

CVSAN ZERO WASTE STRATEGIC PLAN
SECOND EDITION
2019/20 UPDATE



EXECUTIVE SUMMARY

Castro Valley Sanitary District (CVSan)'s Zero Waste Strategic Plan is a living document which highlights some of CVSan's significant achievements and partnerships with the Castro Valley community, reductions of material to landfill, and award-winning recycling and organics diversions program and outreach.

Over the past 15 years, CVSan's Board and staff have worked together to create and implement a transformative vision, one that strives to strategically work with the single and multi-family residential, commercial business, and school communities. CVSan has provided leadership in environmental education and a practical, hands-on approach to program development and implementation.

CVSan acknowledges that the Zero Waste Strategic Plan is being completed during an unprecedented time due to the COVID-19 pandemic. There are a variety of unknown factors about how CVSan and its community will socialize and communicate. As a living document, Sections 3-7 may need to be adjusted or modified in response to those changes.

This second edition of CVSan's Zero Waste Strategic Plan (the first edition was released in 2014) explores the past, present, and future of CVSan's Path to Zero Waste:

BACKGROUND & STAKEHOLDER PROCESS

In August of 2013, CVSan sent out a Request for Proposals for a Zero Waste Strategic Plan consultant. CVSan reviewed proposals from three different firms and selected the HDR Engineering Team in November 2013.

CVSan and HDR initiated a stakeholder process in January 2014 to obtain input into the development of the Zero Waste Strategic Plan. The process consisted of 16 meetings with public agencies, stakeholder groups, and service providers, three public workshops, presentations to and discussion with the CVSan Board of Directors and Solid Waste Committee, and three tours to Davis Street Transfer Station, El Cerrito Recycling Center, and the Berkeley Transfer Station. Ultimately, it was the stakeholder process, combined with research and HDR's expertise that resulted in this Strategic Plan.

EVALUATION OF CURRENT POLICIES, PROGRAMS, PARTNERSHIPS & FACILITIES

In this section, highlights and a narrative of CVSan today are provided in the categories of Agency, Goals, Overview (Single-Family & Multi-Family Residential, Commercial Businesses, and Schools), Strategic Plan, Processing Facilities, Rate Structure, Materials Accepted (Recycling & Organics), Personnel, Partnerships, Certifications & Incentives (4R Business, 4R Planet Award Program and Green Ribbon Schools Program), Environmental Education (4Rs Field Trip Program, Community Group Outreach, and Processing Facility Tours).

Also shown is Event Greening, Events (Earth Day Clean-Up, Collection Events & Compost Give-Away), Audits (Business Follow-Up and School Waste Audits), Technical Assistance (Commercial Business and School Food Scrap Recycling Program), Brand, Visual Resources (various guides & flyers), and Donations. CVSan's Zero Waste Department manages some of the most developed and effective municipal programs available to the local community.

EXECUTIVE SUMMARY CONTINUED

SERVICE OPPORTUNITIES ANALYSIS

CVSan is a leader in Alameda County. A recent benchmark information survey by StopWaste identified that CVSan residents are the best sorters in the County. The Countywide goal is 10% “good stuff” in the landfill by 2020. Currently, only 36% of Countywide residential garbage consists of “good stuff”; materials that are readily recyclable or compostable.

The value of the materials currently sent to the landfill and lost to the local economy in Castro Valley is estimated to be over \$480,000 annually. This estimate is based on the composition of the landfilled materials and an assessment of the current market prices for these materials. By adopting new rules and incentives such as those proposed in this Plan, the community will recover value from materials that are currently being discarded.

The growth rate in Castro Valley is projected to be about 0.3 percent per year through 2025. Using the growth projections, total generation (including all recycling, compost and garbage) could potentially increase by about 1,000 tons over the next 10 years.

CVSan’s current Collection Agreement began in 2019 and will expire in 2029. In several years, CVSan will research potential service and negotiation opportunities.

ZERO WASTE STRATEGY OPTIONS

Through the stakeholder and community participation process, CVSan and the HDR Team developed 75 options for the plan (in addition to sub-options). By approving this plan, the Board is not authorizing CVSan to work on every option listed. All options herein will be further reviewed and approved by the Board, including budgeting for program costs. Options have been shown in Short (1-3 years), Medium (3-7 years), and Long (7-10 years) Terms with a goal of Zero Waste (90% + diversion) by the year 2029. This plan takes CVSan through its current Disposal Agreement which ends in 2029, 15 years after its adoption.

Using the U.S. EPA Waste Reduction Model (WARM), it is estimated that by achieving 90% diversion, the CVSan community would reduce greenhouse gas emissions by over 30,000 metric tons of carbon dioxide equivalent (MTCO2E).

ECONOMIC ANALYSIS & IMPLEMENTATION PLAN

Many of the Zero Waste Strategy Options identified can be implemented by CVSan without new expenditures of resources. Reorganizing staff responsibilities and streamlining policies and programs can make staff time available for new initiatives. New staff or contractor resources may be needed for future Zero Waste program implementation. The following are cost estimates of Strategy Options presented, excluding a Hard-to-Recycle Center.

Short Term (2018-20)	Med. Term (2021-23)	Long Term (2024-26)	Total (labor & expenses)
\$317,274	\$254,550	\$95,550	\$667,374

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SECTION 1: BACKGROUND AND STAKEHOLDER PROCESS



1.1 BACKGROUND

Castro Valley Sanitary District (CVSan) has embarked on a Zero Waste planning process to identify strategies for maximizing diversion from landfills over a 15-year planning period (2014-2029). CVSan has provided leadership in Alameda County through the implementation of innovative recycling and organics diversion programs and outreach to its residents, businesses and institutions.

- As the first community to implement curbside food scraps collection in Alameda County, CVSan worked closely with its residents to overcome the “ick” factor. Techniques and tools developed in Castro Valley have been duplicated across Alameda County and throughout the region.
- CVSan’s Green Ribbon Schools Program has expanded CVSan’s reach into the community by creating model programs for students to recycle and compost at school just as their families recycle and compost at home. As of 2020, schools in Castro Valley now achieve an average of 85 percent diversion which inspires the rest of the community.
- CVSan’s implementation of mandatory commercial recycling has achieved nearly universal compliance, and CVSan’s relationship with the business and multi-family community will enable it to expand and enhance these programs over time.

CVSan takes a practical, hands-on approach to program development and implementation. CVSan has taken a similar hands-on approach to the development of the Zero Waste Strategic Plan. For the first edition, this approach included:

- Educating the public about Zero Waste through a series of public workshops.
- Initiating a series of stakeholder meetings to identify the optimum strategies for reducing waste to landfill.
- Identifying the Zero Waste Strategy Options that would be the most appropriate for implementation in Castro Valley.
- Obtaining feedback from key partners - Alameda County, StopWaste, CVSan’s franchised service provider.
- Presenting these options to the public and CVSan Board for consideration.
- Modifying the options based on public input and Board member comments.
- Estimating the potential costs associated with implementing the Zero Waste Strategy Options.
- Estimating the diversion tons and greenhouse gas emission reductions that can be achieved by diverting 80 percent and 90 percent of materials from landfills.
- Profiling the efforts of Zero Waste businesses and schools in Castro Valley.



1.2 STAKEHOLDER PROCESS

CVSan initiated a stakeholder process in January 2014 to obtain input into the development of the Zero Waste Strategic plan. This stakeholder-driven process included:

- Three public Zero Waste Workshops to receive input from CVSan residents, CVSan's Community Advisory Committee, and additional members of the community.
- 16 meetings with public agencies, stakeholder groups, and service providers including:
 - CARH
 - Castro Valley Chamber of Commerce
 - Castro Valley Businesses & Alameda County Green Business Program
 - Castro Valley Unified School District (CVUSD)
 - Administration
 - Canyon Middle School & Independent Elementary School
 - Castro Valley Library
 - Eden Medical Center (Sutter Health)
 - Homeowners Associations
 - Municipal Advisory Committee members
 - NexCycle (Buyback location)
 - Rental Housing Association (Southern Alameda County)
 - StopWaste
 - Supervisor Nate Miley
 - Waste Management of Alameda County, Inc.
 - Davis Street Transfer Station
 - Altamont Landfill
- Three tours: Davis Street Transfer Station, El Cerrito Recycling Center and Berkeley Transfer Station.

Based on these meetings and research from other Zero Waste communities in 2014, CVSan prepared a list of policies and programs for consideration by:

- CVSan's Community Advisory Committee on March 13th, 2014.
- CVSan's Zero Waste Committee on April 17th and June 5th, 2014.
- CVSan's Board of Directors at its meetings on June 3rd, June 17th, July 1st & August 5th, 2014.



SECTION 2: CURRENT POLICIES, PROGRAMS, PARTNERSHIPS, AND FACILITIES



2.1 DESCRIPTION OF CURRENT PROGRAMS: AGENCY

On July 25, 2019, Castro Valley Sanitary District (CVSan) celebrated 80 years of public service to the community of Castro Valley. In that time CVSan has changed as the community has changed, from providing service to a primarily agrarian community, to one that is progressive and environmentally-conscientious.



Currently, there are approximately nineteen thousand five hundred (19,500) dwellings, offices and commercial units, supporting a population of sixty-three thousand six hundred and twenty-five (63,625). The original District has been enlarged by annexations and has an area of about thirty-three (33) square miles.

CVSan is a member of the Alameda County Waste Management Authority (ACWMA/StopWaste), a County-wide public agency which is responsible for preparation of the Alameda County Integrated Waste Management Plan and Alameda County Hazardous Waste Management Plan. Through a Franchise Agreement (2019-2029) with Alameda County Industries (ACI), recyclables, organics, and garbage are collected within CVSan and then processed.

GOALS

Since the 1989 California Integrated Waste Management Act (AB 939), CVSan has developed activities and programs to meet the ambitious goals mandated by this legislation to reduce the amount of material sent to landfill by 25%, by the year 1995 and by 50%, by the year 2000.



ACWMA/StopWaste has set an Alameda Countywide goal at 75% diversion and beyond. The goal in 2020 is to have less than 10% of the materials deposited in landfills be readily recyclable or compostable, and in turn to have less than 10% of materials placed in recycle or composting containers be garbage.

One of the first milestones of CVSan’s Zero Waste Strategic Plan was for the CVSan Board of Directors to consider a resolution with a goal of Zero Waste (90%+ diversion) by 2029, which they adopted on October 7, 2014.

OVERVIEW

Single-Family Residential

In April of 1991, CVSan implemented the first residential curbside recycling program in Alameda County, and in 1993, the curbside program operated as a “mini” household hazardous waste (HHW) collection, accepting used motor fluids and filters. In 2013, CVSan received a Program Innovation Award from CalRecycle for its Used Motor Oil Filter Exchange Program entitled, “Don’t Forget the Filter.”

In late 1994, a “yard waste” collection program was implemented and has resulted in a large diversion of residential organics, such as grass clippings and yard trimmings. In March 2002, CVSan launched the first residential curbside Food Scrap Recycling Program in Alameda County. As of 2013, 50% of residents were participating by placing food scraps and food-soiled paper in the green organics cart.

In 2012, CVSan received four awards for its Reduce Your Waste Size Program: Award of Excellence for Innovation (California Association of Public Information Officials - CAPIO), Award of Excellence for Dollar Stretcher (CAPIO), Silver Marketing Excellence Award (SWANA), and Special Honorable Mention for Public Outreach & Education (California Association of Sanitation Agencies). CVSan’s Path to Zero Waste and web-based video advertisements received three awards from CAPIO in 2015 for Excellence in Communication in the categories of Innovation, Dollar Stretcher, and Community Engagement. In 2016, CVSan won five Excellence in Communication awards from CAPIO and one Bronze Excellence Award in Communication, Education and Marketing Tools from the Solid Waste Association of North America (SWANA). In 2019, CVSan won the Excelling in Public Information Epic Award from CAPIO for its Zero Waste Characters animated movie.

Residents that downsize to a 20-gallon garbage cart receive a \$50.00 credit on their bill. As of March 2020, a total of 6,959 out of 15,300 single-family residential accounts (45%) have 20-gallon garbage carts.



Multi-Family Residential

In 2005, CVSan began targeted Multi-Family outreach and recycling program implementation. In October 2008, CVSan won a 1st place gold Public Education Excellence Award for its Multi-Family Recycling Program efforts from SWANA. In 2016 CVSan’s Multi-Family Recycling and Organics program won an award in the category of Waste Management from the Green California Summit Advisory Board. By the end of 2018, multi-family complexes had an average diversion rate of 59% (by volume) and 100% had implemented recycling programs. As of March 2020, 98% of complexes had implemented a food scrap recycling program.



OVERVIEW CONTINUED

Commercial Businesses

In 2005, CVSan introduced a comprehensive Commercial Business Recycling Program. As of March 2020, 96% of business accounts have implemented a recycling program with the franchised hauler, ACI, and 84% of food service establishments have implemented an organics program with ACI.

In 2009, CVSan started its 4R Business, 4R Planet Recognition Program to CVSan commercial customers for making green practices business as usual. By 2020, 134 businesses have participated in the program as a 4R Star Business.



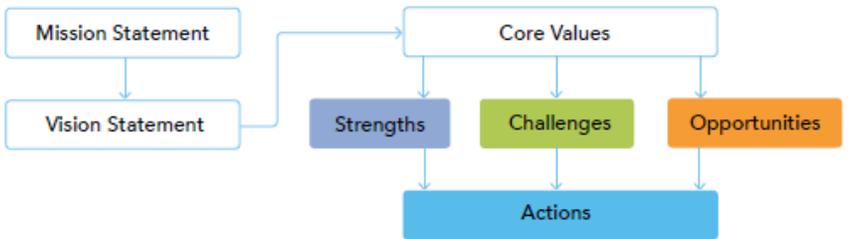
Schools

CVSan has had a history of introducing and layering school programs for the past 20 years. Since 2007, schools have reduced materials sent to the landfill by over 60%. A Green Ribbon Schools Program was launched in October 2007 to guide schools towards sustainable implementation of waste reduction and recycling programs and to educate the younger generation. In 2019/20, 16 schools in CVSan met or exceeded the program requirements and became Green Ribbon Certified Schools, and received \$30,335 in awards. Green Ribbon Schools had an average diversion rate of 85%.



STRATEGIC PLAN

CVSan’s Strategic Plan serves as a framework for decision making over a five (5) year period. It is a disciplined effort to produce fundamental decisions that shape what CVSan plans to accomplish in the specified time. CVSan’s Mission Statement is: “We protect public health and the environment by providing wastewater and solid waste services.” Principles from the Mission Statement have been incorporated into all aspects of CVSan, including goals and objectives for staff in the Zero Waste Department. This flow chart shows how the Strategic Plan organizes the various components into a cohesive plan.



PROCESSING FACILITIES

CVSan has secured via its Disposal Service Agreement effective May 1, 2009 twenty (20) years of guaranteed transfer services at Davis Street Transfer Station (DSTS) for all garbage and construction & demolition debris delivered to DSTS. CVSan has also secured via its Franchise Service Agreement effective May 1, 2019 ten (10) years of guaranteed transfer services at ACI's Transfer Facility at Aladdin Ave. for all recyclables and compostable organics. Currently, commercial organic materials are being made into compost at the Napa Waste and Recycling composting facility in Napa, CA.

RATE STRUCTURE

Customer rates include a component for Collection, Disposal, Composting, and an Administrative Fee. Effective May 1, 2019, CVSan's rates for franchised collection and disposal services include bundled recycling and garbage for Commercial Business customers with three cubic yards or less of garbage services. Organics services are available a la carte. Multi-Family customers with three cubic yards or less of garbage services have bundled recycling, and cart customers have bundled recycling, organics, and garbage. Effective May 1, 2019, a single-family residential customer who subscribes to a 20-gallon garbage cart, up to a 96-gallon recycling cart, and up to a 96-gallon organics cart pays \$30.79/month.

Schools (pre-K through adult, public and private) pay for garbage services under the commercial business rate structure, but do not pay for additional recycling or organics services.

MATERIALS ACCEPTED

Recycling - Effective 2019, the following are materials accepted in the recycling:

- #1-7 plastics except foam.
- Bag-a-Bag plastic film wrap and bags.
- Aluminum foil, pans, steel, tin, empty aerosol cans, and scrap metal.
- Paper, paper cartons, and cardboard.
 - Unlimited flattened cardboard may be placed beside a cart for collection.
 - Includes shelf-stable foil-lined cartons (juice boxes).
- Glass bottles, jars, and containers.

Commercial businesses and schools are encouraged to place recyclable items loosely in the cart or bin for collection. A small number of businesses use a clear plastic bag for transfer to a shared bin and they are encouraged not to tie the tops of bags or loosely tie them so that materials may fall out of the bags during processing.



MATERIALS ACCEPTED CONTINUED

Organics - Effective 2019, the following are materials accepted in the organics:

- Food (food scraps, meat, bones).
- Food-soiled paper (serveware, paper towels, tissues, cardboard food packaging).
- Refrigerated paper cartons.
- "Biocompostable" serveware.
- Shredded paper.
- Plant debris (including palm and cactus).
- Clean/untreated wood.

Materials may be placed in a paper, clear plastic, or "biocompostable" bag. Commercial businesses and schools are encouraged not to tie the tops of bags or loosely tie them so that materials may fall out of the bags during processing.



PERSONNEL

A 0.5 Full Time Equivalent (FTE) ACI Sustainability Specialist (20 hours/week) and a 1.0 FTE CVSan Zero Waste Outreach Specialist are funded by the 2019-2029 Franchise Agreement. The Sustainability Specialist works on providing site assessments, technical assistance, coordinating service changes, and training to Commercial Businesses, Multi-Family complexes, and assists CVSan with Schools.

Currently, Zero Waste Department staff includes a Zero Waste Supervisor, two Zero Waste Specialists, a Zero Waste Outreach Specialist, a Zero Waste Program Intern, and share of Business Services staff. CVSan has offered paid internships for over 15 years focused on school programs and environmental education. CVSan has used Measure D as a primary source of funding for the internship positions. Many of the interns have gone on to successful careers in the environmental and zero waste/recycling industries.

In addition to staff, CVSan's successful programs are only made possible with the support and active participation from residents, property owners and managers, businesses, schools, students, and volunteers.

PARTNERSHIPS

As a leader in the community, CVSan has made an effort to be a good neighbor and actively participate in organizations and activities that make our presence known and allow the Board and staff to form partnerships and strong relationships with our various communities.

PARTNERSHIPS CONTINUED

CVSan is an active member of the Castro Valley / Eden Area Chamber of Commerce, participates in a variety of public events with informational booths, and regularly submits press releases and purchases advertising space in bi-monthly newsletters to promote recycling and organics programs and events. Staff has membership with the Castro Valley Rotary Club and attends weekly meetings to connect with local business professionals. Staff presents annually to the Castro Valley Unified School District Board of Education on school programs and reports on each school's efforts, how much they have diverted, and dollars saved.



CERTIFICATIONS AND INCENTIVES

4R Business, 4R Planet Award Program

This program recognizes and rewards businesses where green practices are business as usual. Under the program, CVSan certifies "4R Star" businesses that complete ongoing activities in each of the 4R categories – Reduce, Reuse, Recycle, and Rot (or Represent, Replicate, or Reciprocate). Businesses that certify, for a limited time, receive a cash incentive up to \$525. 4R Star businesses also receive one free advertisement in the Castro Valley Forum and are highlighted on the CVSan website. CVSan also recognizes and celebrates 4R Star Businesses by holding a 4R Star Business Employee Recognition Brunch in the fall to award committed and innovative employees of 4R Star Businesses.

Green Ribbon Schools Program

This is a certification program that incentivizes and recognizes school participation in CVSan's school programs. Since its inception in 2007, 17 of 18 schools in Castro Valley have participated in the Green Ribbon Schools Program. CVSan certifies schools for their completion of activities and reduction of trash. The application is updated annually and includes categories with the "4Rs" and more. There are six total categories consisting of Reduce, Reuse, Recycle, Rot (Compost), Environmental Education, and Administration and Promotion with requirements and highlights within each section. Schools are awarded by tier based on school size, diversion, number of activities completed, and more. Cash awards up to \$3,000/school/school year are given in addition to an award banner, advertisement in the Castro Valley Forum newspaper, check presentation at a school assembly, and a presentation at a CVSan Board meeting. CVSan has awarded over \$296,335 since 2007.



ENVIRONMENTAL EDUCATION

4Rs Field Trip Program

For more than a decade, CVSan has offered a two-hour 4Rs Field Trip Program (two hours of educational presentations/activities and video) to 3rd graders within the CVSan and CVUSD boundaries. The field trip is offered three days a week from 9:00 – 10.45a.m. during various months while school is in session. The 4Rs Field Trip program is designed to correlate with State Curriculum Content Standards while emphasizing topics such as sustainable waste reduction and recycling. Approximately 30 classes per year participate.



Community Group Outreach

CVSan offers speakers (CVSan staff) to present on topics such as How to Practice the 4Rs in Castro Valley, Buying Recycled, Commercial Recycling – How to Reduce Waste and Your Bottom Line, Food Scrap Recycling, Bay-Friendly Gardening & Landscaping, and much more. Approximately 40 assemblies, refreshers, trainings, and speaking engagements are given to students, staff, and groups during the course of each year, not including trainings that are provided as part of technical assistance to employees and janitorial staff. During Zero Waste Week, workshops are offered and speakers from agencies and businesses such as StopWaste and ACI are invited to join CVSan in topical presentations at public locations such as the Castro Valley Library and the Kenneth Aitken Senior and Community Center. CVSan staff presents annually at the all-day Palomares Science Expo in May to a total of 3,000 students with an educational booth and sorting game.



Processing Facilities Tours

What does 4,000 tons of organics, recycling and garbage look like and how does it get processed in one day? CVSan residents and business owners are able to observe what happens to materials once they leave their curbs and bins. CVSan offers up to two tours per year at the Davis Street Transfer Station and the Alameda County Industries Materials Recovery Facility (MRF). On the tour, attendees witness firsthand the transfer process for garbage and organics as well as the sorting and processing of recyclables.



EVENT GREENING

CVSan offers free event greening services to events presented within CVSan boundaries. Staff provides recommendations for vendor purchasing, event set-up, serveware offerings, recycling and organics container stations, and assists with recruitment and training of ACI-contracted staff or CVSan Green Hearts Volunteer Team members for station monitoring. CVSan also donates recycling and organics services, by request (please submit a donation form at least one month in advance of your event).



EVENTS

Earth Day Clean-Up

Annually, CVSan presents its flagship event, an Earth Day Clean-Up, and partners with all interested schools (approximately 12 each year) and public agencies such as East Bay Regional Park District and Hayward Area Recreation and Park District. CVSan provides funding, resources, templates, rewards, 20 cu yds of compost and mulch per site, organics collection services, and builds goodwill and furthers relationships.



Collection Events and Compost Give-Away

Twice a year (April and August), CVSan and ACI present a large-scale Collection Event and Compost Give-Away at Canyon Middle School. During the 6-hour period, residents, businesses, and schools may bring e-waste, HHW, textiles, cooking oil, mattresses and box springs, tires, and sensitive documents for shredding. Three one-cubic foot bags of compost are given back to each household or business (made from residential and commercial organics) at the event.



AUDITS

Business Follow-Up Audits & Oops Postcard

Staff provides regular follow-up visits and audits on recycling and organics program participation. These visits provide opportunities for staff or the ACI Sustainability Specialist to talk with employees and management to right-size containers, provide additional signage and training, and answer questions such as, "Where does this go?" Additional observations of the outdoor carts/bins are conducted and as appropriate, a completed "Oops" postcard is sent which has full-color images of items common in sorting mistakes. Boxes are checked next to the items indicating the wrong cart/bin. The postcard is mailed to the business for reference to communicate what is actually happening after employees transfer materials to carts/bins. The intended tone of the postcard is educational rather than punitive.

School Waste Audits

Schools sort through one day's worth of garbage to find out what could have actually been recycled and composted, and what is non-recyclable and non-compostable. Students, staff, and parents learn about their waste generation and the materials stream through this hands-on activity. Materials are sorted into 5 separate categories (organics, recycling, garbage, HHW, and other – mainly clothes). Approximately 10+ students and 2-3 adult volunteers (teacher/parent/principal) conduct the audit with CVSan staff. Waste Audits were added as a Green Ribbon requirement in 2010/11 as a key addition towards improving programs and students' consciousness of how much is going in the garbage that could have been recycled or composted. Reports are provided to schools, and data is frequently referenced in presentations and discussions with school administration.



TECHNICAL ASSISTANCE

Commercial Businesses

Targeted assistance begins with a letter to the property owner and is followed by a site assessment and custom report with recommendations for increased diversion. Follow-up contact and hauler site visits follow in an effort to implement effective and sustainable recycling programs. Multi-tenant outreach typically includes close coordination with property management and face-to-face outreach with each tenant. Assistance ranges from working with a business to make service level adjustments, to determining indoor container needs, to assistance completing the 4R Business, 4R Planet program application, and providing custom trainings and signs.



TECHNICAL ASSISTANCE CONTINUED

School Food Scrap Recycling Program

This program guides schools in coordinating a sustainable, educational, and effective Food Scrap Recycling Program. After some experience working with the first few elementary schools, CVSan developed a comprehensive Food Scrap Recycling Guide in 2007 and has improved and updated it each year since. In addition, CVSan works with schools on the Guide's activities, ensures program sustainability via training and refresher assemblies for staff and students, and conducts follow-up visits. Nearly all collection containers and equipment needed are donated by CVSan. Customized signage specific to a school/program is available, and makes it easy for participants to identify what items go in each category (Liquids, Organics, Recycling, Bag-a-Bag, Garbage, and Trays).

BRAND

CVSan's brand is expressed with more than just a logo – it's the public's gut feeling about Castro Valley Sanitary District. CVSan Board and staff communicate the brand qualities with every interaction with the public, including phone calls, emails, and in-person contact. The brand qualities are infused into every newsletter article, marketing campaign, public meeting – any time CVSan presents itself to the public. Some key messages of CVSan's brand are as follows:

- CVSan is a local public agency providing vital infrastructure services that create high quality of life.
 - CVSan is guided by long-term vision for protection of the health of Castro Valley's community and the environment.
 - CVSan is a local resource that's here to serve the public.
 - CVSan's personable staff care about the community.
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VISUAL RESOURCES

CVSan has woven its brand into every visual resource created, and has made a concerted effort to consistently produce pieces that are succinct, informative, visually appealing, and consider our audience. There are too many to practically list or show in this document; a few have been highlighted. Key pieces are available for viewing and download on www.cvsan.org.

School Zero Waste Services Guide

The most recent School Services & Green Resource Guide 2019-2024 highlights answers to questions similar to those in the Commercial Guide (above). The guide also provides important phone numbers and websites, and highlights CVSan Schools programs such as the Green Ribbon Schools Program, Waste Audits, 4Rs Field Trips, Assemblies, Technical Assistance and Student Scholarships. The guide also highlights various ways to practice Reduce and Reuse and additional ways to practice recycling and rot in the CVSan community.



VISUAL RESOURCES CONTINUED

Commercial Tenant Flyer

This sheet outlines the steps that commercial tenants and developers must follow while working on commercial and multi-family improvements or new developments in Castro Valley. CVSan makes it easy to comply with mandatory recycling law, this flyer highlights many of the primary offerings that CVSan has available to businesses to do so. In the flyer, the following are headlines to capture the attention of business owners, managers, and key staff: Education; Free Containers, Signs, and Trainings; Recycling; Organics; Tenant Improvements; Food Service Establishments; Construction & Demolition (C&D), Enclosures; Compliance Requirements; Parcel Maps Without A Mainline Extension (MLX); and Tract And Parcel Maps With A MLX.

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Commercial Guide

The most recent Commercial Zero Waste Services Guide 2019-2024 is 14 pages of tips and information to help commercial businesses reach Zero Waste. The guide highlights methods to reduce waste, resources encouraging reuse of materials, an overview of the Mandatory Recycling Ordinance, CVSan's site visit protocol, bundled rate structure, an overview of organics, recycling, garbage, and hazardous waste, material destinations, 4R Business, 4R Planet Program, and additional details related to commercial services.

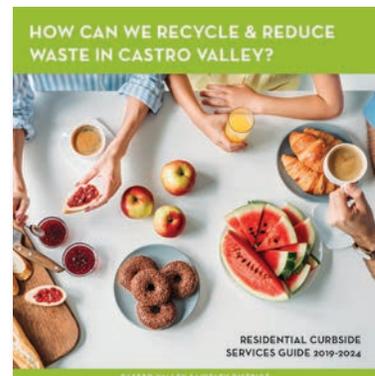
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Multi-Family Community Services Guide

CVSan first developed a comprehensive guide in 2019 to help multi-family communities implement successful recycling and organics programs. The Textile Collection program, Bulky and Reuse Item Collection, and Multi-Family Recognition Program are also explained in detail. Lastly, the guide highlights various ways to practice Reduce and Reuse and additional ways to practice recycling and rot in the CVSan community.

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Residential Curbside Services Guide

The residential guide was recently updated for 2019-2024 and includes helpful and clear information about solid waste services available to residents and is entitled, "How Can We Recycle and Reduce Waste in Castro Valley?"

DONATIONS

CVSan has a Donation Policy which provides guidelines on how donations from CVSan may be requested and specifies limits per year. For businesses and schools, CVSan has made the process of requesting materials and services easy with its Donation & Supply Request Form. Included on the form is a description, dollar value, and visual image of indoor containers, lids, bags, decals, and signs available from CVSan. Containers are purchased using funds from Measure D, CalRecycle, and the Altamont Education Advisory Board. CVSan maintains an inventory of all supplies available and usually processes applications within one week. For businesses and schools, deliveries can be made, and includes placement services to ensure that the containers are set up correctly from the start. On average, staff processes over 200 requests each year.



Recycling, organics, and construction & demolition debris boxes are available for donation; CVSan has 480 cubic yards of services to donate each contract year under the Franchise Agreement. Compost, mulch, and soil are available for donation. A large-scale donation is coordinated each year for Earth Day (see Partnerships and Collection Events & Compost Give-Away above). Approximately 300 cubic yards of material are donated back to the community in April, with an additional 130 cubic yards donated in August.

ZERO WASTE CASE STUDY - STANTON ELEMENTARY SCHOOL

Since 2010, Stanton Elementary School has been one of the longest continual participants in the Green Ribbon program. Through the amazing coordination from Parent Volunteer Darcy Bull (ten years running!), Principal support and student and staff participation over the years, Stanton has reduced their garbage by over 71% since 2010. With the support of Castro Valley Sanitary District (CVSan), waste reduction efforts have been easy, contrary to popular belief. CVSan assemblies, starting in kindergarten and lessons in the classroom from year to year, provide important annual reminders to students. Recycling and organics containers are available in all classrooms and at the lunch time sorting stations. The waste audit results each year continue to demonstrate the small amount of garbage generated and improvements by Stanton with an average of 68.75% of garbage in the garbage the last 4 years and a record 83% in 2019.



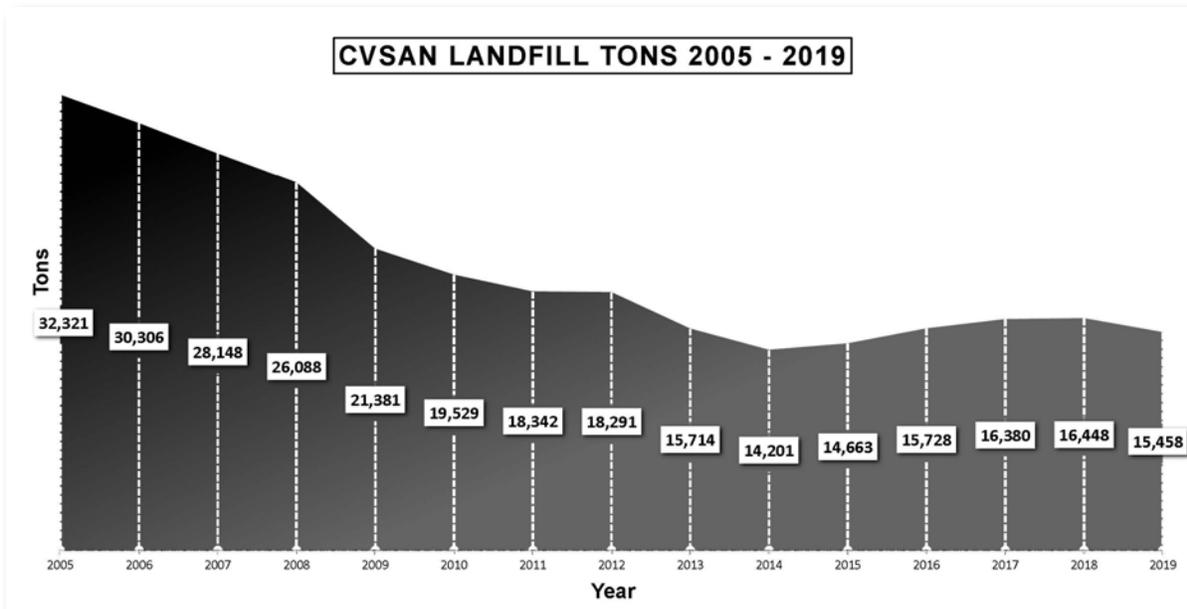
SECTION 3: SERVICE OPPORTUNITIES ANALYSIS



3.1 DISPOSAL INFORMATION

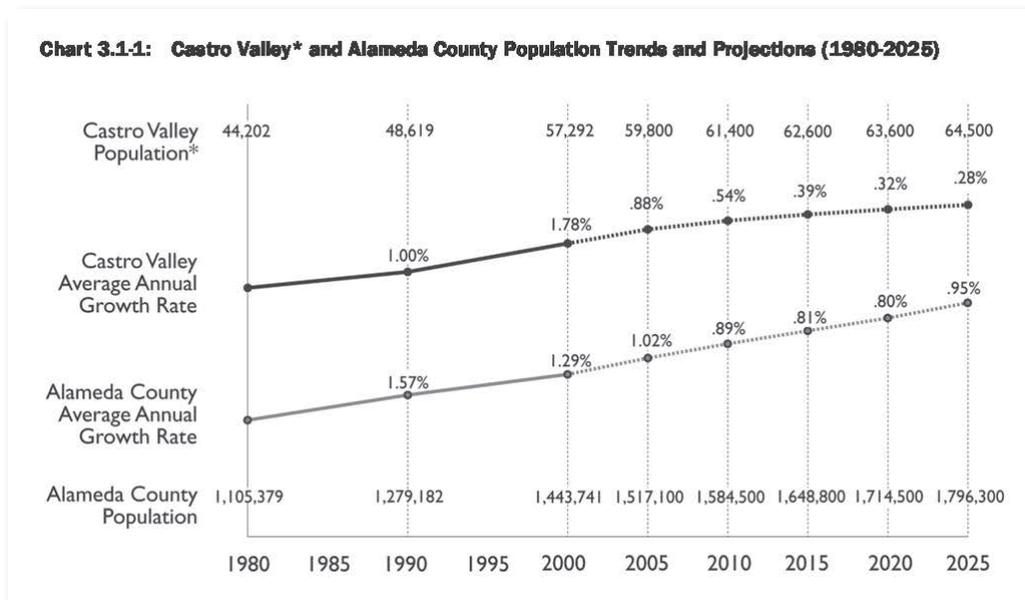
CVSan, members of the CVSan community, and ACI have significantly reduced garbage volumes since 2005. The following table illustrates the dramatic reduction in garbage going to landfills.

CVSan Decrease in Landfilled Tons 2005-2013



In addition to increasing population in Castro Valley and Alameda County (see chart below), CVSan annexed the territory known as “Canyonlands” in December of 2015 which added approximately 750 residents to our population.

Population Increase in Castro Valley



3.2 COMMODITIES/MATERIALS ANALYSIS

The value of the materials currently sent to the landfill and lost to the local economy in Castro Valley is estimated to be over \$1,106,500 annually. This estimate is based on the composition of the landfilled materials and an assessment of the current market prices for these materials. By adopting new rules and incentives such as those proposed in this Plan, the community will recover value from materials that are currently being discarded. The community can also avoid landfill fees which are currently approximately \$1,563,520 per year (16,000 tons at \$97.72 per ton to send to landfill) bring the total value potential of zero waste to over \$2,600,000 annually.

CVSan Commodities Analysis

Market Categories	Tons per Year	Market Price \$/T (est.)	Total Value of Discards (\$)
1. Reuse	50	550	\$27,500
2. Paper	4,000	10	\$40,000
3. Plant Debris	400	60	\$24,000
4. Putrescibles	6,300	50	\$315,000
5. Wood	200	60	\$12,000
6. Ceramics	800	4	\$3,200
7. Soils	0	115	\$0
8. Metals	600	40	\$24,000
9. Glass	800	50	\$40,000
10. Polymers	1,900	300	\$570,000
11. Textiles	500	100	\$50,000
12. Chemicals	50	15	\$800
Total	15,600		\$1,106,500

3.3 FUTURE GENERATION RATES

The growth rate in Castro Valley is projected to be about 0.3 percent per year through 2025. This is a relatively low rate of growth since the community is becoming increasingly built out and there are no large undeveloped parcels within the urban growth boundary. Therefore the total amount of discarded materials generated within the CVSan service area is expected to remain fairly stable. Using the growth projections, total generation (including all recycling, compost and garbage) could potentially increase by about 1,000 tons over the next 10 years.

Tonnage Projections through 2029

	2019	2024	2029
Diversion	19,726	26,515	29,830
Disposal	13,418	6,628	3,314
Generation	33,144	33,143	33,144
Diversion Percentage	59.50%	80%	90%

4R BUSINESS, 4R PLANET CASE STUDY - THE CHICKEN ON FIRE

The Chicken on Fire is an Asian fusion restaurant located in the downtown area of Castro Valley. They have a high diversion rate of 80% with two 96-gallon organics carts and two 96-gallon recycling carts compared to their one 96-gallon garbage cart. All carts are collected once a week.

Each day, the restaurant determines the appropriate amount of food that needs to be prepared based on what day of the week it is. This helps them not to over-prepare food that would end up wasted by the end of the day. Any leftover food is given to employees at the end of each day to take home and eat. In addition, all used cooking oil from the kitchen is recycled. These practices show The Chicken on Fire’s dedication to reducing waste, earning them the title of a 4R Star business.



3.4 ACI SERVICES

CVSan's current contract with ACI began in 2019 and will expire in 2029. The following contract mechanisms allow the contract to better align with CVSan's high diversion goals:

- Rate structure modifications.
 - Diversion goals with penalties for not meeting them.
 - Customized bundling of services options for commercial and multi-family customers.
 - Increased types of materials collected for recycling to include shelf-stable foil-lined cartons (a.k.a. juice/soup boxes and soy milk boxes).
 - Increased types of materials collected for organics to include palm and cactus.
 - Increased types of materials collected in bulky pickup to include reusables such as books, magazines, CD, DVDs, clothing, accessories and more.
 - Providing curbside collection of textiles during the first week of June and the first week of October each year.
-

ZERO WASTE CASE STUDY - DONUT EXPRESS

Donut Express is a small donut shop on Castro Valley Boulevard that opened in 2003. Ever since the shop opened its doors, the owner had implemented bulk sugar dispensers to cut down on waste. However, they used wooden stir sticks, plastic straws, and foam cups. This led to confusion from customers and the different containers would be contaminated due to improper disposal. After years of this being the standard way of operating, the owners made some slight changes that had a visual impact on their business.

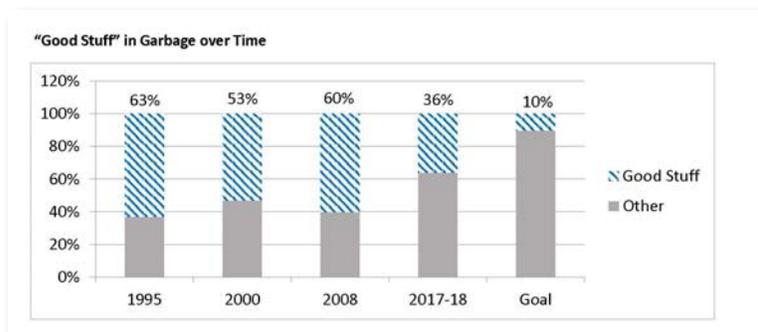
In 2013, Donut Express stopped purchasing wooden stir sticks and plastic straws and purchased several dozen metal spoons. Now, customers could stir in sugar or creamer in their coffee without generating wood or plastic waste. Management estimates the metal spoons cost them \$36 at the time of purchase and they saved \$30 per month. They also stopped purchasing Styrofoam coffee cups and replaced them with paper coffee cups, as well, they offer a discount of roughly \$0.25 if you bring your own cup. Sometimes customers can actually get more coffee than what the paper cup can hold while also getting a discount when they bring their own cup. After implementing the reusable spoons, management has seen a decrease in contamination of their containers leaving them feeling better overall about their waste collection system.



3.5 EVALUATION OF OPPORTUNITIES: POTENTIAL EXPANSION OR ENHANCEMENT

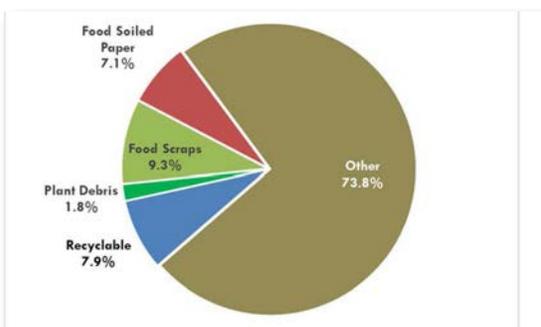
CVSan is a leader in Alameda County. A recent benchmark information survey by StopWaste identified that CVSan residents are the best sorters in the County. The Countywide goal is 10% “good stuff” in the landfill by 2020. As of 2018, only 36% of Alameda County residential garbage consisted of “good stuff”; materials that are readily recyclable or compostable.

StopWaste 2018 Waste Characterization Information Results for Alameda County



Even though Castro Valley residents and businesses are leaders in recycling and composting, there are still a lot of recyclable and compostable materials that end up in the garbage. This pie chart shows how our garbage can be sorted into five different categories – the first four are food-soiled paper, food scraps, plant debris, and recyclable materials that can be marketed to an end user and remanufactured into new products and composted and sold as soil amendment. The fifth would be “other” or garbage which goes to landfill. If properly handled, over 26% of these materials could be reused, recycled or composted. Over 18.2% of what we throw away is compostable and 7.9% is recyclable.

What Went Into Landfill and What Shouldn't Have?



Source: 2018 Alameda County Waste Characterization Study, StopWaste.Org

POTENTIAL EXPANSION OR ENHANCEMENT CONTINUED

Castro Valley residents and businesses have access to collection services for most recyclable and compostable materials through the programs provided by CVSan’s franchised service provider, ACI. However, there are still some items that are hard to recycle in Castro Valley. This table lists the materials and service opportunities that are needed.

Materials	Service Opportunities
Reusable	
Building materials	Materials exchange, drop-off
Curbside textiles	Started June 2019. Includes clothing, bedding, curtains, and stuffed animals
Edible food	Expand Food 2 Go, Food Runners
Reuse component of Bulky Pick-up	Started May 2019. Includes books, CDs, DVDs, magazines, framed pictures, clothing/textiles, shoes, belts, purses, and craft/sewing items
Hard-to-Recycle	
Bulky items	Expand number of drop-offs/door-to-door pickup
Carpet collected at Recycles Day	Starting April 2020
Plastics (vinyl, other rigids, other films)	Expand number of drop-offs/door-to-door pickup
Window glass	Expand number of drop-offs/door-to-door pickup
No Market	
Diapers	Target for redesign/take backs
Hazardous waste/special discards	Expand number of drop-offs/door-to-door pickup

ZERO WASTE CASE STUDY - FARMERS INSURANCE

Farmers Insurance has served Castro Valley residents for over 60 years. They have a 75% diversion rate, subscribing to one 64-gallon recycling cart, one 32-gallon organics cart, and one 32-gallon garbage cart. Each cart is collected once a week.

Employees of Farmers Insurance practice excellent sorting of their materials with low contamination levels. They implemented complete sorting stations next to each desk in their office so that each employee has a convenient recycling, organics, and garbage receptacle. Each station contains clear signage to help employees sort their materials correctly. Farmers Insurance employees work with the other businesses in their building to ensure they have proper signage and deskside containers to further assist in proper sorting. Their commitment to reducing the material sent to the landfill helped Farmers Insurance become a 4R Star business.



4.1 CODE, POLICY, PROGRAMS, STRATEGIES, AND INCENTIVES: GOALS & OBJECTIVES

CVSan developed the policy and program options based on interviews of stakeholders in Castro Valley, public input, discussions with CVSan and StopWaste staff, and research by the HDR Team (CVSan’s Zero Waste consultants). The Zero Waste Strategy Options were presented at public meetings of the Community Advisory Committee, the CVSan Zero Waste Committee, and the CVSan Board of Directors and reflect the input from each of these bodies.

CVSan Board Resolution: on October 7, 2014, the CVSan Board adopted Zero Waste (90+ diversion) by 2029 as a goal. CVSan could further establish milestones for achieving this goal. Such as:

- 80 percent diversion by 2024 (current Franchise Agreement term).
- 90 percent diversion by 2027.
- Be first Alameda County jurisdiction to **achieve** Zero Waste.

Lead by Example: Provide model language for a Zero Waste resolution to other local agencies including:

- Alameda County Board of Supervisors via the Municipal Advisory Council (MAC) Board.
- Castro Valley Unified School District (CVUSD) and private schools.
- East Bay Regional Park District (EBRPD).
- Hayward Area Recreational District (HARD).
- Alameda County Libraries.
- Higher education institutions, such as California State University, East Bay, Chabot College, University of California, Berkeley.
- Special Districts and local jurisdictions.
- Nonprofit organizations and sports leagues.
- StopWaste/Alameda County Waste Management Agency and Source Reduction and Recycling Board.

ZERO WASTE OPTIONS FOR IMPLEMENTATION

REDUCE OPTIONS COMPLETED ✓

✓ RD 1. ZERO FOOD WASTE HIERARCHY

Adopt the hierarchy for food scraps that prioritizes the use of discarded food scraps as follows:

- a. Prevent wasted food.
- b. Feed people.
- c. Convert to animal feed.
- d. Rendering (convert into new non-feed products).
- e. Compost or anaerobic digestion.

OPTIONS FOR IMPLEMENTATION CONT.

REDUCE OPTIONS COMPLETED

- ✓ RD 6. MUSEUM OF BAD DESIGN DISPLAYS
Develop Museum of Bad Design displays with StopWaste and California State University, East Bay to identify opportunities to redesign products and packaging to reduce wasteful practices working with industry leaders. Display nominations for products to target at Castro Valley Library, CVSsan offices, and Sutter/Eden Medical Center.

- ✓ RD 9. PRECAUTIONARY PRINCIPLE
Review impacts of a “precautionary principle” for CVSsan actions/purchases and consider adoption at the County level to reduce volume and toxicity of products purchased. The precautionary principle or precautionary approach states that if an action or policy has a suspected risk of causing harm to the public or to the environment, in the absence of scientific consensus that the action or policy is harmful, the burden of proof that it is not harmful falls on those taking an action. In San Francisco, the precautionary principle ordinance affects City purchases and the City has developed a “San Francisco Preferred” list of less toxic/more recyclable products for its own purchases and to share with the public.

- ✓ RD 11. PAPERLESS OFFICES
Promote “paperless offices” at CVSsan and at home, schools and businesses.
 - a. Encourage paper reduction through on-line publications.
 - b. Promote “Don’t print when you don’t need to print.”

REDUCE OPTIONS IN PROGRESS

- RD 4. SUSTAINABLE PRODUCT DESIGN
Be a strong advocate for product policy legislation and programs regionally, statewide and nationally, particularly to drive improvements in product design that are environmentally sustainable.
 - a. Promote businesses and products that demonstrate sustainable design features.
 - b. Ask public to contribute suggestions to Museum of Bad Design (see RD 6 below) displays.
 - c. Support advocacy organizations (such as California Product Stewardship Council and Californians Against Waste).
 - d. Encourage public support for legislation (state bills, county ordinances).
 - e. End sauce and topping composite packaging.

- RD 7. ZERO WASTE PURCHASING GUIDE
Develop model purchasing guide/policy for schools and businesses:
 - a. Fork dispensers instead of individually wrapped forks.
 - b. Recycled content office paper.
 - c. Compostable plant debris bags.

OPTIONS FOR IMPLEMENTATION CONT.

REDUCE OPTIONS IN PROGRESS

RD 10. ZERO WASTE VENUES AND EVENTS

Provide technical assistance to public and private venues and events to achieve Zero Waste.

- a. Support organizers of public events (such as the Fall Festival) to provide reusable and recyclable displays and promotional materials.
- b. Support venues (such as those at HARD and EBRPD) to provide information to their tenants and renters to achieve Zero Waste at special events.
- c. Support local sports leagues to promote waste-free snacks.
- d. Support the installation of public water bottle refill stations and assist in applying for grants for stations where applicable.
- e. Recommend to event organizers that event vendors recognize and acknowledge that they will comply with zero waste practices (90%+ of what they're serving is complying).
- f. Require ACI provide station monitoring and event greening assistance for two major events in CVSan per year.
- g. Recommend events hire waste sorting staff or secure volunteers that utilize material grabbers to pull contaminants and place them in the correct containers during events.

REDUCE OPTIONS

RD 2. ON-SITE COMPOSTING

Encourage and provide incentives for on-site, backyard and neighborhood composting, particularly at homes, schools, businesses and institutions with sufficient space:

- a. Workshops at nurseries and parks.
- b. Free or discounted composting bins and worm bins.
- c. Master gardener program.

RD 3. VOLUNTARY TAKEBACKS

Encourage businesses and institutions to take back designated products and packaging they sell and are sold by others in the area (especially items that are toxic in their manufacture, use, or disposal, and/or are not currently reusable, recyclable or compostable locally).

- a. Prepare and promote a list of local businesses and nonprofits willing to take back products and packaging that are otherwise difficult to reuse, recycle or compost locally (examples: dry cleaner hangers, reusable packing materials – foam peanuts, bubble wrap).
- b. Support local businesses to charge deposits (like reusable milk bottles) to get back targeted reusable products.
- c. Promote pilot for reusable to-go containers (Go Box model for reusable to-go containers, reusable boxes for takeout orders instead of plastic or paper bags).
- d. Deposits on voluntary take back items (such as dry cleaner hangers).
- e. Promote use of reusable dry cleaner bags (Green Garmento model).

OPTIONS FOR IMPLEMENTATION CONT.

REDUCE OPTIONS CONTINUED

- RD 5. REUSABLE DIAPERS
Reduce disposable diapers by promoting reusable and compostable alternatives and create incentives for such services.
 - a. Consider entering into partnerships with local service providers and deliver information to new parents on the benefits of reusable and compostable diapers.
 - b. Work with service providers to provide coupons for diaper service (reusable or compostable) to all new parents via Eden Medical Center, birth centers and medical offices.
 - c. Encourage day care centers and pre-schools to switch to reusable diapers and help them identify cost savings through garbage reduction.
 - d. Outreach to parenting groups i.e. Castro Valley Mother's Club, and other appropriate activity centers.

- RD 8. PURCHASING COOPERATIVES
Identify opportunities for countywide purchasing cooperatives for recyclable or compostable serve ware (or other items that may be more expensive than the hard to recycle items).

- RD 12. REDUCE WASTED FOOD
Identify opportunities to promote and educate about preventing wasted food at home, school, and work.
 - a. Partner on a cooking workshop at CV Marketplace to educate the community on tips and strategies to prevent wasted food while cooking at home.
 - b. Partner with Castro Valley Unified School District on food sharing and food rescue of school meals.

- RD 13. GO PAPERLESS
Identify opportunities to promote and educate the community about paper reduction through electronic alternatives to print material.
 - a. Promote the reduction of magazine subscriptions via free offerings through the Castro Valley Library.
 - b. Promote the "Stop Catalogs" campaign to connect the community on ways to receive less mail.

- RD 14. ASK FIRST
Referencing State Straws Upon Request law, encourage and support the adoption of an "Ask First" ordinance for Unincorporated Alameda County and/or CVSan's food service establishments to reduce waste from single-use serve ware and utensils.
 - a. Support an Unincorporated Alameda County and/or CVSan-wide "Ask First" ordinance - utensils, stirrers, etc.
 - b. Encourage individual food service establishments to enact an "Ask First" policy - utensils, stirrer, etc.

OPTIONS FOR IMPLEMENTATION CONT.

REDUCE OPTIONS CONTINUED

❑ RD 15. COMMERCIAL WASTE PREVENTION

Encourage an awareness locally about package-free business models (e.g. European food markets). Help establish businesses that aim for Zero Waste.

- a. Support the development of a bulk-bin-focused and/or packaging-free store.
- b. Support waste reducing sales and stocking strategies.
 1. No "Buy One Get One Free" deals.
 2. Discount for products approaching expiration date discount.
 3. Shelf talkers or point-of-sale marketing and education.
 4. On-site workshops or cooking classes on preventing wasted food.

❑ RD 16. LEGAL RESEARCH

Explore purpose and possible support of lawsuit from jurisdictions against companies that produce single-use plastic packaging - public nuisance, unfair business competition, design defect, misrepresentation, and failure to warn.

REUSE OPTIONS COMPLETED ✓

✓ RU 11. FLEA MARKETS

Promote local flea markets, which promotes the sale of reusable items.

- a. Be a resource to non-profit organizations within CVSan who desire to organize a reuse/flea market.

REUSE OPTIONS IN PROGRESS ○

○ RU 1. FOOD DONATION

Encourage and support food donation programs:

- a. Homes – surplus fruit and garden vegetables.
- b. Schools – share tables at schools and donations to food bank.
- c. Caterers and food services establishments – leftovers to food bank/shelters (Food Shift/Food Runners model).
- d. Grocery stores – bread and produce to food bank.
- e. Restaurants, bars, hotels, cafeterias and other hospitality venues – donate edible food to food banks and other discarded food to animal feed (encourage use of facilitators such as foodtodonate.org).
- f. Gleaners – volunteers to harvest and distribute unwanted tree fruit or other produce grown by Castro Valley residents.
- g. Gleaners - support the development of a Castro Valley Gleaning group.
- h. Gleaners - No homegrown fruit/vegetable to landfill or compost.
- i. Food Rescue - explore the potential to measure recovery of edible food.
- j. Community - support food recovery drivers/bikers for schools, restaurants, etc. (such as White Pony Express www.whiteponyexpress.org).
- k. Community - host a freezer/rescuing edible food workshop/event.
- l. Community - promote and assist the opening of second CV food pantry.
- m. Community - support a freegan or rescuing edible food workshop/event.

OPTIONS FOR IMPLEMENTATION CONT.

○ REUSE OPTIONS IN PROGRESS

RU 7. LOCAL MATERIAL UPGRADE

Facilitate development of a network of repair and refurbishing businesses or nonprofits to upgrade materials and products that are collected through large-scale reuse programs to attain a higher price in retail activities. Support nonprofits applying for grants.



RU 8. REPAIR WORKSHOPS

Sponsor quarterly repair workshops (Repair Café and iFixit models)

- a. Connect with Boy Scouts, Girl Scouts, 4H Clubs and other service clubs to organize workshops.
- b. Recruit volunteer “fixers.”
- c. Recruit appropriate free venue.
- d. Schedule and promote repair workshops.
- e. Work to get the Reconnect Club at Fixit Clinics.



RU 13. CLOTHING/TOY/SPORTING GOODS SWAPS

- a. Promote the organization of children’s clothing and toy swaps.
- b. Facilitate cleat/shinguard/supplies/belts reuse at sports tryouts and leagues.
- c. Support/facilitate a sporting goods reuse network or depot in Castro Valley.



□ REUSE OPTIONS

RU 2. REUSE PROMOTION AND EXPLORATION

Promote reuse and repair for residents and businesses with a web-based directory, other internet services (e.g., ebay, Craigslist and FreeCycle.org), utility bill inserts, and cooperative advertisements. Investigate the commercial equivalent to FreeCycle.org or materials exchange such as LA Shares.

- a. Promote brick and mortar depots like East Bay Depot for Creative Reuse, SCRAP (Scrounger’s Center for Reusable Art Parts).
- b. Promote local antique and thrift stores, repair shops and local electronic equipment, furniture and appliance resellers including a brochure/website listing where these are located.
- c. Support a thrift or second-hand type store in CV.
- d. Support/facilitate reusable to-go containers at Castro Valley businesses.
- e. Promote refillable pearl milk tea containers and reusable wide straws.
- f. Promote and/or confirm incentives for reusable coffee mugs/cups at local businesses.
- g. Conduct a “reuse survey” of habits and interests of community members to greater understand reuse in Castro Valley.



RU 3. HOUSEHOLD HAZARDOUS PRODUCT REUSE

Explore and encourage the existing Alameda Countywide free swap program (“swap lockers”) for household hazardous products that enables the community to share these goods at no cost (e.g., Larimer County Drop ‘N’ Swap “buy none, get one free”). Research liability language.

OPTIONS FOR IMPLEMENTATION CONT.

REUSE OPTIONS CONTINUED

- RU 4. DECONSTRUCTION
Promote deconstruction services and used building materials stores.
 - a. Prepare deconstruction services guide.
 - b. Support used building materials outlet at CHaRM.

- RU 5. IN-STORE BARGAIN BASEMENTS
Encourage major retailers of clothing in the area to establish “Bargain Basement” sections of their stores.
 - a. Premium used clothes could be sold that would be supplied by existing thrift stores, with the profits from sales split between them.
 - b. Clothing used in department store displays/advertisements or slightly damaged clothes could be sold (e.g., Jeremy’s Department Store).

- RU 6. ECOLOGY OF COMMERCE
Encourage an “ecology of commerce” for promoting the sale of reusable items in the area. Encourage the marketing of used lumber, building materials, compost products and used appliances through major home repair, hardware stores and nurseries. Encourage the marketing of used furniture through furniture stores.

- RU 9. LOCAL REUSE BUSINESSES
 - a. Encourage the concept of a reuse warehouse or pop-up stores that could be leased out on a spot basis to reuse businesses and nonprofits as needed to help in the ups and downs of market conditions.
 - b. Support a “Dana’s Party Planet” type store that sells and rents reusable party wear.

- RU 10. REUSE COLLABORATIVES
Help form a Reuse Collaborative with businesses and nonprofits throughout the region to help in marketing products collected through reuse networks, and to help develop the above services.
 - a. Form partnerships or contractual relationships with local reuse organizations (such as CARH).
 - b. Publish list of CVSan contractors to encourage donations of reusable items.
 - c. Enter into agreements for no-cost collection service to get textiles and other reusable items to a charity or textile processor and/or broker/collector. Look at home pick-up routes on a schedule for reusable items to be taken to a recovery center for reuse and refurbishing.

- RU 12. MULTI-HOME GARAGE SALES
Promote the organization of multi-home or multi-family garage sales.

- RU 14. PROMOTE REUSABLE CLEANING SUPPLIES
Encourage the use of reusable cleaning supplies and tools at home or at work.
 - a. Promote reusables like towels (do away with disposable cleaning pads and wipes).

OPTIONS FOR IMPLEMENTATION CONT.

REUSE OPTIONS CONTINUED

- RU 15. PROMOTE AND FACILITATE USE OF REUSABLES AT SCHOOL
Encourage the use and sharing of reusables at schools in Castro Valley.
 - a. Support “Reuse Days” with locker-cleanouts, plans and events to reduce and reuse at the end of the school year.
 - b. Support school use of reusable cups and milk refill stations for cafeterias and eating areas at snack and lunchtime.
 - c. Support the elimination of spork packets and promote the use of reusable utensils during snack and lunchtime.

- RU 16. PROMOTE HOLIDAY DECORATION SERVICES
Encourage the use of holiday decoration services that reuse decorations and rent them out every year.
 - a. Promote - lights, lawn ornaments, and other decorations that can be rented and reused.

- RU 17. TOOL LENDING
Encourage the practice of tool lending in Castro Valley.
 - a. Support the development and use of/facilitate a tool lending library in Castro Valley.

- RU 18. REUSABLE SERVEWARE AT EVENTS
Promote reusable dishes, utensils, beverage containers, on-site washing stations i.e. Sudbusters and/or collection of reusables by vendor for washing off-site.

RECYCLING OPTIONS COMPLETED ✓

- ✓ RE 4. SHARING RECYCLING CARTS & BINS
Encourage sharing of recycling carts or bins by multiple businesses and multi-family dwellings that have space constraints or whom are low generators.

- ✓ RE 13. C&D RECYCLING VOUCHERS
Explore continuation of distributing C&D vouchers at special events for recycling C&D at Davis Street.

RECYCLING OPTIONS IN PROGRESS ○

- RE 1. ZERO WASTE STARS - BUSINESS
Expand 4R Stars program to include Zero Waste business designation.
 - a. Provide technical assistance to commercial customers to reduce trash collection, right-size services and document diversion rates.
 - b. Identify and profile high-achieving businesses (such as Knudsen’s Ice Creamery).
 - c. Develop case studies, recognize and promote all businesses that get certified as Zero Waste businesses.
 - d. Require at least 90% diversion in Zero Waste Stars designation.

- RE 3. UNIVERSAL COMMERCIAL RECYCLING
Expand recycling service to 100% of all commercial establishments.
 - a. Provide technical assistance and highlight benefits of participating.
 - b. Inform businesses of County mandatory ordinance and State AB 341 mandate and goals.

OPTIONS FOR IMPLEMENTATION CONT.

RECYCLING OPTIONS IN PROGRESS

RE 14. ZERO WASTE STARS - GOVERNMENT

Continue to provide technical assistance to government operations (such as police, fire, government buildings) and encourage Zero Waste strategies.

RECYCLING OPTIONS

RE 2. ZERO WASTE STARS - SCHOOLS

Expand Green Ribbon Schools Program to include Zero Waste school designation.

- a. Ensure that all 16 public and 7 private schools are fully participating in recycling and composting programs.
- b. Develop case studies, sponsor certification fees, recognize and promote all schools that get certified as Zero Waste schools.

RE 5. BOTTLE & CAN REDEMPTION CENTERS

Ensure that all CRV bottle and can redemption zones have service (work with grocery stores to provide reverse vending machine or other service).

- a. Investigate supporting legislation to require grocery and/or convenience stores to accept bottles and cans and issue reimbursements.
- b. Develop a web page and social media post, and/or press release for where to take bottles and cans for redemption value.

RE 6. ZERO WASTE STARS – MULTI-FAMILY

Provide technical assistance and waste audits to all multifamily complexes and develop companion program to 4R Stars program.

- a. Identify and profile high-achieving multifamily complexes.
- b. Engage all property owners and tenants in solutions to logistical issues.
- c. Develop case studies, recognize and promote all multi-family complexes that get certified as Zero Waste complexes.
- d. Develop Move-in/Move-out Information Packet that helps organize move and unpacking so less gets wasted and coordinate with Reuse Collaborative to arrange collection of reusable products as needed.

RE 7. EXPAND RESIDENTIAL RECYCLING

Improve single family and multifamily residential recycling and include more items in the recycling program.

RE 8. UNIVERSAL RESIDENTIAL RECYCLING

Ensure that all single-family residential generators are fully participating in the recycling program (no recyclables in the trash) (similar to StopWaste mandatory ordinance for commercial and multifamily generators).

RE 9. PUBLIC AREA RECYCLING

Provide recycling pyramids at all 89 public garbage bin (“street can”) locations.

RE 10. RETAIL ESTABLISHMENT PUBLIC RECYCLING BINS

Require all establishments that sell single-use beverages to provide recycling bins.

OPTIONS FOR IMPLEMENTATION CONT.

RECYCLING OPTIONS CONTINUED

- RE 11. ZERO WASTE EVENTS
 - a. Facilitate Zero Waste programs/strategies at all appropriate public events.
 - b. Create “Zero Waste Event Levels” with medals and recognition for recycling and composting levels of 70/80/90%.

- RE 12. HARD-TO-RECYCLE CENTER

Explore development of a Hard-to-Recycle Center to accept specified hard-to-recycle materials and reusable items dropped off from residents and businesses.

 - a. Organize field trips to the El Cerrito Recycling Center (for Board members, CAC, Green Hearts).
 - b. Undertake a community dialogue about developing a local site within 15 miles of Castro Valley.
 - c. Identify grant opportunities and partnerships.
 - d. Support countywide development of a network of resource recovery centers.
 - e. Promote existing centers (Alameda County HHW, Davis Street) and encourage expansion of materials accepted.

- RE 15. RECYCLABLE MATERIALS
 - a. Educate and support the community to improve quality of recyclable materials collected by “cleaning those blue bin materials right.”
 - b. Promote shelf-stable foil-lined cartons i.e. juice boxes recycling.
 - c. Implement 3D printing prototype recycling at Castro Valley High School.

- RE 16. DISASTER DEBRIS
 - a. Develop comprehensive Disaster Debris Management Plan in coordination with CVSan’s Franchised Collector and Processor.

COMPOSTING (ROT) OPTIONS COMPLETED ✓

- ✓ CO 2. SHARING COMPOST CARTS & BINS

Encourage sharing of compost carts or bins by multiple businesses and multi-family dwellings that have space constraints or whom are low generators.

COMPOSTING (ROT) OPTIONS IN PROGRESS ○

- CO 3. FOOD SCRAPS DIGESTION
 - a. Explore anaerobic digestion of food scraps from residents, businesses, and institutions.
 - b. Investigate the possibility of an animal feed from organics pilot with Alameda County Industries.

OPTIONS FOR IMPLEMENTATION CONT.

COMPOSTING (ROT) OPTIONS IN PROGRESS CONTINUED

- CO 4. UNIVERSAL COMPOSTING - COMMERCIAL
 - Expand organics collection service to 100% of all commercial establishments and multifamily complexes.
 - a. Provide technical assistance and highlight benefits of participating.
 - b. Inform businesses and complexes of County mandatory ordinance.
 - c. Research submission of a waiver for Canyonlands organics in response to requirements under SB 1383.
 - d. Engage local food service establishments in taking ownership of public organics bins immediately adjacent to their businesses (“adopt a banana” program).

- CO 5. UNIVERSAL COMPOSTING - RESIDENTIAL
 - a. Ensure that all single-family residential generators are fully participating in the composting program (no organics in the trash) (similar to StopWaste mandatory ordinance for commercial and multifamily generators).
 - b. Green Hearts Volunteers deliver food scrap recycling pails and information door-to-door.
 - c. CVSan purchases a new design or type of food scrap recycling pail.
 - d. Research submission of a waiver for Canyonlands organics in response to requirements under SB 1383.
 - e. Consider compostable bag dispensers i.e. EcoSafe dispensers as a donation to multi-family complexes. Coordinate with MFD Recognition Program for bag refills.

- CO 7. ZERO WASTE PARKS
 - Convert a whole Park (such as Lake Chabot or Cull Canyon) or Venue (such as Willow Park) into a Zero Waste Venue complete with onsite composting and fully convenient recycling containers. Have a great exhibit at the entrance to explain what is happening. Once a demonstration is completed, work with partners to get all parks serving local residents to be Zero Waste venues.
 - a. Partner with East Bay Regional Park District and Hayward Area Recreation District.
 - b. Have food scrap recycling stations at all CV parks.

- CO 8. COMPOSTABLE SERVE WARE
 - Create and publish a list of serve ware products that will compost (not “compostable plastic”), with vendor lists.

- CO 9. PET WASTE DIVERSION
 - Pilot program for dog park manures using a small onsite composter or anaerobic digester.

OPTIONS FOR IMPLEMENTATION CONT.

COMPOSTING (ROT) OPTIONS IN PROGRESS CONTINUED

- CO 10. UNIVERSAL COMPOSTING - STATEWIDE
Support California Air Resources Board adoption of AB 32 Scoping Plan Waste Management Sector recommendations to ban organics from landfills statewide and to expand composting and digestion programs.
 - a. Provide letters of support and public testimony.

- CO 11. IN-COUNTY COMPOSTING FACILITY
Support research and development of an in-County composting facility.

COMPOSTING (ROT) OPTIONS

- CO 1. UNIVERSAL COMPOSTING - GOAL
Adopt a goal to phase out compostable organics going to landfill by 2030.

 - CO 6. FOOD SERVICE ESTABLISHMENT PUBLIC COMPOST BINS
Provide organics bins wherever food is served in public locations.
-

GREEN BUSINESS AND JOBS COMPLETED

None yet

GREEN BUSINESS AND JOBS ITEMS IN PROGRESS

- GB 4. ZERO WASTE HIERARCHY
Consider the Zero Waste Hierarchy of Highest and Best Use (attached) when evaluating material recovery technology proposals that come to CVSan.

GREEN BUSINESS AND JOBS ITEMS

- GB 1. ZERO WASTE BUSINESS RECOGNITION
Help businesses that adopt and implement Zero Waste goals to be recognized through national certification programs (such as U.S. Zero Waste Business Council).

- GB 2. PURCHASE COMPOST
Work with CalTrans Regional Office and local governments throughout the County to use more recycled and compost products on road and construction projects in the area.
 - a. Purchase reused, recycled and compost products for CVSan facilities and services.
 - b. Include recycled and compost specifications in CVSan purchases and projects.
 - c. Provide model specification language to Alameda County and other partners.

- GB 3. RECYCLED PRODUCT INNOVATION
Encourage and support businesses to develop innovative recycled products.

OPTIONS FOR IMPLEMENTATION CONT.

PUBLIC INFORMATION ITEMS COMPLETED ✓

- ✓ PIP 3. ZERO WASTE SCHOOLS - REUSE
Encourage CVUSD to store unwanted office and school supplies accessible by teachers and staff.

- ✓ PIP 4. ZERO WASTE OUTREACH
Continue programs on an on-going basis to educate residents, businesses and visitors about how and where to reduce, reuse and recycle. Continue to contact all businesses to assist them in complying with County and State rules regarding recycling and composting.

- ✓ PIP12. ZERO WASTE SHIFT
Promote discarded materials as resources.
 - a. Consider renaming Solid Waste Department to Zero Waste Department, referencing "Garbage vehicles" as "Recycling vehicles" (with garbage as the residual).

PUBLIC INFORMATION ITEMS IN PROGRESS ○

- PIP 5. ZERO WASTE GREEN TEAMS
Support the formation of Green Teams (Chamber of Commerce, Property Managers, faith community, School District level) and encourage them to work with their networks to pursue Zero Waste. Expand recognition and training program for institutional, commercial and industrial generators.

- PIP 10. ZERO WASTE – GREEN HEARTS
Expand/Promote Green Heart Program to higher levels to create Zero Waste culture change and volunteer support for CVSan initiatives.

- PIP12. ZERO WASTE SHIFT
Promote discarded materials as resources.
 - b. Work on a Zero Waste Week that takes place throughout CV (not just CVSan-hosted/organized events).
 - c. Create Zero Waste Character Costumes.
 - d. Students paint mural in and/or on new Zero Waste Department Office.
 - e. Create superhero characters.

PUBLIC INFORMATION ITEMS □

- PIP 1. ZERO WASTE EVENTS - GOAL
Support adoption of Zero Waste goal for venues and special events in Castro Valley that require Alameda County permits (such as the Rowell Ranch Rodeo Parade) and use incentives and technical assistance to help them implement goals.

- PIP 2. ZERO WASTE SCHOOLS - TENANTS
Support CVUSD to develop new rules for school district tenants (sports teams, after school programs, scouts) to ensure participation in CVUSD recycling and composting programs.

OPTIONS FOR IMPLEMENTATION CONT.

PUBLIC INFORMATION ITEMS

- PIP 6. ZERO WASTE CASE STUDIES
Develop case studies of model programs and promote best practices.

- PIP 7. ZERO WASTE SOCIAL MARKETING
Develop a social marketing program to find the best means to encourage people to use public recycling bins. Use a “Community-Based Social Marketing” style of analysis prompts and focus groups to measure results and implement pilot programs at public area.

- PIP 8. ZERO WASTE MEDIA
Provide information to Radio, TV, on-line and print media outlets for reports to the community on where collected materials go and what is happening to them (including the number of businesses and jobs involved).
 - a. Develop and post GIFs/videos of CVSan’s Zero Waste Characters.
 - b. Develop and share video highlights of zero waste at different schools.
 - c. Create video messages from custodians to students.
 - d. Create testimonial videos with community members.
 - e. Develop and encourage 10 social media influencers for CVSan.

- PIP 9. ZERO WASTE YOUTH
Support the formation of Zero Waste Youth Castro Valley.

- PIP 11. “DIRTY DOZEN” AWARENESS CAMPAIGN
Develop an awareness campaign identifying problem products (such as disposable diapers and other single-use items or hard-to-recycle materials) and promote alternatives.
 - a. Develop an awareness campaign on plastic microfibers i.e. from washing clothes.
 - b. Develop an awareness campaign related marine debris i.e. k-cups and contact lenses.

PARTNERSHIP WITH HAULER OPTIONS

PARTNERSHIP WITH HAULER ITEMS COMPLETED ✓

- ✓ WM 2. SUPPORT PILOT PROGRAMS
CVSan and WMAC can work together to implement pilot programs, including:
 - a. Every other week garbage collection pilot program (garbage collected every other week, recycling and organics collected every week) and/or reduced garbage service.
 - b. Alternative collection programs for multi-family food scraps (to address space constraints/logistics).
 - c. Pilot to collect clean, bagged textiles (including rags and non-reusable items) in the residential recycling collection program (perhaps once a month or as part of cleanup programs).

- ✓ WM 5. CVSAN AS HAULER
Conduct a feasibility study and economic analysis if CVSan were to provide Collection services to CVSan customers.

- ✓ ACI/WM 3. SUPPORT ZERO WASTE CONTRACT DEVELOPMENT
WMAC can share insights on strategies to transform the current collection infrastructure and work with CVSan to develop a model franchise agreement and compensation mechanism for Zero Waste.

- ✓ ACI/WM 1. TARGETS FOR INCREASING DIVERSION
WMAC diversion rate was 51% (minimum contractual requirement is 40% for residential and commercial materials, 50% for construction and demolition materials and 90% for asphalt and concrete). CVSan and WMAC can establish non-binding targets to match CVSan's goals of 80% by 2016 and 90% by 2029.

□ PARTNERSHIP WITH HAULER ITEMS

ACI/WM 4. PRE-TREATMENT AT LANDFILL

CVSan can work with WMAC to develop a biological treatment process at the Altamont Landfill to pre-treat mixed waste before landfilling to stabilize the organic fraction as a cost of landfill operation.

4.2 INITIATIVES: PARTNERSHIP WITH STOPWASTE OPTIONS

In addition to the policy and program options that could be implemented at the local level, CVSan identified those options that are most appropriate for implementation at the regional or county level. The Zero Waste Strategy Options were presented to Supervisor Nate Miley, members of the Municipal Advisory Council Board and representatives of StopWaste and reflect their input.

PARTNERSHIP WITH STOPWASTE ITEMS COMPLETED ✓

✓ SW 1. SUPPORT FOR MODEL PROGRAMS

CVSan has developed model programs for Countywide implementation. StopWaste has expressed interest in supporting:

- a. Every other week trash collection pilot program and/or reduced garbage service.
- b. Best practices for multifamily organics.
- c. Strategies for increasing participation in residential organics program (above 50%).

PARTNERSHIP WITH STOPWASTE ITEMS IN PROGRESS ○

None at this time

PARTNERSHIP WITH STOPWASTE ITEMS □

□ SW 2. NEW COUNTYWIDE POLICIES, PROGRAMS AND INFRASTRUCTURE

CVSan's "service voids analysis" identified some initiatives that would be best suited for Countywide implementation. StopWaste has expressed interest in supporting:

- a. Adding more "readily recyclable" materials to the mandatory ordinance requirements such as plastic film and textiles when feasible.
- b. Working with CalRecycle to advocate for all Convenience Zones for CRV materials are filled (Castro Valley has one unserved zone and there are many across the County).
- c. Training programs for member agencies, businesses, schools, institutions for best practices in Zero Waste, purchasing, contracts.

□ SW 3. RESEARCH PROJECTS

Stopwaste is also best-suited for conducting research projects that benefit the County as a whole. StopWaste has expressed interest in supporting:

- a. Best practices for custodial contracts, collection contracts, purchasing for school districts, businesses, member agencies.
- b. Work with CVSan to develop a model franchise agreement and compensation mechanism for Zero Waste.

PARTNERSHIP WITH ALAMEDA COUNTY OPTIONS

PARTNERSHIP WITH ALAMEDA COUNTY ITEMS COMPLETED ✓

- ✓ AC 1. NEW COUNTY LEVEL POLICIES
There are many policy areas that fall within the jurisdiction of the Alameda County Board of Supervisors (rather than CVSsan). CVSsan can work with Alameda County to implement:
 - b. Ban expanded polystyrene foam serviceware at food service establishments.

PARTNERSHIP WITH ALAMEDA COUNTY ITEMS IN PROGRESS ○

- AC 1. NEW COUNTY LEVEL POLICIES
There are many policy areas that fall within the jurisdiction of the Alameda County Board of Supervisors (rather than CVSsan). CVSsan can work with Alameda County to implement:
 - a. Take-back requirements (building on the pharmaceutical take-back ordinance) for problem products and packaging sold in the area that are toxic in their manufacture, use, or disposal, and/or are not currently reusable, recyclable or compostable locally.
 - c. Adopt an ordinance to require all retailers that sell items in the CVSsan area that must be collected as HHW to take those back to the store for proper reuse, recycling or composting.
 - d. Adopt an ordinance to require all disposable diapers to either have a deposit to cover the cost of proper disposal, or to require retailers that sell them in the CVSsan area to take them back through a retailer and/or manufacturer sponsored collection program.
 - e. Encourage waste prevention, recycling, market development and use of recycled/recyclable materials through lease agreements, contractual relationships and purchasing practices with vendors, contractors, businesses and other governmental agencies. The County could adopt waste prevention, recycling and use of recycled supplies and materials as a County purchasing priority.
 - f. Alameda County Purchasing could submit an environmentally preferable products review sheet to CVSsan prior to major purchases or major contracting for design and construction services for County facilities within the CVSsan area (except for emergency purchases which are exempt). CVSsan to coordinate preferable purchasing information.
 - g. Establish a website that lists all green, recycled, reusable, recyclable and compost products and services that the County purchases for CVSsan, including the vendors that provide those products and services, and contact information. This could be promoted as part of technical assistance programs as a reference source for these types of products and services that can be obtained locally.
 - h. Adopt Zero Waste goals for all public venues and public events that require permits.

PARTNERSHIP WITH ALAMEDA COUNTY OPTIONS

PARTNERSHIP WITH ALAMEDA COUNTY ITEMS IN PROGRESS CONTINUED

- AC 1. NEW COUNTY LEVEL POLICIES CONTINUED
 - i. Require that vendors at events attend an annual workshop covering ZW event practices in order to be certified. Only certified vendors can be used in the CVSan area.
 - j. Require events to hire waste sorting staff to sort garbage material and/or clean up contamination of recycling and organics.

PARTNERSHIP WITH ALAMEDA COUNTY ITEMS

- AC 2. MODIFICATIONS TO ALAMEDA COUNTY CONSTRUCTION AND DEMOLITION DEBRIS ORDINANCE AND GREEN BUILDING ORDINANCE

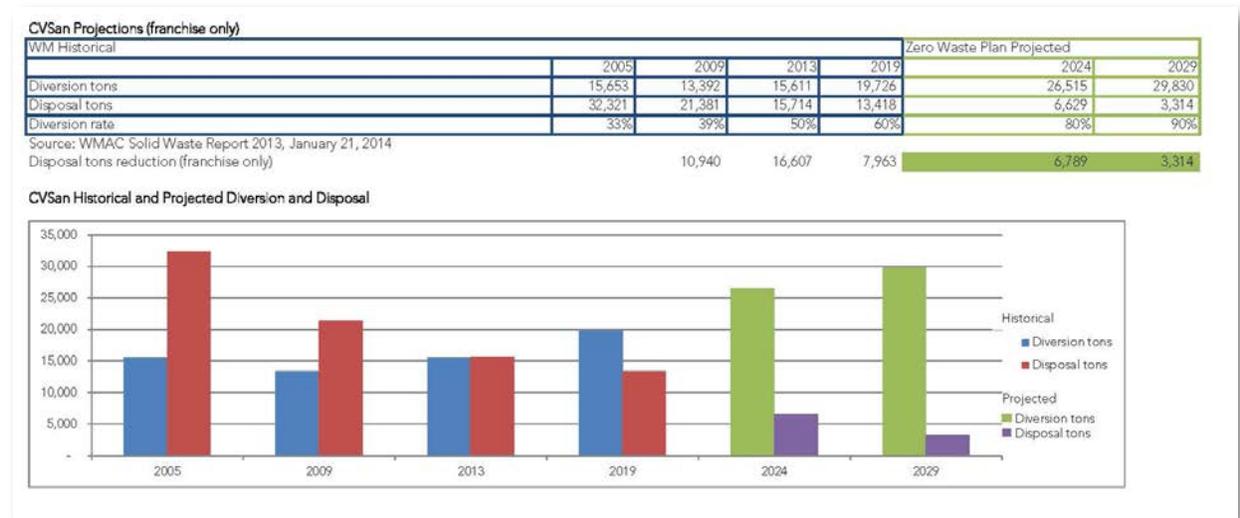
Traditional Public Works projects are required to divert 75% of asphalt, concrete, and similar materials and 50% for remaining C&D materials generated. County projects and traditional public works projects valued at \$100,000 or more. Demolition projects valued at \$25,000 or more.

 - a. Increase recycling requirements to 90% of asphalt and concrete and 75% of all remaining materials by a specific date (such as 2026 or 2030).
 - b. Amend ordinance to require publication in the local newspaper of all buildings planned to be demolished to solicit participation of deconstruction firms to salvage whatever they can while final permits are obtained for remaining parts of the building to be demolished.
 - c. Use economic development tools to help develop value-added reuse businesses, such as mini-sawmill for manufacturing of wood flooring, cabinets and architectural details from deconstructed lumber.
 - d. Support historic preservation and those seeking to restore and reuse buildings, include “adaptive reuse” as a priority in building standards for residential and commercial construction and encourage the remodeling or repurposing of buildings that are still functional.
 - e. Provide incentives for green buildings such as authorizing them to “go to the head of the line” in County permitting procedures. The County could provide a preference in leasing buildings to lease space from green businesses.
 - f. Update the County green building policy to provide incentives for use of products that are more durable, have a longer lifespan, require no additional finishing on-site, have less frequent maintenance and repair cycles, and give credits for products made from recycled content. The County could include a reuse goal in this policy to value the recovered products by the price for which they are sold, or some multiple of their weight, to reflect the higher value of reuse.

4.3 DIVERSION & GHG REDUCTION POTENTIAL

The diversion tonnage estimates are presented based on CVSsan achieving 80 percent diversion in 2024 and 90 percent diversion in 2029 through implementation of the Zero Waste Strategy Options. The policies and programs will be developed over time through additional research, testing, and pilot programs before full-scale rollout. Several policies will require new ordinances and regulations which will require action by the CVSsan Board of Directors and Alameda County Board of Supervisors.

CVSsan Diversion Projections



GREENHOUSE GAS REDUCTION POTENTIAL

As identified in the Alameda County Community Climate Action Plan, waste reduction initiatives can significantly reduce greenhouse gas (GHG) emissions. The Climate Action Plan identifies waste reduction strategies for reducing GHG emissions and includes the goal of 90 percent diversion by 2030 for the unincorporated areas of Alameda County. The GHG reduction potential of the Zero Waste Strategy options was estimated using the U.S. EPA Waste Reduction Model (WARM) to project GHG reduction based on material types and amounts diverted.

The U.S. EPA created WARM to help planners and organizations track and voluntarily report GHG emissions reductions from several different waste reduction practices. WARM calculates and totals GHG emissions of baseline and alternative waste management practices—source reduction, recycling, composting, and landfilling. The model calculates emissions in metric tons of carbon equivalent (MTCE), metric tons of carbon dioxide equivalent (MTCO₂E), and energy units (million BTU) across a wide range of material types commonly found in discarded materials.

Achieving the 90 percent diversion rate would reduce GHG emissions by over 40,000 MTCO₂E.

Greenhouse Gas Emissions Reduction Potential

2024	2029
-27,836	-31,248

Reduction in Metric Tons of Carbon Dioxide Equivalent (MTCO₂E)
Source: Calculated using U.S. EPA WARM
<https://www.epa.gov/warm>

SECTION 3: ECONOMIC ANALYSIS AND IMPLEMENTATION PLAN



5.1 PLANNING LEVEL COSTS

Many of the Zero Waste Strategy Options identified at the workshops and stakeholder meetings can be implemented by CVSan without new expenditures of resources. Reorganizing staff functions and streamlining policies and programs could make staff time available for new initiatives.

New staff or contractor resources may be needed for future Zero Waste program implementation. Current solid waste program staff and projects are funded through municipal solid waste administration fees, CVSan’s allocation of the Countywide Measure D fee, and grant funding from the California Department of Resources Recycling and Recovery (CalRecycle) and the Altamont Education Advisory Board. Staffing and program costs should be evaluated based on the following estimated costs for the Zero Waste Strategy Options. These planning cost estimates are based on an estimate of staff hours and other program costs, such as publications, advertisements and equipment (signs and containers).

Cost Estimates for CVSan Zero Waste Strategy Options

2019-2021								
Project	Name	Hours	Labor cost	Annual labor cost	Annual outreach	Capital	Annualized capital	Total annual cost
RD 1	Zero Food Waste Hierarchy	8	\$400	\$133.33				\$133
RD 2	On-site composting	120	\$6,000	\$2,000.00	\$2,500	see annual	\$2,500	\$7,000
RD 3	Voluntary Takebacks	80	\$4,000	\$1,333.33	\$12,500			\$13,833
RD 4	Sustainable Product Design	50	\$2,500	\$833.33				\$833
RD 7	Zero Waste Purchasing Guide	12	\$600	\$200.00	\$12,500			\$12,700
RD 8	Purchasing cooperatives	160	\$8,000	\$2,666.67				\$2,667
RD 9	Precautionary Principle	40	\$2,000	\$666.67				\$667
RD 10	Zero Waste Events	240	\$12,000	\$4,000.00	\$750	\$20,625	\$6,875	\$11,625
RD 14	Ask First	15	\$750	\$250.00				\$250
RU 1	Food Donation	240	\$12,000	\$4,000.00				\$4,000
RU 7	Local Material Upgrade	40	\$2,000	\$666.67				\$667
RU 8	Repair Workshops	120	\$6,000	\$2,000.00	\$3,000	\$1,000	\$333	\$5,333
RU 11	Flea Markets	24	\$1,200	\$400.00	\$2,000			\$2,400
RU 12	Multi-Home Garage Sales	120	\$6,000	\$2,000.00	\$2,000			\$4,000
RU 13	Clothing/Toy Swaps	120	\$6,000	\$2,000.00	\$2,000			\$4,000
RE 1	Zero Waste Stars - Business	8	\$400	\$133.33	\$750			\$883
RE 3	Universal Commercial Recycling	160	\$8,000	\$2,666.67	\$2,000			\$4,667
RE 4	Sharing Recycling Carts & Bins	12	\$600	\$200.00				\$200
RE 11 same as RD 10	Zero Waste Events	0	\$0	\$0.00				\$0

PLANNING LEVEL COSTS CONTINUED

2019-2021								
Project	Name	Hours	Labor cost	Annual labor cost	Annual outreach	Capital	Annualized capital	Total annual cost
RE 13	C&D Recycling Vouchers	4	\$200	\$66.67	\$250			\$317
RE 14	Zero Waste Stars - Government	96	\$4,800	\$1,600.00	\$250			\$1,850
CO 2	Sharing Compost Carts & Bins	16	\$800	\$266.67				\$267
CO 4	Universal Composting Commercial	200	\$10,000	\$3,333.33	\$2,000			\$5,333
GB 4	Zero Waste Hierarchy	24	\$1,200	\$400.00				\$400
PIP 1	Zero Waste Events - Goal	24	\$1,200	\$400.00				\$400
PIP 2	Zero Waste Schools - Tenants	24	\$1,200	\$400.00				\$400
PIP 3	Zero Waste Schools - Reuse	40	\$2,000	\$666.67				\$667
PIP 4	Zero Waste Outreach	96	\$4,800	\$1,600.00	\$2,000			\$3,600
PIP 5	Zero Waste Green Teams	100	\$5,000	\$1,666.67	\$2,250			\$3,917
PIP 10	Zero Waste - Green Hearts	16	\$800	\$266.67	\$2,200			\$2,467
PIP 12	Zero Waste Shift	8	\$400	\$133.33				\$133
ACI/WM 1	Targets for Increased Diversion	24	\$1,200	\$400.00				\$400
WM 2 a	Reduced Garbage Pilot	200	\$10,000	\$3,333.33				\$3,333
ACI/WM 3	Zero Waste Contract Development	200	\$10,000	\$3,333.33				\$3,333
WM 5	CVSan as Hauler	200	\$10,000	\$3,333.33				\$3,333
SW 1	Support for Model Programs	15	\$750	\$250.00				\$250
Total Hours		2841	\$142,050	\$47,350.00	\$48,950	\$21,625	\$9,708	\$106,008

PLANNING LEVEL COSTS CONTINUED

2022-2024								
Project	Name	Hours	Labor cost	Annual labor cost	Annual outreach	Capital	Annualized capital	Total annual cost
RD 3	Voluntary Takebacks	160	\$8,000	\$2,666.67				\$2,667
RD 5	Reusable Diapers	40	\$2,000	\$666.67	\$500			\$1,167
RD 6	Museum of Bad Design Displays	200	\$10,000	\$3,333.33		\$1,500	\$500	\$3,833
RD 11	Paperless Office	40	\$2,000	\$666.67				\$667
RD 12	Reduce Wasted Food	60	\$3,000	\$1,000.00				\$1,000
RD 13	Go Paperless	60	\$3,000	\$1,000.00				\$1,000
RD 15	Commercial Waste Prevention	120	\$6,000	\$2,000.00				\$2,000
RU 3	HHW Product Reuse	160	\$8,000	\$2,666.67				\$2,667
RU 4	Deconstruction	40	\$2,000	\$666.67	\$12,500			\$13,167
RU 10	Reuse Collaboratives	200	\$10,000	\$3,333.33	\$3,750			\$7,083
RU 14	Promote Reusable Cleaning Supplies	60	\$3,000	\$1,000.00				\$1,000
RU 15	Promote Reusables at Schools	60	\$3,000	\$1,000.00				\$1,000
RU 16	Promote Holiday Decoration Services	40	\$2,000	\$666.67				\$667
RU 17	Tool Lending	40	\$2,000	\$666.67				\$667
RE 2	Zero Waste Stars - Schools	40	\$2,000	\$666.67	\$800			\$1,467
RE 5	Bottle & Can Redemption Centers	160	\$8,000	\$2,666.67				\$2,667
RE 6	Zero Waste Stars - Multi-family	160	\$8,000	\$2,666.67	\$4,500			\$7,167
RE 7	Expand Residential Recycling	60	\$3,000	\$1,000.00				\$1,000
RE 8	Universal Residential Recycling	80	\$4,000	\$1,333.33				\$1,333

PLANNING LEVEL COSTS CONTINUED

2022-2024								
Project	Name	Hours	Labor cost	Annual labor cost	Annual outreach	Capital	Annualized capital	Total annual cost
RE 9	Public Area Recycling	120	\$6,000	\$2,000.00		\$26,700	\$8,900	\$10,900
RE 15	Recyclable Materials	60	\$3,000	\$1,000.00				\$1,000
RE 16	Disaster Debris	120	\$6,000	\$2,000.00		\$0	\$0	\$2,000
CO 1	Universal Composting - Goal	24	\$1,200	\$400.00				\$400
CO 3	Food Scraps Digestion	16	\$800	\$266.67				\$267
CO 5	Universal Composting - Residential	120	\$6,000	\$2,000.00				\$2,000
CO 8	Compostable Serveware	24	\$1,200	\$400.00				\$400
GB1	Zero Waste Business Recognition	24	\$1,200	\$400.00				\$400
GB 2	Purchase Compost	24	\$1,200	\$400.00				\$400
GB 3	Recycled Product Innovation	160	\$8,000	\$2,666.67				\$2,667
PIP 7	Zero Waste Social Marketing	200	\$10,000	\$3,333.33	\$2,000			\$5,333
PIP 8	Zero Waste Media	120	\$6,000	\$2,000.00				\$2,000
PIP 9	Zero Waste Youth	80	\$4,000	\$1,333.33	\$2,200			\$3,533
WM 2 b	Alternatives for Multifamily Food Scraps	40	\$2,000	\$666.67				\$667
WM 2 c	Textile Collection Pilot	40	\$2,000	\$666.67				\$667
SW 2	New Countywide Policies, Programs, and Infrastructure	15	\$750	\$250.00				\$250
Total Hours		2952	\$147,600	\$49,200.00	\$26,250	\$28,200	\$9,400	\$84,850

PLANNING LEVEL COSTS CONTINUED

2025-2027								
Project	Name	Hours	Labor cost	Annual labor cost	Annual Outreach	Capital	Annualized capital	Total annual cost
RD 16	Legal Research	15	\$750	\$250				\$250
RU 2	Reuse Promotion	200	\$10,000	\$3,333	\$5,000			\$8,333
RU 5	In-Store Bargain Basements	120	\$6,000	\$2,000				\$2,000
RU 6	Ecology of Commerce	200	\$10,000	\$3,333				\$3,333
RU 9	Local Reuse Businesses	200	\$10,000	\$3,333				\$3,333
RU 18	Reusable Serve Ware at Events	50	\$2,500	\$833				\$833
RE 10	Retail Establishment Public Recycling Bins	200	\$10,000	\$3,333	\$250			\$3,583
RE 12	Hard-to-Recycle Center	200	\$10,000	\$3,333		To be determined		\$3,333
CO 6	Food Service Establishment Compost Bins	80	\$4,000	\$1,333	\$250			\$1,583
CO 7	Zero Waste Parks	200	\$10,000	\$3,333	\$100	\$2,000	\$500	\$3,933
CO 9	Pet Waste Diversion	200	\$10,000	\$3,333		\$5,000	\$1,250	\$4,583
CO 10	Universal Composting - Statewide	40	\$2,000	\$667				\$667
CO 11	In-County Compost Facility	40	\$2,000	\$667				\$667
PIP 6	Zero Waste Case Studies	120	\$6,000	\$2,000				\$2,000
PIP 11	"Dirty Dozen" Awareness Campaign	120	\$6,000	\$2,000				\$2,000
ACI/WM 4	Pre-Treatment at Landfill	40	\$2,000.00	\$667				\$667
SW 3	Research Projects	15	\$750.00	\$250				\$250
Total Hours		2040	\$102,000	\$25,500	\$5,600	\$7,000	\$1,750	\$41,350

PLANNING LEVEL COSTS CONTINUED

Project	Term	Name	Hours	Labor cost	Annual labor cost	Annual outreach	Capital	Annualized capital	Total annual cost	Possible Rate Impacts	Notes	Completed
RD 1	2019-2021	Zero Food Waste Hierarchy	8	\$400	\$133.33				\$133			Yes
RD 2	2019-2021	On-site composting	120	\$6,000	\$2,000.00	\$2,500	see annual	\$2,500	\$7,000			
RD 3	2019-2021	Voluntary Takebacks	80	\$4,000	\$1,333.33	\$12,500			\$13,833			
RD 4	2019-2021	Sustainable Product Design	50	\$2,500	\$833.33				\$833			
RD 7	2019-2021	Zero Waste Purchasing Guide	12	\$600	\$200.00	\$12,500			\$12,700			
RD 8	2019-2021	Purchasing cooperatives	160	\$8,000	\$2,666.67				\$2,667			
RD 9	2019-2021	Precautionary Principle	40	\$2,000	\$666.67				\$667			Yes
RD 10	2019-2021	Zero Waste Events	240	\$12,000	\$4,000.00	\$750	\$20,625	\$6,875	\$11,625			
RD 14	2019-2021	A&K First	15	\$750	\$250.00				\$250			
RU 1	2019-2021	Food Donation	240	\$12,000	\$4,000.00				\$4,000			
RU 7	2019-2021	Local Material Upgrade	40	\$2,000	\$666.67				\$667			
RU 8	2019-2021	Repair Workshops	120	\$6,000	\$2,000.00	\$3,000	\$1,000	\$333	\$5,333			Yes
RU 11	2019-2021	Flea Markets	24	\$1,200	\$400.00	\$2,000			\$2,400			
RU 12	2019-2021	Multi-Home Garage Sales	120	\$6,000	\$2,000.00	\$2,000			\$4,000			
RU 13	2019-2021	Clothing/Toy Swaps	120	\$6,000	\$2,000.00	\$2,000			\$4,000			
RE 1	2019-2021	Zero Waste Stars - Business	8	\$400	\$133.33	\$750			\$883			
RE 3	2019-2021	Universal Commercial Recycling	160	\$8,000	\$2,666.67	\$2,000			\$4,667	Yes		
RE 4	2019-2021	Sharing Recycling Carts & Bins	12	\$600	\$200.00				\$200			Yes
RE 11	same as RD 10	Zero Waste Events	0	\$0	\$0.00				\$0		RE 11 same as RD 10	Yes
RE 13	2019-2021	C&D Recycling Vouchers	4	\$200	\$66.67	\$250			\$317	Yes		Yes
RE 14	2019-2021	Zero Waste Stars - Government	96	\$4,800	\$1,600.00	\$250			\$1,850			Yes
CO 2	2019-2021	Sharing Compost Carts & Bins	16	\$800	\$266.67				\$267			Yes
CO 4	2019-2021	Universal Composting Commercial	200	\$10,000	\$3,333.33	\$2,000			\$5,333			
GB 4	2019-2021	Zero Waste Hierarchy	24	\$1,200	\$400.00				\$400			
PIP 1	2019-2021	Zero Waste Events - Goal	24	\$1,200	\$400.00				\$400			
PIP 2	2019-2021	Zero Waste Schools - Tenants	24	\$1,200	\$400.00				\$400			
PIP 3	2019-2021	Zero Waste Schools - Reuse	40	\$2,000	\$666.67				\$667			Yes
PIP 4	2019-2021	Zero Waste Outreach	96	\$4,800	\$1,600.00	\$2,000			\$3,600			Yes
PIP 5	2019-2021	Zero Waste Green Teams	100	\$5,000	\$1,666.67	\$2,250			\$3,917			
PIP 10	2019-2021	Zero Waste - Green Hearts	16	\$800	\$266.67	\$2,200			\$2,467			
PIP 12	2019-2021	Zero Waste Shift	8	\$400	\$133.33				\$133			Yes
ACJ/WM 1	2019-2021	Targets for Increased Diversion	24	\$1,200	\$400.00				\$400	Yes		
WM 2 a	2019-2021	Reduced Garbage Pilot	200	\$10,000	\$3,333.33				\$3,333	Yes		Yes
ACJ/WM 3	2019-2021	Zero Waste Contract Development	200	\$10,000	\$3,333.33				\$3,333	Yes		
WM 5	2019-2021	CY/San as Hauler	200	\$10,000	\$3,333.33				\$3,333	Yes		Yes
SW 1	2019-2021	Support for Model Programs										
Total Hours			2841	\$142,050	\$47,350.00	\$48,950	\$21,625	\$9,708	\$106,008			

PLANNING LEVEL COSTS CONTINUED

Project	Term	Name	Hours	Labor cost	Annual labor cost	Annual outreach	Capital	Annualized capital	Total annual cost	Possible Rate Impacts	Notes	Completed
RD 3	2022-2024	Voluntary Takebacks	160	\$8,000	\$2,666.67				\$2,667			
RD 5	2022-2024	Reusable Diapers	40	\$2,000	\$666.67	\$500			\$1,167			
RD 6	2022-2024	Museum of Bad Design Displays	200	\$10,000	\$3,333.33		\$1,500	\$500	\$3,833			Yes
RD 11	2022-2024	Paperless Office	40	\$2,000	\$666.67				\$667			Yes
RD 12	2022-2024	Reduce Wasted Food	60	\$3,000	\$1,000.00				\$1,000			
RD 13	2022-2024	Go Paperless	60	\$3,000	\$1,000.00				\$1,000			
RD 15	2022-2024	Commercial Waste Prevention	120	\$6,000	\$2,000.00				\$2,000			
RU 3	2022-2024	HHW Product Reuse	160	\$8,000	\$2,666.67				\$2,667			
RU 4	2022-2024	Deconstruction	40	\$2,000	\$666.67	\$12,500			\$13,167			Yes
RU 10	2022-2024	Reuse Collaboratives	200	\$10,000	\$3,333.33	\$3,750			\$7,083			
RU 14	2022-2024	Promote Reusable Cleaning Supplies	60	\$3,000	\$1,000.00				\$1,000			
RU 15	2022-2024	Promote Reusables at Schools	60	\$3,000	\$1,000.00				\$1,000			
RU 16	2022-2024	Promote Holiday Decoration Services	40	\$2,000	\$666.67				\$667			
RU 17	2022-2024	Tool Lending	40	\$2,000	\$666.67				\$667			
RE 2	2022-2024	Zero Waste Stars - Schools	40	\$2,000	\$666.67	\$800			\$1,467			
RE 5	2022-2024	Bottle & Can Redemption Centers	160	\$8,000	\$2,666.67				\$2,667			
RE 6	2022-2024	Zero Waste Stars - Multi-family	160	\$8,000	\$2,666.67	\$4,500			\$7,167			
RE 7	2022-2024	Expand Residential Recycling	60	\$3,000	\$1,000.00				\$1,000			
RE 8	2022-2024	Universal Residential Recycling	80	\$4,000	\$1,333.33				\$1,333			
RE 9	2022-2024	Public Area Recycling	120	\$6,000	\$2,000.00		\$26,700	\$8,900	\$10,900			
RE 15	2022-2024	Recyclable Materials	60	\$3,000	\$1,000.00				\$1,000			
RE 16	2022-2024	Disaster Debris	120	\$6,000	\$2,000.00		\$0	\$0	\$2,000			
CO 1	2022-2024	Universal Composting - Goal	24	\$1,200	\$400.00				\$400			
CO 3	2022-2024	Food Scraps Digestion	16	\$800	\$266.67				\$267			
CO 5	2022-2024	Universal Composting - Residential	120	\$6,000	\$2,000.00				\$2,000			
CO 8	2022-2024	Compostable Serviceware	24	\$1,200	\$400.00				\$400			
GB 1	2022-2024	Zero Waste Business Recognition	24	\$1,200	\$400.00				\$400			
GB 2	2022-2024	Purchase Compost	24	\$1,200	\$400.00				\$400			
GB 3	2022-2024	Recycled Product Innovation	160	\$8,000	\$2,666.67				\$2,667			
PIP 7	2022-2024	Zero Waste Social Marketing	200	\$10,000	\$3,333.33	\$2,000			\$5,333			
PIP 8	2022-2024	Zero Waste Media	120	\$6,000	\$2,000.00				\$2,000			
PIP 9	2022-2024	Zero Waste Youth	80	\$4,000	\$1,333.33	\$2,200			\$3,533			
WM 2 b	2022-2024	Alternatives for Multifamily Food Scraps	40	\$2,000	\$666.67				\$667	Yes		Yes
WM 2 c	2022-2024	Textile Collection Pilot	40	\$2,000	\$666.67				\$667	Yes		Yes
SW 2	2022-2024	New Countywide Policies, Programs, and Infrastructure										
Total Hours			2952	\$147,600	\$49,200.00	\$26,250	\$28,200	\$9,400	\$84,850			

PLANNING LEVEL COSTS CONTINUED

New programs, such as every-other-week garbage collection, could reduce costs to rate-payers. However, implementing additional Zero Waste programs could increase costs that would need to be addressed through increasing the Assembly Bill 939 fee, obtaining additional grant funding, or identifying additional sources of revenue. Based on the annual cost estimates for the short, medium and long-term programs and assuming that all of these new costs would be borne by the CVSan rate payers, the potential cumulative rate impact is estimated to be \$1.17 per CVSan customer per month.

Estimated Cost per CVSan Customer per Month			
Short-term Programs	Medium-Term Programs	Long-Term Programs	Cumulative Rate Impact
\$0.57	\$0.46	\$0.17	\$1.20

Actual costs will be determined based on further research and feasibility studies. CVSan will consider future program implementations costs during its annual budget cycle.

CVSAN GREEN HEARTS CASE STUDY

The CVSan Green Hearts Team is for members of the Castro Valley community who are looking for a great way to give back to the environment and Castro Valley. Green Hearts Team volunteers wear their hearts on their sleeve with the goal to help others compost, recycle, and beautify Castro Valley all year round. Green Hearts volunteer opportunities cover a range of activities and ways to contribute. Since its inception in August of 2013 volunteers have helped with: assembling food scrap pails, depackaging items for giveaways, educating event attendees on where to sort their materials, harvesting extra fruit for those in need through CVSan’s annual Zero Waste Week Gleaning Event, and more.

Over 30 volunteers participated in CVSan’s 2019 Zero Waste Week Gleaning event (one group from the event is shown in the top image on the right). During the two hour event we were able to save almost 2,000 pounds of oranges, tangerines, grapefruit, and lemons. With the bountiful haul of produce (shown on the bottom right image), CVSan donated it all to Castro Valley food pantries to feed those in need in the community.



CVSan hopes to keep expanding the young Green Hearts program to include some of the following activities: clean-up assistance, food scrap recycling, visual audits, clerical assistance, CVSan social media promotion, and more!

5.2 ACTIONS STEPS FOR 5, 10, AND 20 YEAR GOALS: GOALS

The following tables summarize the policies and programs that would be implemented by CVSsan over the next 10 years, including short-term (1-3 years), medium-term (3-7 years), and long-term (7-10 year) priorities. The initiatives are categorized based on the timing of implementation (short-term, medium-term, and long-term) and listed as Reduce Options (RD), Reuse Options (RU), Recycling Options (RE), Composting Options (CO), Green Business Options (GB), and Public Information & Participation Options (PIP).

2019-2021	2022-2024	2025-2027
Short-Term Initiatives	Medium-Term Initiatives	Long-Term Initiatives
<p>RD 1. ZERO FOOD WASTE HIERARCHY Adopt the hierarchy for food scraps that prioritizes the use of discarded food scraps.</p>		
<p>RD 2. ON-SITE COMPOSTING Encourage and provide incentives for on-site, backyard and neighborhood composting.</p>	<p>RD 3. VOLUNTARY TAKEBACKS Encourage businesses and institutions to take back designate products and packaging they sell and are sold by others in the area (especially items that are toxic in their manufacture, use, or disposal, and/or are not currently reusable, recyclable or compostable locally).</p>	
<p>RD 3. VOLUNTARY TAKEBACKS Encourage businesses and institutions to take back designated products and packaging they sell and are sold by others in area.</p>	<p>RD 5. REUSABLE DIAPERS Reduce disposable diapers by promoting reusable and compostable alternatives and create incentives for such services.</p>	
<p>RD 4. SUSTAINABLE PRODUCT DESIGN Be a strong advocate for product policy legislation and programs regionally, statewide and nationally, particularly to drive improvements in product design that are environmentally sustainable.</p>	<p>RD 6. MUSEUM OF BAD DESIGN DISPLAYS Develop Museum of Bad Design displays with StopWaste and California State University, East Bay to identify opportunities to redesign products and packaging to reduce wasteful practices working with industry leaders.</p>	
<p>RD 7. ZERO WASTE PURCHASING GUIDE Develop model purchasing guide/policy for schools and businesses.</p>	<p>RD 11. PAPERLESS OFFICES Promote "paperless offices" at CVSsan and at home, schools and businesses.</p>	
<p>RD 8. PURCHASING COOPERATIVES Identify opportunities for countywide purchasing cooperatives or recyclable or compostable serve ware (or other items that may be more expensive than the hard to recycle items).</p>	<p>RD 12. REDUCE WASTED FOOD Identify opportunities to promote and educate about preventing wasted food at home, school, and work.</p>	

GOALS CONTINUED:

2019-2021	2022-2024	2025-2027
<p>Short-Term Initiatives</p>	<p>Medium-Term Initiatives</p>	<p>Long-Term Initiatives</p>
<p>RD 9. PRECAUTIONARY PRINCIPLE Review impacts of a “precautionary principle” for CVSsan actions/purchases and consider adoption at the County level to reduce volume and toxicity of products purchased.</p>	<p>RD 13. GO PAPERLESS Identify opportunities to promote and educate the community about paper reduction through electronic alternatives to print material.</p>	
<p>RD 10. ZERO WASTE EVENTS Provide technical assistance to public and private venues and events to achieve Zero Waste.</p>	<p>RD 15. COMMERCIAL WASTE PREVENTION Encourage an awareness locally about package-free business models (e.g. European food markets). Help establish businesses that aim for Zero Waste.</p>	
<p>RD 14. ASK FIRST Referencing State Straws Upon Request law; encourage and support the adoption of an “Ask First” ordinance for Unincorporated Alameda County and/or CVSsan’s food service establishments to reduce waste from single-use serve ware and utensils.</p>	<p>RU 3. HOUSEHOLD HAZARDOUS PRODUCT REUSE Explore and encourage the existing Alameda Countywide free swap program (“swap lockers”) for household hazardous products that enables the community to share these goods at no cost.</p>	
<p>RU 1. FOOD DONATION Encourage and support food donation programs.</p>	<p>RU 4. DECONSTRUCTION Promote deconstruction services and used building materials stores.</p>	
<p>RU 7. LOCAL MATERIAL UPGRADE Facilitate development of a network of repair and refurbishing businesses or nonprofits to upgrade materials and products that are collected through large-scale reuse programs to attain a higher price in retail activities. Support nonprofits applying for grants.</p>	<p>RU 10. REUSE COLLABORATIVES Help form a Reuse Collaborative with businesses and nonprofits throughout the region to help in marketing products collected through reuse networks, and to help develop the above services.</p>	
<p>RU 8. REPAIR WORKSHOPS Sponsor quarterly repair workshops (Repair Café and iFixit models).</p>	<p>RU 14. PROMOTE REUSABLE CLEANING SUPPLIES Encourage the use of reusable cleaning supplies and tools at home or at work.</p>	
<p>RU 11. FLEA MARKETS Promote flea markets, which promotes the sale of reusable items.</p>	<p>RU 15. PROMOTE REUSABLES AT SCHOOLS Encourage the use and sharing of reusables at schools in Castro Valley.</p>	

GOALS CONTINUED:

2019-2021 Short-Term Initiatives	2022-2024 Medium-Term Initiatives	2025-2027 Long-Term Initiatives
<p>RU 12. MULTI-HOME GARAGE SALES Promote the organization of multi-home or multi-family garage sales.</p>	<p>RU 16. PROMOTE HOLIDAY DECORATION SERVICES Encourage the use of holiday decoration services that reuse decorations and rent them out every year.</p>	
<p>RU 13. CLOTHING/TOY SWAPS Promote the organization of children's clothing and toy swaps. Facilitate deat/shinguard/supplies/belts reuse at sports tryouts and leagues.</p>	<p>RU 17. TOOL LENDING Encourage the practice of tool lending in Castro Valley.</p>	
<p>RE 1. ZERO WASTE STARS - BUSINESS Expand 4R Stars program to include Zero Waste business designation.</p>	<p>RE 2. ZERO WASTE STARS - SCHOOLS Expand Green Ribbon Schools Program to include Zero Waste school designation.</p>	
<p>RE 3. UNIVERSAL COMMERCIAL RECYCLING Expand recycling service to 100% of all commercial establishments.</p>	<p>RE 5. BOTTLE & CAN REDEMPTION CENTERS Ensure that all CRV bottle and can redemption zones have service (work with grocery stores to provide reverse vending machine or other service).</p>	
<p>RE 4. SHARING RECYCLING CARTS & BINS Encourage sharing of recyclable carts by multiple businesses and multi-family dwellings that have space constraints.</p>	<p>RE 6. ZERO WASTE STARS - MULTI-FAMILY Provide technical assistance and waste audits to all multifamily complexes and develop companion program to 4R Stars program.</p>	
<p>RE 11. ZERO WASTE EVENTS Facilitate Zero Waste programs/strategies at all appropriate public events.</p>	<p>RE 7. EXPAND RESIDENTIAL RECYCLING Improve single family and multifamily residential recycling and include more items in the recycling program.</p>	
<p>RE 13. C&D RECYCLING VOUCHERS Explore continuation of distributing C&D vouchers at special events for recycling C&D at Davis Street.</p>	<p>RE 8. UNIVERSAL RESIDENTIAL RECYCLING Ensure that all single-family residential generators are fully participating in recycling program (no recyclables in the trash) (similar to StopWaste mandatory ordinance for commercial and multifamily generators).</p>	<p>RD 16. LEGAL RESEARCH Explore purpose and possible support of lawsuit for jurisdictions against companies that produce single-plastic packaging – public nuisance, unfair business competition, design effect, misrepresentation, and failure to warn.</p>

GOALS CONTINUED:

2019-2021	2022-2024	2025-2027
Short-Term Initiatives	Medium-Term Initiatives	Long-Term Initiatives
<p>RE 14. ZERO WASTE STARS - GOVERNMENT Continue to provide technical assistance to government operations and encourage Zero Waste strategies.</p>	<p>RE 9. PUBLIC AREA RECYCLING Provide recycling pyramids at all 89 public garbage bin ("street can") locations.</p>	<p>RU 2. REUSE PROMOTION Promote reuse and repair for residents and businesses with a web-based directory, other internet services (eBay, Craigslist and FreeCycle.org), utility bill insert-cooperative advertisements. Investigate the comm equivalent to FreeCycle.org or materials exchange as LA Shares.</p>
<p>CO 2. SHARING COMPOST CARTS & BINS Encourage sharing of compostable carts or bins by multiple businesses and multi-family dwellings that have space constraints.</p>	<p>RE 15. RECYCLABLE MATERIALS Educate and support the community to improve the quality of recyclable materials collected by "cleaning those blue bin materials right."</p>	<p>RU 5. IN-STORE BARGAIN BASEMENTS Encourage major retailers of clothing in the area to establish "Bargain Basement" sections of their store where premium used clothes could be sold that would be supplied by existing thrift stores.</p>
<p>CO 4. UNIVERSAL COMPOSTING - COMMERCIAL Expand organics collection service to 100% of all commercial establishments and multifamily complexes.</p>	<p>RE 16. DISASTER DEBRIS Develop comprehensive Disaster Debris Management Plan in coordination with CVSan's Franchised Collector and Processor.</p>	<p>RU 6. ECOLOGY OF COMMERCE Encourage an "ecology of commerce" for promotional sale of reusable items in the area.</p>
<p>GB 4. ZERO WASTE HIERARCHY Consider the Zero Waste Hierarchy of Highest and Best Use when evaluating material recovery technology proposals that come to CVSan.</p>	<p>CO 1. UNIVERSAL COMPOSTING - GOAL Adopt a goal to phase out compostable organics going to landfill by 2020.</p>	<p>RU 9. LOCAL REUSE BUSINESSES Encourage the concept of a reuse warehouse or pop store that could be leased out on a spot basis to reuse businesses and nonprofits as needed to help in the ups and downs of market conditions.</p>
<p>PIP 1. ZERO WASTE EVENTS - GOAL Support adoption of Zero Waste goal for venues and special events in Castro Valley that require Alameda County permits (such as the Rowell Ranch Rodeo Parade) and use incentives and technical assistance to help them implement goals.</p>	<p>CO 3. FOOD SCRAPS DIGESTION Explore anaerobic digestion of food scraps from residents, businesses, and institutions.</p>	<p>RU 18. REUSABLE SERVEWARE AT EVENTS Promote reusable dishes, utensils, beverage containers, on-site washing stations i.e. Sudbusters and/or collection of reusables by vendor for washing off-site.</p>
<p>PIP 2. ZERO WASTE SCHOOLS - TENANTS Support CVUSD to develop new rules for school district tenants (sports teams, after school programs, scouts) to ensure participation in CVUSD recycling and composting programs.</p>	<p>CO 5. UNIVERSAL COMPOSTING Ensure that all single-family residential generators are fully participating in the composting program (no organics in the trash) (similar to StopWaste mandatory ordinance for commercial and multifamily generators).</p>	<p>RE 10. RETAIL ESTABLISHMENT PUBLIC RECYCLING BINS Require all establishments that sell single-use beverages to provide recycling bins.</p>

GOALS CONTINUED:

2019-2021	2022-2024	2025-2027
Short-Term Initiatives	Medium-Term Initiatives	Long-Term Initiatives
<p>PIP 3. ZERO WASTE SCHOOLS - REUSE Encourage CVUSD to store unwanted office and school supplies accessible by teachers and staff.</p>	<p>CO 8. COMPOSTABLE SERVICEWARE Create and publish a list of serviceware products that will compost (not "compostable plastic"), with vendor lists.</p>	<p>RE 12. HARD-TO-RECYCLE CENTER Explore development of a Hard-to-Recycle Center to accept specified hard-to-recycle materials and reusable items dropped off from residents and businesses.</p>
<p>PIP 4. ZERO WASTE OUTREACH Continue programs on an on-going basis to educate residents, businesses and visitors about how and where to reduce, reuse and recycle.</p>	<p>GB 1. ZERO WASTE BUSINESS RECOGNITION Help businesses that adopt and implement Zero Waste goals to be recognized through national certification programs (such as U.S. Zero Waste Business Council).</p>	<p>CO 6. FOOD SERVICE ESTABLISHMENT PUBLIC COMPOST BINS Provide organics bins wherever food is served in public locations.</p>
<p>PIP 5. ZERO WASTE GREEN TEAMS Support the formation of Green Teams (Chamber of Commerce, Property Managers, faith community, School District level) and encourage them to work with their networks to pursue Zero Waste.</p>	<p>GB 2. PURCHASE COMPOST Work with CalTrans Regional Office and local governments throughout the County to use more recycled and compost products on road and construction projects in the area.</p>	<p>CO 7. ZERO WASTE PARKS Convert a whole Park (such as Lake Chabot or Cull Canyon) or Venue (such as Willow Park) into a Zero Waste Venue complete with onsite composting and convenient recycling containers.</p>
<p>PIP 10. ZERO WASTE – GREEN HEARTS Expand/Promote Green Heart Program to higher levels to create Zero Waste culture change and volunteer support for CVSan initiatives.</p>	<p>GB 3. RECYCLED PRODUCT INNOVATION Encourage and support businesses to develop innovative recycled products.</p>	<p>CO 9. PET WASTE DIVERSION Pilot program for dog park manures using a small or composter or anaerobic digester.</p>
<p>PIP 12. ZERO WASTE SHIFT Promote discarded materials as resources. Consider renaming Solid Waste Department to Zero Waste Department, referencing "Garbage vehicles" as "Recycling vehicles" (with garbage as the residual).</p>	<p>PIP 7. ZERO WASTE SOCIAL MARKETING Develop a social marketing program to find the best means to encourage people to use public recycling bins.</p>	<p>CO 10. UNIVERSAL COMPOSTING - STATEWIDE Support California Air Resources Board adoption of 32 Scoping Plan recommendations to ban organics from landfills.</p>
<p>ACI/WM 1. TARGETS FOR INCREASING DIVERSION. Current ACI diversion rate is 51% (minimum contractual requirement is 40% for residential and commercial materials, 50% for construction and demolition materials and 90% for asphalt and concrete). CVSan and ACI can establish non-binding targets to match CVSan's goals of 80% by 2024 and 90% by 2029.</p>	<p>PIP 8. ZERO WASTE MEDIA Provide information to Radio, TV, on-line and print media outlets for reports to the community on where collected materials go and what is happening to them (including the number of businesses and jobs involved).</p>	<p>CO 11. IN-COUNTY COMPOSTING FACILITY Support research and development of an in-County composting facility.</p>

GOALS CONTINUED:

2019-2021	2022-2024	2025-2027
<p>Short-Term Initiatives</p>	<p>Medium-Term Initiatives</p>	<p>Long-Term Initiatives</p>
<p>WM 2a. REDUCED GARBAGE PILOT CVSan and WMAC can work together to implement pilot programs, including: Every other week garbage collection pilot program (garbage collected every other week, recycling and organics collected every week) and/or reduced garbage service.</p>	<p>PIP 9. ZERO WASTE YOUTH Support the formation of Zero Waste Youth Castro Valley.</p>	<p>PIP 6. ZERO WASTE CASE STUDIES Develop case studies of model programs and promote best practices.</p>
<p>ACI/WM 3. SUPPORT ZERO WASTE CONTRACT DEVELOPMENT. WMAC can share insights on strategies to transform the current collection infrastructure and work with CVSan to develop a model franchise agreement and compensation mechanism for Zero Waste.</p>	<p>WM 2b. ALTERNATIVES FOR MULTIFAMILY FOOD SCRAPS CVSan and WMAC can work together to implement pilot programs, including: Alternative collection programs for multi-family food scraps (to address space constraints/logistics).</p>	<p>PIP 11. "DIRTY DOZEN" AWARENESS CAMPAIGN Develop an awareness campaign identifying problem products (such as disposable diapers and other single use items or hard-to-recycle materials) and promote alternatives.</p>
<p>WM 5. CVSAN AS HAULER Conduct a feasibility study and economic analysis if CVSan were to provide collection services to CVSan customers.</p>	<p>WM 2c. TEXTILE COLLECTION PILOT CVSan and WMAC can work together to implement pilot programs, including: Pilot to collect clean, bagged textiles (including rags and non-reusable items) in the residential recycling collection program (perhaps once a month or as part of cleanup programs).</p>	<p>ACI/WM 4. PRE-TREATMENT AT LANDFILL. CVSan can work with WMAC to develop a biological treatment process at the Altamont Landfill to pre-treat mixed waste before landfilling to stabilize the organic fraction as a cost of landfill operation.</p>
<p>SW 1. SUPPORT FOR MODEL PROGRAMS CVSan has developed model programs for Countywide implementation.</p>	<p>SW 2. NEW COUNTYWIDE POLICIES, PROGRAMS AND INFRASTRUCTURE CVSan's "service voids analysis" identified some initiatives that would be best suited for Countywide implementation.</p>	<p>SW 3. RESEARCH PROJECTS StopWaste is best-suited for conducting research projects that benefit the County as a whole.</p>

ZERO WASTE STRATEGIC PLAN TIMELINE (CORRESPONDING TO ZERO WASTE STRATEGY OPTIONS)

Short to Medium-Term Initiatives

RD 3. VOLUNTARY TAKEBACKS

Encourage businesses and institutions to take back designated products and packaging they sell and are sold by others

RD 4. SUSTAINABLE PRODUCT DESIGN

Be a strong advocate for product policy legislation and programs regionally, statewide and nationally, particularly to drive improvements in product design that are environmentally sustainable

RD 8. PURCHASING COOPERATIVES

Identify opportunities for countywide purchasing cooperatives for recyclable or compostable serviceware

RU 1. FOOD DONATION

Encourage and support food donation programs

RU 7. LOCAL MATERIAL UPGRADE

Facilitate development of a network of repair and refurbishing businesses or nonprofits to upgrade materials and products that are collected through large-scale reuse programs to attain a higher price in retail activities

RU 12. MULTI-HOME GARAGE SALES

Promote the organization of multi-home or multifamily garage sales

RU 13. CLOTHING/TOY SWAPS

Promote the organization of children's clothing and toy swaps

GB 4. ZERO WASTE HIERARCHY

Consider the Zero Waste Hierarchy of Highest and Best Use when evaluating material recovery technology proposals that come to CVSan

PIP 1. ZERO WASTE EVENTS - GOAL

Support adoption of Zero Waste goal for venues and special events in Castro Valley that require Alameda County permits (such as the Rowell Ranch Rodeo Parade) and use incentives and technical assistance to help them implement goals

PIP 2. ZERO WASTE SCHOOLS - TENANTS

Support CVUSD to develop new rules for school district tenants (sports teams, after school programs, scouts) to ensure participation in CVUSD recycling and composting programs

ZERO WASTE STRATEGIC PLAN TIMELINE (CORRESPONDING TO ZERO WASTE STRATEGY OPTIONS)

Medium to Long-Term Initiatives

RU 10. REUSE COLLABORATIVES

Help form a Reuse Collaborative with businesses and nonprofits throughout the region to help in marketing products collected through reuse networks

RE 8. UNIVERSAL RESIDENTIAL RECYCLING

Ensure that all single-family residential generators are fully participating in the recycling program (no recyclables in the trash) (similar to StopWaste mandatory ordinance for commercial and multifamily generators)

CO 3. FOOD SCRAPS DIGESTION

Explore anaerobic digestion of food scraps from residents, businesses, and institutions

CO 5. UNIVERSAL COMPOSTING - RESIDENTIAL

Ensure that all single-family residential generators are fully participating in the composting program (no organics in the trash) (similar to StopWaste mandatory ordinance for commercial and multifamily generators)

GB 2. PURCHASE COMPOST

Work with CalTrans Regional Office and local governments throughout the County to use more recycled and compost products on road and construction projects in the area

GB 3. RECYCLED PRODUCT INNOVATION

Encourage and support businesses to develop innovative recycled products

PIP 8. ZERO WASTE MEDIA

Provide information to Radio, TV, on-line and print media outlets for reports to the community on where collected materials go and what is happening to them (including the number of businesses and jobs involved)

On-Going Initiatives

RU 2. REUSE PROMOTION

Promote reuse and repair for residents and businesses with a web-based directory, other internet services, utility bill inserts, and cooperative advertisements. Investigate the commercial equivalent to FreeCycle.org or materials exchange such as LA Shares.

RU 9. LOCAL REUSE BUSINESSES

Encourage the concept of a reuse warehouse or pop-up stores that could be leased out on a spot basis to reuse businesses and nonprofits as needed to help in the ups and downs of market conditions

PIP 6. ZERO WASTE CASE STUDIES

Develop case studies of model programs and promote best practices

ATTACHMENTS



ATTACHMENT 1. MATRIX OF ZERO WASTE INITIATIVES

Customer Service Compliance Rates Performance Partnerships Infrastructure CVSan StopWaste Alameda County	Word Doc Order	Project	PID	SubPID	Combo	Option
•	1	ZERO FOOD WASTE HIERARCHY	RD 01	-	RD 01	Adopt the hierarchy for food scraps that prioritizes the use of discarded food scraps as follows: Prevent wasted food Feed people Convert to animal feed Rendering (convert into new non-feed products) Compost or anaerobic digestion
	2		RD 01	a	RD 01 a	
	3		RD 01	b	RD 01 b	
	4		RD 01	c	RD 01 c	
	5		RD 01	d	RD 01 d	
	6		RD 01	e	RD 01 e	
•	7	ON-SITE COMPOSTING	RD 02	-	RD 02	Encourage and provide incentives for on-site, backyard and neighborhood composting, particularly at homes, schools, businesses and institutions with sufficient space: Workshops at nurseries and parks Free or discounted composting bins and worm bins Master gardener program
	8		RD 02	a	RD 02 a	
	9		RD 02	b	RD 02 b	
	10		RD 02	c	RD 02 c	
	11	VOLUNTARY TAKEBACKS	RD 03	-	RD 03	Encourage businesses and institutions to take back designated products and packaging they sell and are sold by others in area (especially items that are toxic in their manufacture, use, or disposal), and/or are not currently reusable, recyclable or compostable locally)
	12		RD 03		RD 03 a	Prepare and promote list of local businesses and nonprofits willing to take back products and packaging that are otherwise difficult to reuse, recycle or compost locally (examples: dry cleaner hangers, reusable packing materials - foam peanuts, bubble wrap)
	13		RD 03	a		
	14		RD 03	b	RD 03 b	Support local businesses to charge deposits (like reusable milk bottles) to get back targeted reusable products Promote pilot for reusable to-go containers (Go Box model for reusable to-go containers, reusable boxes for takeout orders instead of plastic or paper bags)
	15		RD 03	b1	RD 03 b1	
	16		RD 03	b2	RD 03 b2	Deposits on voluntary take back items (such as dry cleaner hangers)
	17		RD 03	b3	RD 03 b3	Promote use of reusable dry cleaner bags (Green Garmento model)
•	18	SUSTAINABLE PRODUCT DESIGN	RD 04	-	RD 04	Be a strong advocate for product policy legislation and programs regionally, statewide and nationally, particularly to drive improvements in product design that are environmentally sustainable Promote businesses and products that demonstrate sustainable design features Ask public to contribute suggestions to Museum of Bad Design (RD 6 below) displays Support advocacy organizations (such as California Product Stewardship Council and Californians Against Waste) Encourage public support for legislation (State bills, County ordinances) End sauce and topping composite packaging
	19		RD 04	a	RD 04 a	
	20		RD 04	b	RD 04 b	
	21		RD 04	c	RD 04 c	
	22		RD 04	d	RD 04 d	
	23		RD 04	e	RD 04 e	
•	24	REUSABLE DIAPERS	RD 05	-	RD 05	Reduce disposable diapers by promoting reusable and compostable alternatives and create incentives for such services Consider entering into partnerships with local service providers and deliver information to new parents on the benefits of reusable and compostable diapers Work with service providers to provide coupons for diaper service (reusable or compostable) to all new parents via Eden Medical Center, birth centers and medical offices Encourage day care centers and pre-schools to switch to reusable diapers and help them identify cost savings through garbage reduction Outreach to parenting groups i.e. Castro Valley Mother's Club, and other appropriate activity centers
	25		RD 05	a	RD 05 a	
	26		RD 05	b	RD 05 b	
	27		RD 05	c	RD 05 c	
	28		RD 05	d	RD 05 d	
•	29	MUSEUM OF BAD DESIGN DISPLAYS	RD 06	-	RD 06	Develop Museum of Bad Design displays with StopWaste and California State University, East Bay to identify opportunities to redesign products and packaging to reduce wasteful practices working with industry leaders. Display nominations for products to target at Castro Valley Library, CVSan offices, and Eden Medical Center.

PID	SubPID	Implementation	Hours	Labor cost	Annual labor cost	Annual outreach	Capital	Annualized capital	Total annual cost	Possible Rate Impacts
RD 01	-	Short	8	\$400	\$133	\$0	\$0	\$0	\$133	0
RD 01	a									
RD 01	b									
RD 01	c									
RD 01	d									
RD 01	e									
RD 02	-	Short	120	\$6,000	\$2,000	\$2,500	see annual	\$2,500	\$7,000	0
RD 02	a									
RD 02	b									
RD 02	c									
RD 02	-									
RD 03	-	Short	80	\$4,000	\$1,333.33	\$12,500	\$0	\$0	\$13,833	0
RD 03										
RD 03	a									
RD 03	b									
RD 03										
RD 03	b1									
RD 03	b2									
RD 03	b3									
RD 04	-	Short	50	\$2,500	\$833	\$0	\$0	\$0	\$833	0
RD 04	a									
RD 04	b									
RD 04	c									
RD 04	d									
RD 04	e									
RD 05	-	Medium	40	\$2,000	\$667	\$500	\$0	\$0	\$1,167	
RD 05	a									
RD 05	b									
RD 05	c									
RD 05	d									
RD 06	-	Medium	200	\$10,000	\$3,333	\$0	\$1,500	\$500	\$3,833	0

Customer Service Compliance Rates Performance Partnerships Infrastructure CVSan StopWaste Alameda County	Word Doc Order	Project	PID	SubPID	Combo	Option
	29	ZERO WASTE PURCHASING GUIDE	RD 07	-	RD 07	Develop model purchasing guide/policy for schools and businesses
	30		RD 07	a	RD 07 a	Fork dispensers instead of individually wrapped forks
	31		RD 07	b	RD 07 b	Recycled content office paper
	32		RD 07	c	RD 07 c	Compostable plant debris bags
	33	PURCHASING COOPERATIVES	RD 08	-	RD 08	Identify opportunities for countywide purchasing cooperatives for recyclable or compostable serveware (or other items that may be more expensive than the hard to recycle items) Review impacts of a "precautionary principle" for CVSan actions/purchases and consider adoption at the County level to reduce volume and toxicity of products purchased. The precautionary principle or precautionary approach states that if an action or policy has a suspected risk of causing harm to the public or to the environment, in the absence of scientific consensus that the action or policy is harmful, the burden of proof that it is not harmful falls on those taking an action. In San Francisco, the precautionary principle ordinance affects City purchases and the City has developed a "San Francisco Preferred" list of less toxic/more recyclable products for its own purchases and to share with the public
	34	PRECAUTIONARY PRINCIPLE	RD 09	-	RD 09	Provide technical assistance to public and private venues and events to achieve Zero Waste
	35	ZERO WASTE VENUES AND EVENTS	RD 10	-	RD 10	Support organizers of public events (such as the Fall Festival) to provide reusable and recyclable displays and promotional materials
	36		RD 10	a	RD 10 a	

PID	SubPID	Implementation	Hours	Labor cost	Annual labor cost	Annual outreach	Capital	Annualized capital	Total annual cost	Possible Rate Impacts
RD 07	-	Short	12	\$600	\$200	\$12,500	\$0	\$0	\$12,700	0
RD 07	a									
RD 07	b									
RD 07	c									
RD 08	-	Short	160	\$8,000	\$2,667	\$0	\$0	\$0	\$2,667	0
RD 09	-	Short	40	\$2,000	\$667	\$0	\$0	\$0	\$667	0
RD 10	-	Short	240	\$12,000	\$4,000	\$750	\$20,625	\$6,875	\$11,625	0
RD 10	a									

Customer Service Compliance Rates Performance Partnerships Infrastructure CVSan StopWaste Alameda County	Word Doc Order	Project	PID	SubPID	Combo	Option
	37		RD 10	b	RD 10 b	Support venues (such as those at HARD and EBRPD) to provide information to their tenants and renters to achieve Zero Waste at special events
	38		RD 10	c	RD 10 c	Support local sports leagues to promote waste-free snacks
	39		RD 10	d	RD 10 d	Support the installation of public water bottle refill stations and assist in applying for grants for stations where applicable
	40		RD 10	e	RD 10 e	Recommend to event organizers that event vendors recognize and acknowledge that they will comply with zero waste practices (90%+ of what they're serving is complying)
	41		RD 10	f	RD 10 f	Require ACL provide station monitoring and event greening assistance for two major events in CVSan per year
	42		RD 10	g	RD 10 g	Recommend events hire waste sorting staff or secure volunteers that utilize material grabbers to pull contaminants and place them in the correct containers during events
•	43	PAPERLESS OFFICES	RD 11	-	RD 11	Promote "paperless offices" at CVSan and at home, schools and businesses
•	44		RD 11	a	RD 11 a	Encourage paper reduction through on-line publications
•	45		RD 11	b	RD 11 b	Promote "Don't print when you don't need to print."
	46	REDUCE WASTED FOOD	RD 12	-	RD 12	Identify opportunities to promote and educate about preventing wasted food at home, school, and work
	47		RD 12	a	RD 12 a	Partner on a cooking workshop at CV Marketplace to educate the community on tips and strategies to prevent wasted food while cooking at home
	48		RD 12	b	RD 12 b	Partner with Castro Valley Unified School District on food sharing and food rescue of school meals
	49	GO PAPERLESS	RD 13	-	RD 13	Identify opportunities to promote and educate the community about paper reduction through electronic alternatives to print material
	50		RD 13	a	RD 13 a	Promote the reduction of magazine subscriptions via free offerings through the Castro Valley Library
	51		RD 13	b	RD 13 b	Promote the "Stop Catalogs" campaign to connect the community on ways to receive less mail
	52	ASK FIRST	RD 14	-	RD 14	Referencing State Straws Upon Request law, encourage and support the adoption of an "Ask First" ordinance for Unincorporated Alameda County and/or CVSan's food service establishments to reduce waste from single-use serve ware and utensils
	53		RD 14	a	RD 14 a	Support an Unincorporated Alameda County and/or CVSan-wide "Ask First" ordinance - utensils, stirrers, etc.
	54		RD 14	b	RD 14 b	Encourage individual food service establishments to enact an "Ask First" policy - utensils, stirrer, etc.
	55	COMMERCIAL WASTE PREVENTION	RD 15	-	RD 15	Encourage an awareness locally about package-free business models (e.g. European food markets). Help establish businesses that aim for Zero Waste.
	56		RD 15	a	RD 15 a	Support the development of a bulk-bin-focused and/or packaging-free store
	57		RD 15	b	RD 15 b	Support waste reducing sales and stocking strategies. 1. No "Buy One Get One Free" deals. 2. Discount for products approaching expiration date discount. 3. Shelf talkers or point-of-sale marketing and education. 4. On-site workshops or cooking classes on preventing wasted food.
	58	LEGAL RESEARCH	RD 16	-	RD 16	Explore purpose and possible support of lawsuit from jurisdictions against companies that produce single-use plastic packaging - public nuisance, unfair business competition, design defect, misrepresentation, and failure to warn.
	59	FOOD DONATION	RU 01	-	RU 01	Encourage and support food donation programs:
	60		RU 01	a	RU 01 a	Homes - surplus fruit and gardens vegetables
	61		RU 01	b	RU 01 b	Schools - share tables at schools and donations to food bank
	62		RU 01	c	RU 01 c	Caterers and food services establishments - leftovers to food bank/shelters (Food Shift/Food Runners model)

PID	SubPID	Implementation	Hours	Labor cost	Annual labor cost	Annual outreach	Capital	Annualized capital	Total annual cost	Possible Rate Impacts
RD 10	b									
RD 10	c									
RD 10	d									
RD 10	e									
RD 10	f									
RD 10	g									
RD 11	-	Medium	40	\$2,000	\$667	\$0	\$0	\$0	\$667	0
RD 11	a									
RD 11	b									
RD 12	-	Medium	60	\$3,000	\$1,000	\$1,000	\$0	\$0	\$1,000	0
RD 12	a									
RD 12	b									
RD 13	-	Medium	60	\$3,000	\$1,000	\$500	\$0	\$0	\$1,000	0
RD 13	a									
RD 13	b									
RD 14	-	Short	40	\$2,000	\$1,000	\$0	\$0	\$0	\$1,000	0
RD 14	a									
RD 14	b									
RD 15	-	Long	120	\$6,000	\$2,000	\$1,000	\$0	\$0	\$2,000	0
RD 15	a									
RD 15	b									
RD 16	-	Long	240	\$12,000	\$6,000	\$0	\$0	\$0	\$6,000	\$0
RU 01	-	Long	240	\$12,000	\$4,000	\$0	\$0	\$0	\$4,000	0
RU 01	a									
RU 01	b									
RU 01	c									

Customer Service Compliance Rates Performance Partnerships Infrastructure CVSan StopWaste Alameda County	Word Doc Order	Project	PID	SubPID	Combo	Option
	63		RU 01	d	RU 01 d	Grocery stores - bread and produce to food bank.
			RU 01	e	RU 01 e	Restaurants, bars, hotels, cafeterias and other hospitality venues - donate edible food to food banks and other discarded food to animal feed (encourage use of facilitators such as foodtodonate.org)
	64		RU 01	f	RU 01 f	Gleaners - volunteers to harvest and distribute unwanted fruit or other produce grown by Castro Valley residents
	65		RU 01	g	RU 01 g	Gleaners - support the development of a Castro Valley Gleaning group
	66		RU 01	h	RU 01 h	Gleaners - No homegrown fruit/vegetable to landfill or compost
	67		RU 01	i	RU 01 i	Food Rescue - explore the potential to measure recovery of edible food
	68		RU 01	j	RU 01 j	Community- support food recovery drivers/bikers for schools, restaurants, etc. (such as White Pony Express - www.whiteponyexpress.org)
	69		RU 01	k	RU 01 k	Community - host a freezing/rescuing edible food workshop/event
	70		RU 01	l	RU 01 l	Community - promote and assist the opening of a second CV food pantry
	71		RU 01	m	RU 01 m	Community - support a freegan or rescuing edible food workshop/event
	72		RU 01			Promote reuse and repair for residents and businesses with a web-based directory, other internet services (e.g., eBay, Craig's List and FreeCycle.org), utility bill inserts, and cooperative advertisements. Investigate the commercial equivalent to FreeCycle.org or materials exchange such as LA Shares
	73	REUSE PROMOTION AND EXPLORATION	RU 02	-	RU 02	
	74		RU 02	a	RU 02 a	Promote brick and mortar debots like East Bay Depot for Creative Reuse, SCRAP (Scrounger's Center for Reusable Art Parts)

PID	SubPID	Implementation	Hours	Labor cost	Annual labor cost	Annual outreach	Capital	Annualized capital	Total annual cost	Possible Rate Impacts
RU 01	d									
RU 01	e									
RU 01	f									
RU 01	g									
RU 01	h									
RU 01	i									
RU 01	j									
RU 01	k									
RU 01	l									
RU 01	m									
RU 02	-	Long	200	\$10,000	\$2,500	\$5,000	\$0	\$0	\$7,500	0
RU 02	a									

Customer Service Compliance Rates Performance Partnerships Infrastructure CVSan StopWaste Alameda County	Word Doc Order	Project	PID	SubPID	Combo	Option
	75		RU 02	b	RU 02 b	Promote local antique and thrift stores, repair shops and local electronic equipment, furniture and appliance resellers including a brochure/website listing where these are located
	76		RU 02	c	RU 02 c	Support a thrift or second-hand type store in CV
	77		RU 02	d	RU 02 d	Support/facilitate reusable to-go containers at Castro Valley businesses
	78		RU 02	e	RU 02 e	Promote refillable pearl milk tea containers and reusable wide straws
	79		RU 02	f	RU 02 f	Promote and/or confirm incentives for reusable coffee mugs/cups at local businesses
	80		RU 02	g	RU 02 g	Conduct a "reuse survey" of habits and interests of community members to greater understand reuse in Castro Valley
•	81	HOUSEHOLD HAZARDOUS PRODUCT REUSE	RU 03	-	RU 03	Explore and encourage the existing Alameda Countywide free swap program ("swap lockers") for household hazardous products that enables the community to share these goods at no cost (e.g., Larimer County Drop 'N' Swap "buy none, get one free"). Research liability language.
	82	DECONSTRUCTION	RU 04	-	RU 04	Promote deconstruction services and used building materials stores
	83		RU 04	a	RU 04 a	Prepare deconstruction services guide
	84		RU 04	b	RU 04 b	Support used building materials outlet at CHaRM
	85	IN-STORE BARGAIN BASEMENTS	RU 05	-	RU 05	Encourage major retailers of clothing in the area to establish "Bargain Basement" sections of their stores
	86		RU 05	a	RU 05 a	Premium used clothes could be sold that would be supplied by existing thrift stores, with the profits from sales split between them
	87		RU 05	b	RU 05 b	Clothing used in department store displays/advertisements or slightly damaged clothes could be sold (e.g., Jeremy's Department Store)
	88	ECOLOGY OF COMMERCE	RU 06	-	RU 06	Encourage an "ecology of commerce" for promoting the sale of reusable items in the area. Encourage the marketing of used lumber, building materials, compost products and used appliances through major home repair, hardware stores and nurseries. Encourage the marketing of used furniture through furniture stores
	89	LOCAL MATERIAL UPGRADE	RU 07	-	RU 07	Facilitate development of a network of repair and refurbishing businesses or nonprofits to upgrade materials and products that are collected through large-scale reuse programs to attain a higher price in retail activities. Support nonprofits applying for grants
•	90	REPAIR WORKSHOPS	RU 08	-	RU 08	Sponsor quarterly repair workshops (Repair Café and IFixit models)
	91		RU 08	a	RU 08 a	Connect with Boy Scouts, Girl Scouts, 4H Clubs and other service clubs to organize workshops
	92		RU 08	b	RU 08 b	Recruit volunteer "fixers"
	93		RU 08	c	RU 08 c	Recruit appropriate free venue
	94		RU 08	d	RU 08 d	Schedule and promote repair workshops
	95		RU 08	e	RU 08 e	Work to get the Reconnect Club at Fixit Clinics.
	96	LOCAL REUSE BUSINESSES	RU 09	-	RU 09	Encourage the concept of a reuse warehouse or pop-up stores that could be leased out on a spot basis to reuse businesses and nonprofits as needed to help in the ups and downs of market conditions
	97		RU 09	a	RU 09 a	Support a "Dana's Party Planet" type store that sells and rents reusable party wear
	98	REUSE COLLABORATIVES	RU 10	-	RU 10	Help form a Reuse Collaborative with businesses and nonprofits throughout the region to help in marketing products collected through reuse networks, and to help develop the above services
	99		RU 10	a	RU 10 a	Form partnerships or contractual relationships with local reuse organizations (such as CARH)
	100		RU 10	b	RU 10 b	Publish list of CVSan reuse contractors to encourage donations of reusable items

PID	SubPID	Implementation	Hours	Labor cost	Annual labor cost	Annual outreach	Capital	Annualized capital	Total annual cost	Possible Rate Impacts
RU 02	b									
RU 02	c									
RU 02	d									
RU 02	e									
RU 02	f									
RU 02	g									
RU 03	-	Medium	160	\$8,000	\$2,667	\$0	\$0	\$0	\$2,667	0
RU 04	-	Medium	40	\$2,000	\$667	\$12,500	\$0	\$0	\$13,167	0
RU 04	a									
RU 04	b									
RU 05	-	Long	120	\$6,000	\$1,500	\$0	\$0	\$0	\$1,500	0
RU 05	a									
RU 05	b									
RU 06	-	Long	200	\$10,000	\$2,500	\$0	\$0	\$0	\$2,500	0
RU 07	-	Short	40	\$2,000	\$667	\$0	\$0	\$0	\$667	0
RU 08	-	Short	120	\$6,000	\$2,000	\$3,000	\$1,000	\$333	\$5,333	0
RU 08	a									
RU 08	b									
RU 08	c									
RU 08	d									
RU 08	e									
RU 09	-	Long	200	\$10,000	\$2,500	\$0	\$0	\$0	\$2,500	0
RU 09	a									
RU 10	-	Medium	200	\$10,000	\$3,333	\$3,750	\$0	\$0	\$7,083	0
RU 10	a									
RU 10	b									

Customer Service						
Compliance						
Rates						
Performance						
Partnerships						
Infrastructure						
CVSan						
StopWaste						
Alameda County						
Word Doc Order	101					
		Project		PID	SubPID	Combo
						Option
			RU 10	c	RU 10 c	
						Enter into agreements for no-cost collection service to get textiles and other reusable items to a charity or textile processor and/or broker/collector. Look at home pick up routes on a schedule for reusable items to be taken to a recovery center for reuse and refurbishing.

PID	
SubPID	
Implementation	
Hours	
Labor cost	
Annual labor cost	
Annual outreach	
Capital	
Annualized capital	
Total annual cost	
Possible Rate Impacts	

RU 10

c

Customer Service Compliance Rates Performance Partnerships Infrastructure CVSan StopWaste Alameda County	Word Doc Order	Project	PID	SubPID	Combo	Option
	102	FLEA MARKETS	RU 11	-	RU 11	Promote local flea markets, which promote the sale of reusable items Be a resource to non-profit organizations within CVSan who desire to organize a reuse/flea market
	103		RU 11	a	RU 11 a	
•	104	MULTI-HOME GARAGE SALES	RU 12	-	RU 12	Promote the organization of multi-home or multi-family garage sales
	105	CLOTHING/TOY SWAPS	RU 13	-	RU 13	Promote the organization of children's clothing and toy swaps
	106		RU 13	a	RU 13 a	Facilitate cleat/shinguard/supplies/belts reuse at sports tryouts and leagues
	107		RU 13	b	RU 13 b	Support/facilitate a sporting goods reuse network or depot in Castro Valley
	108	PROMOTE REUSABLE CLEANING SUPPLIES	RU 14	-	RU 14	Encourage the use of reusable cleaning supplies and tools at home or at work
	109		RU 14	a	RU 14 a	Promote reusables like towels (do away with disposable cleaning pads and wipes)
	110	PROMOTE AND FACILITATE USE OF REUSABLES AT SCHOOL	RU 15	-	RU 15	Encourage the use and sharing of reusables at schools in Castro Valley
	111		RU 15	a	RU 15 a	Support "Reuse Days" with locker-cleanouts, plans and events to reduce and reuse at the end of the school year
	112		RU 15	b	RU 15 b	Support school use of reusable cups and milk refill stations for cafeterias and eating areas at snacktime and lunchtime
	113		RU 15	c	RU 15 c	Support the elimination of snack packets and promote the use of reusable utensils during snack and lunchtime
	114	PROMOTE HOLIDAY DECORATION SERVICES	RU 16	-	RU 16	Encourage the use of holiday decoration services that reuse decorations and rent them out every year.
	115		RU 16	a	RU 16 a	Promote lights, lawn ornaments, and other decorations that can be rented and reused
	116	TOOL LENDING	RU 17	-	RU 17	Encourage the practice of tool lending in Castro Valley
	117		RU 17	a	RU 17 a	Support the development and use of/facilitate a tool lending library in Castro Valley

PID	SubPID	Implementation	Hours	Labor cost	Annual labor cost	Annual outreach	Capital	Annualized capital	Total annual cost	Possible Rate Impacts
RU 11	-	Short	24	\$1,200	\$400	\$2,000	\$0	\$0	\$2,400	0
RU 11	a									
RU 12	-	Short	120	\$6,000	\$2,000	\$2,000	\$0	\$0	\$4,000	0
RU 13	-	Short	120	\$6,000	\$2,000	\$2,000	\$0	\$0	\$4,000	0
RU 13	a									
RU 13	b									
RU 14	-	Medium	60	\$3,000	\$1,500	\$1,000	\$0	\$0	\$2,500	0
RU 14	a									
RU 15	-	Medium	60	\$3,000	\$1,000	\$1,000	\$0	\$0	\$2,000	0
RU 15	a									
RU 15	b									
RU 15	c									
RU 16	-	Medium	30	\$1,500	\$500	\$700	\$0	\$0	\$1,200	
RU 16	a									
RU 17	-	Medium	40	\$2,000	\$667	\$600	\$0	\$0	\$1,267	
RU 17	a									

Customer Service Compliance Rates Performance Partnerships Infrastructure CVSan StopWaste Alameda County	Word Doc Order	Project	PID	SubPID	Combo	Option
	118	REUSABLE SERVEWARE AT EVENTS	RU 18	-	RU 18	Promote reusable dishes, utensils, beverage containers, on-site washing stations i.e. Sudbusters and/or collection of reusables by vendor for washing off-site
•	119	ZERO WASTE STARS – BUSINESS	RE 01	-	RE 01	Expand 4R Stars program to include Zero Waste business designation
	120		RE 01	a	RE 01 a	Provide technical assistance to commercial customers to reduce trash collection, right-size services and document diversion rates
	121		RE 01	b	RE 01 b	Identify and profile high-achieving businesses (such as Knudsen's Ice Creamery)
	122		RE 01	c	RE 01 c	Develop case studies, recognize and promote all businesses that get certified as Zero Waste businesses
	123		RE 01	d	RE 01 d	Require at least 90% diversion in Zero Waste Stars designation
•	124	ZERO WASTE STARS – SCHOOLS	RE 02	-	RE 02	Expand Green Ribbon Schools Program to include Zero Waste school designation

PID	SubPID	Implementation	Hours	Labor cost	Annual labor cost	Annual outreach	Capital	Annualized capital	Total annual cost	Possible Rate Impacts
RU 18	-	Long	30	\$1,500	\$500	\$500	\$0	\$0	\$1,000	
RE 01	-	Short	8	\$400	\$133	\$750	\$0	\$0	\$883	0
RE 01	a									
RE 01	b									
RE 01	c									
RE 01	d									
RE 02	-	Medium	40	\$2,000	\$667	\$800	\$0	\$0	\$1,467	0

Customer Service	Compliance	Rates	Performance	Partnerships	Infrastructure	CVSan	StopWaste	Alameda County	Word Doc Order	Project	PID	SubPID	Combo	Option
									125		RE 02	a	RE 02 a	Ensure that all 16 public and 7 private schools are fully participating in recycling and composting programs
									126		RE 02	b	RE 02 b	Develop case studies, sponsor certification fees, recognize and promote all schools that get certified as Zero Waste schools
			•				•		127	UNIVERSAL COMMERCIAL RECYCLING	RE 03	-	RE 03	Expand recycling service to 100% of all commercial establishments
									128		RE 03	a	RE 03 a	Provide technical assistance and highlight benefits of participating
									129		RE 03	b	RE 03 b	Inform businesses of County mandatory ordinance and State AB 341 mandate and goals
			•				•		130	SHARING RECYCLING CARTS & BINS	RE 04	-	RE 04	Encourage sharing of recyclable carts or bins by multiple businesses and multi-family dwellings that have space constraints or whom are low generators
•							•		131	BOTTLE & CAN REDEMPTION CENTERS	RE 05	-	RE 05	Ensure that all CRV bottle and can redemption zones have service (work with grocery stores to provide reverse vending machine or other service)
									132		RE 05	a	RE 05 a	Investigate supporting legislation to require grocery and/or convenience stores to accept bottles and cans and issue reimbursements
									133		RE 05	b	RE 05 b	Develop a web page and social media post, and/or press release for where to take bottles and cans for redemption value
•							•		134	ZERO WASTE STARS – MULTI-FAMILY	RE 06	-	RE 06	Provide technical assistance and waste audits to all multifamily complexes and develop companion program to 4R Stars program
									135		RE 06	a	RE 06 a	Identify and profile high-achieving multifamily complexes
									136		RE 06	b	RE 06 b	Engage all property owners and tenants in solutions to logistical issues
									137		RE 06	c	RE 06 c	Develop case studies, recognize and promote all multi-family complexes that get certified as Zero Waste complexes
									138		RE 06	d	RE 06 d	Develop Move-in/Move-out Information Packet that helps organize move and unpacking so less gets wasted and coordinate with Reuse Collaborative to arrange collection of reusable products as needed
•							•		139	EXPAND RESIDENTIAL RECYCLING	RE 07	-	RE 07	Improve single family and multifamily residential recycling and include more items in the recycling program
•							•		140	UNIVERSAL RESIDENTIAL RECYCLING	RE 08	-	RE 08	Ensure that all single-family residential generators are fully participating in the recycling program (no recyclables in the trash) (similar to Stopwaste mandatory ordinance for commercial and multifamily generators)
•							•		141	PUBLIC AREA RECYCLING	RE 09	-	RE 09	Provide recycling pyramids at all 89 public garbage bin ("street can") locations
•							•		142	RETAIL ESTABLISHMENT PUBLIC RECYCLING BINS	RE 10	-	RE 10	Require all establishments that sell single-use beverages to provide recycling bins

PID	SubPID	Implementation	Hours	Labor cost	Annual labor cost	Annual outreach	Capital	Annualized capital	Total annual cost	Possible Rate Impacts
RE 02	a									
RE 02	b									
RE 03	-	Short	160	\$8,000	\$2,667	\$2,000	\$0	\$0	\$4,667	Y
RE 03	a									
RE 03	b									
RE 04	-	Short	12	\$600	\$200	\$0	\$0	\$0	\$200	0
RE 05	-	Medium	160	\$8,000	\$2,667	\$0	\$0	\$0	\$2,667	0
RE 05	a									
RE 05	b									
RE 06	-	Medium	160	\$8,000	\$2,667	\$4,500	\$0	\$0	\$7,167	0
RE 06	a									
RE 06	b									
RE 06	c									
RE 06	d									
RE 07	-	Medium	60	\$3,000	\$1,000	\$0	\$0	\$0	\$1,000	0
RE 08	-	Medium	80	\$4,000	\$1,333	\$0	\$0	\$0	\$1,333	0
RE 09	-	Medium	120	\$6,000	\$2,000	\$0	\$26,700	\$8,900	\$10,900	0
RE 10	-	Long	200	\$10,000	\$2,500	\$250	\$0	\$0	\$2,750	0

Customer Service Compliance Rates Performance Partnerships Infrastructure CVSan StopWaste Alameda County	Word Doc Order	Project	PID	SubPID	Combo	Option
•	143	ZERO WASTE EVENTS	RE 11	-	RE 11	Zero Waste events
	144		RE 11	a	RE 11 a	Facilitate Zero Waste programs/strategies at all appropriate public events
	145		RE 11	b	RE 11 b	Create "Zero Waste Event Levels" with medals and recognition for recycling and composting levels of 70/80/90%
•	146	HARD-TO-RECYCLE CENTER	RE 12	-	RE 12	Explore development of a Hard-to-Recycle Center to accept specified hard-to-recycle materials and reusable items dropped off from residents and businesses
	147		RE 12	a	RE 12 a	Organize field trips to the El Cerrito Recycling Center (for Board members, CAC, Green Hearts)
	148		RE 12	b	RE 12 b	Undertake a community dialogue about developing a local site within 15 miles of Castro Valley
	149		RE 12	c	RE 12 c	Identify grant opportunities and partnerships
	150		RE 12	d	RE 12 d	Support countywide development of a network of resource recovery centers
	151		RE 12	e	RE 12 e	Promote existing centers (Alameda County HHW, Davis Street) and encourage expansion of materials accepted
•	152	C&D RECYCLING VOUCHERS	RE 13	-	RE 13	Explore continuation of distributing C&D vouchers at special events for recycling C&D at Davis Street
•	153	ZERO WASTE STARS – GOVERNMENT	RE 14	-	RE 14	Continue to provide technical assistance to government operations (such as police, fire, government buildings) and encourage Zero Waste strategies
	154	RECYCLABLE MATERIALS	RE 15	-	RE 15	Recyclable Materials
	155		RE 15	a	RE 15 a	Educate and support the community to improve quality of recyclable materials collected by "cleaning those blue bin materials right"
	156		RE 15	b	RE 15 b	Promote shelf-stable foil-lined cartons i.e. juice boxes recycling
	157		RE 15	c	RE 15 c	Implement 3D printing prototype recycling at Castro Valley High School
	158	DISASTER DEBRIS	RE 16	-	RE 16	Disaster Debris
	159		RE 16	a	RE 16 a	Develop comprehensive Disaster Debris Management Plan in coordination with CVSan's Franchised Collector and Processor

PID	SubPID	Implementation	Hours	Labor cost	Annual labor cost	Annual outreach	Capital	Annualized capital	Total annual cost	Possible Rate Impacts
RE 11	-	See RE10 in Short Term								
RE 11	a									
RE 11	b									
RE 12	-	Long	200	\$10,000	\$2,500	\$0	TBD	\$0	\$2,500	0
RE 12	a									
RE 12	b									
RE 12	c									
RE 12	d									
RE 12	e									
RE 13	-	Short	4	\$200	\$67	\$250	\$0	\$0	\$317	Y
RE 14	-	Short	96	\$4,800	\$1,600	\$250	\$0	\$0	\$1,850	0
RE 15	-	Medium	80	\$4,000	\$1,333	\$500	\$0	\$0	\$1,333	0
RE 15	a									
RE 15	b									
RE 15	c									
RE 16	-	Long	300	\$15,000	\$5,000	\$500	\$0	\$0	\$5,500	0
RE 16	a									

Customer Service	Compliance	Rates	Performance	Partnerships	Infrastructure	CVSan	StopWaste	Alameda County	Word Doc Order	Project	PID	SubPID	Combo	Option
						•	•		160	UNIVERSAL COMPOSTING – GOAL	CO 01	-	CO 01	Adopt a goal to phase out compostable organics going to landfill by 2030
•			•	•					161	SHARING COMPOST CARTS & BINS	CO 02	-	CO 02	Encourage sharing of compostable carts or bins by multiple businesses and multi-family dwellings that have space constraints or whom are low generators
•			•	•					162	FOOD SCRAPS DIGESTION	CO 03	-	CO 03	Food Scraps Digestion
									163		CO 03	a	CO 03.a	Explore anaerobic digestion of food scraps from residents, businesses, and institutions
									164		CO 03	b	CO 03.b	Investigate the possibility of an animal feed from organics pilot with Alameda County Industries
•			•	•					165	UNIVERSAL COMPOSTING – COMMERCIAL	CO 04	-	CO 04	Expand organics collection service to 100% of all commercial establishments and multifamily complexes
									166		CO 04	a	CO 04.a	Provide technical assistance and highlight benefits of participating
									167		CO 04	b	CO 04.b	Inform businesses and complexes of County mandatory ordinance
									168		CO 04	c	CO 04.c	Research submission of a waiver for Canyonlands organics in response to requirements under SB 1383
									169		CO 04	d	CO 04.d	Engage local food service establishments in taking ownership of public organics bins immediately adjacent to their businesses ("adopt a banana" program)
•			•	•					170	UNIVERSAL COMPOSTING – RESIDENTIAL	CO 05	-	CO 05	Universal Composting - Residential
									171		CO 05	a	CO 05.a	Ensure that all single-family residential generators are fully participating in the composting program (no organics in the trash) (similar to Stopwaste mandatory ordinance for commercial and multifamily generators)
									172		CO 05	b	CO 05.b	Green Hearts Volunteers deliver food scrap recycling pails and information door-to-door
									173		CO 05	c	CO 05.c	CVSan purchases a new design or type of food scrap recycling pail
									174		CO 05	d	CO 05.d	Research submission of a waiver for Canyonlands organics in response to requirements under SB 1383
									175		CO 05	e	CO 05.e	Consider compostable bag dispensers i.e. EcoSafe dispensers as a donation to multi-family complexes. Coordinate with MFD Recognition Program for bag refills
•			•	•					176	FOOD SERVICE ESTABLISHMENT PUBLIC COMPOST BINS	CO 06	-	CO 06	Provide organics bins wherever food is served in public locations
•			•	•					177	ZERO WASTE PARKS	CO 07	-	CO 07	Convert a whole Park (such as Lake Chabot or Cull Canyon) or Venue (such as Willow Park) into a Zero Waste Venue complete with onsite composting and fully convenient recycling containers. Have a great exhibit at the entrance to explain what is happening. Once a demonstration is completed, work with partners to get all parks serving local residents to be Zero Waste venues.
									178		CO 07	a	CO 07.a	Partner with East Bay Regional Park District and Hayward Area Recreation District
									179		CO 07	b	CO 07.b	Have food scrap recycling stations at all CV parks

PID	SubPID	Implementation	Hours	Labor cost	Annual labor cost	Annual outreach	Capital	Annualized capital	Total annual cost	Possible Rate Impacts
CO 01	-	Medium	24	\$1,200	\$400	\$0	\$0	\$0	\$400	0
CO 02	-	Short	16	\$800	\$267	\$0	\$0	\$0	\$267	0
CO 03	-	Medium	16	\$800	\$267	\$0	\$0	\$0	\$267	0
CO 03	a									
CO 03	b									
CO 04	-	Short	200	\$10,000	\$3,333	\$2,000	\$0	\$0	\$5,333	0
CO 04	a									
CO 04	b									
CO 04	c									
CO 04	d									
CO 05	-	Medium	120	\$6,000	\$2,000	\$0	\$0	\$0	\$2,000	0
CO 05	a									
CO 05	b									
CO 05	c									
CO 05	d									
CO 05	e									
CO 06	-	Long	80	\$4,000	\$1,000	\$250	\$0	\$0	\$1,250	0
CO 07	-	Long	200	\$10,000	\$2,500	\$100	\$2,000	\$500	\$3,100	0
CO 07	a									
CO 07	b									

Customer Service Compliance Rates Performance Partnerships Infrastructure CVSan StopWaste Alameda County	Word Doc Order	Project	PID	SubPID	Combo	Option
•	180	COMPOSTABLE SERVICEWARE	CO 08	-	CO 08	Create and publish a list of serviceware products that will compost (not "compostable plastic"), with vendor lists
•	181	PET WASTE DIVERSION	CO 09	-	CO 09	Pilot program for dog park manures using a small onsite composter or anaerobic digester
•	182	UNIVERSAL COMPOSTING – STATEWIDE	CO 10	-	CO 10	Support California Air Resources Board adoption of AB 32 Scoping Plan Waste Management Sector recommendations to ban organics from landfills statewide and to expand composting and digestion programs
	183		CO 10	a	CO 10 a	Provide letters of support and public testimony
•	184	IN-COUNTY COMPOSTING FACILITY	CO 11	-	CO 11	Support research and development of an in-County composting facility
•	185	ZERO WASTE BUSINESS RECOGNITION	GB 01	-	GB 01	Help businesses that adopt and implement Zero Waste goals to be recognized through national certification programs (such as U.S. Zero Waste Business Council)
	186	PURCHASE COMPOST	GB 02	-	GB 02	Work with CalTrans Regional Office and local governments throughout the County to use more recycled and compost products on road and construction projects in the area
	187		GB 02	a	GB 02 a	Purchase reused, recycled and compost products for CVSan facilities and services
	188		GB 02	b	GB 02 b	Include recycled and compost specifications in CVSan purchases and projects

PID	SubPID	Implementation	Hours	Labor cost	Annual labor cost	Annual outreach	Capital	Annualized capital	Total annual cost	Possible Rate Impacts
CO 08	-	Medium	24	\$1,200	\$400	\$0	\$0	\$0	\$400	0
CO 09	-	Long	200	\$10,000	\$2,500	\$0	\$5,000	\$1,250	\$3,750	0
CO 10	-	Long	40	\$2,000	\$500	\$0	\$0	\$0	\$500	0
CO 10	a									
CO 11	-	Long	40	\$2,000	\$500	\$0	\$0	\$0	\$500	0
GB 01	-	Medium	24	\$1,200	\$400	\$0	\$0	\$0	\$400	0
GB 02	-	Medium	24	\$1,200	\$400	\$0	\$0	\$0	\$400	0
GB 02	a									
GB 02	b									

Customer Service	Compliance	Rates	Performance	Partnerships	Infrastructure	CVSan	StopWaste	Alameda County	Word Doc Order	Project	PID	SubPID	Combo	Option
									189		GB 02	c	GB 02 c	Provide model specification language to Alameda County and other partners
				•	•				190	RECYCLED PRODUCT INNOVATION	GB 03	-	GB 03	Encourage and support businesses to develop innovative recycled products
				•	•				191	ZERO WASTE HIERARCHY	GB 04	-	GB 04	Consider the Zero Waste Hierarchy of Highest and Best Use (attached) when evaluating material recovery technology proposals that come to CVSan
				•	•				192	ZERO WASTE EVENTS – GOAL	PIP 01	-	PIP 01	Support adoption of Zero Waste goal for venues and special events in Castro Valley that require Alameda County permits (such as the Rowell Ranch Rodeo Parade) and use incentives and technical assistance to help them implement goals
				•	•				193	ZERO WASTE SCHOOLS – TENANTS	PIP 02	-	PIP 02	Support CVUSD to develop new rules for school district tenants (sports teams, after school programs, scouts) to ensure participation in CVUSD recycling and composting programs
				•	•				194	ZERO WASTE SCHOOLS - RE-USE	PIP 03	-	PIP 03	Encourage CVUSD to store unwanted office and school supplies accessible by teachers and staff

PID	SubPID	Implementation	Hours	Labor cost	Annual labor cost	Annual outreach	Capital	Annualized capital	Total annual cost	Possible Rate Impacts
GB 02	c									
GB 03	-	Medium	160	\$8,000	\$2,667	\$0	\$0	\$0	\$2,667	0
GB 04	-	Short	24	\$1,200	\$400	\$0	\$0	\$0	\$400	0
PIP 01	-	Short	24	\$1,200	\$400	\$0	\$0	\$0	\$400	0
PIP 02	-	Short	24	\$1,200	\$400	\$0	\$0	\$0	\$400	0
PIP 03	-	Short	40	\$2,000	\$667	\$0	\$0	\$0	\$667	0

ATTACHMENT 2. DEFINITION OF ZERO WASTE BY THE ZERO WASTE INTERNATIONAL ALLIANCE

“Zero Waste is a goal that is ethical, economical, efficient and visionary, to guide people in changing their lifestyles and practices to emulate sustainable natural cycles, where all discarded materials are designed to become resources for others to use.

Zero Waste means designing and managing products and processes to systematically avoid and eliminate the volume and toxicity of waste and materials, conserve and recover all resources, and not burn or bury them.

Implementing Zero Waste will eliminate all discharges to land, water or air that are a threat to planetary, human, animal or plant health.”

ATTACHMENT 3. ZWIA HIERARCHY OF HIGHEST AND BEST USE: REDUCE AND CONSERVE MATERIALS

Refuse – Encourage producers to provide products or packaging that limit waste or emissions.

Return – Set up systems that require producers to take back products and packaging that create wastes or emissions.

Reduce toxics use – Eliminate toxic chemicals use; replace them with less toxic or non-toxic alternatives.

Design out wasting – Identify why materials are discarded and redesign the system to be more efficient and no longer discard those materials.

Reduce consumption and packaging – Use less; buy less and with less packaging; avoid disposables; bring your own.

ATTACHMENT 3. ENCOURAGE CYCLICAL USE OF RESOURCES & SHIFT INCENTIVES TO STOP WASTING

Shift government funds or financial incentives (at any and all levels) from supporting harvesting and use of virgin natural resources to support the circular economy.

Government and businesses should implement sustainable purchasing that support social and environmental objectives.

Ensure incentives are in place for cyclical use of materials and disincentives in place for wasting (policies, research funds, regulations, etc.).

Set up systems to encourage local economies (for example use of proximity principle, marketing support, policies, incentives, social and environmental purchasing practices, information exchanges, etc.).

MANUFACTURERS DESIGN PRODUCTS FOR SUSTAINABILITY & TAKEBACK

Design to be durable, to be repairable, to be reusable, to be disassembled, to be fully recyclable, from reused, recycled or sustainably-harvested renewable materials designed for easy dis-assembly.

Label products to identify who has made it and what it is made of.

Minimize volume and toxicity of materials used in production.

Lease services and products rather than just sell products to customers.

Take products and packaging back after they are used, and reuse, or recycle them back into the economy or nature.

REUSE (RETAIN VALUE & FUNCTION) CONT.

Reuse products.

Repurpose products for alternative uses (e.g. old doors made into walls; old photos and scrap metal into art).

Repair to retain value and usefulness.

Refurbish.

Remanufacture with disassembled parts.

Dismantle to obtain parts for repairing and maintaining products still in use.

Encourage thrift stores, used building materials store, garage sales, flea markets, and charity collections.

Encourage or allow licensed recovery of reusable goods from tipping areas of discards collection and processing facilities.

Provide incentives to takeout customers to bring their own containers, coffee cups and bags.

Organize household hazardous waste swap meets.

RECYCLE DISCARDS SAFELY, EFFICIENTLY & LOCALLY

Inorganics (little or no carbon)

Support “Clean” Materials Recovery Facilities (MRFs) and sorted source separated materials at such MRFs.

Recycle all inorganic materials (e.g., soils, metals, glass and ceramics) including Construction & Demolition debris.

Downcycling is lower priority (e.g., recycling single-use products into 1 time uses or making mixed glass into sand).

Develop local markets and uses for all recovered materials, including Resource Recovery Parks, Residual Research Centers, and business clusters to reuse, recycle or compost products and packaging for highest value and efficiency.

Use existing “Dirty” MRFs only to pre-process mixed discards before burying in landfills, as Dirty MRFs do not benefit generators & produce lower quality materials.

Organics (carbon-based)

Edible food to people first; animal feed second; compost or digest the rest, back to land as compost or digest for fuel depending on where nitrogen is needed most locally.

Promote on-site composting by homes and businesses.

Use lower tipping fees to create clean flows of plant debris, unpainted wood, other compost feedstocks.

Compost yard trimmings, discarded food and food-soiled paper in aerobic windrows and place organics back in soil.

Use in-vessel systems for organics in built-up urban areas.

Maintain source separation for highest and best use of organics.

Combine source separated organics with bio-solids only if biosolids have been tested to ensure they will not contaminate end products and they are not applied on food

REGULATE DISPOSAL, DISPERSAL, OR DESTRUCTION OF RESOURCES

Ban materials or products that are toxic or that cannot be safely reused, recycled or composted.

Recover Energy/Bio-fuels only using systems that operate at biological temperature and pressure, such as sustainable biodiesel from used vegetable oils or biologically or chemically producing ethanol from urban wood, biosolids, manures or food scraps.

LANDFILLING IS THE LAST STEP

Materials sorting for recyclables and research for design purposes.

Biological stabilization before burial.

Require insurance to cover post-post-closure repairs.

Plan systems to be flexible to be adjusted towards Zero Waste with changes in waste stream as waste is reduced.

NOT ACCEPTABLE

Support bioreactor landfills

Burn mixed solid waste, tires, wood from mixed construction and demolition debris, or biosolids. High temperature systems volatilize heavy metals and produce dioxins and furans. Mass Burn, Fluidized Bed, Gasification, Plasma Arc, and Pyrolysis.

Give recycling credit for Alternative Daily Cover (ADC) or “beneficial use” of processing residues to build landfills.

Allow recycling toxic or radioactive wastes into consumer products or building materials.



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