



# Select Preferred Options

## Step 5

### Preparing a Solid Waste Management Plan



# Steps in Preparing a Solid Waste Management Plan



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### Select Preferred Options

- Evaluate options based on feasibility, impact, and alignment with community priorities
- Use the waste management hierarchy to guide decision-making
- Identify opportunities to build on or improve existing programs and services

# 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

# Consider Options

When considering and evaluating waste management options, it is important to consider:



**Impact** the option will have on reducing the solid waste burden on reserve, the environmental impact and community impacts



**Associated needs** (equipment, infrastructure, staff, ongoing operations and maintenance)



**Costs** (both for start-up, ongoing, and decommissioning, if necessary)



**Community Support** options that will be well received by leadership, staff, members etc.



**Education and training** (is this a new concept that will require education and training programs, community outreach to explain to your membership how it works and what their role is in supporting this option)



**Partnerships and agreements** entering an arrangement with a private partner or, municipal/provincial/federal governments

To help you narrow down your option you can use these tools: Feasibility Study & Risk Assessment

# 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

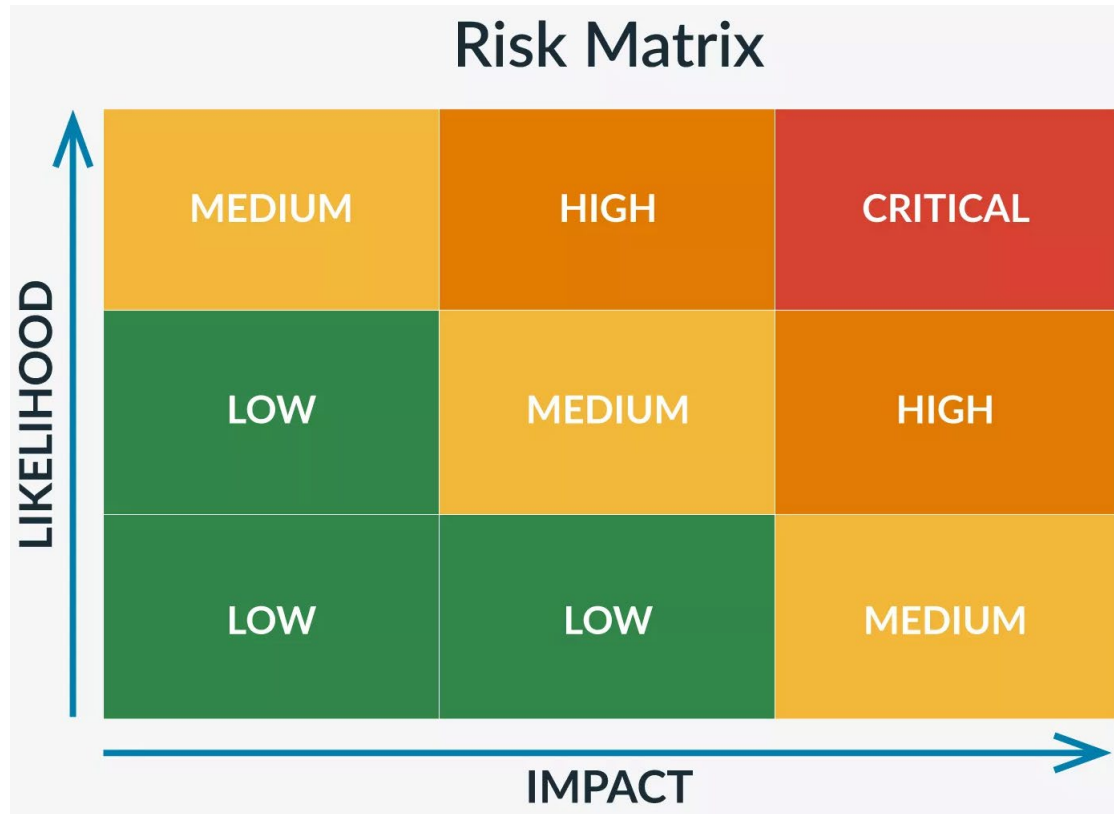
Feasibility Type	Key Question	Example Outcome
Technical	Is there a place to process recyclables?	Recycle facility 80 km away → borderline feasible
Financial	Can we afford capital + operations & management?	Grant covers 80% → feasible
Operational	Can staff run it?	Requires 1 additional operator → feasible 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

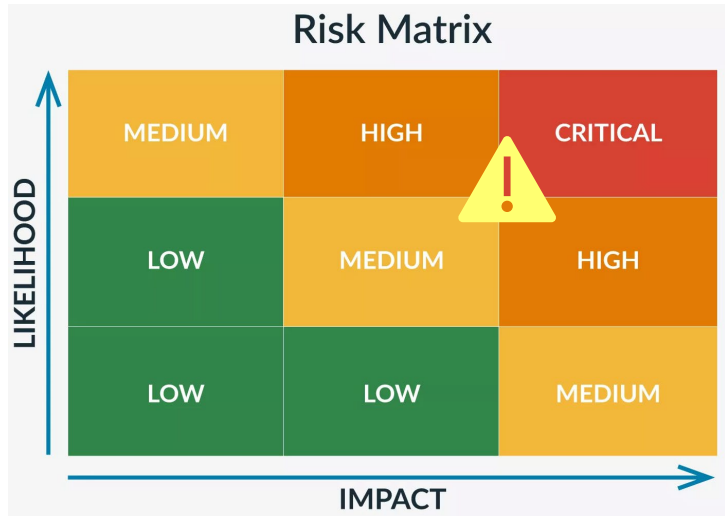


What is a **Risk Assessment**:

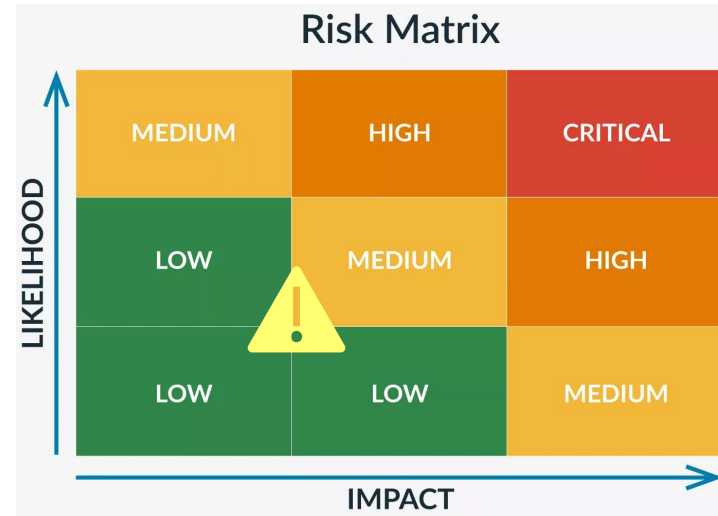
What **IMPACT** (what effect it could have) vs **LIKELIHOOD** that it could occur

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?

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.

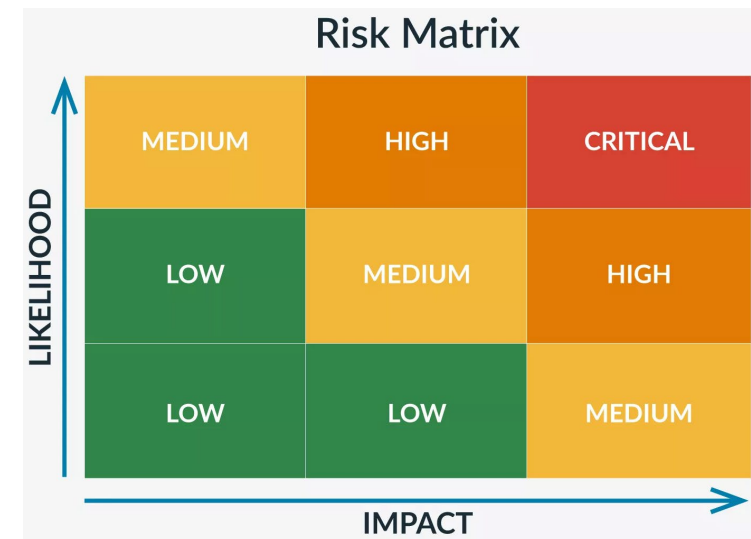


To mitigate risk, implementing an engineered landfill with liners, appropriate cover, and leachate collection systems can prevent leachate from entering groundwater.

# 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



# 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 isn't the most advanced one. It's the one that:

- Communities understand
- People actually use
- Staff can operate
- Budgets can support
- 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
- Utilize the waste hierarchy to prioritize preferred waste management practices
- Community Meetings to review evaluation and gather feedback
- Develop scoring system (similar to proposal evaluation spreadsheet; weighted scores for each category/consideration within each category)
- Omit/veto any that would not receive community support/participation or that are too costly to implement (what are the showstoppers within your First Nation that would prevent an option from succeeding)



# 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

# Planning Activity Instructions

Using the information from this presentation and the provided community profile, work with your table group to complete the corresponding activity questions for XYZ First Nation.

Discuss ideas, identify key considerations, and work together to make planning decisions in the best interest of the community.

Use the provided handout to record your group's responses for this activity.

# Activity: The New Waste Management Plan

## 5 The New Waste Management Plan

### 5.1 Selected Waste Management Approach

*What waste management strategies, programs, services, or approaches have been identified as priorities for the community?*

### 5.2 Alignment with Community Priorities

*How do the selected strategies support community priorities, goals, or identified needs?*

### 5.3 Feasibility and Implementation Considerations

*What factors may affect the feasibility, implementation, or long-term success of the selected strategies?*

### 5.4 Partnership Opportunities

*What partnerships or shared services may support implementation of the selected strategies?*

# Group Reflection

As a table group, discuss:

- What makes a SWM approach feel realistic or achievable?
- How might your community priorities influence planning decisions or selected approaches?
- What types of partnerships might help support the move from planning to implementation?