Our Organic Resources

California Bioresources Alliance November 2, 2016

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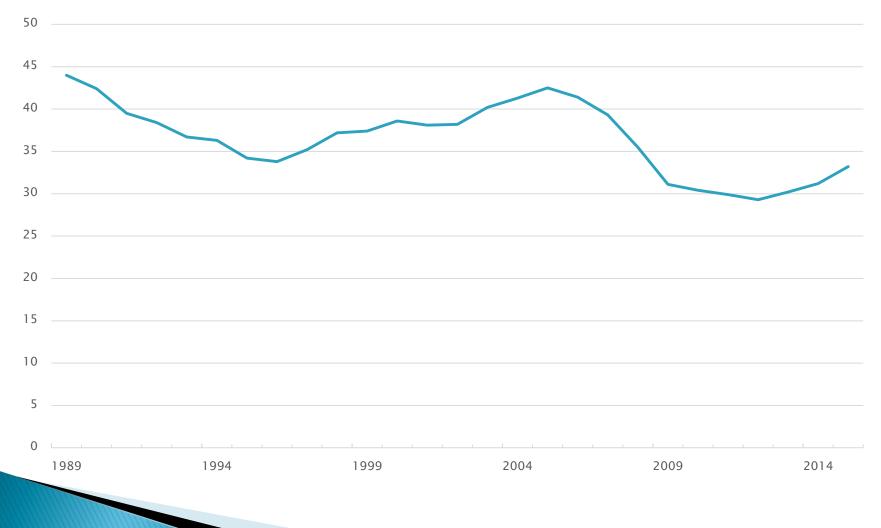
Overview

- California's wasted resources
- Policy drivers
- Focus on organics

and...

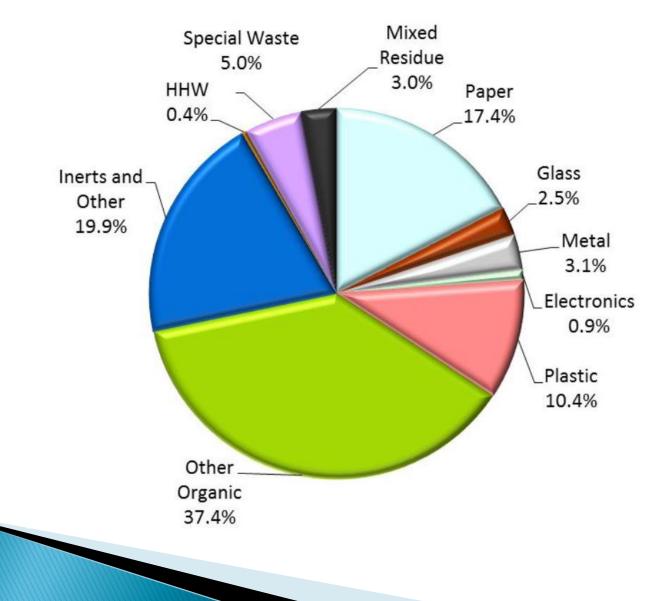
Biomass reporting

Statewide Disposal (millions of tons per year)



3

Disposal Stream - 2014



CalRecycle's Policy Drivers

- 1989 Local diversion mandate-50% AB 939
- 2011 Statewide recycling goal-75% by 2020 AB 341

2016 - Short-lived climate pollutants-75% by 2025 SB 1383

Short-lived climate pollutants SB 1383 (2016)

Requires CalRecycle to develop regulations to achieve:

- 50% reduction in disposal of organic waste from 2014 level by 2020
- 75% reduction in disposal of organic waste from 2014 level by 2025
- Programs to achieve 20% percent recovery of edible food by 2025

Methane as a Short Lived Climate Pollutant

- Organic waste in a landfill creates methane
- Methane is 25x more potent than CO₂ over 100 years, but <u>72x more potent over 20 years</u>
- Fugitive emissions escape landfill gas collection systems

Short-Lived Climate Pollutants

Per statute, CalRecycle to develop regulations in consultation with ARB. these regulations:

- Shall not establish a numeric organic waste disposal limit for individual landfills.
- May require local jurisdictions to impose requirements on generators or other relevant entities within their jurisdiction and may authorize local jurisdictions to impose penalties on generators for noncompliance.
- May include different levels of requirements for local jurisdictions and phased timelines based upon their progress in meeting the organic waste reduction goals for 2020 and 2025
- May include penalties to be imposed by the department for noncompliance
- Shall take effect on or after January 1, 2022

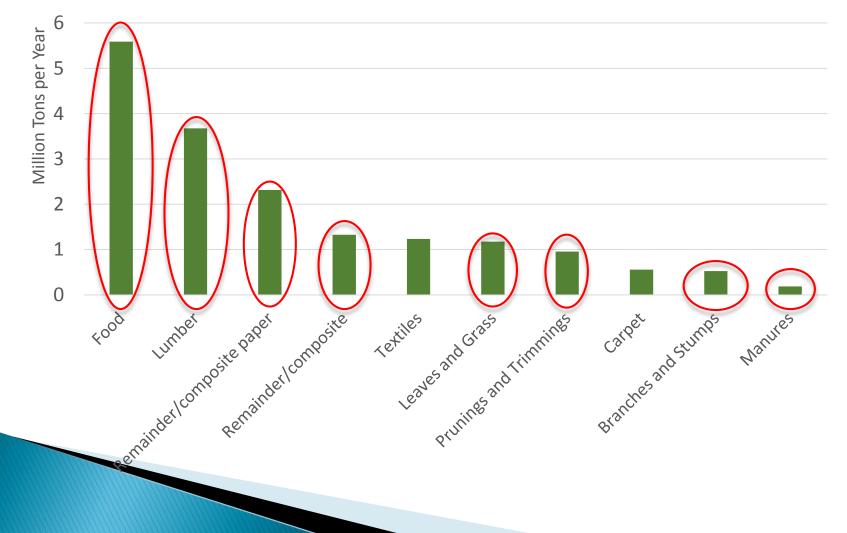
Other Policy Drivers

- Governor's 5 Pillars for Climate Change
- > California Air Resources Board
 - Scoping Plan 2030
 - Short-Lived Climate Pollutant Plan



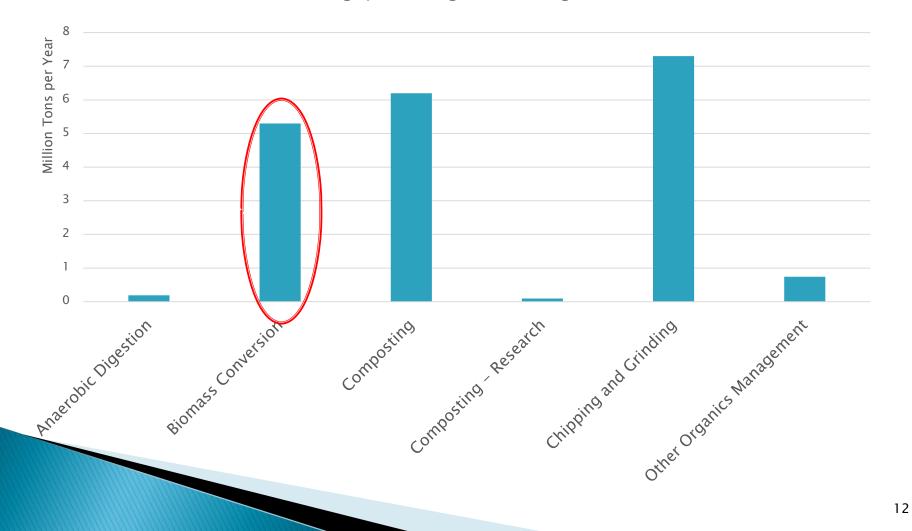
How Much Material?

California Organic Waste (Disposal)



Current Capacity

Estimated Throughput of Organics Management Facilities



Organics Infrastructure: Facility Needs



of facilities to handle additional 10 million tons

- At 300 TPD \rightarrow 100,000 TPY \rightarrow ~ 100 expansions or new
- At 500 TPD \rightarrow 180,000 TPY \rightarrow ~50 expansions or new
- At 1000 TPD → 365,000 TPY → ~ 30 expansions or new
- > 30-100 expansions or new facilities needed

> Or source-reduce!



Adding Capacity

- Siting
- Permitting & environmental regulations
- Cost
- Markets
- > Financing

Inter-Agency Waste Working Group

- ARB convening interagency group including local air districts to look at permitting
- Collaborating towards solutions

Inter-Agency Compost Workgroup

- AB 1045
- CalEPA leading interagency collaboration to "develop and implement policies to aid in diverting organic waste from landfills by promoting the use of agricultural, forestry, and urban organic waste as a feedstock for compost and by promoting the appropriate use of that compost throughout the state"

Funding

Cap-and-trade funding to support organics recycling infrastructure

- > \$25 Million in 2014-15
- > \$40 Million in 2016-17

Need sustained source of funding

Biomass Reporting

Reports:

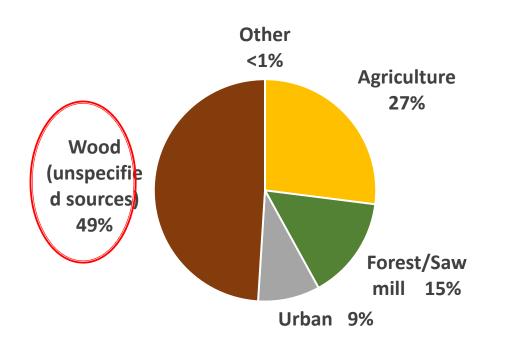
Received information from 29 facilities No report received from 4 inactive facilities

Activity:

5,021,117 tons accepted 396 tons rejected (mostly contamination) 148,358 tons sent to final destinations (5 facilities)

Biomass Reporting

Materials Accepted



Material Type	Tons Accepted
Agriculture	1,377,841
Forest/Sawmill	744,617
Urban	464,256
Wood (unspecified sources)	2,433,338
Other	1,065
Total	5,021,117

Thanks!

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