

# Waste Diversion Opportunities

Presented by

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Solid Waste





#### Agenda

### Project Goal

### **Current Programs**

### Potential Diversion Initiatives

# **Project Goal**

"Identify and assess potential opportunities to divert waste from landfill disposal in order to extend the County's landfill life and reduce greenhouse gas emissions"







## **Current Diversion Programs**

#### **Curbside Recycling**

#### **Drop-Off Centers**









# FOOD SCRAPS DROP-OFF • Let's make compost!•

#### INSTRUCTIONS

- Remove all produce stickers, rubber bands, wrappers, ties, bags, and plastics
- Empty food scraps and compostable waste into the cart
- · Close and secure lid when finished
- Do not overfill!

More info? www.buncombecounty.org/composting

See an issue? Contact recycling@buncombecounty.org



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# **Current Diversion Programs (cont.)**

#### TV / Paint Recycling

#### **Special Waste**

#### TV/PAINT RECYCLING EVENTS

Buncombe County Landfill also accepts the following items from residents\* **ONLY** during TV/Paint Recycling events. Check our website for event details and dates.



Electronics: Cell phones, keyboards, etc.



Televisions, computer monitors and CPUs: Everyday drop-off is available for residents who are able to self-unload.



Paint: Paint, paint thinners, water sealer, enamels, etc. 20-gallon limit per event.



Flammable liquids: Gasoline and kerosene.



Pesticides: Insecticides, herbicides, fungicides, etc.

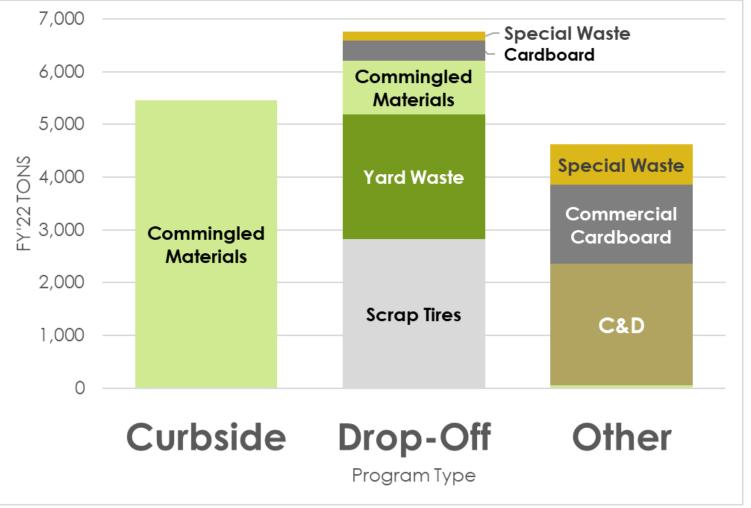


**Unbroken fluorescent bulbs:** 20 bulbs max per month. Check online for bulb disposal





#### How Much Waste Did Buncombe County Divert Last Year?



Total Tons Diverted FY'22: 16,840



#### How Much Waste Did Buncombe County Dispose of Last Year?

Total Waste Disposal Quantity FY'22: **321,917 tons** 



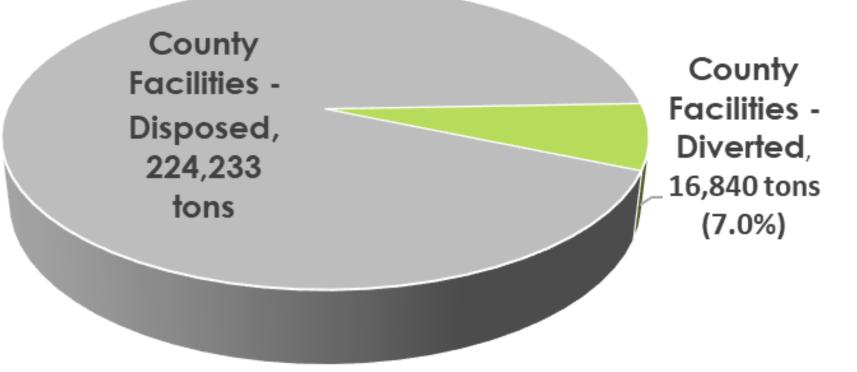
135,667 Tons (Buncombe Co. MSW Landfill)

88,567 Tons (Buncombe Co. CDD Landfill)





## What is Our Current Disposal Rate?



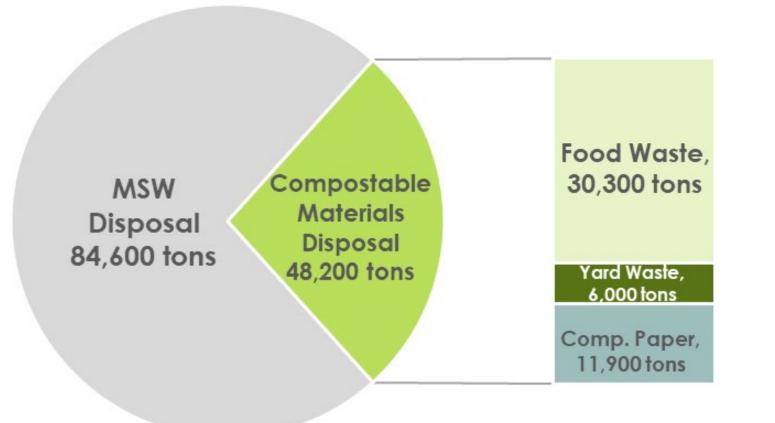




#### **Waste Diversion Initiatives**

- 1. Organics Management
- 2. Construction & Demolition Debris
- 3. Multi-Family / Commercial Diversion
- 4. Data Collection & Enforcement
- 5. Convenience Center Services

# Focus Area 1: Organics Management







# Potential Impact: Organics Diversion

Organic Diversion Level	Estimated Tons	Impact to Diversion Rate	
	Existing Rate	7.4%	
5%	2,400	9.2%	
10%	4,800	10.4%	
25%	12,000	14.2%	
50%	24,000	21.2%	
75%	36,000	29.0%	





# **Organics Processing Options**



#### Windrow Composting



#### Aerated Static Pile (ASP) Composting



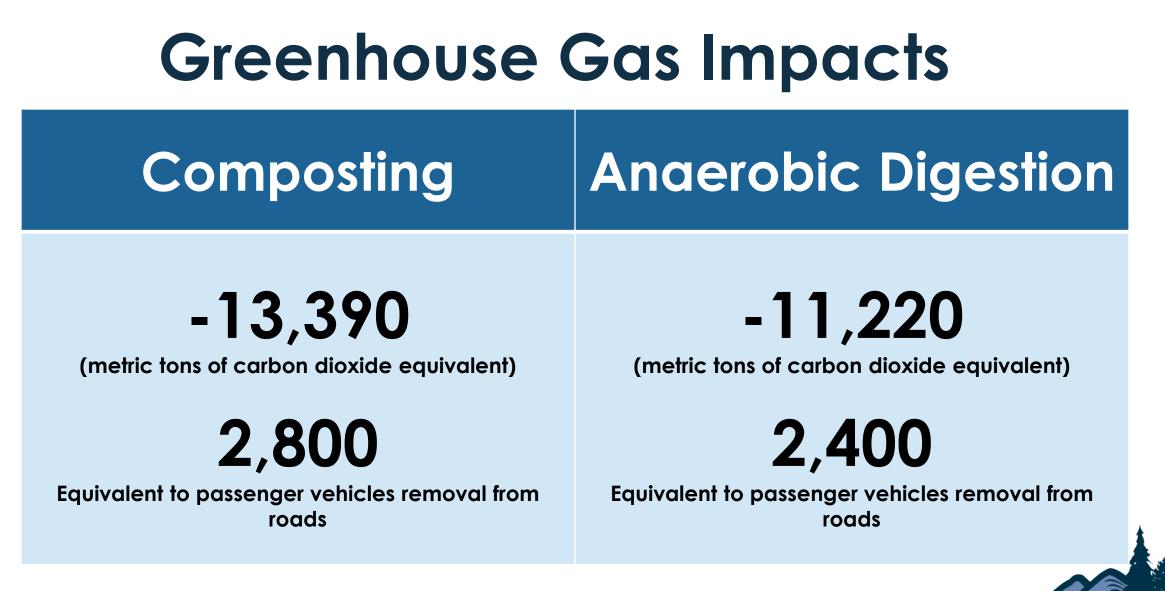
# **Organics Processing Options**



#### **In-Vessel Composting**

**Anaerobic Digestion** 





Based on EPA's WARM Model



# Next Steps: Organics Management

- Continue expanding Community
  Compost Drop-off Program
- Continue supporting start-up of County Campus Compost Ambassador Program
- Investigate implementation of Pilot ASP Program at landfill
  - -Develop budgetary figures -Pursue grant opportunities -Investigate regulatory implications

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# Focus Area 2: Construction & Demolition Debris

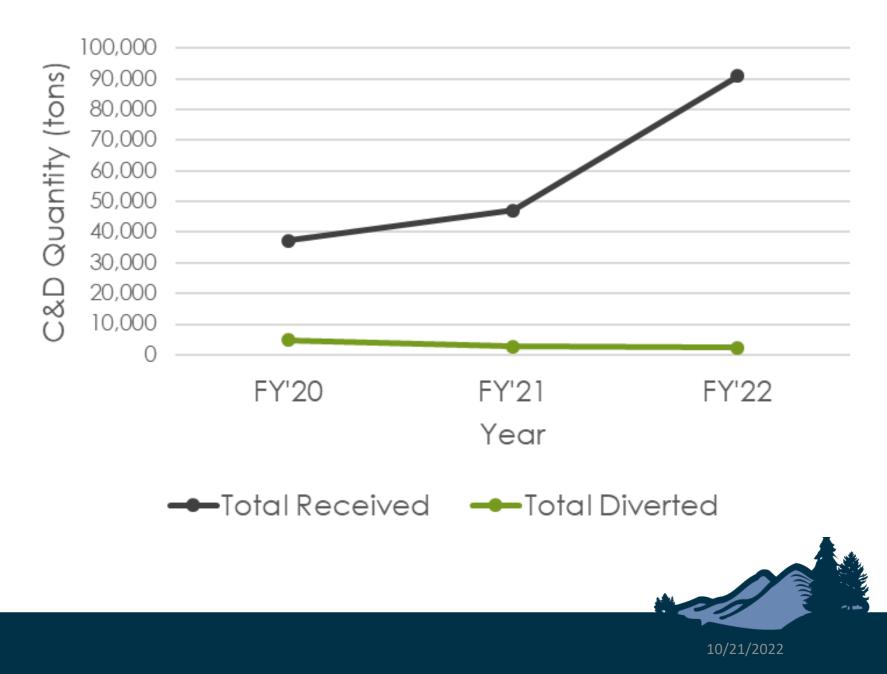
- C&D generation proportional to construction activity
- Significant growth in C&D material quantities
- C&D growth expected to continue







#### Material Quantities: Construction & Demolition Debris



## Next Steps: Construction & Demolition Debris

- Develop educational information to contractors
- Modify operations for recovery of select materials
- Encourage C&D load delivery to landfill
- Continue supporting the implementation of C&D diversion requirements for County projects
- Promote reduced tipping fee for source-separated materials
- Require C&D diversion plan by contractors



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#### Focus Area 3: Multi-Family/Commercial Diversion

#### <u>Multi-Family</u>

- Plan for sufficient capacity
  - Working with BC Planning Dept. on incorporating recycling infrastructure into the planning phase for developers
- Multi-lingual distribution

#### <u>Commercial</u>

- Enforce cardboard recycling
- Develop commercial recycling guide
- Plan for sufficient capacity







# Focus Area 4: Data Collection and Enforcement

#### • Collect program data:

- Continued partnership with our haulers and local recycling companies to capture additional recyclables within our community
- Recycling contamination rates
- Per capita waste generation
- C&D material tonnages
- Enforce commercial cardboard recycling
  ordinance



## Focus Area 5: Convenience Center Services







# Next Steps: Convenience Center Services

- Consider central location(s) to surrounding community
- Prioritize locations that may not be adequately served by curbside collections
- Provide for consistent material collection operations
- Staff convenience centers





## Timeline

Initiative		Short Term (1 - 3 years)	Medium Term (4 - 7 years)	Long Term (8 - 10 years)
Organics	Continue Expanding CommunityCompost Drop-Off Program			
	Continue Supporting start-up of County Campus Compost Ambassador Program			
	Implement Pilot ASP Program			
C&D	Develop educational information to contractors			
	Modify operations for recovery of select materials			
	Encourage C&D load delivery to landfill			
	Continue supporting implementation of C&D diversion regirements for County projects			
	Promote reduced tipping fee for source - separated materials			
	Require C&D diversion plan by contractors			





### **Timeline**

Initiative		Short Term (1 - 3 years)	Medium Term (4 - 7 years)	Long Term (8 - 10 years)
Multi-Family	Multi-Lingual Education Distribution			
	Plan for Sufficient Capacity			
Commercial	Enforce Cardboard Recycling			
	Create Commercial Recycling Guide			
	Plan for Sufficient Capacity			
Data Collection	Collection Program Data			
	Enforce commercial cardboard recycling ordinance			





### **Timeline**

Initiative		Short Term (1 - 3 years)	Medium Term (4 - 7 years)	Long Term (8 - 10 years)
Convenience Centers	Consider Central Locations			
	Prioritize Areas Not Adquately Served by Curbside Collections			
	Provide for Consistent Material Collection			
	Staff Sites			



