



Memorandum

Date: September 27, 2021
To: Natural Resources Commission
From: Jennifer Gilbert, Conservation Coordinator
Adrienne Heinig, Assistant to the Director, Public Works Utilities and Operations
Subject: Senate Bill 1383 Implementation Planning Update

Recommendation

Informational Item

1. Receive informational update on solid waste program topics, including:
 - a. Solid Waste Utility 101 Booklet; and
 - b. Senate Bill 1383 (also called: Short-Lived Climate Pollutants: Organic Waste Methane Emissions Reductions) implementation planning update and introduction presentation link.

Solid Waste Utility 101

Staff have recently completed a utility 101 booklet for the City's solid waste utility (see Attachment 1). Like the water, wastewater and stormwater utility booklets that the City has created in the past, the Solid Waste Utility 101 booklet provides a full spectrum overview of the utility, its programs, funding mechanisms, regulations that guide it, and planning for resiliency. The booklet also details what happens to all the materials collected by Recology, outreach strategies that the City uses to inform customers of waste diversion requirements, and upcoming changes to the utility and the solid waste industry at large.

Senate Bill 1383 Introduction

The Natural Resources Commission has received a number of updates on the status of the City's work to ensure compliance with SB 1383 by January 2022, with the most recent update received by the Commission in June 2021. The memo in June discussed the background of SB 1383, the goals of the legislation, and the City's contract with SCS Consultants to work on a roadmap that will identify any gaps that the City currently has in meeting the regulations of SB 1383, as well as potential options to close those gaps. That work is still underway, and will be presented to the Commission when completed.

As the Commission is aware, landfills are the third largest source of methane emissions in California. When buried in landfills, organic waste (including paper, cardboard, food

scraps, food-soiled paper products, yard trimmings and other organic-based wastes) emit 20% of the state's methane (a climate super pollutant 84 times more potent than carbon dioxide) and air pollutants like PM 2.5 (which contributes to health conditions like asthma). Organics wastes make up half of what Californians send to landfills. Reducing the amount of organic waste in landfills can have a direct impact on the climate crisis, which is the purpose of SB 1383.

The final rulemaking for SB 1383 was completed by CalRecycle on November 3, 2020. Fortunately for Davis, solid waste programs and policies already in place contribute to the community being well on the way toward compliance with SB 1383, especially with the introduction of mandatory organics waste collection in 2016. However, there are many other parts of SB 1383 that will take work to develop and implement.

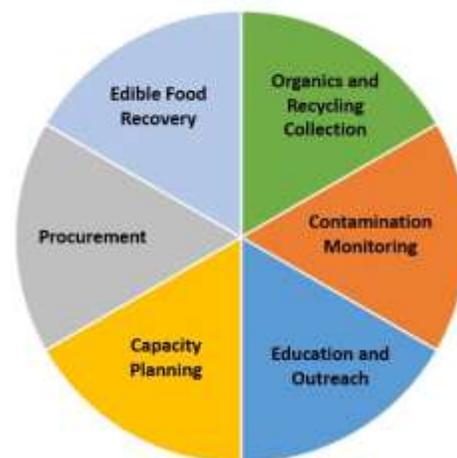
In the report to follow, staff have summarized each of the six main elements of the regulations, where the City is on track to be compliant by January 2022, and where additional steps are likely to be necessary. This report, portions of which were provided to the Utilities Commission at their meeting in July 2021, and provided to Council for their September 21, 2021 meeting (the presentation for the item was rescheduled due to time constraints), is accompanied by a presentation from staff to the Utilities Commission, discussed later in the report.

The Six Main Elements of SB 1383

The chart to the right shows the six main elements of the SB 1383 regulations¹ that apply to the City of Davis. Some aspects of these elements are explained briefly below along with the City's current status and potential next steps.

- **Organics and Recycling Collection**. One of the main requirements, ensuring that all residents and business have access to recycling and organics collection, has been in place in Davis since July 2016. SB 1383 requires specific colors for waste collection containers: trash containers must be grey or black, organics containers must be green, and recycling containers must be blue. All new containers must be clearly labeled with what does and does not go into them.
 - **Current status:** Davis already has recycling and organics collection available to all customers. Single-family trash carts are grey and Recology

The 6 Main Elements of SB 1383



¹ The full text of the regulations can be found online: <https://www2.calrecycle.ca.gov/Docs/Web/118371>. Each section describing the six main elements of the regulations includes a link to the CalRecycle guidance (where available).

- Davis has already been repainting commercial trash bins grey. However, City organics carts have brown lids, commercial recycling carts are green, and single-family recycling carts are blue and black lidded.
- **Anticipated Updates to Comply with Regulations:** While the City does not need to replace all of the existing carts until 2036, any new cart purchased after January 1, 2022 and provided to City customers must be color compliant. The City needs to decide if the goal will be to slowly phase into the new color changes or if the carts should be updated sooner.
 - **Contamination Monitoring** The regulations require waste audits to be conducted on each trash, recycling, and organics route regularly, to check bins for contamination (recycling and organics not being sorted correctly). Specific recording, reporting and follow-up is required for any contamination that is found.
 - **Current status:** While some audits are conducted by Recology Davis drivers, this is not currently done on all routes in order to monitor contamination levels.
 - **Anticipated Updates to Comply with Regulations:** The City will be working with Recology to design a full contamination monitoring program to fulfill the SB 1383 requirements.
 - **Education and Outreach**. SB 1383 regulations will require the City to conduct specific outreach to residents, schools, businesses and edible food generators on an annual basis. The outreach must be translated into multiple languages, based on the most recent census results.
 - **Current status:** The City does already provide annual outreach to these groups regarding waste sorting and recycling.
 - **Anticipated Updates to Comply with Regulations:** The City will need to review its outreach program to ensure that every aspect follows the language, timing, and translation requirements of SB 1383.
 - **Capacity Planning**. The City must collaborate with the County and the other jurisdictions located within the county to determine the necessary organic waste recycling and edible food recovery capacity needed to divert organic waste and edible food from the landfill as required under the regulations.
 - **Current status:** Recology Davis brings all the organic waste collected in Davis to the Yolo County Central Landfill composting operations, however this arrangement has not been formally approved. The County has a robust food recovery network via a number of organizations, with the necessary capacity needs identified through a recently completed capacity study which should be released to the County Board of Supervisors soon.
 - **Anticipated Updates to Comply with Regulations:** The City is working on securing a short-term, organics waste flow agreement to ensure that all of

the organics that are collected in Davis will be composted. The City will also be considering long-term, organics waste processing plans. City staff are working with a county-wide team to assess the county's current edible food recovery capacity and determine if it needs expansion.

- **Procurement Requirements.** Beginning January 1, 2022, the City must annually procure a certain quantity of recovered organic waste products. Jurisdictions can fulfill their target by procuring any combination of eligible products such as compost, mulch, and renewable energy. The City is also required to purchase recycled-content paper.
 - **Current status:** The City has a long-established purchasing policy in place that requires the purchasing of recycled-content paper. The City does use some compost in parks and greenbelts each year, but not enough to fulfill the SB 1383 target.
 - **Anticipated Updates to Comply with Regulations:** The City's Implementation Plan will provide some alternative options for the City to utilize to meet the additional procurement quantity for recovered organic waste products.

- **Edible Food Recovery.** The City must identify the edible food recovery generators that are required to implement edible food recovery programs, connect them with local food recovery organizations, provide annual outreach to the edible food generators about their requirements under SB 1383, and perform annual inspections to ensure they have contracts in place with edible food recovery organizations, and are keeping records of all recovered edible food.
 - **Current status:** The efforts related to edible food recovery programs are being led by the County. More detail on this is included below in this report. The City has been working with the County to identify all the edible food generators in Davis that will be affected by SB 1383.
 - **Anticipated Updates to Comply with Regulations:** Edible food recovery outreach and inspection programs will need to be fully developed in partnership with the County and County jurisdictions.

Edible Food Recovery - A Countywide Effort

City staff continues to work closely with the staff and consultants from other jurisdictions in Yolo County on a county-wide edible food recovery program to meet the requirements of SB 1383. In June 2021, the consultants assisting the Cities and the County with their various implementation plans generated a letter to address the status of the planning on edible food recovery effort. This letter is included as Attachment 2.

At the Yolo County Board of Supervisors meeting on July 13 2021, County staff presented an update on the countywide edible food recovery effort. During the discussion, staff addressed several different points related to edible food recovery:

- The SB 1383 regulations require solid waste programs to report on edible food recovery, estimate capacity for food recovery and increase capacity when needed for Tier 1 and Tier 2 generators to recover edible food. Addressing the Tier 1 and Tier 2 edible food recovery has been the primary focus of solid waste staff in order to fulfill the SB 1383 regulatory requirement.
- Under the requirements of SB 1383, each jurisdiction is responsible for funding the additional capacity need for the Tier 1 and Tier 2 generators within their own jurisdiction. Davis has 7 Tier 1 businesses that will need to recover edible food by January 2022 (most already have some kind of food recovery program in place already). There are an additional 6 Tier 2 businesses that will need to recover edible food by January 2024.
- The County had (at the time of the Board meeting) nearly completed the edible food capacity study that will provide each County jurisdiction with the total amount of edible food recovery capacity that currently exists, and what capacity is needed for full compliance with SB 1383. This is an essential step to complete before jurisdictions can make decisions about funding.
- County staff suggested, and the Board seemed in agreement, that a countywide model that requires all Tier 1 and Tier 2 businesses to work with a single food recovery organization is likely not going to succeed. Particularly with restaurants and large events, a flexible and local food recovery effort might be better suited than a county-wide model. Transporting food from a rural Tier 1 generator to a centralized food recovery organization, then back out to the rural areas would likely take potentially unnecessary time, could be an impact to food safety, and would affect climate action goals. In addition, the Yolo Food Bank has indicated that they are not able to accept food from Tier 2 generators (which is largely prepared food from restaurants, cafeterias and large events) as that food is not shelf-stable and requires more immediate and careful handling and distribution, further highlighting the need for local food recovery efforts.

Edible Food Recovery - Solid Waste Service & Social Service Overlap

An important consideration for jurisdictions throughout the planning process of developing edible food recovery programs will be to determine (if and when applicable) when edible food recovery services are a *solid waste* program (through the requirements within SB 1383) and when the service (should it supersede the requirements) becomes a *social service* program. This is an important consideration as the City revisits the SB 1383 regulations in the future to discuss possible funding opportunities.

Edible Food Recovery - The Question of Funding

There is currently ambiguity of whether solid waste rate funds can be used towards food recovery service under Proposition 218 regulations. Under SB 1383, the regulations do permit recovery organizations to charge distributors for services, however a funding mechanism for an edible food recovery program has not yet been identified by the jurisdictions as the County's capacity study has only been very recently completed (and not yet made public). While the jurisdictions are required to increase the edible food recovery capacity if required, the State has made it clear that the cost of the program does not need to be carried by any particular entity.

Utilities Commission Presentation

City staff gave a presentation on the SB 1383 regulations to the Utilities Commission at their regular meeting on July 21, 2021. The video of the meeting can be viewed here: https://youtu.be/PjLrtdCRg_E?t=5529. With limited time available on NRC meeting agendas, and based on the positive feedback of those who attended the Utilities Commission presentation on SB 1383, this presentation is being provided via the link to the meeting video for the NRC to review prior to staff returning with the SB 1383 Implementation Plan and draft Municipal Code updates.

More information on SB 1383

As a reminder, City staff developed several webpages for the City's website on SB 1383, how it will impact businesses and residents, and a separate page to address the food recovery portion of the regulations. These pages will continue to be updated as more information becomes available and the City's implementation plan develops. The pages are available via a link on www.DavisRecycling.org

Here is the direct link to the SB 1383 webpages: <https://www.cityofdavis.org/city-hall/public-works-utilities-and-operations/solid-waste-and-recycling/sb-1383-calrecycle-organics-regulations>

CalRecycle continues to release more information on SB 1383 implementation on webpages dedicated to collection, procurement, food recovery, and resources for jurisdictions, food donors, and food recovery organizations and services. CalRecycle's webpages can be found here: <https://www.calrecycle.ca.gov/organics/slcp>

The City's July Utility Bill contained an insert introducing the SB 1383 Organic Waste Regulations and encouraging customers to visit the website for more information. This insert is included as Attachment 3.

Ordinance Update

Concurrent with the effort to develop the Plan, City staff have been working to update the existing Chapter 32 of the City's Municipal Code: *Management of Garbage, Other*

Wastes, Recyclables, and Fees Therefor with the changes required to bring the Ordinance into compliance with SB 1383. Most of the changes will be prescriptive, with limited flexibility provided to jurisdictions on the adoption of these regulations, since CalRecycle is providing more specific guidance than previous rulemakings on solid waste programs. Staff will bring the draft ordinance changes to the Natural Resources Commission for input prior to review and potential adoption by the City Council. CalRecycle has indicated that an “enforceable” ordinance to implement the requirements of SB 1383 needs to be in place by January 1, 2022.

The anticipated timeline for the implementation plan and ordinance revision is provided below.

Action	Timeline
Working on implementation plan/roadmap	January 2021 – October 2021
Present SB 1383 Introduction to City Council	September 2021
Present draft implementation plan options to Commissions for recommendation	October – November 2021
Present draft SB 1383 Ordinance to NRC for review	October 2021
Present draft implementation plan options to City Council for review and direction	October – December 2021
Present draft SB 1383 Ordinance to NRC to City Council (First and Second Reading)	November – December 2021

Attachments

1. Solid Waste 101 Utility Booklet
2. Consultant Edible Food Recovery Letter
3. July Utility Bill Insert: SB 1383 Introduction



CITY OF DAVIS

SOLID WASTE UTILITY 101

PUBLIC WORKS – UTILITIES & OPERATIONS



UTILITIES COMMISSION

JULY 21, 2021



WHAT IS SOLID WASTE?

Solid waste is an all-encompassing term that includes trash, recyclables, organics, and all forms of non-liquid waste.

The Solid Waste Program

The City's solid waste program serves businesses, multi-family properties and single-family customers in Davis' 10.5 square mile service area, and includes the collection of organics, recycling and trash. The collection of solid waste is carefully regulated by the State for human and environmental health and safety purposes. Managing waste is necessary in order to ensure healthy communities. Solid waste management has changed drastically over the past 30 years by viewing waste as a *resource* rather than just trash.

What Makes Davis Different: Dual-Stream Recycling

Davis has a dual-stream recycling system: paper is collected separately from "comingled" recyclables (glass, metals and plastic). This preserves the quality of the paper, as it does not get dirty from liquids often found in used containers. Recology's recycling trucks are all divided, so paper goes into one compartment of the truck, while the comingled recyclables go into a different compartment.



By the Tons

In an average year, Davis residents and businesses produce:

6,700 tons of paper, cardboard, glass, plastic and metal recyclables

12,500 tons of organics (yard waste, food scraps, etc.)

20,600 tons of trash

All combined, that's enough waste to fill **85 Olympic-sized swimming pools** each year.

Ahead of the Curve

Recycling in Davis started in April 1970, when a small group of environmentally-minded citizens began a newspaper drop-off recycling program. Curbside recycling of newspapers started just 4 years later, one of the first curbside recycling programs in the nation.

In 2016, based on the City's Integrated Waste Management Plan, the City instituted a city-wide organics collection program for all solid waste customers, one of only a few jurisdictions in California to make the program mandatory.



Did You Know: In the past 20 years, Davis recycled more than 224,800 tons of paper, glass, aluminum and cardboard. That's about a quarter of the weight of the Golden Gate bridge!



RECOLOGY DAVIS

The City has an exclusive franchise waste agreement with Recology Davis to collect trash, recyclables, organics, and on-street yard material piles, and perform street sweeping within the city limits. The contract runs until the end of 2027 with a possible 5 year extension.



A Materials Recovery Facility (MRF) is a place where waste is sorted out by type for processing.

Recology Davis Recycling Center

Recology Davis administration office, material recovery facility, and recycling center is located at 2727 2nd Street in Davis. The recycling center offers 24/7 drop-off recycling for:

- Paper
- Plastics
- Cardboard
- Aluminum
- Metal Cans
- Scrap metal
- Used motor oil
- Motor oil filters

Recology Davis operates a Buy Back Center onsite as well, where customers can redeem their CRV containers. Recology accepts mattresses and box springs for free recycling and used sharps for free and safe disposal during buyback hours.

Bulky Items Drop-Off

Recology offers a Bulky Items Drop-Off event or landfill voucher every year for residents to get rid of bulky items for free. This program ensures that all possible materials are recycled or reused.



Material Recovery Facility

At the material recovery facility (MRF), all the recyclables collected by Recology Davis are hand sorted by material type, then baled for sale to recycling brokers.



Did You Know: Sharps waste, such as used needles and lancets, are banned from the trash in California to protect workers from accidental needle sticks. Unfortunately, Recology staff still regularly find needles in the recyclables they hand sort.



CARTS, COLLECTION, AND CONTAINERS... OH MY!

Single-Family Collection Service

Curbside collection service occurs once a week and includes

- Trash (35, 65, or 95-gallon cart sizes)
- Recycling via 65 gallon split recycling cart
- Organics (35, 65 or 95-gallon cart size)
- Weekly loose cardboard pick-up



Multi-Family Collection Service

Apartments, condos and other multi-family properties receive communal waste collection service. They have at least one organics cart and two different kinds of recycling carts: one for mixed paper and one for plastic, glass and metal containers. Flattened cardboard is stacked on the ground next to the recycling carts or garbage bins. Either 95-gallon carts or large dumpsters are used for trash.



Kitchen Food Scrap Pails

When the City-wide Organics Collection Program began in 2016, kitchen food scrap pails were delivered to the front door of each single-family home in Davis. Pails were also given to multi-family property managers that requested them for their tenants. The City continues to give out pails to new residents and upon request to multi-family properties.



iBIN Recycling

Many multi-family properties in Davis have a blue [iBIN](#) (in-apartment recycling bin) in each unit that was given out by the City in 2008 thanks to a CalRecycle grant. These iBINS make it easier for residents to collect and transport their recyclables from their apartments to the community recycling carts.



Commercial Collection Service

Businesses in Davis have at least one organics cart and two different kinds of recycling carts: one for mixed paper and one for plastic, glass and metal containers. Cardboard is flattened and stacked on the ground for pick-up next to the recycling carts. Some businesses have a bin for cardboard. Either 95-gallon carts or large dumpsters are used for trash.



ON-STREET YARD MATERIAL COLLECTION AND STREET SWEEPING

On-Street Yard Material Collection

In addition to the weekly collection opportunities in the brown-lidded organics cart, seasonal on-street yard material pile collection is offered in most areas of Davis for excess yard materials that do not fit in the organics carts. During the seasonal collection, Recology will collect piles of leaves and tree prunings with a rear-loader truck and “the Claw.”

Seasonal collection includes 10 scheduled fall/winter collections that occur every other week (from mid-October to February) and one spring collection.

There are challenges to collecting material loose on the street. Storms can impact yard material collection by increasing the amount of materials placed in on-street yard material piles or by wind and rain moving piles, leaves and debris around streets and sidewalks. In recent years, the City has experienced more frequent storm events, contributing to an unpredictable level of material being placed in the street during the winter months.



“The Claw”

On-street yard material pile collection is intended for excess leaves and tree prunings that do not fit in the organics cart. But even the Claw has its limitations! Piles should never be more than 5 feet in any direction. Why? That’s the max amount that the loader can collect at one time.



CNN US Crime + Justice Energy + Environment Extreme Weather Space + Science

California city hit by series of weird weather events, including tornado and hail

CNN.com: September 29, 2019

Street Sweeping

Recology performs street sweeping once a month in most areas of town (the downtown area bordered by 5th Street, B Street, 1st Street and the railroad tracks, is swept every Friday).



Did You Know: In most areas of town, the City does not require cars to be moved out of the street when sweeping occurs. This can impact street sweeping effectiveness as the sweeper cannot access the curb and gutter where waste and debris tend to accumulate.



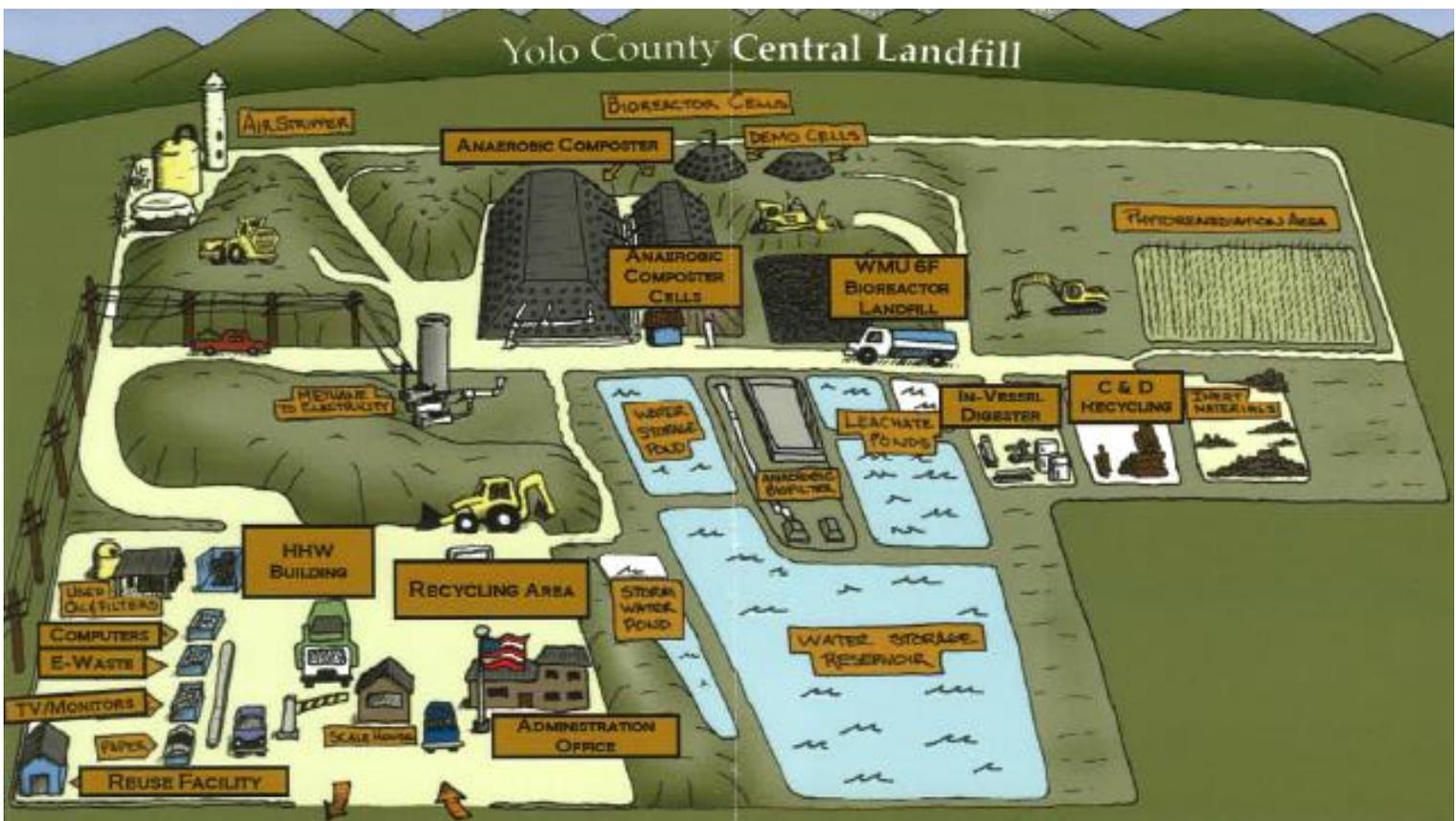
TRASH

WHERE DOES IT ALL GO?

Davis, West Sacramento, Woodland, and Winters have waste flow agreements with Yolo County. Under the terms of these agreements, all trash collected by the cities' waste haulers must go to the Yolo County Central Landfill to be buried. These agreements give the cities a discounted per ton rate for trash as well as a free household hazardous waste drop-off program at the landfill for their residents.

Yolo County Central Landfill: So Much More than a "Dump"

Operated by the County Integrated Waste Management Division, the Yolo County Central Landfill is more than a dumping ground for trash. It's a multi-use resource recovery facility. Not only does the landfill have carefully engineered landfill cells to safely bury trash and ensure the protection of groundwater, they also have a state of the art organics processing facility, a mixed construction and demolition debris recycling facility, a hazardous waste facility, a reuse thrift store, wood reuse program, recycling programs for a multitude of items from electrics to cardboard, and more.





RECYCLING

WHERE DOES IT ALL GO?

The Materials Recovery Facility

All the recyclables that are collected by Recology are brought to their materials recovery facility (MRF) on Second Street in Davis for sorting. When the trucks get to the MRF, the comingled recyclables are emptied into one pile outside the sorting building, while the paper is emptied into a large pile inside the building. Tractors move the recyclables onto conveyor belts for sorting.



Hand Sorting

There are two sorting lines at the MRF—one for paper and one for comingled recyclables. Recology workers sort out recyclables by hand while also pulling out trash. 93-95% of all the material received at the MRF is recyclable. There is only 5-7% trash, which is a huge testament to how well residents and businesses in Davis sort their waste!



Baled Recyclables

Once the recyclables are sorted by type, they are run through a baler to compress them into easily transportable bales (except for the glass, which is kept in large bins). The bales are then sold to recycling brokers.



Did You Know: While most MRFs use a combination of hand-sorting and mechanical equipment that can include air blowers, sieves, magnets, and optical sorting machinery, the Recology MRF in Davis uses only magnets and a line of workers that hand-sort recyclables into separate bunkers.



ORGANICS

WHERE DOES IT ALL GO?

All the material from the brown-lidded organics carts and the on-street yard material piles are collected by Recology and brought to an anaerobic composting facility at the Yolo County Central Landfill where they are turned into compost. Audits performed in 2017 showed that the organics collected in Davis contained approximately 3% food waste (97% yard materials) with only 7% non-organic materials (by weight). That's very clean material by industry standards!



What are organics?

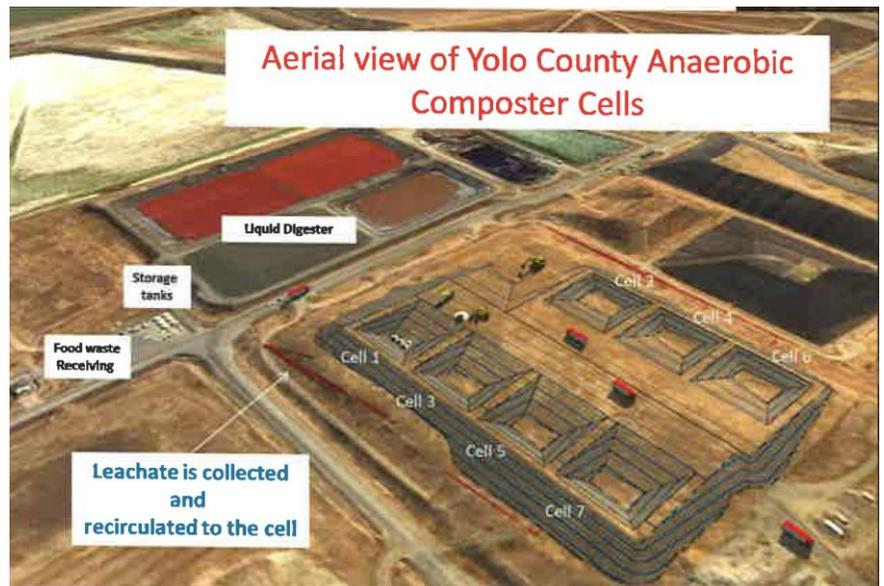
When talking about solid waste, organics are not only what you find in the organic produce section of a grocery store. The term *organics* also refers to food waste, food-soiled paper, and yard material that can be composted.



Yolo County Landfill Composting Facilities

The landfill staff and their contractor run the County's anaerobic composting facility. When organic materials arrive at the facility, they are placed through a grinder and moved into specially constructed cells. Once in the cells, anaerobic bacteria decompose the organics and create biogas and compost. The biogas is fed into an energy generation facility onsite, and the compost is dug out of the cell after 6 months and taken for further processing via aerobic composting.

The landfill is in the process of building an aerobic composting facility onsite to manage the material that comes out of the digester, as well as to have an additional composting option for yard materials. They are also constructing a liquid digester and depackager onsite so that they can accept canned and packaged food wastes for digestion.



What's Next For Organics?

New regulations coming in January 2022 will require the City to focus on improving the organics collection program (see page 13 for details). As part of the preparations for these regulations, the City is looking into short and long term plans for what more we could be doing with our organics.



HAZARDOUS WASTES

Household Hazardous Waste

Under California state law, certain materials, known as household hazardous waste (HHW) are not allowed to be thrown out in everyday garbage. Types of HHW include: motor oil, latex or oil based paints, solvents, household cleaners, pesticides, herbicides, and poisons. Yolo County provides free HHW disposal to Yolo County residents every Friday and Saturday from 7:30 a.m. to 3:30 p.m. at the Permanent Household Hazardous Waste Facility at the Yolo County Central Landfill. **The University of California, Davis** separately funds their own HHW collection program, so residents of the University can't bring their HHW materials to the county HHW facility. **Business hazardous waste** is accepted for a fee at the landfill hazardous waste facility by appointment.

Universal Waste

California state law defines products that contain mercury, lead, cadmium, and other toxic substances as "universal waste". These items also can't be thrown in the household trash or disposed of in landfills. Examples of universal waste include batteries, fluorescent tubes, and many electronic devices. Universal wastes are accepted at the County Household Hazardous Waste facility, and local options for safe disposal in Davis are also available.

Batteries and Medications

Yolo County cities have an agreement with the County to host collection sites for household batteries and medications at various locations. A number of government buildings and retail stores have collection buckets for household batteries and police stations have a medication kiosks where residents can bring unused and expired medications for safe disposal. These sites are visited once per month by County staff to collect the wastes for safe disposal through their hazardous waste facility.

Electronics

While the Yolo landfill does offer free electronic waste recycling for residents during their normal operating hours, there are other local options as well. Goodwill is a State-certified electronic waste recycler, so broken electronics can be brought to Goodwill donation centers for both reuse and recycling.

Fluorescent Bulbs and Tubes

In addition to the free disposal at the county hazardous waste facility, some large retail stores in Yolo County also collect fluorescents from the public for free, including Home Depot, IKEA and Lowes.



Did You Know: Medications are not banned from the trash in California, but concerns over water quality and public health and safety (drug abuse and accidental poisoning) has promoted many jurisdictions to provide safe collection programs for their residents.





SOLID WASTE DIVERSION PROGRAMS

Education, Outreach and Enforcement

The City of Davis Solid Waste Diversion programs focus on outreach and education for the City's residential, multi-family and commercial solid waste customers, in addition to regulatory reporting and program implementation.

Unlike the City's other utilities, the Solid Waste program is not its own division, rather the program and management of the franchise contract is within the Environmental Resources Division of the Public Works Utilities and Operations Department.

Staffing for the City's Solid Waste Program consists of:

- A full time Conservation Coordinator focused on solid waste program development, implementation and outreach, and coordination with Recology outreach staff
- PW Assistant to the Director focusing on education, outreach and regulatory compliance
- Environmental Resources Manager who manages the contract with the City's franchise waste hauler
- Environmental Program Specialist who enforces the solid waste portions (Chapter 32) of the Davis Municipal Code

Please sort your waste into the correct bin. Questions? Visit DavisRecycling.org

RECYCLING		ORGANICS			TRASH
PAPER	PLASTIC, GLASS & METALS	FOOD SCRAPS	FOOD-SOILED PAPER	YARD TRIMMINGS	

Greener Guide
A guide to greener living in Davis.

Professor Davis Goes Zero Waste

Partners for a Greener Davis

REDUCE REUSE RECYCLE REBUY ROT

Annual Apartment Move-Out Waste Reduction Program (AMOWRP)

The Apartment Move-Out Waste Reduction Program (AMOWRP) is a partnership between the City of Davis (Public Works Utilities and Operations Department) Recycling Program and property managers at apartment properties in Davis. It is an effort to reduce the amount of good, usable material that typically ends up in the landfill during the yearly August move-out.

Donation stations are set up at participating apartment properties for residents to leave good, usable items for reuse. Ensuring that bed frames, computer desks, sofas, lamps, clothes, etc. are donated and reused instead of thrown in the trash may help apartment managers see a reduction in their disposal fees because the dumpsters will not fill up as fast, necessitating fewer pickups and saving on disposal cost.

The program operates with the assistance of community volunteers, that help keep the donation stations organized, and non-profit groups that collect donated items.





SOLID WASTE RATES

Current Rate Structure

All properties within the City are required to subscribe to the solid waste services provided by Recology. The City collects solid waste service fees from customers and uses the revenues to pay Recology for the solid waste services provided, to fund outreach programs, and cover the operational and administrative costs of providing these services, including billing and collection of the service fees.

Solid Waste Utility Billing

The solid waste service charges to customers are divided into two categories: Single-Family Residential, and Commercial/Multi-Family Residential.

Solid waste service charges include the following solid waste services:

- 1) Weekly pick-up of garbage.
- 2) Weekly pick-up of recycling, including glass, metal cans, aluminum, non-food soiled paper, cardboard, and plastics.
- 3) Weekly pick-up of organics using the brown-lidded organics cart for items such as meat, cheese, fruits and vegetables, food-soiled paper products (pizza boxes, paper drink cups, paper plates, and paper napkins, etc.), and yard materials (grass clippings, leaves, and other yard trimmings).
- 4) Loose-in-the-street collection of yard materials and street sweeping.
- 5) Bulky Items Drop-Off event in the spring.
- 6) Residential hazardous waste disposal programs.
- 7) Various other waste reduction and recycling outreach and programs.



2019 Proposition 218 Rate Adjustment Schedule

Single Family Garbage Cart Size	Effective March 1, 2019 (13.5%)	Effective January 1, 2021 (12%)	Effective July 1, 2021 (6%)	Maximum Rate Effective January 2022 (5%)	Maximum Rate Effective January 2023 (5%)
35-Gallon	\$ 35.19	\$ 39.41	\$ 41.78	\$ 43.87	\$ 46.06
65-Gallon	\$ 38.95	\$ 43.62	\$ 46.24	\$ 48.55	\$ 50.98
95-Gallon	\$ 46.47	\$ 52.05	\$ 55.17	\$ 57.93	\$ 60.83

Incentivizing Waste Diversion

Solid waste service fees are based on the size of the garbage service. Recycling service is unlimited and available at no additional cost. Basic organics service (one organics cart) is available at no additional cost. Additional organics carts or more frequent pick-ups are available for an additional cost. Customers can pay lower garbage service rates if they downsize their garbage service and recycle more.

WASTE DIVERSION REQUIREMENTS

There are a number of State laws that govern solid waste collection and diversion programs. Some of the key waste diversion regulations are listed below.

AB 939: Integrated Waste Management Act

This landmark 1989 law set forth aggressive solid waste diversion requirements: each city and county must divert a minimum of 25% of its waste from the landfill by 1995 and 50% by 2000.

AB 341: Mandatory Commercial Recycling

Requires all businesses that generate 4 or more cubic yards of waste each week and all multi-family properties with 5 or more units to have recycling service.

AB 1826: Mandatory Commercial Organics Recycling

Requires businesses that generate 2 cubic yards or more of waste per week to recycle their organic waste.

AB 872: Customer Access to Recycling

This new law went into effect July 1, 2020, and applies only to businesses that are subject to the requirements of AB 341 and AB 1826 *and* provide or sell products meant for immediate consumption. These businesses must provide organics and recycling containers that are visible, easily accessible, and clearly marked, at the front-of-house to collect waste generated from products purchased and consumed on the premises.

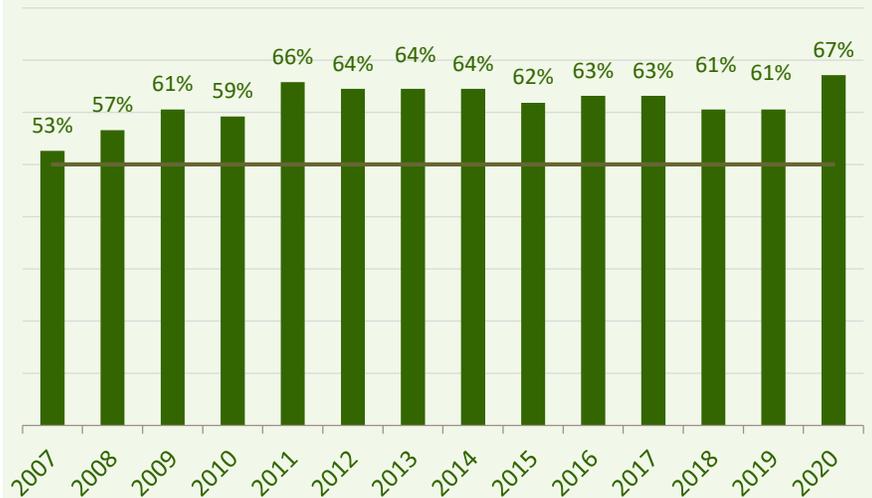


Free Signs & Posters



The City provides free indoor recycling bins, waste bin signage and posters to businesses to help make it easier for them to sort their waste and meet the State requirements.

City of Davis Diversion Over the Years



Did You Know: Davis Municipal Code 32.01.065 requires that recyclables and organic materials be separated from the trash and placed into the correct bins for collection.



SB 1383

SHORT-LIVED CLIMATE POLLUTANTS

CalRecycle Organics Regulations

The California Department of Resources, Recycling and Recovery (CalRecycle) has the responsibility for enforcing Senate Bill 1383 Short-Lived Climate Pollutants: Organic Waste Methane Emissions Reductions. These regulations, which go into effect January 1, 2022 are extensive and mean significant changes in Davis. SB 1383 establishes targets to achieve a 50 percent statewide reduction in the disposal of organic waste to landfills by 2020, and a 75 percent reduction by 2025. It also establishes an additional target that (at minimum) 20 percent of currently disposed edible food be recovered for human consumption by 2025.

These regulations contain the most significant changes to solid waste management since the 1980s and include specific requirements for:

- Collection and processing of organics materials
- Outreach specifications
- Bin color, labeling and placement requirements
- Bin contamination monitoring of all hauler collection routes
- Enforcement penalties for businesses and jurisdictions
- Edible food recovery programs
- Procurement of organic waste products
- Detailed recordkeeping of required activities

Jurisdiction Responsibilities

Provide Organics Collection Services to All Residents and Businesses



Conduct Education and Outreach to Community



Secure Access to Recycling and Edible Food Recovery Capacity



Establish Edible Food Recovery Program



Procure Recyclable and Recovered Organic Products



Monitor Compliance and Conduct Enforcement



CalRecycle

Food waste alone accounts for approximately 17-18 percent of total landfill disposal statewide. Increasing food waste prevention, encouraging edible food rescue, and expanding the composting and in-vessel digestion of organic waste throughout the state will help reduce methane emissions from organic waste disposed in California's landfills. In addition, compost has numerous benefits including water conservation, improved soil health, and carbon sequestration. Anaerobic digestion produces biogas that can be used to create electricity or renewable transportation fuels. Food rescue has the added benefit of assisting Californians who are unable to secure adequate, healthy food by diverting edible food to food banks and pantries.

The City of Davis and SB 1383

The City has engaged a consultant to assist with developing an implementation plan for SB 1383 compliance. There are many aspects of the regulations that the City has already in place—such as a mandatory city-wide organics program and compliant ordinance language for construction and demolition debris and the State's Model Water Efficient Landscape Ordinance (MWELO). For the requirements not currently in place, Davis is working to develop a plan. Staff are meeting with representatives from the county and other jurisdictions on a cohesive county-wide edible food recovery plan. The City is also working on a long-term plan for where our organics waste will be processed.



RECYCLING MARKET CHALLENGES

Recyclables From Davis Are Not Landfilled

The export of recyclable materials is a key component of California's recycling infrastructure. California exports about a third of the recyclable material it collects. Most of that material used to go China for processing and manufacturing into new products, but China's recent strict contamination limits and import bans have led to the stockpiling of recyclable materials at California solid waste and recycling facilities due to the declining global market value for some recyclables.

Despite the challenges in the global recycling market, recyclables collected in Davis are still able to make it to recycling processors. While securing markets for recyclables has become more difficult for the industry as a whole, this difficulty has mostly been due to contamination in recyclable materials.

In Davis specifically, the dual-stream collection system that keeps materials clean during the collection process, an environmentally minded community that sorts their waste properly, and hand sorting of recyclables at the MRF results in pristine bales of recyclables (no trash or other contaminants within). As a result, the Recology corporate sales team has recovered recycling markets that were lost when China exited the market.

What About Plastics?

Some plastics from the Recology MRF stay in the US while others go to South East Asia to be recycled.

In response to concerns voiced in the media about the recycling markets in South East Asia, a Recology team representative visited all of the plastic processing facilities used by Recology in June 2019, to verify that the material Recology sent to them was recycled responsibly. They came back with a wealth of information about the recycling process in Indonesia, Malaysia, Hong Kong, and Vietnam and confirmed that all of the processors are recycling every possible material they can and are doing so without polluting the communities in which they operate.

The Davis City Council passed a resolution in 2019 to support statewide efforts to address single-use plastics and the lack of recycling markets. The Corporate head of Recology has also been an active proponent of reforming the plastics industry and finding comprehensive solutions to getting single-use plastics out of the landfill.



Did You Know: The only modification to recycling practices in Davis in recent years was the request that customers rinse their containers before recycling, in case baled materials sit in the warehouse longer than usual before they ship out.



BUILDING A RESILIENT UTILITY

Waste and Climate Change

Municipal solid waste (MSW) landfills are the third-largest source of human-related methane emissions in the United States, accounting for approximately 15.1 percent of these emissions in 2018. Methane emissions resulting from the decomposition of organic waste in landfills are a significant source of greenhouse gas emissions contributing to global climate change. SB 1383 and similar regulations recognize and look to address this significant potential for addressing climate change.

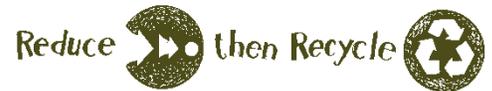
Recycling helps reduce greenhouse gas emissions by reducing energy consumption. Using recycled materials to make new products reduces the need for virgin materials, avoiding greenhouse gas emissions from extracting or mining virgin materials. In addition, manufacturing products from recycled materials typically requires less energy than making products from virgin materials.

Waste prevention and smart shopping are effective at reducing greenhouse gas emissions that result from energy consumption. When we buy less, reuse products, and purchase recycled-content products, less energy is needed to extract, transport and process materials to manufacture products. For example, purchasing recycled-content paper, reduces energy consumption and allows more trees to remain standing, where they can continue to remove carbon dioxide from the atmosphere.



Did You Know: Recology produces an annual sustainability report and posts it to their website every January. They have set a company-wide goal to have 90% of their fleet powered by renewable or alternative energy sources by 2022.

The City's agreement with Recology specifies that all front line vehicles must be CNG by 2025.



You hold the power to enact the necessary change.

Yes, you! While work is being done to address what happens with trash, organics or recycling processing, so much of the work in addressing the climate and environmental impacts of these materials lies in the actions of all of us. Preventing waste from reaching disposal by purchasing reusable products and recycling and composting as much as possible can have a huge impact.

You Can Make a Difference!



Adapted from U.S. EPA (www.epa.gov/wastes/nonhaz/municipal/pubs/ghg/clmfold.pdf)



BUILDING A RESILIENT UTILITY

Several on-going efforts are underway at the City, as staff are working to address current and potential impacts on services and infrastructure necessary for solid waste programs.

Development Reviews

Anytime there is a proposal for a new building, a new development, or significant renovations to existing buildings are planned for a new business, City staff carefully review the plans for congruency with the City's General Plan, Municipal Code and other potential impacts before the plans are approved. Part of that review process includes a close look to ensure that the proposal has sufficient space allotted for enough recycling and organics bins to divert at least 75% of their waste. This is an essential component of planning for the future to ensure that all new businesses, apartments and homes have enough space set aside for recycling and organics bins instead of just trash.

Construction and Demolition Waste

The City of Davis has adopted Tier 1 of the California Green Building Standards Code (CALGreen), which encompasses a number of measures intended to conserve resources and reduce greenhouse gas emissions. Through CalGreen, the City requires construction and demolition projects to divert 100% of their land-clearing debris (soil, dirt, rock, concrete, yard materials, trees, etc.) and at least 65% of all other waste debris (including metals, gypsum, wallboard, lumber, etc.) for recycling or reuse. To ensure that all building projects are meeting these diversion targets, the City requires Waste Diversion Plans to be filled out by customers when they apply for a building permit and a Waste Diversion Report must be completed before a building permit is finalized.



Looking to the Future

Solid Waste Program staff watch for new and developing solid waste legislation changes, industry standards and issues of concern and track their development. The waste industry as a whole is constantly changing to adapt and adjust to the changing economy, product trends and environmental regulations. One example of this is the shift in recent years to online purchasing. This has created a significant increase of cardboard in the waste stream—2,400 tons of cardboard was collected in 2019 compared to only 900 tons in 1991. These changes alter the way that the solid waste program communicates to customers about recycling.



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Abound Food Care



DIVERSION
STRATEGIES

June 10, 2021

RE: Edible Food Recovery Capacity Study for SB 1383 Compliance in Yolo County

SB 1383, the Short-Lived Climate Pollutant Reduction Strategy Regulation, requires jurisdictions to make significant changes to divert organics from landfill disposal. A key part of the regulation is the requirement for specific types of businesses, defined as Tier 1 and Tier 2 edible food generators in the regulation, to participate in food recovery programs (i.e., food donation). Defined edible food generators are required to establish agreements with a recovery organization or service, donate their available edible food, and keep records of donations.

CalRecycle, the State agency responsible for implementing the regulation, defined these edible food generators based on their relative contribution to the statewide disposal of edible food. SB 1383 edible food generator definitions intentionally include both entities that are likely have existing food recovery programs and entities that do not currently participate in food recovery and have relatively significant quantities of food available for donation.

The edible food recovery sections of the regulation also require counties and jurisdictions to complete a “Capacity Study” by August 1, 2022. In this study, the County, in conjunction with jurisdictions, will estimate the quantity of edible food in the disposal stream and identify the aggregated food recovery capacity available to accept the edible food currently disposed in the region. The Capacity Study will identify if there is sufficient food recovery infrastructure within a region. If the study identifies a lack of recovery capacity, CalRecycle requires submission of an implementation plan 120 days after the capacity study is submitted (December 1, 2022). The implementation plan will outline how the region will secure recovery capacity.

Jurisdictions must establish local ordinances to require food recovery organizations and services to report specific data to the jurisdiction. They must also establish an inspection and enforcement protocol for edible food generators, recovery organizations, and recovery services.

The cities of Davis, West Sacramento, Winters, and Woodland and the County of Yolo have contracted with experienced consultants to help complete their Capacity Study, conduct surveys of food recovery agencies and identify Tier 1 generators, and prepare a ‘gap analysis’ of the required investment in

infrastructure is needed to ensure each jurisdiction is fully compliant with the regulation. There have been regular, collaborative meetings and communications between the jurisdictions and consultants for several months, as the group has worked toward the final report delivery.

Specifically, the following items have been completed, or will be completed in the next 10 business days:

- The Yolo Food Bank has been engaged in discussions on their current level of service to Tier 1 generators and estimated need for additional infrastructure.
 - An evaluation and analysis of Yolo Food Bank’s funding request is underway.
- Consultants have surveyed 57 other Food Recovery Agencies (out of 61 Food Recovery Agencies in the County¹) to assess their current level of service to Tier 1 generators and estimated need for additional infrastructure.
 - Analysis of the surveys are being conducted to evaluate trends and gaps in infrastructure.
- All Tier 1 generators in the County who do not currently subscribe to service with the Food Bank have been, or are currently being, surveyed regarding participation and experience with food recovery and any barriers, or past challenges with food recovery.
 - In Yolo County, including each city, 23 individual Tier 1 generators currently do not subscribe to service with the Yolo Food Bank. Surveys will determine if they have available excess to food that can safely be donated and/or if they subscribe to food recovery through another non-profit agency.
- The disposal tons, and required recovery capacity, for all Tier 1 and Tier 2 generators have been estimated using the CalRecycle Model Tool, which is used to determine the “need” for infrastructure.
- Additionally, County Public Health has been engaged and has completed a site visit checklist to ensure the site inspection process has been integrated into their permit inspection program.

Next steps include:

- Determine the available and needed capacity for edible food recovery in the County based on what is required in the regulations and the guidance provided by CalRecycle to date.
- Determine the appropriate amount of funding needed on a Countywide basis to enable edible food generators to donate as required by law.
- Develop a mechanism to provide funding based upon need (potentially via a grant program or other means).
- Finalize the analysis from the funding request for the Yolo Food Bank.
- Finalize the analysis from the food recovery agency surveys.
- Finalize the analysis from the Tier 1 Generator surveys.
- Consolidate the information from all consultant work in each City into a singular Countywide report that will provide a summary of the results of the surveys, the capacity evaluation, an analysis of the Yolo Food Bank funding request, and recommendations on funding a program that will be compliant with SB 1383. This report will serve as a guidance document with tangible steps that the region can take to ensure compliance with the regulation.
 - A Draft report will be provided no later than August 2, 2021.
 - A Final Report will be completed no later than August 31, 2021.

¹ Three Food Recovery Agencies did not respond. One chose not to participate.

Yolo County, and each jurisdiction within its boundaries, are making exceptional steps to ensure compliance with the SB 1383 regulation and have been in continual contact with CalRecycle on the specificities of the requirements. This investment in professional time and resources is a demonstration of that effort. Significant progress has been made to fully understand the current landscape of food recovery in the region, which is made up of a range of 61 non-profit providers in addition to the Yolo Food Bank. Funding for this program must be transparent, reasonable for the ratepayers, and result in tangible recovery of edible food. The County is committed to these results and is working in lockstep with numerous stakeholders involved in this process.

SB 1383: Short-lived Climate Pollutants

Statewide Organic Waste Regulations Starting January 2022

Senate Bill 1383: Short-lived Climate Pollutants is part of a statewide effort to reduce the emissions of short-lived climate pollutants (like methane gas) in various sectors of California's economy. SB 1383 establishes specific statewide targets:

- Reduce the amount of organic waste going to landfills (50% reduction by 2020 and 75% by 2025)
- Rescue at least 20% of edible food that is currently going to landfills by 2025 and redirect it to people in need

What is Organic Waste?

The State defines organic waste as food, landscape trimmings, lumber, wood, manure, cardboard, paper products, and other plant and animal-based products.

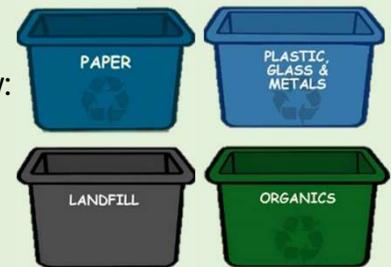
The California Department of Resources, Recycling and Recovery (CalRecycle) finalized the regulations to achieve the goals of SB 1383 in November 2020 and these regulations take effect in January 2022.

The State has committed to reduce greenhouse gas emissions, improve health, and create clean jobs that support resilient local economies. Organic waste makes up half of what Californians send to landfills, where it emits 20% of the state's methane, a climate super pollutant 84 times more potent than carbon dioxide. Implementing the statewide plan under SB 1383 will reduce methane emissions and is essential to achieving California's climate goals.

What will the new State law mean for me?

Here are some of the changes that we will all see under the new State law:

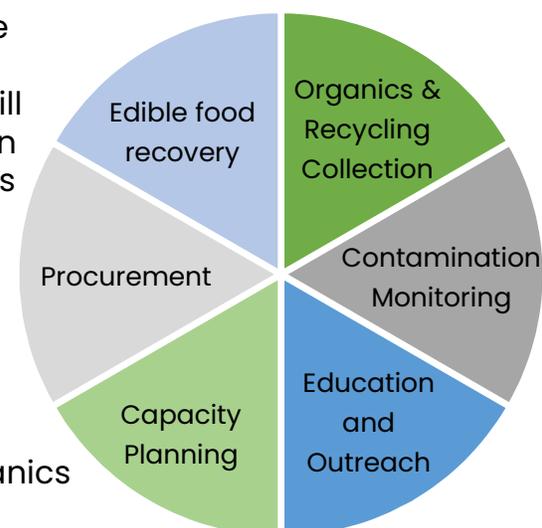
- Everyone will be required to divert all organic waste (paper, cardboard, yard waste, food scraps, and food-soiled paper) from the landfill.
- Businesses will need to place labeled bins for recycling and organics recycling next to all trash cans. Labels must be compliant with State regulations.
- Some businesses will need to recover edible food and redirect it those in need.



Davis is preparing for the SB 1383 Regulations

Fortunately for Davis, we are well on our way toward compliance since Davis has had mandatory organics waste collection since 2016. However, there are many other parts of the new law that will take work to implement. The chart to the right shows the six main elements of SB 1383 that Davis will need to address (more details are available at DavisRecycling.org).

The City is working on an Implementation Plan with a roadmap of options for how we might look to meet the requirements of these new State regulations. Once this roadmap is complete, City Commissions and City Council will review it and determine which options the City will enact to move forward. There will be some changes to the City's waste collection, recycling, and organics programs over the next few years.



For more information about SB 1383, visit DavisRecycling.org