

Organics Subcommittee Meeting



John Fischer
August 6, 2020

Agenda

- Solid Waste Master Plan Update
- COVID 19 Food Waste Impacts
- Food Waste Program & Data Updates
- Waste Ban Development Schedule
- Draft Organics Action Plan by section

Solid Waste Master Plan

- Reopened Draft 2030 Plan for public comment
- 3 upcoming evening meetings – 8/22, 9/1, 9/10
- Can also submit comments by email or mail
- Specific focus – environmental justice, climate change, impacts of COVID 19
- Comment period ends 9/15/20
- <https://www.mass.gov/service-details/re-opened-public-comment-period-draft-2020-2030-solid-waste-master-plan>

COVID 19 Food Waste Impacts

- Reduced business/institutional activity & generation
- Business closures (temporary or longer term)
- Shifts in distribution
- Shift to increased residential generation
- Volatility and uncertainty in generation patterns

Food Waste Data by Year

Processing Type	2016 Tonnages	2017 Tonnages	2018 Tonnages
Compost	80,000	53,000	44,000
Animal Feed	26,000	27,000	40,000
Anaerobic Digestion	48,000	88,000	160,000
Other	14,000	13,000	8,000
Food Donation	23,000	26,000	26,000
Total	190,000	206,000	278,000

- Does not include via wastewater
- Understates animal feed
- Source reduction
 - 154 businesses
 - 448 tons reduction in 2019

Compliance & Enforcement

- As of fall 2019 - 82 NONs + 8 penalties
 - Almost all since start of 2018
- Stopped inspections in spring due to COVID 19, but renewed in June and ramping back up
- Will continue to send formal information requests to targeted generators

Recycling Works in Massachusetts

- FY20 Food Waste Work
 - TA to 84 businesses for food waste reduction
 - >800 tons food waste diversion
 - 39 tons donation (78,000 lbs.)
 - 170 hotline inquiries
 - Presented at 18 events
 - Posted 20 blog posts
 - Continued to update web pages

Recycling Works in Massachusetts

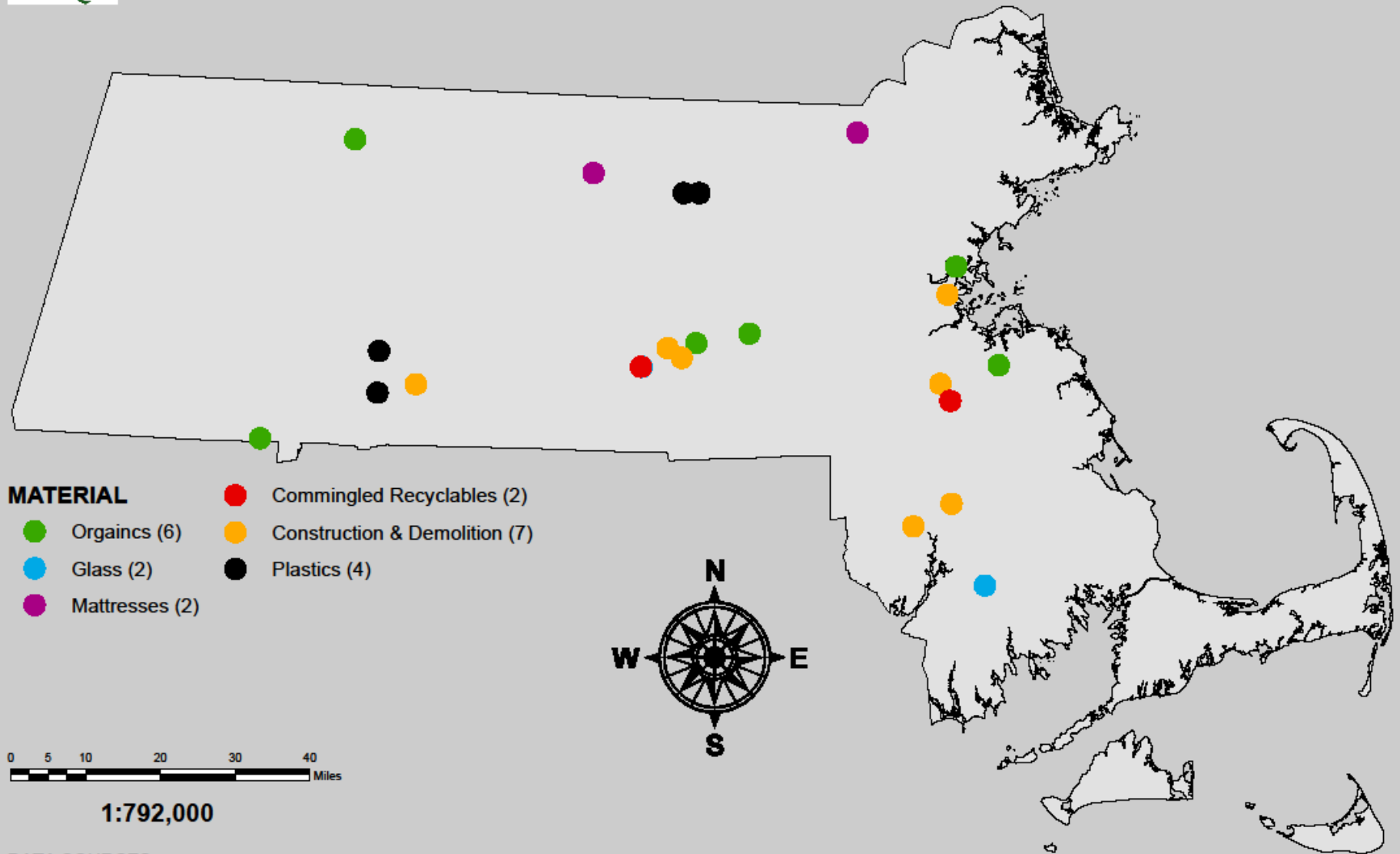
- Developing strategies to improve outreach and engagement with businesses in Environmental Justice Communities
 - household income less than 65% of statewide median;
 - 25% or more of residents are race other than white; or
 - 25% or more of households English Isolation
- Connect/partner with EJ focused organizations
- Focus outreach on EJ communities
- Increased translation services

Recycling Business Development Grants

- 6 grants for \$1 million for food waste
- Next application deadline – November 20, 2020
- Includes food scraps as target material
- Grants from \$50K to \$400K
- Must be for processing, not collection
- Grants fund equipment & capital costs
- <https://www.mass.gov/how-to/apply-for-a-recycling-business-development-grant>



Recycling Business Development Grant Recipients



DATA SOURCES:
- RBDG Grantees: MassDEP BAW, January, 2019

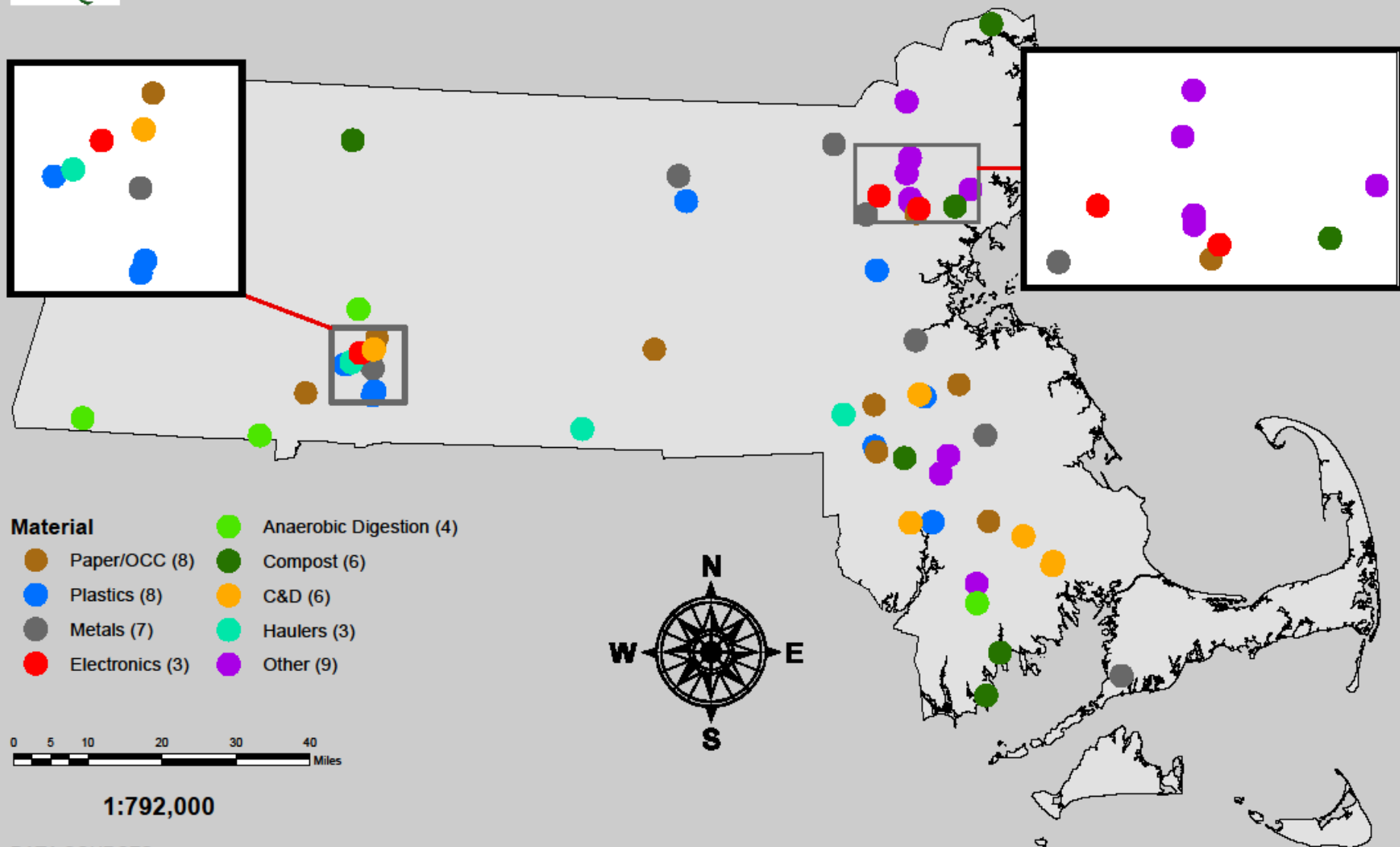
Map Updated January, 2019

Recycling Loan Fund

- Have awarded 20 loans for \$5.28 million for organics projects
- Loans from \$50K up to \$500K
- Broad eligibility for recycling, composting, AD activities, including collection
- <http://www.bdcnewengland.com/programs/massachusetts-recycling-loan-fund/>



Recycling Loan Fund Loan Recipients



DATA SOURCES:
- RBDG Grantees: MassDEP BAW, January, 2019

Map Updated January, 2019

Reduction

- Source Reduction
 - Typical reductions from business tracking = 50%
 - 154 businesses with tracking systems
 - 448 tons reduction in 2019
- Food Donation and Rescue
 - 28,000 tons in 2019
 - 30% overall increase since 2014
 - Greater increase for food rescue

Collection & Processing

- Food Waste Collection
 - increase from 1,350 customers in 2014 to 2,900 in 2019
 - More than doubled
 - Grew 26% in 2019 (from 2,300 to 2,900)
- Compost and AD
 - About 150k TPY potential compost capacity
 - >600,000 TPY AD capacity (operational or under development)
 - 11 de-packaging operations (3 in neighboring states)
 - Growing infrastructure in neighboring states
 - Bans in CT, MA, NJ, NY, RI, VT

Food Waste in Trash

- 2016
 - 26% of trash
 - MSW disposal = 4.6 million tons
 - Food waste in trash = 1.2 million tons
- 2019 21% of trash
 - MSW disposal (2018) = 4.5 million tons
 - Food waste in trash = 950K tons
- Decrease of about 250K tons
- Municipal waste combustor waste characterization data

Food Waste in Trash

- 2019 estimate of 950K tons
- About 55% commercial = 525K tons
- About 45% residential = 425K tons

“Generation” vs. Disposal

- Commercial food waste generation estimates much higher
- About 1.3 million tons vs. 525K tons
 - 280k tons diverted (as of 2018)
 - Additional managed through wastewater, rendering, other byproducts
 - Some uncertainty with generation estimates
 - Esp. for manufacturers/processors

Generation by Size Category

Size Category (tons per week)	Number Generators	% of Generators	Total Est. Generation (tons per year)	% of Total Generation
>2	955	4%	265,657	21%
1-1.99	1,942	8%	734,961	57%
0.5-0.99	1,872	8%	94,547	7%
<0.5	18,204	79%	196,395	15%
Totals	22,973	100%	1,291,561	100%

Sector	Businesses generating over 1 ton of food waste/week	Businesses generating over ½ ton of food waste/week	Percent of business sector subject to proposed waste ban
Hospitals	77	158	60%
Nursing Homes and Residential Facilities	8	39	4%
Full Service Restaurants	850	1,659	17%
Limited Service Restaurants	111	622	33%
Supermarkets	468	583	12%
Warehouse Clubs and Supercenters	31	31	84%
Hotels	137	229	14%
Correctional Facilities	10	13	76%
Schools, Colleges, and Universities	70	79	87%
Manufacturers and Processors	774	897	89%
Distributors and Wholesalers	355	430	85%
Primary and Secondary Schools	0	29	2%
Total	2,891	4,769	

Sector	Annual sector-wide tonnage subject to current ban	Annual sector-wide tonnage subject to proposed ban
Hospitals	20,747	23,528
Nursing Homes and Residential Facilities	985	2,177
Full Service Restaurants	91,158	120,000
Limited Service Restaurants	7,180	25,813
Supermarkets	101,672	105,677
Warehouse Clubs and Supercenters	7,533	7,533
Hotels	17,357	20,507
Correctional Facilities	1,455	1,560
Schools, Colleges, and Universities	28,793	29,116
Manufacturers and Processors	614,848	649,006
Distributors and Wholesalers	66,944	70,663
Primary and Secondary Schools	0	867
Total	958,670	1,056,445

Waste Ban Development Schedule

- October 2020: publish draft regulations and hold public comment & hearings
- Spring 2021: promulgate revised regulations
- Fall 2021: proposed effective date of new regulations
- *Note: also developing comprehensive solid waste regulations revisions that would follow this*



Draft Organics Action Plan by Section

Evaluation & Assessment

- Annual facility reports – AD, compost, animal feed, donation, source reduction
- Waste characterization data – every 3 years
- Hauler customer service counts
- Municipal food waste collection data
- RecyclingWorks in Mass technical assistance
- MassDEP waste ban inspection & enforcement data

Reducing Wasted Food at the Source

- School food waste reduction – promote through Green Team
- RecyclingWorks BMPs – develop by generator size category – promote through business associations
- RecyclingWorks technical assistance
- Support increased use of food waste tracking systems
- Leverage tools for consumer focused food waste reduction campaign
- *Support standardized food date labeling practices (Mass Food Systems Collaborative)*

Food Donation & Rescue

- RecyclingWorks BMPs – promote through business associations & coordinate w/local public health officials
- RecyclingWorks technical assistance
- Targeted grants to support food donation infrastructure
- *Propose state tax credit for farmers and others who donate food (Mass Food Systems Collaborative)*
- *Explore funding models to make food donation and rescue more sustainable (Mass Food Systems Collaborative)*

Large Generators (> 1 ton/week)

- Continue current approach
- RecyclingWorks in MA assistance and guidance
- Waste ban inspections & enforcement
 - New emphasis will be on 1-2 ton per week generators
- Requests for information to businesses
- Supporting infrastructure development
 - Recycling Loan Fund and Recycling Business Development Grants

Medium Generators (1/2 – 1 ton/week)

- Conduct extensive outreach to affected businesses
- Prioritize RecyclingWorks in MA assistance and guidance
 - Target assistance to priority sectors – esp. restaurants
 - Emphasize source reduction of food waste and donation
 - Guidance for smaller scale collection programs
- Work with Leading by Example program to support compliance by state facilities
- Provide grants to public schools to comply
 - Equipment and technical assistance

Medium Generators (continued)

- Proposed regulations to reduce waste ban threshold from 1 ton to $\frac{1}{2}$ ton per week
 - Solid waste facility revised waste ban plans
- Waste ban inspections & enforcement
 - Lead with outreach and compliance assistance
- Support targeted investments in capacity
 - Intermediate processing facilities/de-packaging facilities
 - Expanded local and regional composting capacity

Small Generators ($< \frac{1}{2}$ ton/week)

- Municipal grants to support diverse approaches
 - Home composting bin distribution
 - Drop-off collection programs
 - Curbside collection
 - Municipal compost sites accepting food materials
- Recycling Dividends Program credits
- Partner with interested local business associations to develop local routes

Market Development

- Work with OSD/MassDOT to increase use of compost products by state agencies
- Work with agricultural and landscaping sectors to identify additional market outlets for compost
- RecyclingWorks compost site technical assistance and workshops
 - Consider workshop focused on compost marketing
- MassDAR compost training workshops
- Assess market outlets for materials generated by AD facilities

Next Steps

- <https://www.mass.gov/guides/commercial-food-material-disposal-ban>
- [Mass Food Systems Collaborative Local Food Action Plan](#)
- Send additional comments & suggestions to
 - John Fischer, MassDEP
 - John.fischer@mass.gov
- Draft regulations Fall 2020