



Select Preferred Options

Step 5 Preparing a Solid Waste Management Plan



Steps in Preparing a Solid Waste Management Plan



Select Preferred Options

With potential approaches and solutions identified, this step focuses on evaluating and selecting options that are realistic and the best fit for the community.

This includes:

- Evaluating options based on feasibility
- Using a Risk Matrix
- Identifying opportunities to build on or improve existing programs and services

Step 5

Evaluating Options

When evaluating waste management options, a Feasibility Study & Risk Assessment can help identify the best fit for your community



Step 5

Feasibility Study

A feasibility study looks at whether a waste management option is practical, affordable, environmentally responsible, and achievable based on the community's capacity, infrastructure, and priorities.

Consider the feasibility of the following:



Technical

Can it physically work here?



Financial

Can we afford it (set-up and long-term costs)?



Environmental

Does it improve environmental outcomes?



Geographic/Logistical

Does the location make it practical?



Operational

Can we realistically run it?



Regulatory

Does it comply with laws? (Land Code, Provincial, Federal)



Social & Community

Will people accept and participate?



Institutional/Capacity

Do we have the people and systems to manage it?

Feasibility in Practice

Scenario: Introducing a new off-reserve recycling program

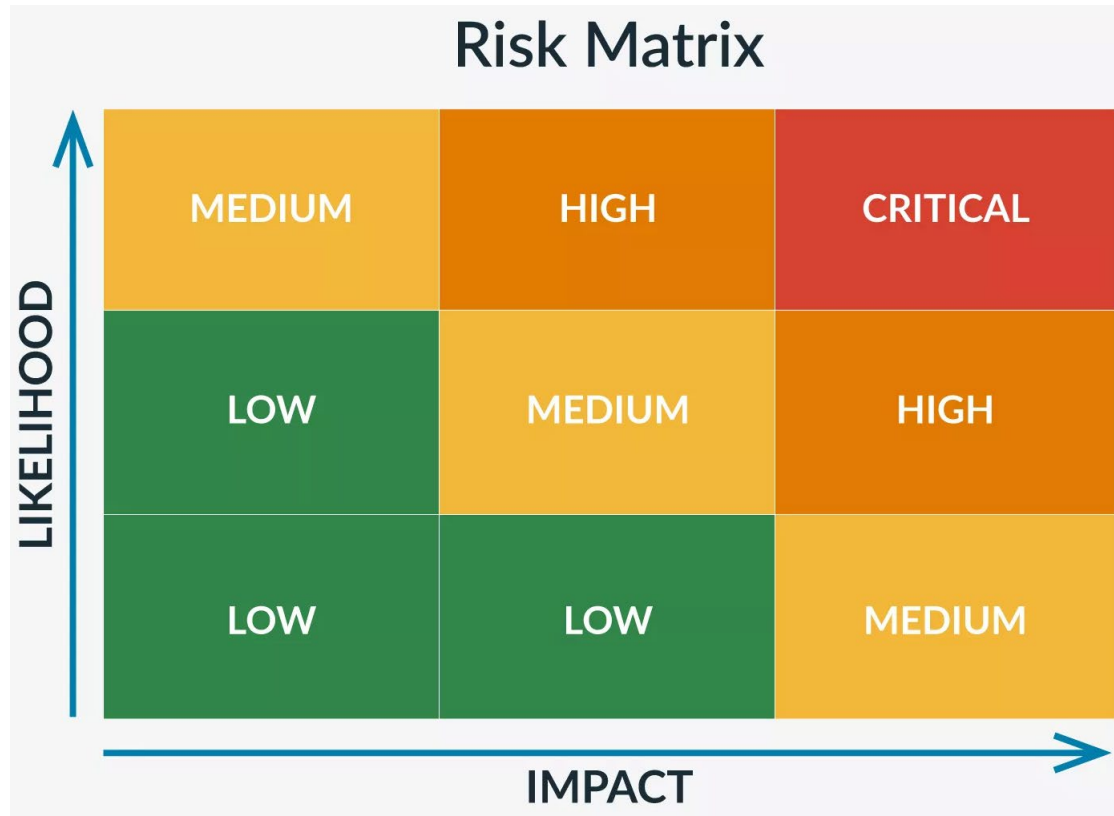
Feasibility Type	Key Question	Example Outcome
Technical	Is there a place to process recyclables?	Recycle facility 80 km away → borderline feasible
Financial	Can we afford capital + operations & management?	Grant covers 80% → feasible
Operational	Can staff run it?	Requires 1 additional operator → feasible with hiring
Social	Will community participate?	Strong engagement support → feasible
Geographic	Are haul distances manageable?	Winter access challenges → risk
Regulatory	Can we get approvals?	Moderate timeline → feasible

Common Feasibility Mistakes

- Evaluating only capital cost, ignoring long-term operations
- Assuming high participation without engagement
- Choosing complex technology for small systems
- Ignoring haul distance and logistics
- Not stress-testing staffing capacity
- Incompatible equipment purchases
- Underestimating waste volume
- Overlooking some waste streams
- Assuming partner participation without confirmation



Risk Assessment



What is a **Risk Assessment**:

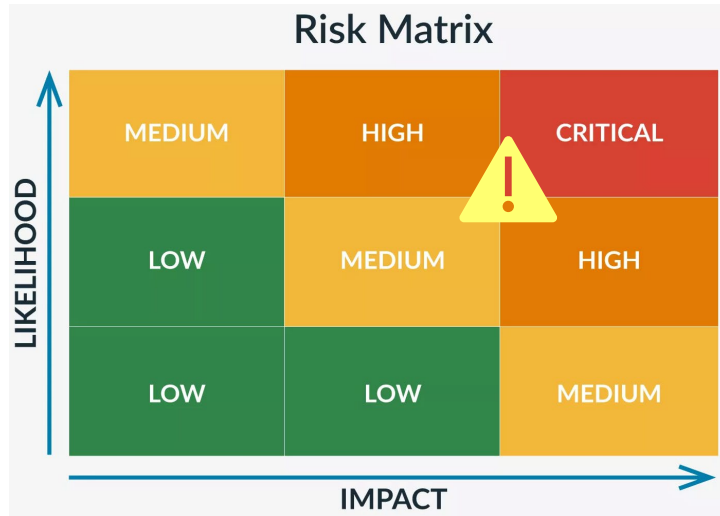
What **IMPACT** (what effect it could have)

vs **LIKELIHOOD** that it could occur

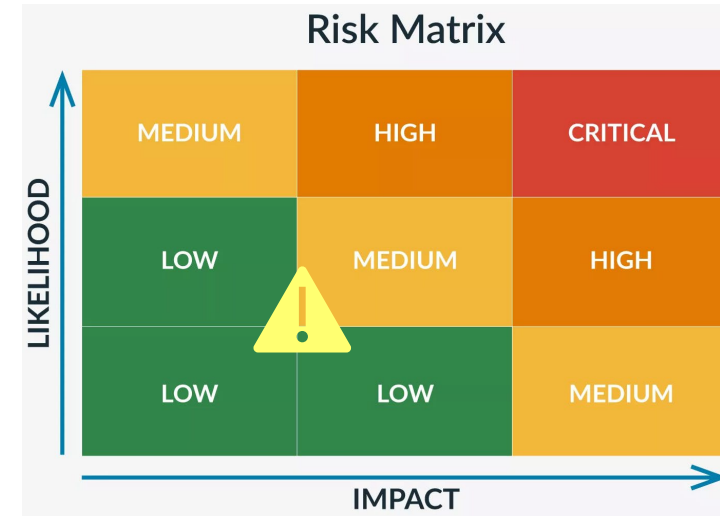
When conducting a risk assessment, also consider the effect of any potential mitigation measures; what measures could be put in place to either minimize the impact or decrease the likelihood of it occurring?

Step 5

Example: Leachate from a landfill could affect groundwater quality, resulting in significant impacts to human health and the environment.



For an improperly designed and located landfill, both the **likelihood** and **impact** of damage to human health and the environment are high.

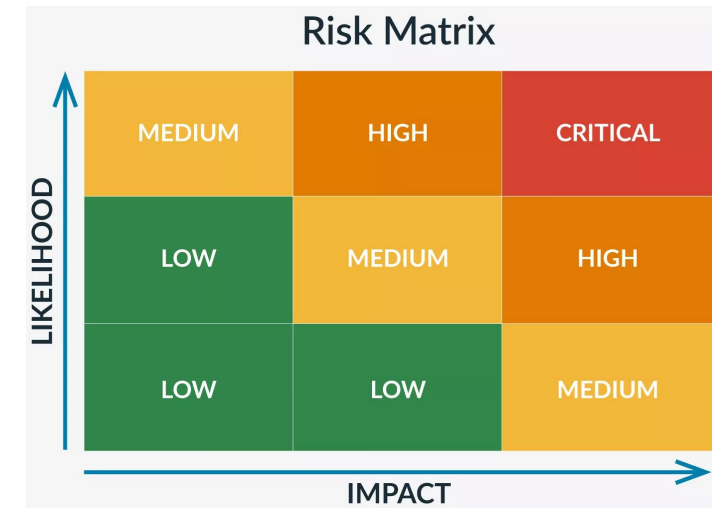


To mitigate risk, implementing an engineered landfill with liners, appropriate cover, and leachate collection systems can prevent leachate from entering groundwater.

Identifying Risks and Roadblocks

Possible roadblocks to consider when trying to develop a plan:

- Improperly designed dumps; not engineered, no leachate collection, unlined disposal sites
- Lack of culturally appropriate training/awareness programs delivered to First Nations
- Most sites are not operated to meet modern environmental standards
- Security of community sites; lack of fencing etc.
- Need for emergency planning
- Need for policy and regulatory frameworks
- Competing infrastructure priorities
- Lack of enforcement of First Nation Laws
- Lack of monitoring and evaluation
- Limited budgets
- Lack of record keeping
- Funding is needed to develop plans & programs
- High cost per capita of building and maintaining infrastructure



Share your Thoughts

How can you determine if a solid waste management approach carries too much risk?

How could a partnership help reduce risks?



Selecting the Most Viable Option

Based on feasibility and risk, what approach is most viable?
What makes this option the best fit for the community?

The best system for your community doesn't have to be the newest or most complex. It just needs to be one that:

- fits the needs of the community
- the community can easily navigate
- budgets can support
- staff can manage and maintain
- future generations can sustain
- the land can support

The most feasible waste management options are those that align with community priorities, available capacity, environmental goals, funding realities, and long-term operational sustainability.

Selecting SWM Options for your First Nation

Other Methods for Selecting Options:

- Rank from most to least preferred
- Use the waste hierarchy to prioritize preferred waste management practices
- Community Meetings to review evaluation and gather feedback
- Develop scoring system
- Omit or veto any options that would not receive community support or that are too costly to implement



A Note on Community Support

Gaining community support for a Solid Waste Management Plan is about helping people feel that the plan belongs to them.

Here are the key strategies that help build meaningful community support during Solid Waste Management Plan development:

- Early engagement
- Use clear plain language
- Include different voices
- Communicate consistently
- Show that feed back matters
- Focus on practical benefits
- Identify community champions
- Start with achievable wins/goals
- Connect the plan to community values
- Respect community protocol and timing



A Note on Partnerships



Partnerships can create major opportunities in SWM by reducing costs, sharing infrastructure, improving services, and increasing technical capacity.

But partnerships also involve shared responsibilities, long-term commitments, and potential risks.

A partnership should strengthen community control and service delivery, not create dependency or reduce flexibility.

What to evaluate before partnering:

1. Define your needs
2. Identify and screen potential partners
 - Services provided/Services shared
 - Cultural values
 - Reference checks & satisfaction ratings
 - Capacity and Reliability
3. Feasibility comparison
 - Set-up and ongoing costs
 - Distance and logistics
 - Risks and benefits
 - Cost vs. Value