

2017 Mayor's Summit

The State of Solid Waste Management



In the Beginning:

AB 939 – The Integrated Waste Management Act of 1989

- ▶ Integrated Waste Management Board
- ▶ Development of a Source Reduction Recycling Element (*SRRE*)
- ▶ 25% landfill diversion rate by 1995
 - Reduce/Re-Use/Recycle
- ▶ 50% landfill diversion rate by 2000

AB 32 - California Global Warming Solution Act of 2006

Reduction of Green House Gas Emissions:

- ▶ Landfill Methane Control Measures
- ▶ Increasing Landfill Methane Capture
- ▶ High Recycling/Zero Waste
 - **AB 341** - Mandatory Commercial Recycling
 - **AB 1826** - Mandatory Commercial Organics Recycling
 - **AB 1594** - Alternative Daily Cover Eliminated
 - **SB 1383** - Short-Lived Climate Pollutants

Governor's Key Climate Change Strategy

CALIFORNIA CLIMATE STRATEGY

An Integrated Plan for Addressing Climate Change



VISION

Reducing Greenhouse Gas Emissions to 40% Below 1990 Levels by 2030

GOALS

- 50% reduction in petroleum use in vehicles
- 50% renewable electricity
- Double energy efficiency savings at existing buildings
- Carbon sequestration in the land base
- Reduce short-lived climate pollutants
- Safeguard California

75% Recycling is the next evolution in California's permanent campaign of sustainability

- ▶ AB 341 - Mandatory Commercial Recycling (75%)
 - ▶ AB 1826 - Mandatory Organics Recycling (75%)
 - Targets Commercial Sector & Multi-Family
 - ▶ AB 1594 - Alternative Daily Cover Eliminated (100%)
-
- ▶ SB 1383 - Short-Lived Climate Pollutants (*Entire Waste Stream*)
 - 50% Reduction of Organics disposal by 2020
 - 75% Reduction of Organics disposal by 2025

AB 1826 – Implementation Schedule

- ▶ **January 1, 2016** - All jurisdictions shall have an organic waste recycling program in place
- ▶ **April 1, 2016** - 8 cubic yards or more of organic waste per week
- ▶ **January 1, 2017** - 4 cubic yards or more of organics per week
- ▶ **January 1, 2019** - 4 cubic yards or more of solid waste per week
- ▶ **Summer/Fall 2021** – If CalRecycle determines that statewide diversion of 50% by 2020 is not met – Expand to 2 cubic yards

AB 1594 – Green Waste Used as ADC

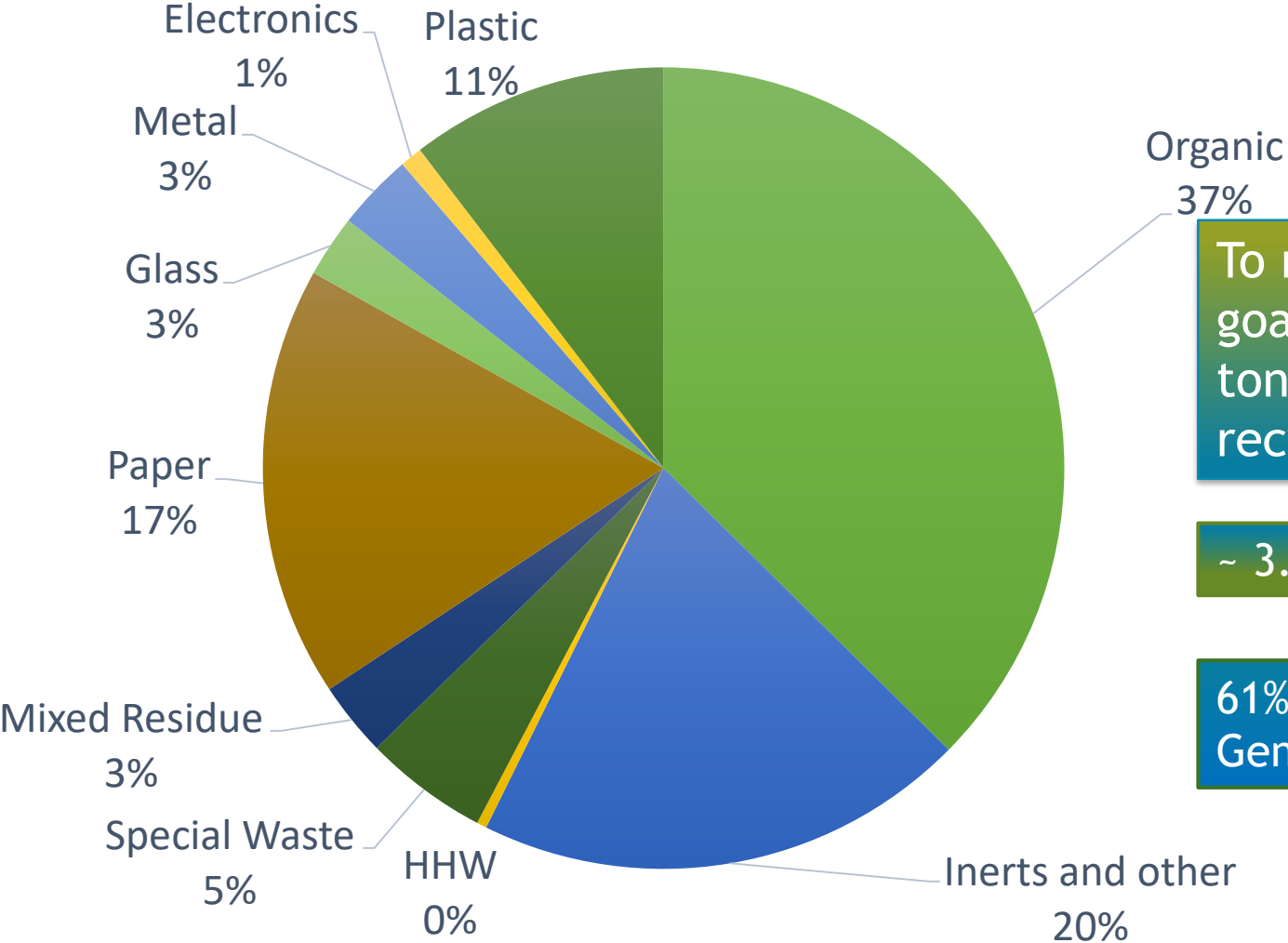
- ▶ **2017** - Jurisdictions will include information of plans to address these new diversion requirements.
- ▶ **2020** - Alternative Daily Cover (ADC) will no longer count as diversion (*2014 ~ 3.4 million tons*)

SB 1383 - Organics Recycling

(Methane emissions resulting from the decomposition of organic waste in landfills)

- ▶ 50% reduction of Organics disposal by 2020 - 2014 Levels
- ▶ 75% reduction of Organics disposal by 2025 - 2014 Levels
 - 2017-2019 Rulemaking
 - January 2022 Compliance with Regulations (Enforceable date)
 - January 2024 – Reg’s may require jurisdictions impose penalties for non-compliance
 - January 2025 – 75% reduction & **20% of currently disposed edible food waste must be recovered for human consumption.** (Food Rescue)

California's Disposed Waste Stream



To reach 75% recycling goal, 23 million more tons will need to be recycled

~ 3.4 million tons of ADC

61% of Disposal is Generated in So. Cal.

Organic Infrastructure Investments

- ▶ CalRecycle estimates costs of mixed (Compost & In-Vessel) infrastructure ~ **\$2-3 billion estimate** does not include:
 - Transfer Rates to facilities
 - Operational Costs
 - Land
- ▶ 100's of new and/or expanded facilities
- ▶ Organic processing rates expected to range from \$75 - \$120 per ton (*LACSD's current program \$85.00*)

Statewide Composting Infrastructure

- ▶ Approximately 160 compost facilities
 - ▶ 5.8 million TPY
- ▶ Approximately 150 “chip and grind” facilities
 - ▶ Green waste and construction demolition debris
- ▶ Not evenly distributed throughout the state
- ▶ Growth has plateaued
- ▶ Some unused capacity

Facility and Capacity Review Focus Areas



Identified Organic Facilities per County

	Facilities per County
Los Angeles	28
Orange	8
Riverside	18
San Bernardino	26
Ventura	9
Santa Barbara	2
Kings	3
Kern	8
Tulare	7
Wastewater Treatments Plants	15
Total	124

Confirmed Available Capacity (Tons/Year)

	Available Capacity (Tons/Year)
Los Angeles	63,055
Orange	Unknown
Riverside	212,280
San Bernardino	126,200
Ventura	17,100
Santa Barbara	547,500
Kings	200,000
Kern	975,000
Tulare	10,400
Wastewater Treatments Plants	182,500
Total	2,334,035

Infrastructure and Capacity Planning

CalRecycle Concepts Identified:

- ▶ Expand AB 876 (McCarty) organics recycling capacity planning requirements: include plans from jurisdictions if they have less than 15 years capacity
- ▶ Planning for edible food recovery capacity and programs
- ▶ Consult with environmental justice community for facility permitting
- ▶ Account for organics disposal reductions in landfill financial assurance planning

MuniEnvironmental Recommendations:

- ▶ Review current hauling agreements and Maintain your flow-control rights
- ▶ Develop short/medium/long-term implementation goals
- ▶ Work with other municipalities/Agencies in developing regional solutions
 - *Identify Potential Host Communities*
 - *Pool resources and expertise, Don't reinvent the wheel*
- ▶ Avoid signing long-term agreements that may only target a portion of the waste stream
- ▶ Make sure the direction of your programs are sustainable and create a pathway for the long-term



Jeff A. Duhamel – CEO/Principal

Email: Jeff@MuniEnvironmental.com

Office: (562) 432-3700

Website: MuniEnvironmental.com