



Part 1: Current programs and infrastructure

**Extended Producer
Responsibility in the Yukon:
exploration and implementation
considerations**

2021



This document is Part 1 of the “Extended Producer Responsibility in the Yukon: exploration and implementation considerations” prepared by the Government of Yukon to fulfill the 2018 recommendation by the Ministerial Committee on Solid Waste to explore Extended Producer Responsibility. Part 1 covers current recycling programs and infrastructure in the Yukon.

1. Existing programs in the Yukon

1.1. Regulated programs

All current regulated programs in the Yukon are stewardship programs. They are structured to collect fees from the consumer at the point of purchase. The fees are placed in a territorial government fund that is used to finance recycling of these regulated products. This is different from EPR programs where the fees (visible or those incorporated into the cost of the product) are collected by the producers who then organize and finance recycling of the regulated products without direct government involvement.

Beverage Container Regulation (BCR)

The BCR was the first material management program established in the Yukon in 1992 to help divert “ready-to-drink” liquid beverage containers from landfill. The surcharge paid by the customer at point of sale is used to pay for the container recycling and to provide a refund incentive for the return of the containers. In 2017, the regulation was amended to include milk and milk substitute containers in the program.

In fiscal year 2019-20, 28.5 million beverage containers were sold in the Yukon. Through the BCR program, 21 million beverage containers, or 74%, were collected for recycling. Glass beverage containers are accepted for refund, however, they are either reused (e.g., beer bottles) or sent to the landfill, and are not currently recycled due to high cost of shipping.

Amounts of BCR materials shipped out, reused and landfilled in 2019 and 2020 are shown in the table below.

(Tonnes shipped out)	2019	2020
PET	100.9	78.4
HDPE	38	30
TetraPaks/Milk cartons	43.0	32.0
Aluminum	128	139
Glass (reused)	no data	202
Glass (landfilled)	no data	638

Designated Materials Regulation (DMR)

Two stewardship programs are regulated through the DMR. Originally enacted in 2003, the DMR initially covered tire stewardship. Amendments in 2018 saw an expansion of the tire program and introduction of the electronics and electrical products (e-waste) stewardship programs the same year.

The Alberta Recycling Management Authority (ARMA) currently fulfills the administrative requirements of the tire stewardship program under contract with the Government of Yukon. Similarly, the Electronics Products Recycling Association (EPRA) runs the electronics and electrical products program. These organizations register producers, collect the established fees, and work towards compliance with unregistered producers. The Government of Yukon runs the actual collection and recycling activities under the DMR and enforces the regulation.

(Tonnes shipped out)	2019	2020
Tires	569	409
E-waste and small electrical appliances	191	183

1.2. Unregulated programs

Packaging and printed paper (PPP)

Collection and recycling of packaging and printed paper materials that are not beverage containers is not regulated in the Yukon. These materials are voluntarily recycled at the community recycling depots and two Whitehorse processors (Raven Recycling and P&M Recycling). The materials from the community depots are processed in Whitehorse for sale to the national and global recycling markets. Territorial and municipal governments financially support recycling of these materials via the Diversion Credit system. Diversion credit amounts are not directly tied to the costs born by the processors and the government does not have control of how these credits are spent. Non-refundable glass containers are no longer collected for recycling as of fall 2019 and are landfilled. Expanded polystyrene (Styrofoam) is also not collected for recycling in the territory. PPP materials obtained from residents and commercial clients are processed together.

(Tonnes shipped out)	2019	2020
Cardboard	2209	2324
Paper	625	422
PET	17	13
HDPE	20	15
TetraPaks	7	7
Mixed plastic	81	295
Plastic film	75	53
Styrofoam (no longer recycled)	7	6
Tin	36	23

Household hazardous waste (HHW)

Yukon municipalities and most communities host HHW collection events once or twice a year, allowing residents to drop off HHW at no cost. A few communities collect HHW year-round at their local solid waste disposal facility (SWDF). Common types of HHW

include used oil from vehicles, fluorescent light bulbs, expired bear spray, cleaning products and old paints.

(Tonnes shipped out)	2019	2020
HHW collection events	no data	117

Non lead-acid batteries are also collected year-round through the voluntary Call2Recycle collection program. There are three public drop off locations in Whitehorse including Raven Recycling, Staples and the Department of Environment.

Old vehicle lead-acid batteries are accepted at Raven Recycling year-round.

(Tonnes shipped out)	2019	2020
Lead-acid batteries	183	152

Textiles

Raven Recycling in Whitehorse collects clothing, sheets, curtains, towels and other fabric textiles for re-use and recycling. The materials are sent to a recycler in British Columbia. The proceeds of the program are shared with the Whitehorse Firefighters Charitable Society.

The Department of Community Services recently expanded collection to include Marsh Lake, Mount Lorne, Deep Creek, Carcross and Tagish.

(Tonnes shipped out)	2019	2020
Textiles	59	41

Other materials

Scrap metals, including white goods (large appliances), are collected at municipal and community SWDFs and at Raven Recycling. Several automotive salvage yards collect

vehicles to depollute them and send them out of territory for metal recycling. The amounts of metals recovered through these processes is not fully tracked and there are large stockpiles of vehicles at SWDFs and scrap yards.

Amounts of scrap metals collected at Raven Recycling are shown below.

(tonnes shipped out)	2019	2020
Aluminum	146	no data
Copper	61	no data
Steel	548	no data
Non-Ferrous Metals	36	no data
Total	791	951

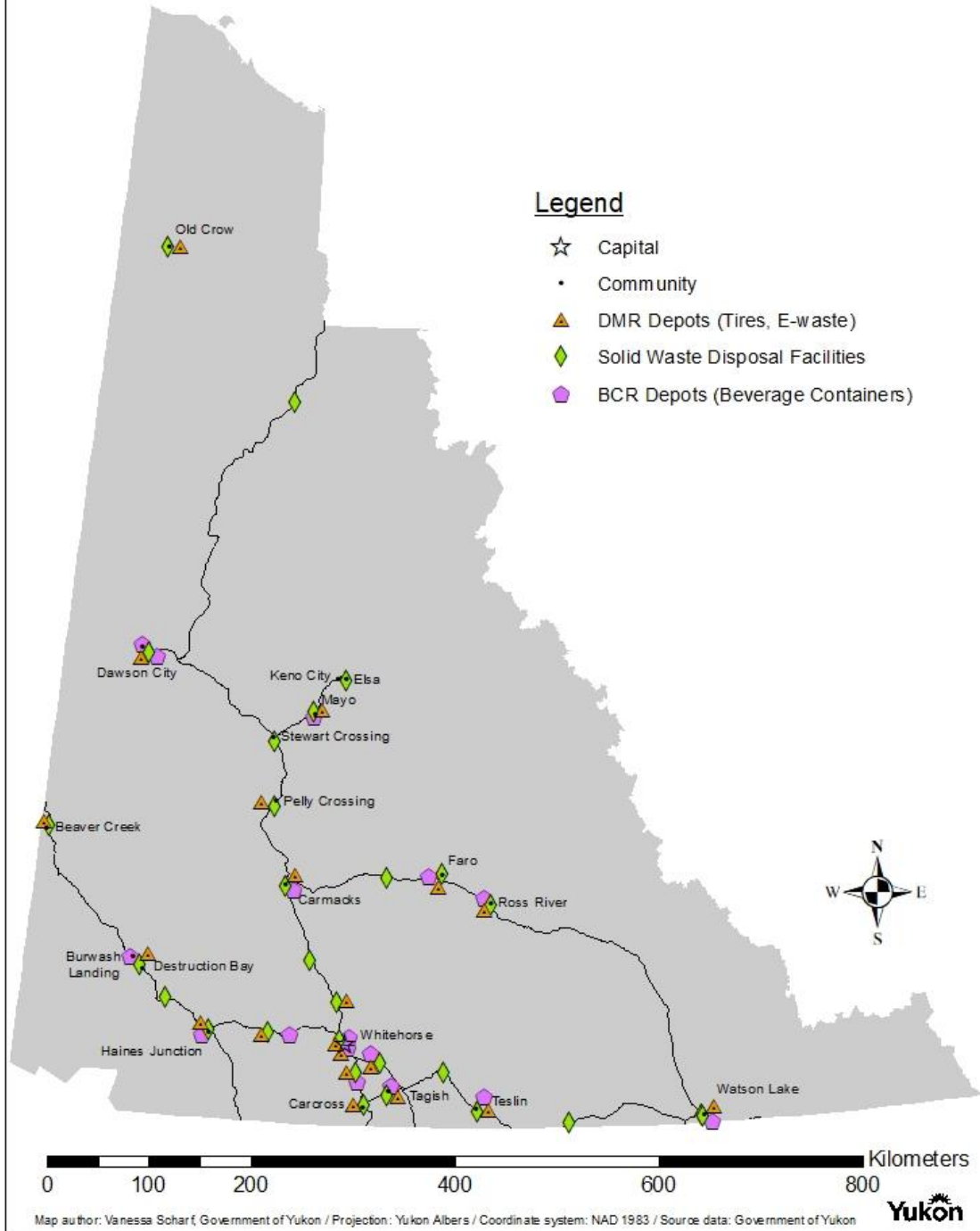
2. Infrastructure overview

2.1. Municipal and community solid waste disposal facilities (SWDFs)

There are eight municipal and 19 community SWDFs in the Yukon, as shown on the map below. Materials covered under the DMR (tires and e-waste) are accepted at all municipal and 11 community SWDFs free of charge. The Department of Community Services arranges for the shipments of DMR materials out of territory for recycling.

All SWDFs also collect recyclable materials such as cardboard, paper, scrap metal, plastics, etc. These materials are then processed through Raven Recycling, and P&M Recycling in Whitehorse, for baling and shipment out of territory.

Existing Waste Collection in Yukon



Whitehorse SWDF

The City of Whitehorse SWDF contains the Son of Eagle landfill, a commercial scale organics processing facility, metals storage area, a tire storage area, a gatehouse, scales (a second set of scales is planned to be installed in 2021), and a public drop-off transfer station with bins for the collection of sorted materials. The municipality also owns and operates a fleet of waste collection vehicles for curbside collection of waste and organics on alternate weeks.

Other municipal SWDFs

The municipalities of Dawson City, Haines Junction, Watson Lake, Teslin, Mayo, Faro and Carmacks operate their own SWDFs. These sites, with the exception of Watson Lake, are not equipped with scales. Installation of scales is under consideration at the Carmacks, Dawson City, Faro, Mayo and Teslin SWDFs.

Community SWDFs

YG, Department of Community Services and Department of Highways and Public Works, operates 19 facilities comprising:

- landfills (Ross River, Beaver Creek, Drury Creek and Swift River);
- modified transfer stations where construction and demolition waste is buried on-site and MSW is transferred to a different landfill (Carcross, Champagne, Deep Creek, Destruction Bay, Marsh Lake, Pelly Crossing and Tagish), the Old Crow modified transfer station is also equipped with a thermal oxidation unit (gasifier); and
- transfer stations where all waste is transferred to a different landfill (Braeburn, Johnsons Crossing, Keno City, Mount Lorne, Silver City, Stewart Crossing and Eagle Plains). Some of these are set to change with possible site closures.

These facilities are not equipped with scales.

2.2. BCR depots

Beverage containers under the BCR program are collected via a network of 16 depots operated by non-for-profit community groups and for-profit businesses as shown on

map. Some of these also collect non-refundable materials from residents. The locations of the BCR depots, shown on the map below, include the following locations: Burwash Landing, Carmacks, Dawson City (two locations), Faro, Haines Junction, Marsh Lake, Mayo, Mendenhall, Mt. Lorne, Ross River, Tagish, Teslin, Watson Lake, and Whitehorse (two locations – Raven Recycling and P&M Recycling).

2.3. Recycling processors

Raven Recycling and P&M Recycling are two recycling processors operating in Whitehorse. In addition to operating as BCR collection depots, these processors amalgamate, sort and bale the BCR material with the non-regulated recycling materials, and then ship them out of the territory for recycling. Raven Recycling is a non-profit social enterprise that handles the majority of the material volumes (75-85% of non-refundable recycling). P&M Recycling is a private business focusing on the BCR materials, but also handles non-BCR materials (15-25% of non-refundable recycling).

2.4. DMR collection

Tires and e-waste are accepted at all municipal and some community SWDFs free of charge. Locations of the DMR depots, shown on the map below, include the following locations: Beaver Creek, Carcross, Carmacks, Champagne, Dawson, Deep Creek, Destruction Bay, Faro, Haines Junction, Marsh Lake, Mayo, Mt. Lorne, Old Crow, Pelly Crossing, Ross River, Tagish, Teslin, Watson Lake and Whitehorse (tires at the SWDFs and e-waste at Raven Recycling).

Tires are shipped directly from the collection sites to a processor in Edmonton, Alberta, that shreds and re-processes tire waste into tire crumb, tire-derived aggregate and decorative mulch.

E-waste from all locations is processed by Raven Recycling in Whitehorse for out-of-territory shipment to Quantum Life Cycle Electronics Recycling in Edmonton, Alberta, a provincially certified e-waste processing and recycling facility.

Computers for Schools Yukon, a federal program to collect, repair and refurbish computers for distribution to schools and non-profit organizations, operates in partnership with Raven Recycling.

2.5. Curbside recycling collection

Municipal curbside collection of recyclables is available in Haines Junction and is also offered by several First Nations to their citizens. In Whitehorse, a private subscription-based collection service is offered by Whitehorse Blue Bin Recycling. They offer a collection schedule of once every two weeks for residential customers. The customer is required to separate materials into paper stream (including paper, cardboard and boxboard) and container stream (including plastics, cans, non-glass jars, and beverage containers). The recyclables are processed at Raven Recycling.

2.6. Commercial waste haulers

Solid waste and recycling

The two largest companies providing commercial solid waste hauling services including recycling are PNW Waste Removal and General Waste Management (A Division of Tle'Nax T'awei Industrial Limited Partnership). Whitehorse Blue Bin Recycling provides pick-up services on a smaller scale for the paper and container streams, as well as dedicated corrugated cardboard collection.

Raven Recycling operates the PaperSave program, which is a cart-based collection service for commercial offices that is sorted into white and coloured office paper, newsprint, shredded paper, boxboard, etc.

Special waste

Special waste transportation services are provided by a variety of companies with the two largest being General Waste Management and KBL Environmental Ltd.

Organics

Commercial organics collection is provided by the City of Whitehorse, PNW Waste Removal, General Waste Management and Whitehorse Blue Bin Recycling (bag collection only).

2.7. Other

Textiles

Raven Recycling in Whitehorse collects clothing, sheets, curtains, towels and other fabric textiles for re-use and recycling.

Second-hand

Yukon has a thriving second-hand industry with multiple consignment and thrift stores. Whitehorse examples include the Love2Thrift, And-Again Consignment Store, All for You Consignment Store, ChangingGear, Renueva, Well-Read Books, G & R Pawnbrokers, Mike's New and Used Emporium, and Quality Used Phones. There is also a vibrant re-sell community operating online, through newspapers, over the radio and at community events.

Some SWDFs (Beaver Creek, Carcross, Champagne, Dawson City, Deep Creek, Destruction Bay, Haines Junction, Marsh Lake, Mayo, Mount Lorne, Old Crow, Pelly Crossing, Ross River and Tagish) operate free stores. Operation of free stores has been problematic for years due to difficulty with high volumes and low volunteer capacity. Free stores have been further hampered recently by the COVID-19 pandemic restrictions.