



NORTH COAST
REGIONAL DISTRICT



SPERLING
HANSEN
ASSOCIATES

Solid Waste Management Plan

NCRD Public & Technical Advisory Committee Meeting

Presented by Sperling Hansen Associates

May 26, 2022

Meeting #2

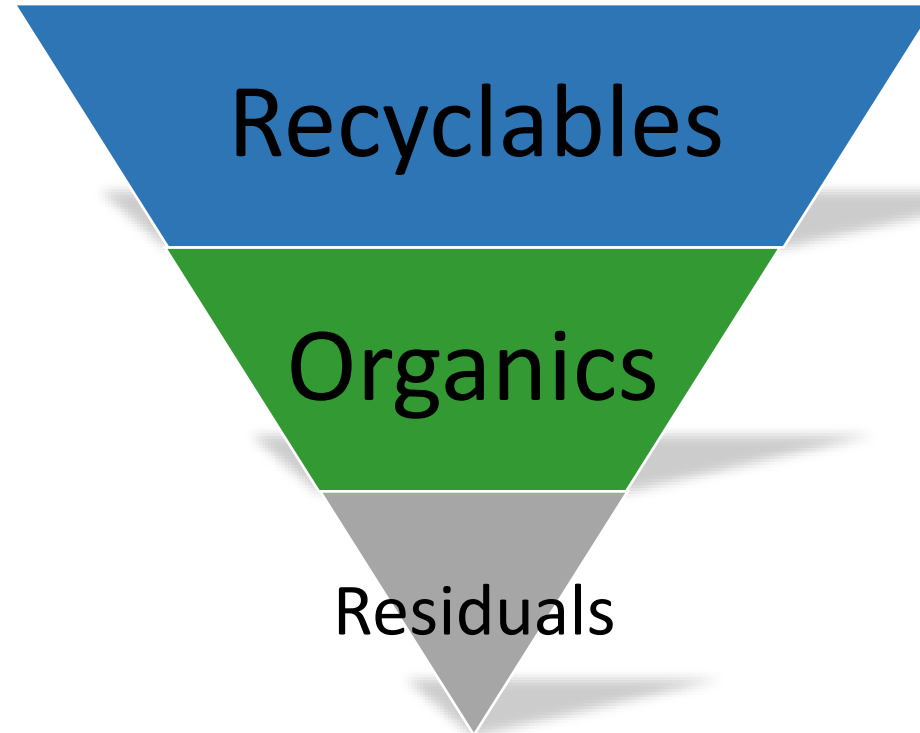


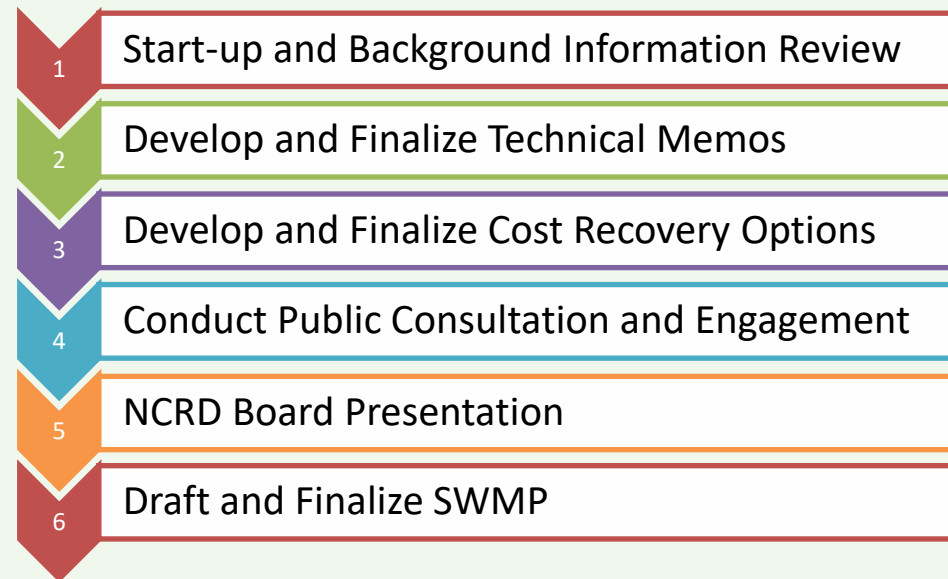
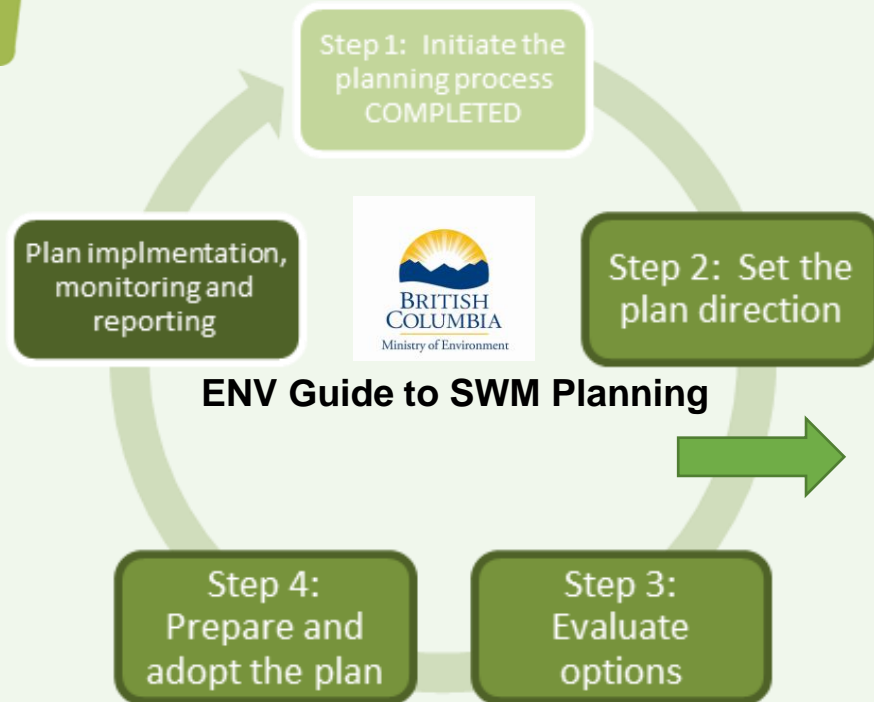
1. Roundtable/Introductions

2. SWMP Update Project
Outline

3. Technical Memo No. 2
Discussion:

- NCRD Residuals Management System Overview
- Residuals Management Initiatives
- Initiatives Carried Forward from 1996 SWMP





Tech Memo 2: Residuals Management (PTAC Mtg. 2)



- **Describe Current Residuals Management in the Islands and Mainland Areas of the NCRD**
- **Confirm Initiatives to be Implemented from the 1996 SWMP**
- **Identify Strategy Options and Initiatives for Residuals Management**



Residual waste is disposed at one of two landfills in the NCRD:

- Islands Landfill (NCRD, near Port Clements)
- Prince Rupert Landfill (City of Prince Rupert)
- The Prince Rupert Landfill primarily serves:
 - City of Prince Rupert,
 - District of Port Edward, and
 - Electoral Areas A and C, including First Nations communities
- The Islands Landfill serves:
 - Village of Masset
 - Queen Charlotte
 - Port Clements, and
 - Electoral Areas D and E, including First Nations communities





Curbside Collection

**District of Port
Edward**

**City of Prince
Rupert**

**First Nations (by
barge/ferry to LF)**

Prince Rupert Landfill



Sandspit

**Queen Charlotte
Village (+ Skidegate
and Tlell)**

**Village of
Masset**

**Old Masset
Village
Council**

**Port
Clements**

Islands Landfill



Waste collected by the
Skidegate Band Council is
directed to the Skidegate
Transfer Station.



Residuals

**What is the best way
to manage waste
stream residuals at
the NCRD disposal
facilities?**



Provincial Residuals Management Objectives

1. Manage residuals appropriately and in an environmentally responsible manner, including using best practices, available technology and infrastructure investment to recover any remaining materials and energy from the waste stream and protect the environment.
2. Strengthen partnerships with interested parties to achieve regional targets such as with waste sector service providers, associations, neighboring jurisdictions and waste generators.



Regional District of Kitimat-Stikine 2021 SWMP Strategies

To improve residuals management at existing facilities:

- a) Set limits on solid waste volumes accepted from outside service areas
- b) Reduce greenhouse gas emissions
- c) Effectively use landfill airspace
- d) Improve public accessibility to existing facilities
- e) Deliver operational service in-house
- f) Close selected small landfills and replace with transfer stations or other suitable waste management services (not applicable to NCRD)
- g) Engage and communicate with citizens on waste management
- h) Set limits and reporting requirements for liquid waste
- i) Assist in the prevention of illegal dumping.



Other Regional District SWMP Strategies

1. Centralize facilities to reduce costs of operating several facilities within reasonable driving distances.
2. Consider reduced operating hours that can reasonably still service self-haulers on a weekly basis.

Administrative Opportunities

A-1 Improve the operational efficiency of the NCRD waste management system.

- Regularly examine each solid waste management service to measure and refine processes, employees/contractors, technology and financials with the goal to continually improve these aspects to improve operational efficiency
- Develop a set of parameters that can be assessed quarterly or annually by the service area manager:
 - quantity of each type of material handled by source (jurisdiction) and type (Residential, ICI, CRD)
 - costs (wages, utilities, maintenance, trucking, other)
 - revenues and number of operating hours.
- Helps make good data available to determine the cost per tonne of material managed, plan for changes to the services, manage assets and prepare cost/benefit analyses for Board decisions.

Challenge: Staff time

Administrative Opportunities

A-2 Continue monitoring solid waste management facilities and services.

As described in A-1, this initiative can be accomplished through the collection of service specific data and will support operational efficiency improvements.

A-3 Improve service delivery to rural and underserved communities in the Island and Mainland service areas.

Services in the NCRD rural communities has undergone recent improvements initiated by the NCRD directly and by other jurisdictions, including increased access to facilities through management agreements and extended operating hours.

Discussion: “What improvements are needed and where?”

Administrative Opportunities

A-4 Improve transportation of materials between service areas.

- Examine in detail the routes (including ferry schedules) and costs of transporting refuse between transfer stations and landfills
- Collect data to assess whether or not transport of bins is efficient or needs to be reconfigured, including outsourcing versus in-house provision of the transportation and compaction of materials versus hauling loose
- Review site access for contractors and availability of switch bins.

Challenges: Data availability, fluctuating prices & equipment costs

Administrative Opportunities

A-5 Develop cost recovery models.

This initiative is the primary topic of Technical Memo 3 and will be covered in detail.

A-6 Establish a permanent Islands Solid Waste Advisory Committee.

- Carry forward initiative from the 1996 SWMP
- Reestablishment of the Islands Solid Waste Advisory Committee will assist with the management of the Islands Solid Waste service

Administrative Opportunities

A-7 Expand the list of prohibited wastes.

- Expanding the list of waste prohibited from disposal supports the requirements for environmental protection

Caution/Challenge: ensure there are viable, sustainable and economical options available

A-8 Update Bylaws.

Current bylaws do not restrict EPR materials from landfills and curbside programs and may be out of compliance with EPR agreements (e.g. Bylaw No. 587 includes charges for the disposal of major appliances).

Challenge: continued access to drop off and curbside collection needed for majority of households

Residuals Management Opportunities

RM-1 Maintenance of Transfer Stations

- Maintenance of Transfer Stations could be included in the garbage collection contract
- Contractor could keep records (through monthly site reports)
- Help keep on top of maintenance tasks at each site
- Relatively low cost and can be added to contract tender

Residuals Management Opportunities

RM-2 Islands Collection Costs Review

- Annual cost of garbage collection services for Islands residents would be apportioned amongst total number of collection units
- Costs would reflect the collection contract costs and any associated administrative and operational costs

Residuals Management Opportunities

RM-3 Problem Waste Stockpiled at Facilities

- Develop a fund to manage stockpiles at disposal facilities when they reach a size that is problematic
- The issue of unmanageable material stockpiles was identified in the 1996 SWMP and persists today
- Be aware of market and transport price fluctuations that may make it possible to reduce stockpile size

Challenge: stewards and contractors may find the service cost prohibitive (i.e., crushing auto bodies and shipping off Haida Gwaii)

Residuals Management Opportunities

RM-4 Illegal Dumping Management

Common strategies to discourage illegal dumping activity includes:

1. Publish photos of incidents
2. Identify the owners of the illegally dumped refuse and bill them for proper disposal
3. Adopt an illegal dumping bylaw with a schedule of fines for various infractions

Additional efforts could include:

4. Erect signs at each common dump site stating that the areas are under surveillance and illegal dumping is strictly enforced
5. Assist community groups/clubs with cleanup by allowing free tipping with prior written approval

Next Steps

- Technical Memorandum No. 3 – Cost Recovery & Public Consultation Plan
 - PTAC Meeting – End of June
- Public Consultation – August/September (survey, events)