
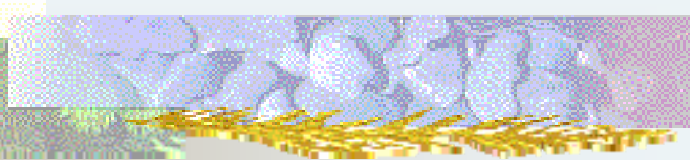
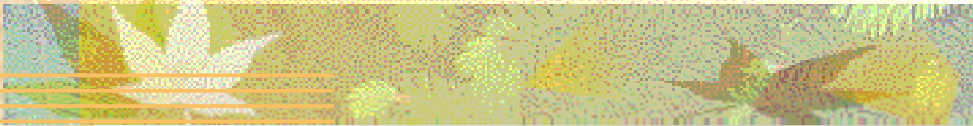


# WLSSD Organic Waste Recovery



**Implementing  
Required Source Separation of  
Pre-Consumer Organic Waste  
February 27, 2008**





## Goals for Today

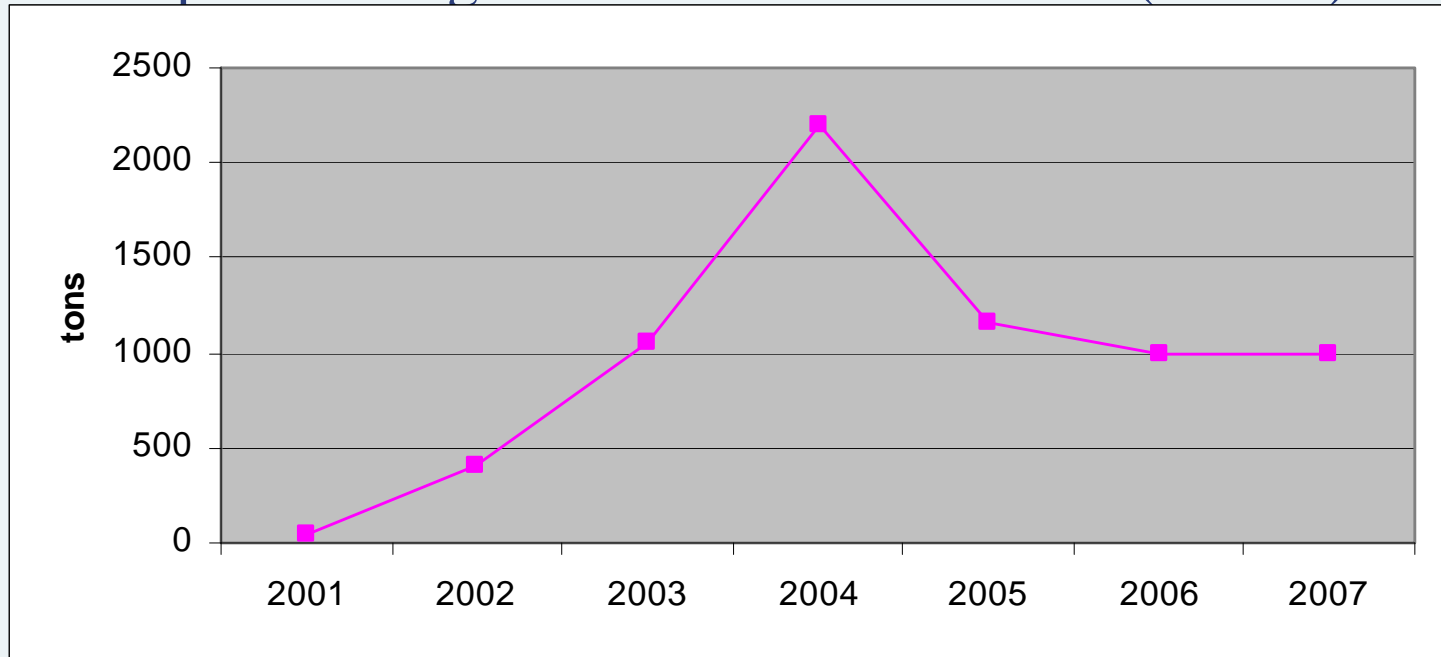
- **Review Composting Program Goals and Operations**
- **Ordinance requirements**
- **Strategies for Implementing Required Source Separation of Pre-Consumer Organic Waste**



# Background

- Minnesota Office of Environmental Assistance CAP Grant
- Permitted to compost 3,950 tons yard waste and 3,950 tons other organic waste annually
- Opened October 2001
- Quantity of recovered organic waste has fluctuated over the years

## Source Separated Organic Waste 2001 to 2007 (in tons)



# Organics Recovery Program Statement of Purpose



- Expand recycling and beneficial re-use opportunities for residents and businesses.
- Reduce WLSSD's reliance on landfill disposal of municipal waste.
- Participate in achieving MPCA Strategic Plan Objective of 35% organics recovery statewide (by 1/1/11).
- Produce a reliable supply of high quality compost for WLSSD and local customers.

# Key Operational Process Steps to Manage Compost

- Feedstock prep and management.
- Active composting.
- Curing.
- Screening.
- Record Keeping



# Source Separated Feedstock Materials



- Residential and commercial
- Food waste, fish processing, yard waste, grain waste and brush grindings



# Feedstock Management

- Waste delivery early in the day.
- ID unacceptables.
- Cover if odorous.
- Process all material by end of operating day.



# Feedstock Prep



# Active Composting



# Windrow formation



- 75' long
- 12' wide at base
- 5-8' high
- Undisturbed for 90 days

# Use of a Compost Blanket

- Use grindings or composted leaves
- Helps to maintain optimum conditions in the pile
- Acts like a biofilter





## 2006 WLSSD Solid Waste Ordinance Objectives

- Intentional approach will achieve higher participation and recovery rates.
- Recovery replaces disposal: reduces reliance on landfills.
- Promotes sustainable practices through local recycling and reuse.
- Increased volume of compostable organics reduces operations cost per ton.



## Getting to Mandatory Source Separation of Organics

- Developed successful methodology for organics recovery in businesses (2001–2007)
- Collaborated with advisory groups, haulers and businesses to determine which generators would be required (2004-2005)
- The WLSSD Solid Waste Ordinance, includes language mandating diversion of pre-consumer organic waste. (October 2006).



# Ordinance Overview:

## Organic Waste Definitions

- **Pre-Consumer Organic Waste:** Animal and vegetable waste which results from the storage, preparation, cooking, handling, selling, or serving of food.
- **Post-consumer Organic Waste:** Organic waste created after the sale or delivery of food to a consumer
- **Industrial Organic Waste:** Inedible, non-paper waste generated in a large commercial or industrial operation- such materials as grain waste and fish hatchery waste.



## Ordinance Overview: Mandated Organizations

- Generators of pre-consumer organic waste:
  - Grocery stores of 7,500 sq. feet or larger
  - Restaurants and caterers with a St. Louis County “Level 3” food-handling license or a Carlton County “Large” license
  - Post-secondary institutions with 1,000 or more full-time students; prepare meals on-site
  - Hospitals and nursing homes having 100 or more beds, and that prepare and serve meals to employees, patients, guests, or residents.
  - Food manufacturer/processor of 5,000 sq. feet or larger



## Ordinance Overview:

Category	Implementation Date
Grocery Stores	<b>March 1, 2008</b>
Post-Secondary Institutions	<b>June 1, 2008</b>
Hospitals/Nursing Homes	<b>June 1, 2008</b>
Restaurants/Caterers - Level 3 Large	<b>July 1, 2008</b>
Food Manufacturers	<b>August 1, 2008</b>
Restaurants/Caterers - Level 3 Medium	<b>September 1, 2008</b>
Restaurants/Caterers - Level 3 Small	<b>January 1, 2009</b>
All above categories in Carlton County	<b>March 1, 2009</b>



## Ordinance Overview: Implementation

- **WLSSD will provide education and technical assistance to businesses affected by the mandate**
- **Implementation schedule is designed to allow for education & assistance with existing resources.**
- **Haulers are responsible for developing collection schedules**
- **WLSSD is responsible for ordinance enforcement**
- **Organic waste can be recovered for human or animal consumption, or for composting.**

# Before and after



# Questions?

