

ZERO | Waste

Proposed Strategies Report Joint Water and Climate Policy Board



JUNE 14, 2021

kessler consulting inc.
innovative waste solutions

Welcome and Introductions

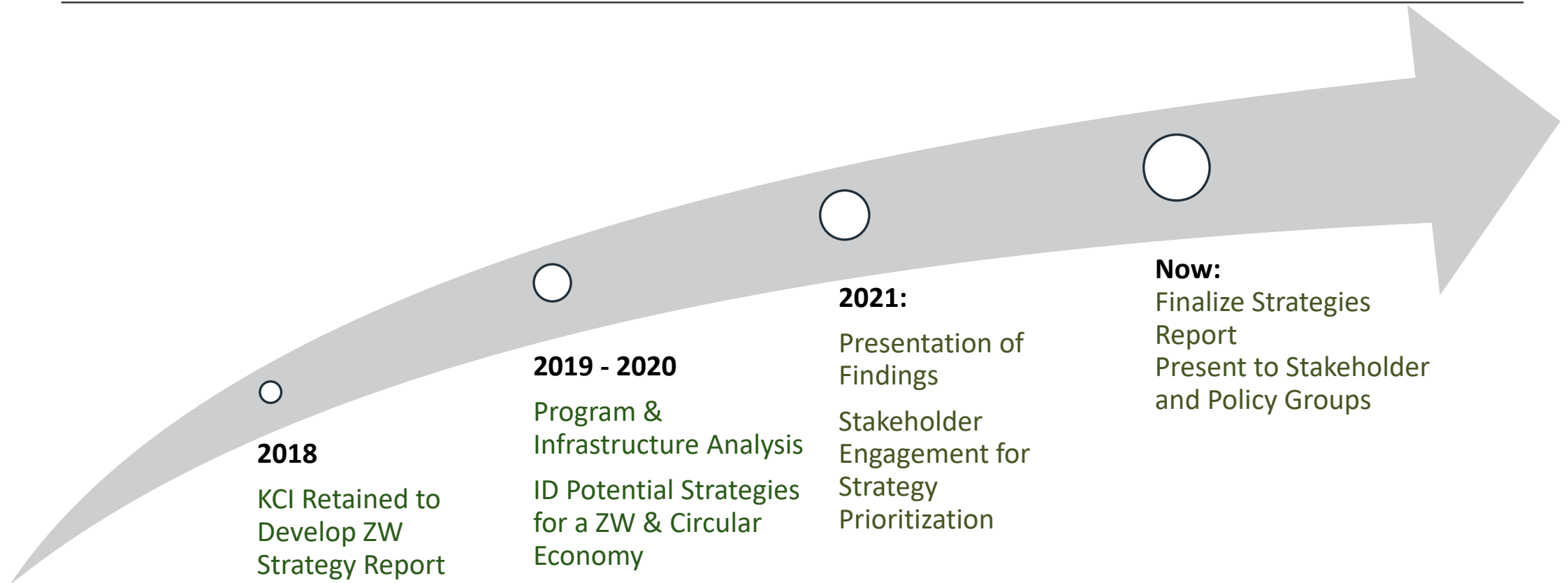


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Project History



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*

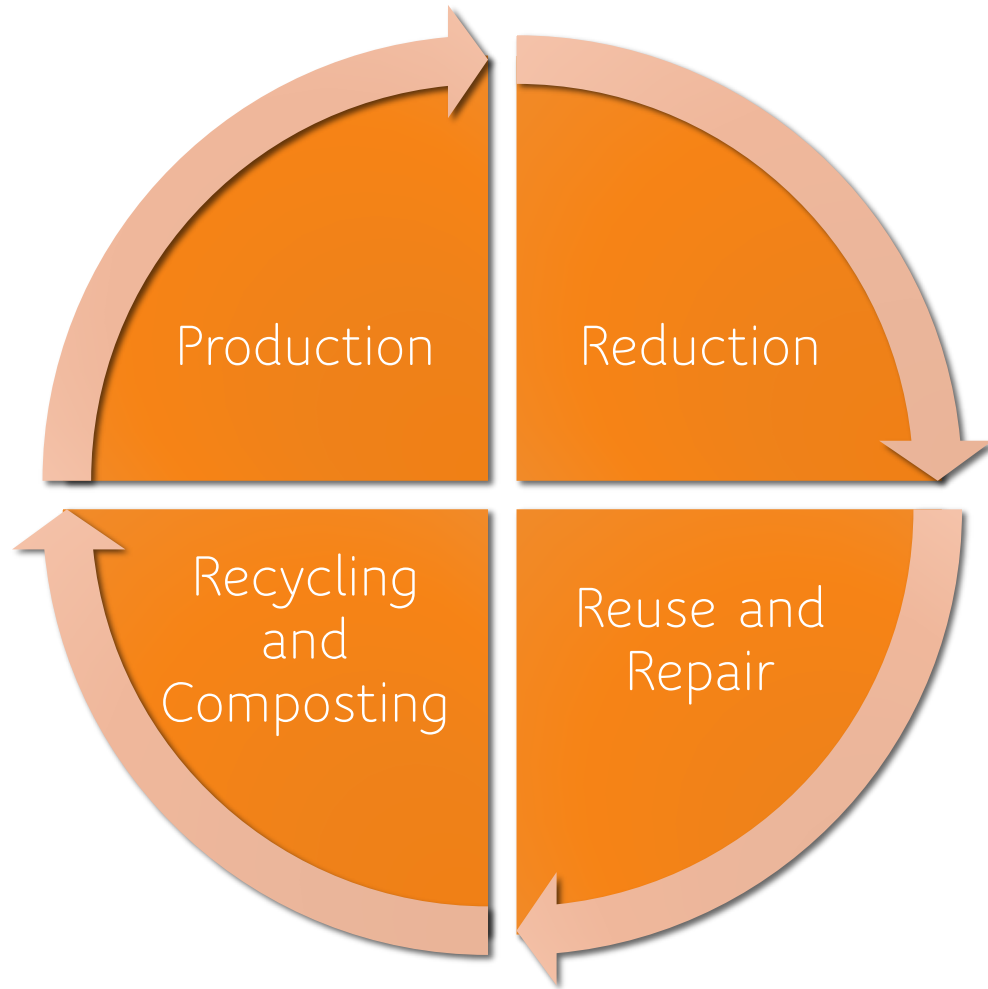


All Waste Is Local

The Linear Economy



Understanding Community-Wide Zero Waste



Source: U.S. Public Interest Research

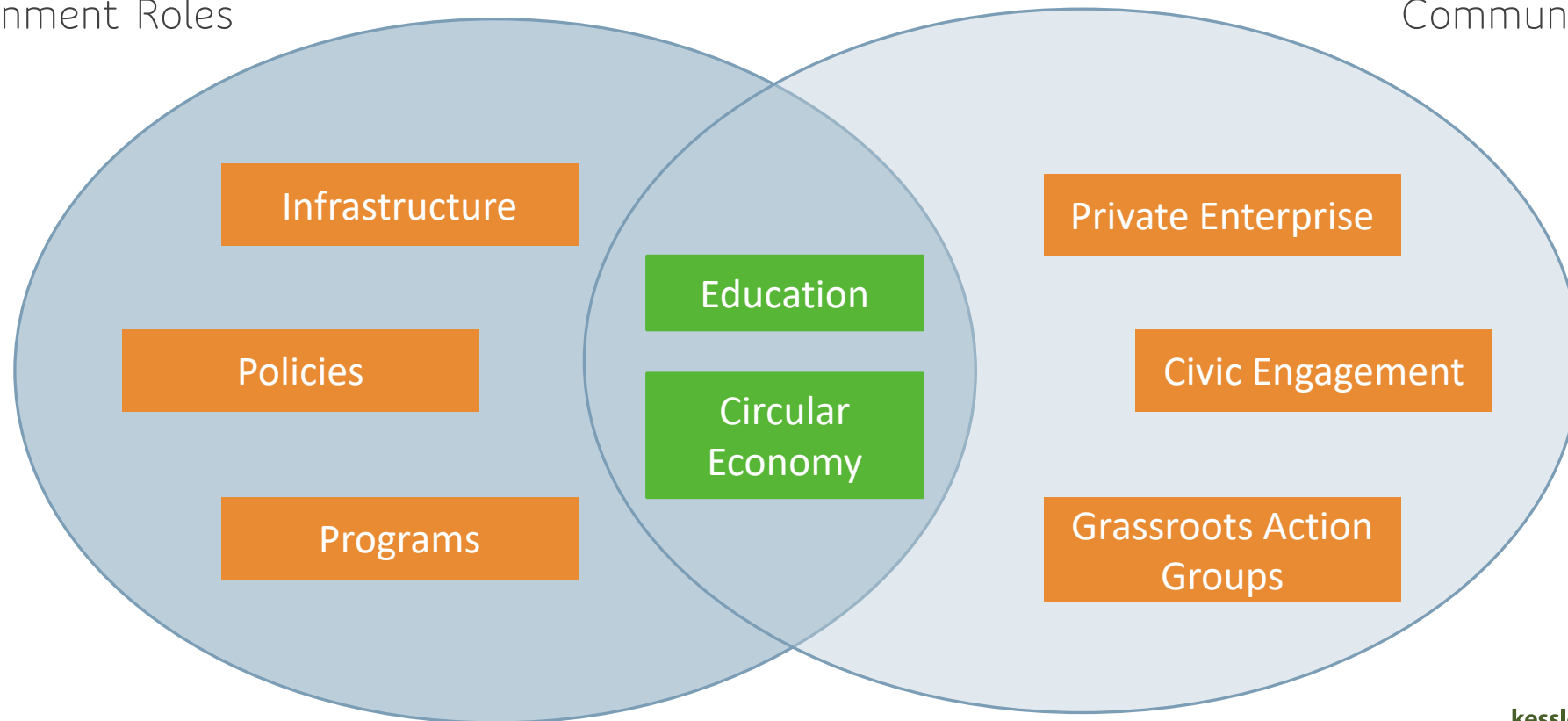


Source: "Three Categories of Zero Waste Solutions" SWANA, CRRRA Zero Waste Training Program (Developed by Kessler Consulting, 2018)

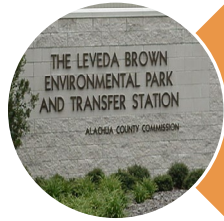
The Players and Their Roles

Government Roles

Community Roles



Alachua County and City of Gainesville Roles



Infrastructure

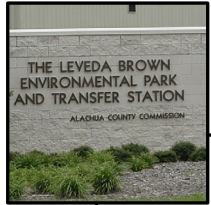


Policies



Programs

Waste Diversion Analysis: Key Findings



Infrastructure

- Limited compost facilities (food waste)
- Limited C&D processing facilities
- No large-scale re-use facility
- No regional material reprocessing facilities



Policies

- Need for Waste Reduction or ZW Goal
- Policy drivers need to include ZW
- Solid Waste Ordinance

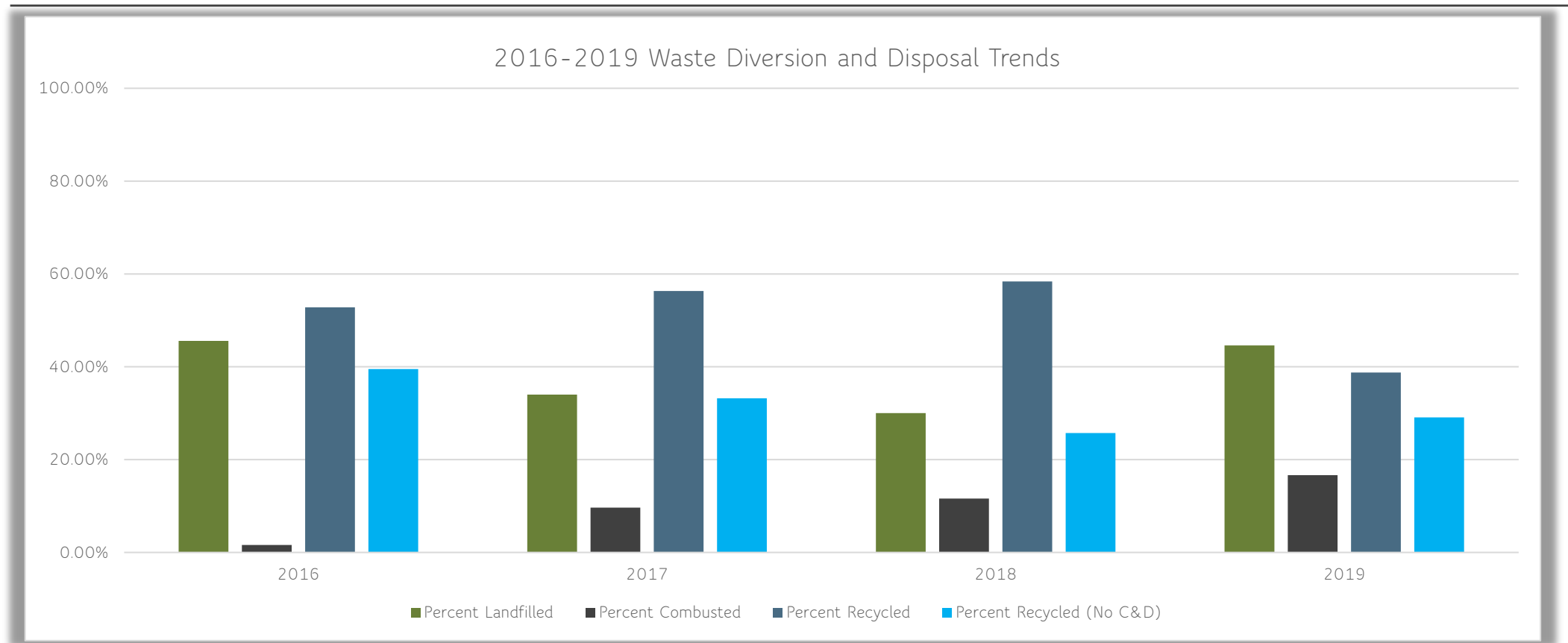


Programs

- Increased O&E programming on recycling, reuse and ZW
- Limited Food Recovery Networks
- Need for uniform community-wide recycling

Note: Analysis included KCI Zero Waste tools and EPA Managing and Transforming Waste Streams checklist.

Waste Characterization



Data Source: FDEP Annual Reporting of Materials Collected (2016-2019).

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



General Strategies







The background of the slide features a vibrant green surface. On the left, a large, white, three-dimensional recycling symbol is prominently displayed. To the right of the symbol, various pieces of white plastic waste are scattered, including bottle caps, a straw, and a small container. A dark, semi-transparent rectangular box is positioned in the center-right of the image, serving as a backdrop for the title text.

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

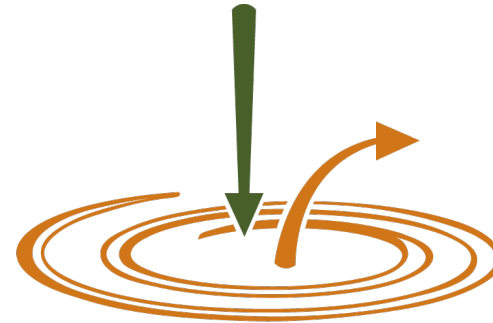
| | |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------|
| Section 1. | General Recommendations |
| | Develop a Community-Wide Zero Waste Recognition and Certification Program. |
| | Provide Clear, Concise 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. |



Questions and Answers



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