Organics and debris management can be challenging for the biggest of communities, so how do rural and small towns manage this material? Our author offers an important look into how to organize a program and what equipment is needed to make it work.

Life in a Small Town

Part 1

by Athena Lee Bradley

Discarding organic materials as waste impacts our environment, energy use and economy – taking up landfill space and contributing to increased greenhouse gas emissions. Instead, organic materials can be turned into viable new products, including mulch, compost, electricity and fuel, helping to create locally-based green jobs and supporting local and regional economies.

Rural and small towns often have budgets to match, but are frequently situated to be able to properly manage this material stream. Focusing on organics material management presents rural and small towns with low-cost opportunities to beneficially develop these resources.

Overview

Organics management presents rural and small towns with a significant opportunity for cost savings, economic development and an enhanced local environment. Organic materials continue to be the largest component of municipal solid waste, comprising just over 56 percent of the materials sent to landfills and incinerators. Around the country, yard trimmings are recycled at just over 57 percent, while less than 3 percent of food scraps are currently recovered.

Organics management programs that focus on reduction and community-based diversion can be successfully implemented in most rural, semi-rural and small towns. Success often involves several strategies, including:

- Implementing a variety of management approaches that are relatively low-cost, manageable within existing staffing limitations, drawing upon existing resources.
- Identifying an organics management system that fosters the importance of the organics management hierarchy, with an emphasis on reducing materials at their source and keeping organics on-site – that is where generated – when possible.
- Developing a system that meets state requirements and helps the community comply with state waste diversion goals.
- Implementing collection and organics processing options, as necessary, and that fit within existing waste handling practices.
- Considering centralized composting – developed locally or regionally through partnerships with farm, regional, or private operations – as a viable organics management option for increased diversion of yard trimmings and possibly food scraps.

This article, presented in two parts, explores each of these. Part 1 addresses organics reduction and reuse opportunities, while part 2 concentrates on the use of composting as an organic material management strategy.

Reducing organics discards

Keeping organics on-site – at residences, schools, institutions, govern-
Grasscycling

During the growing season as much as half or more of yard waste is grass clippings. “Grasscycling” presents a no-cost, simple and easy organics management solution. Instead of raking and bagging clippings and putting them in the landfill, the grass is left on the lawn when mowing to be “recycled” back into the lawn. Grasscycling saves labor and eliminates the need to purchase disposal bags. Grass clippings decompose quickly and allow valuable nutrients to return to the soil, reducing requirements for additional fertilizing. The practice does not harm lawns and does not contribute to the growth of thatch. Grasscycling is commonly practiced on large grass areas such as parks, golf courses, and sport fields where bagging of clippings is not feasible. Specialized “mulching” mowers are available from most major manufacturers. These mowers chop clippings into smaller pieces for quicker decomposition. Retrofit kits are also available to convert a standard lawn mower into a mulching mower. But any lawn mower can accomplish the same result for home use.

Tips for grasscycling success:

- Keep mower blades sharp.
- Cut the grass only when it is dry.
- Do not remove more than one-third the length of the grass height at once.
- Water and fertilize lawn as needed.

Food waste reduction

According to a National Resources Defense Council report, around 40 percent of all edible food in the U.S. is wasted. Better food management practices at home, schools, institutions and at commercial food outlets (including restaurants, bakeries, and grocery stores) can be easily implemented.

Smart food handling techniques can reduce food discards that result from improper storage and handling, including waste from overproduction, preparation trimmings, expiration, spoilage, overcooked, contaminated and dropped items. General tips on food waste reduction include: improving food preparation procedures; adjusting portion sizes; and, monitoring food expiration dates closely. Through implementation of food waste reduction practices, food purchasing costs and disposal needs can be significantly decreased.

Leaf mulching

Similar to grasscycling, leaf mulching is another low-cost organics management solution suitable for rural and small towns. Mulching or shredding leaves in-place is simple and saves residents and landscapers time and money. Mulching leaves in place is much easier than raking, bagging, or blowing them to the curb. Once finely shredded, leaves will continue to decompose adding valuable nutrients to soil and improving soil structure. Like grasscycling, a regular lawn mower can adequately shred leaves to make mulching possible.

Action tips

- Local and regional governments and solid waste authorities can foster education that promotes the incorporation of native and edible plants suitable for yard landscapes.
- Grasscycling and leaf mulching tips can be posted on town and regional government websites.
- Use social media, including Facebook and Twitter, at the beginning of the fall to promote leaf mulching and again in early spring to promote grasscycling.
- If budgets allow, posters, fliers, and pamphlets can also be developed and distributed.
- Home composting workshops can incorporate yard waste reduction.
- Rural areas may want to reach out to agricultural extension agencies to see what educational resources they may have for distribution and promotion.
- Municipalities, counties, and/or solid waste districts may want to adopt a resolution requiring or promoting native plants, grasscycling and leaf mulching.
- Communities can lead by example—landscaping town buildings and right-
of-ways with native shrubbery and practice grasscycling and leaf mulching.

- Food waste prevention can be promoted to residents and businesses by posting information on town and solid waste authority websites. If staffing is available, grocery stores and restaurants can benefit from food waste reduction training included in food recovery and composting training.

Food recovery

Food “waste” is often not “waste,” but discarded food that is nutritional and safe to use. Promotion of food donation is one way that rural and small towns can work to reduce and better manage food discards, while also providing social benefits for the community.

Businesses benefit from food donation through reduced disposal costs and opportunities for potential tax benefits. Conducting a waste assessment helps businesses to identify and make changes to prevent waste and potentially reduce costs associated with food purchases and disposal. Communities benefit from reduced organics to manage and dispose of, as well as the opportunities to help the needy.

Farm gleaning

An opportunity to reduce farm discards and assist those in need is a “farm gleaning” program, where crops are gathered from farmers’ fields that have already been mechanically harvested or from fields where it is not economically profitable to further harvest. Organizations that work with farmers to offer farm gleaning establish distribution of “gleaned” crops to local food distribution networks or organizations.

Food to animals

Food that is no longer safe for people to eat may still be of use as livestock feed. “Food to animal” opportunities may particularly benefit rural, agricultural areas. Food processing facilities, supermarkets and restaurants can reduce food wastes by sending them to farms for use as livestock feed, thus reducing disposal needs. Livestock producers can benefit by saving money on feed costs.

Farms will typically offer collection services or contract with a local hauler to offer these services. Often most or all food scraps are acceptable, including post-consumer scraps. However, some states prohibit meat products from being used as livestock feed. Alternatively, before being fed to livestock, food scraps may be required by state or local regulation to be cooked to eliminate the potential for harmful bacteria. Check with state agricultural agencies for regulations that apply.

Opportunities and action

Similar to organics reduction programs, successful action on food recovery at the community level highlights promotion and education. Private food donations to food recovery agencies in rural areas are often limited because there are fewer larger businesses – such as grocery stores or restaurants – to make donation.

Local government involvement in promoting food donation can help to raise awareness of the importance for smaller commercial food waste generators to participate. Rural areas may have limited food recovery organizations in their immediate area, but are generally served by a regional food bank. These regional food banks typically work with local charities or churches to bring food recovery opportunities to rural and small towns. Mobile pantries are used to fill a void in rural areas without active food distribution networks. Food is shipped in boxes to a mobile pantry site, such as a church, for distribution residents. Animal feed opportunities are contingent on the feed needs of local farmers.

Action tips:

- Before promoting food donation or food to animals programs, it is important for communities to check local and state regulations. Food donation is covered by the federal Good Samaritan Table 1 | Organics management hierarchy

<table>
<thead>
<tr>
<th>Reduce</th>
<th>Reuse</th>
<th>Recycle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smart landscaping</td>
<td>Food recovery</td>
<td>Backyard composting</td>
</tr>
<tr>
<td>Grasscycling</td>
<td>Food to animals</td>
<td>Home digester</td>
</tr>
<tr>
<td>Leaf mulching</td>
<td></td>
<td>Vermicomposting</td>
</tr>
<tr>
<td>Food waste reduction</td>
<td></td>
<td>Neighborhood composting</td>
</tr>
<tr>
<td></td>
<td></td>
<td>School and special event composting</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Centralized composting</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Anaerobic digestion</td>
</tr>
</tbody>
</table>

Act, but there are important health and safety guidelines that must be included in any outreach on food recovery efforts.

- Outreach to food recovery agencies to find out the services they offer (e.g., pick-up), the types of acceptable food items, as well as other specifications, will also be beneficial. Keep in mind that for rural areas, these organizations may be regional or statewide.
- Towns can work with businesses to conduct a waste assessment, to set a goal for reducing the amount of food waste being disposed and become aware of food recovery opportunities.
- Outreach to farmers, petting zoos, and similar operations will determine options for local “food to animals” opportunities, the types of food acceptable, collection options, and storage and processing requirements.

Part 2 of this article, which focuses on using composting as a key organic material management strategy in rural and small towns – with tips and examples of programs in action – will be published in the August 2013 issue of Resource Recycling.

Athena Lee Bradley is projects manager for the Northeast Recycling Council, Inc. She can be contacted at athena@nerc.org. NERC is a non-profit organization that conducts projects in the 10 Northeast states, as well as around the country. Its mission is to promote environmental sustainability through solid waste management. NERC received funding from the U.S. Department of Agriculture, Rural Utility Services for the “Best Management Practices for Organics & Debris Management in Rural Towns in Maine, New Hampshire, New York, and Vermont” project. Through the project, NERC is providing webinars, workshops, resources, and technical assistance. This material is based upon work supported under a grant by the Utilities Programs, U.S. Department of Agriculture. Any opinions, findings, and conclusions or recommendations expressed in this material are solely the responsibility of the author and does not necessarily represent the official view of the Utilities Programs.

Reprinted with permission from Resource Recycling, P.O. Box 42270, Portland, OR 97242-0270; (503) 233-1305, (503) 233-1356 (fax); www.resource-recycling.com.

Who’s Doing It?

Tripoli in Bremer County, Iowa (population 1,313) is part of a network of anti-hunger agencies and volunteers using mobile pantries (www.northeastiowafoodbank.org) to provide food to rural residents in Northeast Iowa. Elementary schools in St. Francis, a town in Anoka County, Minnesota (population 7,218), along with businesses around the region participate in a recycling program that sends food waste to Barthold Farms, located in St. Francis. The program saves the school district and businesses money by reducing garbage waste and collection fees. See the Pigs Aren’t Picky video on the Anoka County Integrated Waste Management Department website (http://tinyurl.com/PigsNotPicky).

The Second Harvest of South Georgia (www.valdostafoodbank.org) serves rural communities throughout Southern Georgia. Programs include “Kid’s Café,” which provides needy children with evening meals. The organization effectively leverages the food recovery options of urban areas to meet the service needs of rural and small towns.