

2018 NWT Climate Change Forum and Charrette

Water and Waste Climate Change Issue Table

There are a number of important links between water, waste management, and climate change. Communities provide essential public services such as **water treatment plants, landfills, sewage lagoons, and waste diversion services.**

As the climate continues to warm in the NWT risks to these services need to be fully considered. For example, climate change has the potential to impact waste management infrastructure, especially in coastal and permafrost areas.

Drinking water/water treatment plants

Potential climate change impacts on drinking water sources and water treatment plants

- Quality of source water
- Risks to water treatment plants (such as permafrost thaw)
- Considerations for adaptation
- Link to MACA site Ensuring safe drinking water
- <https://www.maca.gov.nt.ca/en/services/drinking-water-nwt/ensuring-safe-drinking-water>

Landfills & Hazardous Waste



- Contaminants become more mobile
- More precipitation results in more leachate
- Considerations for adaptation are to limit storage and remove stockpiles.
- Any Others?

Resources:

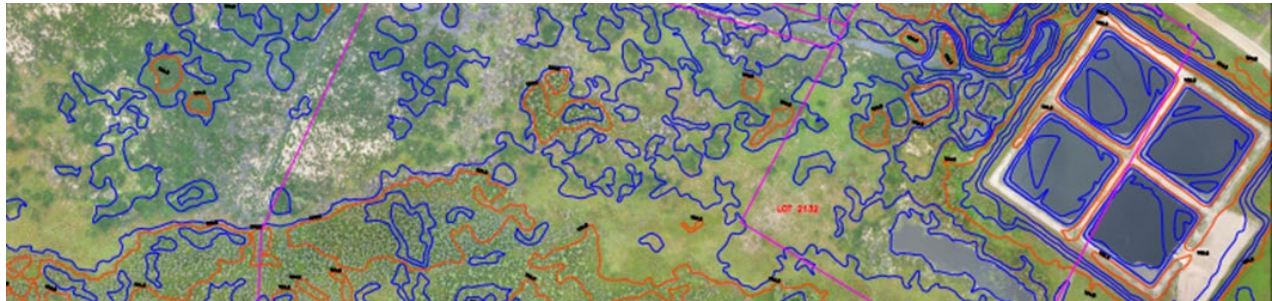
Solid Waste Management for Northern and Remote Communities

http://publications.gc.ca/collections/collection_2017/eccc/En14-263-2016-eng.pdf

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Sewage lagoons



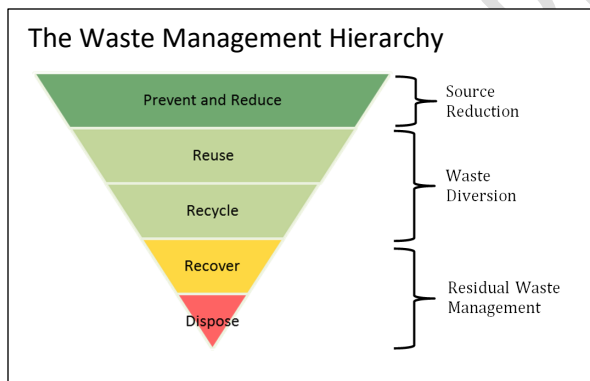
- Increased precipitation
- Changes to Permafrost
- Other Adaptations to consider?

Resources:

The Canadian Standards Association is developing a standard called “*Planning, Design, Operation and Maintenance of Wastewater Treatment in Northern Communities using Lagoon and Wetland Systems*” that will consider climate change.

<https://www.scc.ca/en/nisi>

Waste reduction and diversion



- Everything we consume has embodied energy associated with resource extraction, materials manufacturing, transportation and disposal.
- The more we can move up the Waste Management Hierarchy to prevent and reduce waste, the better for preventing GHG emissions.
- 20% of Canada’s methane emissions are from landfills – preventing food waste and composting organics can prevent these emissions, create a valuable soil amendment and reduce leachate.

- Recycling also prevents GHG emissions. In 2016-17, the Beverage Container Program diverted 1,233 tonnes of beverage containers; preventing 2.5 kilotonnes of GHG emissions, or the equivalent of taking 52 cars off the road.
- A Waste Resource Management Strategy and Implementation Plan to address waste at the territory level will be released in 2019.

For more information contact:

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