#### Meeting the Challenges of a New Decade-An Update on the CA Composting Industry

#### Matthew Cotton Integrated Waste Management Consulting, LLC

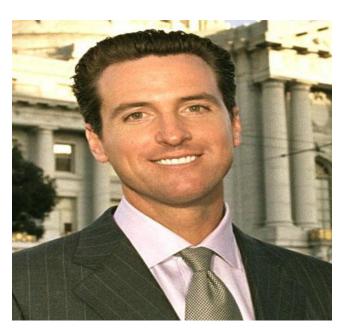
## Summary

- Need to collect more food scraps
- CalRecycle needs to allow food scraps composting at lower tier (Notification)
- CalRecycle/CDFA need to consider regulating direct land application
- Facilities may need to grow in order to handle new constraints
- Regulatory burden (air, water, CDFA, Ag Commission, etc) increasing
- Markets consistent

### A Quick Update:

- New Leadership
- A Really Big Landfill is about to close
- New Rules (CDFA, Air Districts)
- New Restrictions (Air Districts, Imported Pests)
- New Opportunities?









#### **Biggest Issues**

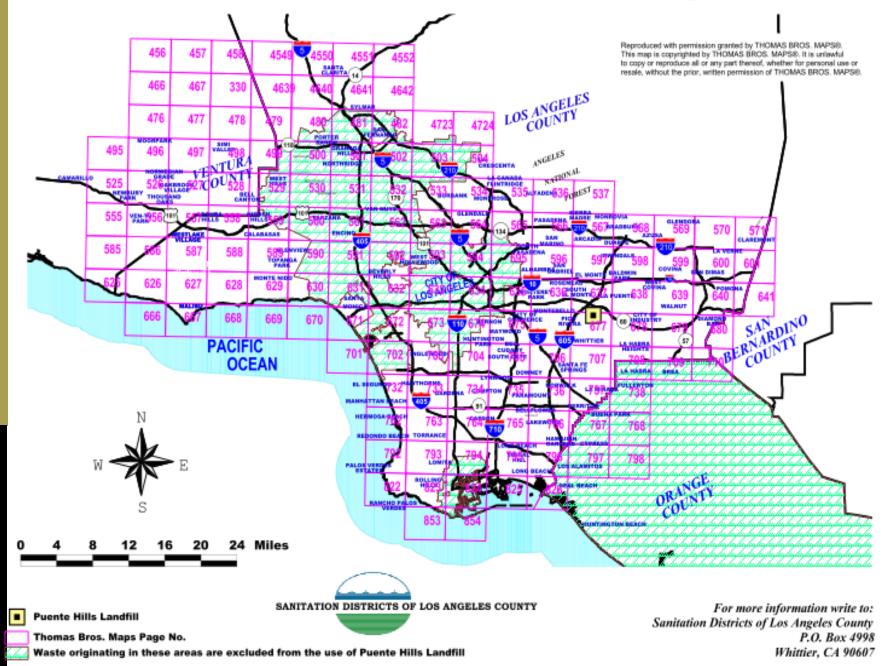
- Puente Hills Closing
- Air Quality Regs.
- Increase in imported pest restrictions
- AB 856 implementation (CDFA)
- Increase in food scraps diversion

# **Matthew Cotton**

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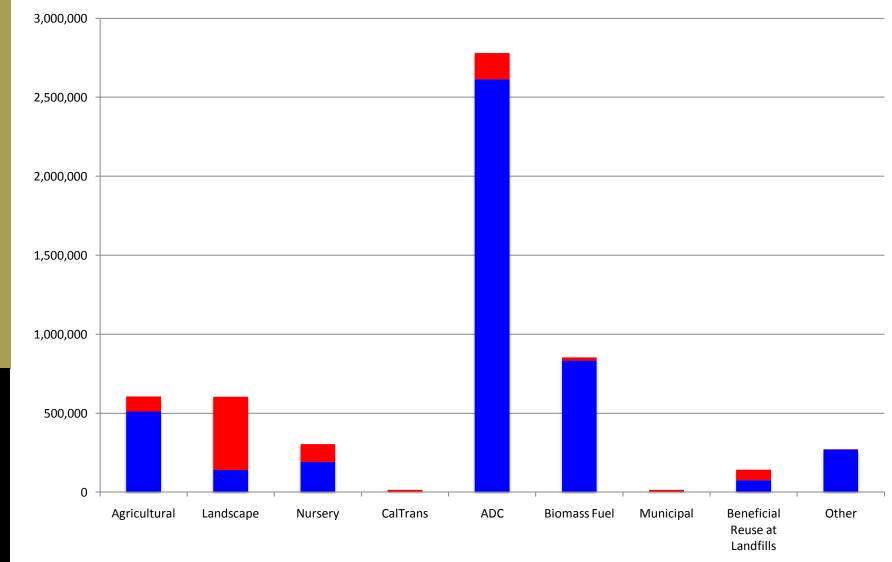
## Puente Hills Landfill

#### **Puente Hills Landfill Wasteshed Map**



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#### End Uses in the Southern Region

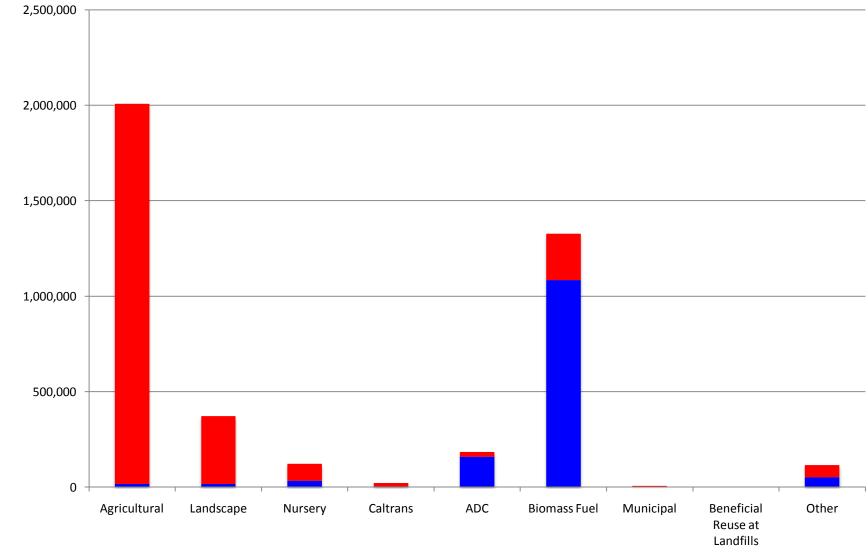


#### Source: CalRecycle 2010

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#### End Uses in the Central Valley



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## **Opportunity or Threat?**

- ADC use in LA Basin has had severe impact on the development of local compost infrastructure.
- Next cheapest alternative is direct land application.
- Regulation of land application is uncertain (Cal Recycle? CDFA?)
- Already driving new composting infrastructure

## Orange County Study\*

- Processed Green Material takes up as much space as garbage in LF (1300#/cy)
- Cost of Potential Refuse Airspace@ 3 landfills @ \$22/ton = \$12 - \$13 million/year
- How much is that airspace worth now?
- Once Puente Hills closes?

\*Processed Green Material Assessment Report, Olinda Alpha Landfill, February 2

## Air Quality Update

- Rule 4566 SJVAPCD
- Rule 1133.3 SCAQMD
- Other Air Districts
  - YSAQMD/SMAQMD "Grandfathering" existing, BACT for new (and modified)
  - BAAQMD, Rule development on hold
- A new era for composting in the Central Valley?





### SJVAPCD Rule 4566

- DRIVER: EXTREME NON-ATTAINMENT
- Rule delayed multiple times.
- District has really tried to work with composters, given the constraints they are under.
- Rule focuses on management practices, not structural controls.
- This is not the problem

#### **Extreme Nonattainment**

- Limited to two districts in CA SJVAPCD & SCAQMD
- Clean Air Act dictates more extreme rules in extreme nonattainment areas
- Annual Threshold of criteria pollutants = 10 tons /year
- Given this limit and recent VOC testing results, all composters, at least in the SJVAPCD are subject to New Source Review

#### What Does this Mean?

- By District's estimate, a 100,000 tpy facility would need to install a high performing ASP system AND purchase roughly \$1.5 million in offsets. Yes. For green material.
- Average cost of VOC offsets = \$18,000/ton
- Huge disincentive for new, yard trimmings only, windrow facilities.
- Larger, guaranteed flow facilities might

#### **Imported Pests**

- Africanized Honeybee
- Asian Citrus Psyllid
- Asian Longhorn Beetle
- Caribbean Fruit Fly
- Diaprepes root weevil
- False Codling Moth
- Guava Fruit Fly
- Gypsy Moth
- Japanese Beetle
- Light Brown Apple Moth

- Mediterranean Fruit Fly
- Melon Fruit Fly
- Mexican Fruit Fly
- Oriental Fruit Fly
- Peach Fruit Fly
- Red Imported Fire Ant
- Striped Fruit Fly
- White Striped Fruit fly

#### **Plant Diseases**

- Huanglongbing (HLB)
- Sudden Oak Death
- Curly Top Virus

#### Imported Pests Which Affect You

#### North

- Sudden Oak Death (SODS)
- Light Brown Apple Moth (LBAM)

#### South

- Red Imported Fire Ant (RIFA)
- Asian Citrus Psyllid (ACP)

• More to come...

#### CDFA – AB 856

- Will fundamentally change how composters sell compost, especially to certified organic growers
- All composters will need to get a license from CDFA
- Need to register a label for compost products
- Will need to guarantee all claims saying your product is suitable for organic production is a "claim"

## The Good News?

- Composters negotiated very reasonable
  "Investigational Allowances"
- Process is fairly computerized license, registration, label review & approval all do-able on-line
- Costs seem reasonable
- May streamline definition of what's "Organic"
- Increases credibility of compost in the marketplace (?)

### Food Scraps Composting

- Still less than 20% of facilities accepting food scraps
- Represents an untapped opportunity
- Biggest barrier is regulatory, not technical
- CalRecycle needs to reexamine allowing food scraps at "Notification Tier" facilities
- If you permit it, they will come
- West Coast leads the US on food scraps diversion

### Trends

- More regulation (less Enforcement?)
- Both cities and large generators clamoring for increased food scraps collection
- Puente Hills closing offers opportunities...but need to regulate direct land ap.
- Feedstock competition likely to increase
- Food scraps? Oh yeah...

## Not grabbing the Headlines?

Carbon Credits ...this may change when CARB adopts CAR protocol for composting/digestion.

Anaerobic Digestion ... We have a long way to go before we have a commercial AD plant in CA handling municipal food scraps.

**Food Safety** ...Food Safety is incredibly important, especially if you are selling to leafy greens...BUT there is no link to compost; and worker health and safety continues to be a real concern.