

Strategies for Building and Implementing SUSTAINABLE TRIBAL WASTE MANAGEMENT PROGRAMS

February 2021

What is the best way to manage waste?

This is a question that many tribes face. Finding a cost-effective and efficient way to build and implement a waste management program can be difficult, especially in rural areas. Each tribe is unique, with its own history, culture, financial situation, and geographic location. A waste management program should be tailored to address the specific needs and circumstances of each community. Effective waste management includes appropriate collection, transport and waste diversion and disposal facilities. Administrative, regulatory and community outreach program elements also contribute to effective waste management.

What can I learn from this document?

The strategies included in this document can assist tribal communities with overcoming barriers in developing and implementing a sustainable waste management program. In addition, this factsheet highlights information about technical assistance solutions that help tribes with protecting the environment and human health of their community. Links to resources and tools are also provided.

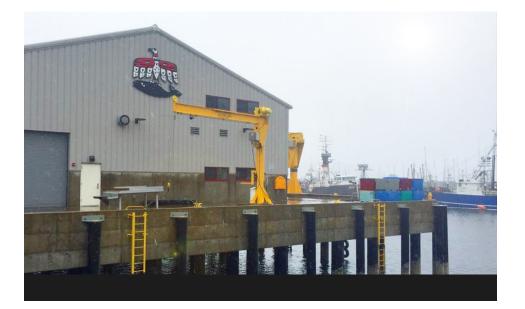
Each Tribe is Unique

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In This Factsheet

- Strategies for Overcoming Barriers
- Technical Assistance Solutions
- Links to Resources and Tools



FINANCIAL VIABILITY

Obtaining program funding, both internal and external, is one of the most difficult challenges in implementing a sustainable waste management program. Every step in developing, implementing and maintaining a waste management program requires funding. Determining funding streams is a critical component to implementing a sustainable waste management program.

Before planning the activities in a waste management program, conduct a self-assessment to evaluate the tribe's capacity and financial ability to successfully establish such a program.

Tribes may want to:

- Prepare a feasibility study of the tribal waste management program(s) to determine if these programs are possible, feasible and beneficial. Preparing a feasibility study is useful because it will help to determine whether a project is worth pursuing and if a waste program or activity is economically viable.
- Develop a fee structure for the waste program. User fees for solid waste services are a common source of funding for many tribes. These fees include transfer station or landfill tipping fees and waste collection service fees. Many tribes use a flat user fee where residents pay a set amount (charged monthly, bi-weekly, annual fee or paid through taxes). Others may collect fees through Pay-As -You-Throw (PAYT) programs, which charge per bag or pound of waste disposed.
- Explore potential sources of supplemental funding, in addition to sustainable self-generated revenue, such as external funding from federal grants and loans, private foundations or non-governmental organization sources of funding.

Financial Resources

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The Tribal Waste Management Program Sustainability Evaluation Tool

www.epa.gov/tribal-lands/ tribal-waste-management -program-sustainabilityevaluation-tool

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The Tribal Waste Management Funding Resources Directory

www.epa.gov/tribal-lands/ tribal-waste-management -funding-resourcesdirectory



Tribal Decision-Maker's Guide

archive.epa.gov/wastes/ wyl/web/pdf/trib-dmg.pdf

Educational Resources



Infrastructure Task Force Work Team 2 Report

<u>https://www.epa.gov/</u> <u>tribal/infrastructure-task-</u> <u>force-tribal-solid-waste-</u> <u>management</u>

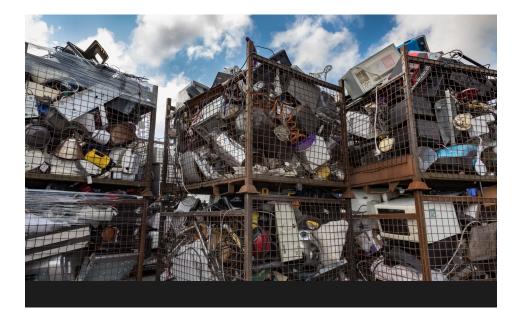
<u>Tribal</u>



Community-Based Social Marketing (CBSM) Training Guide

www.epa.gov/tribal-lands/ tribal-community-basedsocial-marketing-trainingguide





EDUCATION AND OUTREACH

Elevating awareness of why waste should be properly managed to tribal leaders and the community is an integral part of any tribal waste management program. Well planned education and outreach initiatives can help generate understanding and support for waste management issues. Education and outreach initiatives also can be instructional to teach residents how to follow waste management and recycling guidelines that will be beneficial to the tribe.

- Identify your goals and audience by crafting a clear and useful message.
- Create a solid waste committee and hold regularly scheduled meetings. Ask elders, youth, tribal staff, council members and members from other departments to participate.
- Provide outreach and education to tribal leadership that highlights the human health and environmental impacts from improperly disposed waste. This information can persuade and encourage tribal leadership to invest in the waste management program.
- Offer tribal community outreach, education and cleanup events to minimize open dumping and littering by encouraging voluntary participation in waste management programs, including proper waste disposal and waste diversion. If possible, facilitate manufacturer take-back of large waste items, such as old appliances and e-waste, to minimize the risk of such items being disposed of improperly.



PLANNING

Developing written plans that combine a variety of strategies for both waste management and waste reduction is another critical step in developing and implementing a sustainable waste management program.

- Developing an Integrated Waste Management Plan (IWMP) is one of the most important steps in establishing a waste management program. An IWMP is the foundation of any waste management program. If feasible, include a source reduction plan within the IWMP to help minimize the amount of material that enters the waste stream.
- Adopting waste codes, ordinances or regulations provides a basis for enforcement and compliance for sections of your IWMP.
- Collaborating with nearby communities to develop guidance and procedures to coordinate regular collection, transport and disposal services and special collection events can reduce and streamline costs. A Memorandum of Understanding or cooperative agreement with neighboring local governments to address operational gaps and coordinate efforts to address waste-related issues can be beneficial to the tribal community.

Planning Resources



Developing Tribal Integrated Waste Management Plans

www.epa.gov/tribal-lands/ developing-tribalintegrated-wastemanagement-plans

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Developing Tribal Waste Management Codes and Ordinances

www.epa.gov/tribal-lands/ developing-tribal-wastemanagement-codes-andordinances



Operational Resources



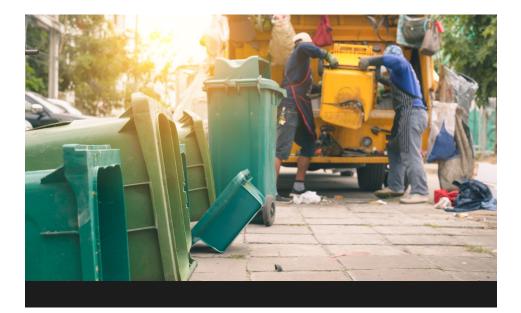
The Tribal Waste Management Technical Assistance Directory

www.epa.gov/tribal-lands/ tribal-waste-management -technical-assistancedirectory



National Tribal Waste Management Peer <u>Matching</u> Program

www.epa.gov/tribal-lands/ forms/national-tribalwaste-management-peermatching-program

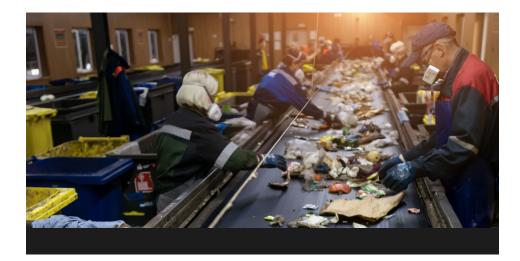


PROGRAM ADMINISTRATION AND OPERATION

Program administration generally includes all administrative oversight functions to ensure proper program implementation (e.g., financial and human resources management, program performance evaluation, scheduling).

- Ensure staff has access to waste management-related trainings. Retaining an adequate number of properly trained and skilled staff will ensure effective implementation.
- Utilize EPA's National Tribal Waste Management Peer Matching Program. This program allows tribes who are working on similar issues to exchange experiences and practical knowledge through a mentoring program. The Peer Matching Program allows tribes to address a specific challenge, such as designing and supervising construction of a transfer station.
- Strategies to implement a source reduction program can range from re-use or exchange centers to building a recycling center to minimize the amount of material that is entering the waste stream. The cost of collection as well as disposal operations benefit from source reduction efforts.
- Ensure that all construction waste produced by federal agencies, self-governance tribes and their contractors is properly managed through final disposition. Include the Federal Acquisition Regulation (FAR) clauses related to cleaning up construction sites and proper disposal requirements in all federal contracts, grants and cooperative agreements and tribal laws (<u>FAR 36.512 and 52.236-12</u>).

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Program Administration and Operation Continued

- Compliance and enforcement programs can deter improper waste disposal by community members and outsiders. Enforcing the tribe's codes and ordinances should focus on the highest priority issues to be most effective. Waste management codes and ordinances are only as effective as their enforcement; therefore, it is important to identify monitoring and enforcement capabilities and to enforce consistently and equitably. For example, installing video surveillance cameras can improve enforcement of illegal dumping. The cameras can capture violators with real-time photos that can be used in court for prosecution.
- Once waste management operations are in place, funds are needed to pay for the operation, maintenance and repair of equipment and facilities. Waste management programs and facilities require various types of equipment, such as collection vehicles, collection bins or dumpsters, compactors or balers and heavy equipment. This equipment can be very costly. The <u>General</u> <u>Services Administration (GSA) GSAXcess®</u> allows tribes seeking property to avoid the cost of new procurements by acquiring the same or like items that have been reported as excess by another federal activity.



Non-Hazardous Materials and Waste Management Hierarchy www.epa.gov/smm/ sustainable-materialsmanagement-nonhazardous-materials-and -waste-managementhierarchy



This factsheet is based on information in the August 2019 <u>Overcoming Barriers</u> <u>to Sustainable</u> <u>Waste Management</u> <u>in Tribal</u> <u>Communities</u> Report.



Sustainable Materials Management on Tribal Lands

https://www.epa.gov/tribal-lands/sustainable-materialsmanagement-tribal-lands-life-cycle-approach-managingmaterials