Operations - Recycling	\$1,277,550
Planning, Operations Support, and Execution	\$268,000
Reduction and Recycling Programs	\$42,000
Transfer to Reserve	\$120,000
Total Annual Existing Operating Expenditures	\$9,830,253

Recommended Resolution

RECOMMENDED RESOLUTION

That it be recommended to the Board:

1. That the Solid Waste Management Plan Update Amendment 4 Issued for Use, Dated October 17, 2018, be approved and that following approval the Solid Waste Management Plan Update be submitted to the Ministry of Environment and Climate Change Strategy for approval.
2. That the regional district's Solid Waste Management Plan was duly and properly consulted on in accordance with the provisions of the *Environmental Management Act* section 27(1) and in accordance with the objectives set out in the regional district's applicable consultation process.
3. That the Ministry of Environment's requirements and recommendations for the Solid Waste Management Plan content, as defined in the Checklist for Review and Approval of Plans, have been duly met and any requested rationale for decisions be provided to the Ministry of Environment and Climate Change Strategy with the checklist.
4. To the best of the knowledge of the Board of Directors, there are no objections to the plan that have not been acknowledged and addressed.

Next Steps



Questions or Comments



THANK

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