



Board Briefing: Solid Waste Management Master Plan

The path to zero waste landfilled

Hennepin County Environment and Energy
July 13, 2017

On the path to zero waste to landfills

- First, prevent waste. Then, capture maximum value from the resources recovered.
- Serve our residents by delivering the most environmentally-beneficial solutions at the lowest possible cost.
- Lead, regionally and nationally, in achieving zero waste to landfills.



What's changed since the last plan in 2012



Improved recycling services

One-sort, materials added, public space recycling, container signage



Expanded organics

Minneapolis, St. Louis Park



Launched new reduction efforts

Fix-it clinics, Master Recyclers, Zero Waste Challenge, move out and bulky waste



Offered incentives

Businesses, schools, apartments, public spaces



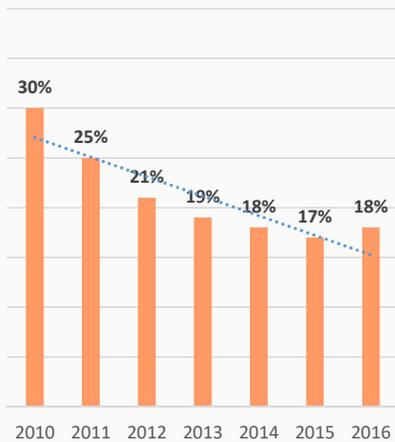
Enhanced education

Recycle Everywhere, Choose To Reuse, Save the Food, Green Partners grants

Incremental progress

Landfilling

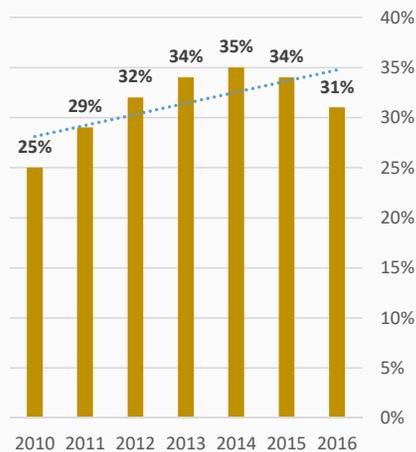
Positive progress:
12% reduction



2030 goal: 1%

Waste-to-energy

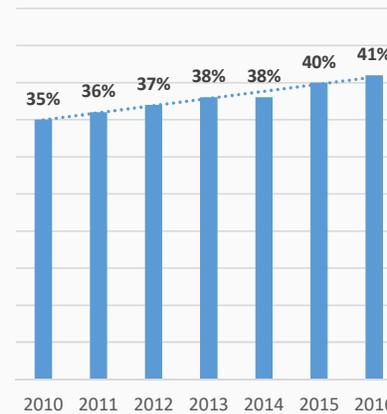
Positive progress:
6% increase



2030 Goal: 19%

Recycling

Positive progress:
6% increase



2030 Goal: 60%

Organics

Limited progress:
no change



2030 Goal: 15%

Putting organics to a better use is our best opportunity to eliminate landfilling

- Organics are a problem in landfills
- Saves capacity at HERC for materials that produce more energy
- Better, higher use
 - Food scraps turned into compost makes for healthier soils and plants
 - If digested, food scraps produce energy and beneficial products



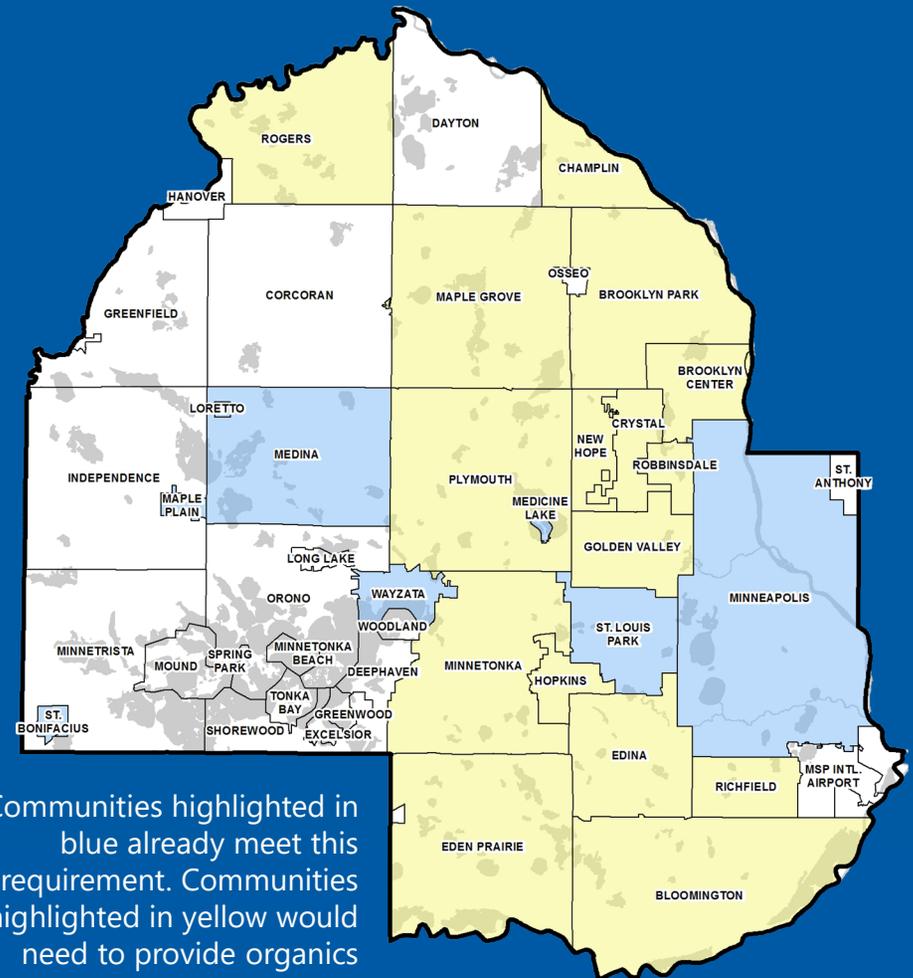
Send a market signal to accelerate change

- Previous two master plans encouraged organics recycling
- Current waste system is designed to optimize trash disposal
- Clear market signal needed to re-align system to optimize recycling to capture the maximum value from waste



Recommendation – residential organics

Require cities to provide all residents the opportunity to recycle organics by 2022, with a possible exemption for 4th class cities.

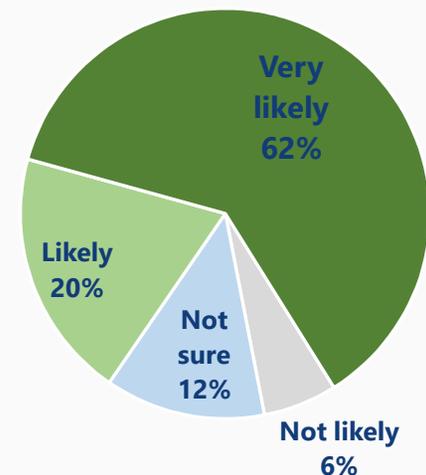


Communities highlighted in blue already meet this requirement. Communities highlighted in yellow would need to provide organics recycling service

What we heard

- Concept is still new and the benefits need to be clearly communicated
- Residents are interested in participating
 - Barriers are cost, space, increased truck traffic and fear of smells and pests
- Cities are open to requirements, but have concerns about implementation
 - Want help in determining the best collection method and understanding the options – benefits and costs.
 - Residents are not seeing the cost savings of reducing waste. Concern about adding more fees for recycling services.
 - Help with promotions to get buy in and educate residents.

If your community were to start a curbside organics recycling program, how likely is it that your household would participate?



Our plan

- Build demand
 - Provide funding assistance for drop offs
 - Promote organics to those who already have the option
- Help cities explore options
 - Pilot projects to address barriers and evaluate environmental benefits and costs of options.
- Support cities with implementation
 - Facilitate conversations with haulers
 - Provide sample contract language
 - Create education materials



Recommendations – business organics

Require businesses that generate large quantities of food waste to implement food waste recycling by 2020

Applies to businesses in the following sectors that generate 1 ton of trash or more per week:

- Restaurants
- Grocery stores
- Food wholesalers/distributors
- Food manufacturers
- Hotels
- Caterers
- Nursing/residential care facilities
- Office buildings with cafeteria/dining services

Why this approach to determine which businesses are subject to the requirements

- These businesses typically generate large amounts of food waste
- Sets trigger level where organics recycling can be done cost-effectively (1 ton of trash per week)
- Uses the existing processing capacity, while encouraging the development of future additional capacity
- Encourages development of efficient collection; phase in smaller generators later, if needed

What we heard

- Understood environmental benefits
- Unlikely to voluntarily implement organics
- Many said organics requirements make sense and are a logical next step, but none readily embraced requirements
- The approach is sound

What are the proposed standards for compliance?

- Organics recycling service in place
- Containers set up in the back-of-the house
- For property owners that have affected tenants, offer organics service or allow a tenant to set up the service
- A standard to ensure organics service is being used effectively

What we heard

- Standards for compliance were reasonable.
- Appreciate front-of-house collection being optional
- A standard to ensure that service is being used effectively needs to be assessed accurately and fairly
- Appreciate the requirements only applying to the affected tenant, not the entire building.

Appropriate requirement, implemented right

Proposing targeted outreach model, rather than a traditional enforcement model

- Create a level playing field
- Continue to offer financial assistance, training and support
- Facilitate cooperation with haulers
- Communicate requirements as part of a broader organics effort
- Make the case by promoting the environmental, financial, and social benefits

What we heard

- Approaching businesses with an encouraging attitude makes requirements palatable.
- Implementing within one year was manageable. They could roll out a program fairly quickly with the appropriate training and support.
- Data gathered should be used to encourage, rather than shame, businesses into compliance.
- Appreciated the thoughtful approach to the requirements and being included in the design.

Our plan

- Continue offering business recycling grants targeting large food waste generators
- Help address barriers
 - Space constraints
 - Training challenges
 - Explore ways to reduce costs for businesses
- Further develop requirement
 - Refine approach for determining compliance based on feedback
 - Develop enforcement approach - reporting requirement, inspection protocols, etc.
 - Develop options for resources needed to implement
- Initiate process to revise Ordinance 13



Recommendations – Improve infrastructure

- Increase organics transfer capacity
 - Expand capacity at county's transfer station
 - Explore adding capacity in southern metro area
- Secure additional processing capacity
 - Release RFP in 2018 to develop anaerobic digestion facility

Why additional transfer capacity is needed

- Inefficient for haulers to transport organics to far away composting sites
- Reduces costs for haulers
- May reduce costs for residents and businesses, if haulers pass on the cost savings

What we heard

- Haulers
 - Concerned about current capacity at compost sites.
 - Want more transfer facilities for organics
 - Support an expansion of the BPTS to accommodate more organics processing.
- Cities want to see county leadership on improvements to waste infrastructure to make organics recycling viable.

Our plan for increasing transfer capacity

- Expand organics area at county transfer station
 - Increase amount of organics that can be managed at the site
 - Support multiple collection methods
 - Evaluate feasibility of equipment to remove packaging
 - Complete the expansion by end of 2019
- Explore adding capacity in southern metro area



Why anaerobic digestion?

- Composting capacity is inadequate
- Better, higher use of organic material
 - Extracts clean, renewable energy that has a variety of uses
 - Reduces greenhouse gas emissions
 - Produces beneficial products, such as fertilizer and compost
- Opportunity to enhance county self-sufficiency
 - Provides an opportunity for county to bring a portion of organics processing within its control
 - Generates ongoing revenue from tipping fees

Our plan for anaerobic digestion

Release RFP in 2018 to develop anaerobic digestion facility

- Quality proposals more likely when any/all are secured:
 - Supply of organics
 - Site
 - Funding
- Organics recycling requirements would demonstrate county willingness to assume some development risk
- Without a secured supply of organics, facility development too risky

Why act now?

- Residents want organics as an option
- Businesses are not going to prioritize organics without a requirement
- Requirements are the best way to send the market signal necessary to accelerate change
- Action needed now to build the capacity needed when requirements take effect
- County steers system to maximize benefits for residents and the environment



Next steps

- Complete a draft master plan with specific strategies, including language about exploring requirements
- Release the plan for public comment this fall
- Present for board approval by the end of 2017
- Submit to the MPCA for final approval
- Initiate ordinance change process

