

Green Waste Management



Background

Definition

Green waste management includes access to residential and work site composting, education on proper disposal of waste, and other opportunities to divert waste from landfills. Green waste management is a relatively new service at the city level and education and outreach are needed to change residents' behavior to properly dispose of green waste.

Nationwide, organic wastes, including food scraps and yard waste, constitute over 25% of the solid waste sent to landfills. This organic waste is a great opportunity for waste reduction—to divert materials from the traditional garbage can to landfill waste stream. It is also an opportunity for positive environmental impact as composting green waste not only prevents organic waste from entering landfills but also produces compost, a useable product.

Health, equity and sustainability considerations

Traditionally, green waste management programs have focused on curbside service for single family residences. To provide equal service to all residents and to reduce the amount of waste sent to landfills, local jurisdictions should provide food scrap and yard waste collection to multifamily residences and businesses. Information about collection services and educational materials should be available in different languages to promote participation of diverse communities.

Green waste management practices protect the environment and protect residents from the detrimental health effects of pollution and climate change. The clustering and disproportionate siting of waste transfer and processing facilities in low-income communities and communities of color is an environmental justice

The average household produces over 40 pounds of green waste every month.

issue. Without proper mitigation of negative effects, these facilities can degrade health and environmental conditions, as well as displace community revitalization plans and economic activity.

The [King County Comprehensive Solid Waste Management Plan](#) outlines strategies to promote equity, including:

- “Fair distribution of transfer facilities and division resources, such as the community litter cleanup, school education, and green building programs, helps ensure that everyone has access to services that create safer and healthier communities.
- The division provided technical assistance to ensure that the benefits of green building strategies, such as lower energy costs and improved indoor air quality, are available to residents of affordable housing developments.

- In siting new transfer facilities, the division engages communities to ensure equal opportunity for involvement in the siting process. The division utilizes demographic data to ensure that these essential public facilities are distributed equitably throughout the county and that any negative impacts of the facilities do not unfairly burden any community.
- In addition to translating materials into multiple languages, the division has added a Spanish-language component to its comprehensive outreach programs. Rather than simply translate existing materials, the division has worked directly with the local Spanish-speaking community to create new programs and materials in Spanish that respond to the questions and needs of the community.”

Program and Policy Examples

Program examples—How is it used locally?

Noted below are a variety of programmatic actions designed to divert green waste from landfills.

Access to curbside composting service. Collection of organic materials for composting has proven to be one of the most successful strategies to divert material from disposal. King County has been collecting curbside yard waste since the 1990s and curbside food scraps and food-soiled paper since 2002. Nearly 100 percent of single family customers with [curbside garbage collection](#) now have access to food scrap collection. Additional strategies, however, are needed to provide access to yard waste and food scrap disposal to residents beyond those living in single family homes. These strategies include:

- *Residential multifamily:* jurisdictions require multifamily housing developments to provide green waste disposal bins that are as convenient as trash bins. Jurisdictions can also fine property owners for container contamination—charging customers if green waste is found in garbage containers.
- *Commercial food waste disposal:* Commercial waste can make up to 50% of an urban community’s waste. Many local jurisdictions have added commercial food waste programs.
- *Local Government:* Local governments should adhere to the same practice and philosophies that they communicate with the communities that they govern. Since local governments are similar to businesses, they should adhere to commercial green waste disposal standards.

The [City of Auburn’s multifamily food and yard waste](#) service provides compostable pick-up service on a subscription basis. [City Code 8.08.120](#) prohibits yard waste from being mixed with garbage. Garbage containers containing yard waste and garbage will not be picked up.

The [City of Seattle’s Zero Waste Strategy](#) mandates food waste collection for all commercial sites that generate food scraps. Customers are fined for mixing food waste with garbage.

The [City of Des Moines’ Farmers Market](#) provides food scrap collection bins to work towards a zero waste market.

Education. Education is needed to inform residents and businesses about the benefits of composting and how to properly use waste bins and curbside pick-up services. Tools for Change’s [Changing Recycling and Composting Behavior Through Social Marketing](#) (2013) provides best practices on how to best integrate

new composting programs into existing waste management practices, and how to encourage residents to utilize composting services.

King County's [Master Recycler Composter program](#) provides free training about waste reduction, recycling, solid waste impacts on climate change and public outreach. The program is open to all King County residents living outside the cities of Seattle and Milton. In exchange for free training, program graduates are expected to volunteer for public outreach to inspire others to reduce waste.

Other opportunities. Event recycling reinforces a recycling ethic and provides a way to compost green waste while away from a home or business where waste containers may be available. Many local jurisdictions require vendors to use compostable food and beverage containers and/or require event organizers to provide a plan to manage food waste.

Local jurisdictions can provide support and services to schools to practice resource conservation and engage students in environmental stewardship. [King County's SWD's Green Schools Program](#) assists over 400 schools in 11 school districts to improve their conservation practices and involve students in conservation and outreach efforts. The program offers a three-tier system where each tier achieves different levels of certification towards sustainability and stewardship. Each level of certification helps schools to educate, promote, and enhance knowledge of environmental stewardship, including green waste management.

In addition to composting, King County and local jurisdictions collaborate with food producers, grocers, restaurants, and schools to [donate surplus meals and staple food items](#) to local food banks rather than sending unused food to the landfill. Programs use the Washington State Department of Health [Charity Food Donation guidelines](#).

Development regulations and model ordinances

Green waste management is guided by policies and plans at the state and county levels.

[Beyond Waste](#), Washington state's plan for managing hazardous and solid waste, is a 30-year plan with the goal to eliminate wastes and toxics wherever possible and to use the remaining wastes as resources.

King County's 2013 Comprehensive Solid Waste Management Plan presents strategies for managing King County's solid waste over the next six years, with consideration of the next 20 years. State law ([RCW 70.95](#)) delegates authority to the county to prepare a comprehensive solid waste management plan in cooperation with the cities within its boundaries. An interlocal agreement (ILA) is required for any city participating in a joint city-county plan ([RCW 70.95.080\(3\)](#)). The King County Solid Waste Division provides [an up-to-date list of local jurisdictions with ILAs](#).

Implementation

Developing policy language

Local government policy typically consist of goals—zero waste policy, recycling and disposal targets—beyond those set by King County, and additional incentives and bans. They can also provide more targeted education and outreach to residents.



The Ohio EPA's [Urban Agriculture, Composting, and Zoning: A zoning code model for promoting composting and organic waste diversion](#) (2012) provides model policy language to promote composting in urban areas.

Considerations for local implementation

At the regional level, proper green waste management requires collection infrastructure—collection and haulers, processing, and end of use disposal. Yard waste composting requires a specialized processing facility and food waste composting requires an even more sophisticated facility to address odors, and avoid problems with animals, insects, and pests. King County has both yard waste and food scrap processing facilities that process waste from local jurisdictions across the county.

Challenges to implementation

Communities are often concerned about local composting because of potential odors, rodents, and pests. Proper management of composting processing facilities can minimize these problems.

Successful green waste management programs require residents and businesses to change their behavior. Many residents do not participate in green waste management practices because they are unaware they should be doing so and/or they are accustomed to disposing of all waste in a garbage container. Education and outreach can help with long-term behavior change. Fines for putting yard waste and food scraps in garbage collection bins can also promote the proper disposal of green waste.

Resources

Mecklenburg County Land Use & Environmental Services Agency's [Best Practices for Local Government Solid Waste Recycling, Diversion from Landfill and Waste Reduction](#) (2011)

Metro's [Guide to Effective Composting](#) (2010)

Washington State Department of Ecology's [Organic Materials Management](#) (2013)

Waste Management's [Commercial Composting Guidelines](#) (2014)

Waste Management's [Apartment and Multifamily Composting Guidelines](#) (2014)