

# ***North American Workshop on Food Waste Reduction and Recovery***

***Practical approaches to linking food waste to GHG reduction and  
other environmental and socio-economic benefits***

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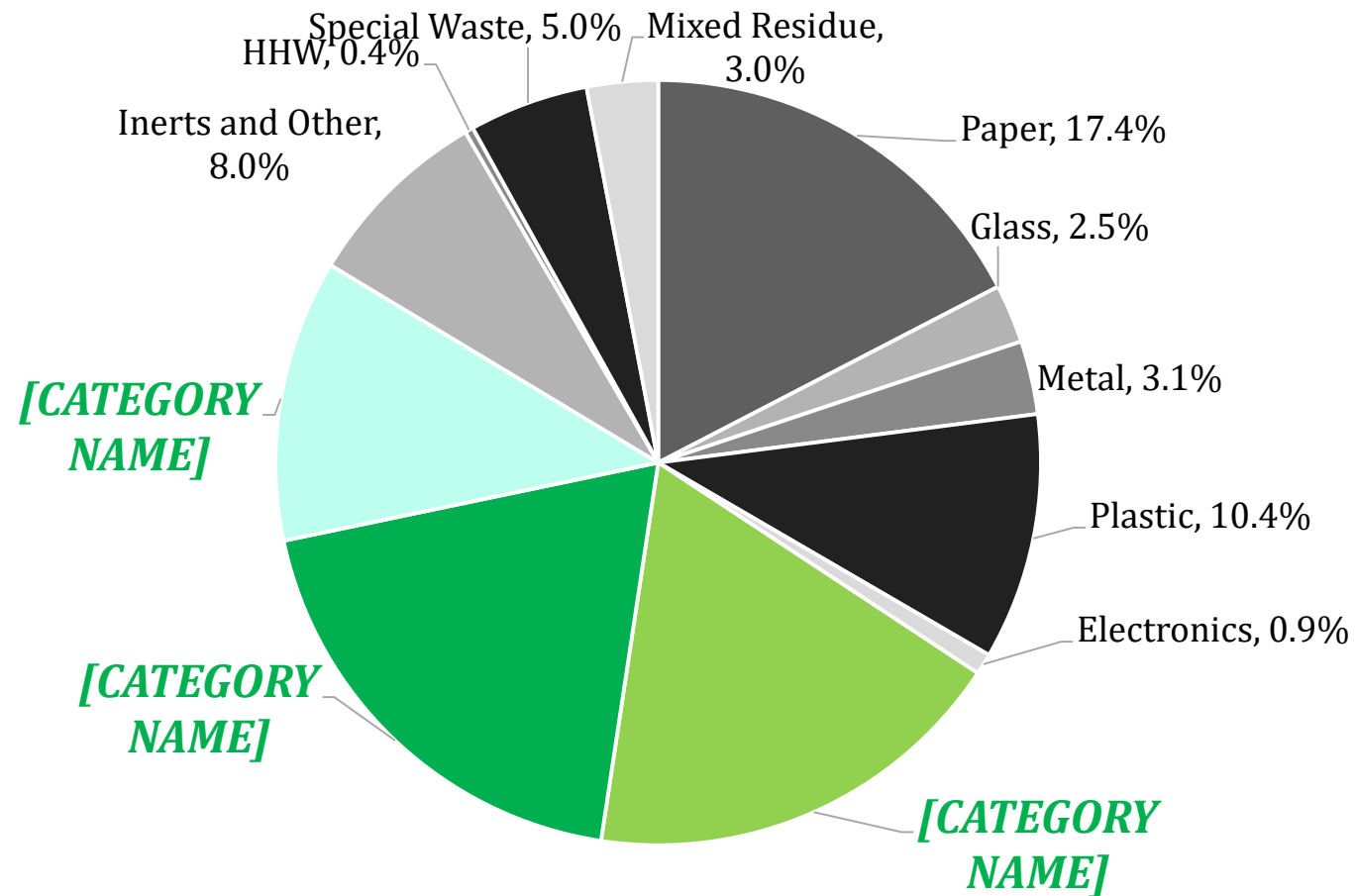
*March 2, 2017*

# California Background



- Population – 39 Million
- Solid Waste – 34 Million Tons/Year
- Organic Waste – 20 Million Tons/Year
- Food Waste – 5-6 Million Tons/Year (18%)
- 50% of nation's fruits/vegetables grown in CA
- 63 Million tons food wasted every year
- 1-8 Californians are food-insecure
- 1-4 children are food-insecure

# Disposal Stream - 2014 (half is organic)



# California Statute (2016)

## Short-Lived Climate Pollutants & Senate Bill 1383

### ➤ **Organics Disposal Goals:**

- ↓ CH<sub>4</sub> emissions 40% by 2030; 50% ↓ in organics disposal by 2020 (from 2014 levels); 75% ↓ by 2025
- ***20% reduction in disposal of edible food waste by 2025***

### ➤ **CalRecycle Requirements**

- Adopt Regulations that may:
  - require jurisdictions to impose requirements on generators; authorize jurisdictions to impose penalties
  - include CalRecycle penalties on jurisdictions for noncompliance
  - Include requirements to meet the goal of 20% recovered edible food

## California Statute (2016)

# Short-Lived Climate Pollutants & Senate Bill 1383 (cont'd)

### ➤ **CalRecycle Requirements (cont'd)**

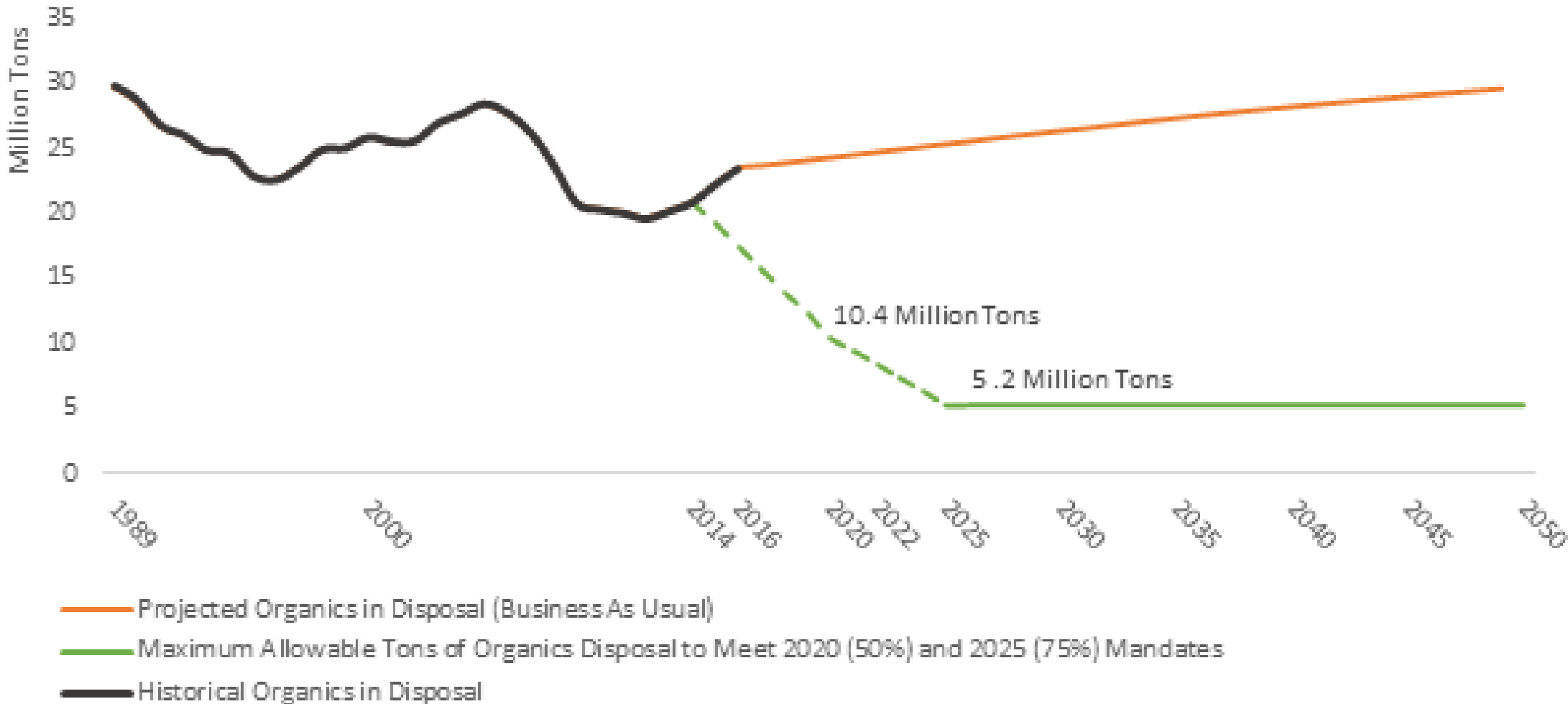
- Informal workshops 2017, formal rulemaking 2018; regulation completed 2019, effective Jan 2022
- Report in consultation with Air Resources Board to analyze progress by July 2020
  - Status of infrastructure, state funding, local rates
  - Progress in achieving goals, addressing regulatory and siting barriers
  - Status of markets

[http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill\\_id=201520160SB1383](http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB1383)

<http://www.calrecycle.ca.gov/Climate/SLCP/>

# 1383 – Reduction of Organics Disposal

## Allowable Disposal of Organics Statewide



# CalRecycle Funding for Organics

## Greenhouse Gas Reduction Fund Grants

Cycle 2 (FY 16/17) - \$40 million mostly for organics

- \$24M for organics processing infrastructure (food waste prevention/rescue partnerships)
  - \$12M Digestion Projects - \$4M max
  - \$12M Composting Projects - \$3M max (\$3M set aside for Rural Projects)
- \$5M for food waste prevention/rescue

## CalRecycle Loans

- GGRF Loans ~\$7M available [Greenhouse Gas Reduction Fund Loan Program](#)
- RMDZ Loans ~\$7M available [Recycling Market Development Zone Loan Program](#)

**CalRecycle webpage on Food Rescue & Food Banks:**

<http://www.calrecycle.ca.gov/Organics/Food/Donation/>

# Additional California Funding Programs

**Food banks and food recovery organizations may be able to utilize:**

- [State Loan Guarantee Program](#) Infrastructure & Economic Development Bank or IBank
  - Small Business Success Story in [IBank's newsletter](#) - Hope of the Valley Rescue Mission funding via State Loan Guarantee Program
- [California Capital Access Program](#) California Pollution Control Financing Authority



# Criteria for Food Waste Prevention & Rescue Projects

- measurably prevents food waste or recovers edible food from becoming waste normally destined for landfill disposal
- results in recovered food being distributed to people
- will result in a reduction of GHG emissions
- food waste *residuals* must be sent to a composting, digestion, or fermentation facility when one is available within the project service area



# Socio-economic Benefits of Food Rescue

## **Disadvantaged Communities: providing direct, meaningful, and assured benefits**

- A. Facility located within & results in direct air or water quality benefits in the community.
- B. Food rescue project located within the community.
- C. Waste processed is diverted from landfills located in that community.
- D. Increases food access to community residents.
- E. At least 25% of project work hours performed by community residents.
- F. At least 10% of project work hours performed by community residents in job training programs which lead to industry recognized credentials or certifications.

- Maps: <http://www.arb.ca.gov/cc/capandtrade/auctionproceeds/535investments.htm>.
- Funding Guidelines: <http://www.arb.ca.gov/cc/capandtrade/auctionproceeds/arb-funding-guidelines-for-climate-investments.pdf>



# GHG Benefits of Food Rescue

**2.08 MTCO<sub>2</sub>e/Ton of Food Rescued**

## **Burdens/Benefits Included in Factor**

- Production & processing emissions
- Packaging emissions
- Distribution/retail emissions
- Avoided landfill methane emissions (0.39 MTCO<sub>2</sub>e/ton food)

## **Weighted Averages**

- 16 food types
- Distribution, Retail, Consumer

- Air Resources Board Quantification Methodology <https://www.arb.ca.gov/cc/capandtrade/auctionproceeds/quantification.htm>
- Waste Diversion Grant and Loan Program [Quantification Methodology for FY 2016-17](#)
- GHG Benefits for Food [Waste Diversion GHG Emission Reduction Calculator for FY 2016-17](#)
- <http://www.cleanmetrics.com/pages/ClimateChangeImpactofUSFoodWaste.pdf>

# Results from Food Rescue Projects

- Fresno Food Ministries (partnered with Colony Anaerobic Digester)
  - \$226,000 for refrigerators, ovens, ranges, truck, website support, education & outreach, organizational networking, & personnel
  - 65 tons food rescued per year
  - 3 full-time jobs
- Waste Not OC/Feeding America-Riverside/OC Food Bank (partnered with CR&R regional Anaerobic Digester)
  - \$20,000 to offset operation costs
- Stater Bros/Community Action Partnership of San Bernardino County/Mojave Desert & Mountain Recycling Authority (partnered with Burrtec Composting Facility)
  - Purchase of food collection bins (20-30 gallons) for 3-4 grocery stores, main distribution center – 4 bins at each location



# 1383 Regulation – Potential Concepts

## Edible Food Definition

**DRAFT! DRAFT! DRAFT!**

- *Food intended for human consumption. In order for this edible food to be recovered, it must meet applicable public health and food safety standards.*

## Tracking and Reporting Edible Food

- Generator reporting on food donations
- Food recovery organization reporting on food donations received



# 1383 Regulation – Potential Concepts

## Generator Access to Food Recovery

- Food Recovery Organization Programs
- Edible food pick-up services for generators
- Edible food recovery services as part of event permits (farmers' markets, festivals)

## Generator Participation in Food Recovery

- Food donation plans for all public facilities
- Food donation plans for edible food generators
- Formal arrangements between edible food generators & food recovery organizations
- Local public education and outreach efforts
- Compliance monitoring by jurisdictions

# Contact Information

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CalRecycle Listserves: <http://www.calrecycle.ca.gov/Listservs/>

(Greenhouse Gas Reduction Programs and Short-Lived Climate Pollutants)