

SOLID WASTE MANAGEMENT TOOLKIT



THE FEDERATION OF CANADIAN MUNICIPALITIES

Website: www.fcm.ca

COMMUNITY INFRASTRUCTURE PARTNERSHIP PROJECT (CIPP)

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We encourage you to reproduce this toolkit and credit the Federation of Canadian Municipalities.

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LIST OF FIGURES

FIGURE	TITLE OF FIGURE	PAGE
1	Process	12
2	Working Across Jurisdictions – A Holistic Approach	13
3	Theory of Change	14
4	Self-assessment - Relationship	23
5	Sample Self-assessment Charts – Relationship	24
6	Self-assessment – Solid Waste and Service Agreements	27
7	Sample Self-assessment Charts – Solid Waste and Service Agreements	29
8	Composition of Solid Waste by Weight, Generated by Canadian Households	33
9	Differences in Solid Waste Management	36
10	Waste Management Hierarchy: Reduce and Reuse	41
11	Waste Management Hierarchy: Recycle	42
12	Waste Management Hierarchy: Recovery	46
13	Waste Management Hierarchy: Residuals	47
14	The Circular Economy	51
15	Waste Control Strategy	53
16	City of Ottawa Educational Resources	54
17	Northumberland Educational Resources	55
18	The Planning Wheel	63
19	Roadmap to Service Agreements	84
20	Agenda Items for Service Agreement Negotiations	85

LIST OF ACRONYMS

ACRONYM	TITLE
CCME	Canadian Council of Ministers of the Environment
CEDI	Community Economic Development Initiative
CIER	Centre for Indigenous Environmental Resources
CIPP	Community Infrastructure Partnership Project
EMA	Environmental Management Act
FCM	Federation of Canadian Municipalities
INAC	Indigenous and Northern Affairs Canada
MSW	Municipal Solid Waste
MTSA	Municipal-Type Service Agreements
RCAP	Royal Commission on Aboriginal Peoples
SWM	Solid Waste Management
UNEP	United Nations Environment Programme

NOTES ON TERMINOLOGY

INDIGENOUS/ABORIGINAL

In this Toolkit, we use the word *Indigenous*, rather than *Aboriginal*, even though both these words are used to describe the original inhabitants of what is now known as “North America”. Indigenous has become more commonly used, particularly in light of the *United Nations Declaration on the Rights of Indigenous Peoples*.

FIRST NATIONS

There are three Indigenous peoples that are recognized in the *Constitution Act, 1982*: Indians, Inuit and Métis. Section 35(a) of this Act states, “The existing aboriginal and treaty rights of the aboriginal peoples of Canada are hereby recognized and affirmed.” Legally recognized Indians often self-refer as First Nations but some do not. Some are adamant that their name is only according to their own language. For example *Onkwehonwe* is how the Mohawk refer to themselves, not First Nations, or Indigenous, or Aboriginal. In the Ojibway language, *Anishinaabemowin*, they refer to themselves as *Anishinaabe* for one person and *Anishinaabeg* in the plural, which translates into English as “human being”. “First Nation” can also mean the reserve, or the person(s) from that reserve – it never refers to the Inuit or Métis.

HOW TO USE THIS TOOLKIT

The intended audience of this Toolkit is elected officials and staff from both First Nations and municipalities who are interested in working together to meet their solid waste management needs.

This Solid Waste Toolkit is designed to be used in conjunction with the *First Nations-Municipal Community Infrastructure Partnership Program: Service Agreement Toolkit (2nd Edition)* (*Service Agreement Toolkit*). The *Service Agreement Toolkit* focusses on water agreements, but also contains other useful information. This includes agreement fundamentals, negotiation readiness tips, funding sources, and differences between First Nation and municipal governments. Rather than repeat all that information here, readers will be referred back to the *Service Agreement Toolkit* from time to time for more information on related issues.

To help readers find the sections of the *Service Agreement Toolkit* that are referenced in the Solid Waste Toolkit, the unit and page numbers of the *Service Agreement Toolkit* are provided. Links to the exact sections on certain highlighted words or phrases, also called hyperlinks, are also provided. By clicking on the hyperlink, the reader will be taken directly to the section referenced. However, it might take a long time to open up the *Service Agreement Toolkit* each time from your computer browser. Thus, we recommend the reader keep a copy of the *Service Agreement Toolkit* open on the computer at the same time as reading this Toolkit. The *Service Agreement Toolkit* is available for free [on the FCM website](#). It is available as a full document, or by unit. It can be downloaded to your computer and opened that way as well.

ABOUT US

Beginning in 1901, the Federation of Canadian Municipalities (FCM) has been the national voice of municipal governments, and represents 90 per cent of Canada's municipal population. United, we partner constructively with the federal government, influence federal policy and programs, and provide support to municipalities through innovative funds and programs. Members include Canada's largest cities, small urban and rural communities, and 20 provincial and territorial municipal associations. Municipal leaders from all parts of Canada assemble annually to establish FCM policy on key issues. FCM's job is to convene, listen, and unite members around common issues. For more information, please visit the FCM website at www.fcm.ca

FCM has recognized that municipalities and First Nations often struggle with similar issues: poor infrastructure, insufficient funding, and inadequate capacity to keep our communities healthy and strong. The Community Infrastructure Partnership Project (CIPP) CIPP was established in 2010 to help address these challenges by providing support for improved relations between First Nations and municipalities through the establishment of sustainable and equitable municipal-type service agreements (MTSA). The project aims to foster relationships between First Nations and adjacent municipalities across Canada and support the development of mutually-beneficial community infrastructure service agreements. CIPP delivers neutral, third-party facilitation to strengthen relationships and capacity at the local level between First Nations and municipalities. Guided by principles of neutrality, reconciliation, and equity, we bring communities together in a safe place for a respectful exploration of opportunities. CIPP is funded by Indigenous and Northern Affairs Canada (INAC) through the auspice of the First Nations Solid Waste Management Initiative announced in Budget 2016 by the Government of Canada, which will invest \$409 million dollars over five years to support First Nations in developing sustainable waste management systems. In 2016-2018 the project is being implemented nationally by the Federation of Canadian Municipalities and in conjunction with the Center for Indigenous Environmental Resources (CIER) in Manitoba. You can learn more about CIPP at www.fcm.ca/cipp.

INTRODUCTION

On average, Canadians throw away almost 1,000 kilograms or over one ton of garbage per person per year. Based on best available knowledge and waste audits, a community member on reserve produces an average of 1.5-1.7 kg of waste per day - roughly 30% less per capita than that of someone living off reserve. Garbage fouls our drinking water, injures and kills wildlife, generates greenhouse gases, and poisons the air when they burn. We cannot in good conscience leave future generations a hazardous mound of refuse as their inheritance.

The conveniences of modern life bring with them mountains of garbage. On average, Canadians throw away almost 1,000 kilograms or over one ton of garbage per person per year. Based on best available knowledge and waste audits, a community member on reserve produces an average of 1.5-1.7 kg of waste per day - roughly 30% less per capita than that of someone living off reserve. Over two thirds of it ends up in a land fill site. The other third is recycled or ends up littering the landscape. Garbage is the part of this lifestyle that no one really wants to think about too much. As a responsible society we must, however. Garbage fouls our drinking water, injures and kills wildlife, generates greenhouse gases, and poisons the air when they burn. We cannot in good conscience leave future generations a hazardous mound of refuse as their inheritance.

As they both bear the brunt of responsibility at the front lines of solid waste management, First Nations and municipalities vastly improve their chances of safely dealing with garbage by working together. If municipalities and First Nations work entirely independently of each other, they may negatively affect each other or miss opportunities to provide greater benefits to their communities. Through cooperative action, municipalities and First Nations can, among other things:

- Reduce costs;
- Create local jobs;
- Minimize the impact on the environment;
- Harmonize land use plans;
- Invest in advanced technology they could not afford independently; and
- Build greater respect and understanding for each other's unique cultures, ways of life and governance structures.

Working in partnership is key. Many First Nations and municipalities are working together across Canada to improve solid waste management and serve as an example for others.

- In British Columbia, Huu-ay-aht First Nation, Alberni Clayoquot Regional District and Bamfield Marine Research Centre are working together to consolidate solid waste collection;
- In Manitoba, The Municipality of Clanwilliam Erickson, Municipality of Harrison Park, Rolling River First Nation, Keeseekoowenin First Nation, and Riding Mountain National Park have conducted a joint feasibility study and are planning the construction of a new regional waste management centre; and
- In Ontario, Constance Lake First Nation and the Town of Hearst are negotiating a joint municipal type service agreement on solid waste with a view to signing it as soon as possible.

This Solid Waste Toolkit is intended to assist First Nations and municipalities as they explore their own solid waste management challenges and think about ways to address them through joint partnerships. The toolkit walks the reader through the process from relationship building, to developing a solid waste plan, to drafting a service agreement, to options for funding. Information about developing joint solid waste management agreements and tools developed by the FCM Community Infrastructure Partnership Project (CIPP) are provided, including:

- An overview of the process for developing a joint solid waste management plan and service agreement (Chapter 2);
- Relationship building (Chapter 3);
- Information on the how's and why's of solid waste management (Chapter 4);
- Guides for developing and examples of solid waste management strategies (Chapter 5);
- Tips for developing joint solid waste service agreements and a template agreement (Chapter 6); and
- Funding opportunities (Chapter 7).

Through seven years of experience supporting relationship building between First Nations and municipalities, we have learned that the best agreements are built upon respectful and trusting relationships between communities. Through improved relationships, First Nations and municipalities develop lasting bonds that support long term cooperation on solid waste management. This may be a new way of doing business for some communities. Unaccustomed to working across jurisdictions, some communities struggle to get past the stage of good intentions.

In the often cited words of Chief Justice Antonio Lamer from the 1997 Delgamuukw Supreme Court decision, "Let us face it, we are all here to stay."¹ Recognizing this, it is incumbent on us to learn about each other, find new ways to work together, and jointly meet our obligations to care for each other and the land on which we all depend. FCM wishes you great success as you embark on your joint efforts to improve solid waste management in your communities. We hope the resources provided throughout this Toolkit will help to guide your community to the goal of a strong solid waste management system and improved relations between neighbours. Please share your success stories with us. Through cooperation, we can leave a legacy of harmony and health for our children and all our relations.

CHAPTER 2

OVERVIEW OF THE PROCESS FOR DEVELOPING A JOINT SOLID WASTE MANAGEMENT PLAN AND SERVICE AGREEMENT

So, you want to get to know your neighbours better and maybe work together on some common issues. How do you start?

It is as simple as inviting your neighbour to coffee or lunch to talk about the issues you are dealing with in your community and what your hopes are for the future. Together, determine if you share common concerns and consider opportunities for collaboration. As you get to know each other and the issues better, you can figure out how you can work together to reach common goals. During this time, it is recommended that your community members be consulted to gather their views. This also can serve as an opportunity for education to get them ready for any changes that might be coming.

Then, when you are ready, start to draft an agreement that spells out what you will work on together, how you will work together, and all the other details of your arrangements. A template that you can adapt to your particular needs is provided in Chapter 6. There are also [sample agreements](#) signed by other communities that may serve as inspiration and are available on the CIPP webpage. Once the parties are satisfied with the draft, it is presented to each council for further examination. Revisions may be required sending the parties back to the discussion table. With perseverance and good intentions, a mutually satisfactory agreement is adopted by both councils. At this point, take a well-deserved pause to celebrate your success before launching into implementation.

While the process sounds simple enough, working together to make joint decisions and share infrastructure is a challenge, not the least because it requires cross-jurisdictional cooperation. How can you respect the independence of each First Nation and municipality, while facilitating common action? How do municipalities exercising delegated provincial authority and First Nations, operating under self-government agreements or federal legislation coordinate their activities? The solution

is to adopt a holistic approach. As Figure 2, below, shows, First Nations and municipalities have their own mandate, jurisdiction, and authority represented by the two halves of the circle. Yet, we are each part of the overall whole as represented by the circle itself. We are all connected through kinship, friendship, and our mutual reliance on the social, economic, and environmental elements of the world around us.

**FIGURE 1:
THE PROCESS**

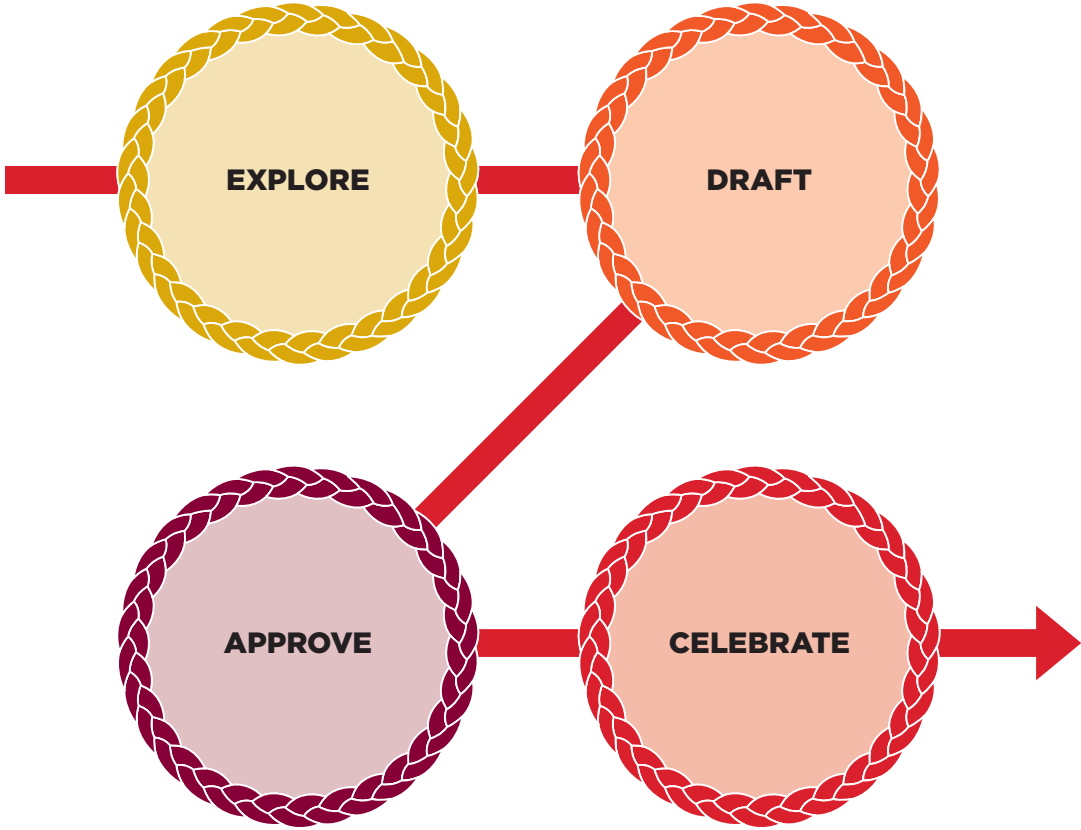


FIGURE 2: WORKING ACROSS JURISDICTIONS - A HOLISTIC APPROACH

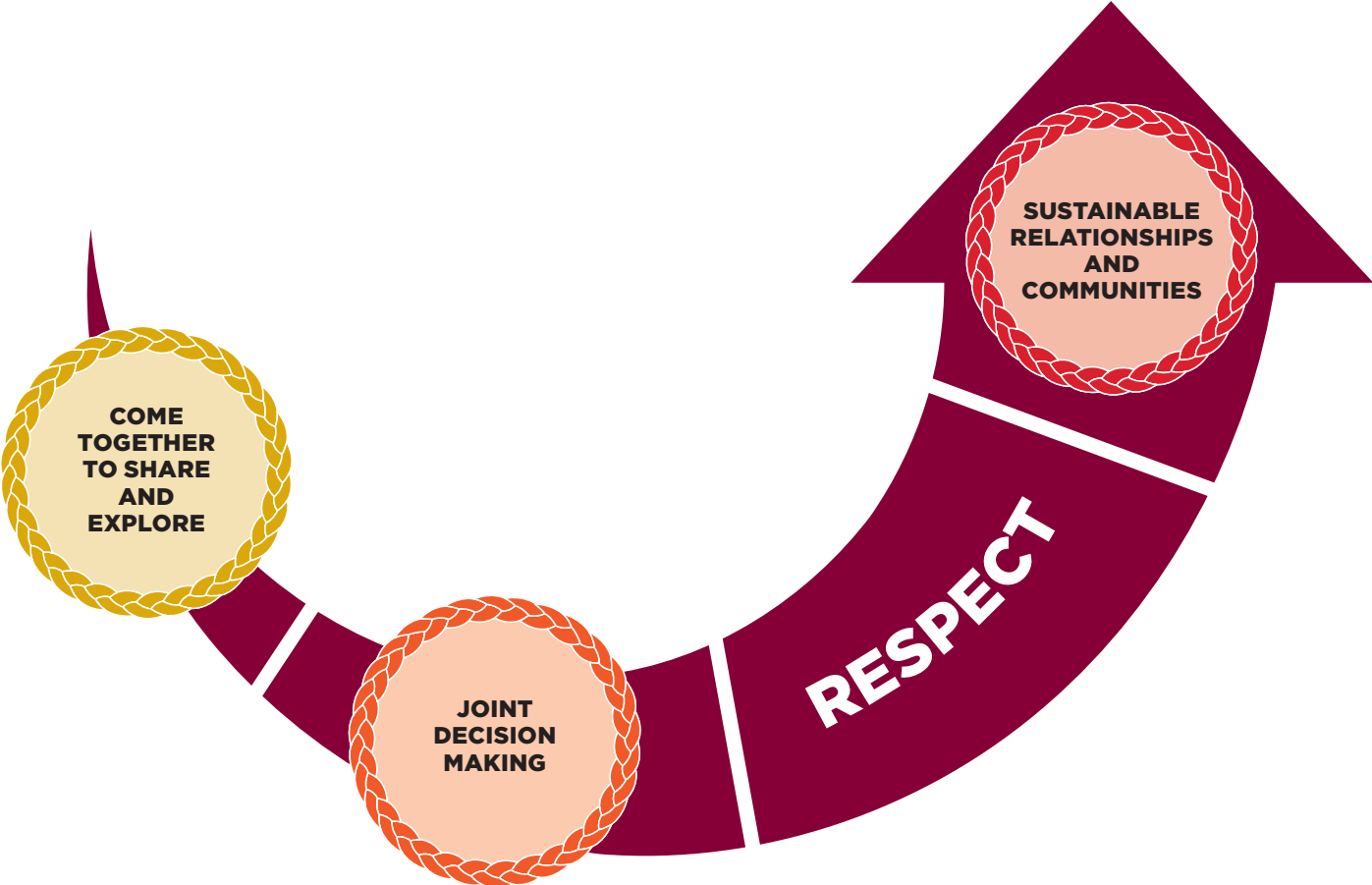


A holistic perspective is the philosophical foundation of many traditional Indigenous knowledge systems and one that is increasingly embraced by other Canadians. It recognizes the intimate interconnectedness among humans and all other living and non-living beings. You will find different spellings from time to time—holistic or wholistic—but both denote a balance of intellect (mental), beliefs (spiritual), values (emotional), and the physical world, such as the balance between humans and the environment. Blending Indigenous philosophies, experience, decision making processes, and ways of working with those of other Canadians will generate new frameworks for action that are respectful and embrace multiple perspectives. These new ways of working together, created through respectful dialogue, will facilitate communications and ultimately make each community stronger.

Whether your main objective is a new solid waste site, improved access to drinking water, or coming to each other's aid in times of emergency, we recommend you start by building a foundation of

trust and respect. Build relationships at the political and staff levels so that elected officials and staff get to know each other across community lines. Invite your neighbours to your parties and celebrations. Educate yourself about your neighbour. As your knowledge and respect for each other grows, you will build the necessary trust to share views through frank and honest conversation about matters that potentially affect the relationship. A strong, trusting, respectful relationship will withstand the natural stresses and strains that come with implementation of the agreement. The infrastructure you are sharing is a long term investment. The relationship that underpins the agreement has to be considered a long term investment as well; an investment in reconciliation and nation building. An agreement built on an unstable relationship is built on quicksand and will not last. A commitment to a long term relationship will insure your agreement will last at least as long as the infrastructure. Sustainable relationships support sustainable infrastructure projects, which in turn support sustainable communities.

**FIGURE 3:
THEORY OF CHANGE**



As respect for each other grows, communities can build mechanisms for joint decision-making, the means by which they can come together in a respectful and equitable manner to generate consensus positions on issues of common interest. So, what is joint decision-making? Simply put, it is a process of discussing issues and reaching consensus on a course of action. These decisions are then implemented by each jurisdiction according to its own laws, policies, and processes. The agreements that the partners work on are the conclusion of joint decision-making. By exercising dialogue principles—which we will discuss later—each community jointly explores the “ins and outs” of an issue. They describe what an issue means to them and then listen to their partner until an understanding and agreement is reached.

In some communities, there exist formal structures for this, such as the [Eeyou Istchee—James Bay Regional Government](#), a half-Cree, half-Québécois government that manages land that falls under the joint jurisdiction of the Eeyou Istchee and local Québécois government. [The Alberni-Clayoquot Regional District](#) is another example. Initially it was established as a solely municipal government structure within the traditional territories of ten First Nations on Vancouver Island. With the signing of the modern Maa-nulth Final Agreement (Treaty),

the treaty First Nations also serve on the Regional District. At present Councillor John Jack, a member of the Huu-ay-aht First Nation and signatory to the Maa-nulth Treaty, serves as the District Chair of the Alberni-Clayoquot Regional District Board of Directors. Other communities or groups of communities have adopted friendship type agreements that are not legally binding but set out expectations of each community and identify areas of common interest. [Examples](#) are available on the CIPP webpage. Yet others have adopted less formal arrangements, for example agreeing to meet at a Council-to-Council level regularly throughout the year or as the need arises.

You may want to start small. A working group consisting of one or two elected officials and senior staff from the First Nation and municipality could start this process, working together on solid waste management. As confidence grows and this group gets comfortable working together, consider the value of creating an ongoing mechanism for joint decision making on a variety of issues. Solid waste is likely only one of many issues on which First Nations and municipalities could collaborate. There is also value in regular communications just to share news, stay in touch, and continue to build the relationship. Suggestions for relationship building are explored further in Chapter 3 below.



CHAPTER 3

RELATIONSHIP BUILDING



As noted in Chapter 2, a strong relationship will help create the conditions for a successful agreement. You may be tempted to jump immediately into a discussion about solid waste management. After all, that is what you are there to talk about. But relationship building takes time, time worth investing to ensure you understand each other well, learn to trust each other, and build a personal connection. A solid relationship is a precondition to a sustainable agreement. This chapter provides some practical advice on developing a cross cultural relationship and provides several activities communities can use to build greater awareness and improve relations between neighbours.

One area where we have learned that First Nations cultures and municipal cultures often differ is their expectations about the importance of relationships. As Shawn Wilson puts it in his book *Research Is Ceremony – Indigenous Research Methods*, “relationships do not shape reality, they are reality.”² Not all, but generally speaking, First Nations people expect to have a more personal relationship with

Breaking the ice is often the hardest part. Start with a relaxed atmosphere, share a meal together, build time into your agenda to mingle and chat. Think of this less as a business transaction and more as a chat over the back fence with your neighbour.

people they are doing business with than is often the case in municipal culture. As the Truth and Reconciliation Commission found, “For over a century, the central goals of Canada’s Aboriginal policy were to eliminate Aboriginal governments; ignore Aboriginal rights; terminate the Treaties; and, through a process of assimilation, cause Aboriginal peoples to cease to exist as distinct legal, social, cultural, religious, and racial entities in Canada.”³ Due to this, First Nations may be hesitant to collaborate until strong, trusting relationships are built. Municipal officials and staff often take a faster paced, more business-like approach that does not necessarily include time for relationship building. Municipal officials and staff that relax, let down their guard, and take time to listen, demonstrate through these actions that they welcome new people, ideas, and ways of doing things. Breaking the ice is often the hardest part. Start with a relaxed atmosphere, share a meal together, build time into your agenda to mingle and chat. Think of this less as a business transaction and more as a chat over the back fence with your neighbour.



Likewise, municipal officials and staff that take time to educate themselves about the history of Indigenous – Canadian relations will improve relations with their First Nations neighbours faster. Because some issues, like residential schools, are painful topics that are difficult to speak about in public, doing some homework will show respect and sensitivity. [The Royal Commission on Aboriginal Peoples \(RCAP\)](#) and the recent report from the [Truth and Reconciliation Commission \(TRC\)](#) are two excellent sources of information and are a good place to start. The Big City Mayors Caucus of FCM has released [Pathways to Reconciliation](#), a tool for improving Indigenous – municipal relations. These documents are a rich source of information about the history of relations between Indigenous peoples and other Canadians and offer a grand vision for change. There is a growing body of resources where municipal officials and staff can learn more about Indigenous peoples, including cultural sensitivity courses and a national Indigenous television channel (Aboriginal Peoples Television Network). People are generally happy to share their culture with others and are often

pleased to be asked. If you have a question, ask, but be respectful in how you ask. Inviting Indigenous teachers, Elders, and community leaders to your council or staff meetings is a great way to learn more about your immediate neighbours. Learn about and observe local protocols as a way of demonstrating respect. Ask if you can attend community functions hosted by your neighbour and invite them to yours.

This Toolkit provides several activities that can form the basis of a meeting or part of an agenda for your next First Nation – municipal meeting. They are also available on the [CIPP Webpage](#). Each exercise has been tested many times with First Nations and municipalities across Canada. These exercises will encourage communication, deepen understanding, and spark new ideas and ways of looking at the world.

EXERCISE ONE: YOUR SHARED HISTORY

First Nations and municipalities are not always aware of each other's history. The purpose of this exercise is to share and explore your communities' histories for better mutual understanding. Knowing where we came from can sometimes help us know where we want to go. As partners and neighbours sharing a territory, your histories are bound to intersect.

For this exercise you will need large sticky notes or scrap paper and tape and a large blank wall. It will take about one and a half or two hours to complete this exercise depending on how much time it takes to complete the timeline and hold a discussion on the results.

STEP 1

The exercise starts with each community working independently - representatives of the First Nation in one group and the representatives of the municipality in a separate group.

Each community identifies the significant historic events that have shaped it.

What are the most significant cultural, social, political, environmental events in your communities' history that are important to share - be sure to capture anything 'joint' between your communities as well.

Examples might include treaties, municipal incorporation, significant social events, any major disasters in the region, dates of service agreements, etc.

Write one historic event and the date of that event per sticky note or piece of paper.

We recommend giving yourselves a time limit of no more than half an hour for this portion of the exercise.

STEP 2

Once time is up, hang the notes on the blank wall starting with the oldest event on the left side of the wall and each subsequent event following that to the right, up to the present.

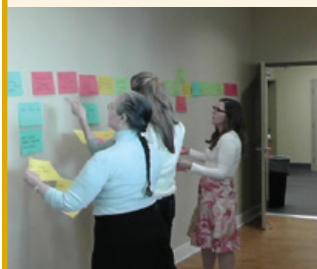
Both the First Nation and the municipality use the same wall space to hang their notes.

Post each event in its historical order, mingling First Nation and municipal events along the timeline.

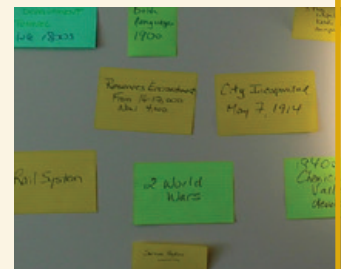
If two things happened at roughly the same time, post them one above the other.

The following photos show the construction of a timeline.

This should only take a few minutes.



Building the timeline



Sample timeline



STEP 3

This is where the real fun begins. Once the timeline has been completed, step back and take a look.

Have one or more individuals from each community read out the historic event and explain why it is an important milestone for their community.

Discuss what you have learned together.

Ask questions for further clarification.

Explore the implications of these events on your relationship moving forward.

STEP 4

Talk about the future. What does a new relationship hold for the future?

What history will you create together?

Perhaps the signing of a new service agreement or the opening of a new recycling facility are events that will be marked on the timeline in the future.

We encourage you to try this exercise with a number of different groups.

In the CIPP workshops we do it with elected officials and senior staff.

But it can also be used in schools, at community events, meetings of Friendship Centres and church groups, etc.

It is a great way to involve youth and elders.

EXERCISE TWO: PRINCIPLES FOR POSITIVE RELATIONS

This exercise encourages partner communities to explore the four principles of reconciliation identified in RCAP. RCAP was tasked in 1991 with investigating the relationship between Indigenous and non-Indigenous peoples in Canada. It is the most thorough exploration of Indigenous realities in Canada. RCAP made 440 recommendations for improvements.

Below are a series of quotes from the RCAP Report that explain each principle. Divide into small mixed First Nation and municipal groups of about four people each to discuss one or more of the principles. Consider what the principle means, why is it important, what could communities do to implement this principle, how would this principle affect First Nation – municipal relations, etc. Each small group could make notes of their comments and report back to the larger group.

PRINCIPLE #1: MUTUAL RECOGNITION

“This calls on non-Aboriginal Canadians to recognize that Aboriginal people are the original inhabitants and caretakers of this land and have distinctive rights and responsibilities that flow from that status. At the same time, it calls on Aboriginal people to accept that non-Aboriginal people are also of this land, by birth and by adoption, and have strong ties of affection and loyalty here. More broadly, mutual recognition means that Aboriginal and non-Aboriginal people acknowledge and relate to one another as equals, co-existing side by side and governing themselves according to their own laws and institutions. Mutual recognition thus has three major facets: equality, co-existence and self-government.”

PRINCIPLE #2: MUTUAL RESPECT

“From mutual recognition flows mutual respect... the quality of courtesy, consideration and esteem extended to people whose languages, cultures and ways differ from our own but who are valued fellow-members of the larger communities to which we all belong. In this sense, respect is the essential precondition of healthy and durable relations between Aboriginal and non-Aboriginal people in this country.”



PRINCIPLE #3: SHARING & COOPERATION

“Partners must recognize each other’s basic rights, including, in this instance, rights of self-government and rights of equality as peoples. They must also display respect for their respective cultures and institutions... Our histories, public institutions and popular cultures must give greater recognition to what is often unacknowledged: the relation of sharing that is at the foundation of the Canadian federation and its economy.”

“Both parties need to be in a position to engage in exchanges on an equal basis. Meaningful sharing is not possible under conditions of poverty and dependence...”

“...Sharing must take a form that enhances, rather than diminishes, people’s capacity to contribute to the whole.”

PRINCIPLE #4: MUTUAL RESPONSIBILITIES

“Ideally, Aboriginal peoples and Canada constitute a partnership in which the partners have a duty to act responsibly both toward one another and also toward the land they share. The principle of mutual responsibility, then, has two facets...[First] Since each partner has the capacity to act in a way that affects the prosperity of the overall enterprise, each partner is also liable to suffer from the mistakes or wrongdoing of the other partners. This mutual vulnerability on the part of the partners gives rise to mutual obligations. By virtue of this relationship, each partner has an obligation to act with the utmost good faith with respect to the other partners on matters covered by their joint endeavour.... [Second] Aboriginal peoples and Canadian governments both have an obligation to act with the utmost good faith toward each other with respect to the lands in question.”

EXERCISE THREE: SELF-ASSESSMENTS

There are two parts to this exercise – a self assessment of your relationship and knowledge of your neighbour and a self assessment of your knowledge of solid waste management and service agreements. They can be done together or separately. Each community first conducts their own assessment and then shares the conclusions with their partner community. Together you can jointly explore knowledge gaps and issues that will foster the growth of a positive relationship and sustainable solid waste management.

PART A: RELATIONSHIP

The purpose of this exercise is to better understand how your partner community views your relationship and identify your level of understanding of your neighbour's history, culture and governance practices. It involves exploring in your separate communities what you each know about the other and how you feel about the relationship and then sharing your conclusions with your neighbour for frank discussion.

STEP 1

Start by creating identical graphs, one for each First Nation or municipality participating in the exercise.

Draw a cross in the middle of the page and label each of the four arms of the cross as culture, governance, relationship, or history.

Subdivide each arm with a scale of zero to ten starting with zero at the centre point and ten at the outside.

See the picture below:

STEP 2

Each community participating gets one chart. Within your community, discuss the questions provided below and decide what score to give yourselves on a scale of zero to ten (zero being low and 10 being high).

This is a community score, so if you think lots of people in your community know about something you can rate yourself high on that point, but if few people in your community would know about something rate yourselves lower.

The sub questions under each main question are intended to help prompt discussion and help explain the main question.

They do not have to be answered individually. Record your answers on the chart.

When you are satisfied with your answers, draw a line between the dots on your chart like the example below.

**FIGURE 4:
SELF ASSESSMENT:
RELATIONSHIP
GRAPH**

SELF-ASSESSMENT: RELATIONSHIP

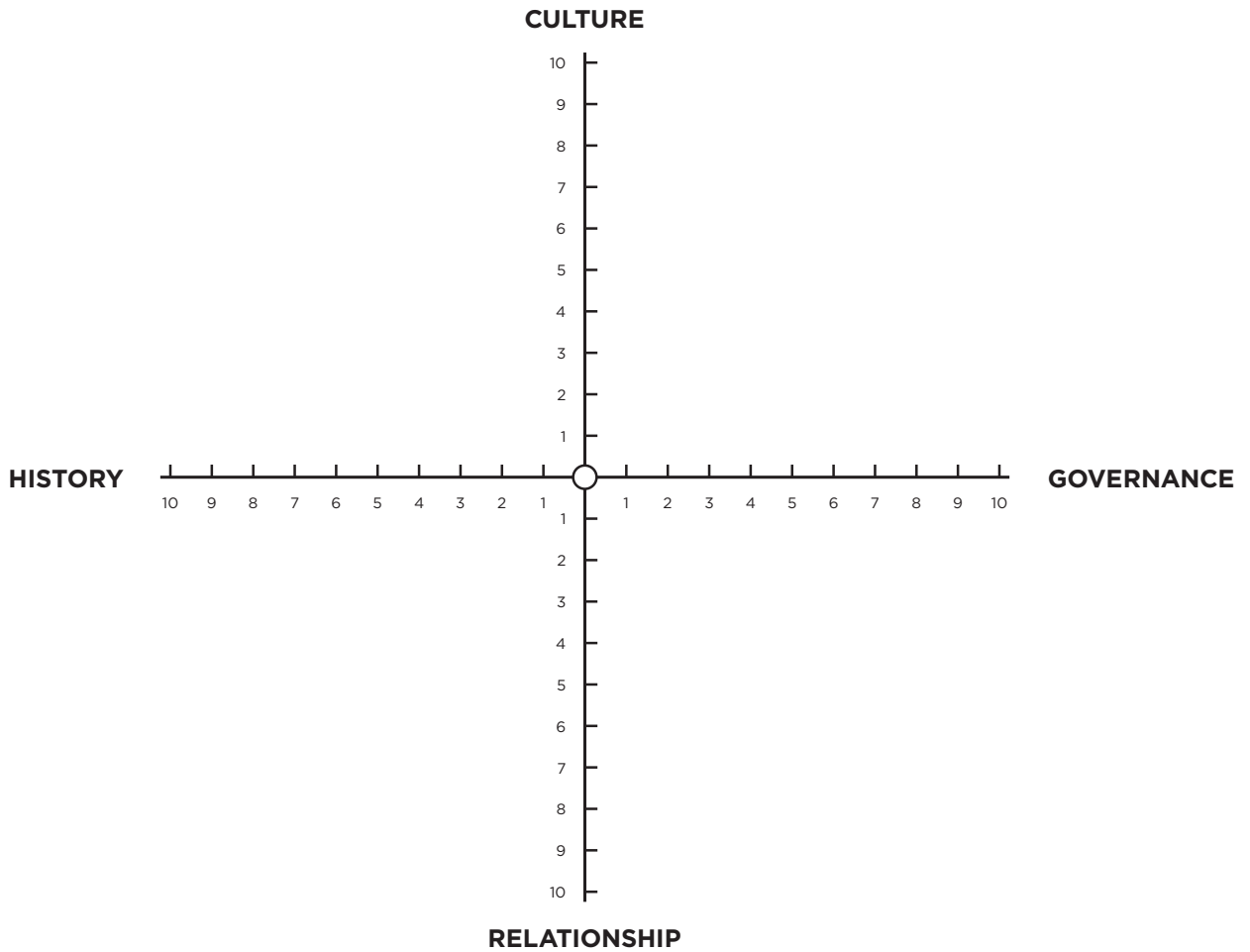
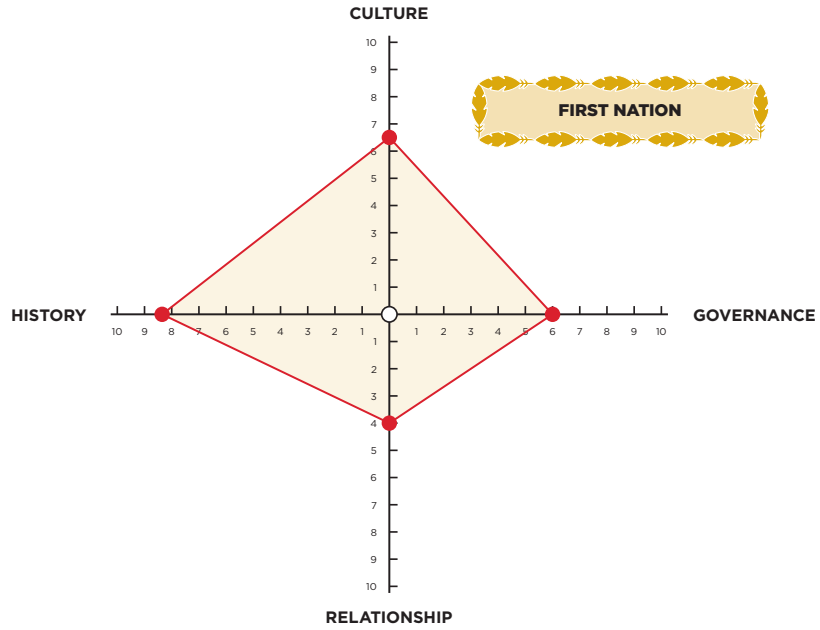
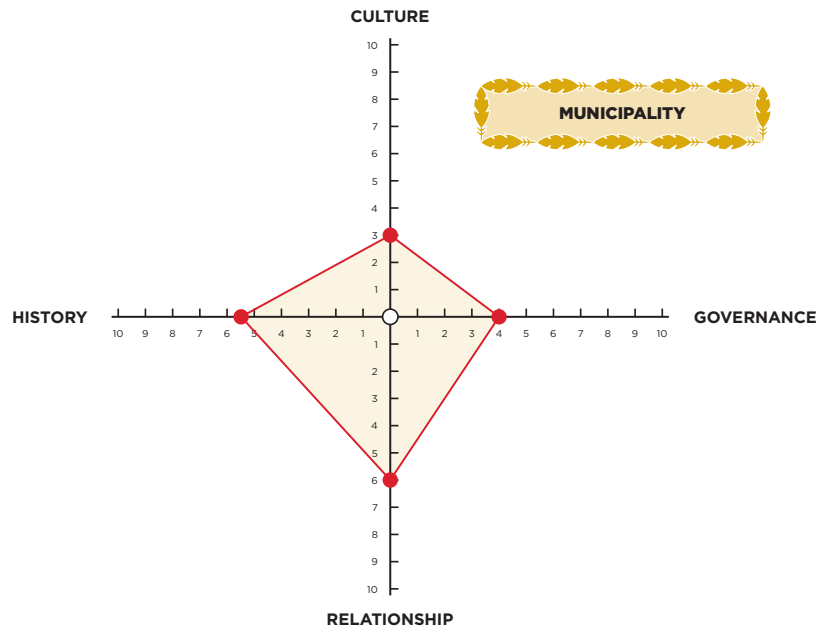


FIGURE 5: SAMPLE SELF-ASSESSMENT CHARTS: RELATIONSHIP

SELF-ASSESSMENT: RELATIONSHIP



SELF-ASSESSMENT: RELATIONSHIP



1. Culture: How well do you know your partner's culture and cultural practices?

For example:

- the language;
- the traditional foods and drinks;
- how life events are recognized and celebrated (i.e. marriage, birth of child, death);
- What is the cultural protocol of the community;
- How are elders participation recognized and respected;
- What is sacred or taboo (i.e., gravesites are sacred, desecration of gravesites is taboo)?

2. Governance: How well do you know the laws, government structure, and decision making process of your partner community?

For example:

- Where your community partner gets its authority to govern;
- Where your community partner gets its financial resources;
- Do community members in your partner community have a role in decision making and if yes, what is that role;
- What subjects can your partner community make laws about or what areas of jurisdiction do they have;
- What is the relationship of the government of your partner community with other levels of government?

3. Relationship: What is the strength of your relationship with your partner community?

(For this question 0 means a very poor relationship, 10 means a very good relationship.)

For example:

- Have you ever attended a meeting of your partner's council;
- Does your political leadership meet regularly with your partnering community's leadership;
- Do your communities participate in social or civic events together (i.e. hockey games, community groups, church, school, etc.);
- Do your citizens feel welcome and safe in your partner's community?

4. History: How well do you know the history of your partner community?

For example:

- Do you know when the municipality was incorporated or when the band was established;
- How much do you know about historical events within your partner community (i.e., signing of treaty, opening and/or closure of major businesses or industries, when a school, recreation centre, or hospital opened or closed);
- How much do you know about important historical figures from your partner community?

STEP 3

The final step is to share your community responses with your partner community and discuss.

Draw a line between the dots on your chart, then hang the charts side by side where everyone can see them.

Discuss the results between your communities.

What are the differences and similarities between the charts?

Where can you do better?

Does your partner have knowledge that can help fill gaps on your charts?

Where can you work together to better understand each other?

Brainstorm ideas for future training or education and make a personal commitment to learn more.

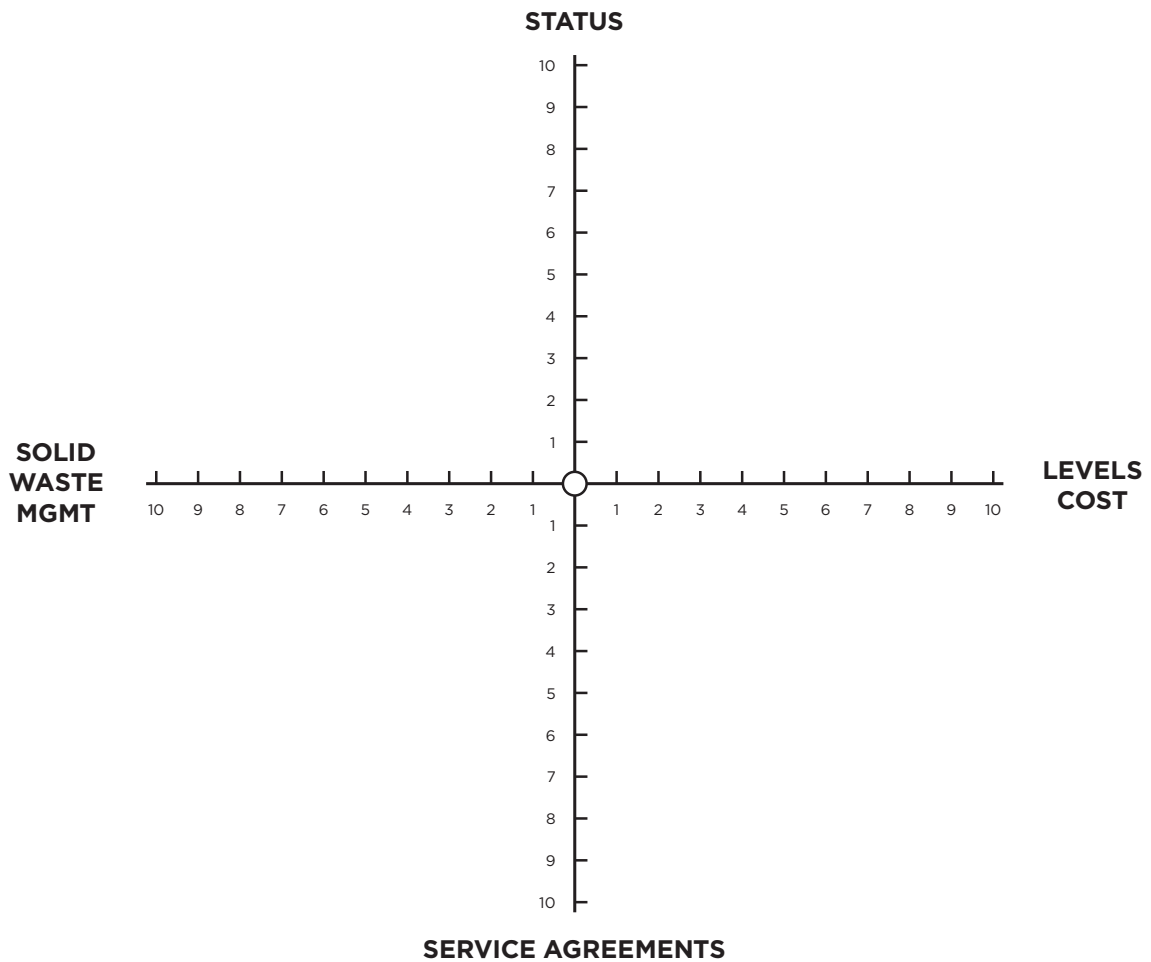
PART B: SOLID WASTE MANAGEMENT AND SERVICE AGREEMENTS

The purpose of this exercise is to better understand your current level of understanding of solid waste management and service agreements. This is a quick way to identify solid waste management problems that need to be addressed or knowledge gaps that may require additional research, training, or education. The process is the same as for the relationship self-assessment above – divide by community, answer the questions and complete the chart, and discuss your conclusions together. The questions are different and the arms of the cross are labeled: status, solid waste management, levels and costs, and service agreements. Also, this time you are looking at what your council and staff know about an issue, not your community generally. For example, you would not expect everyone in your community to know about the complexities of running a solid waste site, but someone on staff should know. In addition, in this exercise you are focussing on your own community, not what you know about your partner. The questions follow the sample chart.



**FIGURE 6:
SELF ASSESSMENT:
SOLID
WASTE AND
SERVICE
AGREEMENTS**

SELF-ASSESSMENT: SERVICE AGREEMENTS



1. What is the state of solid waste management currently in your community?

For example:

- Do you have an open, unregulated land fill site;
- Do you burn garbage;
- Does your community participate in any community waste management awareness campaigns;
- Do you have a fenced and supervised land fill site;
- Do you have garbage pickup service in your community;
- Do you have recycling and what are you recycling i.e. pop cans, paper, electronics, tires;
- Do you collect and compost organic materials;
- Do you have a reuse centre;
- Do you have a problem with illegal dumping?

2. How much do you know about solid waste management?

For example, do you know:

- How to properly operate, maintain and close of a land fill site;
- How many land fill sites are in your territory;
- What you recycle currently and what else you might be able to recycle;
- How to manage a large scale composting system;
- How much illegal dumping might be happening and why;
- About alternative solid waste management systems such as gasification, or incineration?

3. How much do you know about levels of service and the cost for services?

For example, do you know:

- how much waste your community produces;
- What types of waste is being produced (i.e. household, hazardous, commercial, hospital, etc.);
- How the size or make up of your population is going to change within the next 10-20 years;
- How much it costs to operate a land fill site, transfer station, recycling facility or composting system;
- The range of pricing for solid waste management services;
- The return rate on recycled materials (i.e. how much do you get for a ton of aluminum cans)?

4. Do you know what to include in a service agreement on solid waste?

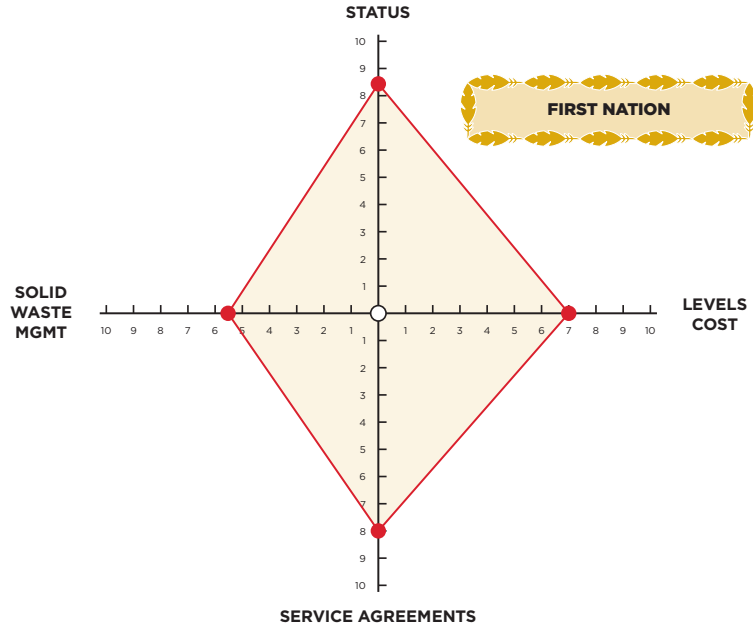
For example, do you know:

- If anyone in your group has ever negotiated a service agreement before;
- What services you wish to share and who will supply what;
- If your community needs additional infrastructure to be developed or upgraded and who would do that work;
- Where funding for the capital investment or cost of services will come from;
- What to do if a dispute with your partner arises in the implementation of the agreement?

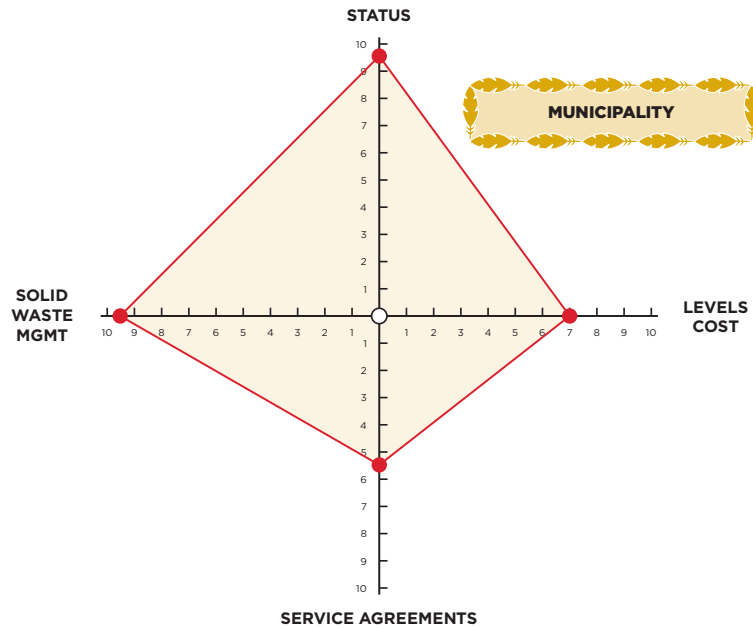
Below are sample completed charts.

FIGURE 7: SAMPLE CHARTS: SOLID WASTE AND SERVICE AGREEMENTS

SELF-ASSESSMENT: SERVICE AGREEMENTS



SELF-ASSESSMENT: SERVICE AGREEMENTS



ADDITIONAL RESOURCES

GUIDE TO RELATIONSHIP BUILDING

Unit 2 of the CIPP *Service Agreement Toolkit* provides additional information on relationship-building between First Nations and municipalities, including a template communication protocol or friendship type agreement, tips for working effectively, a checklist for positive relations, similarities and differences between First Nation and municipal governance structures, dispute resolution, and relationship building case studies.

FCM PATHWAYS TO RECONCILIATION

FCM Big City Mayors Caucus respond to the Truth and Reconciliation Commission Calls to Action.

COMMUNITY ECONOMIC DEVELOPMENT INITIATIVE RESOURCES

A collection of resources on First Nations culture, history, and economic development, as well as examples of friendship accords and relationship agreements, joint community economic development plans and strategies, joint governance terms of reference, First Nation – municipal planning, and community consultation produced by the FCM Community Economic Development Initiative.

TRC'S CALLS TO ACTION

The *Truth and Reconciliation Commission* made 94 Calls to Action to redress the legacy of residential schools and advance reconciliation between Indigenous and non-Indigenous people in Canada.

ROYAL COMMISSION ON ABORIGINAL PEOPLES

Volume Five of the RCAP Report lays out a twenty-year plan for redressing the relationship between Indigenous and non-Indigenous peoples.

KAIROS BLANKET EXERCISE

Kairos, a Canadian religious organization, has developed “an interactive learning experience that teaches the Indigenous rights history we’re rarely taught. Developed in response to the 1996 Report of the Royal Commission on Aboriginal Peoples—which recommended education on Canadian-Indigenous history as one of the key steps to reconciliation, the Blanket Exercise covers over 500 years of history in a one and a half hour participatory workshop.”



CHAPTER 4

SOLID WASTE MANAGEMENT

Solid waste management includes garbage sorting and collection, transport to and dumping at landfill sites, recycling, composting, community education, and waste reduction. If not properly dealt with, solid waste poses a serious threat to public health and the environment. It is a growing issue linked directly to the way we produce and consume goods. It concerns everyone.

Solid waste management is one of the most challenging issues faced by municipalities and First Nations as they provide for their community members. The volume of waste produced is daunting: “Canadians generate significant waste. Statistics Canada reports that in 2010 Canadians generated over 936 kilograms of waste per person. Of this total, 729 kg went to landfills. For the past decade, waste diversion has stagnated while waste disposal has been on the rise in Canada.”⁴ Local governments spent \$2.6 billion on solid waste management in 2008, an increase of \$1.1 billion since 2002. Almost half of the costs were for collection and transportation of solid waste. Operation of disposal sites and fees charged to dump the waste amount to another 32% of the costs.⁵

This chapter provides a general introduction to solid waste and solid waste management and introduces the “5 R’s” of solid waste management – reduce, reuse, recycle, recover, and residuals. The subject of household hazardous waste is covered as well. The chapter concludes with a discussion of the future of solid waste management.

It is not possible in this brief Toolkit to provide an exhaustive review of all the different solid waste management systems that exist. Additional resources are provided at the end of the chapter if you wish to learn more.

WHAT IS SOLID WASTE?

Solid waste is discarded material, also known as garbage, and can include almost anything. It is either in solid or semi-solid form, is non-soluble but includes gases and liquids in containers. It may be:



Food, agricultural refuse



Paper, such as newspaper, old notebooks, photocopies



Construction debris, demolition waste



Mining residues



Disposable used diapers



Garden clippings, cut grass from mowing the lawn



Sewage sludge

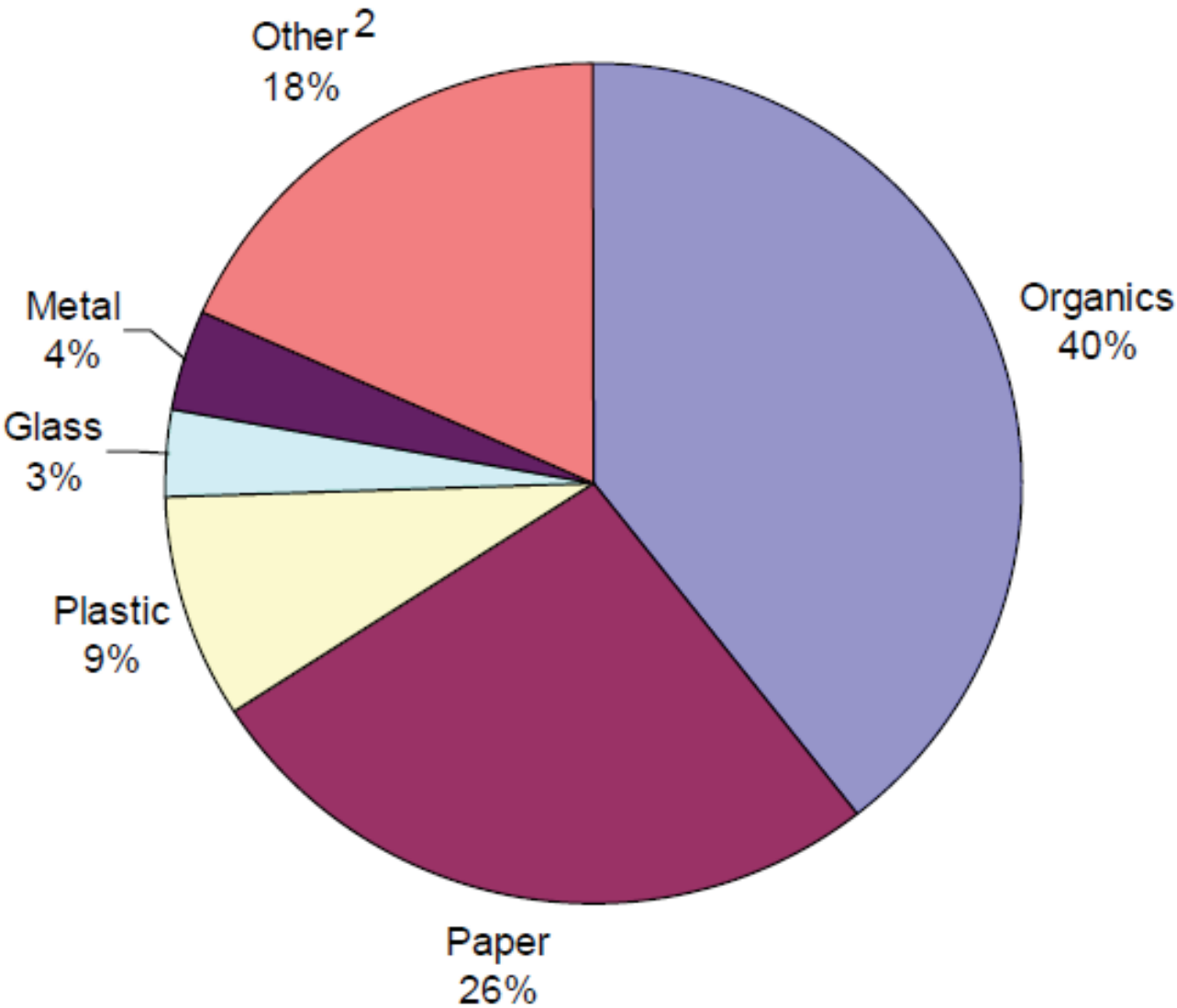


Bottles and jars



Plastic bags

FIGURE 8: COMPOSITION OF SOLID WASTE BY WEIGHT, GENERATED BY CANADIAN HOUSEHOLDS⁶



WHAT IS SOLID WASTE MANAGEMENT AND WHY MANAGE SOLID WASTE?

Solid waste management has been defined as the “systematic control of generation, collection, storage, transport, source separation, processing, treatment, recovery, and disposal of solid waste.”⁷ Solid waste management is a basic need of communities. Just like access to clean drinking water, shelter, food, energy, transport and communications are essential to society, managing solid waste in a sustainable manner is essential to human and environmental health and wellbeing. Despite this, the public and political profile of waste management is often lower than other services. Garbage is not very exciting and therefore the issue can be ignored or overlooked while the problem grows. Unfortunately, the consequences of doing little or even nothing to address waste management can be very costly to society and to the economy overall.



In keeping with the three pillars of sustainable development: social, environmental, and economic considerations, effective solid waste management addresses:

- **Public health:** Not having a solid waste collection service has a direct health impact on residents, particularly children. Accumulated waste may attract animals or lead to disease. The uncontrolled burning of waste creates particulate and persistent organic pollutant emissions that are highly damaging locally and globally;
- **Environmental pollution:** Dumpsites on land can pollute both surface and groundwater. These sites are often alongside water bodies, and therefore may directly pollute them as well as the surrounding environment. Former dumpsites, particularly those that have received hazardous waste, are a major category of contaminated site;
- **Economic cycles:** Solid waste reflects patterns of consumption, reuse, recycling, recovery, and disposal of resources. Minimizing, or eliminating, the amount of solid waste makes good economic sense and contributes to public health and reduction of environmental pollutants.

While it is difficult to assess the size of the problem, evidence shows that the costs to society and the economy for poorly managing solid waste may be 5-10 times more than what sound solid waste management would cost per capita.⁸ It is *dramatically cheaper* to manage waste now in an environmentally sound manner than to clean up the “sins of the past” in future years.

Addressing solid waste management allows a community:

- To protect the public and the environment (air, water, land) from the potentially harmful health effects of waste;
- To minimize waste and compost, recycle, re-use, re-sell as much as possible to use scarce resources wisely;
- To maximize the economic development aspects of solid waste management, including increasing jobs, producing renewable energy, returning valuable goods to the economy;
- To educate and raise awareness about efficiency in solid waste management; and
- To reduce the generation of waste as much as possible thereby reducing solid waste management costs and reducing the burden on the environment.

Solid waste management on a small First Nation reserve or a rural municipality may look very different from solid waste management in a large city or large First Nation reserve, as described in the chart below:

FIGURE 9: DIFFERENCES IN SOLID WASTE MANAGEMENT

STEPS IN SOLID WASTE MANAGEMENT	FIRST NATION OR SMALL MUNICIPALITY <i>(particularly remote communities)</i>	LESS REMOTE OR LARGE MUNICIPALITY OR FIRST NATION
Generation	Originates mostly from what has been purchased, and as by-products (undesired material) of industry often a resource based industry, like residue from a fish processing plant.	Originates mostly from what has been purchased, and as by-products (undesired material) of industry. Volumes can be very high.
Collection	Typically do not have door to door garbage pickup or a “collection day” or centralized waste collection system; individuals take garbage to the dump or a transfer site.	On garbage collection day(s), door-to-door pick-up from households and commercial buildings.
Storage <i>(waste is placed in some form of container before collection)</i>	Wooden bins which absorb water, do not last as long as plastic bins; attracts animals (stray dogs, bears).	Garbage barrels (usually with tight-fitting lids) or big plastic bags filled with garbage are put at the curb on collection day awaiting pick-up. Also in some cities separate paper and aluminum, glass, and plastic recycling bins and wheeled compost bins with animal proof locks. Some cities stagger garbage and recycling pick up for every second week.
Transport	Individuals’ vehicles or a contractor with a pick-up truck hired to haul the waste to another site.	Waste collection truck or “garbage truck” owned and operated by the community or a contractor, sometimes with separate compartments for recycling and garbage.
Source separation <i>(the sorting of materials that make up waste at its point of generation, for more efficient recycling or final disposal)</i>	Often there is none or individuals are required to sort and separate materials on their own and dump them in the appropriate receptacle at the dump or transfer station.	Curbside separation is most common. Each individual in his or her home separates out newspapers, bottles, cans, compost, and garbage and place them at the curb for collection in specially marked containers. Some large municipalities accept all garbage which is then brought to a central processing facility where a combination of technology and human labour sort the garbage.

STEPS IN SOLID WASTE MANAGEMENT	FIRST NATION OR SMALL MUNICIPALITY <i>(particularly remote communities)</i>	LESS REMOTE OR LARGE MUNICIPALITY OR FIRST NATION
Processing	None or some separation of recycling.	Advanced technology to sort garbage, recycle, divert hazardous wastes to proper treatment, produce and sell compost, and generate energy from waste.
Treatment <i>(to reduce the volume/ toxicity of solid waste, transforming it into a more convenient form of disposal)</i>	Open burning which causes serious human and environmental health problems.	Could be an incinerator, gasification or compaction. For example, large garbage trucks contain compactors which can reduce the volume of the garbage thereby allowing them to take on more garbage before having to off load at the dump.
Recovery <i>(to recover material that cannot be reused or recycled to produce another output)</i>	None	Some municipalities in Canada are using high level technology to produce energy from waste.
Disposal	Open dumping, open air burning; may not have had a proper environmental assessment to ensure the land fill site does not negatively affect watercourses, human habitation, etc. When site has reached maximum capacity it is abandoned and a new site sought.	Lengthy and detailed environmental assessment to determine location of site. Sanitary landfills with a combination of liners, leak detection, leachate collection systems, and gas collection and treatment systems, as well as ongoing monitoring systems to detect leaks and decommissioning plans. Often problematic to open new landfills due to concerns of neighboring residents. Post closure use and monitoring of sites increasingly important.

LEGISLATION

The provinces and territories hold the responsibility for regulating municipal solid waste management. The provinces and territories, and sometimes the Federal Government, regulate environmental assessment processes required to approve the construction of new solid waste sites. The federal government is also responsible for the international and interprovincial movement of hazardous wastes, waste control on federal lands, and classifying dangerous or toxic substances under the *Canadian Environmental Protection Act*. INAC provides some oversight for solid waste management on reserve. The 2009 Fall Report of the Auditor General of Canada included a review of land management and environmental protection on reserves. This review compared the extent to which regulations applicable to reserves were consistent with off-reserve regulations. The Auditor General found that many environmental threats are not regulated on reserves. A detailed comparison of legislation in place in Ontario and on reserves is found in Exhibit 6.2 of the Auditor General's report.⁹

Trying to blend Indigenous traditional laws, on reserve regulations, and provincial and federal legislation and funding arrangements can be challenging. Bearing in mind the common goal of improving solid waste management practices across jurisdictions can help to keep frustration to a minimum as the partners work out their joint arrangements. Remember to invoke the holistic approach.



PROVINCIAL LAWS AND REGULATIONS

There are laws and regulations, and likely additional guidelines, standards, or minimum requirements that apply to solid waste management in your area. A thorough review of all these provisions is not possible here. It is recommended that government officials and other experts be consulted to confirm what provisions might apply to your circumstances. Listed below are the primary regulations for municipalities to get you started.

Alberta:	<u><i>Environmental Protection and Enhancement Act, Waste Control Regulation</i></u>
British Columbia:	<u><i>Environmental Management Act</i></u>
Manitoba:	<u><i>Environment Act, Waste Management Facilities Regulation 37/2016</i></u>
New Brunswick:	<u><i>Clean Environment Act, Beverage Containers Act</i></u>
Newfoundland & Labrador:	<u><i>Environmental Protection Act, Municipalities Act</i></u>
Northwest Territories:	<u><i>Environmental Protection Act</i></u>
Nova Scotia:	<u><i>Environment Act, Solid Waste-Resource Management Regulations</i></u>
Nunavut:	<u><i>Environmental Protection Act</i></u>
Ontario:	<u><i>Environmental Protection Act, Waste Diversion Act</i></u>
Prince Edward Island:	<u><i>Environmental Protection Act</i></u>
Quebec:	<u><i>Environment Quality Act</i></u>
Saskatchewan:	<u><i>Environmental Management and Protection Act</i></u>
Yukon:	<u><i>Environment Act</i></u>

FIRST NATIONS LAWS AND REGULATIONS

Regulation of First Nation solid waste management falls under the *Indian Act*¹⁰, the *First Nations Land Management Act* (FNLMA)¹¹, under the provisions of a modern treaty, or the inherent right to self-government. Each is considered below in brief.

Although solid waste management is not specifically referenced, First Nation Band Councils have authority under section 81 of the *Indian Act* to “provide for the health of residents on the reserve and to prevent the spreading of contagious and infectious diseases” and “the construction and maintenance of...other local works”. These can be interpreted to include the management of solid waste. The *Indian Reserve Waste Disposal Regulations 1978*¹² set out prohibitions, permits, penalties for solid waste management on reserve, under the authority of the Minister of INAC.

First Nations operating under the FNLMA with a land code in force have authority to manage waste management under the environmental provisions of their land code.

First Nations that have negotiated self-government or comprehensive agreements hold full authority to manage solid waste independent of the *Indian Act* or FNLMA. Indigenous peoples also hold inherent or treaty rights to land and self-government and thus hold inherent or treaty rights to address matters related to solid waste management including land management, public health, and environmental health and well-being. The Supreme Court of Canada, in the *Delgamuukw v. British Columbia* case¹³, has clearly stated that we must all strive to reconcile Indigenous rights with Canadian assertion of sovereignty. This means we must all learn to work together in a respectful and inclusive fashion for the betterment of all.



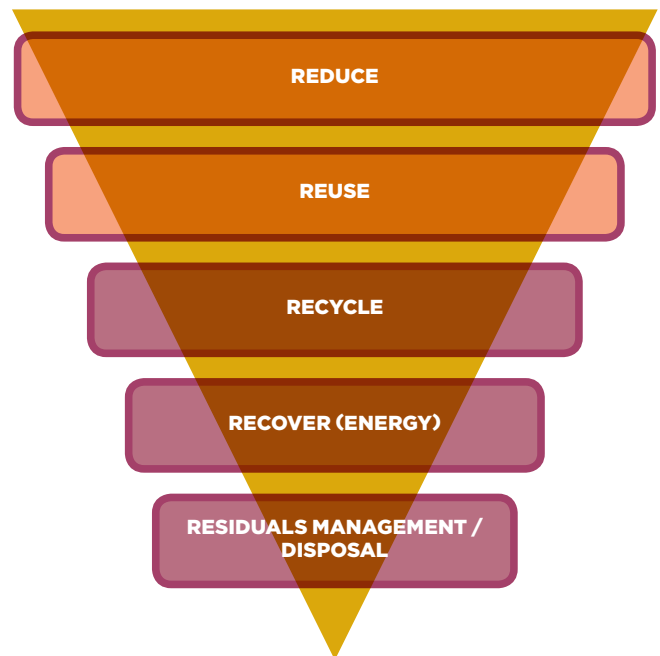
THE FIVE R'S – REDUCE, REUSE, RECYCLE, RECOVER, AND RESIDUALS

Many people think about solid waste management starting at the dump site, but it should actually begin long before that. By implementing efforts to reduce, reuse, recycle, and recover waste, communities can greatly reduce the amount of solid waste that eventually reaches the landfill site. This, in turn, reduces environmental contamination and threats to human health. Each step of the solid waste management hierarchy is discussed in further length below.

REDUCE AND REUSE

Reducing the amount of waste produced means less waste entering the waste stream in the first place, including reducing the amount of resources used to produce or ship the product, reducing hazardous materials used in production, and reducing the amount of energy required to produce or ship the product. Communities can help to limit waste at this stage by looking at opportunities to reuse the product or the materials it came shipped in. Old clothes can be sent to a thrift shop, plastic bags can be washed and used again for bringing home groceries, or a chair with a broken leg can be mended. Some municipalities and First Nations include a “reuse centre” at their land fill site where people can leave something they do not want or need any more in a convenient and sanitary location for others to consider taking home. There is more discussion about reduce and reuse in the section below on the future of solid waste management.

FIGURE 10: WASTE MANAGEMENT HIERARCHY: REDUCE AND REUSES¹⁴



RECYCLING

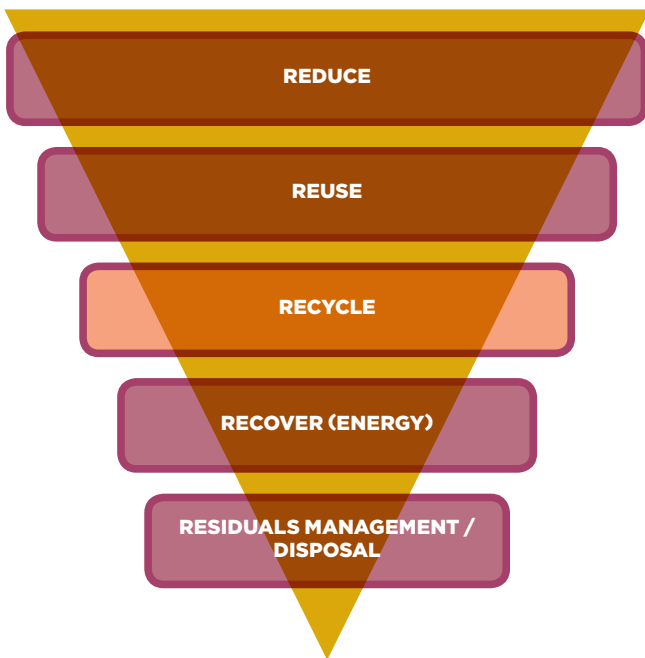
Recycling means converting something that might be considered waste, for example an empty soda can, into something useful, for example clean aluminum for a new can of soda. As noted earlier, most recycling is done by individuals taking advantage of a variety of means to divert materials away from the land fill site. This might include taking empty bottles back to a store for a refund, or separating newspaper that can then be sold to produce new paper, or dropping used batteries at a collection site to be recycled by battery producers.

In Canada, this also includes composting – separating organic material like kitchen scraps and letting it rot back into soil. Composting is discussed at greater length below in a separate section. Hazardous waste also is dealt with in a separate section.

Different materials require different recycling strategies. Paper, one of the easiest materials to recycle, accounts for almost half of the waste stream and thus keeping it out of the land fill site can increase the life span of the solid waste site. Glass, plastic, and metals account for almost another quarter, but they must be addressed separately.

The collection of Freon from used appliances is a type of recycling. This is required by law in Canada as a means to reduce the escape of ozone depleting substances into the atmosphere. This must be conducted by a licensed professional to ensure the substance is properly handled. Access to this service is not always possible in northern remote communities, which will require additional efforts to address the problem.

FIGURE 11: WASTE MANAGEMENT HIERARCHY: RECYCLE¹⁵



Recycling efforts have been assisted by the Canada-wide Action Plan for Extended Producer Responsibility¹⁶, approved in principle by the CCME. This policy approach “shifts responsibility upstream in the product life cycle to the producer and away from municipalities...[and] also shifts the historical public sector tax-supported responsibility for some waste to the individual brand owner, manufacturer, or first importer”.¹⁷ The Action Plan recommends incentives, including “green procurement, restrictions on toxic and hazardous materials in products, eco-labelling and bans on the disposal of products covered by extended producer responsibility regulations”.¹⁸ It also lists materials to be considered for extended producer responsibility, voluntary industry programs, and composting processes across Canada.



The following materials are now to be considered for extended producer responsibility:¹⁹

- **Packaging;**
- **Printed materials;**
- **Mercury containing lamps;**
- **Other mercury-containing products;**
- **Electronics and electrical products;**
- **Household hazardous and special wastes;**
- **Automotive products;**
- **Construction materials;**
- **Demolition materials;**
- **Furniture;**
- **Textiles and carpet;**
- **Appliances, including ozone-depleting substances .**

There are some provincial programs and established industry-initiated voluntary programs which improve waste diversion in the country and add to important positive environmental outcomes.²⁰

COMPOSTING

Next to recycling paper, composting yard waste and kitchen scraps is the largest impact First Nations and municipalities can have on reducing the amount of solid waste going to landfill sites. There are different kinds of composting systems, some are very simple and operate manually, and others are highly complex and involve industrial processing. The concept is the same however. Kitchen waste from vegetable peels to leftover food scraps, and yard waste including

leaves, branches, or Christmas trees are collected and heaped together for decomposition. Warmth, water, and regular turning help to speed decay into useable soil. The soil can then be used for gardens. Composting is also a good solution for dealing with agricultural waste including manure and by-products of commercial fishing or timber operations.

Compositing systems include:



static piles – a common backyard technique, a simple pile of compost is created and then regularly turned, often by hand with a shovel. These types of systems are not recommended in bear country and should not include foods containing cooking oils, meat or bones that will attract other animals.



windrow composting – piles in long rows on the ground;



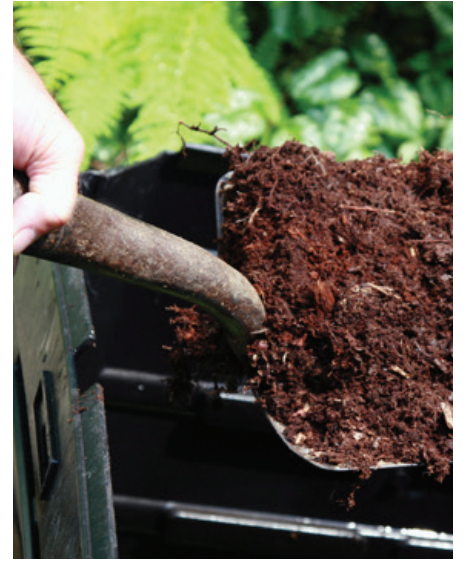
passively aerated windrows – perforated pipes are set at the bottom of each pile to allow air circulation required for decomposition;



forced aeration, static piles – same as above but blowers are attached to force air into the piles;



enclosed, or in-vessel, composting – there are many different shapes and sizes for enclosed composting, from a back yard tub to large commercial composter – indoor storage of compost until disposal and an investment in a large enclosed commercial composter may help to address bear problems.



vermicomposting – adding worms to the mix speeds decomposition and is usually done indoors to allow the worms to do their work year round.

The type of composting system that might work best depends on many considerations, which may apply whether it is a small backyard composter or a large industrial compost system. This includes:

- **where to site the composter - will the smell bother the neighbours;**
- **the amount of compost - do you have a system large enough to handle the compost generated and do you have enough compost to run the compost system?;**
- **should the system be enclosed, for example to discourage bears?**

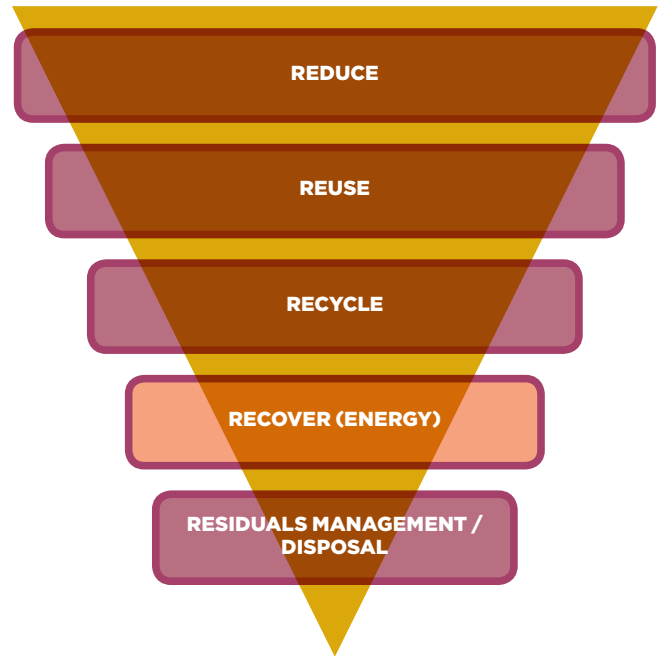
Simple systems like static piles, window row composting, and vermicomposting generally have low technology demands. Then can be done in the kitchen (vermicomposting) or the backyard or can be scaled up to industrial sizes. Enclosed composters can also be individual sized or serve an entire community. A backyard composter can be turned by hand and thus does not have a high technology demand. Large commercial or industrial sized in-vessel composters are much more sophisticated and require higher degrees of technology and cost more to purchase and operate. The other forms of composting, passively aerated or forced aeration windrows are somewhere between these in cost.

WASTE RECOVERY: ENERGY-FROM-WASTE

Energy-from-Waste facilities are a relatively new approach to solid waste management. Energy-from-waste generates heat, electricity or steam from solid waste.

These systems include incineration with energy recovery, gasification, and thermal chemical reactions (pyrolysis). In Canada there are five large energy-from-waste facilities operating that treat mixed solid waste and recover heat or steam. The system at Edmonton, Alberta is one such facility. The facility was launched in 2014 and is expected to produce 38 million litres of fuel and biochemical once it reaches full operation. The FCM Green Municipal Fund supported the development of the Edmonton facility.

FIGURE 12: WASTE MANAGEMENT HIERARCHY: RECOVERY ²¹



ANAEROBIC SYSTEMS

Canada also considers anaerobic (no oxygen) digesters for organic waste to be a type of energy-from-waste system.²² These systems convert organic waste to energy including electricity, compressed natural gas, or ethanol. In anaerobic digesters the organic waste is fermented in an oxygen-deprived environment to produce biogas, compost and heat.²³ These anaerobic digestion systems are also called biofuel facilities. This process is common to many natural environments, including swamps or the stomachs of cows or moose. Airproof reactor tanks called digesters are filled with materials including food waste, manure, sewage sludge, industrial effluent, forest and agricultural waste where, through various stages the waste is broken down and changed to a useable product. Anaerobic digestion is also used for treating sewage or other

contaminated water or wastes containing high levels of organic matter.²⁴ These digesters are far superior to trying to capture energy at land fill sites and have the added advantages of requiring less land, speeding up the decomposition, and collecting nutrients from the waste rather than allowing them to spill into the environment.²⁵

Saint-Hyacinthe, Québec has constructed a biofuel plant that produces natural gas from organic waste and sewage sludge. Saint-Hyacinthe won the FCM 2016 Sustainable Communities award for their efforts. A case study on this project is provided below.

RESIDUALS

Everything left after reducing, reusing, recycling, or recovering is residuals. This is what goes to the land fill site. Transfer stations, land fill sites, and hazardous waste management are discussed here.

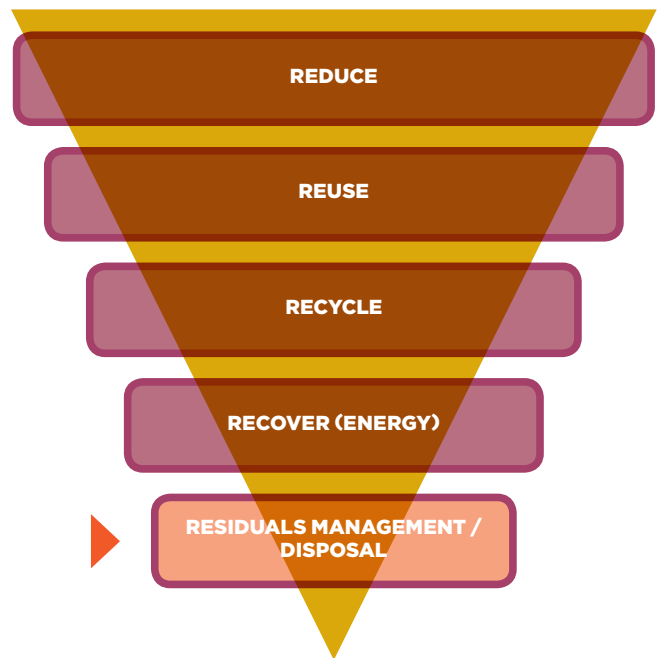
TRANSFER STATIONS

Transfer stations are used by many communities where the land fill site is located too far away from the community or does not otherwise allow for direct access by community members. The waste is brought to the transfer station either by individuals direct from their home or by trucks that may have collected it throughout the community, either through door to door pick up or directly from specific sites i.e., from the band office or apartment buildings. The waste is then dumped into large industrial sized bins until they are full, at which point they are loaded onto a truck or railroad flatbed to be shipped to the land fill site.

Use of transfer stations can reduce the number of trips to the land fill site and thus reduce greenhouse gas emissions. They can include recycling or reuse centres, and they allow multiple communities to use a single land fill site and cooperate in waste hauling. The creation of transfer sites is usually less expensive than land fill sites and requires far less environmental assessment and costly environmental protection measures, but they still have expensive components, including purchasing land for their location, purchase or rental of large industrial bins, hauling contracts, etc.²⁶



FIGURE 13: WASTE MANAGEMENT HIERARCHY: RESIDUALS



LANDFILL SITES

Landfill sites, commonly referred to as “the dump”, are the final stage of the solid waste management hierarchy. There are at least 2,000 land fill sites in Canada and most if not all First Nations and municipalities currently operate or have operated a land fill site in the past. Many consisted of little more than an empty field, had no access controls, and had nothing to prevent garbage from blowing around or leaching into groundwater or nearby lakes and streams. These sites would sometimes be deliberately set on fire or accidental fires were not controlled resulting in toxic air pollution. With little or no recycling or diversion of materials from the sites, hazardous substances mixed with less problematic waste, turning these sites into toxic waste dumps. When the site was full, it may or may not have been covered with earth, and was otherwise left to decompose as best as possible. Communities may no longer know where these sites are located.

There are plans in many communities to close these older sites and create sites that meet higher environmental standards. Most modern land fill

sites are subject to environmental assessment processes to confirm the best location, including testing to ensure the site is away from water sources and underlying ground water. “Cells” or sections of the landfill site are dug and lined to prevent leachate, the ooze that drains from the garbage, from reaching ground or surface water sites. This leachate is instead channeled into holding ponds where it can be further treated in sediment ponds, sand filtration systems, and finally natural buffer systems like swamps and forests. Recycling and reuse storage space is often provided at these sites, as are large industrial composters. Environmental assessment of the proposed sites can cost millions of dollars, and the actual construction of these sites many million dollars more. The cost alone is often reason enough to encourage communities to invest in the first five R’s and to work together and pool their resources to construct new land fill sites. Improved environmental protection systems are another reason to work together. Some systems, for example, industrial sized composters are only affordable if multiple communities participate. Regional land fill sites allow multiple communities to use a single solid waste site.



HAZARDOUS SOLID WASTE MANAGEMENT

Hazardous waste is a specific kind of solid waste that needs special attention. Few people realize that they may be generating hazardous waste in their homes from everyday household items including paint, batteries, fluorescent lightbulbs, medication, old electronics, etc. Statistics Canada states that “of the 58% of households that had batteries to dispose of in 2009, 42% discarded them in the garbage.”²⁷ These products and others like them can contain dangerous toxins, including heavy metals like mercury and cadmium from batteries, persistent organic pollutants that build up in the body including PCBs, greenhouse gases like fluorinated gases from aerosol cans, or ozone depleting substances including chlorofluorocarbons used in air conditioners. These can poison us and everything in the environment causing cancer, birth defects, and death. These materials need to be removed from the waste stream and not disposed of in a land fill site where they can leach into the air, ground or waterways.

In addition to the challenges of waste quantities there are challenges associated with the environmentally sound management of end-of-life products that are hazardous, contain toxic materials or are in others ways problematic for the traditional solid waste management system. Many of these products are best managed through special collection and recycling systems that operate separately from conventional municipal waste management programs.²⁸

Environment and Climate Change Canada notes that, “all three levels of government contribute to environmental protection and have a role to play in managing hazardous waste and hazardous recyclable material.

- Municipal governments establish collection, recycling, composting and disposal programs within their jurisdictions;
- Provincial and territorial governments establish measures and criteria for licensing hazardous-waste generators, carriers, and treatment facilities, in addition to controlling movements of waste within their jurisdictions;
- The federal government regulates transboundary movements of hazardous waste and hazardous recyclable material, in addition to negotiating international agreements related to chemicals and waste.”²⁹

First Nations governments too have responsibilities for hazardous waste management.

There are a number of ways in which household hazardous waste is managed in Canada. The [David Suzuki Organization](#) provides an overview of household hazardous waste management by province and territory in Canada.

Some municipalities hold a hazardous waste collection day each year and invite the public to turn in hazardous household waste including old oil and gasoline, batteries, paint, herbicides and insecticides, and light bulbs containing mercury, among other things. Staffed by volunteers and supported by mobile storage systems mounted on transport trucks and operated by trained professionals, these events can go a long way to reduce the amount of these materials making their way to the land fill site.

THE FUTURE OF SOLID WASTE MANAGEMENT

The CIPP Team has heard many communities complain about the amount of waste produced and have spoken about the need to look at the issue of waste from the point of production, distribution and purchase, rather than at the back end when the garbage is being shipped to a land fill site. Although the quote that follows speaks specifically to municipalities, First Nations are generally in the same situation.

Managing waste is primarily the responsibility of Canadian municipalities. Although waste management is a core municipal service it is often uniquely challenging because municipalities have limited capacity or tools to affect waste generation. Their abilities to divert waste from disposal are also constrained by practical issues, such as affordable diversion technologies, weak or non-existent secondary materials markets and facility-siting challenges. Perhaps the most difficult aspect is that municipalities have few tools to address the consumption and design of products that are purchased and used by their citizens and which, at the end of their life, become a municipal waste management responsibility.

Reducing the rate of waste generation and increasing the quantities of waste diverted from disposal and incineration are two key environmental and management challenges faced directly by municipalities and indirectly by senior levels of government in Canada. While there is a significant challenge in managing the large quantities of solid waste, there is a bigger challenge in reducing waste generation in the first place and in increasing the diversion from disposal of those wastes that are produced.

Gains in both of these areas will result in lasting environmental benefits, such as reduced risks from the release of toxic and hazardous substances and reduced greenhouse gas production.³⁰

Many organizations and governments are talking about the “circular economy”. The circular economy is one that is designed to protect natural ecological systems and re-cycle products back through the economic system. It is intended to replace the existing linear economic system of create, use, and dispose. The circular economy³¹ preserves and enhances natural capital, optimises resource use, and identifies and corrects negative impacts on land, water, air, and climate change.

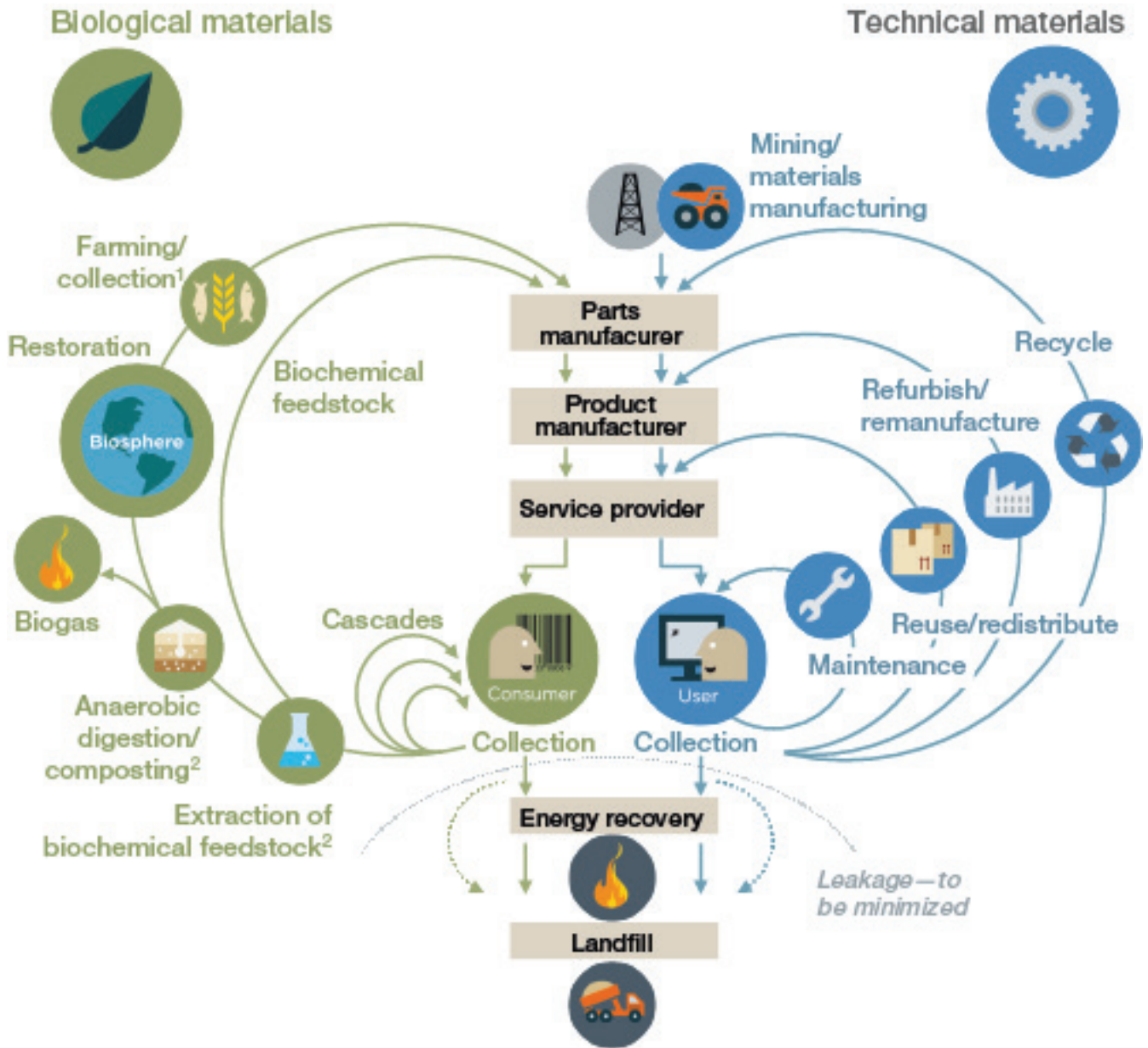
The World Economic Forum describes the circular economy as:

an industrial system that is restorative or regenerative by intention and design. It replaces the end-of-life concept with restoration, shifts towards the use of renewable energy, eliminates the use of toxic chemicals, which impair reuse and return to the biosphere, and aims for the elimination of waste through the superior design of materials, products, systems and business models.³²

It includes, “a regenerative economy that thrives within nature’s limits, circular products and materials designed for multiple lives and repeated profitable cycles of reuse, repair and recycling, efficient production and consumption powered by closed-loop manufacturing, renewable resources and low-carbon energy.”³³

FIGURE 14: THE CIRCULAR ECONOMY

Source: Ellen MacArthur Foundation circular economy team drawing from Braungart & McDonough and Cradle to Cradle (C2C)



This diagram shows how both natural and industrial materials are recycled through the system. Note that sending materials to a landfill site is at the very bottom of the diagram and is to be avoided in the circular economy. Embracing this system in Canada will help to reduce the overall solid waste management burden on communities and improve environmental outcomes.

In 2013, FCM launched the National Zero Waste Council in collaboration with Metro Vancouver to unite governments, businesses and non-government organizations to improve solid waste management in Canada. “With a focus on product design and behaviour change the Council is taking action on the factors that drive waste generation in support of a high quality of life, environmental sustainability and economy prosperity while consuming fewer resources and less energy.”³⁴ The Zero Waste Management Council has embraced the following guiding principles and priorities.

GUIDING PRINCIPLES

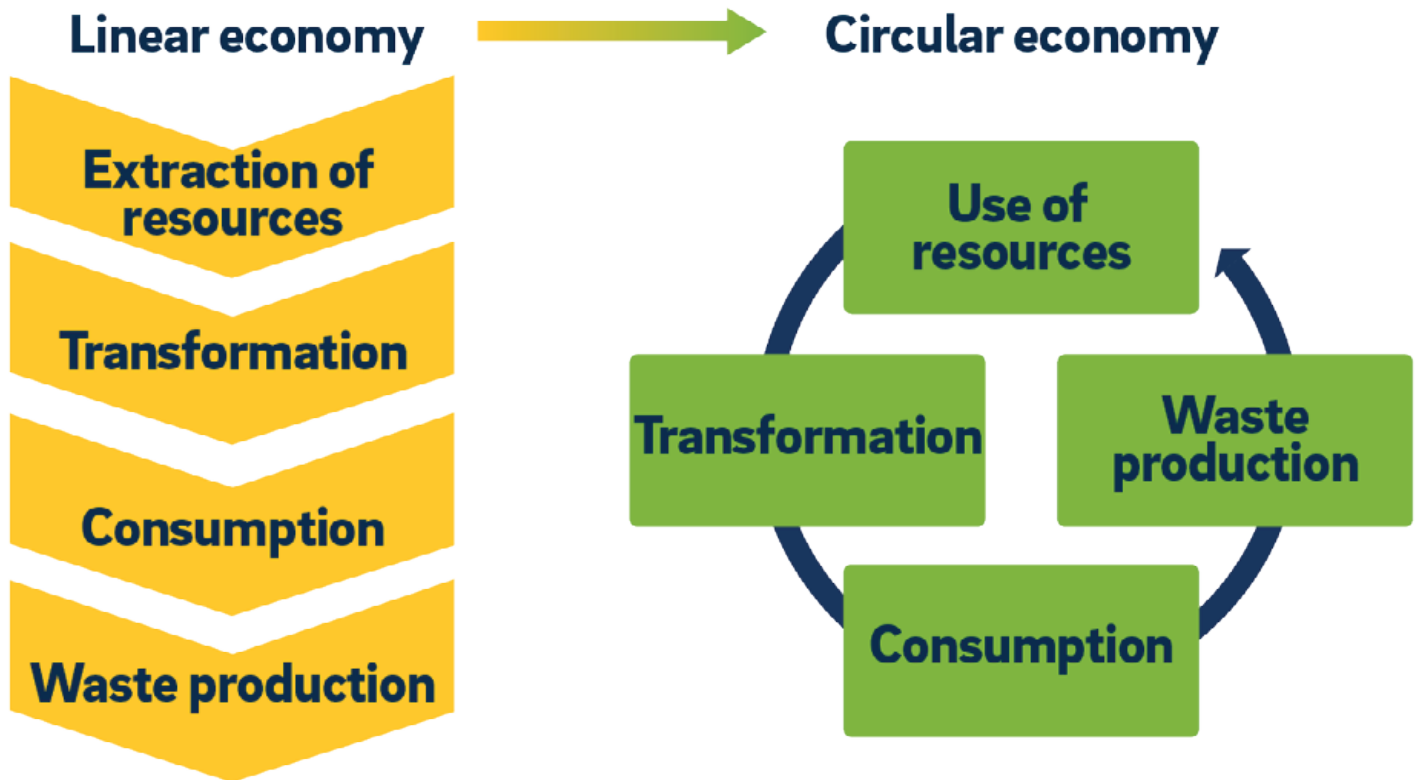
- Commit to collaboratively working with business, government and community partners to develop new solutions;
- Adopt a waste prevention and reduction framework that positions Canadian cities and businesses to compete globally in an emerging resource-constrained economy;
- Align with global and international initiatives;
- Stress the economic, social, and environmental benefits associated with the conservation of resources;
- Consider local and global consequence and long term impacts.³⁵

PRIORITIES

- Implement National Communication Campaigns
Develop and support national communication and education campaigns to build public awareness that products and packaging can and should be designed to prevent waste, with benefits for the economy, the environment and lifestyles;
- Advance Policy Development
Research and assess opportunities for policy harmonization that will facilitate producers to improve the design of products and packaging, and pursue targeted initiatives to help facilitate this shift in identified product streams;
- Facilitate Knowledge Exchange and Dialogue
Support and leverage existing initiatives and opportunities that promote best practices and facilitate knowledge exchange between industry, government and other key stakeholders.



FIGURE 15: WASTE CONTROL STRATEGY³⁶



COMMUNITY ENGAGEMENT

Getting community buy in for improved solid waste management is critical to success. Many systems rely on individuals doing their part to help sort waste in the home before it gets bagged and dumped. When entering into a new agreement to share solid waste management there may be changes to where garbage is taken, when it is collected, how it is collected, etc. Community

members need to understand what the changes are and why the changes have occurred so that they can participate fully and help achieve waste reduction goals.

Outlined below are a few samples of how communities have shared information on local waste management.

FIGURE 16:
CITY OF
OTTAWA
EDUCATIONAL
RESOURCES³⁷

The poster features the City of Ottawa logo and the title "Think outside the bag!" with the French translation "Il n'y a pas que le sac - pensez-y!". It states that more than 75% of household waste can be diverted from landfill. Below this, it lists items for three types of bins: a black recycling bin (magazines, cardboard, pizza boxes, flyers), a blue recycling bin (plastic bottles, metal cans, drink and soup boxes), and a green food scrap bin (food scraps, tissues, paper towels, food-soiled paper). A central graphic shows a trash bag with 75% of its contents being diverted to recycling and 25% going to a grey trash bin. The poster includes the website ottawa.ca/wasteexplorer and ottawa.ca/navigateurdedechets.

Ottawa
Think outside the bag!
Il n'y a pas que le sac – pensez-y!

More than 75 per cent of your household's waste can easily be diverted from the landfill by making sure these items end up where they belong:

On peut facilement détourner de nos sites d'enfouissement plus de 75 % de nos déchets ménagers en nous assurant de les placer au bon endroit :

- Magazines
• Cardboard boxes
• Pizza boxes
• Flyers
- Magazines
• Boîtes en carton
• Boîtes de pizza
• Circulaires
- Plastic bottles, jars and food tubs
• Metal/aluminum food and beverage cans and trays
• Drink and soup boxes
- Bouteilles, bocaux et contenants en plastique
• Boîtes et plateaux alimentaires en métal/aluminium
• Boîtes de boisson et de soupe
- Food scraps
• Tissues, napkins, paper towels
• Food soiled paper packaging
- Restes de table
• Mouchoirs, essuie-tout, serviettes en papier
• Emballages alimentaires en papier souillés

Visit ottawa.ca/greenbin for a full list of acceptable items.
Pour une liste complète d'articles acceptés, veuillez visiter ottawa.ca/bsa/vert.

75%
25%

Visit ottawa.ca/wasteexplorer
Veuillez visiter ottawa.ca/navigateurdedechets

FIGURE 17: NORTHUMBERLAND COUNTY EDUCATIONAL RESOURCES³⁸

BULKY RIGID PLASTICS DROP-OFF

Examples of Bulky Rigid Plastics Accepted

- ✓ Plastic beverage crates (i.e. milk/pop/beverage crates)
- ✓ Clean plastic drums, totes & empty garbage cans (all sizes)
- ✓ Clean plastic buckets/pails (all sizes - remove metal handle)
- ✓ Plastic plant/propagation trays & flower pots
- ✓ Plastic toys (i.e. playhouses)
- ✓ Plastic tool & gun cases
- ✓ Plastic laundry baskets
- ✓ Plastic lawn furniture
- ✓ Plastic recycling bins & carts

Non-Acceptable Plastic Items

- ✗ Plastic bags
- ✗ Plastic film (i.e. stretch film & other flexible packaging)
- ✗ Styrofoam
- ✗ Plastic appliances
- ✗ Vinyl siding
- ✗ Water hoses
- ✗ Toys with circuit boards or battery packs
- ✗ Pool/chemical containers
- ✗ Driveway sealant containers
- ✗ Paint cans (empty can go into mixed recycling)
- ✗ Motor oil containers
- ✗ Car bumpers

www.northumberlandcounty.ca
1-866-293-8379



RECYCLING





Plastic beverage containers



Boxed beverage containers



Plastic tubs & lids



Metal food & beverage containers



Aluminum Cans, foil, trays & pie plates



Glass bottles & jars (food & beverage)



Paperbacks & telephone books



Paper cups, paper plates, paper take-out containers



Fine paper, envelopes, magazines



Corrugated cardboard



Boxboard (empty cereal, tissue boxes, etc)



Newspapers

Northumberland County • Toll free 1-866-293-8379 • www.northumberlandcounty.ca

bag YOUR BAGS... The Right Way!

bag
YOUR
BAGS

Step 1 Stuff all of your plastic bags and plastic stretchy outer-wrap into **ONE clear or clear-blue bag**

Step 2 Tie the bag closed at the top

Step 3 Set-out at the curb on your collection day and tie it to your heavier bags on windy days

Do not mix plastic bags and plastic stretchy outer-wrap in with your other recycling items, such as cans, bottles, newspapers;

Do not use grocery bags as your 'Bag of Bags'. Our collectors at the curb and sorters at the Recycling Plant need to be able to see into the bag!

What Goes into My Bag of Bags?
Examples Include:

- Bread bags
- Frozen food bags
- Produce bags
- Bubble wrap
- Water softener salt bags
- Dry cleaning bags
- Grocery/retail bags (plastic)
- Newspaper bags
- Milk bags (emptied and rinsed)
- Plastic outer wrap from pop cases toilet tissue, paper towels



CASE STUDIES

The following are a selection of examples of municipalities or First Nations who have successfully implemented innovative approaches to waste management.

THE CITY OF SAINT-HYACINTHE, QUÉBEC

took the lead in completing all the research and development for its biomethanation project to produce biogas from waste. The project, completed without external consultants, is a first in Québec and one of the first in North America.

THE TOWN OF CAPE ST. GEORGE, NEWFOUNDLAND, is a leader among small rural municipalities with its comprehensive curbside recycling program and resourceful approach to reuse and composting. The town aims to reduce the overall waste tonnage shipped to landfill by 40 per cent (from 300 to 180 tons) and, through the program, has already achieved a 25 per cent reduction.

THE CITY OF WHITEHORSE, YUKON, is taking the lead among northern communities with a Solid Waste Action Plan that aims to divert at least half of its solid waste from landfill by 2015 and achieve zero waste by 2040.

THE CITY OF SURREY, BC has scored a triple win with a composting program that diverts kitchen waste from landfill sites, reduces greenhouse gas emissions and cuts fuel costs for waste collection vehicles.

WAHNAPIAE FIRST NATION (WFN), ON has implemented a curb side recycling program since 2010. The community has also developed a Waste Diversion Strategy that clearly sets out their goals and objectives for waste management. This strategy includes an objective of diverting 30 percent of the community's waste through their recycling program. WFN also offers a community swap area and registered sites that accept used electronics and tires.



ADDITIONAL RESOURCES

Solid Waste Management

STATE OF WASTE MANAGEMENT IN CANADA

A CCME (2014) report on the state of waste management in Canada.

METRO VANCOUVER SOLID WASTE MANAGEMENT PLAN

PowerPoint presentation (2011) on waste reduction and diversion.

SOLID WASTE MANAGEMENT FOR NORTHERN AND REMOTE COMMUNITIES: PLANNING AND TECHNICAL GUIDANCE DOCUMENT

March 2017 document by Environment and Climate Change Canada.

WASTEADVANTAGE MAGAZINE

This is for professionals in the solid waste and recycling industry.

SOLID WASTE DISPOSAL PRACTICES IN REMOTE FIRST NATIONS COMMUNITIES.

A PowerPoint Presentation by Ahmed Oyegunle & Shirley Thompson, University of Manitoba, Natural Resources Institute.

SOLID WASTE MANAGEMENT PRACTICES IN TWO NORTHERN MANITOBA FIRST NATIONS COMMUNITIES: COMMUNITY PERSPECTIVES ON THE ISSUES AND SOLUTIONS

Master's thesis by Ahmed Oyegunle, University of Manitoba, Natural Resources Institute.

Recycling and Reuse

SOLID WASTE AS A RESOURCE: GUIDE FOR SUSTAINABLE COMMUNITIES.

FCM publication outlining considerations for managing waste as a resource.

WASTE DIVERSION SUCCESS STORIES FROM CANADIAN MUNICIPALITIES

Published by FCM's Green Municipal Fund

MUNICIPAL SOLID WASTE (MSW) OPTIONS: INTEGRATING ORGANICS MANAGEMENT AND RESIDUAL TREATMENT/DISPOSAL

MUNICIPAL WASTE INTEGRATION NETWORK, RECYCLING COUNCIL OF ALBERTA.

SUDBURY AREA FIRST NATION RECYCLING PROGRAM IMPLEMENTATION EVALUATION

Produced in 2012, this resource is an evaluation of the existing waste management systems of 21 First Nations communities and waste audits of two First Nation communities. This document also highlights innovative and cost effective recycling programs being implemented by several small northern communities.

ADDITIONAL RESOURCES

Composting

THE ART AND SCIENCE OF COMPOSTING

This resource is for composters and farmers (Univ. of Wisconsin-Madison, L. Cooperband, 2002).

CANADIAN COUNCIL FOR MINISTERS OF THE ENVIRONMENT.

Guidelines for Compost Quality, 2005.

GREEN ACTION CENTRE.

Composting Basics and Getting Started, (2010).

SOLID WASTE MANAGEMENT

United Nations Environmental Program. (2005). Composting.

Anaerobic Digestion

ANAEROBIC DIGESTION: PATHWAYS FOR USING WASTE AS ENERGY IN URBAN SETTINGS

(Davis, 2014). How to utilize waste as energy in cities.

TYPES OF ANAEROBIC DIGESTERS FOR SOLID WASTES

Book chapter in “Biomethanization of organic fraction of municipal solid wastes” by Vandevivere, De Baere and Verstraete.

Transfer Stations

ALBERTA TRANSFER STATION TECHNICAL GUIDANCE MANUAL

A technical guidance manual prepared for Alberta Environment (2008).

GUIDELINES FOR ESTABLISHING TRANSFER STATIONS FOR MUNICIPAL SOLID WASTE

Government of BC

TRANSFER STATIONS AND TRANSFER POINTS

UN Environment Programme: Newsletter and Technical Publication on municipal solid waste management.

Future of Solid Waste Management

GLOBAL WASTE MANAGEMENT OUTLOOK

A 2015 United Nations (2015) follow-up publication on the Rio+20 Summit.

WHAT IS A CIRCULAR ECONOMY?

This website is from the Ellen MacArthur Foundation and discusses various aspects of the circular economy.

CIRCULAR ECONOMY LAB

This site emphasises the opportunities available for a regenerative economy.

NATIONAL ZERO WASTE COUNCIL CIRCULAR ECONOMY BUSINESS TOOLKIT

This 2016 Toolkit is a guide for businesses and all sectors to use circular modes of production and service.

WORLD ECONOMIC FORUM

This WMW (Waste Management World) site is global in perspective, and promotes the most efficient use of waste as possible.

CHAPTER 5

SOLID WASTE MANAGEMENT PLANNING

This chapter provides tools for developing a solid waste management plan and joint solid waste service agreement with your neighbour. It includes a planning tool and a template solid waste service agreement. Additional resources on service agreements are available in the *Service Agreement Toolkit, Unit 3*. This includes information on feasibility studies and environmental assessment, various checklists of service agreement provisions, pricing principles, and case studies.



“Waste management is a cross-cutting issue impacting on many aspects of society and the economy. It has strong linkages to a range of other global challenges such as health, climate change, poverty reduction, food and resource security and sustainable production and consumption. The political case for action is significantly strengthened when waste management is viewed as an entry point to address a range of such sustainable development issues, many of which are difficult to tackle”.³⁹

SOLID WASTE MANAGEMENT STRATEGIES

Solid waste management is connected to other issues, some of which can be addressed at the local level and which can contribute to improved environmental and human health and well-being outcomes. Other issues, for example, reducing waste generation at the production and distribution source may not be under the control of municipalities or First Nations, but communities can encourage others to address these issues. A solid waste strategy should reflect both the local and more global issues to ensure that communities are looking at solid waste management as a holistic or interconnected issue and considering a range of challenges that proper waste management can help to address.

Some provinces and territories in Canada require municipalities to develop solid waste strategies. The *Environmental Management Act* in British Columbia, for example, requires that all regional districts have a solid waste management plan. The *Guide to Solid Waste Management Planning 2016* provides regional districts with a step by step approach for developing a plan and includes useful information on planning for enforcement, renewal of plans, and provincial targets for waste reduction. Québec has adopted the *Québec Residual Materials Management Policy—2011-2015 Action Plan* “to create a zero-waste society that maximizes added value through sound residual materials management.” An overview of all provincial and territorial solid waste management strategies can be found in the 2015 report *State of Waste Management in Canada* which was prepared for the CCME.

The United Nations Environment Program has published a helpful check list of things that all communities can do to address solid waste challenges.

ENABLE – MAKE IT EASY TO ‘DO THE RIGHT THING’

- Ensure that a regular and reliable solid waste management collection service is available to all citizens irrespective of income level;
- Phase out existing uncontrolled dumps, upgrade to or replace with controlled disposal facilities;
- Work to build on existing repair workshops and reuse systems, as part of a concerted approach to waste prevention;
- Work to increase the coverage of ‘itinerant waste buyers’ who collect source-separated materials for recycling;
- Ensure whenever possible that national [and provincial or territorial] policy and strategy is fully supportive of the local initiatives.

ENGAGE – GET PEOPLE INVOLVED

- Raise awareness of waste generators (households, businesses, institutions, industry) regarding the health and environmental impacts and high costs to society and to business resulting from uncontrolled dumping and burning;
- Educate and inform people so that they know what is the ‘correct’ thing to do;
- Work with community based organizations and non-government organizations and the informal sector to provide primary collection services in low-income areas;
- Work with informal repair and reuse shops and recyclers to integrate them into the solid waste management system – to improve working practices, increase reuse and recycling rates and divert waste from (expensive) collection and disposal by the [municipality or First Nation].

ENCOURAGE – GIVE THE RIGHT SIGNALS

- ‘Carrot’ (Provide a meaningful incentive or reward): For example, facilitate clean up campaigns, so that neighbourhoods are clean, watercourses are clear and flood risks are reduced. This then provides an incentive to communities to maintain this;
- Institute affordable charges for primary collection of municipal solid waste; assist those who cannot pay;
- ‘Stick’ (Ensure that there is a clear penalty for undesirable behaviour): Implement and enforce legislation against uncontrolled dumping and burning;
- Ensure that the regulatory agency is adequately resourced to enforce the legislation to stamp out both casual evasion and organized waste crime;
- Communicate achievements and success stories to all stakeholders, to encourage and keep up engagement.

EXEMPLIFY – LEAD BY EXAMPLE

- Implement pilot and demonstration projects to show that the intended goal can be achieved;
- Work with larger (public sector) waste generators to demonstrate that they themselves are already using, and paying for, controlled disposal;
- Work with larger (private sector) waste generators to ensure that they too are using, and paying for, controlled disposal. (Global Waste Management Outlook, p. 298).

SOLID WASTE MANAGEMENT PLANS

First Nations and municipalities working together on solid waste management will require a solid waste management plan. A solid waste management plan looks at the community's current waste situation, sets out a vision and goals to be achieved, identifies the steps required to achieve the goals, and identifies indicators of success. Some municipalities and First Nations already have their own waste management plans, which could be shared with their partners and discussed to consider opportunities to collaborate or consolidate. The plan may have to be adjusted to accommodate the partner community. In other cases, communities will have to start from scratch to develop a joint plan, for example, if a new regional solid waste site is being considered.

Professional assistance, including from engineers and solid waste management specialists, is usually required for the development of solid waste management plans.

The tool provided below is designed to help the communities work their way through the planning process, including identifying their goals, research to be completed, key dates, when and how to engage their community members, etc.

Figure 18 provides an overall picture of the process and highlights the main questions to reflect on together. The chart that follows expands on the questions highlighted in the graphic. It is intended to provide a road map for working through the various stages of developing a solid waste strategy and service agreement.

Note that not all communities will be starting this exercise in the same place. Some communities may have a clear understanding of their needs and options and can make an immediate start on developing a joint service agreement. Other communities may have only just started looking at their solid waste issues and do not have sufficient information on which to base decisions. They may wish to begin by conducting a waste audit – a process that involves taking a close up view of the waste being generated in a community, including how much, what kind, etc. A feasibility study to examine the options for new solid waste management processes is often the next step after that. There are many steps that have to be completed to conduct a feasibility study, including developing a terms of reference, selecting contractor(s), reviewing drafts, reviewing the final report, reviewing options, and finally making decisions on how to proceed. Communities may also wish to conduct additional research. Case studies, expert reports, field studies and trips, and peer to peer mentoring on new technologies may reveal useful information.

Some of the steps you can likely complete on your own. Others may require expert analysis and advice to guide your communities. Many communities start with a waste audit and/or feasibility study conducted by experts. Choosing the location for a new landfill site, for example, will require careful consideration of the laws and regulations, analysis of the geography of the proposed location, soil testing, analysis of groundwater levels, etc. Professionals can make recommendations about various options available, provide cost estimates, explain regulatory processes, and answer questions about technological processes. At the end of the day, however, your communities should have answers to the questions posed in Figure 18 below.

Communities also are encouraged to include their community members in the process at appropriate points. Community members will have opinions to share, concerns that will need to be addressed, and ideas that could inform your decisions. Improving solid waste management relies on community members to do their part to support efforts to increase recycling, collect compost, ensure hazardous waste is properly managed, and reduce residuals going to the land fill site. Consider holding community meetings to explain the challenges you are facing, options available, changes to fees and fines, changes to the way garbage will be collected or stored, or to explain new features available like bear proof compost bins. Think of ways to make it fun and engaging, get the youth involved, hold community clean up days, offer prizes or awards, etc.

**FIGURE 18:
THE PLANNING WHEEL**

Each colour of the wheel corresponds to the colour in the graph below. Start at the upper right-hand quadrant, and work clock-wise around the wheel reviewing the questions below.



STEPS IN DEVELOPING A JOINT SOLID WASTE MANAGEMENT PLAN⁴⁰

PART A – WHERE ARE WE NOW?

1. Develop a profile of the First Nation – Municipal planning area Include information on population, number of households, types of business, and estimated growth rate of the First Nation and Municipality. Identify transportation routes, distance to solid waste landfills and other disposal sites, and infrastructure needs. GPS mapping may be of assistance. This information will help when developing cost estimates for waste management activities. Also consider, what is the state of our relationship and how can we improve things as we work together on solid waste management.

2. Identify the solid waste generators within the municipal and First Nation planning area Confirm all residential, commercial and government solid waste generators in the planning area (include homes, government buildings, schools, restaurants, health facilities, etc.). Also, determine whether you will need to handle solid waste from the cleanup of illegal dumpsites. Do any solid waste generators produce waste that requires special handling, for example medical waste or toxic industrial waste?

3. Identify existing waste management practices within the planning area including any programs and infrastructure Determine where waste is currently going and how it is being disposed of. Identify any significant amounts of waste entering and leaving the planning area. What are the current programs and infrastructure available to manage solid waste, including recycling and composting. What is the projected life of the existing infrastructure? Where is there excess capacity? Who is responsible for managing solid waste (i.e. First Nation, municipality, private company)?

4. Conduct a waste assessment/waste audit Characterizing solid waste that requires management in the community is the backbone of the whole planning process. Determining the quantity and composition of waste will allow evaluation of options and estimation of costs. Has your community recently conducted a waste audit or waste assessment?

5. Estimate future waste generation quantities Use the estimated growth information that was gathered in Step 1 to determine future waste generation.

PART B – WHERE DO WE WANT TO GO?

6. Develop waste handling vision and goals Once a good picture of the current situation is determined, begin looking at what you want in sustainable solid waste management systems and the waste management options available. Do you want to close existing waste sites? Do you want to develop a recycling or composting program? What are your financial goals?

PART C - HOW ARE WE GOING TO GET THERE?

7. Develop waste handling options What percentage of discards could be prevented, reused, reduced, or recycled? Does the First Nation or Municipality provide curb side pick up, or will residents have to take waste to a transfer station or disposal facility? Do your communities require recycling systems, composting systems, disposal of household hazardous waste systems? Are there existing programs and infrastructure that can be adapted or expanded? Is new infrastructure or programs required? Determine if there are potential benefits of developing or participating in regional programs. Are there other potential partners?

8. Develop cost estimates for waste handling options Cost estimates should include both capital costs and operation and maintenance costs for each option. Do any options generate cost savings? Identify where the funds to cover these costs will come from. Who will pay for what?

9. Compare options based on criteria jointly developed by the partner communities Look to your goals to assist in the development of criteria for comparing options and to prioritize criteria. Criteria might include cost, reduced environmental harm, future monitoring, job creation and employment opportunities, etc.

10. Build First Nation - Municipal Consensus Are there obvious areas of agreement? Are there issues on which you disagree? Is there flexibility? This is also a good point to think about what your dispute resolution processes will be for not only working through this issue, but what systems you might include in your solid waste and friendship-type agreements. Return as necessary to the goals and options to develop an approach everyone can agree upon.

11. Negotiate Solid Waste Agreement and Friendship-type Agreements Address basic issues including who will supply the services, what facilities will be shared, how much will services cost and who pays for what, how will you communicate, etc. Review the solid waste agreement template and the sample agreements available on the CIPP website. Answer the questions on the solid waste agreement development guide. These agreements will serve as your guide for the future.

12. Sign and Celebrate Remember to take time to savour your success. Are there opportunities to build deeper bonds through a public signing ceremony, by involving your schools, and civic groups?

PART D - HOW WILL WE KNOW WE HAVE ARRIVED AT OUR DESTINATION?

13. Develop Indicators of Success What does success mean to you, to your community, to your neighbours, to the land? Look back at your goals. How will you measure your success? As you go through the process of developing and implementing your agreements gather evidence of your success.

14. Evaluation Measure your success against the goals you set in step 6. How have things changed? What worked? Is there work still to be done? Regular evaluation of where you started from, how far you have come, and how you can improve things for the future will help keep your plan on track and generate improvements for your communities.

15. Set your next goals You will know you have arrived if you have accomplished all the tasks you set for yourselves at the beginning of this process. Where will you go together from here?

ADDITIONAL RESOURCES

COMPREHENSIVE SOLID WASTE MANAGEMENT STRATEGY

This is a SWM strategy (2014) from Thunder Bay, ON.

SOLID WASTE MANAGEMENT ENVIRONMENTAL ASSESSMENT PROCESS

This SWM Environmental Assessment is from Sault Ste. Marie, ON.

SASKATCHEWAN SOLID WASTE MANAGEMENT STRATEGY DISCUSSION PAPER

This March 2017 Discussion Paper originates from the Government of SK.

SASKATOON WASTE AND RECYCLING PLAN

The City of Saskatoon's Plan, 2007.

MATSQUI FIRST NATION ENVIRONMENTAL MANAGEMENT PLAN

This environmental management plan includes a section on solid waste management.

A GUIDE TO PREPARING ENVIRONMENTAL MANAGEMENT PLANS FOR OPERATIONAL FIRST NATIONS

This guide provides guidance on how to develop environmental management plans (which usually include sections on solid waste management). This guide was developed for First Nations who have ratified their land code under the *First Nations Land Management Act* but includes information that will also be relevant to other First Nations or municipalities.

CHAPTER 6

DRAFTING A JOINT SERVICE AGREEMENT ON SOLID WASTE MANAGEMENT

First Nations and municipalities are encouraged to establish a firm relationship foundation for their joint solid waste management agreement. A lasting agreement requires sustainable relationships between partners.

The following principles represent lessons learned and best practices as recommended from experts in the field and are referenced in *Towards Sound Government to Government Relationships with First Nations: A Proposed Analytical Tool*.⁴¹ Observing these principles as you negotiate with your partners will help to establish trust and respect and build a common understanding of what is agreed upon. These principles also are included in the Service Agreement Toolkit.

FAIRNESS

Fairness means treating all parties in an equitable manner. The Institute on Governance emphasizes that equitable does not mean equal at all times. It means treating parties in a fair manner that both parties can agree to. For example, during

a consensus-based decision making process, a municipality may have four individuals on their side of the negotiation table while a First Nation may have six. Although this situation is not equal, it is equitable as decisions cannot be made unless everyone agrees and perhaps the municipality only has four persons who could attend the negotiation meeting. Fairness also means respecting that negotiation of service agreements take place in a government-to-government context, which in turn means respecting the jurisdiction of each party and their legal rights. Finally, fairness means equity in the outcomes. How can your communities jointly balance the positive outcomes, like new economic opportunities, with the negative ones, like environmental degradation? No one community should bear all the responsibility while the other reaps the rewards.

LEGITIMACY AND VOICE

Maintaining legitimacy and voice in service agreement negotiation is closely linked to fairness. Legitimacy can pertain to:

- the quality of the interaction between the First Nation and the municipality;
- the extent to which the relationship and the agreement have involved the communities and given these communities a voice in the discussions;
- the extent to which differing approaches to governance and negotiation are respected by both parties.

ACCOUNTABILITY

Accountability is the acknowledgment of responsibility for decisions and actions. It means ensuring that negotiations are carried out in a manner that is responsive to community needs and expectations, funders, and partners. Being accountable also means being transparent to your community, following through on promises, and sharing information with everyone involved in the negotiations. This includes preventing stalls in the negotiation process and gaining trust.

PREPARATION

When entering into negotiation with your neighbour, make sure you arrive to the discussions prepared so that discussions remain productive. Some questions to consider include:

- On what services am I willing to cooperate?;
- What are my main concerns?;
- What will my partner's main concerns be?;
- How am I prepared to address my partner's concerns?;
- What are my community's main restrictions?;
- What am I looking for in this partnership in terms of communication?;
- Is there a timeline in which I would like to try to achieve our objectives?;
- What does success look like to me?



A couple of other tips for drafting your joint service agreement are worth noting here.

- Try to use plain language in developing the agreement and avoid ‘legalese’ where possible. Partners should feel free to send the document to their individual lawyers for review to get legal advice, but at the end of the day be sure that those responsible for implementing the agreement understand it. These agreements are meant to be executed by non-lawyers, so it should not take a lawyer to figure what each section means;
- In developing the agreement, talk before you write. Identify all the issues of concern and talk about what each party is trying to achieve before putting pen to paper. Sometimes important ideas or concepts can be overlooked because draft text was developed before the idea was full explored, followed by reluctance to start tinkering with the written text;
- Read the agreement word by word, several times. We recommend you do this separately to answer the question - does this agreement meet our community needs? Then read it together line by line with your partner. Does the agreement meet our collective needs? Do not be afraid to amend the language of the text if it is not clear or there are ideas missed, etc. The agreement should represent a true “meeting of the minds”.

The template solid waste service agreement below is intended to serve as a guide for organizing and drafting a service agreement. This sample is very general in nature. Clauses will likely need to be added, deleted, or amended to serve the specific needs of the communities developing the agreement. For example, the payment section of the template is only a suggestion; parties may wish to structure their payment for services differently based on the desired level of service and needs. The template below is drafted as if the municipality is providing the service to the First Nation. This is not always the case however. There are instances when the First Nation is providing a service to a municipality and the template can be amended easily to reflect this. To better understand the sections and to provide some guidance on issues to consider in developing the agreement, the template below provides a brief description of each section, draft language for the various clauses, and issues to consider in drafting those clauses. More examples of solid waste management agreements are available on the [CIPP webpage](#), including a template agreement in Word that can be downloaded and amended to suit individual communities’ needs, as well as examples of agreements concluded by other communities.



SOLID WASTE SERVICE AGREEMENT AND ISSUES TO CONSIDER

SECTION OF AGREEMENT	POSSIBLE PROVISIONS OF AGREEMENT
Title	SOLID WASTE SERVICE AGREEMENT
Date	This agreement made this <i>[day]</i> of <i>[month, year]</i>
Who are the Parties to the Agreement	<p>BETWEEN: <i>[NAME OF MUNICIPALITY]</i> <i>[Address]</i></p> <p>(hereinafter called the "Municipality")</p> <p>AND: <i>[NAME OF FIRST NATION]</i> <i>[Address]</i></p> <p>(hereinafter called the "First Nation")</p> <p>(collectively, the "Parties")</p>
Whereas clauses	<p>WHEREAS:</p> <p>A. The First Nation's Band Council has approved this Service Agreement by passing Band Council Resolution <i>[Name of Resolution]</i> at its meeting held on <i>[Date]</i> in accordance with the provisions of the Indian Act, R.S.C. 1985, c. I-5. A certificate of the Band Council Resolution is attached to this Service Agreement as Schedule <i>[Name of Schedule]</i>.</p> <p>B. The Municipal Council has approved this Agreement by passing By-law No. <i>[Number of By-law]</i> at its meeting held on <i>[Date]</i>. A copy of the By-law is attached to this Service Agreement as Schedule <i>[Name of Schedule]</i>.</p> <p>C. The First Nation is responsible for the administration and control of Reserve Lands.</p> <p>D. The Municipality and the First Nation have reached an agreement whereby the First Nation will pay the Municipality to provide Solid Waste Services to the Lands.</p> <p>E. The said Parties deem it to their mutual interest to enter into this agreement.</p>
A standard enactment clause	<p>THEREFORE THIS AGREEMENT WITNESSES that in consideration of the mutual covenants and agreements herein contained the sufficiency which is hereby acknowledged, the PARTIES hereto agree as follows:</p>

ISSUES TO CONSIDER

The title makes it clear what the Agreement is about

Date Agreement signed

Presumably this will be at least one First Nation and one Municipality, but consider whether there are additional parties that should be included. This might include a regional government, or other neighbouring communities. Indigenous and Northern Affairs Canada will likely not be a party to the agreement. First Nations generally have legal capacity to enter into contracts in their own right.

This section is dedicated to the high level principles and objectives the agreement will address.

It is also the place to reference mandating documents for the agreement, for example Band or municipal council resolutions or by-laws.

This can be copied as is into the agreement.

SECTION OF AGREEMENT	POSSIBLE PROVISIONS OF AGREEMENT
Definitions section	<p>1.0 DEFINITIONS</p> <p>1.1 In this agreement, including this section, the recitals and schedules hereto, unless the context otherwise requires:</p> <p>“Annual Fee” has the meaning ascribed in Section 4.</p> <p>“Lands” means the lands outlined in Schedule [Number of Schedule] and includes anything within the boundaries of those lands.</p> <p>“Leasehold Land” means any areas of the Reserve that is leased under the provisions of the Indian Act, RSC 1985, c. 1-5 to any non-Band members at any time during the Term.</p> <p>“Leaseholder” means a tenant or occupier of leasehold land.</p> <p>“Reserve” means the [Name of First Nation] which is a reserve within the meaning of the <i>Indian Act</i> R.S.C. 1985, c. 1-5.</p> <p>“Service Agreement” means this agreement, including the recitals and schedules hereto, as amended and supplemented from time to time.</p> <p>“Serviced Properties” has the meaning ascribed in Section 3.2.</p> <p>“Solid Waste Services” means, where appropriate, the gathering, transporting, separating, sorting, selling, processing, and disposing of wastes, refuse trash, garbage and recyclables.</p> <p>“Term” means a period of time which this Agreement remains in force and effect, as described in Section [Number of section which describes the term of the agreement].</p>

ISSUES TO CONSIDER

Are there specific terms that should be defined in the agreement?

A definition section is sometimes included in the contract to either provide greater clarification of a term (for example, “reserve” means R1 and R2 at ABC First Nation) or to create short forms for complex ideas that are contained in the agreement (for example, “agreement” means this agreement including all the recitals and schedules hereto, as amended and supplemented from time to time).

There is no need to define every term, just those that might cause confusion or would make the agreement easier to read and follow.



SECTION OF AGREEMENT	POSSIBLE PROVISIONS OF AGREEMENT
Duration of the Agreement	<p>2.0 TERM</p> <p>2.1 Subject to earlier termination under paragraph 2.2 this agreement commences on <i>[Date of Agreement]</i> and shall continue to <i>[End date parties agree upon]</i> and may be renewed in accordance with Section 2.3 below. Subject to termination under Section 2.2 or paragraph 7.1 below.</p> <p>2.2 This agreement may be terminated on <i>[Number of months/year(s)]</i> of written notice by a Party, at their sole discretion.</p> <p>2.3 If the First Nation fulfils the terms and conditions of this Agreement so as to be on good standing with the Municipality, the First Nation shall have an option to renew the Agreement for <i>[number of terms this agreement can be renewed]</i> additional terms of <i>[term of the agreement]</i> years each, and may exercise such option by providing the Municipality written notice at least <i>[minimum number of months' notice]</i> months in advance of the expiry of the initial Term or any renewal term. The same terms and conditions as outlined in this Agreement shall apply to each renewal term. Failure to provide such notice shall extinguish the renewal option under this agreement.</p>

ISSUES TO CONSIDER

When will the agreement take effect?

Examples might include immediately on signing, a specific date in the future (i.e., Thursday March 31, 2018), or upon something else happening (i.e., two days after the new solid waste site is completed and has passed inspection).

Answers to this question are dependent on many factors including whether infrastructure is already in place, whether there is already informal sharing of services, or whether you need time to get things ready for implementation.

When does the agreement end?

- You may want to include a specific end date for the agreement, perhaps because you want to see how it works before committing to a long-term open-ended agreement;
- Or perhaps you are comfortable working together and are happy to sign a long term agreement with no specified end date, but that can be cancelled by either party with sufficient notice;
- The term of the agreement may also be dependent on the type of funding arrangement between INAC and the First Nation.

Can the agreement be renewed?

- Consider whether you want to include the possibility of the agreement being renewed. If yes, there are many ways this can be addressed in the document. This could include automatic renewal after a certain time period unless one of the partners objects;
- Perhaps you want to include a date when the agreement will come up for review (i.e., three years after it was signed, the agreement will be reviewed by all parties and either renewed or cancelled at that time);
- INAC has advised that renewals will also depend on whether the First Nation has submitted all required reports to INAC, including copies of invoices. It will also depend on an assessment and review of the service agreement, mutually agreed upon service fees, and confirmation of funding sources.

SECTION OF AGREEMENT	POSSIBLE PROVISIONS OF AGREEMENT
Who is providing what?	<p>3.0 SERVICES</p> <p>3.1 During the Term, the Municipality will provide Solid Waste Services through its own resources and/or independent contractors to the following properties of the initial year in existence as of the commencement date of this Agreement:</p> <ul style="list-style-type: none"> (a) <i>[number of]</i> businesses (b) <i>[number of]</i> homes (c) <i>[number of]</i> mobile homes and non-Band housing <p>3.2 On the first day of <i>[agreed upon month, usually the month the Agreement came into effect]</i> during each year of the Term, the First Nation shall provide the Municipality, in a form and with content satisfactory to the Municipality, information regarding all parcels of property and other taxable folios within the Lands. On an annual basis of the initial date of the Service Agreement, the Municipality and the First Nation, acting reasonably, will determine the number of properties which will be services under this Service Agreement for each upcoming year, collectively the “Serviced Properties”.</p> <p>3.3 Co-ordination of the provision of Solid Waste Service to be provided with the Municipal or Reserve boundaries shall be the responsibility of the Municipality. The First Nation agrees to expend all reasonable efforts in supporting this coordination function.</p> <p>3.4 The quality and quantity of the Services to be provided by the Municipality under this Agreement will be substantially the same as the quality and quantity of Services provided by the Municipality to the users of such Services on non-Reserve lands within the Municipality. The Municipality is not obliged to provide Services at a greater level or degree than the level or degree to which the same Service is provided elsewhere within the Municipality. The Municipality makes no representation or warranty that the level or degree of Services provided under this Service Agreement will be maintained or continued to any particular standard, other than as stated expressly herein. The First Nation acknowledges and agrees that there may be from time to time interruptions or reductions in the level of Services, and that the Municipality will not be held liable for any losses, costs, damages, claims or expenses arising from or connected with a temporary interruption or reduction in the level of a Service provided under this Agreement.</p>

ISSUES TO CONSIDER

What goods and services are you expecting to share?

Be as specific as you can about exactly what is being supplied by whom. For example, it is not sufficient to say ‘garbage collection’, if you are in fact expecting a certain kinds of garbage to be collected and at a particular time. If, for example, you are expecting curbside recycling pick up twice per month, be sure to say exactly that in the agreement.

In addition to solid waste management, are there other services you are interested in sharing. What are they? Do they need a separate agreement or can they be brought together in a comprehensive agreement?



SECTION OF AGREEMENT	POSSIBLE PROVISIONS OF AGREEMENT
	<p>3.5 Services will be provided within the Federal Level of Service Standards and will comply with all Federal Acts, regulations, and policies, as well as Provincial Acts, regulations and polies. These can be listed below.</p> <p>3.6 Time shall be deemed the essence of this agreement. The service schedule and interval of the service(s) should be outlined below. Some services should take into consideration any special conditions based on the nature, urgency and extent of the services.</p> <p>3.7 The Municipality/Contractor shall, for the prices set out in this agreement and except as otherwise specifically provided, provide at no additional cost to the First Nation/Owner all and every kind of labour, machinery, plant, structures, roads, ways, materials, appliances, articles and things necessary for the due execution and completion of all the work set out in this Contract and shall forthwith according to the instructions of the agreement, commence the works and diligently execute the respective portions thereof, and deliver the works complete in every manner to the First Nation/Owner within the time specified in the Contract.</p>

ISSUES TO CONSIDER

Who is going to do what?

Think through all the elements of managing solid waste. For example, who is going to supply what to whom, who is responsible for running the operation and maintaining the service, who is responsible if services break down, who is responsible for construction of new infrastructure or upgrades to existing infrastructure? Will this be the municipality, the First Nation or a private contractor? Be sure you think through the whole supply chain and identify responsible parties.

- Who owns what?;
- Is it necessary to spell out in the agreement who owns what infrastructure?;
- If new infrastructure is to be built, is it owned by whoever's land it sits?;
- What if the parties share the cost for new infrastructure – who owns it then?;
- Is new infrastructure contemplated?;
- If yes—what is to be built, who pays for it, who builds it, when, construction standards, etc.;
- Who is responsible for operations and maintenance?;
- If a system is already up and running, perhaps there may be no need to consider this further because responsibility will remain with whoever is currently doing this work.

Who will maintain the:

Transfer stations, garbage or recycling bins, the land fill site, the trucks, etc.?

Perhaps it would be helpful to share O&M, providing back-up support for holidays or emergencies, or possibly as a means to build capacity or share the expenses.

- Who do you contact if there is a problem or an emergency?;
- Who is responsible for paying for repairs or making repairs?;
- Does failure to maintain the system constitute breach of the agreement?

SECTION OF AGREEMENT	POSSIBLE PROVISIONS OF AGREEMENT
Who pays for what	<p>4.0 PAYMENT FOR SERVICES</p> <p>4.1 As compensation for the provision of Solid Waste Services provided hereunder, the First Nation shall pay the Municipality the Annual Fee, which shall be payable and calculated in accordance with this Section 4.</p> <p>4.2 On the <i>[day of the month]</i> of <i>[month]</i> each year of the Term, the Municipality will calculate the Annual Fee payable by the First Nation for the provision of Solid Waste Services for the upcoming year, as follows:</p> <ul style="list-style-type: none"> (a) the Parties will designate a reasonable property fee acting in a reasonable manner; (b) that property fee will be multiplied by the number of serviced properties in accordance with Section 3.1; and, (c) the result of that calculation shall be the Annual Fee payable that year. <p>4.3 The Annual Fee payable by the First Nation for the provisions of Solid Waste Services for the first year of the Term of this Service Agreement will be calculated as follows:</p> <p><i>[Demonstrate an initial calculation of the fees]</i></p> <p>4.4 On or before <i>[date an invoice for services is to be sent]</i> of each calendar year, the Municipality shall invoice the First Nation for the Annual Fee for the upcoming year.</p> <p>4.5 The First Nation will pay all of the Municipality's invoices within thirty days of issuance. Interest on all outstanding invoices shall accrue at a rate of <i>[agreed interest rate]</i> percent, calculated monthly.</p> <p>4.6 The First Nation shall, within <i>[number of days]</i> of the date upon which the agreement is executed, provide the Municipality with an irrevocable standby Letter of Credit drawn upon a Canadian Chartered bank in the amount of <i>[estimated cost of services for one year]</i> dollars to be used as security for payment of amounts owing to the Municipality pursuant to this. Any renewed or substituted Letter of Credit shall be delivered by the First Nation to the Municipality not less than <i>[number of days]</i> prior to the expiration of the then current Letter of Credit.</p>

ISSUES TO CONSIDER

What is the cost of the service?

- What are the costs of operation, maintenance, capital investment, or closing and monitoring land fill sites?;
- Will these costs be divided equally between the parties?;
- What happens if new or unexpected costs arise?

CIPP recommends full cost accounting to determine the price to charge for solid waste management.

It may also be worthwhile to consider including an increase to fees annually to account for inflation, or a set percentage increase per year, or negotiation of new rates annually or as required.

Who is paying for what? Who is paying any related taxes or duties, third party liability insurance or workers compensation?

Are there:

- Bin rental or purchase fees?;
- A volume or weight limit?;
- Fees if these limits are exceeded?;
- Are there fines, for example for mixing recyclables with waste destined for the land fill site?

SECTION OF AGREEMENT	POSSIBLE PROVISIONS OF AGREEMENT
<p>Commitments</p>	<p>5.0 COVENANTS OF THE MUNICIPALITY</p> <p>5.1 The Municipality shall provide Solid Waste Services to the Lands.</p> <p>5.2 The Municipality shall bill the First Nation for the cost of the Solid Waste Services in accordance with the payment provisions of this Service Agreement.</p> <hr/> <p>6.0 COVENANTS OF THE FIRST NATION</p> <p>6.1 The First Nation shall give the Municipality maps and other information required by the Municipality in order to enable the Municipality to identify the location of all existing residents and business which require Solid Waste Services.</p> <p>6.2 The First Nation will comply with, and take all reasonable steps to ensure compliance with any person receiving the Solid Waste Service with the Municipality's [insert name of bylaw], and any amendments thereto or replacements thereof, and all applicable provincial and federal regulations.</p>
<p>Communicating with citizens</p>	<p>7.0 PUBLIC INFORMATION</p> <p>7.1 The First Nation and the municipality will work together to develop information to be shared with the public about this agreement and to inform the First Nation members of any changes to service, including among other things recycling, composting, and garbage pick-up or drop off.</p>
<p>Access to Reserve or Municipal lands for implementing the agreement</p>	<p>8.0 RIGHTS OF ACCESS</p> <p>8.1 Representatives of the Municipality may at any time enter upon the Reserve for the purpose of providing any of the Services required in accordance with this Service Agreement as outlined by Section 3 and inspecting the Reserve Infrastructure and ensuring compliance with the terms of the Agreement.</p>

ISSUES TO CONSIDER

The agreement boiled down to its bottom line. Community X will do such and such, Community Y will do this, that, and the other thing.

Often community members need reminders about new waste management practices. Working together, First Nations and municipalities can develop common communication materials that keep citizens informed.

Does one party have the right to be on territory of the other in order to repair or maintain the system?

If yes, under what circumstances (i.e., as a matter of course in the context of regular work; upon one day's notice to the other party; only in special circumstances; etc.)?

If no, how do the parties inform the other of the need for access, under what circumstances will permission be granted, how much notice is required for obtaining permission, etc.?

SECTION OF AGREEMENT	POSSIBLE PROVISIONS OF AGREEMENT
<p>Conditions for cancelling the Agreement</p>	<p>9.0 TERMINATION FOR BREACH OF AGREEMENT</p> <p>9.1 Should either party be in breach of its covenants or undertakings under this Service Agreement, other than a failure by the First Nation to pay for Services, which remains un-rectified for a period of <i>[acceptable period for rectification of breaches of the agreement]</i> following written notification of such breach, the party not in breach may, at its option and without prejudice to any other rights or remedies it might have, immediately terminate this Service Agreement.</p> <p>9.2 Whether or not the Services or any of them are discontinued or any disconnections are made, where invoices remain unpaid by the First Nation as at <i>[Date]</i> of the following year, the Municipality shall have the right, without prejudice to any other right or remedy, to call upon the Letter of Credit as outlined in section 4.6. If, at any time during the term of this Service Agreement invoices remain unpaid as at <i>[Date]</i> and the First Nation fails to have the Letter of Credit in place, the Municipality may give immediate notice of termination of this Service Agreement.</p> <p>9.3 If this Service Agreement is terminated or otherwise cancelled for any reason, a prorated portion of any advance payments made by the First Nation will be refunded.</p>
<p>Liability</p>	<p>10.0 LIABILITY AND FORCE MAJEURE</p> <p>10.1 The Municipality does not warrant or guarantee the continuance or quality of any of the services provided under this Service Agreement and shall not be liable for any damages, expenses or losses occurring by reason of suspension or discontinuance of the Solid Waste Services, for any reason which is beyond the reasonable control of the Municipality, including without limitation acts of God, forces of nature, soil erosion, landslides, lightning, washouts, floods, storms, serious accidental damage, strikes or lockouts, vandalism, negligence in the design and supervision or construction of the Reserve Systems, or in the manufacture of any materials used therein, and other similar circumstances.</p>

ISSUES TO CONSIDER

What happens if one party does not fulfill its side of the bargain?

- Is there a procedure in the agreement about what to do if one party fails to meet its side of the agreement?;
- Under what conditions does the agreement become null and void?;
- Under what conditions is the agreement redeemable?;
- Failure to pay on time (or at all) - what happens? Is there a late fee penalty? Is the contract automatically terminated? Under what circumstances would it be acceptable for a late payment?;
- Failure to provide the service or goods - what happens? Is the contract automatically null and void? Should there be a procedure for advising the other side about a perceived failure to meet the obligations?;
- Should there be a dispute resolution process spelled out in the agreement? If yes, what would it look like (i.e. go directly to court; hire a mediator or arbitrator; use a talking circle to work through the issue, etc.)? Who pays for these services?

Who is liable for problems?

While the contract will spell out who is responsible for what, it is common to limit liability in certain circumstances. For example, the parties may want to agree that damages resulting from failure to provide services would not be compensated (i.e., loss of income to a restaurant that had to close because the garbage was not collected). So called “Acts of God” might also be excluded, for example, if there is a major flood, neither party is liable for damages.

SECTION OF AGREEMENT	POSSIBLE PROVISIONS OF AGREEMENT
<p>Sharing information</p>	<p>11.0 COMMUNICATIONS AND CONTRACT PROTOCOL</p> <p>11.1 All the Parties to this agreement will appoint one or more representatives, with notice to the other Parties of such appointments as the principal contacts for official communications about this Agreement, and as the principal contacts for operational matters pursuant to this Agreement. The Parties further agree to establish a communications protocol to manage issues arising under this Agreement.</p>
<p>Settling disagreements</p>	<p>12.0 DISPUTE RESOLUTION</p> <p>12.1 In the interest of cooperative and harmonious co-existence, the parties agree to use their best efforts to avoid conflict and to settle any disputes arising from or in relation to this agreement.</p> <p>12.2 In the event that the parties fail to resolve matters, the parties shall seek a settlement of the conflict by utilizing <i>[Outline agreed upon method(s) of dispute resolution]</i>, and recourse to the Courts shall be a means of last resort except where public health and safety is concerned.</p>
<p>Rights of the First Nation and municipality</p>	<p>13.0 ACKNOWLEDGEMENT OF RIGHTS</p> <p>13.1 Nothing contained in this Agreement will be deemed to limit or affect any other Aboriginal rights or claims the First Nation may have at law or in equity. Nothing contained in this Agreement will be deemed to limit or affect the legal rights, duties or obligations of the Municipality. The Parties agree that nothing in this Agreement will affect the cooperation or consultation covenants the Parties have entered into pursuant to other Agreements.</p>

ISSUES TO CONSIDER

To whom should communications be made, and in what form?

- Think about who is the best person to receive notice about what. For example, the need for repairs might best be directed to the system manager, but a request for additional time to pay a bill might best be directed to the Chief Administration Officer. In small communities it might make sense for one person to receive all communications no matter the issue;
- Think also about what form communications should take. Is a phone call sufficient, is an email adequate for notice, do some things require a registered letter? The answer to this may depend on the nature of the issue to be discussed in the correspondence. For example, a phone call to the system manager may be the best way to deal with a frozen pipe, but a registered letter may be required to confirm intention to withdraw from the agreement.

What happens if there is a dispute between the parties about the interpretation of the Agreement or a problem with the service or payment?

It is recommended that the Agreements include provisions for dispute resolution. Additional options include neutral third party facilitation, mediation, and arbitration.

What is the process and timeline for settling disputes? Who pays for the dispute resolution process?

This provision is sometimes included to provide comfort that the Agreement will not undermine Indigenous rights or municipal authority.

SECTION OF AGREEMENT	POSSIBLE PROVISIONS OF AGREEMENT
<p>Standard Clauses</p>	<p>14.0 HEADINGS</p> <p>14.1 Headings that precede sections are provided for the convenience of the reader only and shall not be used in constructing or interpreting the terms of this Agreement.</p> <p>15.0 ENTIRE AGREEMENT</p> <p>15.1 This Service Agreement constitutes the entire agreement between the parties and there are no undertakings, representations or promises express or implied, other than those expressly set out in this Service Agreement.</p> <p>15.2 This Service Agreement supersedes, merges and cancels any and all pre-existing agreements and understandings in the course of negotiations between the parties.</p>
<p>To whom are communications directed</p>	<p>16.0 NOTICE</p> <p>16.1 The address for delivery of any notice or other written communication required or permitted to be given in accordance with this Service Agreement, including any notice advising the other party of any change of address, shall be as follows:</p> <p>(a) to Municipality: <i>[Provide Address including the attention the letter should be directed to and other relevant contact information]</i></p> <p>(b) to First Nation: <i>[Provide Address including the attention the letter should be directed to and other relevant contact information]</i></p> <p>16.2 The parties may change their address for delivery of any notice or other written communication in accordance with section 11.1.</p>

ISSUES TO CONSIDER

Should you include 'boiler plate' or standard clauses commonly found in other agreements?

These are standard clauses in these types of contracts.

- Gender: "Any reference to one gender in this agreement also includes reference to the other gender" (helps get around the awkwardness of having to write he/she all the time);
- Governing Laws: "The provisions of this agreement will be governed and interpreted in accordance with the laws of the province or Canada, as applicable."

Be sure to provide the full name, position, address, phone number, email, etc., for communications between the parties. Keep this information handy for emergency situations.

SECTION OF AGREEMENT	POSSIBLE PROVISIONS OF AGREEMENT
	<p>17.0 SEVERANCE</p> <p>17.1 In the event that any provision of the Service Agreement should be found to be invalid, the provision shall be severed and the Agreement read without reference to that provision.</p> <p>17.2 Where any provision of the Service Agreement has been severed in accordance with Section 14.1 above and that severance materially affects the implementation of this Agreement, the parties agree to meet to resolve any issues as may arise as a result of that severance and to amend this Agreement accordingly.</p>
	<p>18.0 AMENDMENT</p> <p>18.1 The Service Agreement shall not be varied or amended except by written agreement of both parties.</p> <p>18.2 No waiver of the terms, conditions, warranties, covenants, and agreements set out herein shall be of any force and effect unless the same is reduced to writing and executed by all parties hereto and no waiver of any of the provisions of this Agreement will constitute a waiver of any other provision (whether or not similar) and no waiver will constitute a continuing waiver unless otherwise expressly provided.</p> <p>18.3 Where the provisions of this agreement do not conform to the requirements of any applicable federal or provincial law or any enacted amendment to those laws this agreement will be amended to conform with them and the parties will work together to inform the public about any change to the service that may result.</p>

ISSUES TO CONSIDER

This is a standard clause that allows the parties to delete a section of the agreement because it is found to be invalid. For example, if the agreement has a clause that required 15 ton trucks for garbage hauling, but a new municipal by-law prevented trucks over 5 tons to travel the roads for a couple of months in the spring to protect the soft roads, the requirement for 15 tons trucks could be ignored without making the entire contract invalid. Of course it is expected that the municipality and First Nation would have discussed the new by-law before it was implemented and come up with a solution to haul the garbage.

Can the contract be amended?

- If yes, how are changes to be made to the contract? Options include:
 - Following notice from one party to the other of the desire to amend the agreement;
 - After discussion between the parties;
 - Are amendments to be made in writing? This is recommended so there is a written record;
 - Do amendments have to be approved by Councils?;
 - Should amendments be signed by the original parties?;
 - Should the amendments be attached to the original agreement?

Do you need to include provision for future legislative changes?

- Laws change from time to time, which may affect contracts. For example, higher standards for solid waste management at the provincial or federal level may require improvements to infrastructure;
- What happens to your agreement if a law changes that affects your agreement?;
- Do you have to provide each other notice that the laws have changed?;
- Should you agree to meet to discuss matters including changes to infrastructure?;
- Who is responsible for making and paying for the improvements if the law changes?

SECTION OF AGREEMENT	POSSIBLE PROVISIONS OF AGREEMENT	ISSUES TO CONSIDER
	<p>19.0 GOVERNING LAWS</p> <p>19.1 The provisions of this Agreement will be governed and interpreted in accordance with the laws of <i>[insert province]</i> or Canada, as applicable.</p>	<p>Because First Nations engage with the Federal Government and municipalities are mandated by whichever province they are in, both provincial and federal law needs to be identified here.</p>
	<p>20.0 ASSIGNMENT</p> <p>20.1 The rights and obligations of the parties may not be assigned or otherwise transferred. An amalgamation by a party does not constitute an assignment.</p>	<p>Can the agreement be assigned, or responsibility for its implementation passed on to another government?</p> <ul style="list-style-type: none"> • As written, this provision states that it cannot be assigned to someone that is not a party to the original agreement. For example, the First Nation could not assign the responsibility for implementation to a different First Nation; • The one exception allowed is if, for example, a municipality were to be amalgamated into a larger body, such as a new regional government. The regional government would automatically become responsible for the municipality's obligations under the contract.
	<p>21.0 ENUREMENT</p> <p>21.1 The Service Agreement enures to the benefit and is binding upon the parties and their respective heirs, executors, administrators, successors, and assigns.</p>	<p>Does the contract enure, or automatically pass on, to successive Councils?</p> <ul style="list-style-type: none"> • The issue to consider here is whether the agreement is binding on subsequent Chiefs, Mayors and Councils; • For example, does this agreement only last until the next election, or is it expected to continue to be binding on the municipality and First Nation despite who is elected in the future?; • If the contract is open ended without a set end date, it would be worthwhile including an enurement clause like this one that makes it clear the agreement is binding on future councils.

SECTION OF AGREEMENT	POSSIBLE PROVISIONS OF AGREEMENT
	<p>IN WITNESS WHEREOF the parties hereto have executed this Agreement.</p> <p>On behalf of the [NAME OF FIRST NATION OR MUNICIPALITY]</p> <hr/> <p><i>[Position]</i></p> <hr/> <p><i>[Position]</i></p> <p>On behalf of the [NAME OF FIRST NATION OR MUNICIPALITY]</p> <hr/> <p><i>[Position]</i></p> <hr/> <p><i>[Position]</i></p>

ISSUES TO CONSIDER

Think about who has authority to sign a contract binding your community:

- Is it the Chief and Mayor?;
- Is it a Band Manager or Chief Administrative Officer?;
- Do all members of the council for the municipality and the First Nation have to sign?;
- This is also the time to think about what evidence of approval for the contract might be necessary in addition to a signature. Council resolutions or by-laws approving the agreement can be attached to the contract as an appendix as this kind of evidence.



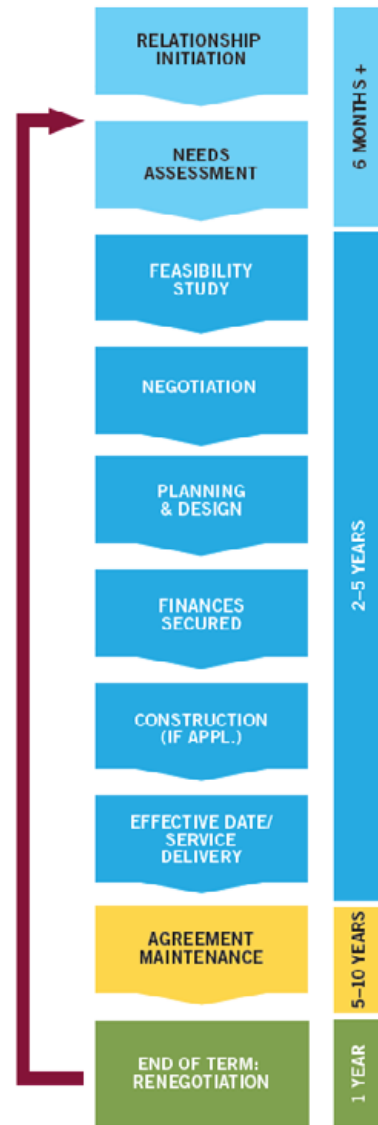
ROAD MAP TO SERVICE AGREEMENTS

It will likely take many meetings to sort out the details of the agreement. Setting up a regular meeting, once per month on the same day and same time can help keep the discussions moving forward. Remember, it may take months or even years to complete the steps from idea to implementation. There may be feasibility studies to complete, land purchases to be negotiated, equipment to buy and infrastructure to install, and agreements to negotiate, all of which can take months to complete themselves. Also, from time to time you will need to get advice from your councils. There will be decision points along the way where the negotiations will have to pause while your councils decide how to proceed. Taking time for community consultations to inform community members and get their input, which is recommended, will slow the process, but it is time well spent as it will strengthen community resolve when it comes to implementing the new solid waste management plan.

Experience has shown that a small working group of two to three representatives per community can easily manage the negotiations. We recommend at least one elected official from each community participate on the working group to provide political direction. First Nations and municipalities tend to assign responsibility for various governance issues to council members, so perhaps the council person responsible for infrastructure or public works could serve on the working group. Senior staff should also serve on the working group. They bring needed expertise to the discussions, including financial, technical, legal, and administrative advice. Again, in the spirit of relationship building, remember to build in some casual time to get to know each other better.

FIGURE 19: ROADMAP TO SERVICE AGREEMENTS

Source: Community Infrastructure Partnership Program (CIPP), January 2011.



The steps of a standard negotiation are set out in sequence below. You would not necessarily address all of these items at the same meeting; it depends on what stage you are at in the process.

FIGURE 20: AGENDA ITEMS FOR SERVICE AGREEMENT NEGOTIATIONS

Review the Checklist for Positive Relationship-building <i>Service Agreement Toolkit</i> , p. 22
Develop a Friendship Agreement or Communications Protocol <i>Service Agreement Toolkit</i> , p. 27
Confirm project or issue to be addressed
Review and answer the Preparation Questions <i>Service Agreement Toolkit</i> , p. 62
Work through “Checklist 1: Essential contract elements of a service agreement” <i>Service Agreement Toolkit</i> , p. 64
Identify issues for further research and provide answers (i.e., waste audits, feasibility studies, case studies, discussions with experts, peer to peer mentoring)
Review “Guidelines for pricing options” <i>Service Agreement Toolkit</i> pp. 75-77 and “Sample pricing models” <i>Service Agreement Toolkit</i> pp. 78-81 and <i>CIPP Pricing Webinar</i> .
Review “Collaborative dispute resolution” <i>Service Agreement Toolkit</i> pp. 41-46
Research funding options and develop funding proposals
Develop and implement public engagement strategy and solicit feedback from your council and community on draft as appropriate or customary
Develop first draft of agreement
Incorporate feedback in second draft, and continue with drafts of the agreement until everyone is satisfied
Prepare draft council resolution to sign agreements
Council adopts draft resolution and agreement
Organize and hold signing ceremony and celebration

SERVICE AGREEMENT RENEGOTIATION TOOL

Some communities may already have solid waste management agreements and may need to amend or renegotiate them from time to time. The CIPP *Service Agreement Toolkit* at pages 85-86 has useful tips on renegotiating agreements generally as well as a service agreement renegotiation tool.

CHAPTER 7

FUNDING RESOURCES

First Nations and municipalities can be hard-pressed to find the financial resources to properly manage solid waste.

Construction of a new solid waste site can amount to millions of dollars, including costs for:

- waste audits and feasibility studies;
- environmental assessment;
- construction of new transfer or land fill sites; and
- new composting or energy recovery systems.

Other costs are ongoing, including:

- garbage collection and sorting;
- transportation;
- purchase and application of cover material;
- site remediation upon closure;
- on-going monitoring systems;
- fencing and other equipment; and
- labour.

Few First Nations or municipalities can afford these costs without support from other orders of government. Fortunately, other resources are available in Canada. In addition to the resources identified in the *Service Agreement Toolkit*, chapter 5, municipalities and/or First Nations may be able to access the following funding to support investments in improved solid waste management.



GREEN MUNICIPAL FUND (GMF)

Through [GMF](#), FCM supports initiatives that demonstrate an innovative solution or approach to a municipal environmental issue, and that can generate new lessons and models for municipalities of all sizes and types in all regions of Canada. These initiatives offer significant environmental benefits, a strong business case and social advantages, and are complemented by local policies and measurement systems.

The unique GMF program model continues to offer integrated funding and knowledge services; along with added benefits such as broader capital project eligibility, enhanced client service and improved application forms and resources, and more opportunities for communities to work together through peer networks.

Helping local sustainability leaders move from vision to reality. Whether you are at the planning stage, undertaking a feasibility study or pilot project, or getting ready to implement a capital project, we're with you every step of the way!

Municipalities and municipal corporations working in partnership with a municipality may apply and include one or more partnering First Nations in their application. Funding is available for waste diversion projects like composting or recycling initiatives including feasibility studies, pilot projects and capital projects. Plans must be able to achieve 60% diversion of waste from the current waste stream to qualify for funding. Remote communities must target 15% reduction. Thermal treatment (i.e., recovery systems) will only be supported where communities have already achieved the 60% diversion rate. Waste stream solutions targeting specific challenging issues like diapers, polystyrene, certain plastics, etc., may also be eligible for funding. Feasibility studies, pilot projects and capital projects will be considered and must demonstrate some improvement for multiple municipalities in their diversion rates by weight or volume and offer other environmental benefits. The GMF offers both grants and low interest loans. The [website](#) should be consulted for the latest information regarding funding amounts.

MUNICIPALITIES FOR CLIMATE CHANGE INNOVATION PROGRAM (MCIP)

Extreme storms, hotter summers, colder winters, rising sea levels, flooding and drought. These are just some examples of the new reality of climate change for many Canadian communities. MCIP provides funding, training and resources to help municipalities adapt to the impacts of climate change and reduce greenhouse gas (GHG) emissions. The program is funded by the Government of Canada. The program provides grants for climate change mitigation studies that assess the feasibility of solid waste projects that could lead to greenhouse gas (GHG) reductions from anaerobic treatment and management of solid waste or landfill gas capture. Both feasibility studies and operational studies are eligible. Funding is available to municipalities and partnering First Nations; please see more details on the [program's website](#).

MUNICIPAL ASSET MANAGEMENT PROGRAM (MAMP)

Aging infrastructure, including roads, buildings and bridges, competing priorities, limited budgets. These are some of the challenges municipalities face in making infrastructure decisions today. FCM's new Municipal Asset Management Program is a five-year, \$50-million program designed to help Canadian municipalities make informed infrastructure investment decisions based on sound asset management practices. The program is funded by the Government of Canada. The program offers training and workshops and funding to assist with the planning, data management and analysis undertaken by a municipality or partner to better understand their infrastructure management needs, including for solid waste management. Funding is available to municipalities and partnering First Nations that share infrastructure through a joint service agreement. Further details are available on the [program's website](#).

ECOACTION COMMUNITY FUNDING PROGRAM

This program provides financial support to Indigenous communities and their partners for projects that result in measurable, positive impacts on the environment. The program focuses on projects that will protect, rehabilitate or enhance the natural environment, and build the capacity of communities to sustain these activities into the future. In particular, this program funds projects that divert organics from landfills or promote proper disposal of hazardous waste. Further details are available on the [program's website](#).

FIRST NATIONS WASTE MANAGEMENT INITIATIVE

In Budget 2016, the Government of Canada announced a proposed investment of \$409 million dollars over five years dedicated to the First Nations Solid Waste Management Initiative. The First Nations Solid Waste Management Initiative supports First Nations in developing sustainable waste management systems. Eligible components for funding include planning, capacity building and training, programs and partnerships in support of waste management and diversion such as recycling and composting, waste infrastructure construction and operation and waste site decommissioning. Funding is available to First Nation communities, Tribal Councils, First Nations technical service organizations, related not-for-profit organizations, and eligible collaborative organizations operating on behalf of First Nations. For more details regarding the program and funding please see the [program's website](#).

ADDITIONAL RESOURCES

FIRST NATION - MUNICIPAL RELATIONS

CEDI (Community Economic Development Initiative)

In 2010, FCM surveyed its municipal members about municipal-First Nations relations. Members ranked working with common standards and doing joint planning for economic development among the top five ways to improve their relationships and shared goals with nearby First Nation communities.

Since it was launched in 2012, CEDI's focus has been on joint community economic development (CED). This will continue throughout Phase 2 because it's a model that provides opportunity and optimism to the communities involved. Representatives from CEDI First Nations and municipalities have told us that joint CED, which can include problem-solving around land uses and management, includes these benefits:

- Better community-to-community relationships;
- A more attractive climate for investors and tourists;
- A stronger, united voice for engaging with businesses and federal and provincial governments;
- Less duplication and more efficient use of limited resources;
- Access to each partner's unique human, physical and financial capacities, and alternative funding streams;

- More opportunities for local business development and job creation;
- Coordinated planning efforts to improve land use, land management and environmental/resource protection.

Each CEDI community partnership works in its own unique way. The partners jointly decide what applies to their geography, people, and circumstances.

Some CEDI partners have gone on study tours in support of tourism ventures. Others have used peer mentorship to launch their joint work, hired joint Economic Development Officers, or organized regional planning workshops that brought people together who had never imagined being in the same room planning a better future.

The launch of CEDI's *Stronger Together* toolkit in September 2015 made the learnings of CEDI's Phase 1 available to a wide audience because the way that CEDI does joint CED, contains lessons for First Nations and municipalities across Canada, whether or not they are CEDI partners.

FIRST NATION MUNICIPAL NETWORK ON LINKEDIN

The First Nations-Municipal Network is a unique venue to facilitate peer-to-peer mentoring, support and advice on improved infrastructure, joint service agreements, community economic development, and relationship building between First Nations and municipal elected officials and staff – as well as other individuals and organizations interested in First Nations – Municipal cooperation.

Members can use this space to share successes, challenges, experiences and best practices, ask questions, share tools and resources, and build their networks to promote strong intergovernmental and cross-cultural relationships.



Solid Waste Management Professional Organizations and First Nations Technical Services

- [Compost Council of Canada](#);
- [Edmonton Waste Management Centre of Excellence](#);
- [Municipal Waste Association](#);
- [Ontario Waste Management Association \(OWMA\)](#);
- [Saskatchewan Waste Reduction Council](#);
- [Solid Waste Management Association of North America](#);
- [Waste Management Association of B.C. \(WMABC\)](#);
- [Ontario First Nations Technical Service](#);
- [First Nations Technical Service \(Alberta\)](#);
- [EcoCanada Building Environmental Aboriginal Human Resources \(BEAHR\) Solid Waste Coordinator Program](#).

ENDNOTES

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Notes (from site):
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