

# COMOX STRATHCONA SOLID WASTE MANAGEMENT PLAN: 2013 - 2018



System: Comox Strathcona Regional Districts

Northern Wasteshed:	2014 Population Estimate	43,000
	2014 Residual Waste Estimate	25,000 tns
Southern Wasteshed:	2014 Population Estimate	67,000
	2014 Residual Waste Estimate	<u>42,000</u> tns
	Projected Annual Total Waste	67,000 tns

Plan Challenge No. 1: Compliant Efficient Disposal System

Plan Challenge No. 2: Reduce Waste Disposal – Increase Diversion

Current waste diversion is approximately 51% and per capita residual disposal rate is about .61 tonnes. 2022 target diversion is 70% and per capita residual disposal is .38 tonnes/person/year.

ETHINK REDUCE REUSE RECYCLE

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Plan Diversion Challenge – 70% diversion of waste by 2022. Current diversion is estimated at 51% in the Plan.

In addition to continuing our current programs major new initiatives include:

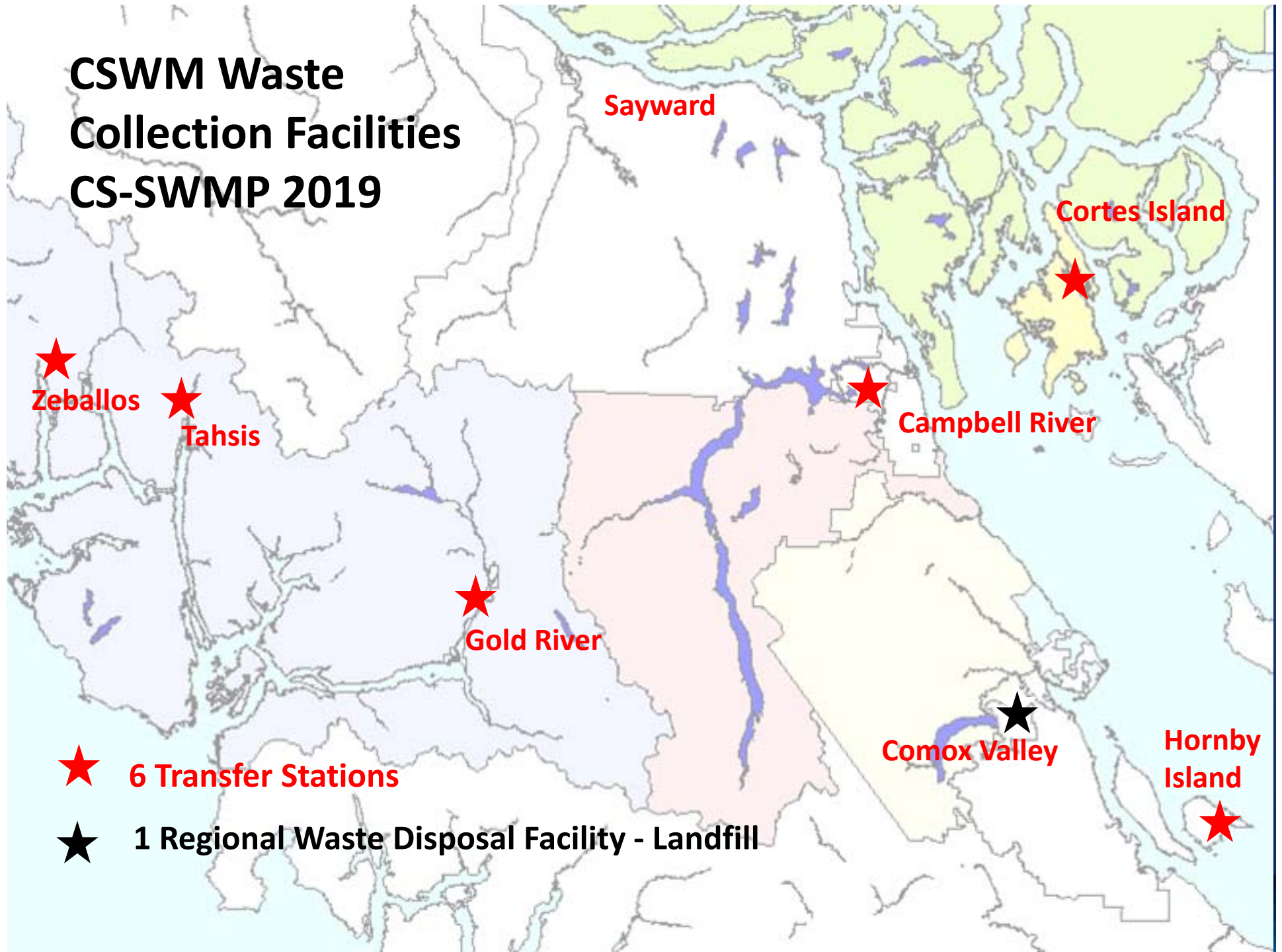
- Food waste composting is our first diversion priority going forward:
  - City of Campbell River has issued a bios and food waste composting RFP;
  - Town of Comox and Village of Cumberland are participating in district pilot/interim composting program;
  - District is proceeding with a Regional Composting Assessment report scheduled to be presented to the solid waste board in November;
  
- In addition, Illegal Dumping Plan include efforts to combat illegal dumping - diversion education and a service wide bylaw;

ETHINK REDUCE REUSE RECYCLE

# CSWM Waste Disposal Facilities 2013



# CSWM Waste Collection Facilities CS-SWMP 2019



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CS SWMP Waste Disposal Facility Options Assessment:

1. Close all current landfills, build transfer stations and export waste;
2. (7) Landfill sites and combinations assessed (cost, environmental, social);
3. (4) Waste to Energy (WTE) technologies using same assessment including:
  - Conventional mass burn - Metro Vancouver Burnaby (285k tonnes/yr);
  - (3) Advanced thermal technologies – gasification, pyrolysis and plasma;
    - (13) Vendors responded to WTE RFI - with LOI resulting:
      - (3) large scale facilities assessed and;
      - (8) small scale facilities;

Overall conclusions of the assessment:

- Minimal difference - environmental risk and GHG emission estimate;
- Most expensive system operational cost – transportation of waste;
- Most expensive system factor – small population distributed over wide area;

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CS SWMP Disposal System Capital Cost Estimates

CS SWAMP estimated capital projects		Aug, 2014
Item	Capital Project	Estimated Budget
1	Campbell River Closure	\$ 13,125,000.00
2	Comox Valley Closure	\$ 10,620,000.00
3a	Comox Valley New Landfill Expansion (3m excavation)	\$ 16,950,000.00
3b	Comox Valley New Landfill Expansion (8m excavation)	\$ 21,550,000.00
4	Gold River Landfill Closure	\$ 2,866,200.00
5	Gold River TS Upgrade	\$ 688,859.00
6	Tahsis Landfill Closure	\$ 1,865,000.00
7	Tahsis Transfer Station	\$ 676,936.00
8	Zeballos Landfill Closure	\$ 1,002,500.00
9	Zeballos Transfer Station	\$ 676,936.00
10	Sayward Landfill Closure	\$ 390,000.00
11	Cortes Island Closure	\$ 390,000.00
	Total Excluding 3b	\$ 49,251,431.00
	Total Excluding 3a	\$ 53,851,431.00

Class 'C' construction estimates and budget factor applied

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### New Disposal System Operational Costs:

- Business case(s) analysis - large part of CS SWMP assessment;
- Solid Waste Management System Financial Model Assessment completed in 2014 (AECOM – Mr. Andy Kier)

The impact of the new waste system cost has resulted in our current fee-for-service model being stressed and requisition introduced in 2013 and 2014. Contributing factors include:

- Reduction in annual yearly tonnages;
- Compliance necessitating single large LF w/large trans costs;
- MoE operational changes – new operational criteria;
- Capital debt servicing for CS SWMP facility closures;

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Challenge:

System costs are approaching unsustainable levels.

Are there common issues that may lead to shared mutually beneficial solutions to common challenges?

Common value discussion questions:

Combine waste streams?

Shared disposal facilities?

Waste transportation options?