

Compost in CA, 2016

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Reimagine organic waste as a natural resource

Transitive verb: to imagine again or anew; *especially* : to form a new conception of : **re-create**



Food Waste

Orchard Trimmings



Dairy Manure



Dead Trees





Biosolids and Human Waste

We have too much “waste”

dairy manure	58,000,000.00 MT
potentially compostable waste disposed of in landfill	12,700,000.00 MT
organic waste handled by compost facilities	6,200,000.00 MT
vineyards and wood waste	5,000,000.00 MT
chip and grind	3,650,000.00MT
burned to produce energy	1,325,000.00 MT
classified as “other.”	740,000.00MT
biosolids	720,000.00 MT
anaerobically digested	187,000.00 MT
Total	88,522,000.00

We need less waste and
more compost

What is compost?

Anything that was ever living that has been through biological thermophilic decomposition

And what role can government play in structuring a market to make it?

Policy Goals

- Get ride of “waste”
- Improve water, air and soil quality
- **Develop a robust, formal market for compost**
- Provide education and standards
- Create a regulatory framework that increases quality supply and simultaneously incentivizes market demand

Stakeholders

Communities (producers of organic materials and those impacted by its management)

Urban and rural individuals, business and governments

Agricultural production, processing and other business

Waste management companies

Producers

Cities & counties

Agriculture and industry

Managers of public lands

Individual and small scale urban gardeners

Governing Bodies (who makes the rules over how it is managed)

CalRecycle

Air and Water Boards. Regional and State

California Department of Food and Agriculture

US EPA

Regulatory Framework Policies

AB-1826 Solid Waste

SB 1350 Agricultural Lands: Healthy Soils

AB1045-Organic Waste: Healthy Soils

SB -1383 Short Lived Climate Pollutants

Funding Policy

Compost Application on Grazed Rangelands, NRCS Conservation Practice (demand)

Healthy Soils, Greenhouse Gas Reduction Fund (demand and possibly supply)

Park Bonds AB-2444 (demand and possibly supply)

Short Lived Climate Pollutants SB-1383 (supply)

Challenges & Possible Solutions

Not enough compost :: Manage other organic material streams for composting

Lack of processing capacity :: Further funding for new facilities, encourage agricultural composting, streamline permitting requirements across regulating agencies

No previous formal compost market place:: AB 1045. Industry education and organization

Undo economic burden from State Water Resources Control Board General Order ::
Remove herbivore manure from Tier II

Permitting barriers to ag composting :: Allow woody biomass to be imported in certain ag operations without triggering full commercial composting requirements

Next Steps

- Get new funding on the ground, identify and implement projects
- Identify and promote best practices for onsite agricultural composting
 - New science on emissions creation during the compost process
- Continue work with RCD's, counties and other relevant stakeholders to build out watershed scale agricultural composting facilities
- Continue to work with cities, counties, food policies councils and other stakeholders to support composting of urban organic waste streams and food system health
- Support regional networks of stakeholders devoted to compost creation and carbon farming

Next Steps Continued....

- Secure further funding for new composting facilities
- Continue to support state agency coordination and market frameworks on biomass management and compost
- Work with industry and producers to create new compost products suitable for a variety of agricultural uses
- Research on thermophilic composting effects on biodegradation of hormones, pharmaceuticals and compounds of emerging concern, research regarding compost from alternate waste streams
- Promote full cycle policy for organic materials management around the ecological flows of carbon and other key earth elements including water and nitrogen

Original Marin Carbon Project Field Trial
Nicasio Native Grass Ranch, Nicasio Marin

What the cows know...



Thank you

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