

ANNUAL REPORT 2022

Imagine what can be.

Director's Message

Our Organization

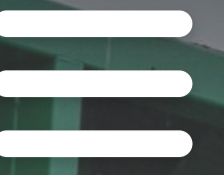
Continuing Progress

For Our Community

Legislative Update

Year in Review

Ten-Year Financial Forecast



Director's Message

Hello, I'm Tom Koutroulis, director of OC Waste & Recycling.

2022 was a year of change and focus, keeping our commitment to continuous improvement at the core of everything we do.

Recent state legislation set into motion major recycling mandates that have and will continue to significantly impact residents, businesses, cities, waste haulers and our own landfill operations.

I'm proud to share OC Waste & Recycling met these mandates positively and proactively. As environmental stewards providing an essential public service, we're reimagining our agency's future as it evolves toward resource recovery.

The evolution of our agency spans new composting infrastructure; enhancing and developing, repurposing and recycling programs; with transparent community outreach and education initiatives to bring clarity to all that we do. At all three of our active landfills, we continue to recover and recycle mattresses, appliances and scrap metal to conserve valuable landfill space. Our habitat restoration efforts provide homes for many native wildlife and plant species. And our landfill gas-to-energy facilities harness methane gas to produce renewable energy, generating electricity for homes throughout the County.

On the heels of organics recycling legislation, we've designed and constructed compost greeneries at two of the municipal landfills. A third facility is being built and will open in 2023. The greeneries will ensure a local solution to recycling organic materials long after the landfills have reached capacity.

The concept of recycling organics is a clear and simple one – food fit for human consumption is diverted to nonprofits and organizations that feed hungry families. Businesses such as grocery stores and restaurants are doing their part to make sure edible food is not wasted by transferring it to local food pantries. Believe it or not, this work is needed in Orange County. And we're honored to play a role in the effort to help eliminate food insecurity in our communities.



Our habitat restoration efforts provide homes for many native wildlife and plant species.



Our landfill gas-to-energy facilities harness methane gas to produce renewable energy, generating electricity for homes throughout the County.

Another area where we need to work together is actively participating in your jurisdiction's recycling programs at home, at work and at school. Senate Bill 1383 mandates the diversion of edible food and organics material from the landfill. We cannot accomplish this goal without your support and participation.

This year, OC Waste & Recycling was proud to host Countywide Compost Giveaways. These events raise awareness about the importance of placing healthy organic material back into our communities. For the first time, residents saw a curbside-to-community return on new organics mandates. And it was well received.

While we continue to advance towards change, we believe that meeting mandates is as much about education in the community as it is about operations and processes.

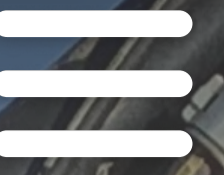
We are active in schools and the community, answering questions from residents, hosting public meetings, attending community events and providing landfill and greenery tours.

OC Waste & Recycling partnered with the Orange County Department of Education, providing recycling education directly into classrooms, giving teachers valuable tools to teach and inspire the next generation of environmental stewards.

We have raised the bar to get to where we are today, but it is apparent that there is still plenty of work to do. I hope you will join us in this effort as we continue to innovate and transform.

It all starts with doing things a little differently. Then, before you know it, small changes become continuous improvement and we've made positive impacts that clearly benefit our environment and our communities.

Thank you and please enjoy OC Waste & Recycling's 2022 Annual Report.

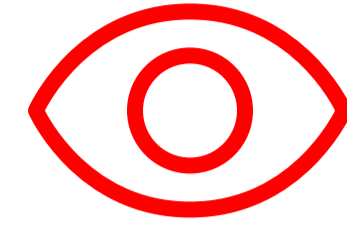


Our Organization



Our Mission

The mission of OC Waste & Recycling is to provide waste management services, protect the environment, and promote recycling in order to ensure a safe and healthy community for current and future generations.



Our Vision

A landfill and resource recovery system that safely manages waste, recycles resources and protects the environment for Orange County residents and businesses.

Board of Supervisors



Doug Chaffee
Chairman,
Fourth District



Donald P. Wagner
Vice Chairman,
Third District



Andrew Do
First District



Vincent Sarmiento
Second District



Katrina Foley
Fifth District

Waste Management Commission

The purpose of the Waste Management Commission is to advise the Orange County Board of Supervisors on matters relating to municipal solid waste and hazardous waste management, operation and maintenance of the County's landfills, and other facilities related to the County's solid waste disposal system.

Effective March 2023

** City Selection Appointee*

Officers



David J. Shawver

Chair
At Large*



Kimberly Ho

Vice Chair
First District

Commissioners



Ted Bui

First District*



Colin Edwards

First District

Commissioners



Lee Fink
Second District



Gloria Alvarado
Second District



Arianna Barrios
Second District*



Beth Haney
Third District*



Isabell Kerins
Third District



Rajat Khurana
Third District



Tamara Wallace
Fourth District



Christine Marick
Fourth District*

Commissioners



Donald Froelich
Fifth District



Joe Soto
Fifth District



John Taylor
Fifth District*



Jarad Hildenbrand
City Manager Representative*



Thomas D. Koutroulis
OC Waste & Recycling
Director



Leadership Team

OC Waste & Recycling is comprised of three principal organizational pillars – **Operations, Compliance and Customer Service**. These three pillars make up OCWR; they drive consistency and standardization to the greatest possible degree. Our leadership team of deputy directors ensures that the functions of our agency work cohesively to thrive together.

Operations

Three of our deputy directors manage our landfill regions, responsible for operations and maintenance, overseeing all aspects for their active landfills, closed sites, resource recovery and site leadership for regulatory compliance, program development, implementation and execution. Another deputy director serves as the safety and standard operational procedures manager across the agency, supporting the agency's safety culture and standard operating procedures.



Jorge Hernandez
 North Region Deputy
 Director



David Tieu
 Central Region Deputy
 Director



Hany Ahmed
 South Region Deputy
 Director



Jeff Southern
 Safety and Operational
 Procedures Deputy Director

Compliance

The Compliance Support Division ensures that OCWR landfills meet all required and mandatory federal, state, and local environmental rules and requirements. In addition to these environmental services, the Compliance Support Division oversees planning, renewable energy, the project management office, as well as the reliability maintenance program to help plan for OCWR's future. A collaborative manner seeks to avoid all unplanned system downtime at OCWR enterprise level. The deputy director for the Compliance Support Division ensures that these vital services are provided to all OCWR landfills in a seamless manner.



Julian Sabri
 Compliance Support
 Deputy Director

Business Services

County stakeholders, inter-department, general public and franchise hauler partners, as well as business related functions and SB 1383 Implementation are the main areas of focus. This section includes strategic communications, educational outreach and community programs, government relations, financial services and budget, administration, legislation, procurement and contracts, and our network of Household Hazardous Waste Collection Centers.



Lisa Smith
 Business Services & External
 Affairs Deputy Director



Continuing Progress

Our state-of-the-art landfills present environmental engineering and stewardship at the highest levels, reflected in a variety of activities: the design and location of each fill area, compost facilities, airspace preservation, prevention of hazardous waste from being buried, mitigation of naturally occurring events, and even in the heavy equipment we use.


Systemwide Operation Highlights



475,904
Hours Recorded by
OCWR Employees



5,086,596
Tons of Buried Waste



785,048
Toll Fee Booth
Transactions




720.96
Tons of Compost Applied
for Beneficial Reuse



16,842
Tons of Green Waste
Repurposed for Composting



88,495
Total Operational Hours
of Heavy Equipment



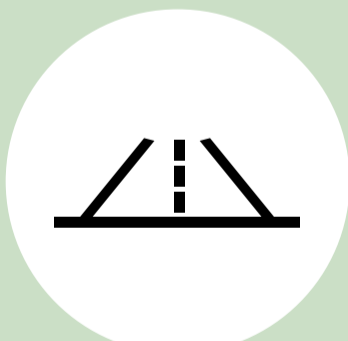
37,948
Calls Handled at
HQ Reception



484
Acres of Habitat
Maintained



1,892,183
Tons of Soil Received



519,996
Tons of Asphalt Received



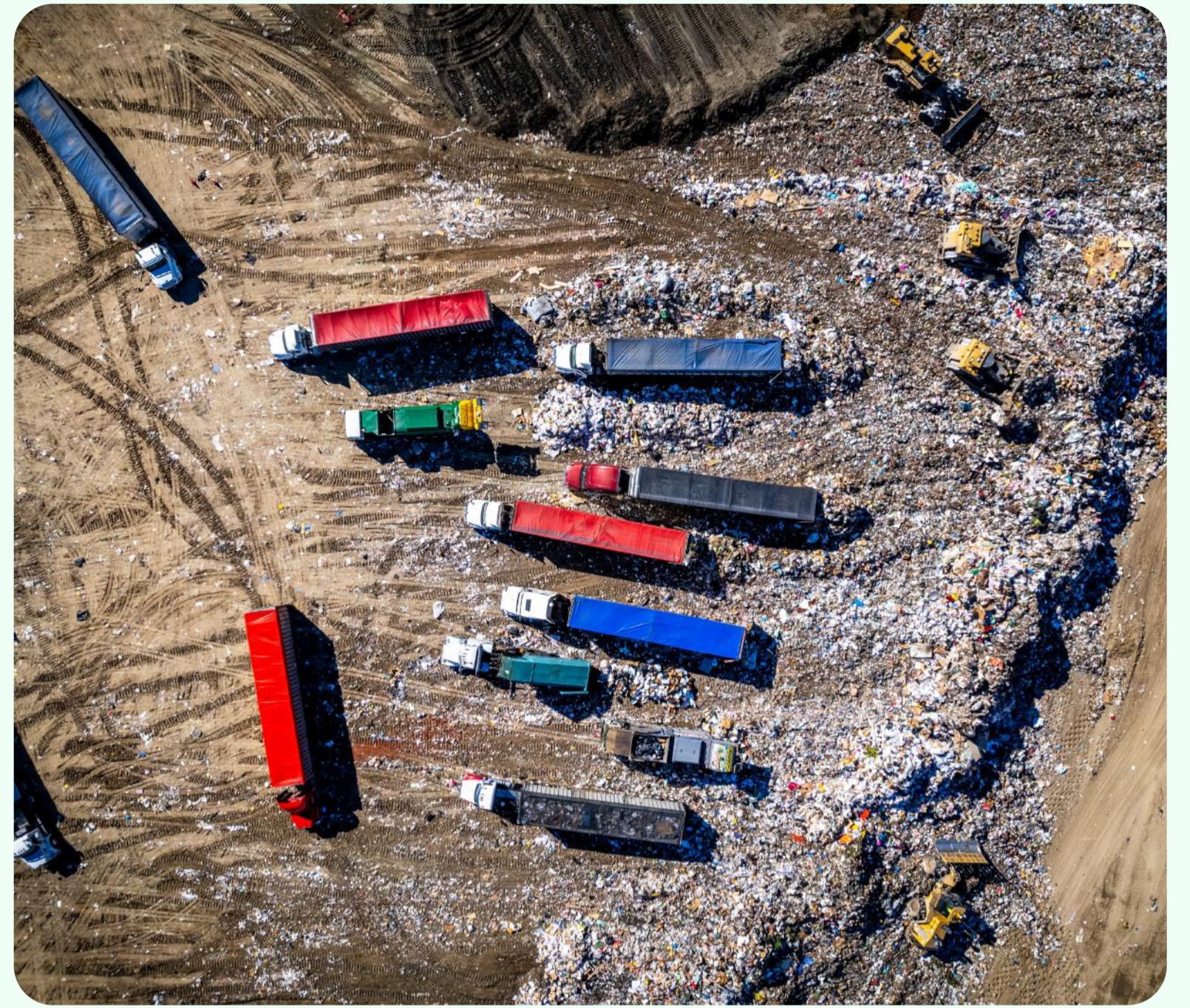
27,262
Mattresses Recovered
(749.7 tons)



2,162
Tons of Scrap Metal
Recovered

Preserving Airspace

In addition to reporting tonnage accepted and buried each year, it is equally important to measure the space in the landfills that did not get filled by recycling green waste, mattresses and metals. We call this preserving airspace, and our focus on resource recovery is already paying off. The airspace preserved in 2022 is roughly equivalent to the space of more than 16 Olympic-sized swimming pools.



Our Journey to Renewable Diesel – One Year Later



OCWR shifted all heavy equipment fleet to renewable diesel (RD) in July 2021. That's 106 pieces of heavy equipment and 115 engines operating across the County's landfills.

We see a cleaner environment and a lower fuel cost when we use RD. This was especially beneficial when fuel prices were rapidly increasing across the country. When compared to diesel fuel, during 2022 we saw an estimated:

75% Reduction in Carbon Dioxide equivalent units (CO2 eq) emission

33% Reduction in fine particulates

9% Reduction in Nitrogen Oxides (NOx)



Keeping Things Safe



Workers Compensation: continues to be **lowest in the last 13 years** of agency history per CEO Risk Management.

Continued safety performance: all three landfills; ending the year with **Total Recordable Injury Rates (TRIR) at or below 2020** industry standard rates.

Coaching and Mentoring: introduced SPOT Check "Safety Performance Observation Talk" program to support OCWR supervision coaching and mentoring staff in the field; **517 SPOT Checks** completed to recognize positive safety performance and give immediate feedback to staff.

OCWR staff logged a total of **9,142 training hours** in the County's Eureka Learning Management System.

Playbook of Standard Operating Procedures: **272 SOPs were updated or revised** based on revised job hazard analysis to include pictures, videos and task specific expert tips.

LOTO Electrical Safety: **157 Equipment Specific Lockout/Tagout (LOTO) Procedures developed and published** within the SOP Playbook.

More than **36,000 unique inspections/submissions completed digitally** using WiFi-enabled tablets, this increase was driven by the conversion of existing paper forms and checklists to the digital platform and development of new inspections.

1,242 Training Hours Logged on the heavy equipment under direct supervision.

11 new trainees completed heavy equipment training and received certification in the safe operation of their assigned machines.

ORNGE is the New Green

OC Waste & Recycling has been reimagining what our agency's future will look like. This was the nexus for ORNGE is the New Green, creating a circular economy with organics:

Organics to Renewable Natural Gas and Energy.



Composting Operations

Taking on the unprecedented challenge of developing a regional organic waste management and recycling program for the County, we have developed local infrastructure and built sustainable composting systems co-located at the County's landfills.

Compost is a full-circle product that begins in the yard waste bin and transforms into nutrient-rich soil amendment that helps retain moisture in the soil, suppresses weed growth, and provides macro and micronutrients for healthier plant growth.

To help facilitate the exchange of compost and mulch we have a dedicated webpage to accept requests for compost and/or mulch material from residents, commercial businesses, local cities/jurisdictions and government agencies.

By diverting organics, we are preserving landfill capacity and extending the lifespan of finite resources, so that our landfills will continue to be available for future generations.



“

The San Juan Capistrano Equestrian Coalition appreciates the opportunity to work with OCWR to repurpose equestrian waste. This project will help create green solutions, decrease distances the trucks travel and keep costs down to ensure that people of all income levels have the opportunity to enjoy riding.

– Dr. Julie Ryan Johnson, Board Member

In 2022, Capistrano Greenery began accepting horse manure from the San Juan Capistrano Equestrian Coalition, diverting compostable material from the landfill as well as being a good neighbor to local residents and businesses. The operations team successfully incorporated manure and horse bedding into the feedstock without impacting the quality of finished compost.



Quality Assurance Certification

Our agency received the US Composting Council’s “Seal of Testing Assurance” at Frank R. Bowerman Landfill’s Bee Canyon Greenery and Prima Deshecha Landfill’s Capistrano Greenery. This certification signifies that OCWR’s compost offers the highest standards of compost quality, meeting all federal, state and local regulations and permitting criteria.

Sharing with The Community



Green waste that was once buried at the landfill is now recycled into compost and mulch and provided to OC residents, commercial businesses, local cities and government agencies.

Our activities have contributed to meeting diversion mandates as well as meeting California's statewide goal of diverting organics from disposal to achieve climate change-related reduction targets.

Our efforts will preserve landfill capacity and extend the lifespan of these finite resources, allowing our landfills to still be here for current and future generations.

The Future of OCWR

From windrow composting, our next step will be Covered Aerated Static Piles, then on to Source Separated Organics facilities, all co-located at the landfills, and ahead to Anaerobic Digestion. We are also looking at the possibility of creating solar farms and battery storage facilities within the landfill system.

“

Thank you OC Waste & Recycling for 25 tons of free compost! It is great to be able to provide our residents with a full-circle product that begins in the yard waste and transforms into a nutrient-rich soil amendment to retain moisture in the soil, suppress weed growth and provides nutrients for healthier gardens and yards.

— Cathy Nguyen, Environmental Services Coordinator, City of Placentia



Compost Giveaways

OC Waste & Recycling encourages organic diversion all year long through the promotion of special days such as Earth Day and America Recycles Day®. By partnering with other agencies within the County, OCWR is able to reach the local community and raise awareness for composting. Our outreach also included promoting good recycling habits and asking the community to pledge to recycle on November 15, America Recycles Day, the only nationally recognized day dedicated to promoting recycling in the United States.

Habitat Restoration

Habitat Restoration is a vital part of OCWR's compliance and environmental stewardship efforts. In 2022, restorations not only involved rebuilding habitats and removing invasive species, but also incorporating compost from our facilities into new and existing landscapes. With the support of Irvine Ranch Conservancy (IRC), a non-profit land management organization, restorations and compost were successfully implemented across the county.

North Region

Coastal sage scrub restoration on a 7.5-acre site within Crystal Cove State Park began in spring 2020 and continued to progress in 2022. **This unique restoration project involves re-introduction of many rare plant species along coastal bluffs and will provide habitat for the endangered California gnatcatcher.** It serves as mitigation for habitat impacts at the closed Gothard Landfill in Huntington Beach. IRC prepared a vegetation plan, performed flora and fauna surveys to determine background species inventory, collected native seed and implemented essential weed control. In 2023, IRC plans to take the carefully collected native seeds from the site at Crystal Cove State Park and apply them to container plants in Orange County.

Aligning with permit requirements, approximately 198 acres of coastal sage scrub achieved completion status at Prima Deshecha Landfill in 2022. The growth offset planned impacts associated with the development of the landfill's Zone 4, providing natural habitat in designated and depleted areas. The growth of coastal sage scrub at Prima also supported an increase in California gnatcatcher territories. The Segunda area started with six pairs of gnatcatchers in 2015 when the installation began. **After years of habitat installation efforts, the number of gnatcatcher pairs increased to 25, successfully quadrupling the amount in 2022.**

South Region

Central & South Regions

Bee Canyon Greenery at Frank R. Bowerman Landfill in Irvine processes green waste into quality compost to a diverse list of customers in Orange County, including residents, cities, partner agencies and private companies. **Over 6,000 tons of green waste was processed in 2022.**

One of those satisfied customers is IRC. OCWR contracts with IRC to manage the Trabuco Creek restoration project for the mitigation of Prima Landfill's habitat impacts. **The project began in 2021 and includes restoration of Trabuco Creek through the removal of invasive giant reed (*Arundo donax*), replanting and seeding native plants, and the creation of a 0.30-acre wetland.** Creating the wetland and restoring native habitats on disturbed lands requires healthy soils. IRC utilized 144 tons of Bee Canyon's compost to help accomplish this goal. Incorporating the compost into the new wetland repaired the soil's biological, chemical, and physical properties. IRC plans to continue to use OCWR's compost in various projects across Orange County.

“

OCWR has been a great partner to Irvine Ranch Conservancy in facilitating this landscape-scale habitat restoration project. Not only did OCWR provide compost free of charge, they also delivered all the quantities we needed directly to the field site. OCWR staff have been consistently helpful in providing us with a quality product in a timely manner.

— Robert Freese, Irvine Ranch Conservancy Program Manager



Capital and Improvement Projects

26 Improvement Projects completed in 2022 with a construction value of over \$2M. Projects include road and retention basin maintenance, installing channel crossing safety bridges, fencing, solar streetlights and more.

Two Capital Projects were completed in 2022 with a construction value of more than \$3.5M. The Prima Deshecha landfill saw developments to Zone 1 Phase D2 and its Zone 4 Habitat Mitigation.

Demonstration Pilot Projects

Olinda Alpha

Olinda Improves Safety at the Site

North Region staff implemented several new safety measures including but not limited to raising stop signs, adding new street lights around key areas of the landfill and reminding drivers to keep a safe distance between vehicles.

Methane Detection Pilot

Monitoring for methane of Olinda Alpha Landfill utilizing drone technology.

Pilot program in progress to determine the feasibility of drone technology as a potential alternative to existing methods for monitoring.

Drones equipped with HD camera can capture current site conditions including generating aerial maps, Google Maps and topography maps that are used in engineering designs and calculations.

Tested the Posi Shell Applicator to reduce methane gas emissions and use as an alternative daily cover (ADC). The use of the applicator was approved by the LEA in 2022.

Set up a compost pickup area for County residents.

Piloted the Eco Sift machine to help explore ways to clean compost.

Methane Detection Pilot

Pilot program in progress to determine the feasibility of drone technology as a potential alternative to existing methods for monitoring.

Frank R. Bowerman

Prima Deshecha

Condensate Treatment Pilot Program

A 9-week pilot program utilizing biophysical activated sludge (PAC), Granular Activated Carbon (GAC), and Ion Exchange Resin was conducted at the Prima Deshecha Landfill to determine effectiveness of different processes in treating onsite-generated condensate.

Treatment methods were determined successful in treating onsite condensate for organic parameters as well as Per- and Polyfluorinated Substances (PFAS); permitting with South Orange County Wastewater Authority (SOCWA) and City of San Clemente.

Methane Detection Pilot

Monitoring for methane at Zone 1 for Prima Deshecha Landfill utilizing drone technology.

Pilot program in progress to determine the feasibility of drone technology as a potential alternative to conventional methods for monitoring.

Surveying with drones utilizes less personnel and less equipment which is lower labor intensive and significantly improves the factor of safety for this field operation.

Capistrano Greenery Horse Manure Pilot

Capistrano Greenery began accepting horse manure from the San Juan Capistrano Equestrian Coalition in February 2022. Incoming tonnage started at approximately 10 tons per week, has since increased to about 40 tons per week. All windrows with manure have passed all laboratory testing.

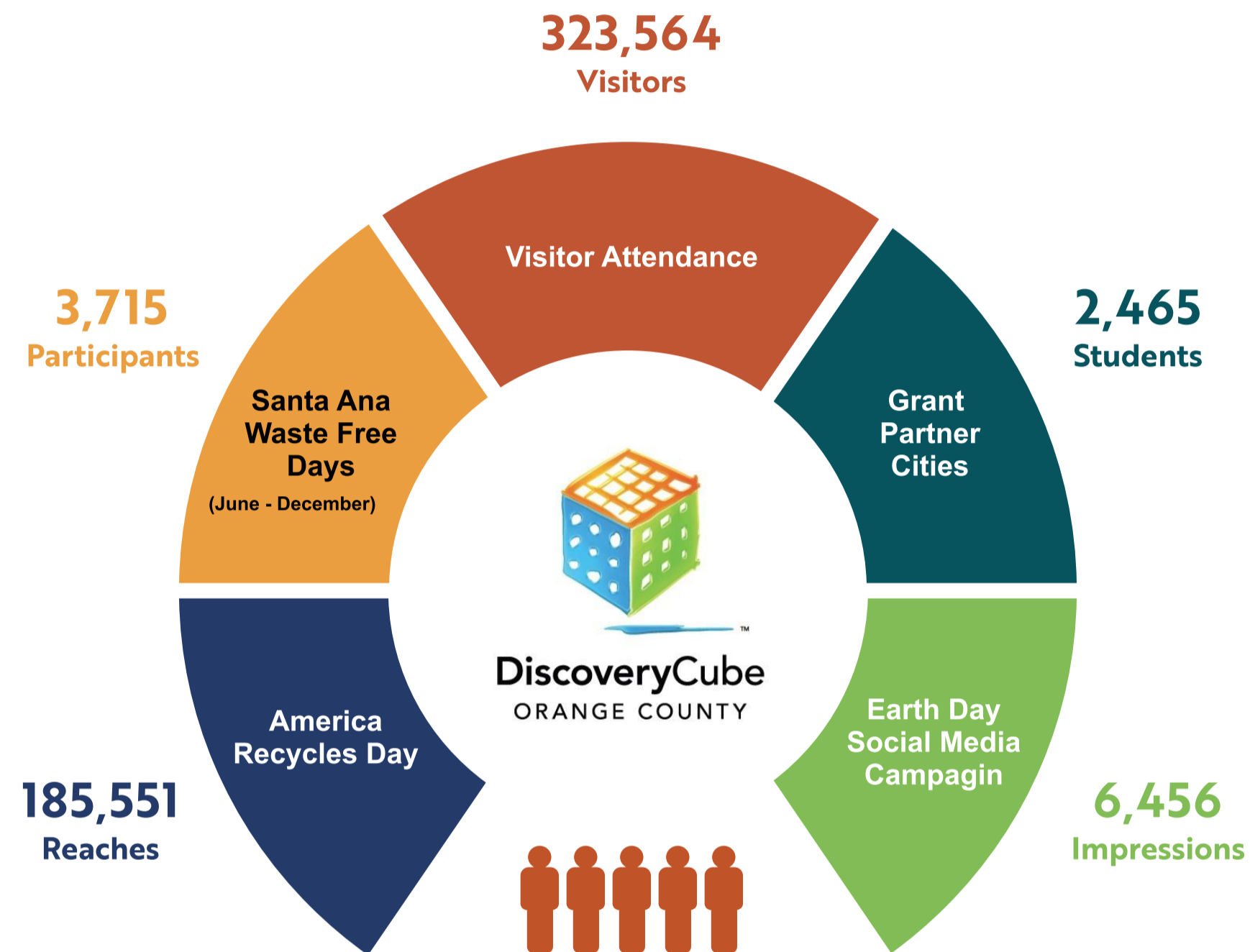


For Our
Community

Total Collective Educational Touchpoints for 2022: 3,221,950

Discovery Cube

OC Waste & Recycling and Discovery Cube OC continue to support the mission of both organizations through a series of hands-on educational exhibits, programs, and activities for residents. This year 2022 marked a 10-year milestone generating environmental awareness and recycling best practices.



92% of guests said they would now consider packaging in their purchasing decision to minimize waste

91% of visitors said they recycle regularly

82% were familiar with what organic waste includes

81% would consider composting or participating in a composting program after visiting the exhibits

2022 survey results highlights of 1,362 guests surveyed within the Eco Challenge exhibits



Orange County Department of Education

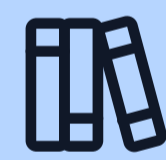
OCWR and the Orange County Department of Education (OCDE) brought waste diversion education directly into classrooms through standards-based curriculum for teachers, receiving the 2022 NACo award for curriculum-based outreach. The focus for 2022 was expanding programs to all grade levels. In addition, a concerted effort was made to promote the resources among educators through school science nights, Teacher On Special Assignment (TOSA) meetings, Parent Teacher Association (PTA) meetings, summer camps and through district communications portals.



Expanded curriculum to all K-12 grade levels



3,098 participants this year



92 classrooms



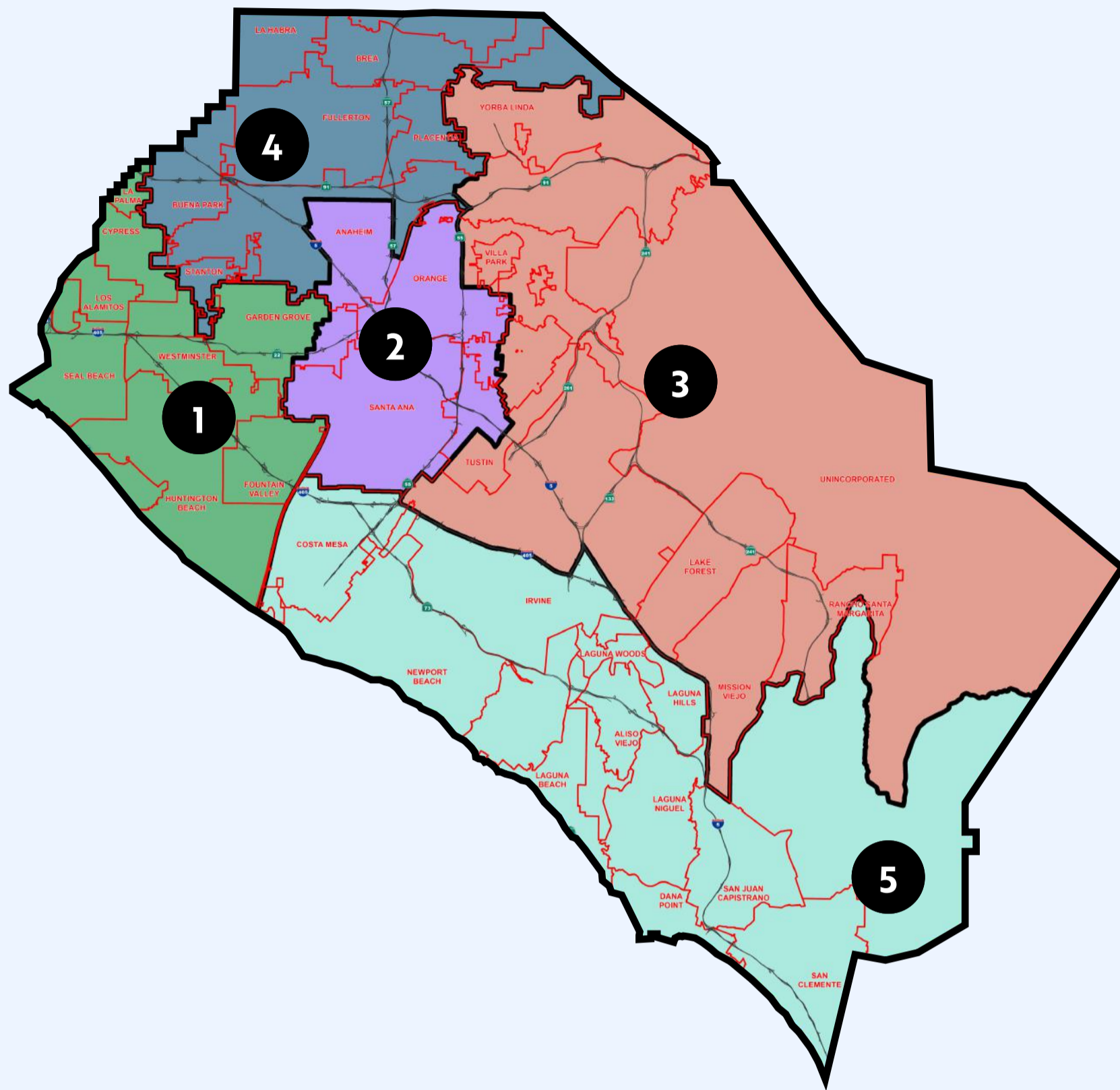
100% of teachers surveyed stated they would use the lesson materials again



Internal and external press coverage

[OCDE Newsroom](#) | [Waste Advantage Magazine](#)

[Spectrum 1 News](#) | [Parenting OC](#)



Orange County Supervisorial Districts

First District

Anaheim Union High School District, Garden Grove Unified School District
 Ocean View School District, Westminster School District, Cypress School District

Second District

Santa Ana Unified School District, Tustin Unified School District, Orange
 Unified School District

Third District

Irvine Unified School District, Saddleback Valley Unified School District,
 Orange County Private Schools

Fourth District

Fullerton School District, Anaheim Elementary School District, Brea Olinda
 Unified School District, Magnolia School District

Fifth District

Garden Grove Unified School District, Capistrano Unified School District
 Newport-Mesa Unified School District, Irvine Unified School District, Laguna Beach
 Unified School District, Orange County Private Schools, Orange County Public
 Charter Schools



Partners

OC Waste & Recycling renewed partnerships with **Angels Baseball** and the **Anaheim Ducks Hockey Club**.

Through these programs, the County is leading efforts to regionalize environmental stewardship among students, educators, and schools.

The new programs support OCWR in-classroom curricula with the Orange County Department of Education in the form of education materials, scholarships, assemblies, field trips and waste diversion education incentives.

Events

OCWR supports community events and outreach opportunities throughout the County. These include event booths, summer school programs, outreach materials, community clean-up events and more. Through community engagement, our teams were able to report on residential awareness specific to new organics recycling education and provide resources to answer their many questions.

31 events supported with outreach

41,098 touchpoints

“

The OCWR-OCDE partnership opened the door to bring waste diversion education directly into classrooms as part of a comprehensive approach to standards-based instruction. With diverse ways to flexibly use the curriculum, the materials provide outstanding educational value to local educators, while simultaneously meeting goals for waste diversion education.

— Orange County Department of Education

“

The long-term benefits to the environment and teaching children they can make a daily difference were well worth it. I can also say how much I learned and made changes because of this lesson sequence.

THANK YOU!

— Orange County Department of Education Teacher

“

I think everything in the lesson sequence is pertinent to our time, supported by changes that we will see coming to our city.

— Orange County Department of Education Teacher

“

Students loved learning about the animals, goats and falcons. They were interested in how many ways OCWR works to protect the environment. I don't think they realized what a big deal this was...but the idea of organic waste and how much ends up in the landfill was new for them.

— Orange County Department of Education Teacher

“

Through onsite programming and outreach, OC Waste & Recycling and Discovery Cube OC have provided our community with hands-on Science, Technology, Engineering and Math (STEM) educational programming and activities. The unique and innovative programs the Cube and the County have co-developed help residents understand their role in the waste stream and learn about reducing waste in our landfills, especially compostable waste.

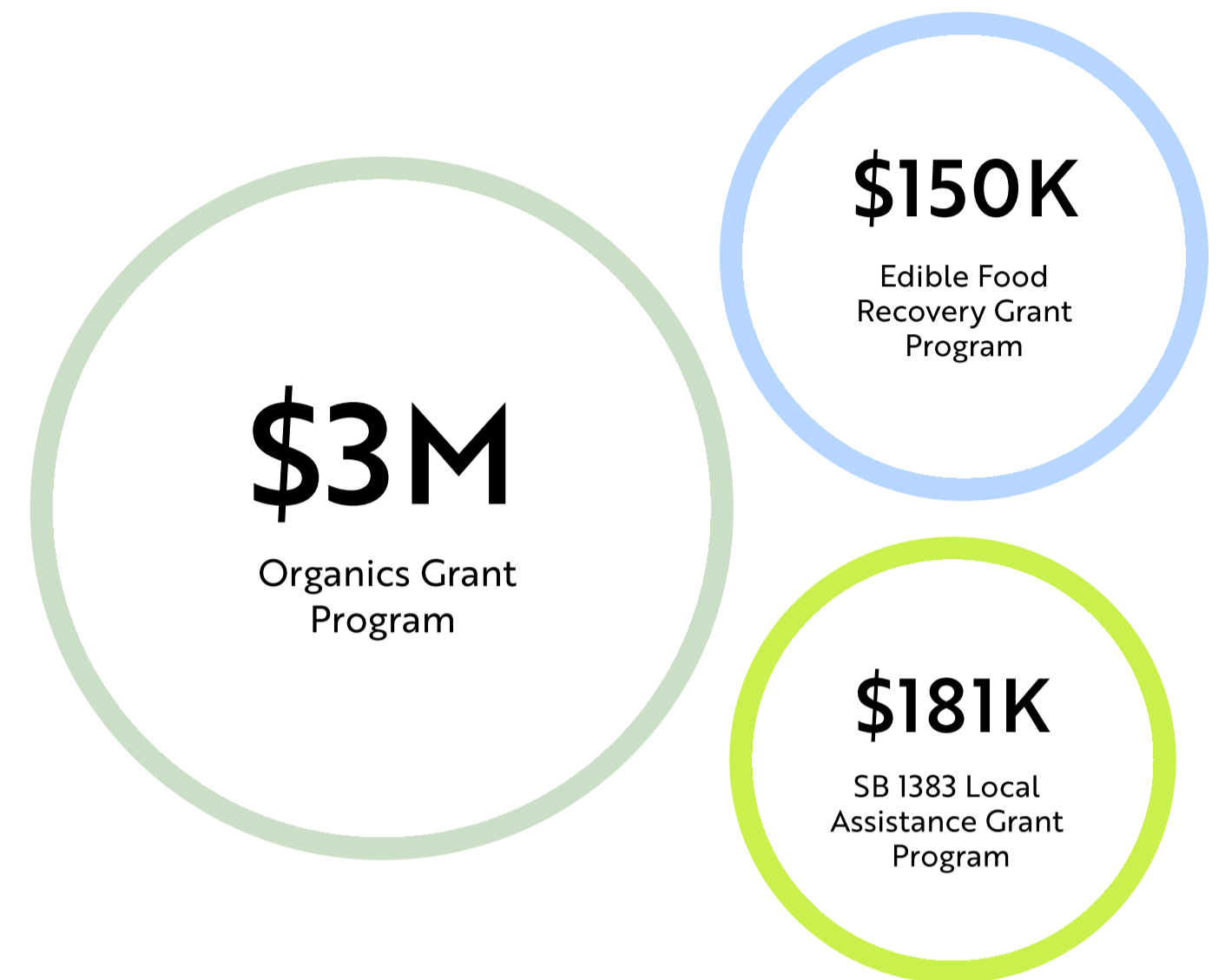
— Discovery Cube OC



Grants

In 2022, OCWR procured more than \$3.3 million from the Department of Resources Recycling and Recovery - CalRecycle. Grant funds will cover costs associated with the following projects:

- Phase IB expansion of Bee Canyon Greenery
- Increase edible food recovery at John Wayne Airport
- Provide food scrap containers for OC Unincorporated areas
- Allow OCWR to purchase compliance software to aid in SB 1383 implementation




“


Abound Food Care is grateful for the grant funds provided by OC Waste & Recycling. This allowed Abound Food Care to grow our innovative program and support numerous organizations and those experiencing food insecurity. Abound was able to lease a refrigerated vehicle to assist in increasing food donations to community food pantries safely. We were able to provide food recovery supplies needed by food pantries, screen for food insecurity at several hospitals and resource centers, and educate the community and businesses on the importance and benefits of diverting excess edible food from landfills. With the help of this grant, Abound Food Care and our food recovery partners have recovered over 138 million pounds of excess edible food and screened over 450,000 patients for food insecurity, directing those in need to community resources.


— Mike Learakos, Abound Food Care, Grant Recipient

OCWR's fourth cycle of the regional waste diversion grant has played a pivotal role in providing funding for education outreach programs, organics recycling and edible food recovery. Our grant recipients, including non-profit organizations, schools, cities and special districts accomplished the following in 2022:

 **12,377** Tons of Edible Food Recovered

 **9,347** Residents Educated

 **260** Commercial Businesses Assisted with Commercial Compliance

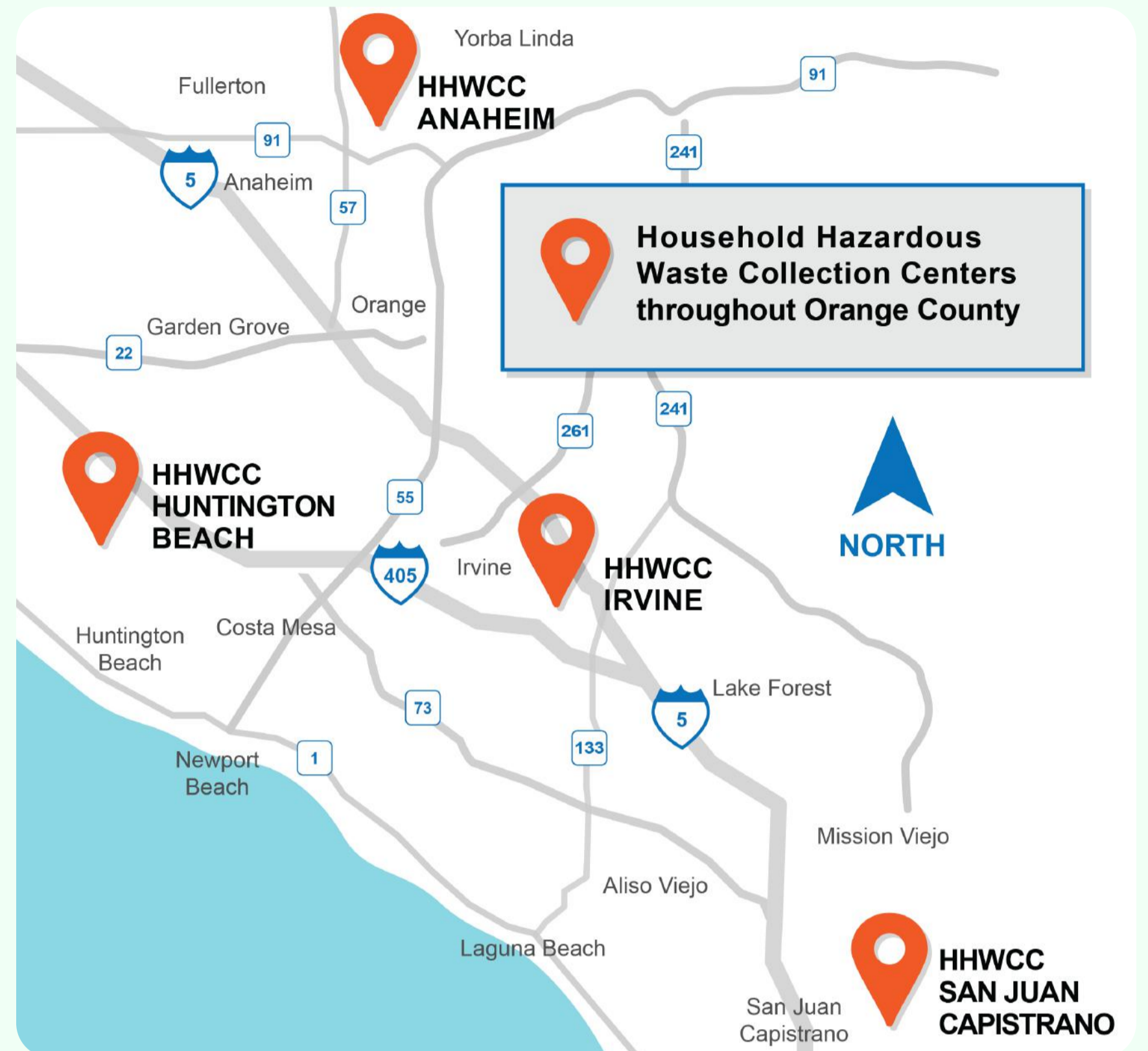
 **9,424.24** Tons of Organic Material Collected



HHWCC Provide Convenient Solution

Improperly disposing of household hazardous waste poses risks to both the environment and the workers who handle it. Items that require special care should not go in trash or recycling carts, and hazardous liquids should never go down the drain. The County's household hazardous materials collection began in 1985 and today, Orange County has one of the most efficient household hazardous waste collection programs in California with four facilities across Huntington Beach, Anaheim, Irvine and San Juan Capistrano.

The Household Hazardous Waste Collection Centers (HHWCC) provide free services for Orange County residents, offering a convenient drive-up, hands-free experience for those needing to safely dispose of household hazardous waste, including common chemicals, batteries, pesticides, paints, automotive fluids and electronic waste.



Free Items from MEP

In addition to dropping off materials, County residents can also pick up items for free at the collection centers through our Materials Exchange Program (MEP). New or partially used products for household, yard and car care include items such as paint, chlorine, motor oil and cleaning substances.

Irvine resident Victor Ortego is no stranger to the MEP. As a driver by trade, he is very familiar with the four HHWCC locations. He says that before he goes to the store to purchase new chemicals, he will visit the MEP first to check and see if items are available. He usually looks for cleaning supplies. He even utilized paint from the MEP to add some color to his kitchen.

Events Going Viral

OCWR held several events in 2022 utilizing social media as an affordable advertising option. The promotions generated substantial traction, serving as a key component driving attendance. **The Marine Flare Collection Event** was shared by more than 20 organizations including: US Coast Guard Council, California Boating & Waterways, Orange County Fire Authority, Orange County Sheriff's Department, The Fishing Wire and more.

The inaugural Compost Giveaway at Frank R. Bowerman landfill and the county-wide giveaway at all three active landfills also generated high numbers of social media shares. Social support spanned Districts 1 – 5, CalRecycle, OC Health Care Agency, Cal State Fullerton, OCCE Master Gardeners and 15 cities across the county.



Instagram ↑ 43%

Facebook ↑ 27.2%

Twitter ↑ 15.1%

Year-Over-Year Increases

OCWR social media experienced growth on all platforms, increasing impressions and followers across Facebook, Instagram and Twitter.

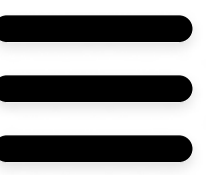




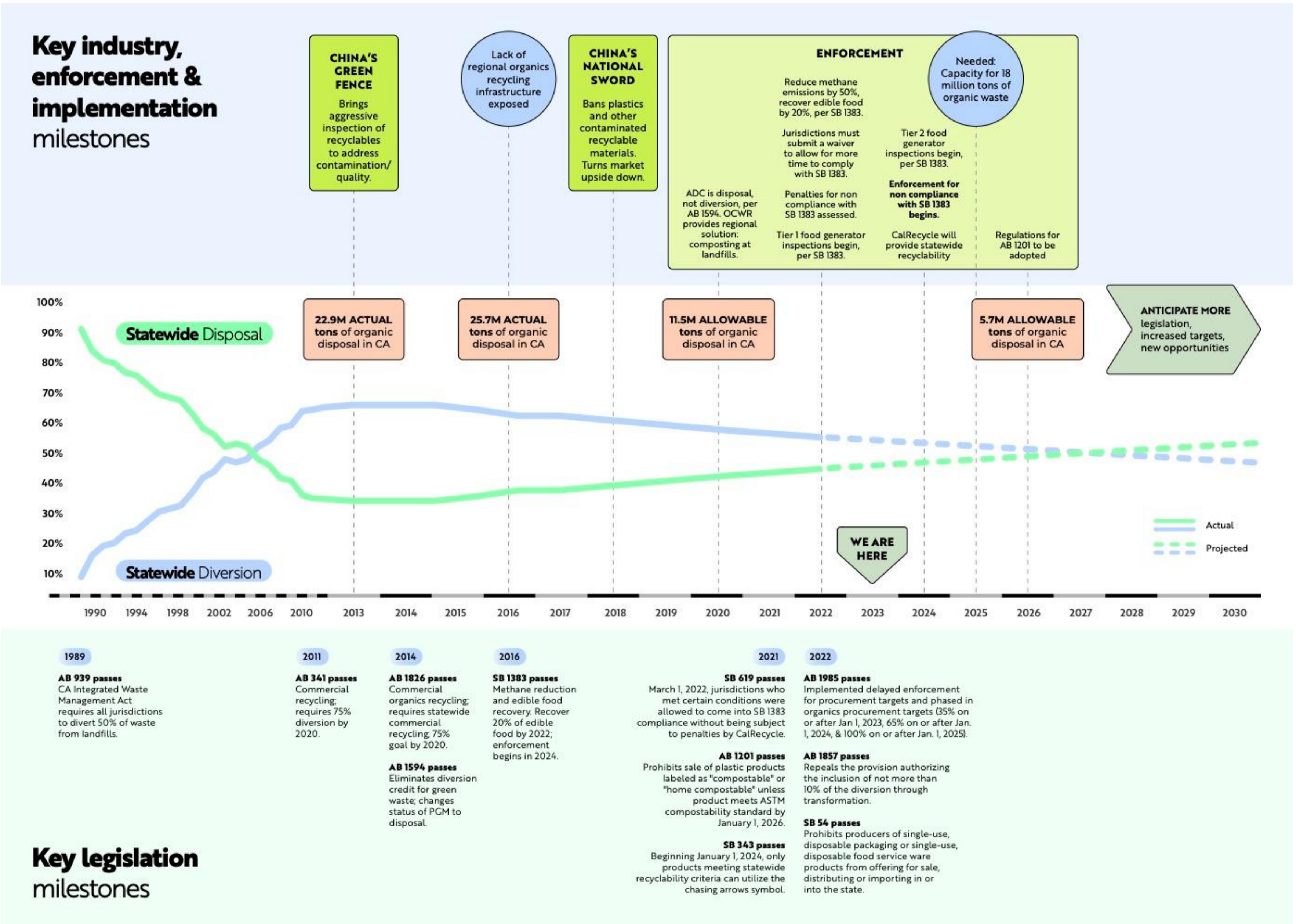
Legislative Update

Ensuring jurisdictional compliance of Senate Bill 1383 was a top priority in 2022.

OCWR worked together with the County's 34 cities, jurisdictions, and waste haulers, updating franchise agreements, passing mandatory organic waste management ordinances, conducting capacity planning activities and establishing edible food recovery contracts.



Legislation and Recycling Timeline



Key legislation milestones

<p>1989 AB 939 passes CA Integrated Waste Management Act requires all jurisdictions to divert 50% of waste from landfills.</p>	<p>2011 AB 341 passes Commercial recycling; requires 75% diversion by 2020.</p>	<p>2014 AB 1826 passes Commercial organics recycling; requires statewide commercial recycling; 75% goal by 2020.</p> <p>AB 1594 passes Eliminates diversion credit for green waste; changes status of PGM to disposal.</p>	<p>2016 SB 1383 passes Methane reduction and edible food recovery. Recover 20% of edible food by 2022; enforcement begins in 2024.</p>	<p>2021 SB 619 passes March 1, 2022, jurisdictions who met certain conditions were allowed to come into SB 1383 compliance without being subject to penalties by CalRecycle.</p> <p>AB 1201 passes Prohibits sale of plastic products labeled as "compostable" or "home compostable" unless product meets ASTM compostability standard by January 1, 2026.</p> <p>SB 343 passes Beginning January 1, 2024, only products meeting statewide recyclability criteria can utilize the chasing arrows symbol.</p>	<p>2022 AB 1985 passes Implemented delayed enforcement for procurement targets and phased in organics procurement targets (35% on or after Jan 1, 2023, 65% on or after Jan. 1, 2024, & 100% on or after Jan. 1, 2025).</p> <p>AB 1857 passes Repeals the provision authorizing the inclusion of not more than 10% of the diversion through transformation.</p> <p>SB 54 passes Prohibits producers of single-use, disposable packaging or single-use, disposable food service ware products from offering for sale, distributing or importing in or into the state.</p>
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Legislation Making an Impact

Legislative activity continued to unfold throughout 2022. OCWR tracked 36 bills, of which 19 were signed into law. Key legislative highlights include:

AB 1857

Zero Waste Transaction Act of 2022

Repeals the provision authorizing the inclusion of not more than 10% of the diversion through transformation and removes the diversion credit for municipal solid waste incinerators and redefines incineration as disposal.

Imposes the sales ban on the thermostats of every manufacturer not in compliance with the act. The bill requires manufacturers to provide collection bins for out-of-service mercury-added thermostats.

AB 732

Mercury Thermostat Collection Act 2021

AB 1985 Organic Waste Procurement Targets

Establishes a phased approach for meeting recovered organic procurement targets, 30% by 2023, 65% by 2024 and 100% by 2025. Cities have two additional years to comply with the SB 1383 organic waste diversion procurement requirements.

Prohibits producers of single-use, disposable packaging or single-use, disposable food service ware products from offering for sale, distributing, or importing in or into the state such packaging or products that are manufactured by 2032, unless they are recyclable or compostable.

SB 54

Plastic Pollution Prevention and Producer Responsibility Act

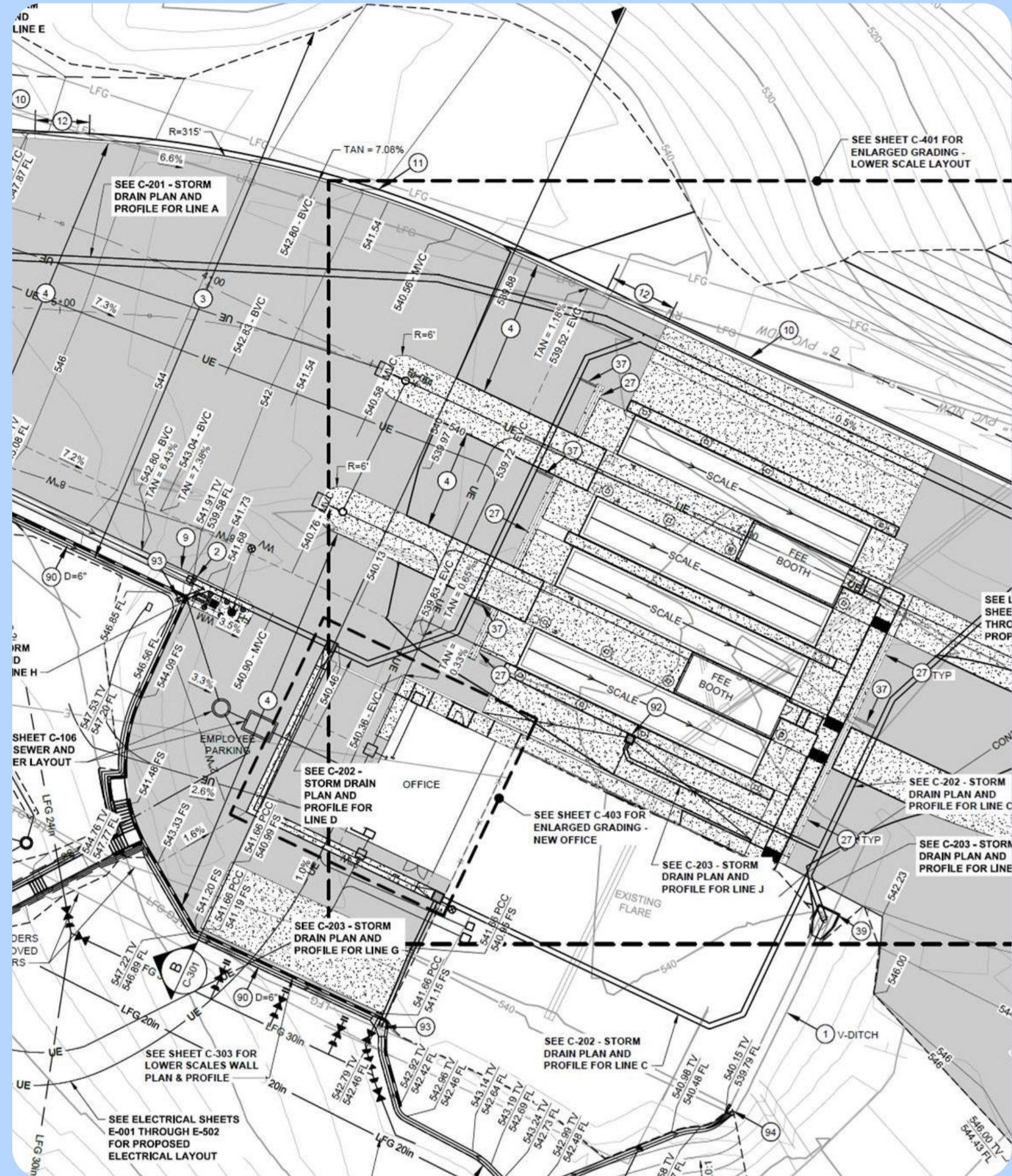


Year in Review

The pivot to resource recovery and preservation is happening in every aspect of OCWR's drive to advance our mission and fulfill our vision.

January

- » Regulations for SB 1383 went into effect, driving capacity planning, edible food recovery and working with waste haulers on education and outreach.
- » Prima Entrance and Fee Booth Improvement Project approved by Board of Supervisors.
- » Board approves final Supplemental Environmental Impact Report and Prima Deshecha Landfill General Development Plan Update for Zone 4 construction projects.
- » Board approves contract renewal for strategic marketing and outreach services.



February

- » OCWR celebrates the Lunar New Year with First District at the Tet Festival in Mile Square Park.
- » OCWR partners with Discovery Cube for outreach and recognition of Teacher Champion Awards night.

March

- » OCWR Receives **\$3M in CalRecycle grant funding** to expand Bee Canyon Greenery.

- » OCWR Director goes live on OC Talk Radio to talk about SB 1383.

- » Commenced Tier 1 generator inspections for edible food recovery.



April

- » Earth Day celebration at Discovery Cube and partnership for compost and worm presentations at OC Public Libraries.

- » OCWR teams up with SWANA to promote landfill safety.

- » The Central Region team finishes construction on an outdoor event center.

- » Initial SB 1383 jurisdictional report outlining legislation implementation was submitted.

May

- » OCWR wins three NACo Achievement Awards:
 1. OC Waste & Recycling AB 939 Regional Recycling and Waste Reduction Grant Program
 2. OC Waste & Recycling/OC Department of Education Curriculum-Based Outreach Program
 3. Prima Deshecha Landfill Zone 4 Habitat Mitigation Projects

- » Lunch at the Landfill raised over \$22,000 for the United Way of Orange County.

- » OCWR hosts inaugural compost giveaway at the Frank R. Bowerman landfill; distributing nearly 54 tons of ready-to-use compost.

- » Association of California Cities – Orange County visits FRB to learn more about OCWR.

- » OCWR partners with Rossmoor for Community Clean Up.



June

- » OCWR participates at the OC Green Expo to educate about sustainable resources and waste and recycling.

- » OCWR partners with OC Department of Education to provide compost and worm demonstration to summer camp students at Shipley Nature Center.

July

- » Bee Canyon Greenery receives Seal of Testing Assurance approval from the US Composting Council®.

- » Submitted the Countywide capacity planning report to CalRecycle, assessing organics capacity and food recovery for the County for 2022-2024.



August

- » OCWR hosts marine flare collection event at Dana Point Harbor.

- » OC Grand Jury tours the Olinda Alpha Landfill.

September

- » Tom Koutroulis serves as panelist on Second District's Sustainability Summit at Orange Coast College Planetarium.

- » OCWR participates in Canyons clean up event.

- » Capistrano Greenery receives Seal of Testing Assurance approval from the US Composting Council®.

- » OCWR Director presents at CRRA Conference.



October

- » OCWR participates in Irvine Global Village Festival.

- » OCWR shares recycling best practices at South County Disaster Expo.

- » Waste diversion and recycling booth at Portola Elementary School Fall Festival.

November

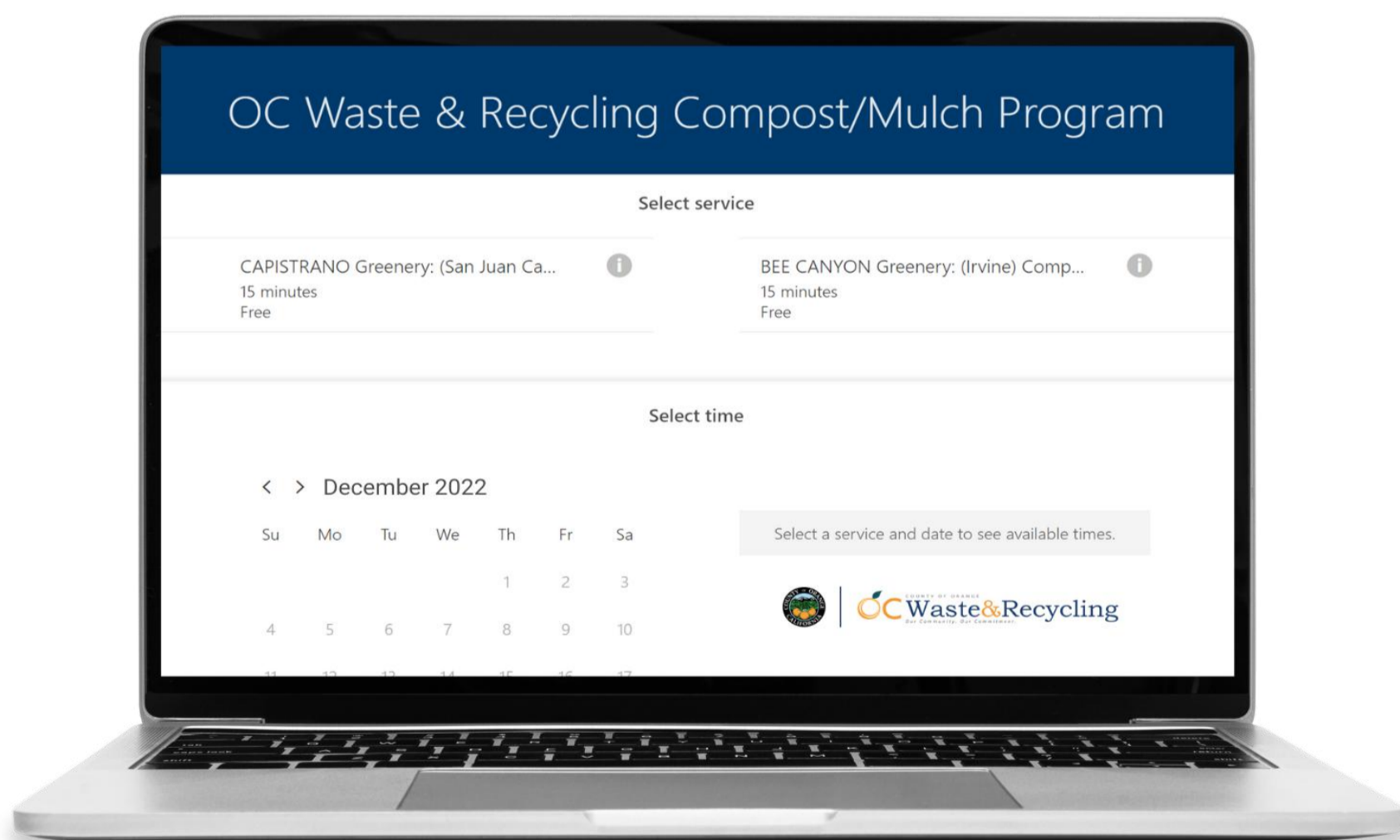
- » America Recycles Day® celebrated at all three landfills by hosting a **free compost giveaway**.

- » **A Better Tomorrow Starts Now** mailer goes out to County unincorporated to help educate residents about organics recycling.

- » OCWR and OC Department of Education celebrate recycling best practices **in the classroom** and in the **news** with Adelaide Price Elementary School in Anaheim.

A Better Tomorrow Starts Now

Reducing food waste is an important step forward. Learn how to do your part!



December

- » David J. Shawver is elected Chair of the Waste Management Commission for 2023; Kimberly Ho is elected Vice Chair.

- » Online scheduling goes live for County residents to pick up ready-to-use compost.

- » Annual surveying at OCWR exhibit at Discovery Cube reveals that 96% of visitors plan to recycle regularly and 81% of visitors would consider participating in a composting program.

OC WASTE & RECYCLING

Ten-Year Financial Forecast

Highlights of Ten-Year Financial Forecast

OC Waste & Recycling (OCWR) is responsible for the administration and management of Orange County's solid waste disposal system. The Department is structured as an enterprise fund and is primarily supported by revenues from waste management gate fees that are charged to customers. OC Waste & Recycling receives no tax revenues or County General Fund contributions to support its operations.

OCWR has actively pursued ways to expand its service and core functions by exploring new technologies and alternatives in organic waste management, in addition to converting landfill gas into beneficial sources of energy. Included in the Department's strategic plan is also an action plan focused on increased recycling resource recovery and renewable energy. Although landfilling remains an essential public service, OCWR business model has evolved along with new legislation requirements from Senate Bill (SB) 1383. The Department has developed an implementation plan for Waste Infrastructure System Enhancement (WISE) to support the regional need for organics processing capacity and the County jurisdictions in complying with SB 1383 diversion regulations.

The 10-Year Financial Forecast included in this Annual Report is for the period of FY 2022/23 through FY 2031/32. The projected tonnage anticipates a trend of significant decline due to impacts from the forecasted recession and the assumption of maximum organics recovery required by SB 1383 statewide goal. Since Olinda Alpha landfill is projected to be filled earlier than the closure permit date in 2036, OCWR has initiated the process to revise the Solid Waste Facility Permit (SWFP) for Frank R. Bowerman and Prima Deshecha landfills to increase the daily intake tonnage at these sites and to accommodate tonnage diversion from Olinda landfill. The Department has also planned to continue accepting importation tonnage to supplement the decrease in In-county tonnage revenue and to provide a stable source of net revenue sharing to the County and cities.

Net importation revenue sharing to the County is expected to be in the range of over \$7 million a year then lower to over \$5 million a year starting FY 2026/27, with the same amount going to Orange County cities.

Forecasted system revenues (Exhibit B. Forecasted System Revenues) reflect a dramatic tonnage revenue drop due to the projected disposal tonnage decline (CHART 1). Waste Disposal Agreements' (WDA) disposal rate with projected annual CPI escalation is used to forecast system revenue pending negotiation for the new WISE agreements' rate structure.

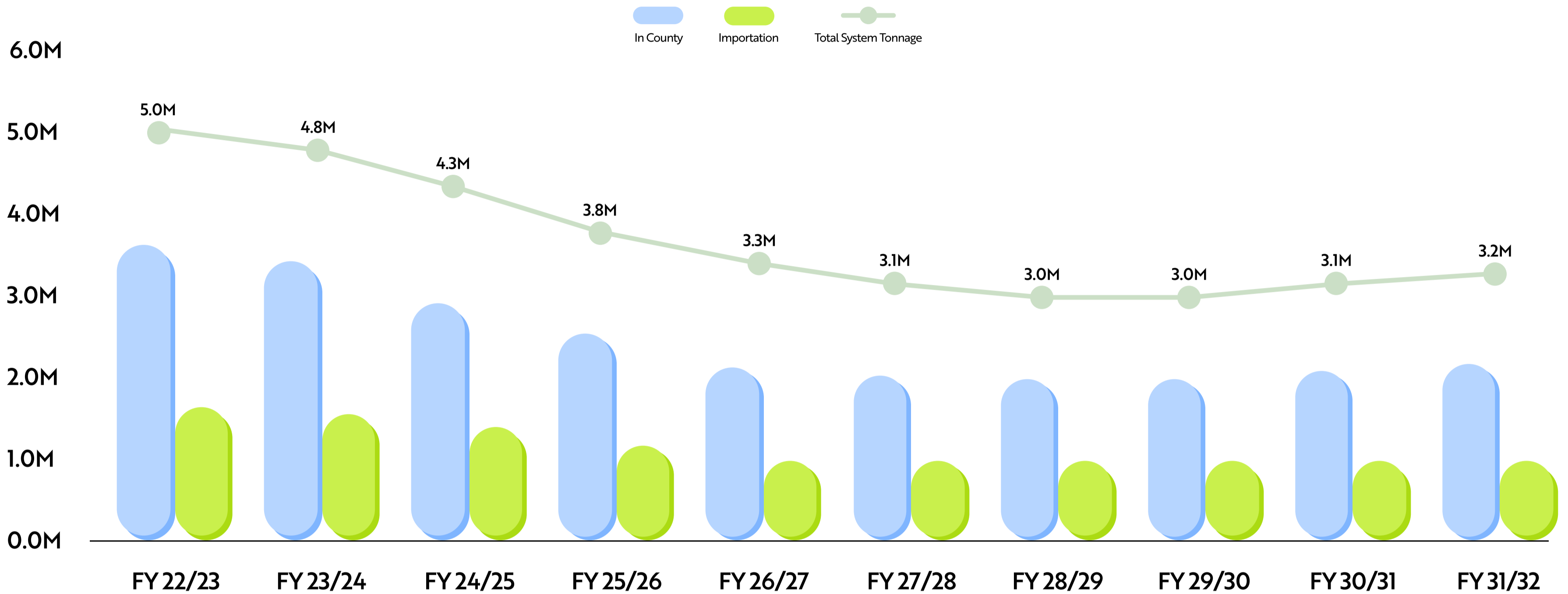
Forecasted system expenses include significant capital project costs related to the future development of the landfill system, costs for organics infrastructure, specifically for the Central and South Region landfills' source separated organics (SSO) facilities, anaerobic digesters (AD), and construction costs of a renewable natural gas (RNG) facility (Exhibit C. Forecasted System Expenses). Expenses are projected to be significantly higher than revenue in all the years of the forecasted period (CHART 2). Despite the Department's effort to strategically utilize reserves, maximize operational efficiencies, and closely monitor expenditures, OCWR will experience a negative operating cash flow (non-restricted portion) starting FY 2025/26, which deficit continues to deepen and draw out other sources of earmarked and restricted cash in the years after (Exhibit D. Forecasted Cash Balances). The Department is in dire need to obtain a new rate structure that provides sufficient financial inflows to sustain its operations, to restore the healthy cash flow, and to continue providing quality services to the County residents.

The schedule following CHART 1 and CHART 2 provides a two-year summary of audited financial data for fiscal years ending June 30, 2022 and 2021, respectively. In addition, detailed schedules for tonnage, revenues, expenses, cash balances and accrued closure and post-closure liabilities for the 10-year forecast period are presented in Exhibits A through G.

System Tonnage

(in millions)

Chart 1

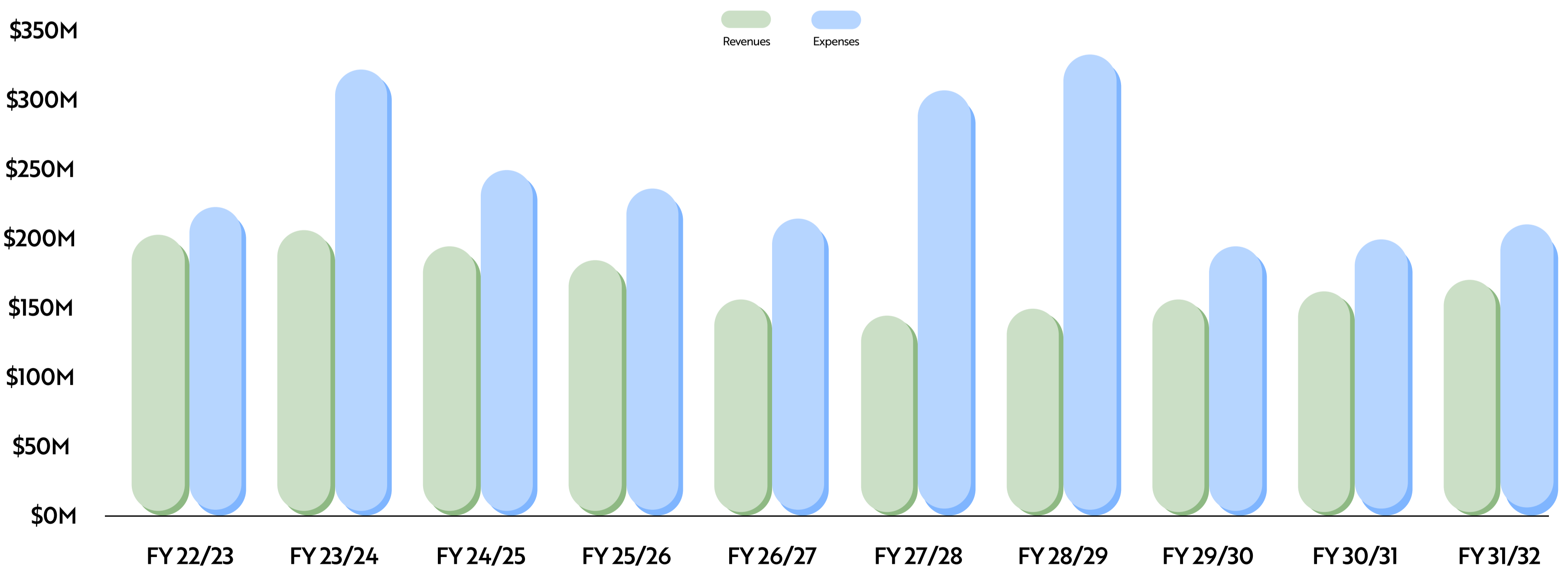


System Financial Projections

(in millions)

Funds 273, 295 and 299

Chart 2



Tonnage & Audited Financial Data for Fiscal years Ending June 30, 2022, & 2021

Disposal Waste Tonnage [1]

	6/30/22	6/30/21
In-County	3,465,058	3,368,487
Importation	1,588,538	1,609,655
Total System Tonnage	5,053,596	4,978,142

Statements of Revenues, Expenses and Charges in Fund Net Position For the Years Ended June 30, 2022 & 2021 [2]

	6/30/22	6/30/21
Total Revenues	\$ 182,810,859	\$ 184,212,975
Total Expenses	\$ 142,952,173	\$ 142,699,075
Change in Net Position	\$ 39,858,686	\$ 41,513,900

Cash Balances

	[3]	[3]
	6/30/22	6/30/21
Enterprise/Operating Fund	\$ 266,337,453	\$ 255,770,004
Capital Project Fund	\$ 90,612,502	\$ 52,429,866
Corrective Action Escrow Fund	\$ 11,811,449	\$ 10,456,214
Environmental Reserve Fund	\$ 41,951,029	\$ 32,170,021
Deferred Payment Security Deposits Fund	\$ 934,982	\$ 854,346
Habitat Mitigation Escrow Funds	\$ 879,010	\$ 879,010

Accrued Closure and Postclosure & Cash Balance

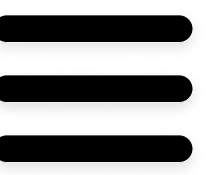
	[3]	[3]
	6/30/22	6/30/21
Landfill Closure Liabilities	\$ 78,099,985	\$ 73,040,280
Landfill Postclosure Liabilities	\$ 111,276,659	\$ 113,793,485
Escrow Funds (Closure) Cash Balance [4]	\$ 95,542,480	\$ 95,238,427
Landfill Postclosure Cash Balance [4]	\$ 143,709,608	\$ 143,114,761

[1] Source: Disposal Reporting System (DRS) Monthly Tonnage Reports.

[2] Source: OC Waste & Recycling's 2022 & 2021 Financial Statements and Trial Balance audited by Eide Bailly LLP - Certified Public Accountants

[3] Source: Data is based on the 2nd Close figures obtained from County financial system reports.

[4] Source: Cash balance is based on the General Ledger report for the official June 30 year-end close



A. Forecasted System Tonnage

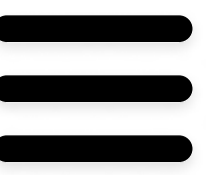
Description	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27
Frank R. Bowerman Landfill	1,594,032	1,530,271	1,375,834	1,225,538	1,941,826
Olinda Alpha Landfill	1,380,000	1,324,800	1,191,100	1,038,556	0 [1]
Prima Deshecha Landfill	475,472	456,453	410,387	361,971	324,193
Total In-County Tonnage	3,449,504	3,311,524	2,977,321	2,626,065	2,266,019
Frank R. Bowerman Landfill	606,357	582,103	523,356	461,612	837,794
Olinda Alpha Landfill	693,712	665,964	598,754	528,114	0
Prima Deshecha Landfill	237,897	228,381	205,333	181,108	162,206
Total Imported Tonnage	1,537,966	1,476,447	1,327,443	1,170,835	1,000,000
Total System Tonnage [3]	4,987,470	4,787,971	4,304,764	3,796,900	3,266,019

Description	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32
Frank R. Bowerman Landfill	1,770,939	1,734,498	1,738,874	1,766,065	1,850,637
Olinda Alpha Landfill	0	0	0	0	0
Prima Deshecha Landfill	295,663	289,579	290,309	294,849	308,968
Total In-County Tonnage	2,066,601	2,024,076	2,029,184	2,060,914	2,159,605
Frank R. Bowerman Landfill	852,069	855,113	854,747	852,475	845,411
Olinda Alpha Landfill	0	0	0	0	0
Prima Deshecha Landfill	147,931	144,887	145,253	147,524	154,589
Total Imported Tonnage [2]	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Total System Tonnage [3]	3,066,601	3,024,076	3,029,184	3,060,914	3,159,605

[1] Olinda Alpha Landfill is projected to fill earlier than the permit date. Disposal tonnage of North Region will be diverted to Central and South Region landfills.

[2] Importation is planned to be continued with tonnage intake estimated at 1 million tons, based on landfill system's capacity after Olinda closure.

[3] OCWR is working on planning for landfill cell construction projects and additional permitting for tonnage diversion from North Region to other regions' landfills.



B. Forecasted System Revenues

Description	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27
Fund 299 Enterprise/Operating-Total Revenues [1] & [2]	\$ 152,388,181	\$ 155,029,388	\$ 143,006,669	\$ 130,182,209	\$ 115,815,538
Fund 273 Capital Project/Operating-Total Revenues [3]	\$ 1,682,469	\$ 1,225,418	\$ 731,280	\$ 727,668	\$ 696,319
Fund 295 Importation Revenue Sharing-Total Revenues [4]	\$ 50,007,126	\$ 50,418,013	\$ 46,775,459	\$ 42,572,816	\$ 37,551,390
Total Projected Revenues	\$ 204,077,775	\$ 206,672,819	\$ 190,513,408	\$ 173,482,693	\$ 154,063,246

Description	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32
Fund 299 Enterprise/Operating-Total Revenues [1] & [2]	\$ 107,396,662	\$ 110,795,237	\$ 118,165,791	\$ 121,927,938	\$ 129,212,505
Fund 273 Capital Project/Operating-Total Revenues [3]	\$ 1,353,251	\$ 1,676,020	\$ 581,862	\$ 630,777	\$ 569,474
Fund 295 Importation Revenue Sharing-Total Revenues [4]	\$ 38,302,417	\$ 39,068,466	\$ 39,849,835	\$ 40,646,832	\$ 41,459,768
Total Projected Revenues	\$ 147,052,331	\$ 151,539,723	\$ 158,597,487	\$ 163,205,547	\$ 171,241,747

[1] Current major sources of revenue for Fund 299 Operating include disposal tonnage, interest earnings, lease & royalty, and recycling operation.

[2] Other sources of revenue for Fund 299 Operating such as AD Biogas and RNG revenue are estimated based on projected construction completion date and market rates.

[3] Interest earnings is the only revenue generated by Fund 273. Its annual interest earning projection is based on ending cash balance of prior year.

[4] Importation tonnage revenue is projected to decline significantly starting FY 2026/27.

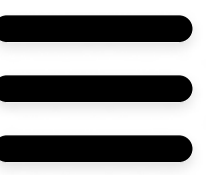
C. Forecasted System Expenses

System Expenses by Fund	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27
Fund 299 Enterprise/Operating	\$ 156,197,967	\$ 187,994,996	\$ 167,779,417	\$ 163,558,895	\$ 157,041,852
Fund 273 Capital Project/Operating	\$ 54,115,507	\$ 105,880,000 [2]	\$ 63,100,000	\$ 54,800,000	\$ 48,730,000
Fund 295 Importation Revenue Sharing	\$ 19,462,239	\$ 19,407,101	\$ 17,882,222	\$ 16,167,265	\$ 14,165,417 [1]
Total System Expenses	\$ 229,775,713	\$ 313,282,098	\$ 248,761,638	\$ 234,526,160	\$ 219,937,269

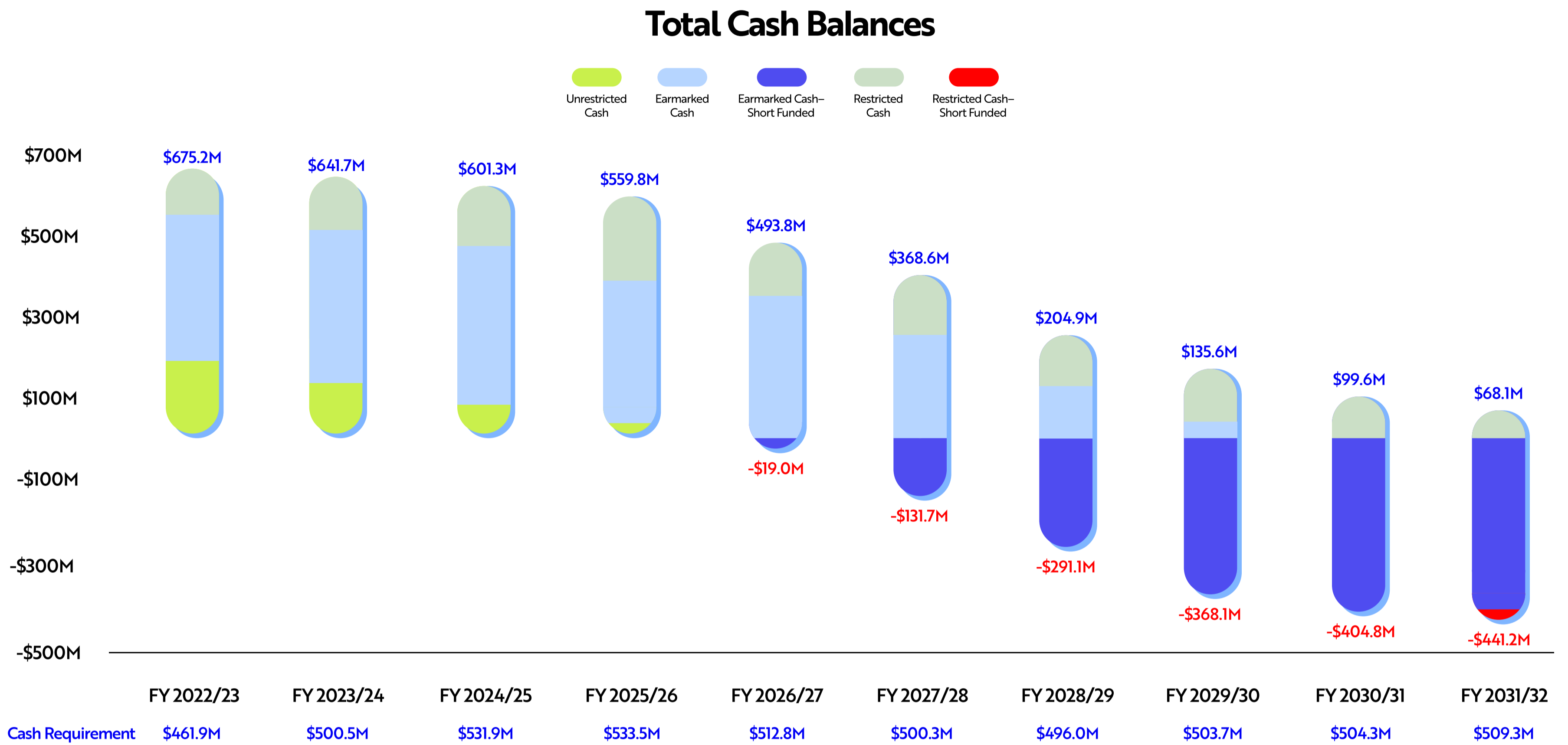
System Expenses by Fund	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32
Fund 299 Enterprise/Operating	\$ 157,048,239	\$ 156,107,958	\$ 158,870,516	\$ 160,468,391	\$ 177,673,201
Fund 273 Capital Project/Operating	\$ 124,200,000 [2]	\$ 158,000,000 [2]	\$ 23,100,000	\$ 27,000,000	\$ 17,700,000
Fund 295 Importation Revenue Sharing	\$ 14,390,725	\$ 14,620,540	\$ 14,854,951	\$ 15,094,050	\$ 15,337,931
Total System Expenses	\$ 295,638,965	\$ 328,728,498	\$ 196,825,466	\$ 202,562,440	\$ 210,711,132

[1] Fund 295 Importation Revenue Sharing's expenses include Net Revenue Sharing to County & Cities, Host Fees and Special Tax for importation tonnage.

[2] Capital project expenditures are high in FY 2023/24 for landfill projects and in FY 2027/28 - FY 2028/29 for construction projects of Organic Phase III - Bee Canyon Anaerobic Digestion and RNG facility at Prima landfill.

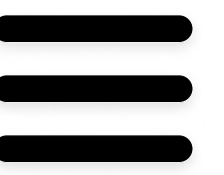


D. Forecasted Cash Balances



- [1] Unrestricted Operating Cash Balance is projected to be negative starting FY 2026/27.
- [2] Starting FY 2026/27, OCWR would have to draw down earmarked cash for operating use.
- [3] Starting FY 2031/32, all earmarked cash would be exhausted. OCWR would have to draw down from escrow restricted cash. Total cash deficit will be \$441.2 millions.
- [4] OCWR will not be able to conduct its business with negative operating cash flow situations mentioned in Note [2] & [3].
- [5] OCWR will need a new rate structure starting FY 2025/26 to restore its cash flow to a healthy and sustainable level.

Ending Cash Balances	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27
Fund 299 OCWR Operating Fund	\$ 170.9M	\$ 96.5M	\$ 42.7M	\$ -0.3M	\$ -44.4M
Fund 273 Capital Project Fund	\$ 42.4M	\$ 44.6M	\$ 26.7M	\$ 26.5M	\$ 25.4M
Total Unrestricted Operating Cash	\$ 213.2M	\$ 141.2M	\$ 69.4M	\$ 26.3M	\$ -19.0M [1]
Fund 299 Operating Cash Earmarked for Future Use	\$ 137.7M	\$ 141.0M	\$ 146.3M	\$ 132.3M	\$ 130.4M
Fund 275 Environmental Reserves Fund [2]	\$ 43.5M	\$ 44.7M [2]	\$ 60.8M	\$ 62.3M [2]	\$ 63.9M
Fund 279 Postclosure Maintenance Fund	\$ 163.1M	\$ 186.1M	\$ 192.7M	\$ 194.3M	\$ 195.8M
Total Cash Earmarked for Future Obligations	\$ 344.3M	\$ 371.8M	\$ 399.8M	\$ 389.0M	\$ 390.0M
Fund 276 Deferred Payment Security Deposits	\$ 1.2M	\$ 1.2M	\$ 1.2M	\$ 1.2M	\$ 1.2M
Fund 274 Corrective Action Escrow Fund	\$ 13.8M	\$ 14.1M	\$ 14.5M	\$ 14.9M	\$ 15.3M
Fund 288 FRB Landfill Wetland & Agua Chinon Wash Riparian Escrow Fund	\$ 0.9M	\$ 0.9M	\$ 0.9M	\$ 0.9M	\$ 0.0M [3]
Fund 286 Olinda Alpha Closure Escrow Fund	\$ 43.9M	\$ 49.1M	\$ 50.5M	\$ 60.8M	\$ 37.8M
Fund 284 Frank R. Bowerman Closure Escrow Fund	\$ 32.2M	\$ 33.0M	\$ 33.8M	\$ 34.6M	\$ 35.5M
Fund 287 Prima Deshecha Closure Escrow Fund	\$ 25.7M	\$ 30.4M	\$ 31.2M	\$ 32.1M	\$ 32.9M
Total Restricted Cash	\$ 117.6M	\$ 128.7M	\$ 132.1M	\$ 144.5M	\$ 122.8M
Total Fiscal Year End Cash Balances	\$ 675.2M	\$ 641.7M	\$ 601.3M	\$ 559.8M	\$ 493.8M



D. Forecasted Cash Balances

Cash Balances

Ending Cash Balances	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32
Fund 299 OCWR Operating Fund	\$ -181.0M	\$ -352.2M	\$ -389.3M	\$ -427.8M	\$ -462.0M
Fund 273 Capital Project Fund	\$ 49.4M	\$ 61.1M	\$ 21.2M	\$ 23.0M	\$ 20.8M
Total Unrestricted Operating Cash	\$ -131.7M	\$ -291.1M	\$ -368.1M	\$ -404.8M	\$ -441.2M [1]
Fund 299 Operating Cash Earmarked for Future Use	\$ 135.3M	\$ 139.9M	\$ 143.9M	\$ 140.9M	\$ 145.2M
Fund 275 Environmental Reserves Fund [2]	\$ 65.5M	\$ 67.1M	\$ 68.7M	\$ 70.4M	\$ 69.2M
Fund 279 Postclosure Maintenance Fund	\$ 197.2M	\$ 198.5M	\$ 198.2M	\$ 197.8M	\$ 197.2M
Total Cash Earmarked for Future Obligations	\$ 397.9M	\$ 405.5M	\$ 410.9M	\$ 409.1M	\$ 411.6M
Fund 276 Deferred Payment Security Deposits	\$ 1.2M	\$ 1.2M	\$ 1.2M	\$ 1.2M	\$ 1.2M
Fund 274 Corrective Action Escrow Fund	\$ 16.8M	\$ 17.2M	\$ 17.7M	\$ 18.2M	\$ 18.7M
Fund 288 FRB Landfill Wetland & Agua Chinon Wash Riparian Escrow Fund	\$ 0.0M	\$ 0.0M	\$ 0.0M	\$ 0.0M	\$ 0.0M
Fund 286 Olinda Alpha Closure Escrow Fund	\$ 14.2M	\$ 0.0M	\$ 0.0M	\$ 0.0M	\$ 0.0M
Fund 284 Frank R. Bowerman Closure Escrow Fund	\$ 36.4M	\$ 37.3M	\$ 38.2M	\$ 39.1M	\$ 40.1M
Fund 287 Prima Deshecha Closure Escrow Fund	\$ 33.9M	\$ 34.8M	\$ 35.7M	\$ 36.7M	\$ 37.7M
Total Restricted Cash	\$ 102.4M	\$ 90.5M	\$ 92.8M	\$ 95.2M	\$ 97.7M
Total Fiscal Year End Cash Balances	\$ 368.6M	\$ 204.9M	\$ 135.6M	\$ 99.6M	\$ 68.1M

[1] Total Unrestricted Operating Cash Balance is projected to be negative starting FY 2026/27 and would be in deficit of \$441.2 million by FY 2031/32.

[2] Fund 275 Cash balance's decrease is low until FY 2023/24 due to borrowing from other County departments. Repayments will reinstate balance to \$70 million cap.

[3] Per the agreement with the California Department of Fish and Game for habitat mitigation, requirement for Fund 288 escrow is estimated to end in FY 2025/26.

Escrow proceed will be transferred back to Fund 299.

E. Closure Escrow Funds

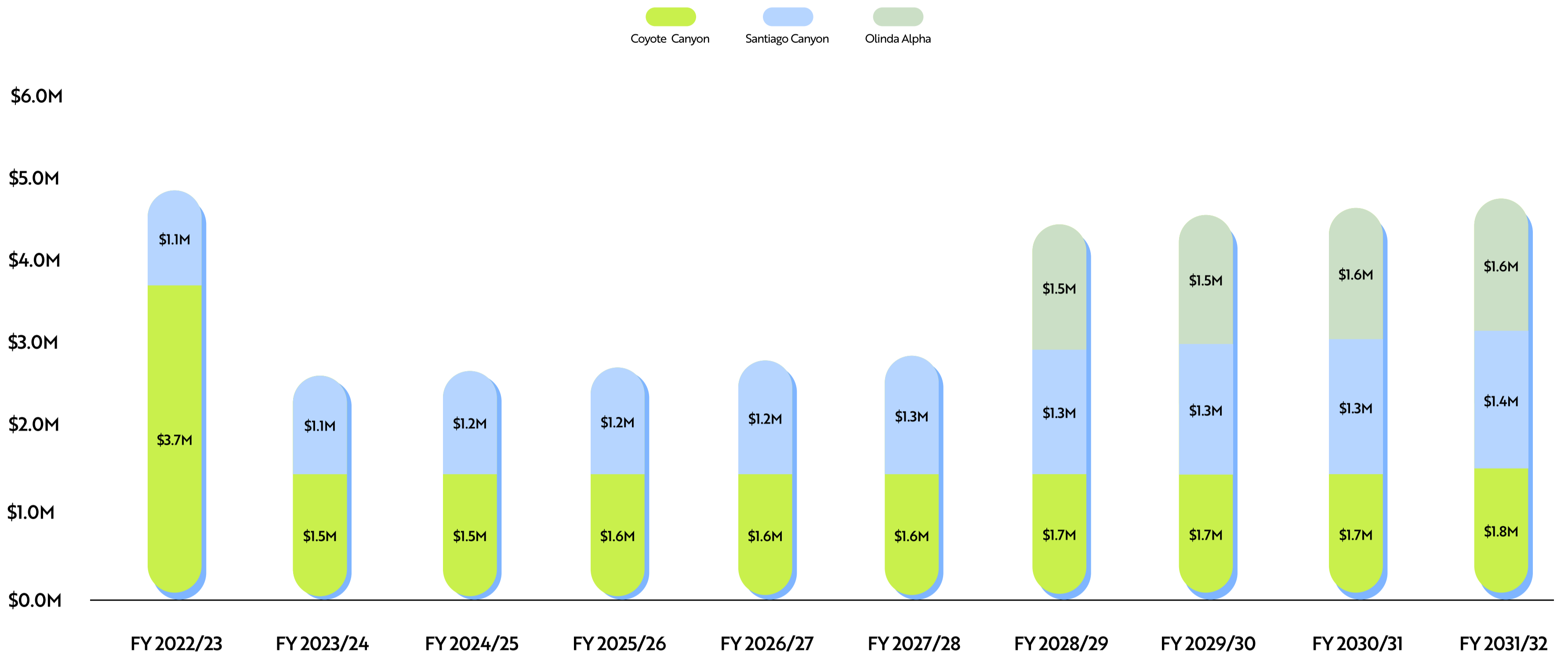
Description	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27
Frank R. Bowerman Landfill					
Annual Tonnage of Refuse	2,200,389	2,112,373	1,899,190	1,687,150	2,779,620
Cash Balance at 6/30/XX	\$ 32,193,892	\$ 32,989,725	\$ 33,805,231	\$ 34,640,896	\$ 35,497,219
Olinda Alpha Landfill					
Annual Tonnage of Refuse	2,073,712	1,990,764	1,789,854	1,566,671	0
Cash Balance at 6/30/XX	\$ 43,901,450	\$ 49,106,545	\$ 50,453,046	\$ 60,836,469	\$ 37,846,525
Prima Deshecha Landfill					
Annual Tonnage of Refuse	713,369	684,834	615,720	543,079	486,399
Cash Balance at 6/30/XX	\$ 25,674,002	\$ 30,378,753	\$ 31,211,738	\$ 32,067,564	\$ 32,946,857

Description	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32
Frank R. Bowerman Landfill					
Annual Tonnage of Refuse	2,623,007	2,589,610	2,593,622	2,618,541	2,696,047
Cash Balance at 6/30/XX	\$ 36,374,710	\$ 37,273,893	\$ 38,195,304	\$ 39,139,492	\$ 40,107,020
Olinda Alpha Landfill					
Annual Tonnage of Refuse	0	0	0	0	0
Cash Balance at 6/30/XX	\$ 14,226,196	\$ -	\$ -	\$ -	\$ -
Prima Deshecha Landfill					
Annual Tonnage of Refuse	443,594	434,466	435,562	442,373	463,557
Cash Balance at 6/30/XX	\$ 33,850,260	\$ 34,778,434	\$ 35,732,059	\$ 36,711,832	\$ 37,718,470

[1] Olinda Alpha Landfill is projected to be in the closure process starting FY 2026/27. Transfers from Olinda escrow fund to Operating Fund will be needed to fund closure cost. Escrow fund will be exhausted when closure process ends.

F. Landfill Postclosure Maintenance Expense

Annual Postclosure Maintenance Expenditures



[1] Olinda Alpha Landfill is estimated to start its 30-year postclosure maintenance period in FY 2028/29.

[2] Coyote's estimated postclosure maintenance cost is high in FY 2022/23 due to one-time landfill gas collection system replacement cost.

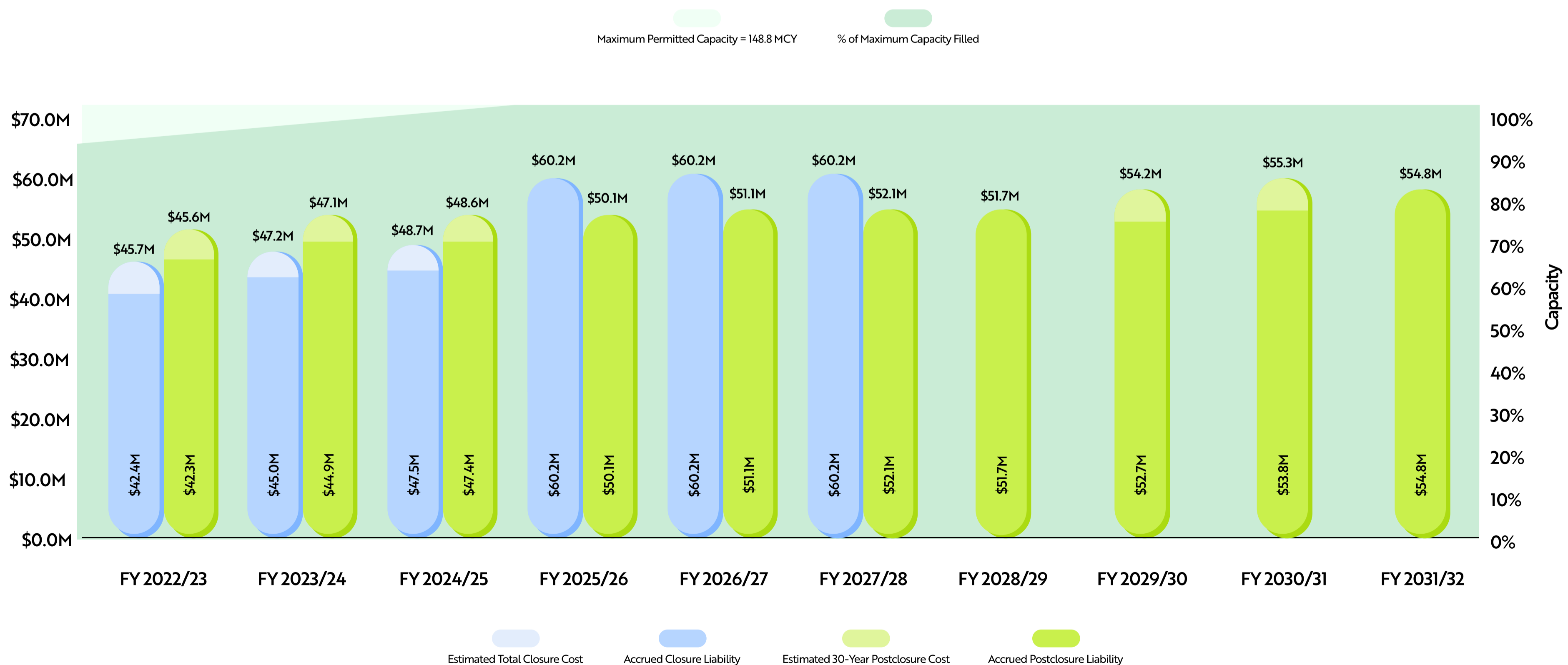


G. Landfill Closure and Postclosure Liabilities

Frank R. Bowerman Landfill Closure and Postclosure Liabilities



Olinda Alpha Landfill Closure and Postclosure Liabilities



G. Landfill Closure and Postclosure Liabilities

Prima Deshecha Landfill - Zone 1 Closure and Postclosure Liabilities



Prima Deshecha Landfill - Zone 4 Closure and Postclosure Liabilities



Prima Deshecha Landfill Zone 4 is estimated to start accepting waste in FY 2025/26. Accrued liabilities are required when waste is accepted.

H. Closed Landfill Postclosure Liabilities and Reserves

Santiago Canyon Postclosure Liability and Reserves



Effective FY 2015/16, OCWR started the policy to maintain reserves equal to 15 years of the annual postclosure maintenance cost estimates for each closed site that has been in its postclosure phase longer than 15 years. Santiago Canyon reaches its 15th year of postclosure in FY 2021/22; therefore, reserves accrual would start from FY 2022/23.

Coyote Canyon Postclosure Liability and Reserves



In FY 2024/25, Coyote Canyon Landfill should complete its 30-year postclosure period and GASB 18 postclosure liability is no longer required. Since the Coyote Postclosure liability accrued balance would be spent off by FY 2023/24 - one year earlier than the 30-year period, OCWR will have to replenish the accrued balance with reserves for 15 year maintenance cost estimate.