



ZERO | Waste

Proposed Strategies Report and Implementation Plan

Gus Olmos, SWRR

Chas Jordan, Kessler Consulting, Inc.

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Background

Zero Waste in Alachua County



Defining Zero Waste

The conservation of all resources by means of responsible production, consumption, reuse and recovery of products, packaging, and materials by minimizing discharges to land, water, or air that threaten the environment or human health.



Guiding Principles of the Strategies Report

01

*Keep
Resources
Local*

02

*Foster Job
Growth*

03

*Emphasize
and Support
Upstream
Solutions*

04

*Mitigate
Climate
Change*

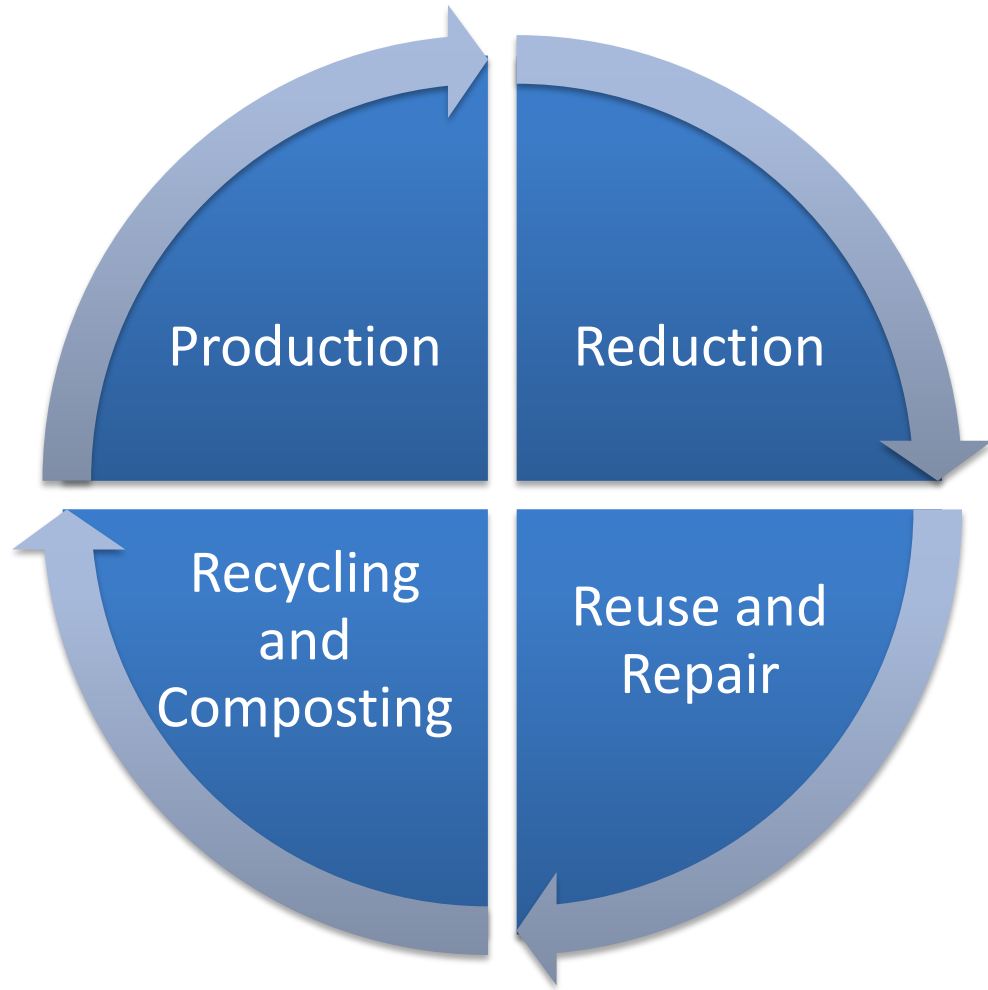
05

*Address
Environmental
Justice and
Create Equity
of Service*

The Linear Economy



Understanding Community-Wide Zero Waste



Source: U.S. Public Interest Research

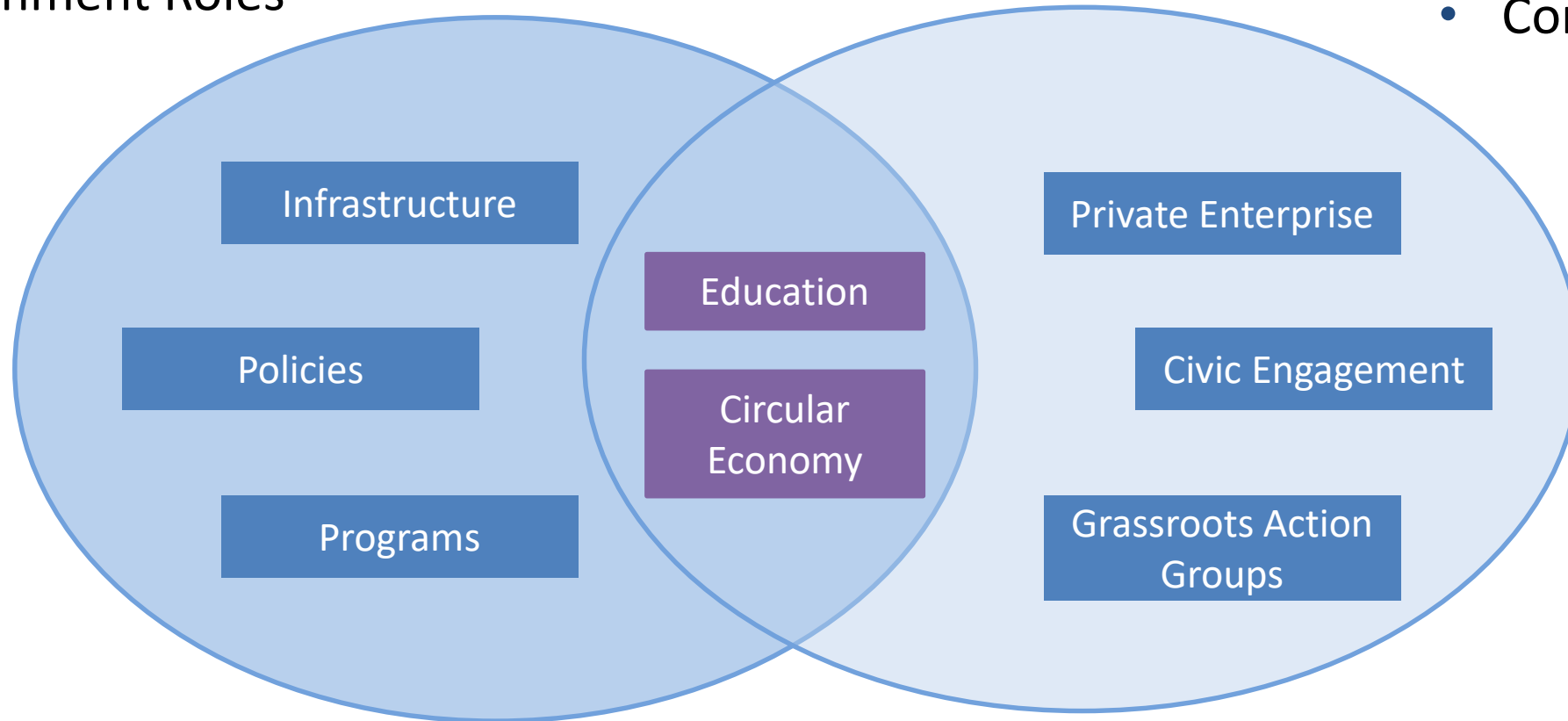


Source: “Three Categories of Zero Waste Solutions” SWANA, CRRRA Zero Waste Training Program (Developed by Kessler Consulting, 2018)

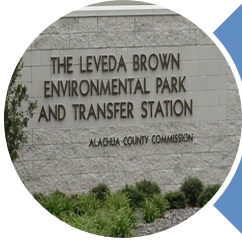
The Players and Their Roles

- Government Roles

- Community Roles



Alachua County Roles



Infrastructure



Policies



Programs

Current Programs and Initiatives

- Pay-As-You-Throw SW rate structures
- Mandated Commercial Recycling
- Multiple Reuse Stores and Facilities
- Hazardous Waste Diversion



Potential Strategies



GENERAL STRATEGIES



ORGANICS MATERIAL
RECOVERY



RECYCLABLES AND
C&D RECOVERY



Implementation

Phase 1 Strategies

Section 1. General Recommendations	
In Progress	Establish a Solid Waste Reduction Goal and Formalize by Adopting a Resolution on Zero Waste.
In Progress	Implement Zero Waste Procurement Policy.
In Progress	Reduce Single-Use Accessories in Dining, Take-Out and Delivery of Prepared Meals.
In Progress	Establish Public and Private Partnerships to Facilitate Innovative Research and Develop New Technologies for Managing Solid Waste in Alachua County and City of Gainesville.
	Develop Partnerships with the Private Sector to Implement a Large-Scale Reuse Program.
	Revise Future Contracts and Franchise Agreements with Collections and Processing Vendors to Include Requirements and Incentives Addressing Zero Waste.
Section 2. Organic Material Recovery	
In Progress	Develop a Plan to Phase Organics from Garbage Collection.
In Progress	Expand Food Recovery Networks to Include Alachua and Gainesville Food Pantries.
	Add Incentives to Current Residential Backyard Composting Programs and Expand.
	Establish the Processing Infrastructure Necessary for Diverting Organic Materials from the Waste Stream.
Section 3. Recyclables and C&D Material Recovery	
In Progress	Ban Single-Use Plastics and Polystyrene on City and County Properties and at City and County Events.
In Progress	Expand Existing Mandatory Commercial Recycling Ordinance.
In Progress	Establish Uniform Multi-family Recycling.
	Conduct an Analysis of Recycling and Disposal Fees to Identify Methods for Discouraging the Landfill of Material.
	Expand the Reach of the Business Recycling Toolkit to all Municipalities within the County.
	Support Organizations Working on the Implementation of Take-Back Programs.

Phase 2 Strategies

Section 1. General Recommendations	
	Develop a Community-Wide Zero Waste Recognition and Certification Program.
	Provide Clear, Concise and Consistent Educational Messaging Across the County and City for All Zero Waste Strategy Approaches.
	Evaluate the Waste Reduction Impacts & Potential Capacities for Expansion within Existing Reuse Infrastructure.
Section 2. Organic Material Recovery	
In Progress	Develop Infrastructure for the Collection of Organic Materials.
	Build Upon Recycling Outreach and Education Programming to Include Organic Material Diversion.
Section 3. Recyclables and C&D Material Recovery	
	Revise Building Code Standards or Green Building Ordinances to Address Zero Waste Initiatives for C&D Material Diversion.
	Foster the Expansion and New Development of C&D Reuse and Recycling Facilities for the Region.
	Foster the Development of Regional Reprocessing Facilities.
	Conduct Operational Analysis of Current Material Recovery Facilities (MRFs) to Ensure High Performance Rates that Support Zero Waste.
	Establish Uniform Recycling Messaging and Improve Coordination (during events such as student move-out).

Phase 3 Strategies

Section 1.	General Recommendations
	Create Incentives for Businesses and Institutions to Adopt Policies Focused on Reduction of Problematic Materials.
Section 2.	Organic Material Recovery
	Market Final Compost Product Throughout Community and Provide Education on Importance of Soil Restoration.
Section 3.	Recyclables and C&D Material Recovery
	Adopt New Ordinances Banning Specific Recyclables from Entering Local Transfer Stations, Landfills, and Incinerators.
	Adopt an Ordinance to Incorporate Reusable and Recyclable Materials into Local Government Road Construction and Maintenance Projects.
	Conduct a Feasibility Study on the Development of a Regional CHaRM Facility for Processing Bulky Materials.
	Consider the Use of Waste-to-Energy to Address Difficult to Recover Materials and Waste Streams.
	Adopt a Single-Use Plastic Bag Ban.
	Create a Single-Use Plastics Ban (plastic food ware, Styrofoam) and Litter Reduction Ordinance.
	Create Processes for Stakeholder Involvement Throughout Decision Making and Implementation Phases.
	Establish Dedicated Staff for Zero Waste Outreach and Education Activities at the County and City.

Section 1: General Recommendations

- Establish a Solid Waste Reduction Goal and Formalize by Adopting a Resolution on Zero Waste
 - Per-capita goal based on the annual Solid Waste Management Report
 - Resolution based on per-capita goal and the Zero Waste Plan
- Implement a Zero Waste Procurement Policy
 - Green/Zero waste purchasing plan was set to be included in policy discussions directly before the pandemic hit and was postponed.
 - Work with procurement to update the proposed green purchasing/single use plastics policy; including compostable or reusable items for events and recycled content/sustainable purchasing practices and buying local when possible.



Section 1: General Recommendations (Contd.)

- Reduce Single-Use Accessories in Dining, Take-Out and Delivery of Prepared Meals
 - Current legislation prohibits the banning of packaging material in the State of Florida
 - City of Gainesville is considering requiring that single use accessories provided by request only, requiring reusable tableware for dining in, and requiring compostable “to-go” items where legal
- Establish Public and Private Partnerships to Facilitate Innovative Research and Develop New Technologies for Managing Solid Waste in Alachua County & Develop Partnerships with the Private Sector to Implement a Large-Scale Reuse Program
 - Continuing to work on attracting private companies to the Eco-Industrial Park
 - Use grant funds to enable local businesses to develop or improve solid waste/recycling technologies



Section 2: Organic Materials Recovery

- Develop a Plan to Phase Organics from Garbage Collection
 - Establish the facilities needed to process collected pre and post-consumer organics
 - Include possible organics collection in future solid waste collection agreements
 - Identify areas for a pilot study of curbside and commercial organics collection and initiate the pilot project
 - Include organics in the mandatory commercial recycling ordinance
 - Implement curbside and commercial organics collection based on the findings from the pilot project
 - Possibility/need of locating a large-scale composting facility in Alachua County



Section 2: Organic Materials Recovery (Contd.)

- Expand Food Recovery Networks to Include Alachua and Gainesville Food Pantries
 - Investigate local ordinances that may restrict food donations and recommend changes to foster food-recovery programs
 - Develop list of food-recovery organizations and their scope
- Add Incentives to Current Residential Backyard Composting Programs and Expand
 - Provide home composters to the public at a reduced rate through annual sales and/or keeping inventory available to the public
 - Free wire compost bins are already available to the public
 - Maintain the PAYT system and highlight the savings from reducing garbage cart size through home composting



Section 3: Recyclables & C&D Material Recovery

- Expand Existing Mandatory Commercial Recycling Ordinance
 - Increased enforcement is the most effective way to increase commercial recycling. Expanding commercial enforcement will require additional Code Enforcement officers
 - Some changes to the existing ordinance may include the requirement for garbage to be bagged before disposing in dumpsters and establishing a maximum contamination level for recycling containers



Section 3: Recyclables & C&D Material Recovery (Contd.)

- Establish Uniform Multi-family Recycling
 - Working with The Recycling Partnership on a Pilot study to provide recycling totes for apartment complexes in order to reduce contamination and increase recycling
 - Multifamily recycling will also be addressed in the exclusive commercial franchise and will be in a separate category along with commercial and traditional residential lines of service.
 - Multifamily recycling services will be uniform in the services provided and method of collection and tailored to each property's needs as determined by the county



Section 3: Recyclables & C&D Material Recovery (Contd.)

- Conduct an Analysis of Recycling and Disposal Fees to Identify Methods for Discouraging the Landfill of Material
 - The processing fee at the Material Recovery Facility is moving to a per-generator basis
 - The fee will be calculated on the contamination levels seen from each customer and adjusted accordingly



Eco-Industrial Park Update

Current Status

- ✓ Business Plan Development
- ✓ Land is shovel ready
- ✓ Business Recruitment

Next Steps

- BoCC Approval of Selection Criteria
 - Comprehensive Plan, Economic Development, Zero Waste Objectives
 - Environmental Protection and Economic Development Advisory Committees
 - Final Naming and Branding
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Selection Criteria - Comprehensive Plan

Solid Waste Element

- Objective 1.5 “The County shall develop and implement a waste reduction strategy that includes waste prevention, source reduction, reuse, recycling and biological disposition...”
- Policy 1.2.5 “The use of tires, plastics or plastic derived materials as a fuel source or as feedstock for a waste to energy facility is prohibited in the County solid waste system...Exceptions to this policy may be allowed for research and development activities by special exception...”


Energy Element

- Policy 7.1.1 “... promote a cluster of waste to wealth industries at the Resource Recovery Park to make useful products from recycled materials.”


Economic Element

- Policy 1.1.6 “Alachua County shall promote a Recycling Market Development Zone (RMDZ)/Resource Recovery industrial park focused on sustainable production of goods or materials that may include recycled content or resources collected by the County curbside recycling program or otherwise removed from the County’s waste stream.”
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Selection Criteria - Economic Development

- Meets FS125.045 (2 & 3) Standards
 - Clear Business Model and Pro Forma
 - Ability to Finance Vertical Construction
 - Employment Quantity
 - Salary Quality
 - Mix of Skilled, Technical Trades
 - Local Employment Opportunities
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Selection Criteria - Zero Waste Objectives

- Directly facilitates the implementation of the Zero Waste Plan
 - Synergy with existing facilities at Leveda Brown Environmental Park
 - Businesses target portions of waste stream not currently addressed in a significant way by County's solid waste system
 - Measurable reductions in amount of waste disposed at landfills
 - Prioritizes waste reduction or reuse over recycling
 - Reduced Environmental Impacts
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Examples

- Construction and Demolition Materials Recovery Facilities
- CHaRM (Center for Hard-to-Recycle Materials)
- Recycling & Reuse Facilities
- Organics Management
- Research and Development



Questions?