**Study Session:** Updates on Senate Bill (SB) 1383, Residential Recycling Contamination & Residential Garbage and Recycling Rates

April 12, 2021 | 1:30 PM - 4:30 PM



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## Agenda

#### San José's Solid Waste Program Overview

- Presented by Valerie Osmond
- Senate Bill 1383 Overview, San José's Program Alignment, and Next Steps
  - Presented by CalRecycle: Brianna Lara

City of San José: Shikha Gupta

#### Residential Recycling Contamination and Next Steps

• Presented by City of San José: Valerie Osmond

SCS Engineers: Stacey Demers

#### Residential Garbage and Recycling Rates and Next Steps

• Presented by Kerrie Romanow & Valerie Osmond





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## San José's Solid Waste Program Overview

## **Integrated Waste Management**

- Solid waste collection, processing, and disposal
- Residential, commercial, Construction & Demolition, and City facilities
- Leader in recycling since 1985
- Contract requirements surpass state recycling mandates











## History of San José's Solid Waste Program





#### Previous Single-Family Collection Setout (1993-2002)



#### Current Single-Family Collection Setout (2002-present)





## **City Overview**



Annual Per Capita Waste Disposal (lbs/person/day)

CalRecycle Target



## **Major Solid Waste Regulations**





# CITY OF SAN JOSE

Environmental Services

## SB 1383 Overview (Presented by CalRecycle)

Next: San José's Program Alignment and Next Steps

### The Green Reset: An Opportunity To Create Our Future

## City of San José

California's Super-Pollutant Reduction Strategy









## Pandemic Lessons for SB 1383





## THE CLIMATE CRISIS COSTS CALIFORNIA BILLIONS





### **Organic Waste Is the Largest Waste Stream in California**



## **SB 1383 Requirements**





## **New Statewide Programs to Reduce Super Pollutants**

Food & Organics Waste Collection



Edible Food to Food Insecure

Millions of meals

to 1 in 5 food

isecure in CA

Mew and Expanded Recycling

15,000 green jobs

#### **Recycled Organics Products**



Lower GHGs = 1.7 million fewer cars a year



## **Jurisdiction Responsibilities**



#### SB 1383 IN ACTION

#### LOCAL GOVERNMENT ROLES AND RESPONSIBILITIES

SB 1383 doesn't just apply to waste management and recycling departments.

Every local department plays a role in SB 1383 implementation.





#### SB 1383 IN ACTION

INSPECTION AND ENFORCEMENT REQUIREMENTS



Monitor Compliance and Conduct Enforcement

#### JURISDICTION REQUIREMENTS

Ordinance 2022



Adopt an Ordinance (Enforceable Mechanism)

Including Enforcement Compliance Monitoring & Education

2022-2024



Annual Compliance Reviews, Route Reviews, Inspections

**Educate Violators** 

#### Compliance Monitoring & Enforcement

2024

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Annual Compliance Reviews Route Reviews, Inspections, Notice of Violations, Penalties for Violators



## STATE ENFORCEMENT



<b>→</b>
<b>✓</b>
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Oversee and Monitor for Compliance

#### **Jurisdiction Review**

- Conduct joint inspections with jurisdictions
- Review Implementation Record

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#### **If Violations**

- Issue Notices of Violation
- May Authorize Corrective Action Plan
- Allows up to 24 months to address barriers outside of a jurisdiction's control



#### Authorize Waivers

- Low Population
- Rural Areas

#### Emergency Circumstances

**Oversee and Monitor** 

- State Agencies and Facilities
- Local Education Agencies

#### CALRECYCLE OVERSIGHT (BEGINS IN 2022)

#### https://www.calrecycle.ca.gov/organics/slcp



https://www.youtube.com/watch?v=ckX3HNO2ymw&feature=youtu.be



## San José – leading the nation in diversion from landfills











## San José Recycling Infrastructure





## Residential

- Single-stream recycling since 2002
- Garbage processing since 2008
- Source-separated yard trimmings









## **Residential Organics**

#### Source-Separated Yard Trimmings 97% Landfill Diversion

## Garbage Processing 70% Landfill Diversion





## Commercial

- Organics ("wet") are source separated and processed at an anaerobic digestion facility, ZWED
- Consolidated into single franchise in 2012





## **Commercial Organics**

#### 60% Landfill Diversion





## **City is Required to Adopt Ordinances/Policies**



Organic Waste Recovery

Edible Food Recovery

Self-haul of organics

CALGreen Building Standards and Model Water Efficient Landscape

Administrative Civil Penalties



## **Collection & Processing**



Provide Organics Collection Services to all Residents and Businesses



Conduct Education and Outreach to Community



Contamination monitoring



Deliver mixed waste to high diversion organic waste processing facility



## Procurement

#### **RECYCLED ORGANICS PRODUCTS\***



Compost

Mulch

Electricity

Biofuel

\*All procured recycled organic products must meet regulation standards

#### RECYCLED CONTENT PAPER PROCUREMENT

Extensive list of paper products (examples include paper janitorial supplies, office paper, storage folders and boxes)





## **Inspections & Enforcement**

#### WARNING NOTICE AVISO DE ADVERTENCIA THÔNG CÁO CẢNH BÁO

Your Container may not be serviced on future collection days due to the following:

Es posible que su Contenedor no reciba servicio en los próximos días de recolección debido a lo siguiente:

Thùng rác của quý vị có thể sẽ không được đổ vào những ngày thu rác trong tương lai vì những lý do sau:



Container Overloaded (Lid Must Be Closed) Contenedor sobrecargado (la tapa debe estar cerrada) Thúng chứa quả tải (Nắp thúng phải đóng lại được).



Container Contaminated With Non-Recyclable Material Recipiente contaminado con material no reciclable Thùng chứa bị ô nhiễm do chứa những vật liệu không thể tái chế



Container Contaminated With Non-Wet/Non-Organic Material Recipiente contaminado con material Inorgânico / no húmedo Thùng chứa bị ô nhiễm do chứa những vật liệu không phải Rác Ướt/Rác Hữu Cơ

Date / Fecha / Ngày

Please contact Republic Services at 408-432-1234 to schedule an extra pickup or to request a larger container.

Comuniquese con Republic Services al 408-432-1234 para programar una recolección adicional o para solicitar un contenedor más grande.



Vui lòng liên hệ với Republic Services theo số 408-432-1234 để sắp xếp thêm một lần thu rác hoặc để yêu cầu một thùng rác lớn hơn.





## **Recordkeeping & Reporting**

### Need additional resources & data management tools





## **Edible Food Recovery**



Most Preferred.

#### **Food Recovery Hierarchy**

Source Reduction & Reuse Reduce the volume of surplus food generated

**Feed Hungry People** Donate extra foods to banks, soup kitchens and shelves

> Feed Animals Divert food scraps to animal feed

Industrial Uses Provide waste oils for rendering and fuel conversion and food scraps for digestion to recover energy

> Composting Create a nutrient-rich soil amendment

Landfill/ Incineration Last resort to disposal







## **SB 1383 Coordination**

SB 1383 Topic	City Department / Entity
Procurement of recycled organic waste products	ESD, DOT, PRNS, Public Works, Real Estate
Procurement of recycled content paper	ESD, Finance
Edible food recovery	ESD, County of Santa Clara work group, City Housing & PRNS, Second Harvest of Silicon Valley, Loaves & Fishes



## **Next Steps/Upcoming Asks of Council**

- Adopt required ordinances & update schedule of fines by January 1, 2022
- City staff are collaborating across departments on:
  - Recycled organic waste procurement targets
  - Recycled content paper requirements
  - Edible food recovery efforts
- Additional resources for solid waste enforcement and reporting
- Staff will return to Council with additional information on options for edible food recovery compliance





## Study Session: Update on Residential Recycling Contamination



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# **Residential Garbage & Recycling Services**

Contractor	Services	Service Districts		
CALIFORNIA WASTE	Single-family recycling			
SOLUTIONS ZEROWASTE SPECIALISTS	District A District C			
Single-family garbage				
	District A District C	A A		
SANITATION INC.				
reen	District B			
	Citywide Multi-family & City Facilities garbage & recycling	- Andrew		
	<ul> <li>Citywide yard trimmings</li> <li>Citywide garbage processing</li> </ul>	Single-family Multi-family Households Households		
greenwaste a brighter shade of green	Citywide street sweeping	A: 98,000 Citywide: B: 50,000 115,000 C: 68,000		



### **Residential Material Flow**





# **Most Common Single-Family Cart Sizes**



32-Gallon Garbage

87% of SFDs



96-Gallon Recycling

Approximately 80% of SFDs



### Single-Family Dwelling Tons Steady Before 2020





### **COVID-19 Impacts on Solid Waste & Public Outreach**









# **Increased Tons During COVID-19 Pandemic**

Before and after shelter-in-place

• Apr-Dec 2019 vs. Apr-Dec 2020



+8%

+17%



# Single-Family Dwelling Recycling Contamination



Apr-Dec 2019 vs. Apr-Dec 2020







### **Program Material**





# **Materials Not Accepted in Recycling Cart**







Yard Trimmings



Food & Liquid



> Tanglers



Large Items



Hazardous Waste



Packaging







### **Measuring Cart Contents**

Contracts require a third-party study every two years





# Fall 2020 SFD Recyclables Study Results (Presented by SCS Engineers)



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City of San José

Characterization of Inbound Residential Curbside Recyclables

**Presentation of Results** 

Stacey Demers Project Director

# Study Design

#### **Recycling Collection Districts**



District	Average # Routes/Day	Number of Samples
А	22	110
В	10	50
С	16	80
Total	48	240



# Fieldwork Schedule

Week Beginning Monday:	Days of Fieldwork	MRF	
September 28, 2020	5	CWS	
October 5, 2020	No Sorting		
October 12, 2020	5	CWS	
October 19, 2020	5	CWS	
October 26, 2020	No Sorting		
November 2, 2020	5	CWS	
November 9, 2020	5	GreenWaste	

# Material Classifications

Material Type	RRFS Materials	Non-RRFS	
	Clean Newspaper	Contaminated Paper &	
Papar	Clean OCC		
ruper	Clean Mixed Paper	Remainder/Composite Paper	
	Clean Aseptic & Poly-coated Packaging		
	#1 PET Bottles & Containers		
	#2 HDPE Bottles & Containers	Pomaindor/Composito Plastic	
Plastic	#3, #4, #5, #7 Bottles & Containers		
	Clear/Clean Plastic Bags & Other Film	(includes opaque plastic liim)	
	Durable Plastic Items		
	Aluminum Beverage Cans		
Motal	Aluminum Foil	Remainder/Composite Motal	
meiai	Steel (Tin) Cans	Remainder/Composite Merdi	
	Other Scrap Metal		
Glass	Recyclable Glass	Remainder/Composite Glass	
Textiles	NA	Bagged and Loose Textiles	
Organic	NA	Organics	
		Includes sharps & personal hygiene products)	
Medical	NA		
Electronic	NA	Electronics	
HHW & Special		Includes chemicals, motor oil, oil filters,	
Waste	NA	mercury lamps, batteries, tanks)	
Other	NA	Other Materials including polystyrene	

# Summary of Citywide Results

Material Type		Mean Composition			
s (RRFS)	Paper	Clean Newspaper	1.8%		49.0%
		Clean OCC (Cardboard)	15.9%	<u>२० २७</u>	
		Clean Mixed Paper	10.7%	27.2/0	
Jdie		Clean Aseptic & Poly-Coated Packaging	0.7%		
r Stu		#1 PET Bottles and Containers	2.9%		
Fo	<u>i</u>	#2 HDPE Bottles and Containers	1.9%		
oles	last	#3, #4, #5, #7 Bottles and Containers	1.2%	7.3%	
clat	4	Clean/Clear Plastic Bags and Other Film	0.2%		
ŝcyć		Durable Plastic Items	1.1%		
I Re		Aluminum Beverage Cans	0.7%	3.5%	
ntia	etal	Aluminum Foil	0.1%		
ide	Ŵ	Steel (Tin) Cans	1.2%		
Res		Other Scrap Metal	1.6%		
	Glass	Glass Recyclable Glass		9.0%	
es	Contaminated Paper & Remainder / Composite Paper		13.2%	13.2%	
abl S)	Remainder / Composite Plastic		1.5%	1.5%	
RF	Rema	inder/Composite Metal	2.3%	2.3%	
Rec	Rema	inder/Composite Glass	0.3%	0.3%	
N (N			1.8%	1.8%	51.0%
<b>G</b> Organics		5.5%	5.5%	51.0%	
esid Stud	Media	Medical Waste		0.9%	
- Re	Electr	Electronics		0.9%	
NO N	HHW & Special Waste Other Materials		0.8%	0.8%	
z			23.9%	23.9%	
Total			100.0%	100.0%	100.0%

Note: Composition based on 216 samples.



# Proportion of RRFS by Sample



# Major Material Classification by Collection District



# Day of Week – Collection District A



# Day of Week – Collection District B



# Day of Week – Collection District C







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# **Recycling Routes Sampled**

- About 775 SFD households per route
- Most routes have between 41%-60% contamination



### **Route Contamination Levels**



# **Recycling Composition Changes**





# **Recycling Compensation Structure**





### **Increased Contractor Compensation**

- The 2020 contamination level increased from the 2015 level
- The 2020 level will increase contractor compensation of about \$8M in 2021-2022

Contamination Increase	Contractor Approx. Compensation Increase	Percentage Point SFD Rate Impact (Rounded)
5%	\$4.5M	+4%
10%	\$6.8M	+6%
15-20%	\$8.3M	+7%



# **ESD's Response**

- Encourage garbage cart upsizing
- Sell Extra Garbage Stickers
- Recycle Right marketing campaign
- Cart lid replacement pilot





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# **Cart Lid Replacement Pilot Program**

- Uses route data from Fall 2020 Study
- Trilingual Recycle Right messages
- 5,000 SFD households
- Launch: late Apr. 2021











# Residential Garbage and Recycling Customer Rates



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# Forecasted Rate Increases Presented to Council in February

21% Single Family  An increase of \$8.21 per month or \$1.89 per week for the typical service level, billed to property owners



 An increase of approximately \$1.61 per month or \$0.37 per week per dwelling unit, billed to property owners



# Why Increases?



New prices approved in 2019 Recycling contamination

Over 15% increase in contamination during COVID One-time cost offsets for 2020-2021 rate increases Annual inflationary ("cost of living") contractual adjustments for contractors







# **Local Rates Comparison**

### Single-Family

Regional Jurisdictions	FY 20-21 Monthly Rate
San Francisco	\$ 59.70
Oakland	\$ 51.27
Palo Alto	\$ 50.07
San José (FY 21-22 Forecast)	\$47.33
Santa Clara	\$ 44.10
Fremont	\$ 39.72
San José (Current)	\$ 39.12
Sunnyvale	\$ 37.36
Hayward	\$ 35.62

### **Multi-Family**

3yd Garbage 1x/week	Monthly Rate
Countywide Average (FY 19-20)	\$ 334.85
San José (Forecasted FY 21-22)	\$286.35
San José (Current)	\$ 267.62



### **Exploring Reductions**









Continue to freeze staff positions funded by residential garbage and recycling ratepayers

#### Use Fund Reserves

Partial drawdown of O&M reserve in 2021-2022

Use of fund balance

Reductions to current services (Junk Pickup, Garbage Processing)

City potentially not SB 1383 compliant If available, use Federal relief funds to offset some cost caused by stay-at-home orders

One-time offset



# **Recommended Strategy**

Potential Strategy	Estimated Reduction	Concerns
<b>Use fund balance</b> Leverage available savings after updating budget projections and use of Bottle Bill funds	SFD: 2.0%	• None

- Typical fine-tuning of budget projections and proposed rate setting
- Revised forecast for SFD increase: 19%
- An increase of \$7.43 per month or \$1.72 per week for the typical service level, billed to property owners


## **Additional Strategy**

Potential Strategy	Estimated Reduction	Concerns
<b>Use fund reserve</b> Partial use of Operations and Maintenance Reserve (\$2.4M)	SFD: 2.0%	<ul> <li>Makes the fund less resilient should a new emergency arise</li> <li>One-time offset, will make next two years of rate increases higher than planned to restore O&amp;M Reserve</li> </ul>

- Forecasted SFD increase would go from 19% to 17%
- **O&M Reserve** use: double impact to future customer rates (onetime offset and restoration of Reserve)

2021-2022	2022-2023	2023-2024
SFD Rate Adjustment	SFD Rate Adjustment	SFD Rate Adjustment
2% Decrease	Additional 2% Increase	Additional 2% Increase Potential cost savings if recycling contamination returns to pre- COVID levels, <u>up to 7% decrease</u>

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### **Not Recommended Strategies**

Potential Strategy	Estimated Reduction	Concerns
Continue to freeze staff vacancies	SFD: less than 1%	<ul> <li>Near-term, critical efforts related to SB 1383 compliance and recycling outreach</li> <li>City overhead already on the low end of the industry</li> </ul>
<i>Limit SFD Junk Pickup</i> restrict service to two 3-item collections per year	SFD: 2%	<ul> <li>Popular service amongst residents, many households request pick up of more than 6 items per year</li> <li>Challenging to implement administratively</li> <li>Residents would need to pay for pickup after 6 items</li> </ul>
<b>Federal relief funds</b> from the American Rescue Plan for a one-time reduction to SFD rate increase focused on recycling contamination costs	TBD	<ul> <li>Competing priorities for federal funds</li> <li>One-time offset, would likely make future rate increases higher than planned</li> <li>Relief through rate reduction would be citywide and not completely focused on most vulnerable</li> </ul>





#### **Rate Notices**

- Notices in English, Spanish,
   Vietnamese of max rate increases
- To property owners
- 45-Day protest period
- Mailing week of April 19
- Proposed rates scheduled for June 15, 2021 Council agenda





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# **Questions?**



Environmental Services

Study Session: Updates on Senate Bill (SB)1383, Residential Recycling Contamination & Residential Garbage and Recycling Rates

#### April 12, 2021 | 1:30 PM - 4:30 PM

Presented by: Kerrie Romanow, Director, Environmental Services Department Valerie Osmond, Deputy Director, Environmental Services Department Shikha Gupta, Senior Environmental Program Manager, Environmental Services Department Brianna Lara, Environmental Scientist, California Department of Resources Recycling and Recovery (CalRecycle)

Stacey Demers, Project Director, SCS Engineers



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