



RecyclingWorks in Massachusetts
Year End Report: Fiscal Year 2015 (July 2014 – June 2015)
The Center for EcoTechnology
September, 2015

The Center for EcoTechnology (CET) is proud to submit the FY15 year-end report for RecyclingWorks in Massachusetts to the Massachusetts Department of Environmental Protection (MassDEP). CET and MassDEP continued waste diversion assistance to the commercial and institutional sector with a focus on supporting and promoting the effective date of the Commercial Organics Waste Ban through outreach, education, technical assistance. The following represents approximated measureable impacts within the fiscal year:

- Over 7,430 tons of material diverted from disposal (expected to continue on an annual basis)
- Direct assistance to over 1,000 businesses
- Approximately 65,000 visits to www.recyclingworksma.com

Email / Phone Hotline

A CET staff member in the Northampton office operates the RecyclingWorks phone hotline and email service. Inquiries are directed to RecyclingWorks resources on www.recyclingworksma.com, referred to CET field staff for follow up, or processed for continued levels of assistance.

The goal in the work plan for this year was to serve 650 businesses through the RecyclingWorks hotline and email. We served 842 businesses which exceeded the goal by almost 30%. The hotline volume almost doubled between FY14 and FY15.

Summary Statistics July 2014 – June 2015 Data:

	<u>FY13</u> <u>Totals</u>	<u>FY14</u> <u>Totals</u>	<u>FY15</u> <u>Totals</u>
Requests from Businesses & Institutions:	213	418	735
Requests from Processors & Haulers	88	50	92
Total Number of Requests:	301	468	827
Total Number of Requests Completed:	278	422	842

Businesses continue to express great appreciation for this free service. As in past years, the hotline service has fielded a broad array of call/email topics including:

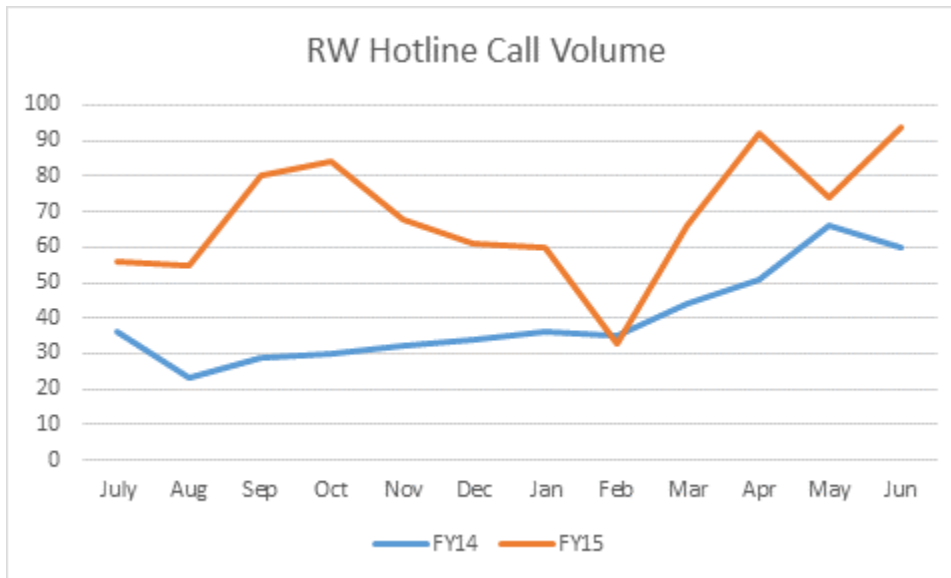
- Food related questions including: the ban, starting a diversion program, estimating generation quantities and food donation.
- General questions regarding the Best Management Practices Food Donation Stakeholder Meetings
- How to recycle uncommon materials
- Businesses concerned about receiving, or having received, a failed load letter or enforcement from MassDEP
- Employees wishing to start recycling programs at businesses that don't currently recycle
- Haulers and processors requesting/correcting listing in the service directory
- Surplus materials reuse



- Consultants seeking assistance
- General recycling questions
- Compost Site Technical Assistance requests

By weight, 61% of the waste diversion initiated from hotline calls in FY15 was composted, 37% was recycled and 2% was reused.

The call volume fluctuated throughout the year. There was an elevated volume of calls in the months leading up to the beginning of the organic waste ban. There was also an increase in call volume in the spring. The increased volume of calls overall has required significant focus to provide quality customer service and technical advice to MA businesses.



Lessons learned:

- Businesses are cautious of possible regulatory enforcement or reporting responsibilities CET may have with MassDEP and some wish to remain anonymous throughout the duration of the call. CET does **not** forward hotline calls to MassDEP for waste ban non-compliance, so companies do not need to worry about this.
- More consultants and haulers have utilized RecyclingWorks resources in working with their clients. A majority of this assistance is directly related to the commercial food waste ban.
- MA policies and the RecyclingWorks program is gaining national attention and the hotline gets a small but noticeable number of calls from around the country.
- With the implementation of the Commercial Organics Waste Ban there has been a significant increase in the number of requests for interviews from students and journalists.

RecyclingWorks Website:

CET staff has worked to maintain and significantly expand the website and database in this past fiscal year. In FY15, 26 haulers and processors have been added or updated to the database for a total of 306. Examples of other updates made in FY15 include:



- On-site Systems for Managing Food Waste was added in November 2014.
- Special Events Composting/Recycling Toolkit added in April 2015.
- The construction materials webpage was updated to include content on ceiling tile recycling in April 2015.
- Hospitals webpage updated to include content on recycling x-ray film in April 2015.
- A printable Commercial Organics Waste Ban Threshold Estimation Guide was added in May 2015.
- The food waste webpage was updated to include content on gleaning in May 2015.
- List of Organizations in Massachusetts Interested in Accepting Packaged Food Material for Depackaging added in June 2015.

Case Studies:

CET created written and video case studies for America's Food Basket:

- [America's Food Basket video case study](#)
- [America's Food Basket written case study](#)

CET also created video case studies for Deerfield Academy and Kowloon Restaurant.

- [Deerfield Academy](#)
- [Kowloon Restaurant](#)

RecyclingWorks Newsletters:

CET creates and sends a monthly RecyclingWorks newsletter reaching more than 1,900 people. Topics include resources for complying with the organic waste ban, waste diversion highlights, new information added to the RecyclingWorks website, newly publicized recycling or waste information, and upcoming recycling and waste diversion events. In FY15, CET produced many newsletters and e-blasts to RecyclingWorks contacts to promote and attract attendees for WasteWise and food donation stakeholder meetings.

Website Statistics:

Comparing FY15 to FY14, overall activity on the RecyclingWorksMA.com website increased significantly. We estimate that there were 65,000 sessions in FY15 which is nearly a 50% increase over FY14. Approximately 80% of sessions in FY15 were new visitors while 20% were returning to the site.

After a Boston.com article on October 21st about [plastic cups at Dunkin' Donuts](#) linked to the [recycling plastics](#) page on RecyclingWorks, almost 2,900 visitors linked to this page over the course of a few days. However, less than 2% of those visitors continued onto other links on the site and there was not a noticeable increase in hotline traffic.

Google Analytics failed to record most traffic on the RecyclingWorks website during the fourth quarter of the fiscal year due to an adjustment to Google's algorithms that temporarily interrupted the RecyclingWorks analytics. Hence our statistics for the full year are estimated based on the trend in the first three quarters.



06/01/2014 – 06/30/2015

	Visitors	Sessions	Page Views
FY2013	12,127	16,566	46,621
FY2014	33,068	43,807	108,203
FY2015* (recorded)	42,917	51,946	112,818
FY2015 (estimate)	54,000	65,000	143,000
Percent Change	163%	148%	132%

* did not capture final quarter of fiscal year

06/01/2014 – 03/31/2015

	Visitors	Sessions	Page Views
FY2014	21,129	27,821	68,839
FY2015	40,722	49,363	107,743

RecyclingWorks website traffic for full fiscal year.

Note that for the last quarter of the fiscal year (April 1 – June 30, 2015), Google Analytics failed to capture our traffic.

Marketing:

Promotional activities have included newsletters, press releases, conference tabling, speaking engagements/presentations, interviews and virtual platforms such as email, webinars and social media such as Twitter and Facebook.

CET had eleven interviews with various news outlets regarding RecyclingWorks, the Commercial Organics Waste Ban, and the WasteWise Food Donation Forum.

ecoRI article	Aug-14
980 WCAP-Lowell radio interview	Sep-14
Press Release	Sep-14
Cape Cod Times article	Oct-14
Springfield Republican article	Mar-15
Professional Retail Store Maintenance Organization (PRSM) Magazine article	Mar-15
Daily Hampshire Gazette Recycle, Reduce, Reuse insert	Apr-15
Greenfield Recorder Recycle, Reduce, Reuse insert	Apr-15
Amherst Bulletin Recycle, Reduce, Reuse insert	Apr-15
Boston Globe article	Jun-15
Falmouth Enterprise	Jun-15



CET attended and/or presented at the following 23 events to present and promote RecyclingWorks, the organics waste ban, and food donation Guidelines.

Massachusetts Food Association (MFA) & US EPA Supermarket Sustainability Meeting	7/9/14
Stericycle Event	8/14/14
Merrimack Valley Chamber Meeting	8/28/14
MassDEP Solid Waste Advisory Committee (SWAC) Meeting	9/16/14
Full Harvest Tour at Barstow Farm	10/3/14
Full Harvest Tour at UMASS-Lowell	10/3/14
Full Harvest Tour at Gardner Ale House	10/7/14
Solid Waste Association of North America (SWANA) Southern New England Chapter Conference	10/7/14
Western Mass Municipal Recycling Council (MRC) Meeting	10/23/14
SWAC Meeting	10/23/14
Mass Agriculture Fairs Association Conference	11/8/14
Red Lion Press Event	11/14/14
Massachusetts Environmental Health Association (MEHA)-Marlboro Presentation	12/3/2014
SWAC Meeting	12/11/14
Organics Subcommittee Presentation	12/11/14
Central MA MRC Presentation	12/17/14
Concord Board of Health	2/15
MassRecycle R3 Conference	3/30/15
UMass Farm to Institution Summit	4/7 and 4/8/15
Springfield Chamber of Commerce Business Roundtable	4/8/15
Organics Waste Diversion Workshop	5/27/15
Northeast Sustainable Energy Association (NESEA) ProTour event at Berkshire County Jail	6/5/15
Zero Waste and Recycling Webinar	6/16/15

CET conducted outreach to many municipalities, chambers, and appropriate organizations regarding RecyclingWorks, the organics waste ban, the Commercial Food Waste Vendor Fair, and the best management practices for food donation.

Notice of Non Compliance (NON) Outreach:

RecyclingWorks representatives conduct outreach to waste generators who have received NONs from MassDEP for waste ban non-compliance and haven't returned to compliance. In addition, businesses which have been issued warning letters by MassDEP for waste ban material violations have been contacted and encouraged to assess current recycling systems. In all cases, RecyclingWorks assists these businesses in responding to Waste Ban Inspectors and encourages technical assistance. In FY15,



RecyclingWorks staff worked with 37 generators through NON outreach. Fifteen of these generators have been returned to compliance, twenty-one are still in process, and one was not implemented.

Generators Subject to the Ban:

CET conducted several types of outreach to generators likely to be subject to the ban. We connected with association groups like Green Restaurant Association, Mass Restaurant Association, Mass Food Association, A Better City (ABC), and others and offered information, case studies or other appropriate tailored information. We also did targeted calls and visits to some larger generators that came to our attention. Through other work, energy efficiency to businesses throughout the state as an example, we identified any large food generators for specific ban compliance assistance as appropriate.

Brewery Outreach:

CET conducted outreach to breweries in Massachusetts. A list of breweries in the state was compiled and direct outreach was conducted to identify brewpubs. Brewpubs were targeted due to the byproducts of the brewing process, they also have associated restaurants and we demonstrated a great success with the Gardner Ale House. Of 15 identified brewpubs in the state, 12 had an arrangement with a local farmer to dispose of the spent grain from the brewing process. Local breweries seem to be well positioned with existing organics management plans in place and TA potential is limited.

Healthcare Outreach:

CET has been conducting outreach to the healthcare sector to provide technical assistance for setting up organic material diversion programs at hospitals. The 20 healthcare facilities with the highest estimated organic material generation in the state have been contacted about their organic material management programs. Southcoast Health, a chain of three hospitals, is interested in receiving assistance in setting up a diversion program at their Saint Luke's Hospital location in New Bedford, MA.

WasteWise:

CET conducted outreach to promote and facilitate the WasteWise Fall and Spring Forums. CET continued to promote the Massachusetts chapter of WasteWise as well as the EPA WasteWise program.

The WasteWise 2014 Fall Forum was held at EcoBuilding Bargains in Springfield in December, 2014. The topic of the forum was "Diversion and Reduction through Reuse". There were around 50 attendees at the event and multiple presentations on reusing furniture, mattresses and building materials.

CET posted a survey that received 47 responses. More than 50% of survey respondents reported that the fall forum was their first WasteWise Event. The top three industries represented were Municipal/State/Federal Agencies, Colleges/Universities, and Waste Reduction Organizations.

The WasteWise Forum for Food Donation was held at the Whole Foods Market Regional Offices in Cambridge in June 2015. There were over 50 attendees. All 10 respondents to the CET posted survey about the forum rated the Forum as "very informative." Attendees commented on particularly enjoying learning about new regulations, food donation, and the processes used by other businesses.

Technical Assistance

Broadly, technical assistance is focused on helping implement a recycling or composting program at facilities. The details of the kind of help needed by each individual facility that is helped varies greatly. There is significant customization for each facility to provide a valued and effective service.



The following summary charts demonstrate the number of facilities receiving various forms of Technical Assistance in FY15, broken down by associated section of the work plans. Technical Assistance in FY14 laid the groundwork for many diversion programs that started in the fall of this fiscal year because many generators waited until the ban took effect in October to start programs they had planned in FY14. Looking forward, we anticipate continuing to receive calls from entities that need assistance complying with the waste bans. The attached tracking sheet provides detailed information on a facility-by-facility basis.

CET had a goal of providing technical assistance to 137 generators in FY15 (50 through mini TA's and 87 through on-site TA's.) CET assisted 167 generators which surpassed this goal by over 20%. The number of on-site TA's was similar to the goal (85 TA's) while the number of mini TA's was significantly large than the goal (82 mini TA's).

Type	# In Progress	# Completed	Total Assisted	FY15 Assistance Goal
Hospitality	3	13	16	20
Generators Subject to Ban	12	19	31	25
State Facilities	4	9	13	12
Other On-Site TA's	14	11	25	30
Mini-TA	36	46	82	50
Totals	69	98	167	137

Lessons learned:

- The Town of Lenox served as a pilot for a collaborative restaurant composting initiative. It included businesses that did not have to comply with the Waste Ban but decided to do so as a result of the Environmental Committee initiative. This model could be replicated elsewhere.
- MassDEP Sustainable Material Recovery Program (SMRP) municipal grant recipients that have a business/institutional focus benefit greatly from RecyclingWorks TA. This is a pairing that makes very effective use of MassDEP investments.
- There is potential to assist organizations to divert more food and container waste at Festivals similar to MassMoca Solid Sound Festival. Also, many towns have Business Chamber events over the course of several days that produce several tons of waste and these are a potential TA.
- There continues to be opportunities for generators to work with haulers to make composting and recycling systems more cost effective.
- De-packaging and de-contamination services will help increase diversion and this material is a common source of requests and inquiries.
- The emerging prevalence of on-site technologies such as those listed in the RecyclingWorks web resource: [On Site Systems for Managing Food Waste](#) often come up in the course of delivering TA for food waste diversion services. While these systems show potential in many important applications, in some cases there is a lack of market-tested examples for generators to reference. RecyclingWorks continues to advise generators to ask for references and in cases where these systems have any discharge to the waste water treatment system, these generators are advised to check with the local waste water agency to confirm the acceptability of the technology for their system.

- The hospitality sector continues to have significant potential for assistance, but proves challenging to engage through the broad association and chamber type means of outreach. More direct and focused engagement of this sector is likely needed to be more effective at reaching and moving this sector. The town of Lenox is an example of successful engagement.
- State Facility programs have met the following challenges this year:
 - updates in hauler contracts which have resulted in vendor changes
 - equipment malfunctions
 - budget constraints
- Diversion program communication and oversight remains a challenge especially in facilities with sub-contractors or tenants.
- Larger organizations, such as hospitals, can be difficult to engage even after targeted outreach. It can be hard to identify the best contact person in each facility as they may be housed in a variety of departments. In addition, changes in staffing or management plans during the course of the TA can disrupt implementation.

Compost Site Technical Assistance

RecyclingWorks began offering a new form of Technical Assistance in FY15, to help compost site operators with sound composting practices. This mid-year addition to the work plan required creating an updated operational checklist that was a compilation of previously existing similar documents, which serves as the baseline for the TA. The checklist and basic scope of work for the TA was created in close partnership between CET and MassDEP and vetted by the Massachusetts Department of Agricultural Resources (MDAR). CET secured three composting industry experts to serve as consultants to the program and conducted outreach through the organics subcommittee and the list of registered compost sites in MA. By the end of FY15, 7 sites were in various stages of receiving assistance through RecyclingWorks. No TA's were completed by the close of the fiscal year, which accounts for nearly all the unspent portion of the overall allocated RecyclingWorks budget. Consulting costs for these sites and anticipated additional sites are included in the FY16 work plans and budgets.

Food Donation Best Management Practices

Since the Commercial Organics Waste Ban went into effect in October of 2014 there has been increased interest in food donation programs as a strategy to comply with the waste ban. The RecyclingWorks hotline has seen an increase in inquiries about food donation programs, and in January of 2015 RecyclingWorks, MassDEP, EPA Region 1, and the Harvard Food Law and Policy Clinic started a stakeholder engagement process to develop a set of guidance documents around food donation. In parallel with the stakeholder process CET and MassDEP have been working with Harvard to develop legal fact sheets around date labeling, liability and tax implications. The project has been ongoing since January through the end of FY15, and the work continued into FY16. As part of the process RecyclingWorks has held three stakeholder meetings, engaging key stakeholder groups of food donation organizations, local and state health agents, and businesses that donate food. The meetings were held on March 25 in Springfield, April 9 in Worcester, and April 29 in Boston. Total attendance for all three meetings was around 70 stakeholders.

Based upon the stakeholder input, a guidance document is under development that will provide a broad overview of how to set up and manage a successful food donation program. Additional input was gathered from a meeting with the Harvard Food Law and Policy Clinic, EPA Region 1, the State Department of Public Health, and the Boston Public Health Commission on June 17. The guidance document is currently under revision and will be completed in FY16.



MassDEP Green Business Specialist

The Green Business Specialist (GBS) working out of MassDEP's Boston Office has assisted with conducting RecyclingWorks outreach and recruiting businesses for technical assistance. The GBS has worked on targeted outreach to health care facilities and breweries and compiled reports on technologies to manage on-site organic waste and technologies used for depackaging food material. The GBS has been assisting with the development of a food donation guidance document that has involved multiple stakeholder groups. The GBS has developed fact sheets around building material re-use and developed a list of organizations that are interested in taking packaged food material. The GBS has supported the overall Organics Action Plan through various tasks assigned and managed directly by MassDEP.