A LETTER FROM THE ISLAND-WIDE FOOD WASTE PROJECT OVERSIGHT COMMITTEE

OCTOBER 15, 2018

Dear Colleagues:

Each year, at significant environmental and monetary costs, the Vineyard loads the freight boats with 19,000 tons of trash for shipment to off-Island landfills and incinerators. Last year that was 792 truckloads of trash shipped off the Island. Almost 40% of this trash stream is food waste, which could and should be diverted: to food equity programs for Islanders; to feed Island animals; and to an Island-based, yet to be built, composting facility providing soil enriching compost for Island farms. The very nature of our Island as a self-contained entity makes it not only possible but imperative for us to rescue our food waste from the trash stream and use it for good.

We are writing now to ask for your help. Please become part of the solution, as an advocate, investor, implementer and/or cooperating citizen recycler.

Since December 2015, we, the Island-wide Food Waste Project Oversight Committee (the "Food Waste Committee") have undertaken a comprehensive study (the "Study") to identify the most sustainable and Island-appropriate way to manage food waste on the Island. The full study is available at <u>http://vineyardvision.org/island-wide-food-waste-composting-feasibility-study-completed/</u>.

As part of the Study, the Food Waste Committee ranked six technologies according to costs, potential job and revenue creation, social and environmental impact and other relevant criteria. This assessment yielded the following: in-vessel (or rotary drum) composting is best suited as the Island-wide solution to our food waste problem, but there were several other options that were at least worth exploring further.

As a next step, the Food Waste Committee commissioned a Business Plan for Recycling Food Waste on Martha's Vineyard (the "Business Plan") to identify the infrastructure investment and the projected operating costs to process food waste on-Island. The full report is available at <u>http://vineyardvision.org/Food-Waste-Business-</u> <u>Plan</u>. The attached Executive Summary of the Business Plan provides insight regarding the costs of implementation for the four top-ranked approaches from the Study. Ultimately, the Island's solution to its food waste problem will likely entail public-private partnerships, state grants and philanthropic investment.

We should keep our food waste here. On-Island composting can create on-Island jobs, save fossil fuels and, by providing a new source of locally-sourced compost, reduce production costs for farmers. In addition to food waste, composting could utilize cardboard, soiled paper and yard waste, thereby further reducing our trash stream. Waste disposal will continue to become more expensive and complicated nationwide, and even more so here due to our Island status. We must act now--please join us.

Please contact Sophie Abrams Mazza, Food Equity and Recovery Director for Island Grown Initiative, at <u>sophie@igimv.org</u> or call 508-687-9062 to share your questions or comments and to indicate your interest in becoming involved in implementing solutions.

Chris Murphy, Chair	Michael Loberg	Rebecca Haag
Jon Previant	Richard Toole	Matt Pool
Don Hatch	Melissa Hackney	Sophie Abrams Mazza

INTRODUCTION TO THE BUSINESS PLAN

The Problem

The Food Waste Committee convened with the goal of developing a comprehensive plan for dealing with food waste on the Island. The Island does not have any public composting facilities for organic waste, nor does it have any plan for dealing with food waste generated here. With the exception of a small pilot project described below, no Island transfer station is prepared to accept source-separated food waste for composting. Consider the following facts:

- By law, Massachusetts requires commercial establishments to recycle food waste. Enforcement currently is lagging because of a lack of facilities to accept diverted food waste. These are now being built, so enforcement will follow. Private residences then will also be required to separate food waste from trash.
- At 19,000 tons per year, trash is the Island's biggest export. Food, at 6,500 tons, comprises more than a third of that waste. We can rescue all of that food, some for consumption by people and some for animals. And what's not edible can become soil enriching compost for local use.
- The Island imports large quantities of costly compost, much of which contains sewage sludge, dyes and other contaminants. In addition to the costs that end users pay, the environmental impacts are significant, including fossil fuel use and the potential contamination of our Island soils.
- Because all of the Island's landfills are capped, all of our waste, including food, is shipped to off-Island landfills, incinerators and recycling facilities, a cost which is borne by Island taxpayers.
- Estimates are that Island towns and we as taxpayers could save as much as \$286,000 a year by recycling food waste on the Island, not counting potential income

from related business development, including the sale of locally produced compost.

The Study

Because of these facts, the Food Waste Committee oversaw the Island-wide Organics Waste Management Feasibility Study. The Study assessed various technologies and approaches to managing food waste on the Island and made the following specific recommendations for next steps:

- Pursue an economic analysis and potential funding for in-vessel equipment, most likely to be located at the Edgartown and/or Oak Bluffs transfer stations;
- Support and encourage farmers and other businesses to develop licensed composting operations that can accept the in-vessel product or direct food waste;
- Pursue business possibilities for pick-up service; and
- Promote Island-wide food waste reduction, recycling and recovery.

The Business Plan

Coker Composting and Consulting from Troutville, Virginia, in collaboration with Robert L. Spencer, environmental consultant (who also consulted with the Food Waste Committee on the Study) prepared the Business Plan and the attached Executive Summary, Their resumes and credentials are attached to the Business Plan. The Business Plan's purpose is to address the Study's next steps recommendation to develop an economic analysis of the Food Waste Committee's top-ranked solutions for dealing with the Island's food waste.

COMMITTEE RECOMMENDATIONS BASED ON THE STUDY AND THE BUSINESS PLAN

1. <u>In-vessel Composting</u>: The Food Waste Committee recommends in-vessel composting as the most feasible for the Island, after thorough consideration of an initial set of six possibilities. For an in-depth discussion of all of the considered solutions (extrusion, anaerobic digestion, in-vessel composting, turned windrow composting, aerated static-pile composting and off-island transport), please see the Study.

In-vessel composting is done in a closed environment. This can be a rotary drum or a large stainless steel lined container. The advantages of in-vessel composting are tighter control of temperature, odors, rodent control, the ability to compost meat, dairy products and animal carcasses. Typically closed composters create compost quicker than open static piles. An in-vessel unit could be located at either or both of the Island's transfer stations and could be sized to handle the seasonal fluctuation in food waste.

Additional Benefits:

- large reduction of waste stream going off island
- organics, soil, and water remain on island

- leaves, wood chips, cardboard and other paper waste are compostable
- compost is an excellent soil amendment
- it is a fairly low tech process
- lower capital costs than other methods (i.e., extrusion or anaerobic digestion)

2. <u>Community and Government Action</u>: The Food Waste Committee recommends that elected officials and concerned citizens proceed to develop a plan to implement an in-vessel composting operation for Island-wide use. To do this, the most appropriate implementer must be identified. Then, the site(s) must be secured. Finally, the funding must be lined up. One option is that a private company would invest in and own the facility, on either town-owned or privately-held land, and would operate through an agreement with the Island's towns. An alternative option is that the Island's towns join together for a public facility, with the capital costs being funded through federal, state and philanthropic grants and investments. The Food Waste Committee will continue to act as a catalyst for this effort and welcomes the participation of advocates, investors, implementers and citizen recyclers.

3. <u>Small Scale Demonstration Projects</u>: In the near term, and until the in-vessel facility is up and running, the Food Waste Committee highly recommends demonstration projects for food waste recycling. These are important because they educate consumers, businesses and institutions, they help build the infrastructure for the in-vessel facility, and they can help normalize the process of source separating food waste, so that it becomes business as usual.

One current small-scale project, the Island Food Rescue Program operated by Island Grown Initiative, is currently picking up separated food waste from over 25 restaurants on the Island, as well as from the majority of schools and from the Island's transfer stations that have waste stations for consumer waste. During the Rescue Program's first year of operation (2017), 17 tons of food waste were captured. This year, the program will pick up over 120 tons of food waste from these sources. The waste is then being composted at Island Grown Initiative's Farm Hub at Thimble Farm, to improve the quality and productivity of the soil there. This success and expansion of this small-scale project demonstrates a significant demand for food waste pick-up for composting or animal feed.

Other possible demonstration projects (and this list is by no means exhaustive) include:

- A tub grinder to be located at a farm that currently open-air composts. The tub would grind food and cardboard down to more uniform sizes to help with the composting process;
- A bigger truck for Island Grown Initiative so that it can expand its pick up. Currently IGI staff have had to turn away restaurants that want to participate because the truck is not big enough;
- The development of a concentrated pick-up route in Edgartown where many

seasonal restaurants are clustered;

- The placement of on-site heat stabilization processing units in more rural locations (because they need to be emptied less frequently); and
- A black soldier fly project that converts food waste into animal feed.

4. <u>Consumer Education</u>: The Food Waste Committee highly recommends continued consumer education and a call to action from our businesses and institutions. We must **Reduce, Reuse, Recycle** as much of our waste as possible. There is significant opportunity to manage the problem by: engaging grocery stores to salvage as much food as possible for distribution through the Island's food equity distribution system; encouraging restaurants to reduce portion sizes; and engaging schools, hospitals, transportation centers, public facilities to separate food waste to give to local farmers to feed animals or compost. Several town transfer stations now accept household food waste, which is then composted to improve agricultural production. All Island transfer stations should participate. We also must continue to work with local farmers to license and expand their composting operations. All of these activities will help reduce the volume of food waste and set the stage for the success of an Island-wide in-vessel system.

Please join us! We must take action now to capture the Island's food waste and use it for good.