

Talking Trash: Recyclables and Organic Waste



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SUMMARY

In 2016, the State of California enacted Senate Bill (SB) 1383, requiring counties, cities, and other organizations responsible for waste collection to coordinate with their residents to divert organic waste, including food scraps, from the landfill waste disposal stream. Another provision makes jurisdictions responsible for procuring a quantity of the recovered organic waste products resulting from the diversion. The 2023-2024 Orange County Grand Jury (OCGJ) investigated how Orange County jurisdictions are complying with the requirements and goals of SB 1383 that impact single-family residential units.

The investigation revealed that the approaches to meeting SB 1383's requirements vary greatly from jurisdiction to jurisdiction. The majority of Orange County jurisdictions have not yet distributed residential waste containers that meet the SB 1383 standardization requirements, leaving outdated labeling/embossing in place. Education and outreach have not yet taken place at all in some jurisdictions. Even when information has been disseminated in other jurisdictions, the methods disproportionately favor intermittent paper mailings. Also, the State's unrealistic targets for the procurement of recycled organic waste products do not account for a jurisdiction's population density or geographic size, which frequently makes them extremely difficult to meet.

The local enforcement stage of SB 1383 started on January 1, 2024. However, the majority of Orange County jurisdictions are unlikely to meet the SB 1383 targeted seventy-five percent reduction in the amount of organic waste sent to landfills by January 2025.

The OCGJ concludes there is a clear need to improve education and outreach efforts, develop enforcement mechanisms and processes, and to coordinate and collaborate among all jurisdictions to collectively address the challenges and to achieve the goals and targets of SB 1383.

BACKGROUND

Organic waste comprises more than a third of the waste stream in California and includes green waste, wood, food waste, and fibers such as paper and cardboard. When left to decompose in landfills, organic waste releases large amounts of methane gas which is harmful to the environment (CalRecycle, 2024). In September 2016, SB 1383 set reduction targets in a statewide effort to reduce emissions of Short-Lived Climate Pollutants (SLCP) including methane. Simply put, this required all statewide jurisdictions to implement mandatory organic waste collection and recycling to divert organic waste from landfills. Another key benefit of the diversion of organic and other recyclable material from landfills is the preservation of overall landfill capacity.

In 2014, the State conducted random sampling of twenty-six landfills, Material Recovery Facilities (MRF), and Transfer Stations located in twenty-one of California's fifty-eight counties (none in Orange County). The results were used to establish the baseline for

the required reduction in organic waste destined for landfills. SB 1383 then set goals to reduce organic waste sent to landfills below the 2014 baseline by fifty percent no later than January 1, 2020, and seventy-five percent by January 1, 2025. However, despite the law's requirements, the amount of organic waste sent to landfills statewide actually increased by twenty-three percent above the 2014 baseline (Little Hoover Commission, 2023).

SB 1383 requires all jurisdictions to memorialize the bill's requirements in their municipal codes and ordinances no later than January 1, 2022. One of the results of these changes is that each jurisdiction had to amend or renegotiate their waste haulers' franchise agreements to incorporate the new requirements.

In accordance with SB 1383, as of January 1, 2024, all jurisdictions (and therefore all waste producers) will be subject to enforcement, including monetary fines. While SB 1383 has a myriad of requirements for commercial as well as residential waste producers, the OCGJ narrowed its investigation to the impacts associated with local jurisdiction compliance with SB 1383 on Orange County residents. This report focuses on the specific requirements associated with SB 1383, the local actions taken so far to meet those requirements, the success of those actions and how they are measured, local agency outreach and education efforts, and the challenges that remain for the County of Orange and the county's thirty-four cities.

REASON FOR THE STUDY

The organics diversion mandate under SB 1383 began to take effect in California on January 1, 2022. This means that jurisdictions in California were required to implement programs for the separation and diversion of organic waste, including food scraps, from landfill disposal. The actual enforcement of this requirement started on January 1, 2024. The OCGJ's intent was to take a closer look at how Orange County jurisdictions are responding to this mandate, their successes and challenges, and the impact of this new requirement on the Orange County residents.

The OCGJ initially focused on two questions:

- What actions have Orange County jurisdictions taken to implement organics collection for their residential customers, and how do they measure the success of these actions?
- Given that one key to the success of SB 1383 is public participation, have local jurisdictions conducted sufficient outreach and education?

While investigating the answers to these questions, the OCGJ discovered additional information about Orange County recycling and waste management that is notably relevant to this topic and is included in this report.

METHOD OF STUDY

The OCGJ toured several local waste facilities, including:

- The Frank R. Bowerman landfill in Irvine, owned by the County of Orange and managed and operated by OC Waste & Recycling (OCW&R). This enabled the OCGJ to gain a better understanding of the refuse collection and disposal process.
- The MRF operated by Rainbow Environmental Services, located at 17121 Nichols Lane in the city of Huntington Beach. This facility was previously decommissioned then reopened on short notice when the newer Anaheim MRF was destroyed by fire in February 2022.
- The MRF operated by Waste Management, located at 2050 North Glassell Street in the city of Orange. This tour allowed the OCGJ to gain information on the operation of a newer, larger MRF.

The OCGJ reviewed SB 1383 and related documents, training videos, public meeting recordings, and presentations available on the CalRecycle website.

The OCGJ reviewed online publications from various organizational and media sources related to trash hauling and general operations of the waste and recycling industry and conducted fourteen interviews with representatives from the waste industry, local jurisdictions, and the State's enforcement agency.

The OCGJ also disseminated a nine-question survey to each of the thirty-four Orange County cities and the County to obtain their perspectives on local implementation of SB 1383. Follow-up interviews were conducted with representatives of the same ten cities included in the 2019-2020 OCGJ report "OC Recycling: Doing it the Right Way" and the County for additional insight into each jurisdiction's implementation of, and compliance with, SB 1383's requirements.

The OCGJ utilized the same sampling of ten cities as well as the County of Orange (for its unincorporated areas) because they represent different geographical areas of the county (from Brea in the north to Dana Point in the south) and reflect a variety of larger cities by population and/or land area (e.g., Santa Ana, Irvine) and some that are smaller (e.g., Buena Park, Mission Viejo).

Individual members of the OCGJ also observed the types and colors of carts, their labeling, and their contents at various locations throughout the county. These observations were documented via photographs to illustrate dissimilar details and nuances among jurisdictions and haulers.

INVESTIGATION AND ANALYSIS

Overview of SB 1383

SB 1383 set ambitious targets for reducing organic waste disposal in landfills from the 2014 baseline: fifty percent by January 2020 (which was not met), and seventy-five percent by January 2025. Organic waste comprises more than half the waste stream in California and includes green waste, wood, food waste, and fibers such as paper and cardboard. When left to decompose in landfills, organic waste releases large amounts of methane gas. The overall goal of the bill is to reduce greenhouse gas emissions by at least four million metric tons per year by 2030 by requiring that “organics” going to the landfill be reduced to 5.7 million metric tons by 2025.

This groundbreaking legislation is a statewide effort to reduce Short-Lived Climate Pollutants (SLCPs). SLCPs such as methane, black carbon, tropospheric (ground level) ozone, and hydrofluorocarbons remain in the atmosphere for a shorter time than carbon dioxide but have a much stronger warming effect. Therefore, reducing SLCPs has the potential to significantly slow global climate change in the near term (California Air Resources Board, 2024). The State’s efforts and policies are intended to substantially increase the rate of organic material diversion away from landfills. This diversion goal is meant to move the State towards the desired “circular economy” where organic waste is collected, converted into new materials or products, and reused for other purposes.

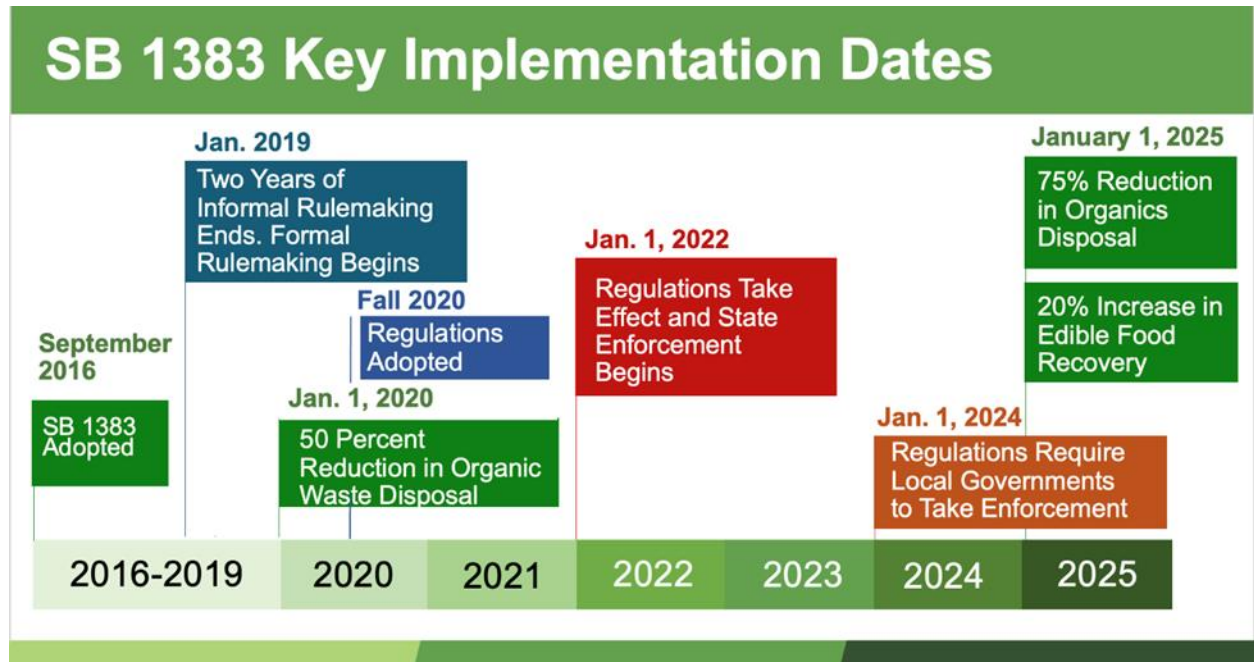


Figure 1

Source: CalRecycle

How Are Jurisdictions Impacted by SB 1383?

In this context, a jurisdiction may be a city, county, city and county, or special district that collects solid waste.

The jurisdictions' responsibilities specified by SB 1383 relating to residential units include (CalRecycle, 2024):

- Providing organics collection services to all residents
- Conducting education and outreach to community
- Procuring recyclable and recovered organic products
- Securing access to recycling capacity
- Monitoring compliance and conducting enforcement

SB 1383 contains a significant amount of detail regarding the types of allowable collection programs. Critical requirements are listed below:

- Each resident must subscribe to an organic waste collection service that either “source-separates” the waste by using separate bins or transports all unsegregated waste to a facility that recovers seventy-five percent of the organic content collected.
- SB 1383 requires one of the following collection options:
 - A one-can system – all contents are transported to a facility that recovers seventy-five percent of the organic content.
 - A two-can system – at least one of the containers (whichever includes organic waste and garbage) must be transported to a facility that recovers seventy-five percent of the organic content.
 - A three-can system – organic waste is required to be source separated (recyclables in blue, food and yard waste in green).

Jurisdictions must also conduct education and outreach to all residents regarding collection service requirements, contamination standards, self-haul requirements, and overall compliance with SB 1383. Educational material must be linguistically accessible to non-English speaking residents.



Figure 2

Source: CalRecycle

Orange County Jurisdictions’ SB 1383 Implementation Status

How do jurisdictions assess their own progress?

The OCGJ sent a ten-question survey to thirty-four cities and OC Waste & Recycling (OCW&R) and received thirty-one responses. The purpose of the survey was to verify how these agencies measure their progress on the implementation of various aspects of SB 1383. Survey participants were asked to mark their progress on the scale from 1 (significant challenges) to 5 (excellent) for each of the questions. The survey questions as well as more detailed information on responses and follow-up comments and explanations is included in Appendix A.

Main Implementation Issues

To follow-up on the survey, the OCGJ conducted a series of interviews with jurisdictions to learn more about their specific challenges in implementing SB 1383, successes, concerns, and solutions to common issues. The eleven jurisdictions interviewed were the same included in the 2019-2020 OCGJ report “OC Recycling: Doing it the Right Way” representing different geographical areas of the county and a variety of populations and/or land areas. Several themes emerged from the interviews:

- **Container Standardization**

SB 1383 requires standardized colors for residential and business curbside containers (green for organics, blue for recyclables, and grey for trash). It also requires container

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labels on new containers. The color scheme for collection containers must meet either of these requirements:

- The lid of the container is the correct designated color
- The body of the container is the correct designated color, and the lid is also the same specified color or may be gray or black

Out of the eleven jurisdictions interviewed, only two have distributed containers that meet the State requirements. However, jurisdictions are not required to replace containers prior to January 1, 2036. Most are replacing their containers gradually over time. The variety of colors used by various jurisdictions contributes to the confusion and potentially increases contamination rates. In many cases, existing containers include embossed information that is no longer accurate or labels with outdated information (see examples below).

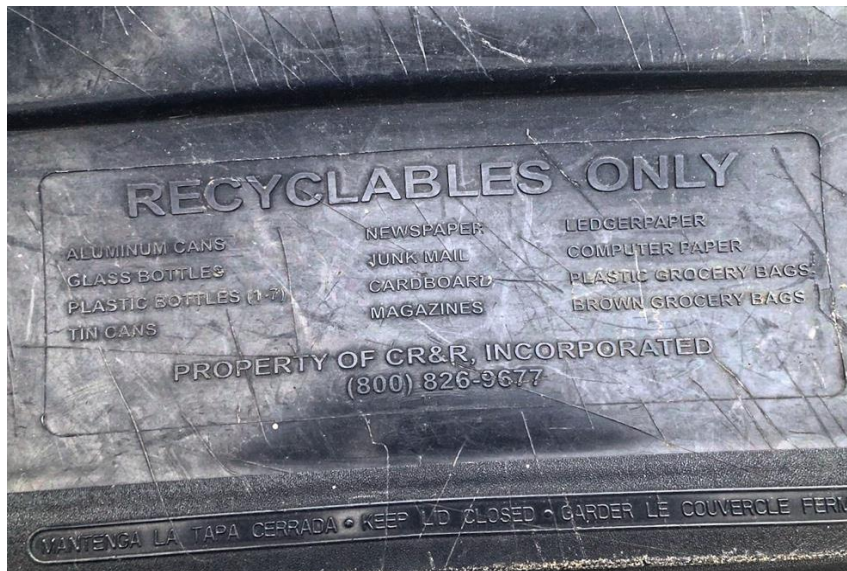


Figure 3. The embossed information wrongly directs residents to put plastic grocery bags in the recycling container. Photo: OCGJ

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Figure 4. The old sticker incorrectly directs residents to put shoes, clothes, and other textiles in the recycling container. Photo: OCGJ



Figure 5. Outside label on the 'green waste' container contains no information regarding food scraps. Photo: OCGJ

The following two images of the “Food Scrap” container (outside and inside) were taken by an OCGJ member in a public park. The contents of the container, which contains unallowable items, such as plastic packaging, further underscores the need for clear signage and more public education.

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Figure 6. Lid of the “Food Scraps” container in a public park from November 2023 showing correct information. Photo: OCGJ



Figure 7. Contents of the same “Food Scraps” container in the public park from November 2023. Photo: OCGJ

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Another standardization issue is that what is accepted for recycling varies among the jurisdictions and haulers.

For example, some allow palm fronds into organics bins while others do not, and some allow food scraps to be deposited in compostable bags while others do not, further adding to the confusion.

- **Funding and Enforcement**

While conducting interviews with the Orange County jurisdictions, the OCGJ learned that there are two approaches to funding their solid waste management programs (including SB 1383 implementation activities): (1) using an enterprise fund; and (2) using the general fund. Using an enterprise fund ensures that all revenues generated by the solid waste management program are reinvested in that program rather than being diverted into other needs of the jurisdiction.

Even though enforcement activities were effective starting January 1, 2024, jurisdictions only conduct inspections and spot-checks of residential customers' organic and trash containers using either "lid flipping" or smart trucks that record the contents of the containers as they are being emptied. Haulers (via contracts) have been designated to perform these functions. If residents are found to be in violation, the first step is to provide them with additional educational materials and information. If the violation persists, warning notices are issued. The final step is issuing fines. *The penalties imposed by a jurisdiction are based on Government Code Sections 53069.4, 25132, and 36900, and are as follows:*

- *First violation: \$50-\$100 per violation;*
- *Second violation: \$100-\$200 per violation;*
- *Third or subsequent violation: \$250-\$500 per violation*

Penalties increase when an entity violates the same requirement within a one-year period (CalRecycle, 2024).

While jurisdictions have yet to collect fines, some have not even established the collection protocol or the account where collected fines will be deposited.

- **Education and Outreach**

Clearly, there is a need for more education and outreach. The success of SB 1383 implementation and the ability to reach the CalRecycle goal of a seventy-five percent diversion rate depend largely on residents' compliance and behavior change. Education and outreach is the first and most critical component of that change.

"The accuracy of consumer disposal decisions directly influences the performance of the recycling system." (Christian Blanco C. S., 2023)

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Most interviewed jurisdictions collaborate with haulers to create and distribute educational materials. Others also use consulting services for that purpose. Outreach strategies, the number of outreach events and communications, as well as participation rates vary greatly from jurisdiction to jurisdiction, but most rely heavily on paper mailings, which may not be the most effective way of reaching the public. If combined with junk mail, the educational material may go unread into a recycling bin, if not the trash. Frequently, the information flyers are mailed together with hard-copy utility bills, which may overlook those who subscribe to electronic billing.

As part of their outreach/education campaigns, some of the interviewed jurisdictions purchased kitchen pails for recycling food scraps to distribute to some or all households. These purchases were funded through SB 1383 assistance grants from CalRecycle, which most of the Orange County jurisdictions applied for and received.

The OCGJ reviewed a sampling of educational materials being distributed by several cities and concluded that the quality of these materials can range from highly informative publications with accessible and attractive designs to flimsy “newsletters” issued by haulers for their respective jurisdictions with graphics and instructions that are barely legible.

Paper mailings have their role but represent only one of many possible outreach methods. The recycling industry itself is embracing technological advancements, including the use of Artificial Intelligence (AI), in waste sorting, predicting trends, the use of smart hauler trucks and smart bins, as well as in outreach and education (Recycling Inside, 2023).

According to Recycling Inside, “AI can play a pivotal role in educating the public about recycling practices. Chatbots and virtual assistants powered by AI can provide real-time guidance on waste disposal, recycling guidelines, and collection schedules. By engaging with individuals through personalized interactions, AI-driven platforms can raise awareness, promote recycling behavior, and facilitate proper waste management at the consumer level.”

According to research by the Recycling Partnership, “People have a misconception that what is recyclable doesn’t change. They are recycling incorrectly in some cases because they are basing decisions on past guidelines and recycling knowledge such as believing milk cartons are wax coated and should not be recycled, or envelopes with windows should not be recycled. They think they know what they need to know about recycling because that’s what they’ve always known.” (Center for Sustainable Behavior & Impact, 2022)

More than seventy percent of people surveyed wish there was an easier way to get information on what can and can’t be recycled in their community. (Center for Sustainable Behavior & Impact, 2022)

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Determining the success of their outreach efforts is another challenge that Orange County jurisdictions are facing in the near future. Most jurisdictions need to determine how to measure outreach efforts, as the enforcement started January 1, 2024. Having common standards and methods to measure the success of public education and compliance, and regularly posting this information on the jurisdiction's website related to SB 1383 goals, will give the public an incentive to comply with SB 1383. However, in the interim, there is a significant amount of visual evidence regarding the level of residents' confusion as evidenced by the photo below. The photo is the amount of waste in the first five hours of a workday that was improperly included in residential recyclable containers and delivered to a MRF, where it had to be hand sorted out.



Figure 8: Waste improperly included in recyclable containers Photo: OCGJ

- **Procurement of Recovered Organic Waste Products**

Representatives from most of the jurisdictions the OCGJ interviewed indicated that meeting the procurement requirements of SB 1383 is challenging. This is due to their jurisdictions' State-calculated procurement targets far exceeding the quantity of recovered organic waste products that they can utilize.

To comply with SB 1383, jurisdictions must procure recovered organic waste products to meet an annual procurement target. Recovered organic waste products include:

- *Compost*
- *Mulch*

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- *Renewable energy (transportation fuel, electricity, and gas for heating) from anaerobic digestion*
- *Electricity from biomass conversion*

Each jurisdiction's procurement target is calculated by multiplying its population, as reported by the California Department of Finance, by the per capita procurement target (0.08 tons of organic waste per California resident per year). The resulting procurement target can then be multiplied by product conversion factors (as established by the regulations) to determine the annual procurement requirements for recovered organic waste products.

Source: CalRecycle

As one of the survey respondents stated:

“Meeting the annual procurement target presents a significant challenge. In addition, the formula used to calculate a jurisdiction's procurement target does not account for density or square miles. Denser areas equal less space to distribute mulch or compost. More people equals higher procurement target.”

As a result, a number of jurisdictions with high procurement targets had to use grant funding to purchase the required amounts of compost/mulch. Because the required target procurement amounts exceeded what they can utilize in their communities, they had to distribute the compost/mulch (via hauler) to agricultural communities outside Orange County. They also admitted that without grant funding, meeting the targets will be even more difficult and will require diverting resources from their own communities or raising rates.

The regulations limit procurement to “*use or giveaway, and do not include the sale of products [14CCR Section 18993.1(e)(1)] so jurisdictions cannot sell the procured recovered organic waste products, such as compost, via a third party.*” (CalRecycle, 2022)

Renewable Natural Gas (RNG) is one of the products that can be counted towards meeting a jurisdiction's procurement goal. Haulers operating in Orange County, including Republic, CR&R, and Waste Management, utilize trucks powered by RNG. However, in most cases the RNG they use is not purchased from an approved facility so it cannot be counted towards the required procurement goal. CalRecycle maintains a [list of anaerobic digestion facilities in California](#) to help jurisdictions find renewable gas that may be eligible towards their SB 1383 procurement obligations.

Currently, this list contains only six facilities that produce Compressed Natural Gas (CNG), which in this case is presumably compressed RNG. None of these facilities is located in Orange County. The closest are located in Riverside County (Perris), San Bernardino County (Victorville and Rialto), and San Diego County (Escondido).

The issue of RNG is further complicated by the fact that some sewage treatment plants also produce RNG, which (according to CalRecycle) is mostly ineligible. Below is the

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information included in “Frequently Asked Questions” on RNG on the CalRecycle website (CalRecycle, 2022):

Renewable gas derived solely from sewage is ineligible for meeting the procurement target because a Publicly Owned Treatment Work (POTW) is not a solid waste facility and therefore not in the scope of the legislative intent of SB 1383. Sewage is also not typically destined for a landfill, so its use does not help achieve the landfill diversion goals.

However, [Title 14](#) explicitly authorizes POTWs to accept food waste without a solid waste facility permit, making it functionally similar to incentivizing biomethane from a solid waste facility. Therefore, it is justifiable to allow the portion of renewable gas resulting from the digestion of food waste at POTWs to count toward the procurement targets, provided the POTW accepts food waste from specified facilities or operations [see 14 CCR Section 18993.1(h)(1)] and meets all other applicable regulatory requirements. For more information, please see the [Final Statement of Purpose and Necessity](#) (pages 178-180).

The issue of procurement difficulties encountered by California jurisdictions is mentioned in the Little Hoover Commission 2023 report on the implementation of SB 1383. The Commission recommended that “the state should expand the list of compliance pathways and products eligible to count toward a jurisdiction’s procurement requirements.” (Little Hoover Commission, 2023)

- **Coordination and Vision for the Future**

In a county with thirty-four cities and several other jurisdictions, coordination, collaboration, and sharing resources and best practices can be a challenge. The OCGJ learned that county-wide groups meet on a regular basis, including a waste management coordinators’ group, a haulers’ group, and a market development group. Additionally, the OCGJ learned that OCW&R has assumed a leadership role in positioning Orange County for a greener, more sustainable future.

OCW&R has a clear vision for a regional, county-wide approach to the implementation of SB 1383, which includes not only organics and edible food strategies, but also market creation and development, procurement and compliance, and regional standardization and collaboration.

The details of their vision are outlined in the 2024 presentation to the legislative group, which is available on the OCW&R website (OC Waste & Recycling, 2024).

The following slide has been taken from this presentation.

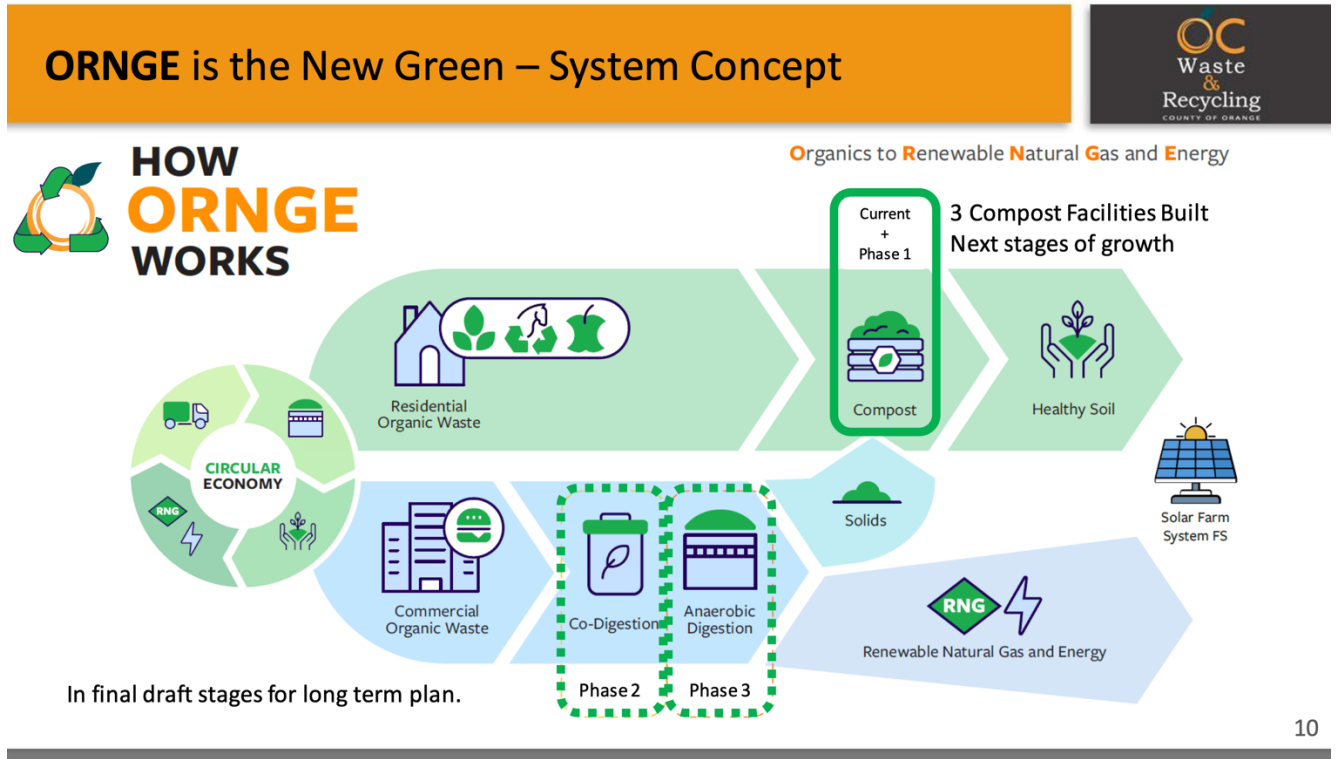


Figure 9. Circular economy concept for Orange County

Source: OCW&R

• **Other Issues**

Multi-family housing units: While not within the scope of this report, it should be noted that services to multi-family units still pose a significant challenge. Jurisdictions are required to provide organic waste collection to multi-family units. Many find it difficult to provide a three-bin source-separated service to these units due to limited space. Creative solutions, such as providing smaller organics containers or containers that are placed in a common area to serve multiple units, have been utilized by Orange County cities, but full compliance is difficult to achieve.

The cost of SB 1383 implementation: The Little Hoover Commission Report states that the gross cost of implementation was determined to be \$40 billion between 2019 and 2030. (CalRecycle, 2019) “About 5 percent of this figure represents soft costs (i.e. the work local jurisdictions must do to create organic waste programs, educate the public, and ensure health, safety, and quality control measures are met). The other 95 percent represents the cost of disposing of organic waste, including constructing infrastructure” (Little Hoover Commission, 2023). Most Orange County jurisdictions interviewed by the OCGJ indicated that they had to increase their residential and/or business waste collection rates to cover the cost of expanded services mandated by SB 1383.

COMMENDATIONS

- County of Orange, OC Waste & Recycling is commended for having successfully met SB 1383 mandates, developing new composting infrastructure, a model education and outreach program, moving towards robust and repurposing recycling programs, and developing gas-to-energy facilities to produce renewable energy.
- City of Mission Viejo, Solid Waste Program is commended for their proactive implementation of SB 1383 mandates, distributing compliant waste containers to all residents, and producing a robust outreach and education program using numerous delivery methods.
- City of Santa Ana Public Works, Trash and Recycling Program is commended for proactively revising their hauler contract to meet SB 1383 requirements, producing a notable and ongoing outreach and education program, distributing compliant waste containers to all residents, and fostering a highly collaborative relationship with their hauler.

FINDINGS

In accordance with California Penal Code Sections 933 and 933.05, the 2023-2024 Grand Jury requires responses from each agency affected by the findings presented in this section. The responses are to be submitted to the Presiding Judge of the Superior Court.

Based on its investigation titled “Talking Trash: Recyclables and Organic Waste,” the 2023-2024 Orange County Grand Jury has arrived at the following principal findings:

Container Standardization

- F1. The majority of Orange County jurisdictions have not yet required their haulers to distribute residential containers that meet the CalRecycle standardized colors, leaving legacy and often incorrect or illegible labeling and embossing in place.

Funding and Enforcement

- F2. While a jurisdiction may not delegate its overall responsibility for compliance with State requirements to a hauler, some jurisdictions have designated the task of imposing and collecting fines from residents to the hauler in accordance with State law. However, not all jurisdictions are clear on who ultimately receives and retains the collected fines.
- F3. All jurisdictions will eventually start collecting fines from residents for non-compliance, but some have not yet determined whether the revenues will go into a waste and recycling enterprise fund or into the jurisdiction’s general fund.

Education and Outreach

- F4. In most jurisdictions, education and outreach is a joint effort between jurisdiction, hauler, and sometimes consultants, with the jurisdiction reviewing the materials before publication. The methods of dissemination vary by jurisdiction and hauler but frequently rely on a resident actively seeking the information, which requires the resident to have some awareness of the new mandates in the first place. Most efforts primarily revolve around intermittent hard-copy paper mailings.
- F5. Most jurisdictions currently have no way to accurately determine the effectiveness of their respective education and outreach efforts other than the eventual inspections or audits that will take place.

Procurement of Recovered Organic Waste Products

- F6. There is some concern that there are not enough composting facilities in Orange County to process all organic waste, forcing some jurisdictions/haulers to transport it long distances for processing.
- F7. There is currently no infrastructure in the county that is a State-approved source of Renewable Natural Gas (RNG) and energy from organic waste. Jurisdictions that use vehicles running on RNG procured from non-approved sources cannot count that RNG towards fulfillment of their procurement requirement.
- F8. The formula used by the State to calculate a jurisdiction's procurement target does not account for a jurisdiction's population density or geographic size (square miles). As such, meeting the annual procurement target presents a significant challenge for most jurisdictions.
- F9. Many Orange County jurisdictions were unable to meet the requirement in SB 1383 to reduce organic waste sent to landfills by the 2020 deadline. It is unlikely the required seventy-five percent reduction will be achieved by the 2025 deadline.
- F10. The current procurement requirements mandated by SB 1383 are unrealistic and likely unachievable by most jurisdictions.

RECOMMENDATIONS

In accordance with California Penal Code Sections 933 and 933.05, the 2023-2024 Grand Jury requires responses from each agency affected by the recommendations presented in this section. The responses are to be submitted to the Presiding Judge of the Superior Court.

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Based on its investigation titled “Talking Trash: Recyclables and Organic Waste,” the 2023-2024 Orange County Grand Jury makes the following recommendations:

Container Standardization

- R1. All jurisdictions should expedite the acquisition and distribution of residential containers that meet the CalRecycle standardized colors. Additionally, until the compliant containers can be distributed, all jurisdictions should ensure the distribution of labeling for non-compliant containers that explain the current SB 1383 requirements applicable to their jurisdiction by June 30, 2025.

Funding and Enforcement

- R2. By December 31, 2024, all jurisdictions should ensure their waste hauling agreements are in compliance with State statute so that haulers may be designated to perform certain required tasks but are not improperly delegated overall responsibility for compliance. Additionally, all jurisdictions should ensure that any fines collected by a hauler are forwarded to the jurisdiction.
- R3. The OCGJ recommends that all jurisdictions utilize a dedicated waste and recycling enterprise fund for collection of fines for non-compliance with SB 1383 by December 31, 2024.

Education and Outreach

- R4. By December 31, 2024, all jurisdictions should diversify the methods and media used for education and outreach to include, among others, various social media platforms, emails to residents, newspaper, television, flyer mailings, community events, and appearances at other public gatherings.
- R5. By December 31, 2024, and in order to gauge the effectiveness of their education and outreach efforts, all jurisdictions should develop new methods to engage residents directly to help determine their awareness of the requirements associated with SB 1383, such as surveys, online quizzes, and door-to-door polling.

Procurement of Recovered Organic Waste Products

- R6. By June 30, 2025, the OCGJ recommends that all jurisdictions participate in the OCW&R-led efforts to develop a coordinated county-wide approach to the organics recycling infrastructure and programs as well as procurement requirements associated with SB 1383, working towards creating circular economy as a long-term goal.

- R7. By December 31, 2024, the Orange County Board of Supervisors and all Orange County cities should lobby appropriate members of the State Legislature and/or CalRecycle to revise the organic waste diversion targets to better reflect Orange County's waste amounts, revise the jurisdictions' procurement requirements to better represent the limited options currently available for procurement, the jurisdictions' varying populations, population densities, and geographic size, and to delay associated enforcement actions by the State.

RESPONSES

The following excerpts from the California Penal Code provide the requirements for public agencies to respond to the Findings and Recommendations of this Grand Jury report:

Section 933

(c) No later than 90 days after the grand jury submits a final report on the operations of any public agency subject to its reviewing authority, the governing body of the public agency shall comment to the presiding judge of the superior court on the findings and recommendations pertaining to matters under the control of the governing body, and every elected county officer or agency head for which the grand jury has responsibility pursuant to Section 914.1 shall comment within 60 days to the presiding judge of the superior court, with an information copy sent to the board of supervisors, on the findings and recommendations pertaining to matters under the control of that county officer or agency head and any agency or agencies which that officer or agency head supervises or controls. In any city and county, the mayor shall also comment on the findings and recommendations. All of these comments and reports shall forthwith be submitted to the presiding judge of the superior court who impaneled the grand jury. A copy of all responses to grand jury reports shall be placed on file with the clerk of the public agency and the office of the county clerk, or the mayor when applicable, and shall remain on file in those offices. One copy shall be placed on file with the applicable grand jury final report by, and in the control of the currently impaneled grand jury, where it shall be maintained for a minimum of five years.

Section 933.05.

(a) For purposes of subdivision (b) of Section 933, as to each grand jury finding, the responding person or entity shall indicate one of the following:

- (1) The respondent agrees with the finding.
- (2) The respondent disagrees wholly or partially with the finding, in which case the response shall specify the portion of the finding that is disputed and shall include an explanation of the reasons thereof.

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(b) For purposes of subdivision (b) of Section 933, as to each grand jury recommendation, the responding person or entity shall report one of the following actions:

- (1) The recommendation has been implemented, with a summary regarding the implemented action.
- (2) The recommendation has not yet been implemented, but will be implemented in the future, with a timeframe for implementation.
- (3) The recommendation requires further analysis, with an explanation and the scope and parameters of an analysis or study, and a timeframe for the matter to be prepared for discussion by the officer or head of the agency or department being investigated or reviewed, including the governing body of the public agency when applicable. This timeframe shall not exceed six months from the date of publication of the grand jury report.
- (4) The recommendation will not be implemented because it is not warranted or is not reasonable, with an explanation, thereof.

Responses Required

Comments to the Presiding Judge of the Superior Court in compliance with Penal Code Section 933.05 are required from:

Findings – 90 Day Response Required

OC Board of Supervisors:	F1, F2, F3, F4, F5, F6, F7, F8, F9, F10
City Councils of:	
Aliso Viejo	F1, F2, F3, F4, F5, F6, F7, F8, F9, F10
Anaheim	F1, F2, F3, F4, F5, F6, F7, F8, F9, F10
Brea	F1, F2, F3, F4, F5, F6, F7, F8, F9, F10
Buena Park	F1, F2, F3, F4, F5, F6, F7, F8, F9, F10
Costa Mesa	F1, F2, F3, F4, F5, F6, F7, F8, F9, F10
Cypress	F1, F2, F3, F4, F5, F6, F7, F8, F9, F10
Dana Point	F1, F2, F3, F4, F5, F6, F7, F8, F9, F10
Fountain Valley	F1, F2, F3, F4, F5, F6, F7, F8, F9, F10
Fullerton	F1, F2, F3, F4, F5, F6, F7, F8, F9, F10

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Garden Grove	F1, F2, F3, F4, F5, F6, F7, F8, F9, F10
Huntington Beach	F1, F2, F3, F4, F5, F6, F7, F8, F9, F10
Irvine	F1, F2, F3, F4, F5, F6, F7, F8, F9, F10
La Habra	F1, F2, F3, F4, F5, F6, F7, F8, F9, F10
La Palma	F1, F2, F3, F4, F5, F6, F7, F8, F9, F10
Laguna Beach	F1, F2, F3, F4, F5, F6, F7, F8, F9, F10
Laguna Hills	F1, F2, F3, F4, F5, F6, F7, F8, F9, F10
Laguna Niguel	F1, F2, F3, F4, F5, F6, F7, F8, F9, F10
Laguna Woods	F1, F2, F3, F4, F5, F6, F7, F8, F9, F10
Lake Forest	F1, F2, F3, F4, F5, F6, F7, F8, F9, F10
Los Alamitos	F1, F2, F3, F4, F5, F6, F7, F8, F9, F10
Mission Viejo	F1, F2, F3, F4, F5, F6, F7, F8, F9, F10
Newport Beach	F1, F2, F3, F4, F5, F6, F7, F8, F9, F10
Orange	F1, F2, F3, F4, F5, F6, F7, F8, F9, F10
Placentia	F1, F2, F3, F4, F5, F6, F7, F8, F9, F10
Rancho Santa Margarita	F1, F2, F3, F4, F5, F6, F7, F8, F9, F10
San Clemente	F1, F2, F3, F4, F5, F6, F7, F8, F9, F10
San Juan Capistrano	F1, F2, F3, F4, F5, F6, F7, F8, F9, F10
Seal Beach	F1, F2, F3, F4, F5, F6, F7, F8, F9, F10
Stanton	F1, F2, F3, F4, F5, F6, F7, F8, F9, F10
Tustin	F1, F2, F3, F4, F5, F6, F7, F8, F9, F10
Villa Park	F1, F2, F3, F4, F5, F6, F7, F8, F9, F10
Westminster	F1, F2, F3, F4, F5, F6, F7, F8, F9, F10

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Yorba Linda F1, F2, F3, F4, F5, F6, F7, F8, F9, F10

Recommendations – 90 Day Response Required

OC Board of Supervisors: R1, R2, R3, R4, R5, R6, R7

City Councils of:

Aliso Viejo R1, R2, R3, R4, R5, R6, R7

Anaheim R1, R2, R3, R4, R5, R6, R7

Brea R1, R2, R3, R4, R5, R6, R7

Buena Park R1, R2, R3, R4, R5, R6, R7

Costa Mesa R1, R2, R3, R4, R5, R6, R7

Cypress R1, R2, R3, R4, R5, R6, R7

Dana Point R1, R2, R3, R4, R5, R6, R7

Fountain Valley R1, R2, R3, R4, R5, R6, R7

Fullerton R1, R2, R3, R4, R5, R6, R7

Garden Grove R1, R2, R3, R4, R5, R6, R7

Huntington Beach R1, R2, R3, R4, R5, R6, R7

Irvine R1, R2, R3, R4, R5, R6, R7

La Habra R1, R2, R3, R4, R5, R6, R7

La Palma R1, R2, R3, R4, R5, R6, R7

Laguna Beach R1, R2, R3, R4, R5, R6, R7

Laguna Hills R1, R2, R3, R4, R5, R6, R7

Laguna Niguel R1, R2, R3, R4, R5, R6, R7

Laguna Woods R1, R2, R3, R4, R5, R6, R7

Lake Forest R1, R2, R3, R4, R5, R6, R7

Los Alamitos R1, R2, R3, R4, R5, R6, R7

Mission Viejo R1, R2, R3, R4, R5, R6, R7

Newport Beach R1, R2, R3, R4, R5, R6, R7

Orange R1, R2, R3, R4, R5, R6, R7

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Placentia	R1, R2, R3, R4, R5, R6, R7
Rancho Santa Margarita	R1, R2, R3, R4, R5, R6, R7
San Clemente	R1, R2, R3, R4, R5, R6, R7
San Juan Capistrano	R1, R2, R3, R4, R5, R6, R7
Seal Beach	R1, R2, R3, R4, R5, R6, R7
Stanton	R1, R2, R3, R4, R5, R6, R7
Tustin	R1, R2, R3, R4, R5, R6, R7
Villa Park	R1, R2, R3, R4, R5, R6, R7
Westminster	R1, R2, R3, R4, R5, R6, R7
Yorba Linda	R1, R2, R3, R4, R5, R6, R7

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GLOSSARY

AB	Assembly Bill
CalRecycle	California Department of Resources Recycling and Recovery

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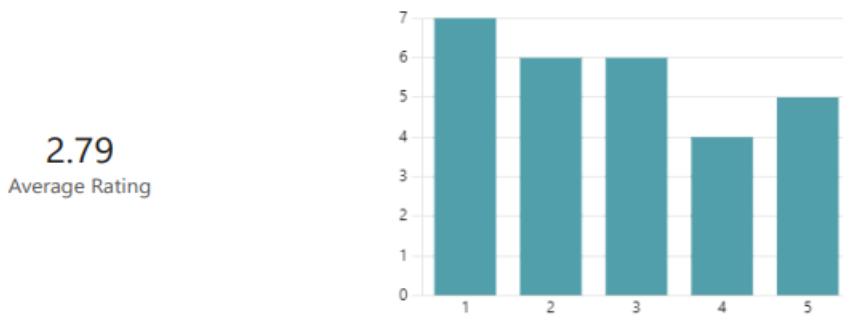
Circular Economy	Current economic models consist of acquiring materials, making them into products, and then those products become waste. A circular economy reduces material use, redesigns materials and products to be less resource intensive, and recaptures “waste” as a resource to manufacture new materials and products.
Compost	Compost is made from a variety of organic materials and is used to add nutrients and improve soil structure by mixing it into the soil.
Mulch	Mulch is typically made from a single material like straw, grass clippings, or wood chips and is spread on top of the soil to suppress weeds, retain moisture, regulate soil temperature, and protect plant roots.
MRF	Material Recovery Facility
OCGJ	Orange County Grand Jury
OCW&R	OC Waste & Recycling, a department of the County of Orange
Organic Waste	Solid wastes originated from living organisms and their metabolic waste products, and from petroleum, which contain naturally produced organic compounds, and which are biologically decomposable by microbial and fungal action into the constituent compounds of water, carbon dioxide, and other simpler organic compounds. Sometimes called biodegradable waste.
ORNGE	Organics to Natural Gas and Energy
POTW	Publicly Owned Treatment Work
Recycling	Using waste as material to manufacture a new product. Recycling involves altering the physical form of an object or material and making a new object from the altered material.
RNG	Renewable Natural Gas
SB	Senate Bill
SLCP	Short-Lived Climate Pollutants
Solid Waste	Discarded or abandoned materials. Solid wastes can be solid, liquid, semi-solid or containerized gaseous material.
Waste	Objects or materials for which no use or reuse is intended.

APPENDICES

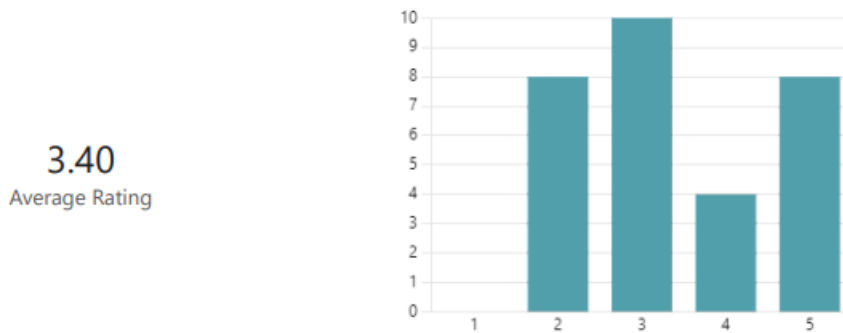
APPENDIX A – SURVEY RESULTS

Survey participants were asked to mark their progress on a scale from 1 (significant challenges) to 5 (excellent progress) for each of the nine questions. On the following bar graphs, the 'x' axis (horizontal) depicts the rating scale from 1 to 5. The 'y' axis (vertical) represents the number of respondents that gave themselves a particular rating.

Was your city successful in meeting the goal of reducing organic waste disposal 50% by 2020?



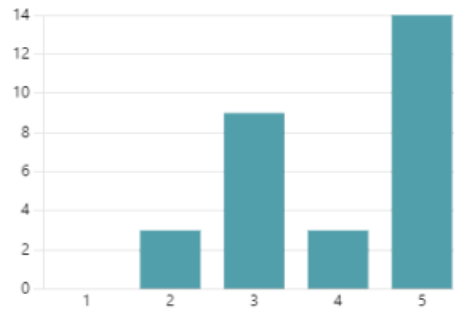
Are you confident that your city will meet the goal of reducing organic waste 75% by 2025?



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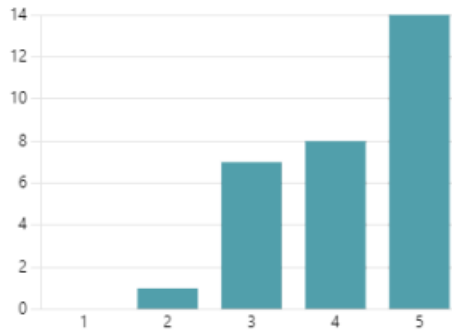
How would you rate your city's success in providing organic waste collection services to all residents?

3.97
Average Rating



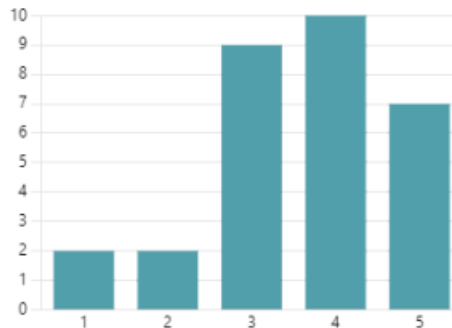
How successful is your city in recycling these organic materials?

4.17
Average Rating



How would you rate your confidence that city residents have been educated to have sufficient knowledge of the composting requirements (and associated restrictions) with the proper disposal of yard trimmings and food scraps?

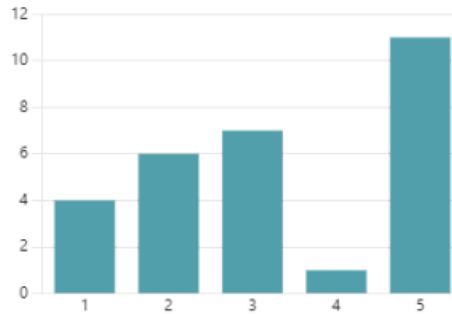
3.60
Average Rating



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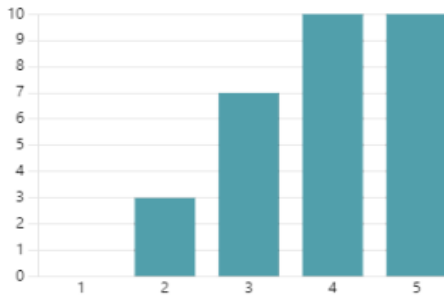
How successful was your city in procuring a quantity of recovered organic waste products annually?

3.31
Average Rating



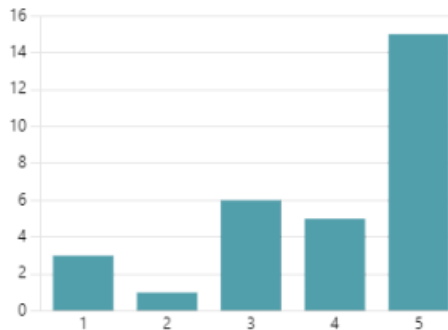
How would you rate your city's success in meeting the record-keeping requirements associated with SB1383, including but not limited to, inspection and enforcement, compliance reviews, investigation of complaints, and alleged violations?

3.90
Average Rating



How satisfied are you that your current agreements(s) with the hauler(s) that service your city are adequate to comply with all provisions of residential services required by SB1383?

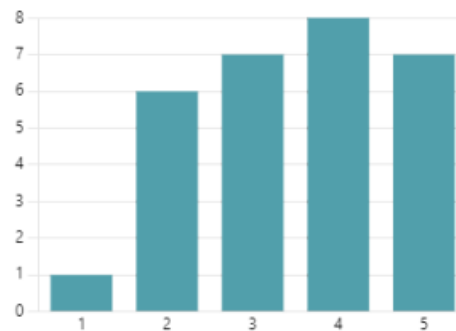
3.93
Average Rating



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Are your city's current staffing levels that are, or will become, responsible for all aspects of full SB1383 compliance adequate to meet the tasks at hand?

3.48
Average Rating



The following examples of additional comments or explanations for their answers to the questions above were provided by survey respondents:

“Comprehensive implementation and effective management of SB 1383 would require additional resources and financial support. Despite our [jurisdiction’s] proactive approach, including securing a new hauler/franchise agreement . . . that aligns with SB 1383’s requirements and achieving near-complete adoption of these guidelines, there remains a widespread reluctance towards organic recycling. Ongoing educational efforts are in place and will continue; however, achieving significant behavioral change and compliance will require additional resources.”

“[Our jurisdiction has] been working on compliance regarding SB 1383 with new franchise agreements, building out local infrastructure, meeting the SB 619 procurement targets, providing education and outreach, programs are being implemented to incrementally improve participation and increase diversion. We are increasing staffing levels to help with continued support for compliance as it requires increased effort for more inspections, waste characterizations, more education and outreach, further program development, market creation and development for compost and mulch, inspections, education, and enforcement support. Although meeting the 75% goal requires more heavy lifting, I anticipate we will see incremental improvements from our efforts.”

“SB 1383 has proven to challenge the recycling habits of many throughout the [jurisdiction]. Through updated franchise agreements . . . and CalRecycle grant funding, we have been able to educate and encourage change in disposal habits as required via SB 1383. Additional outreach outlining the requirements and benefits of recycling organic material will be key in successfully transitioning residents and business owners to recycle organic material.”

“[We] started a new franchise agreement after an RFP process This allowed us to incorporate all hauler-related SB 1383 compliance activities and select an innovative

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organic waste collection program. We are facing procurement challenges as energy related products are not readily available (particularly) RNG for collection vehicles. Staffing may prove to be a challenge, depending upon the amount of complaints, inspections, and enforcement actions we are required to address.”

“Procurement [is our] biggest challenge.”

“Our agreement with [the hauler] required that they implement 1383 compliant programming immediately for residential. It also includes education/outreach, contamination monitoring, purchase or compost/mulch on our behalf. Residential 3-cart was implemented on day one of the agreement. However, even with education, residents are hesitant to participate with food in the organics container due to not being allowed to use compostable bags and therefore attracting bugs and vermin.”

“Meeting the annual procurement target presents a significant challenge. [The hauler’s] collection trucks are fueled with RNG. The RNG purchased is California produced, though not SB 1383 qualified. In addition, the formula used to calculate a jurisdiction’s procurement target does not count for density or square miles. Denser areas equal less space to distribute mulch or compost. More people equals higher procurement target.”

“As with any new program where you need to change habits and behavior, it is going to a long-term project to get adults in the habit of separating their food scraps. State of CA should implement a statewide outreach campaign, and not just rely on local jurisdictions to provide all the outreach.”

APPENDIX B – CIRCULAR ECONOMY STARTS IN YOUR KITCHEN



Circular Economy at work



Food scraps collected on the kitchen



Food scraps in the organic waste container



Compost resulting from processing organic waste, including food scraps