



StopWaste is the Alameda County Waste Management Authority, the Alameda County Source Reduction and Recycling Board, and the Energy Council operating as one public agency.

Member Agencies:

- Alameda County
- Alameda
- Albany
- Berkeley
- Dublin
- Emeryville
- Fremont
- Hayward
- Livermore
- Newark
- Oakland
- Piedmont
- Pleasanton
- San Leandro
- Union City
- Castro Valley Sanitary District
- Oro Loma Sanitary District

October 2, 2020

Alameda County Board of Supervisors
County of Alameda Administration Building
1221 Oak Street, #536, Oakland, CA 9461

Dear Supervisors:

The Alameda County Recycling Board is in the process of updating its Recycling Plan, and would like to consult with you about this update. This item was presented to the Transportation/Planning Committee.

As required by County Charter, the Recycling Board must set a date to reduce, reuse, and compost at least 75%, and if necessary, set a date to address further quantities of discarded materials.

Accordingly the new goal being proposed is landfill obsolescence, more specifically stated as:

Landfills become obsolete as a means of managing materials, replaced by:

- *Circular material flows that minimize the use of non-renewable resources that have traditionally been landfilled*
- *Elimination of landfill waste through redesign of products and systems, and*
- *Effective recovery of materials.*

The date proposed is 2045, which aligns with the State’s carbon neutrality goal.

A topic brief that summarizes the scope of the plan, as well as the full text of the proposed plan, are attached.

Sincerely,

Wendy Sommer
Executive Director

2020 Recycling Plan Update

Beyond 75% Diversion: A Plan for Landfill Obsolescence

Measure D, the county charter amendment that established the Recycling Board, mandates that the Recycling Board create and periodically update a Recycling Plan to **plan, fund, and implement a comprehensive source reduction and recycling program**. The current Recycling Plan extends through 2020, and is therefore in need of an update.

Measure D also requires that the Recycling Board set a date to **reduce, recycle and compost all discarded materials generated within Alameda County by at least 75% by weight**. The current date to achieve the 75% goal is 2020. While there has been significant progress at preventing and diverting waste, the most recent estimated countywide diversion rate is less than 70%.

Despite robust recycling and organics collection programs, extensive infrastructure, mandatory requirements, and sophisticated franchise contract provisions, **both diversion rates and per capita disposal throughout the state have remained relatively flat for nearly 10 years**, while gross landfill tonnages have begun to increase after years of steady declines.

Both the data and the experiences of Alameda County jurisdictions and service providers suggest that the county is reaching the limits of an approach that relies on post-consumption collection and processing. **StopWaste is therefore proposing “landfill obsolescence” for discussion as the post-75% goal.**

Updates to the Recycling Plan are in development. For questions on the update, contact Meghan Starkey at mstarkey@stopwaste.org.

“Landfill Obsolescence”

Landfills become obsolete as a means of managing materials, replaced by:



Circular material flows that minimize the use of non-renewable resources



Elimination of landfill waste through redesign of products and systems



Effective recovery of materials

Recycling Plan

- Voter Initiative “Measure D”
- 75% and beyond
- Date requirement

- Issues
- Infrastructure & Programs
- Countywide Goals and Objectives
- Integrated Budget and Staffing

CoIWMP

- State Law AB 939
- Disposal Capacity
- Facility siting criteria
- WMA Policies
- HHW

The Recycling Plan and Countywide Integrated Waste Management Plan exist as separate governing documents, but share some common elements that work together to shape StopWaste’s approach to tackling waste-related challenges in Alameda County.

Required elements of the Recycling Plan, and current status:

Requirement	Current Status
<p>Source Reduction Program to minimize the generation of refuse.</p>	<p>✓ StopWaste and member agencies have multiple source reduction initiatives in place; see Countywide Integrated Waste Management Plan (ColWMP) and the Agency Annual Budget.</p> <p>Examples include: Food Waste Reduction, Reusable Food Ware, and Reusable Bag Ordinance projects.</p>
<p>Residential Recycling Programs to provide each Alameda County residence with curbside pick-up of recyclable materials.</p>	<p>✓ All jurisdictions provide residential curbside programs; see ColWMP for details.</p>
<p>Commercial Recycling Programs to reduce the refuse disposal costs of businesses and government agencies.</p>	<p>✓ All jurisdictions provide commercial recycling programs; see ColWMP for details.</p>
<p>Recycled Product Market Development Program to create and strengthen stable markets for recycled materials in Alameda County.</p>	<p>✓ StopWaste has several market development projects; see Agency Annual Budget.</p> <p>Examples include: Compost and Mulch, Packaging, Building Services and Partnership projects, and development of a countywide Recycled Market Development Zone.</p>
<p>Recycled Product Purchase Preference Program to further encourage recycled materials markets by maximizing the amount of recycled products purchased by County government agencies.</p>	<p>✓ The County of Alameda has a Green Purchasing Program, partially funded by Measure D. For over ten years, agency staff has worked with the County General Services Agency to not only increase environmentally preferable purchases directly by the County, but to also work with local purchasing officials to instill environmentally preferable procurement policies and tools, such as bid specifications and shared purchasing contracts.</p> <p>Examples include: Green Purchasing Fact Sheets, Green Purchasing Guides and Resources, and Model Policy and Implementation Guide for Environmentally Preferable Purchasing at StopWaste.org</p>

Alameda County Source Reduction and Recycling Board

BEYOND 75% DIVERSION:

A PLAN FOR LANDFILL OBSOLESCENCE

DRAFT

September, 2020

BOARD MEMBER ROSTER

Source Reduction and Recycling Board

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ACKNOWLEDGEMENTS

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DRAFT

1. INTRODUCTION

The Alameda County Waste Reduction and Recycling Initiative (“[Measure D](#)”) was approved by the voters of Alameda County in November 1989. It established the Alameda County Source Reduction and Recycling Board (“[Recycling Board](#)”) and mandated that the Recycling Board create and periodically update a plan for a comprehensive source reduction and recycling program.

Furthermore, Measure D requires that the Recycling Board:

“[E]stablish, not later than January 1, 1999, a date to reduce, recycle, and compost at least seventy-five percent (75%), by weight, of all discarded materials generated within Alameda County, and, as necessary to the establishment of sustainable discarded materials management practices, shall subsequently establish a date (or dates) to reduce, recycle, and compost further quantities of discarded materials.”

In 2010, the Recycling Board targeted the end of calendar year 2020 for achievement of the 75% goal. As discussed in [Section 2: 2020 Context](#), progress toward the 75% goal has plateaued over the last 10 years, demonstrating that the approach of relying primarily on collection and processing isn’t enough to meet the 75% target. Therefore, this Plan sets a new goal for landfill obsolescence by the year 2045. While more ambitious than the 75% goal, this goal embodies the potential of fundamental, systemic changes to the production, consumption, and disposal that move Alameda County toward a more circular economy. To reflect this change in focus, this Plan is titled “Beyond 75% Diversion: A Vision for Landfill Obsolescence.”

Measure D requires that this Plan provide for the following essential elements (see [Section 4: Plan Activities](#) for more detail on each element):

1. An Alameda Countywide Source Reduction Program to minimize the generation of refuse;
2. Residential Recycling Programs to provide each Alameda County residence with curbside pick-up of recyclable materials;
3. Commercial Recycling Programs to reduce the refuse disposal costs of businesses and government agencies;
4. An Alameda Countywide Recycled Product Market Development Program to create and strengthen stable markets for recycled materials; and
5. A Recycled Product Purchase Preference Program to further encourage recycled materials markets by maximizing the amount of recycled products purchased by county government agencies.

The Plan incorporates all Alameda County recycling programs, whether funded by Measure D or not.

Relationship to the Alameda County Integrated Waste Management Plan

Measure D states that this Plan shall align with the requirements of the Integrated Waste Management Act of 1989 (AB 939), the state statute that (among other provisions) requires a Countywide Integrated Waste Management Plan (CoIWMP). The Alameda County Waste Management Authority (WMA) adopted an updated [Countywide Element to the CoIWMP](#) in April 2020.

The Countywide Element is the primary tool to design programs that are countywide in scope, and that complement and support Alameda County jurisdictions' individual programs. In conformance with state requirements, the Recycling Board acted as the Local Task Force during adoption.

While creating and updating this Plan is the legal obligation of the Recycling Board as a distinct entity, it is designed to be complementary to and consistent with the CoIWMP. This reflects the administration of the Recycling Board and the WMA as one agency (StopWaste), which jointly implements programs that fulfill the aims and requirements of each Board. Where applicable, this Plan references the Countywide Element directly, both to provide further detail and to avoid duplication between that document and this Plan.

2. 2020 CONTEXT

To remain relevant, the work done to fulfill the requirements of Measure D and this Plan must consider the state of waste reduction in Alameda County. This section provides a brief overview of some of the main issues that Alameda County faces in its efforts to reduce solid waste disposal and achieve related benefits, as well as a description of the roles that StopWaste, its member agencies, and private companies play to address these issues.

Top Six Countywide Issues

The ColWMP Countywide Element adopted in 2020 includes a chapter called “Countywide Issues,” that serves as the reference for the solid waste-related issues that Alameda County is currently facing, or are likely to arise, over the course of the planning period. (See [Countywide Element Chapter 2: Countywide Issues](#).)

This Plan addresses those same six issues:

- Recyclables markets
- Organics processing capacity and contamination
- Collaboration and roles in response to state mandates
- Climate and waste reduction
- Alignment of public interests and WMA priorities
- Transition to closed loop systems

Recycling Board, Alameda County Waste Management Authority, and Energy Council Roles

The Recycling Board, the Alameda County Waste Management Authority, and the Energy Council operate together as one public agency known publicly as StopWaste, with staff employed by the WMA. While each entity has discrete functions, they operate together under one roof with one set of staff to allow for collaboration among different project focus areas and cost-efficient administration.

The Recycling Board is responsible for programs that promote source reduction, recycling, recycled product procurement, market development, and grants to nonprofit waste reduction enterprises. Program funding is provided from a per-ton disposal surcharge at the Altamont and Vasco Road landfills, which is set at \$8.23 per ton as of 2020. About 55% of the funds are allocated to participating Alameda County municipalities for waste reduction efforts and about 45% for specified countywide programs and grants to nonprofit organizations, administered by StopWaste. Recycling Board initiatives are described in Measure D. Many of the requirements are prescriptive, such as the formula for distribution of funds to member agencies. The remaining are further refined in this Plan. The Recycling Board oversees the implementation of Measure D, serves as the Local Task Force, and acts as the Planning Committee for the WMA.

StopWaste, in implementing WMA and Recycling Board functions and requirements, focuses on programs that are best implemented on a countywide scale. Within that focus, it prioritizes the upstream activities that target reduce and reuse in the waste reduction hierarchy (reduce, reuse, recycle, rot (compost)). Downstream programs, including collection and processing of recyclables and organics, are primarily addressed by individual jurisdictions. StopWaste runs a discrete set of complementary downstream programs, for either

programmatic or efficiency reasons, with periodic adjustments to the relative roles based on current conditions. StopWaste's programmatic areas, encompassing both upstream and downstream activities, are: Organics, Packaging, Built Environment, and Communications.

The **Organics** program area focus on food waste reduction for residents, institutions, and schools (upstream), as well as enforcement of the Mandatory Recycling Ordinance (MRO), and promotion of compost and mulch use (downstream). Other programs work at the intersection of up- and downstream, in order to close the materials management loop. Examples include the WMA carbon farming project and support to member agencies' implementation of SB 1383, the Short-Lived Climate Pollutant Act.

Packaging programs include technical and grant assistance for packaging redesign; grant support for implementation of reusable packaging efforts, such as shipping and transport packaging and food service ware; and enforcement of the Reusable Bag Ordinance (upstream). The MRO increases opportunities for packaging materials to be recycled (downstream).

Built Environment programs support innovative approaches to building, including design for deconstruction (upstream), as well as focus on regional support for construction and demolition debris recycling (downstream).

Communications programs support all the programs noted above, through general media campaigns, at www.StopWaste.org and on social media channels. Schools and community-based outreach and education programs provide direct education to Alameda County school children and residents.

In addition, StopWaste provides other important functions, such as planning, support for its member agencies, legislative advocacy, grants, and innovative pilot programs.

The Energy Council was formed in 2013 as a joint powers agency to seek funding, on behalf of its member agencies, to develop and implement programs and policies that reduce energy demand, increase energy efficiency, advance the use of clean, efficient and renewable resources, and help create climate resilient communities. The Energy Council assists its members in strengthening staff capacity, providing technical expertise, and securing funds to implement local sustainable energy strategies.

Details and specific programmatic activities on all Recycling Board, WMA and Energy Council programs may be found online in the Annual StopWaste Integrated Budget at www.StopWaste.org.

The Role of WMA Member Agencies

Complementing the role of StopWaste are the roles of the jurisdictions within Alameda County. The WMA is a joint powers agency comprised of the 14 cities within Alameda County, the County itself, and two sanitary districts (Castro Valley and Oro Loma). Each member agency is responsible under the State Integrated Waste Management Act (also known as AB 939) for planning and implementing waste management and related programs at the local level. Pursuant to their land use powers, each member agency also performs environmental review and issues land use permits for solid waste projects.

All member agencies provide solid waste collection and disposal services, as well as recycling and composting services. In Alameda County, all jurisdictions have franchise agreements and/or contracts with private haulers, processors, and landfill operators. (The City of Berkeley provides some hauling services directly.)

Castro Valley and Oro Loma sanitary districts have assumed responsibility for implementing AB 939 waste reduction programs in their jurisdictions. Their service areas are primarily in unincorporated Alameda County. Although the sanitary districts participate fully as WMA members, they do not have local land-use powers.

The Role of Private Entities

Private entities have traditionally performed the majority of solid waste activities in Alameda County, including waste diversion programs and waste collection and disposal. All processing and disposal facilities in Alameda County are owned and operated by private entities, with the exception of the Berkeley Transfer Station, owned and operated by the City of Berkeley.

In addition to the large companies currently providing comprehensive waste management services in Alameda County, there are many large and small firms and nonprofit organizations that provide waste diversion services. These include materials recovery facilities (MRFs), drop-off and buy-back centers, donated goods and resale merchandise stores, industries specializing in processing of secondary materials such as wood wastes, and entities that have become proficient in the use of secondary materials.

Additional Resources:

[Countywide Element Chapter 3: Solid Waste Management System](#) provides a comprehensive description of the various public and private entities responsible for materials and waste management in Alameda County, including jurisdiction waste reduction programs. An interactive map of the flow of materials destined for composting, recycling, and landfilling can be found online at www.StopWaste.org/materials-map.

3. GOAL AND DATE

As of 2020, Alameda County has a 67% diversion rate, based on extrapolations from the CalRecycle model¹. Diversion was estimated to be 15% in 1990, and the most recent estimate at the time of publication of this Plan is lower than the high of 73% in 2015. Per capita calculations indicate 4.4 pounds/person/per day, compared to 8.8 in 1990 and 3.6 in 2015.

Table 3-1: Progress Toward 75% Diversion Goal

Year	Tons	Population	Diversion Rate	Lbs./Person/Day
1990	2,058,839	1,276,702	14%	8.8
1995	1,542,516	1,333,031	37%	6.3
2000	1,579,652	1,437,136	54%	6.0
2005	1,501,082	1,462,736	60%	5.6
2010	1,069,896	1,509,240	70%	3.9
2015	1,050,037	1,594,569	73%	3.6
2018	1,322,709	1,656,884	67%	4.4

Despite robust recycling and organics collection programs, extensive infrastructure, mandatory requirements, and sophisticated franchise contract provisions, both diversion rates and per capita disposal have remained relatively flat for nearly 10 years, while gross landfill tonnages have begun to increase after years of steady declines. The requirements of SB 1383, the short-lived climate pollutant legislation designed to reduce landfilled compostables by 75%, will likely, if successful, provide the final push to get Alameda County to the total 75% diversion by weight goal. Regardless of what exact percent of estimated diversion is possible, however, both the data and the experiences of Alameda County jurisdictions and service providers suggest that the county is reaching the limits of an approach that relies on post-consumption collection and processing.

1 The CalRecycle model for measuring progress towards the statewide 75% goal includes adjustments for economic growth and population. Starting in 2007, CalRecycle began using only per capita estimates instead of “diversion rates” to measure progress towards the 50% and 75% statewide goals. The diversion rates for 2010-2018 are therefore inferred based on assumptions of total waste generation, which cannot be measured.

“Beyond 75%” Goal

This Plan sets the goal that landfills become obsolete as a means of managing materials. Circular material flows will minimize the use of non-renewable resources that have traditionally been landfilled; redesigned products and systems will eliminate landfill waste; and recycling and organics programs and facilities will effectively recover materials.

Landfill obsolescence will require more fundamental systemic change than the recycling-based solutions that have been heavily relied upon thus far, and that were designed to meet goals set three decades ago. At that point, the solid waste stream was made of a high proportion of readily recyclable materials, which have since largely been replaced by materials that are more difficult to recycle. This trend, combined with other developments—including an unprecedented decline in overseas markets, diminishing success of California’s Bottle Bill, contamination in recycling and organics streams, and state mandates, as well as the understanding of climate change and evolving public attitudes—warrants a different approach.

Presciently, Measure D identified source reduction (also known as waste prevention) as a means to reach its goals. As we reach the limits of collection and processing, waste prevention must emerge as the primary strategy in order to both sustain and expand upon the progress to date. Simultaneously, goals and measurements need to evolve to reflect environmental impacts more accurately. Relying on weight-based goals grossly oversimplifies the challenge; assessment of our progress should not be based on how much space is left in local landfills. In fact, Alameda County has more than adequate landfill capacity, estimated to last until 2049. By replacing a weight-based goal with a more comprehensive and ambitious goal, public policy can focus on changes that are simultaneously more impactful on total waste, have fewer negative human and environmental side effects, and contribute to offsetting climate change.

The 2045 date for achieving landfill obsolescence was chosen because it aligns with the State’s climate neutrality goal. The two goals are symbiotic, as a massive rethinking of how to eliminate waste, and a redesign of economic and human systems, is inherent in each of them.

4. PLAN ACTIVITIES

To reach the goal of landfill obsolescence, the whole system of materials and waste management must be reimagined. While post-consumer waste diversion will continue to play a role, StopWaste will focus on fostering innovative activities that work toward a circular economy that considers “waste” as “feedstocks,” such as carbon farming through compost application or influencing packaging redesign. This section briefly discusses the implementation activities that fall under the responsibility of this Plan, within the context of the state of waste reduction, different roles, and aligning with the guidance of Measure D.

SOURCE REDUCTION PROGRAM

Source reduction, refers to activities designed to reduce the volume, mass, or toxicity of products throughout the life cycle. It includes the design and manufacture, use, and disposal of products with minimum toxic content, minimum volume of material, and/or a longer useful life. An example of source reduction is use of a reusable shopping bag at the grocery store. Although it uses more material than a single-use disposable bag, the bag can be reused hundreds of times, eliminating the GHG emissions associated with and materials used in production of the single-use bag, as well as the impacts of its disposal.

Each jurisdiction within Alameda County has an adopted Source Reduction and Recycling Element (SRRE) under the ColWMP. These SRREs, which are required by State law and maintained by jurisdictions, outline jurisdiction-specific waste diversion activities to help meet State and local diversion goals. One component of the SRREs is source reduction, which includes citizen education, procurement, school and government source reduction, and material exchange such as thrift shops. More information about SRREs in Alameda County can be found in [Countywide Element Chapter 7: Implementation](#).

In addition to the jurisdiction-specific information contained in the SRREs, the Recycling Board has also prioritized source reduction and focuses on upstream activities that promote reduce and reuse in the waste reduction hierarchy. The requirements contained within Measure D provide for the development of an Alameda Countywide Source Reduction Program. Provisions include, but are not limited to the following:

- Reducing the amount of county purchases, with specific goals and an emphasis on the conservation of paper products and employee education.
- A program that recognizes businesses demonstrating a significant reduction in the use of packaging materials or other materials used in manufacturing processes.
- Research and development of source reduction opportunities and incentives.
- An intensive public education campaign to promote best practices in reducing waste for consumers and for businesses and institutions.
- Research and study on disposal costs and waste audit services to demonstrate the efficacy of recycling programs to businesses and institutions.

Measure D source reduction funding has been allocated to StopWaste projects that address the above criteria. Activities have included research, direct technical assistance, grant funding, and significant outreach campaigns tailored to consumer and business audiences. Specific allocations of Measure D source reduction funds have varied over time, and reflect StopWaste priorities as adopted by the Recycling Board. Below are

brief descriptions of current programs funded by the Source Reduction Program. More detail can be found in the StopWaste annual budget, which lists deliverables and budgets for each program.

- Food Waste Reduction aims to reduce wasted food generated in food service, households, and schools by providing training and technical assistance, media and outreach, food-saving tools, and food waste reduction grants through the Smart Kitchen Initiative, Stop Food Waste Campaign, and Smart Cafeteria Initiative.
- Packaging focuses on waste prevention, reuse, and improved recyclability of packaging materials that are manufactured, sold, and discarded in Alameda County, with an emphasis on packaging that supports food waste reduction goals. The program provides education, technical assistance, and financial support to businesses and institutions, as well as engagement with industry and other stakeholders to support the implementation of sustainable packaging.
- Built Environment advances upstream building material strategies to reduce the amount of material eventually exiting the built environment as waste. The program works with member agencies and partners to shift industry trends toward greater material efficiency, designing for circularity, and lowered embodied carbon.
- Reusable Food Ware develops policy, infrastructure, and capacity for greater adoption of reusable food ware in Alameda County, aiming to reduce single-use to-go containers.
- Reusable Bag Ordinance implements the expanded reusable bag ordinance adopted by the WMA Board in 2016. The program provides outreach and technical assistance to the 14,000 affected stores and eating establishments and enforcement with inspections conducted on non-compliant entities, based on complaints made from the general public and in-field observations.
- Resources for [Upstream Projects Grants Program](#) funds to non-profit and other organizations in the categories of: reuse and repair; food waste prevention; waste prevention equipment; and community outreach grants.

RECYCLING AND ORGANICS DIVERSION PROGRAMS

Discarded materials require adequate diversion programs that increase recycling and organics processing, thereby keeping these materials out of landfill. StopWaste policy is to support adequate infrastructure that maximizes environmental benefits by balancing high volume of recovery with related considerations such as quality of commodities, operating impacts of facilities, and other environmental impacts of programs. Even in a fully circular economy, these types of facilities and programs are necessary to turn “waste” material into “feedstocks” for another generation of products.

Member agencies are responsible for on-the-ground collection services, through their contracts with waste haulers (or, in the case of City of Berkeley, delivering some services directly). Member agencies set and monitor all aspects of these programs, including accepted materials, frequency of service, processing and disposal destinations, and rates. Both directly and indirectly, member agencies’ needs and requirements drive investment and operations at processing facilities.

StopWaste provides a more general role in supporting the flow of materials throughout the County, by assisting with ordinances, supporting compliance with legislation, and providing countywide education and communications in a complementary manner to member agencies’ direct communications with their residents and businesses. Activities by category are below.

Infrastructure

StopWaste supports member agencies' access to efficient, adequate, and environmentally-sound infrastructure for managing reuse activities and recyclables, organics, and other discards. This is achieved through monitoring material flows throughout the county and beyond, such as conducting studies and compiling data from the member agencies, reviewing new or modified solid waste facilities throughout the County under the auspices of the Countywide Element's Siting Criteria and ColWMP amendment processes, fee collection, and enforcement.

Education and Communications

StopWaste provides public education and information on how to reduce, reuse, repair, recycle, and when needed, dispose of an item correctly. Engagement with schools, institutions, residents, and businesses helps achieve these goals.

The [RE:Source guide \(https://resource.stopwaste.org\)](https://resource.stopwaste.org) provides a user-friendly database of where residents and businesses can take materials for diversion or disposal, and is an example of an education and communication tool that aims to reduce contamination and increase diversion.

Regional Collaboration

StopWaste convenes its member agencies on a regular basis for collaboration and coordination of countywide efforts to reduce waste and divert materials from landfill. The Technical Advisory Committee (TAC) meets monthly and is made up of representatives from each member agency. Jurisdiction and StopWaste staff share technical and other information related to the coordination of StopWaste and member agency programs. StopWaste also facilitates working groups and stakeholder meetings for other coordination actions related to waste reduction and diversion, including the Alameda County Service Providers Task Force. This Task Force was originally convened to address the issue of China's changed import policies and recyclables market challenges, and has since become a regular forum to promote collaboration on a number of topics such as education and outreach, contamination issues, and organics collections and diversion issues. It consists of member agency staff as well as industry representatives.

Technical Assistance

In order to meet state mandated and local diversion goals, the WMA has passed several ordinances, such as the Mandatory Recycling Ordinance (MRO) and Reusable Bag Ordinance (RBO). These countywide programs are continually monitored and evaluated to ensure they are meeting the intended goals. StopWaste also promotes the regional interests of its member agencies at a state and national scale, including monitoring legislation and regulations and assisting member agencies in complying with such policies.

StopWaste provides technical assistance on how to comply with local, state, and federal legislation. Often these take the form of pilot programs with emphasis on scalability and model ordinances. For example, the MRO was adopted in 2012 and requires businesses, institutions, and multifamily properties with five or more units to sort their recyclables separate from waste. StopWaste provides technical assistance to support compliance with the ordinance as well as enforcement, as needed. The type of assistance provided

for compliance with the MRO may evolve over time given current needs, from enforcement to education and partnering with properties to come up with innovative approaches to meeting the intent of the ordinance. Similarly, SB 1383, The Short-Lived Climate Pollutants Reduction Act adopted in 2016, will require diversion of organics from landfill and minimum procurement of recycled-content organic materials by cities. Member agencies look to StopWaste for assistance in meeting procurement requirements, as well as maintaining viable organics markets (i.e., addressing adequate processing capacity and quality). While certain activities will naturally be undertaken on a countywide level—for example, gathering information regarding food donation options—others may be more appropriate at the local level. Given expense, expertise, roles, funding sources, and similar or competing responsibilities, efforts will be further divided between StopWaste and the member agencies as regulations are finalized and implementation begins.

MEMBER AGENCY ROLES

Residential Programs

All member agencies have curbside recycling and organics collection programs that serve their jurisdiction's residents. These franchise agreements with various waste haulers are negotiated by the jurisdictions and vary in terms of provider, frequency, and method of collection. (The City of Berkeley provides collection services directly to its residents, as well as contracting with some private entities.) Specifics of accepted materials and other details, including rates, can be found on the StopWaste website, including the [RE:Source guide](#). These agreements also describe the flow of materials throughout the waste management system, including which transfer and processing facilities and landfills are used. Most of the member agencies send their materials to in-county facilities, while some send materials out-of-county for processing or disposal. More detailed information on the residential collection programs for member agencies is provided in [Table 3-8](#) and [Table 3-9](#) in the Countywide Element. The flow of materials may be seen at www.StopWaste.org/materials-map.

Commercial Programs

In most jurisdictions, the franchised hauler also provides commercial recycling service. Services provided vary among jurisdictions, as some franchised haulers retain the exclusive right to collect commercial recyclables from larger businesses while some commercial and industrial businesses in the County have their recyclables collected by private companies, or ship their recyclables to private recycling companies or processing facilities (e.g., paper companies or wood waste facilities). Several cities contract with private collection companies to pick up their recyclables from municipal facilities. In addition, a robust infrastructure of hundreds of recycling and reuse businesses exists in Alameda County, from reuse facilities to thrift stores to construction and demolition processing facilities.

A summary of the commercial recycling arrangements for each jurisdiction can be found in [Table 3-10](#) of the Countywide Element.

RECYCLED PRODUCT MARKET DEVELOPMENT PROGRAM

A robust infrastructure for recycling and diversion with sufficient capacity for Alameda County is essential to reach the goal of landfill obsolescence. However, the increasing complexity of products, need for reliable markets to buy recycled materials, and contamination of waste streams means that materials that cycle through the County's infrastructure may still ultimately wind up in landfills. To close this gap, efforts are needed on multiple fronts: decreasing contamination in the feedstock, ensuring adequate processing, and influencing markets and product development so that there is a stable and sustainable demand for the outputs of processed recyclables. Markets are essential to both the economics of sustaining recycling as well as realizing the environmental benefits from it.

RMDZ

The Recycling Market Development Zone (RMDZ) program, administered by CalRecycle, provides low interest loans and technical assistance to firms that use recycled materials to make new products or that prevent or reduce waste as part of the manufacturing process. To qualify for assistance, the facilities must be located within a CalRecycle-designated RMDZ and use postconsumer or secondary recovered waste feedstock generated in California.

The Oakland/Berkeley RMDZ encompasses West Berkeley between Interstate 80, San Pablo Avenue, the Oakland-Emeryville border, and the Albany border. In Oakland, the zone includes the central business district, major industrial areas in West Oakland and the Coliseum area, the Port of Oakland's facilities, and the Oakland International Airport.

The acute shortage of recycling infrastructure, new mandates from the State directing new diversion goals, and research that connects recycling with reducing greenhouse gas emissions, point to the critical need to build a more robust recycling infrastructure in California. Given the significance of developing this infrastructure, the WMA and Recycling Board directed staff to start a process to expand the Berkeley and Oakland RMDZ to a countywide RMDZ, with StopWaste becoming the Zone Administrator.

Additionally, the WMA adopted facility related goals, objectives, and policies through the Countywide Element, specifically Goal 2—Responsible Infrastructure—which aims to maximize environmental benefits by balancing high volume of recovery with related considerations, such as quality of commodities, operating impacts of facilities, and other environmental impacts of programs.

StopWaste Projects Funded by Market Development

While traditional recycling commodities (fiber, metals, and glass) are handled in the context of international markets and are incorporated into a multitude of products, organics materials are collected, processed, sold, and used within a very small geographic area through only a handful of products. Therefore, both the benefits and challenges of composting remain very much local issues, and a prime candidate for market development.

StopWaste market development efforts over the years have promoted compost and mulch in several ways. These efforts have included direct consumer education and incentives; grants and design assistance for public projects; training member agency staff to incorporate compost into their specs and requirements; working with urban farms to both use compost and provide workshops for residents on the use of compost;

and educating landscape professionals on compost use. Applying compost – one method of a practice known as “carbon farming” – on landscapes, gardens, as well as range and park lands, enhances the ability of plants to capture carbon from the air and store it in the soil, thereby providing quantifiable greenhouse gas benefits. StopWaste is currently modeling this cutting-edge practice on WMA property in the Altamont hills, while also educating landowners and ranchers about carbon farming benefits. This both supports a market for compost and meets the urgent need for carbon sequestration methods.

Another priority area for StopWaste is packaging. Packaging presents both a source of contamination in recycling streams (thereby creating market challenges) and an opportunity to use recyclable commodities. In this arena, StopWaste has focused on driving increased adoption of reusable transport packaging (through technical assistance and grants) as well as promoting uniform recyclability labelling efforts. To support the efforts to reduce single-use food ware, StopWaste will pilot various approaches to support local reusable infrastructure, including grants and technical assistance for business conversion to reusable food ware.

Other market development efforts have focused on the built environment, mainly in developing policy approaches to incorporate innovative materials and techniques.

Recycled Product Purchase Preference Program

Although the Recycled Product Purchase Preference program began by focusing simply on reducing overall paper use and increasing recycled content of paper and other products, it has since expanded over time to cover a wide range of green purchasing programs. The Alameda County General Services Agency (GSA) implements these Measure D-required programs through a Memorandum of Understanding (MOU) with StopWaste. The GSA directly assists member agencies, including allowing jurisdictions to “piggyback” on county contracts for affordable access to recycled content or green products, developing and sharing approaches to reduce the use of materials (such as electronic processes that eliminate paper use), providing assistance to pass and implement local green purchasing policies, and convening local purchasing officers at periodic educational roundtables on specific types of materials, such as carpeting, office equipment, and furniture. The GSA leverages and shares its expertise freely to advance green policies throughout the County, while providing national leadership for innovation in this area.

5. IMPLEMENTATION

This Plan articulates a vision for systemic change, in which materials and waste management systems are reimagined. This Plan identifies the activities that StopWaste will undertake in support of this sweeping goal, including education, technical assistance, financial assistance, model and countywide ordinances, support for responsible local infrastructure, innovative pilot projects, and regional collaboration.

While this Plan articulates the general activities to achieve goals over a longer time span, StopWaste will use joint planning and budgeting processes between the WMA, Energy Council, and Recycling Boards to define specific priorities and deliverables. This section explains the processes by which the general concepts in this Plan will be translated into action.

StopWaste uses an adaptive approach to strategic planning, focusing its efforts to achieve the greatest results in support of its goals and mission. Every two years, StopWaste initiates a priority-setting process among staff and with key stakeholders, designed to assess progress toward overarching goals, review results of program evaluation or other studies, and analyze current issues. StopWaste's two-year priority setting process is an opportunity to ensure that our collective efforts are responsive to new challenges and opportunities in the communities we serve. Together, the Boards set guiding principles for budget development.

Each fiscal year, the Recycling Board will adopt a budget to implement this Plan. The budget document, called the StopWaste Annual Integrated Budget and found online at www.StopWaste.org, also contains the budgets for the WMA and the Energy Council.

Recycling Board programs are funded by fees collected through Measure D. Given their shared priorities and integrated governance, many projects are jointly funded by the WMA and the RB. At the same time, projects are joint funded only to the extent that they meet the detailed requirements for eligible activities in Measure D. The Energy Council programs are solely externally funded.