CFWR 2022

Think Outside the Can: Consider Compost Pilot Project



Opportunity # USDA-NRCS-NHQ-CFWR-22-NOF00001179

1

Project Abstract

Hernando County Florida's *Think Outside the Can: Consider Compost Pilot Project* will reduce by 4,500 tons the amount of waste material placed in the landfill annually and will instead turn it into a beneficial compost product for local agricultural producers and community gardeners.

Hernando County Solid Waste (HCSW), the project applicant, landfills nearly 20% more waste than the state average¹. While the material is managed with best management practices (BMP) current practices do not optimize benefits to the local environment or economy.

Hernando County is a rural county located in Central Florida, Central Florida soils often contain less than 1% organic matter (OM) meaning that these sandy soils lack the ability to retain moisture and nutrients². Despite the challenges of soil quality, agriculture is a growing industry in Hernando County⁵ and 31% of Hernando County agricultural producers are new to the industry³.

The realities of Hernando County Agriculture coupled with the challenge of the amount of material landfilled annually presents the opportunity for HCSW to establish a compost program that optimizes benefits to the local environment and economy. This pilot program will build on the existing compost education provided by HCSW to Hernando County residents free of charge and in partnership with University of Florida's Office of Extension (UF/IFAS) and Hernando County Utilities office of Water Conservation.

Hernando County Florida's proposed *Think Outside the Can: Consider Compost Pilot Project* will produce compost to aid local soils in the retention of moisture and nutrients, make the compost available to local agricultural producers, and simultaneously reduce the amount of material landfilled annually.

¹ 2020 Solid Waste Management Report, Florida Department of Environmental Protection

² The Dirt on Central Florida Soils, University of Florida IFAS, Dr. William Lester

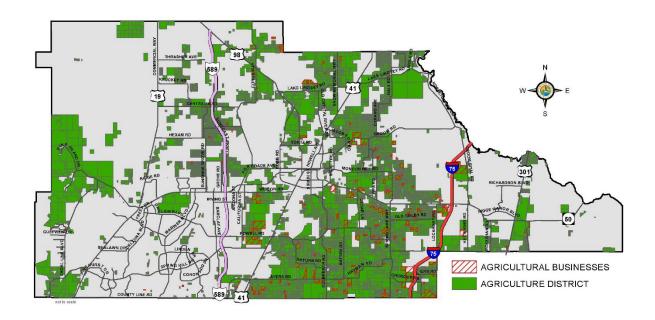
³ USDA 2017 Census Farm Economics

Project Narrative

Introduction:

Hernando County, Florida is a geographically diverse county located on the central-west coast of Florida. The county is comprised of mostly unincorporated areas and has one municipality. Western Portions of Hernando County are located on the Gulf of Mexico; the more urbanized central part of the county is home to most county residents and Eastern portions, where most agricultural businesses are located, are more rural in nature. Hernando County is a growing, rural county and approximately 23% of land in the County is agriculturally classified as Greenbelt.

HERNANDO COUNTY: AGRICULTURE DISTRICT ZONING



HCSW provides solid waste services for all 194,515¹ residents of Hernando County including all incorporated and unincorporated areas of the county. As part of the services provided, Hernando County Solid Waste operates three landfill sites: West Hernando Convenience Center, East Hernando Convenience Center, and the Northwest Solid Waste Management Landfill. The Northwest facility is Hernando County's main landfill and is located on 398 acres of property owned by Hernando County Board of County Commissioners. Eleven acres at the Northwest facility are planned for a compost facility and Hernando County Florida's proposed *Think Outside the Can: Consider Compost Pilot Project* will take place in a 3-5 acre plot near the planned site and in accordance with FDEP permitting requirements.

¹ Source: U.S. Census Bureau, 2020 Census Redistricting Data (Public Law 94-171)

Since 2015 HCSW's Recycling Coordinator, Carmen Bruno, has been engaged in professional development and networking to prepare HCSW to champion composting in Hernando County. Mr. Bruno is a certified Solid Waste Association of America (SWANA) Manager of Compost and is part of the organics recycling committee for Recycle Florida Today (RFT), which is currently working to bring a chapter of the United States Compost Council (USCC) to Florida.

In 2016, HCSW commissioned an analysis to determine options for diverting organics from Hernando County's landfill. Hernando County Solid Waste manages wastewater sludge, green waste and food waste. Currently wastewater sludge, food waste, and some green wastes are placed in the Class I landfill as a management strategy and green waste is also shredded to produce mulch that is provided to Hernando County residents for free (see Figure I below).

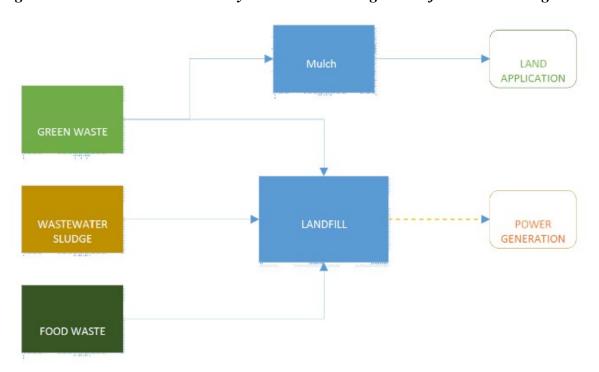


Figure I: Current Hernando County Solid Waste Management of Recoverable Organics

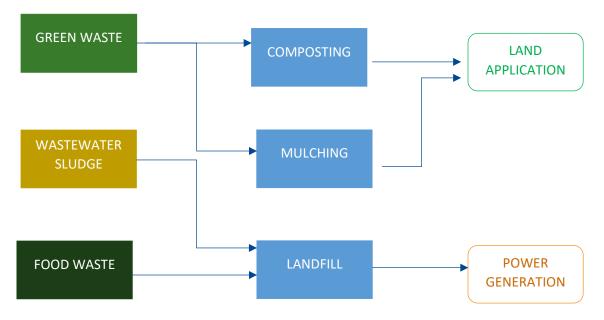
Hernando County landfills nearly 20% more waste than the state overall¹ (see Figure II below). Based on the waste composition study conducted in 2016, organic waste landfilled in the Class I landfill comprised 24.5% of the total waste stream. Put differently, Hernando County landfill manages 34,366 tons of waste per year that could be converted to compost. *Hernando County's Think Outside the Can: Consider Compost Pilot Project* proposes the composting of 4,500 tons of currently landfilled waste per year.

Figure II: Waste Management Practices Florida & Hernando County¹



Hernando County recognizes organic waste as a valuable resource. Recycling organic waste will reduce the amount of landfilled waste thus saving landfill airspace and giving value to waste by developing products and markets for green waste. As a result of the 2016 study, Hernando County has elected to first implement composting as the recycling option to divert green waste from the landfill (see Figure III below).

Figure III: Proposed Hernando County Think Outside the Can: Consider Compost Pilot Project



The Hernando County Think Outside the Can: Consider Compost Pilot Project, will employ aerobic composting to transform yard waste into a beneficial compost that increases waterholding capacity in the soil, increases porosity, and suppresses diseases. The project will mirror the Modified Static Aerobic Pile compost process that has been mastered by Hillsborough

County Florida and studied by HCSW's recycling coordinator, thus decreasing the learning curve to producing a distributable compost product approved by the Florida Department of Environmental Protection.

Hernando County Solid Wastes composting facility was approved in Hernando County's Capital Improvement Plan in fiscal year 2018-2019. Hernando County received permitting for Turned Windrow and Modified Static Pile composting in February of 2022. Facility design will be completed in 2023 and construction of the facility will begin in 2024. Hernando County's Think Outside the Can: Consider Compost Pilot Project will build a successful wood waste composting program and long-term goals post pilot project will be to add food waste and dry anaerobic digestion with the goals of further reducing the amount of landfilled waste and reducing greenhouse gas emissions (see Figure IV pg. 8).

Image II: Schematic of Composting Area at NW Wetwell Culvert Conveyance Forcemain to EL 109.0 Catch Storage Tanks Basin 140 x175 Gravity Mulch-Collection Stockpile Pipe 120 x160 Covered Potential Future Compost Area Processing Area 163 x169 **Future Curing** Flat/Area: 30'x30' **Pad Extension** 0.4 Acres Washdown Area PROPOSED COMPOSTING AREA: 10.4 Acres 150'x200' Equipment 163'x316' Storage and **Curing Pad** Maintenance Area Employee 160'x120' Parking Finished and Office roduct Storage Trailer Area EL 109.0

Goals and Objectives

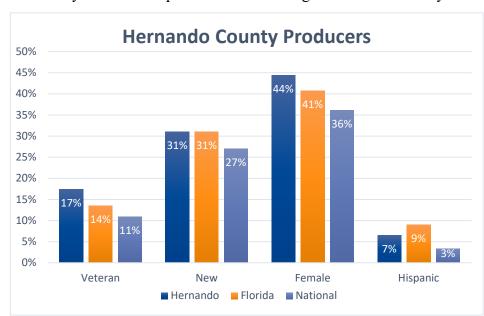
Hernando County's *Think Outside the Can: Consider Compost Pilot Project* will achieve the following goals and objectives.

Table I: Goals and Objectives

Goals	Objectives
1. Generate 10,000 cubic yards of	
finished compost annually.	
	1.a Divert 4,500 tons of waste annually from the
	landfill.
	1.b Receive FDEP approval of compost product.
2. Increase Access to Compost.	
	2.a Provide at least one educational event per
	month to agricultural producers and interested
	compost users.
	2.b Provide 85% of compost created to end users
	by end of grant program.
3. Increase Amount of Water and	
Nutrient Holding Capacity in the soils.	
	3.a Perform soil tests measuring water and
	nutrient levels in soil (pre/post application).

Impact on Executive Priorities Equity & Climate

Agriculture is a growing industry in Hernando County with a 13.6% projected growth rate through 2029². Hernando County agricultural producers are uniquely diverse and many historically underserved producers are working in Hernando County. Hernando County boasts

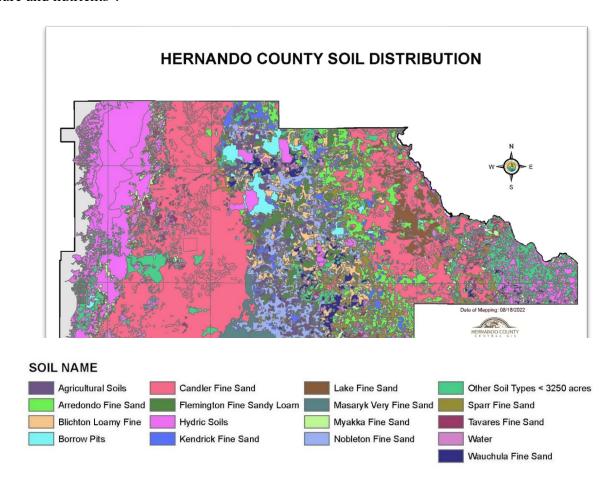


17% of producers who are former military compared to 11% nationally and 14% in Florida³. 31% of producers in Hernando County are new compared to 27% nationally. Currently, 44% of producers in Hernando County are female compared to 36% nationally. Hernando County

² Florida Department of Economic Opportunity 2021-2026 Statewide, Regional, and County Projections

also outpaces the nation when it comes to Hispanic producers at 7% compared to 3% nationally. The majority of Agricultural Producers in Hernando County operate small farms with 81% operating farms less than 50 acres in size. However, as the industry grows in Hernando County producers have experienced a per farm average increase in the net income per farm of 88% over 2012³. In order to assist these historically underserved producers access the economic and environmental advantages of composting, HCSW and its education partners will directly contact these producers to welcome them and invite them to educational workshops. Outreach efforts will include social media, letters, emails, telephone calls, and visits to producer sites. HCSW and its education partners will also work with local producers to offer educational events at their sites fostering the development of a network of peers that can offer the support needed by these typically underserved populations. During educational events, the subject matter expert facilitators and peer network will receive questions and offer science-based solutions.

Hernando County is a rural county located in Central Florida, Central Florida soils often contain less than 1% organic matter (OM) meaning that these sandy soils lack the ability to retain moisture and nutrients³.



³ The Dirt on Central Florida Soils, University of Florida IFAS, Dr. William Lester

As a result of the poor soil quality, agricultural producers often apply large quantities of water and fertilizer. The compost produced by HCSW will aid the local soils ability to retain moisture and increase its nutrient levels; thereby, reducing the need for the application of harmful fertilizers providing economic benefit to producers and environmental benefit to the community. In the local area this reduction in fertilizer use will help reduce the level of nitrates found in surface and ground water. This nitrate reduction is very important as Hernando County is part of a Basin Management Action Plan (BMAP) to reduce the nutrient load in the Weeki Wachee Springs Group and the Florida Aquifer⁴. 27% of current Nitrogen sources are agricultural.

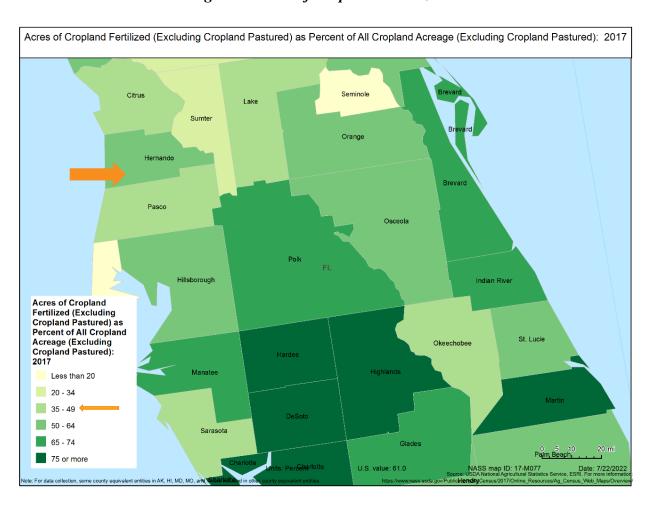
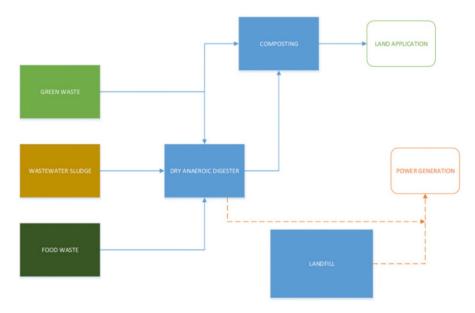


Image III: Acres of Cropland Fertilized³

Longer term as Hernando County scales the reduction of organic waste to the landfill, HCSW will employ strategies to decrease carbon emissions including the addition of pre and post-consumer food waste and dry anaerobic composting to HCSW's waste management practices (Figure IV below).

⁴ Florida Department of Education, Weeki Wachee Basin Management Plan 2018

Figure IV: Long-Term Hernando County Solid Waste Management of Recoverable Organics & Reduction of Greenhouse Gases



Procedures and Work Plan

Table II: Work Plan

Cool 1. Com	wata Campast			
	erate Compost. Divert 6 000 to	ns of Organ	nic waste annually from	the landfill
Milestone	Key Personnel	Timeline	Data Collection/Evaluatio n (Progress Indicator)	Data Dissemination
Receive compostable material	Carmen Bruno, Recycling Coordinator Consultant	Oct. 2023- Feb. 2025	Tonnage of green waste added to aerated pile	Disseminated to frontline staff and leadership for monitoring and quality improvement.
Objective 1.b	Receive FDEP	approval of	f compost product.	
FDEP Report on Quality of Compost Received	Carmen Bruno, Recycling Coordinator Consultant	March 2024- Feb. 2025	Report from FDEP stating quality of compost generated	Disseminated to frontline staff and leadership for quality improvement and disseminated to end users to verify quality/usability of product.
			nage of Waste Diverted	from Landfill, Amount
	of Compost Gen			
Goal 2. Incre	ease Access to C	ompost.		

Objective 2. users.	a Provide monthly	y educatio	nal events to producers	and interested compost
Milestone	Key Personnel	Timeli ne	Data Collection/Evaluatio n (Indicator of Progress)	Data Collection/Disseminatio n Plan
Create Educationa 1 Content Module 1	Dr. William Lester, UF/IFAS	March 2023 to June 2023	Completed Module Surveys will be distributed to training attendees evaluating the content of module, what was learned, and training delivery	Disseminated to educational team for discussion on improving modules and content delivery
Create Educationa 1 Content Module 2	Dr. William Lester, UF/IFAS	March 2023 to June 2023	Completed Module Surveys will be distributed to training attendees evaluating the content of module, what was learned, and training delivery	Disseminated to educational team for discussion on improving modules and content delivery
Deliver Educationa 1 Content	Dr. William Lester, UF/IFAS Carmen Bruno, Recycling Coordinator Lily Browning, Program HCUD Program Coordinator	July 2023 to Feb. 2025	Sign-in Sheets	Disseminated to educational team for discussion on improving attendance and targeting producers/end users.
		_	reated to end users by e	0 1 0
Compost available at NW site	Carmen Bruno, Recycling Coordinator	April 2024	Weight of Compost distributed and type of business/resident receiving the compost	Disseminated to frontline staff and leadership for discussion on achieving objectives and targeting producers/end users.
Compost available at W site	Carmen Bruno, Recycling Coordinator	April 2024	Weight of Compost distributed and type of business/resident receiving the compost	Disseminated to frontline staff and leadership for discussion on achieving objectives and targeting producers/end users.

Compost	Carmen Bruno,	April	Weight of Compost	Disseminated to frontline
available	Recycling	2024	distributed and type of	staff and leadership for
at E site	Coordinator		business/resident	discussion on achieving
			receiving the compost	objectives and targeting
				producers/end users.

Deliverable 2: Quarterly Rosters of Sign-in Sheets from Educational Events Deliverable 3: Quarterly Compost Distribution Reports

Goal 3. Increase Amount of Water and Nutrient Holding Capacity in the soils Objective 3.a Perform soil tests measuring water and nutrient levels in soil (pre/post application).

Milestone	Key Personnel	Timeli ne	Data Collection/Evaluatio n (Indicator of Progress)	Data Collection/Disseminatio n Plan
Baseline Soil Quality Tests	Dr. William Lester, UF/IFAS Carmen Bruno, Recycling Coordinator Chris Linsbeck, Hernando County Parks & Rec.	Dec. 2023	Moisture & Nutrient Levels in Soils	Disseminated to frontline staff and leadership for monitoring and quality improvement. Disseminated to Agricultural Producers for Education and Discussion.
Biannual Soil Quality Test	Dr. William Lester, UF/IFAS Carmen Bruno, Recycling Coordinator Chris Linsbeck, Hernando County Parks & Rec.	Dec. 2024	Moisture & Nutrient Levels in Soils	Disseminated to frontline staff and leadership for monitoring and quality improvement. Disseminated to Agricultural Producers for Education and Discussion on how quality of soil now reduces the need for large applications of water/fertilizer.

Collaborators

Hernando County's Think Outside the Can: Consider Compost Pilot Project will require regional collaboration across several sectors. In order to achieve the Goals and Deliverables of the project, HCSW will collaborate with the University of Florida's Office of Extension, Local Agricultural Producers, Hernando County Parks & Recreation, Hillsborough County Waste Management Services, Hernando County Utilities, and more. These collaborative relationships

are summarized in Table III Collaborators and Contributions and Table IV Letters of Support & Commitment (letters of support/commitment are attached). Importantly, these collaborations build on existing relationships and open the door for new and deepened collaborative relationships.

Presently, HCSW offers residents interested in backyard composting classes in person and/or online typically once per month. The classes explain the compost process and the benefits of a home compost pile. The class details acceptable materials for cold composting available in all households. The classes are done in partnership with UF/IFAS and HCUD Water Conservation. Once the resident finishes the class, they receive a free compost bin and a one-page composting information and data tracking sheet. To date over 500 composters have been distributed in Hernando County. With the new pilot project, the education partners will be able to develop new curriculum targeting agricultural producers and will be able to expand compost education directly addressing the composting needs of this important group.

UF/IFAS is an important partner for the education goal and objectives of the project. They also offer soil testing that would enable the project to measure if the compost produced improves soil quality. By working with another partner, Hernando County Parks and Recreation, the project will have access to sites across the geographically diverse county to determine and communicate the benefits of the locally produced compost to potential end users.

As HCSW works towards producing a compost that delivers on the promise of improved soil quality, increased collaboration with Hillsborough County Solid Waste Management and other technical consultants will boost HCSW's ability to generate useable compost quickly. These relationships will provide technical expertise that will reduce errors while HCSW is beginning its work. Importantly, HCSW has also received the support of the Florida Department of Environmental Protection and local Agricultural Producers in the pursuit of *Hernando County's Think Outside the Can: Consider Compost Pilot Project*.

Table III Collaborators and Contributions

Partner	Contact	Description of Partnership	Related Deliverable
UF/IFAS	Dr. William	Dr. William Lester holds a graduate	Deliverable 2:
Hernando	Lester, Urban	degree in Plant Medicine. Combining a	Quarterly Rosters of
County	&Commercial	mix of horticultural knowledge and	Sign-in Sheets from
	Horticulture	management skills, his current	Educational Events
	Agent III for	responsibilities include teaching the	
	UF/IFAS	public and working closely with county	Deliverable 4: Soil
	Extension	and professional clients. His goal is to	Quality Test Reports
	Hernando	put complex scientific findings into	
	County	language that can be understood by	
		school age children and the adult public	
		alike. He has been involved in the	
		creation of multimedia educational	
		materials to support the Hernando	
		County Fertilizer Ordinance. Protecting	

Partner	Contact	Description of Partnership	Related Deliverable
		Hernando County's fragile Nature Coast ecosystem and reducing the amounts of harmful toxins being placed in the environment are the central goals of his frequent teaching programs. Dr. Lester is also Hernando County's extension agent with the expertise to conduct soil testing measuring WHC and OM.	
Hernando County Utilities office of Water Conserva tion	Lilly Browning, Hernando County Utilities Department Florida- Friendly Landscaping™ Program Coordinator	Ms. Lilly Browning is Hernando County Utilities Florida-Friendly Landscaping Program Coordinator and is part of the education team trio of HCSW, UF/IFAS, and HCUD delivering recycling and environmental education to Hernando County. Ms. Browning also represents HCUD who has responsibility for overseeing much of Hernando County's efforts to reduce nitrogen load in Florida's Aquifer and the Weeki Wachee Springs Group per the County's BMAP.	Deliverable 2: Quarterly Rosters of Sign-in Sheets from Educational Events
Hernando County Parks & Recreatio n	Chris Linsbeck, Hernando County Community Services Director	Mr. Linsbeck brings an eager willingness to participate to the project. As the County Community Services Director, Mr. Linsbeck oversees the hundreds of acres comprising Hernando County's Parks where pilot project compost can be applied and the soil quality improvements can be measured.	Deliverable 3: Quarterly Compost Distribution Reports Deliverable 4: Soil Quality Test Reports
Hillsboro ugh County Solid Waste Manage ment	Ron Weisman, Operations Manager Solid Waste Management Hillsborough County	Mr. Weisman brings a genuine spirit of collaboration and a willingness to share to the project. Mr. Weisman has successful implemented Hillsborough County's Composting Program and has generously shared his time and technical expertise with HCSW inspiring and informing the model for this pilot project.	Deliverable 1: Quarterly Report on Tonnage of Waste Diverted from Landfill, Amount and Quality of Compost Generated. Deliverable 4: Soil Quality Test Reports
Technical Consulta nt	TBD	Qualified, consulting engineer with expertise in both aerobic and anaerobic composting. As well as inoculants,	Deliverable 1: Quarterly Report on Tonnage of Waste Diverted from

Partner	Contact	Description of Partnership	Related Deliverable
		reducing greenhouse gas emissions,	Landfill, Amount and
		etc.	Quality of Compost
			Generated.
			Deliverable 4: Soil
			Quality Test Reports

Table IV Letters of Support & Commitment

Entity	Supporter/Collaborator Contact
University of Florida	Dr. William Lester, Urban & Commercial Horticulture
	Agent III for UF/IFAS Extension Hernando County
Florida Department of	Karen S. Moore, Environmental Administrator
Environmental Protection	
Hernando County Parks & Rec.	Chris Linsbeck, Director
Hillsborough County Landfill	Ron Weisman, Operations Manager Solid Waste
	Management Hillsborough County
Hernando County Utilities	Lilly Browning, Florida-Friendly Landscaping TM
	Program Coordinator
Huntsman Tree Supplier, Inc.	Michelle Huntsman, Owner/Operator

Evaluation

As an expansion of the Procedures and Work Plan section of this application, Table V below summarizes the evaluation plan for the pilot project and emphasizes major project milestones. The first major milestone to be completed will be the creation of compost education modules that can be used by the educational team to educate local agricultural producers. Content will be developed by subject matter experts and useable in both virtual and face-to-face education settings. Learning outcomes will include participants knowledge on the cost benefits of using compost, local availability of compost, environmental benefits of compost over fertilizer, soil benefits of using compost, recycling organic materials, and more. Once the modules are developed they will be used by the educational team to deliver education to agricultural producers throughout the duration of the grant. Participants in educational events will participate in surveys determining the quality of educational delivery and their perceptions of their learning gains towards the intended learning outcomes. Results from these surveys will be used by the educational team to improve and refine compost education.

The next major milestone to be achieved will be the receipt and mixing of compostable materials. The weight of green waste will be captured when received by the landfill and prior to mixing. Measuring the weight of material will help frontline staff ensure the appropriate mix of materials and enable measurement of achievement of the project objective to reduce by 4,500 tons annually the amount of landfilled material.

Another major milestone will be the receipt of FDEP approval to distribute the compost generated during the pilot. Throughout the composting project temperatures of the piles will be monitored and samples will be submitted to FDEP as required to determine when the compost is ready for distribution. Reports from FDEP will be disseminated to frontline staff and leadership for monitoring and quality improvement. Once a distributable product is produced results of the FDEP report will be shared with agricultural producers for education and discussion.

Hernando County has identified Hernando County Parks and Recreation Department as the collaborator to provide the sites for data collection for goal 3: increase amount of water and nutrient holding capacity in the soils. Hernando County Parks and Recreation has multiple sites throughout the county where the compost can be applied. The University of Florida offers local soil testing as a fee-based service provided by the office of extension and they will serve as the collaborator responsible for data collection. At this time, the project is planning for pre and post compost application soil quality testing at three sites. Facilitators of educational events will share the results of soil tests with participants educating them on how locally available compost has improved the soil in their environment; thereby, reducing the need for the application of fertilizer and large quantities of water.

Table V Major Milestone Evaluation Plan

	Milestone	Timeline	Indicator of Progress	Data Collection/Dissemination Plan	Related Deliverable
1.	Complete Education Compost Modules.	By June 2023	Delivery of Education to Agricultural Producers	Completed Module Surveys will be distributed to training attendees evaluating the content of module, what was learned, and training delivery	Deliverable 2: Quarterly Rosters of Sign-in Sheets from Educational Events Deliverable
2.	Mix Compost Materials	By Oct. 2023	Weight of Material Diverted from Landfill	Tonnage of material added to aerated pile Disseminated to frontline staff and leadership for monitoring and quality improvement.	Deliverable 1: Quarterly Report on Tonnage of Waste Diverted from Landfill, Amount and Quality of Compost Generated. Deliverable

	Milestone	Timeline	Indicator of Progress	Data Collection/Dissemination Plan	Related Deliverable
3.	Receive FDEP report on quality of compost.	By March 2024	Approval to Distribute Compost	Report from FDEP stating quality of compost generated Disseminated to frontline staff and leadership for quality improvement and disseminated to end users to verify quality/usability of product.	Deliverable 3: Quarterly Compost Distribution Reports
4.	Measurement of Soil Quality.	By Nov. 2024	Increase in soils Water Holding Capacity (WHC)	Soil Tests measuring WHC/OM Disseminated to frontline staff and leadership for monitoring and quality improvement. Disseminated to Agricultural Producers for Education and Discussion.	4: Soil Quality Test Reports

Self-Sustainability:

After several years of preparatory work and initial planning HCSW is ready to implement *Hernando County's Think Outside the Can: Consider Compost Pilot Project.* If received, this grant will infuse necessary funding for technical expertise, community outreach, and equipment necessary for a successful pilot project. With these additional funds Hernando County will be able to reach and educate more local agricultural producers and provide them with a beneficial compost product quickly. Once these goals are reached HCSW will be poised to transition towards longer-term goals, further reducing the amount of organic waste landfilled and local emissions of greenhouse gases.

The Compost facility is an approved project on the county's capital improvement plan and will continue to receive funding post-pilot completion from the HCSW enterprise fund through fees collected at the landfill sites, non-ad valorem assessments and revenue generated from compost. In addition, HCSW will continue to pursue local and federal funding grant opportunities as well as seek support from local philanthropists and agricultural producers.

Budget

Category	YR1			YR2		Total YR1 & YR2			
	Federal Non-Federal Cost Share		Federal	Non-Federal Cost Share	Federal Total	Non-Federal Total	Total		
Personnel	\$0.00	\$1,000.00	\$0.00	\$1,000.00	\$0.00	\$2,000.00	\$2,000.00		
Contractual	\$129,550.00	\$22,425.00	\$147,825.00	\$16,425.00	\$277,375.00	\$38,850.00	\$316,225.00		
Supplies	\$1,990.00	\$0.00	\$0.00	\$0.00	\$1,990.00	\$0.00	\$1,990.00		
Equipment	\$0.00	\$0.00	\$20,600.00	\$60,067.00	\$20,600.00	\$60,067.00	\$80,667.00		
Total	\$131,540.00	\$23,425.00	\$147,825.00	\$17,425.00	\$299,965.00	\$100,917.00	\$400,882.00		
Percent of Total					75%	25%			

Budget Narrative

Personnel

To complete objective 2.a, delivery of educational content to agricultural producers and other community gardeners/producers is required.

Federal: NA

Non-Federal Cost Share: Dr. William J. Lester, Residential/Commercial Horticulture Agent III for the University of Florida's Institute of Food and Agricultural Sciences will present 40 hours of educational content at \$25/hr x 40 hrs/yr= \$2,000. Please see the attachment titled "Letter of Contribution UF/IFAS"

Equipment

To complete goal 2, composting bagging is required. The equipment will be stored at the main landfill in a covered storage facility and maintenance will be performed by Hernando County's fleet department who will also inventory the equipment in the county's fleet inventory management system Assetworks.

Table I: Rotochopper go-bagger 250 Lease vs. Cost Comparison

Lease		Purchase	
		Purchase Price (No	
Annual Lease Amount (2		maintenance costs	
years)	\$80,556	included)	\$80,482
Insurance Annual Costs	\$156	Insurance Annual Costs	\$156
Administration Annual		Administration Annual	
Costs	\$29	Costs	\$29
Annual Total	\$80,741.00	Total	\$80,667.00

Federal: Purchase of Rotochopper go-bagger 250 @ \$20,600 or 26% of total unit cost.

Non-Federal Cost Share: Purchase of Rotochopper go-bagger 250 @ \$60,067 or 74% of total unit cost.

Supplies

To complete goal 1 and goal 2, composting materials and educational events are required. To complete goal 3 soil testing is required.

<u>Federal:</u> Composting Demonstration/Training Materials \$100/mth x 19 mths= \$1,900 Soil Tests 6 units @ \$15/unit=\$90;

Non-Federal Cost Share: NA.

Contractual

To complete goal 1, screening equipment, Cribus 3800, is required. The equipment will be stored at the main landfill in a covered storage facility and maintenance will be performed by Hernando County's fleet department who will also inventory the equipment in the county's fleet inventory management system Assetworks. When the award period is over the lease period will terminate.

Table II: Cribus 3800 Lease vs. Cost Comparison

Lease		Purchase	
		Purchase Price (No	
Annual Lease Amount		maintenance costs	
(TMR not included)	\$192,000	included)	\$480,000
Insurance Annual Costs	\$4,512	Insurance Annual Costs	\$4,512
Administration Annual		Administration Annual	
Costs	\$348	Costs	\$348
Telematics (GPS) Costs	\$248	Telematics (GPS) Costs	\$248
Annual Total	\$197,108	Total	\$485,108

Federal: Lease of Cribus 3800 at \$16,425/mth. x 15 months = \$246,375

Non-Federal Cost Share: Lease of Cribus 3800 at \$16,425/mth. x 2 months = \$32,850

To complete goal 1 and goal 3, technical assistance from a subject matter expert is required.

<u>Federal:</u> Consultant at \$24,000/yr (\$2,000/mth. x 14 mths.) to provide all-inclusive technical assistance on producing compost=\$28,000

Non-Federal Cost Share: Consultant at \$24,000/yr (\$2,000/mth. x 3 mths.) to provide all-inclusive technical assistance on producing compost=\$6,000

To complete objectives 2.a, educational content created by a subject matter expert is required.

<u>Federal</u>: Consultant at \$1500/module x 2 modules to create two educational content modules informing agricultural producers how to compost (module 1) and the benefits of composting (module 2) = \$3,000

Non-Federal Cost Share: NA.