

Follow up Questions & Answers
Food Waste Composting Program Presentation
County Council Work Session May 17, 2022

Re: Requested information from May 17, 2022 County Council Meeting

Environmental Services staff has noted the feedback received from County Council on May 17, 2022, regarding the food waste composting feasibility study, this document is intended to address the questions and concerns raised at this meeting.

1.What led to thinking that Los Alamos could achieve 50% food waste diversion?

This was based on previous studies of similar, successful food compost programs across the country. This is also based on the success of the current County programs such as our 70% participation rate on brush and above average recycle rate.

2.How would we get additional material needed to divert 100% of the food waste? Especially if we don't have enough yard trimmings right now.

We can manage 50% food waste with current amount of yard trimmings available. This is the current upper limit. If we wanted to divert 100% of food waste, we would need to source yard trimmings from another source such as surrounding municipalities. The County could offer a rate for yard trimming disposal that would incentivize other communities to bring their yard trimmings to Los Alamos County instead of landfilling the material.

3.Why are there only costs for first 3 years of the program?

The estimated capital cost for this project is \$2,011,000, and annual operating and maintenance costs of \$518,341. This program includes 3 FTE's. The capital cost funding option is assumed to be a 10-year short term loan and is modeled to be repaid using Environmental Gross Receipts Tax (EGRT). From FY23 to FY28, an annual rate increase of 3% is needed to cover cost to provide solid waste services, and an additional 3% would be needed from to cover the annual operating and maintenance costs of the food waste composting program. In out years, a 3% annual increase should be adopted to continue covering the cost to provide service.

4.Could we partner with Santa Fe if didn't start food composting here in LA?

During the feasibility study Santa Fe Solid Waste Management Agency (nor any other community contacted) did not express interest in partnering. Private partnerships may be a possibility; however, the private company that was contacted emphasized the importance of building local, sustainable, micro compost systems that promote environmental sustainability, reduce financial impacts, and strengthens the community.

5.Could we do backyard composting as an alternative to municipal composting?

Backyard composting largely benefits the residential community. In FY21 and FY22, ~470 backyard compost kits were distributed to residents, many residents are on a waiting list for future projects, this is one example of the citizen enthusiasm for composting. To provide backyard composting kits to all LAC residents would cost \$103

per kit (not including distribution cost) or \$750K, for all 7,250 households. However, this will not solve the excess yard trimming problem, nor will it serve the business community. Many households/businesses do not have the space to accommodate a backyard compost bin and are unable to participate in the program. In past conversations with business owners, they mentioned they want access to compost and recycle; however, it needs to be convenient.

6.What if we don't compost? What are costs for landfilling yard trimmings? What are the carbon emissions for landfilling yard trimming materials? Provide a side-by-side comparison of the food waste composting program vs. landfilling yard trimmings and food waste.

See table: Triple Bottom Line Analysis.

Triple Bottom Line Analysis		
Economic Impacts	Compost Food and Yard Trimmings	Landfill Food and Yard Trimmings
Tons (3,000 Yard Trimmings and 1,500 Food)	4500	4500
Hauling Cost	\$55,800 hauling to Bayo Canyon	\$118,125 hauling to Rio Rancho Landfill
Disposal cost	\$ -	\$ 121,905
Labor Cost	\$245K full compost program	\$ 140,000
Total Cost	\$ 300,800	\$ 380,030
Cost per ton	\$ 67	\$ 84
Potential Off Set - Compost sales	\$10/cubic yard x 7,000CY = \$70,000/year	
Environmental Impacts		
Total Green House Gas Emissions (MTCO2E)	-341.45	396.79
Water Required (Gallons)	0	0
Supports Councils 2022 Strategic Goals related to Environmental Sustainability	YES	YES
Citizen Impacts		
Customer Participation	Participation rate is expected to be 50%; however, this is currently unknown and will be monitored.	Currently over 70% of residents utilize the yard trimming program.
Cost to Customer	Nominal increase to monthly rate	Disposal cost of yard trimmings will increase from \$37/ton to current trash rate \$66/ton

Net Results of Food Composting:

Total Change in GHG Emissions (MTCO₂E): **-738.24**

This is equivalent to...

Removing annual emissions from **156** Passenger Vehicles

Conserving **83069** Gallons of Gasoline

Conserving **30760** Cylinders of Propane Used for Home Barbeques

7.Are there other things we can spend this money on to decrease our carbon footprint?

The solicitation process is in progress for the Greenhouse Gas Baseline Inventory Study and Climate Action Plan. The findings will provide a comprehensive list of impactful, carbon reduction strategies. The Los Alamos Resiliency, Energy and Sustainability (LARES) Task Force recommended: WCNR-1: Set an immediate goal to eliminate municipal solid waste through reduction, reuse recycling and composting (by e.g., 2035) following Zero Waste principles. Furthermore, the recommendation to achieve this goal is to eliminate organic waste going to the landfill within the next 3-5 years.

8.How much water does this use?

According to SCS consultant and our discussion with a local private company, supplemental water will not be required for composting based on high water content of food waste.

9.Why can't we use the yard trimming roll cart container?

This is an option that was examined and is used in some communities. However, this is not a recommended option for LAC as there was a recent \$2.4 million investment for bear resistant trash containers to reduce human-bear interactions. Adding food waste to the yard trimming program would undo the current initiative by attracting bears to unsecure yard trimming carts that contain food waste. This would require a new bear resistant roll cart for each household.

10.Are pizza boxes and food wrappers/containers compostable?

In the future, the County could take these items. To start the program it is best to collect food only as this will minimize contamination.

11.There is some concern about animal invasion factor before material is collected, how will this be managed?

The recommendation is to provide bear resistant collection for both drop off sites for residential customers and curbside collection for commercial collection.

12.Can non-potable water be used for composting?

Yes.

13.Will high winds dry out the compost piles?

No, it is protected by outer crust/insulated by finished compost and mulch. A best management practice is to check the weather and wind direction before turning a compost pile.

14.Can the County use the compost for Parks and grounds as one key component of xeriscape is quality soil?

Yes, this is a great use that can provide valuable soil amendments.

15.To generate 7,000 cubic yards of compost per year assumes 50% collection rate. That also assumes there is enough carbon source to generate compost and also assumes there is a market for this material. Maybe 50% is the right number, does this differ from curbside vs. drop off. It will be difficult for residents to drop off material.

There is enough yard trimming available to compost 50% of food waste or 1,500 tons. If the County choose to offer residential curbside collection of food waste, the participation rate/diversion rate would increase to 80% or more. This based on the success of our current diversion programs. However, if we got to this level we would need to source additional carbon materials.

16.Is there a market for 7,000 cubic yards of compost? What does the local home and garden store sell in one year? Households in the County could absorb the compost to enhance their landscape; however, it will take proactive marketing on the County's behalf. The current compost is in high demand and attracts customers from surrounding communities. Additionally, policies can be used to stimulate the use of compost. Example: Implement a local development ordinance that requires landscape be amended with organic material to bring organics material up by 5% soil content. This model is currently in practice by the Denver Water Service Area.

17.Can we partner with other communities?

We have explored this regionally and currently, there is no definitive commitment or expression of interest from other communities to collaborate on this effort.

18.Boulder uses one canister for green and food waste and provides curbside pickup. How is it managed?

City of Boulder has an ordinance that requires trash haulers to offer curbside collection for food composting. Trash collection is provided by several third-party contractors and rates vary depending on the company. Rates can start at \$35/month. Composting is also managed by a third party.

19.How will residents be expected to transfer materials to the drop off site?

The County could provide biodegradable bags with a container, similar to the kitchen countertop bin provided with the back yard composting kit. A provision for small container – kitchen container was not included; however, this can be something the County could provide or this provides a great re-use opportunity for any plastic container, such as ice cream.

20. There is concern about the environmental impacts for windrow composting as identified in the final report.

Windrow composting was determined to have the greatest environmental impact because of the potential for odors that emanate from decomposing food or biosolids. However, with proper management of the compost, odors can be avoided. The preferred site is Bayo Canyon since it is a remote area and collocated near the existing biosolid composting operation.

21. Is composting effective year-round or is it seasonal?

Compost can be accomplished year-round. In the middle of winter compost piles will achieve 135 degrees temperatures and will increase 10-20 degree Fahrenheit when the piles are turned. It may slow down during the winter due to ambient temperature, but this can be done year round in our community.

22. Who runs the current biosolid compost operation?

Department of Public Utilities

23. Are there grant opportunities?

Yes. Environmental Protection Agency, New Mexico Environment Department, and New Mexico Clean and Beautiful have grant opportunities that prioritize organics composting programs. The next state grant programs are available in spring 2023. There was a federal grant opportunity that was due July 28, 2022. Staff will continue to monitor potential grant opportunities.