

Onondaga County Resource Recovery Agency

2010 ANNUAL REPORT ON RECYCLABLES RECOVERED

This report is submitted pursuant to:

NYSDEC Permit Number 7-3142-00028/00002-0 Certificate to Operate Onondaga County Resource Recovery Facility;

NYSDEC Permit Number 7-3156-00047/00001-0 Permit to Construct and Operate the OCRRA Landfill;

NYSDEC Permit Number 7-3148-00048/00001-0 Solid Waste Transfer Station-Ley Creek; and

NYSDEC Permit Number 7-3142-00036/00001-0 Solid Waste Transfer Station-Rock Cut Road.

Period reported: January 1, 2010 through December 31, 2010

Date: March 1, 2011

Planning Unit: **County of Onondaga** including the City of Syracuse, excluding the Town and Village of Skaneateles

Contact Person: A.T. Rhoads, Executive Director, OCRRA
100 Elwood Davis Road North Syracuse, NY 13212-4312

1. 2010 Recycling Data

OCRRA (Onondaga County Resource Recovery Agency) is a non-profit public benefit corporation charged with managing solid waste in Onondaga County (with the exception of the Town and Village of Skaneateles). This includes proper disposal of Municipal Solid Waste (MSW) and recycling. Established in 1989, OCRRA has overseen recycling of over 12 million tons of material.

Each year, the approximately 450,000 Onondaga County residents exceed expectations and maintain a fantastic recycling rate. In 2010, an impressive **38,900 tons** of material was collected from households through the blue bin curbside recycling program.

In 2010, over **536,800 tons were recycled** through mandatory and voluntary recycling (both residential and commercial) in the community, **for a total recycling rate of 60%** (see Table 1). OCRRA also met permitting requirements set forth by the NYSDEC to maintain a 40% processible recycling rate¹, by reaching 47%, or 234,500 tons (see Table 2).



Above: OCRRA volunteers Arlene Osborne and Delores Diello give Onondaga County residents Jim and Nancy Parry blue bins at an OCRRA outreach event at a local grocery store in 2010.

¹ The processible recycling rate, as defined by NYSDEC, considers only those materials recycled that could have otherwise been disposed of at the waste-to-energy facility. For example, it does not include yard waste, which is an unacceptable waste at the waste-to-energy facility.

OCRRA inventories and records recycling tonnages of all material, mandated and non-mandated, which is diverted for recycling through the efforts of the curbside program, private commercial and industrial entities, and public and private institutions. Material items include, but are not limited to: bulky metals (scrap autos are not counted), food waste, textiles, unique plastics, sludge, oils, and wood. Deposit beverage containers are also reported in the recycling tonnages.

Table 1 - 2010 Recycling and Solid Waste		
Recycling	Tons	Percent of Total Waste
Curbside Recycling (Primarily Residential)	38,900	
Commercial Recycling (Primarily Business)	497,976	
Total Recycling	536,876	60%
Solid Waste		
Incoming Municipal Solid Waste (MSW)	279,647	
Less MSW Ferrous & Nonferrous Recycling ¹	(10,002)	
Incoming Construction & Debris (C&D)	50,455	
Incoming Other Waste ²	37,675	
Total Solid Waste	357,775	40%
Total Recycling and Solid Waste	894,651	

¹Ferrous and nonferrous metals that are recovered from MSW at the Waste-to-Energy Facility and recycled are subtracted to avoid double counting.

²Includes biosolids currently being sent to a landfill.

Table 2 - 2010 Processible Recycling and Municipal Solid Waste¹		
Processible² Recycling	Tons	Percent
Curbside Recycling (Primarily Residential)	38,900	
Processible Commercial (Primarily Business)	195,635	
Total Processible Recycling	234,535	47%
Municipal Solid Waste (MSW)		
Incoming Municipal Solid Waste	279,647	
Less MSW Ferrous & Nonferrous Recycling ³	(10,002)	
Total MSW	269,645	53%
Total Processible Recycling and Solid Waste	504,180	

¹Sources for these data include: recycling companies, retail and commercial firms, and governmental organizations which voluntarily report to OCRRA. Reported data have been adjusted to eliminate known double-counting. For example: If Generator A ships 500 tons of scrap metal to Recycler B and both organizations report 500 tons to OCRRA; OCRRA credits the system-wide total with 500, not 1,000, tons.

²Processible materials are those which could have been disposed of at the Waste-to-Energy Facility.

³When calculating recycling rates, ferrous and nonferrous metals recovered from MSW at the Waste-to-Energy Facility are subtracted to avoid double counting.

Table 3 – OCRRA Mandated Recyclables

Residential

- Office Paper and Discarded Mail
- Newspapers and Magazines
- Corrugated Cardboard, Brown Paper Bags, Paperboard, Pizza Boxes
- Milk and Juice Cartons, Gable-Top Cartons, Aseptic Cartons
- Glass Food and Beverage Containers
- Metal Food and Beverage Containers
- Aluminum Foil
- #1 and #2 Plastic Bottles
- **NEW in 2010:** # 5 Plastics
- Aerosol Cans

Commercial

- Office Paper and Discarded Mail
- Newspapers and Magazines
- Corrugated Cardboard, Brown Paper Bags, Paperboard, Pizza Boxes
- Other blue bin items (if economically justified)



ABOVE: Students, teachers, head custodian and principal of Syracuse Expeditionary Learning School pose for a picture with Recycling Director Andrew Radin and an Earth Flag, donated by OCRRA. The school won OCRRA’s annual Mastro Award for recycling excellence in June 2010.



ABOVE: OCRRA employees pose for a picture behind bags of trash they collected for the Annual Earth Day Clean-Up in April 2010. Over 400 groups participated in the event in 2010, cleaning up a combined total of over 71,000 pounds of litter!



ABOVE: Recycling Specialist Ann Fordock gives resident Dave Pasinski a blue bin at the annual Huntingon Family Center picnic, in Syracuse.

Table 4 - 2010 Recycling By Material		
MATERIAL	TONS¹	PERCENT OF TOTAL²
Organic Wastes (excluding Paper)		
Food	90,763	17%
Yard Waste	35,364	7%
Wood	15,682	3%
Textiles	3,605	1%
Total Organic	145,414	27%
Plastics		
	7,485	1%
Metal		
Ferrous Metals, except MSW Ferrous	106,320	20%
MSW Ferrous and MSW Non Ferrous	10,002	2%
Non Ferrous Metals, except Aluminum and MSW Non Ferrous	7,930	1%
Aluminum	6,340	1%
Total Metal	130,592	24%
Paper		
Corrugated Cardboard and Kraft Bags	99,585	19%
Newspapers and Magazines	18,291	3%
Office / Mixed Paper	56,701	11%
Books	408	0%
Total Paper	174,985	33%
Sludge		
	58,097	11%
Other		
Glass	6,870	1%
Special and Hazardous Wastes	1,009	0.2%
Electronics and Batteries	5,783	1%
Appliances	450	0.1%
Miscellaneous	6,191	1%
Total Other	20,303	4%
TOTAL	536,876	100%

¹Data reporting is voluntary. Many businesses consider the tonnage and disposal of their special process wastes (the category "Special and Hazardous Wastes"), whether or not they are "hazardous", to be proprietary information. Therefore, the data concerning the recapture and recycling of waste, particularly in this category, may be underreported.

²Data may not equal 100% due to rounding.

Greenhouse Gas Avoidance

Recycling has many environmental benefits, including resource and energy savings due to avoidance of using virgin materials. The USEPA provides its WARM Model to allow users to determine the amount of greenhouse gases (GHGs) saved due to recycling or composting. In the table below, the GHG emissions avoided for materials recycled in Onondaga County in 2010 has been calculated. In 2010, Onondaga County's recycling program saved over 1 million MTCO₂E from being emitted. This is equivalent to taking more than **189,300 passenger vehicles off the road**².

Table 5 – 2010 Greenhouse Gas Emissions Avoidance			
MATERIAL¹	RECYCLING / COMPOSTING vs. COMBUSTION EMISSION FACTORS² (MTCO₂E per short ton)	TONS RECYCLED/ COMPOSTED	GHG EMISSIONS MITIGATED (MTCO₂E)
Food	-0.07	90,763	-6,353
Yard Waste	-0.04	35,364	-1,415
Wood	-1.85	15,682	-29,012
Mixed Plastics	-2.79	7,485	-20,884
Mixed Metals ³	-4.35	124,252	-540,496
Corrugated Box	-2.59	99,585	-257,926
Magazines	-2.71	2,725	-7,385
Newspaper	-2.22	15,566	-34,557
Mixed Paper - Office	-3.14	56,701	-178,040
Books	-2.62	408	-1,069
Glass	-0.33	6,870	-2,267
Electronics/Batteries	-2.09	5,783	-12,087
TOTAL GHGs Mitigated			-1,091,491

¹Some materials recycled were not included in this analysis due to a lack of equivalent emission factors: Sludge, Special and Hazardous Waste, Textiles, and Miscellaneous.

²GHG avoidance factors are taken from the USEPA's WARM Model, Version 11.0: http://www.epa.gov/climatechange/wycd/waste/calculators/Warm_home.html. Factors are based on recycling / composting vs. combustion.

³Mixed Metals include: Ferrous Metals, MSW Ferrous, Non Ferrous Metals, MSW Non Ferrous, Aluminum, and Appliances

Discussion

Total recycling (residential plus commercial) for Onondaga County in 2010 was approximately 44,000 tons lower than 2009. In addition, incoming trash from residents and businesses was about 1% lower than 2009. There are multiple factors that contribute to losses like these, however the single most important factor was the struggling economy and tightening of budgets, which caused consumers to buy less and many companies to scale back business – resulting in less material that required disposal or recycling. Consumers are spending less than they were a few years ago; in fact 2010 spending levels were lower than they were when the current financial crisis began³. Less consumer purchasing results in less packaging and old items being replaced that need to be disposed of or recycled – the material is simply

² Calculated using USEPA's Greenhouse Gas Equivalencies Calculator at <http://www.epa.gov/cleanenergy/energy-resources/calculator.html>

³ Jacobe, D. 2010. <http://www.gallup.com/poll/143288/consumers-september-spending-matches-2010-low.aspx>

not there to handle. Many businesses have also been reducing their outputs, which also result in less waste and recyclables generated. These contributing factors are present in both residential and commercial sectors and are affecting the county as a whole, resulting in less disposal.

However, despite the decrease in total trash and recyclables, Onondaga County residents and businesses maintained a consistent recycling rate. A 60% recycling rate is still quite an achievement, especially when facing such a dire economic situation. While the percentage recycled decreased from last year; 64 to 60%, it still demonstrates that the residents of Onondaga County make recycling a priority and are able to maintain a consistent recycling rate even during tough economic times.

2. 2010 Recycling Program Costs and Market Trends

OCRRA manages the solid waste and recycling program for 33 municipalities in Onondaga County. Each municipality is unique in its solid waste collection. Some provide waste and recyclables collection through their own public employees, some contract with private waste hauling firms to provide services for their residents, and still others require residents to arrange for disposal and recycling by contracting with a private hauler or bringing their MSW and recyclables to one of the two OCRRA transfer stations.

OCRRA is not funded by taxation. The trash tipping fee revenue provides the bulk of the financing for recycling program components essential to achieving the mandated recycling rate. OCRRA applies for government and private grants through competitive applications as well. Program costs include OCRRA's comprehensive public education program which consists of radio, TV, web, and print media campaigns; on-site visits to businesses by a staff of recycling professionals offering technical assistance; classroom presentations by a New York State certified school teacher; and numerous brochures and teaching materials.

OCRRA's recycling program covers costs necessary to assure waste haulers a zero tip fee for residential recyclables. OCRRA also manages two transfer stations that allow for the drop-off of blue bin recyclables at no cost. The transfer stations are also drop-off points for additional materials such as scrap metal, small appliances, and household batteries. OCRRA operated a Community Collection Center through March 2010, where residents dropped off electronics (including TVs, computer components, VCRs, and stereos), fluorescent light bulbs, batteries, books, cell phones, and smoke detectors for recycling or proper disposal. However, this facility was closed at the end of March 2010 due to economic constraints.

During 2010, OCRRA's Recycling Program managed:

- ❁ Two yard waste compost sites, open to the public six days per week from April to November;
- ❁ Through March 2010, a Community Collection Center, where electronics, fluorescent light bulbs, batteries, books, cell phones and smoke detectors were collected for recycling or proper disposal;
- ❁ Three Household Hazardous Waste (HHW) collection days;
- ❁ Two Electronic recycling collection events;
- ❁ A "Shred-O-Rama", where mobile shredding trucks shredded household confidential papers on-site;
- ❁ Year-long battery collection at local drop-off points and a curbside collection in July;
- ❁ A mercury thermometer and thermostat exchange program; and
- ❁ Special services and programs for businesses, schools, and apartment building managers and owners.

Direct program costs in 2010 (unaudited) associated with the recycling services are as follows:

Table 6 – 2010 RECYCLING COSTS	
PROGRAM	EXPENSE
Recycling Personnel	\$428,827
Material Recovery Facility (MRF) Fees	\$(29,466)
Public Education - Outside Service	\$287,167
Composting	\$126,685
Household Hazardous Waste (HHW) Collection	\$131,403
Blue Bin Expense	\$240,852
Computer and TV Collection	\$37,511 ¹
Other Recycling Programs	\$119,312
Total Cost	\$1,342,291

¹Includes cost of Community Collection Center operations (open Jan – Mar 2010).

“Blue bin” recyclables are collected at the curbside by private haulers, municipal haulers, and municipalities with private hauling contracts. The recyclables are taken for processing and marketing to a material recovery facility (MRF).

In 2010 OCRRA’s five-year contract agreement with private local MRFs was set to expire. A new four-year contract was negotiated; it is set to begin in 2011. Two private local MRFs signed on to the new long-term contract. This contract reduces OCRRA’s annual risk in connection with payments to the MRFs for material processing, potentially generates income for the Agency under favorable market conditions, and provides certainty and stability for the community’s recycling system during commodity market lows. As a result of OCRRA’s contract, the MRFs accept the recyclables at no charge to the waste haulers.

Taking into consideration the value of the commodities in the blue bin, OCRRA pays the MRF for processing and marketing residential recyclables using a formula adopted in the contracts. In the contract that was in effect during the period covered in this report, 2010, OCRRA paid the MRFs an administrative fee of \$1.50 per ton for the processing and marketing of the residential recyclables collected under the mandatory program. Additional payments were made from or to OCRRA depending on the market prices of old corrugated cardboard (OCC) and old newspapers (ONP). Consistent prices below \$40 per ton require an additional payment from OCRRA to the MRFs; while market prices above \$80 per ton require a payment to OCRRA from the MRFs. Any payments made to OCRRA were used for furthering public education for the recycling program. Market prices for OCC and ONP were relatively steady in 2010, and both stayed at or above \$80 per ton for about half of the year (see Figure 2). The MRFs paid OCRRA a net sum of \$37,256 in 2010 (see Table 7).

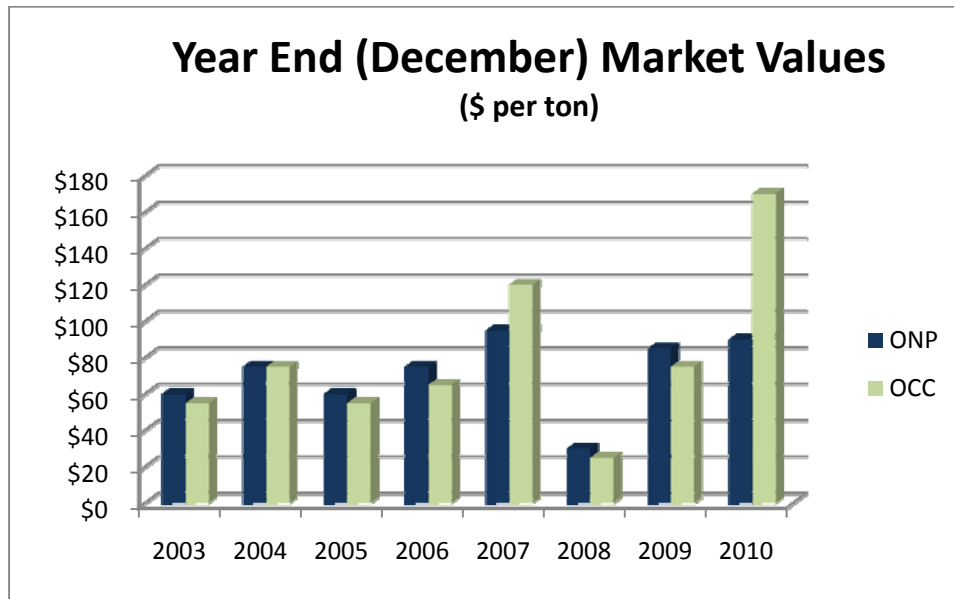
The MRF contract is a valuable tool, which allows OCRRA to formulate and maintain a uniform definition of “blue bin” recyclables. The contract also encourages stability in the local market for recyclable commodities by attenuating the variation in global market demand and pricing. This uniformity helps facilitate the successful education and enthusiastic cooperation of the public.

Fluctuations in the commodity markets are difficult to predict from year to year. As seen in Table 7, the last several years of favorable market conditions for recyclable commodities required significantly lower MRF expenses than in 2001, 2002, and 2003. Market conditions sustained high enough prices in 2010 that OCRRA saw a net return from the MRFs.

TABLE 7 – TOTAL MRF PAYMENTS	
2001	\$432,000
2002	\$334,970
2003	\$173,347
2004	\$19,804
2005	\$74,727
2006	\$68,668
2007	(\$66,820)
2008	(\$58,250)
2009	\$158,106
2010	(\$37,256)

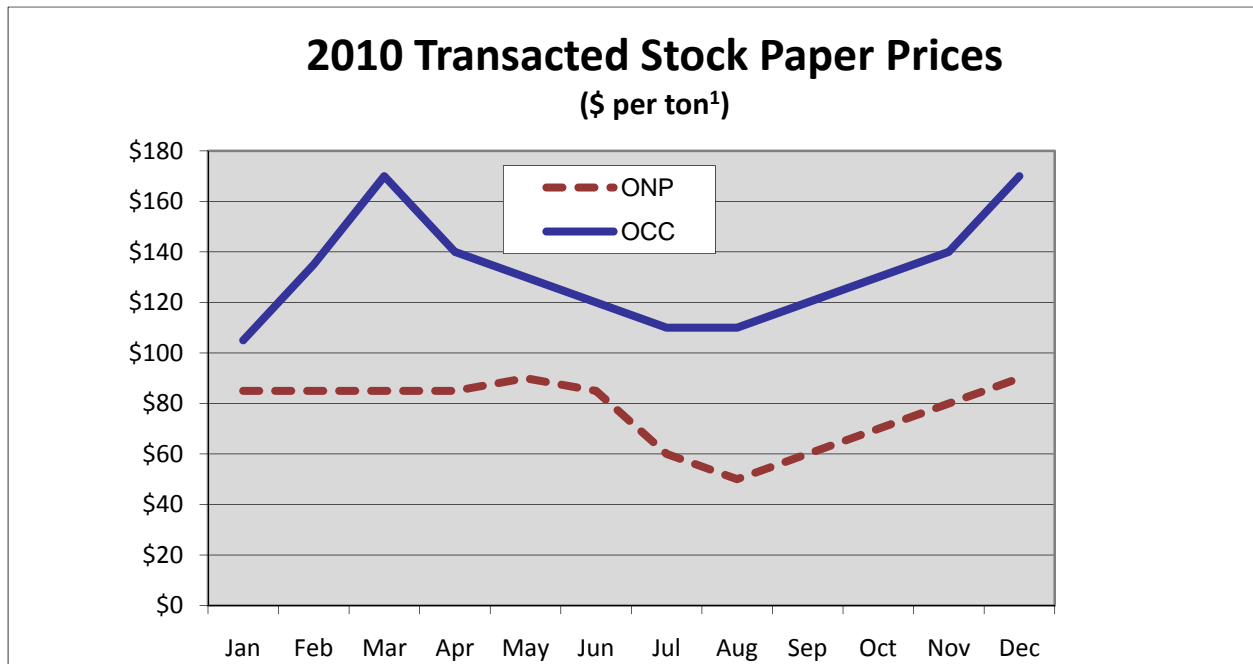
Prices for contractual commodities in December 2010 and prior years are shown in Figure 1. Prices at the end of 2009 were somewhat high compared to previous years. ONP dropped off in mid 2010, but as of December was on its way back up (see Figure 2). OCC spiked in March 2010, leveled off for most of the year, and was showing a steady rise in December. Therefore, OCC prices at the end of 2010 were substantially higher than previous years.

Figure 1



¹Prices for ONP and OCC are based on the Official Board Markets (Buffalo)

Figure 2



¹Prices for ONP and OCC are based on the Official Board Markets (Buffalo)

3. Public Education, Program Outreach, and Enforcement

OCRRA continues to enforce the local law mandating source separation for recycling through a system of public education and outreach.

Recycling Team

OCRRA employs a professional recycling team engaged in spreading the recycling message and bringing technical assistance to the residents, schools, and businesses in Onondaga County. OCRRA's three Recycling Specialists explore inquiries and complaints about business, apartment, and institutional recycling. In 2010, the Recycling Specialists visited hundreds of local businesses, apartment complexes, and schools to offer assistance in designing recycling programs as well as free recycling containers and decals. In addition, OCRRA employs a New York State certified teacher, who spoke to more than 12,000 local students in over 500 classes in 2010.

When needed, OCRRA Enforcement Officers supplement the efforts of the Recycling Specialists. An enforcement officer calls on businesses and apartment buildings when it is determined that other approaches have not resulted in cooperation. Each enforcement officer spends a significant portion of the week inspecting loads of solid waste at OCRRA's Waste-to-Energy facility to ensure that those containing recyclables are issued warnings and/or violations. Recycling Specialists will visit any waste generator that may be in violation to determine the source of the problem and assist in designing a recycling program which will capture the mandated recyclables.

OCRRA Communications

The Onondaga County community maintains an excellent recycling rate; however, frequent and consistent communication from OCRRA is necessary to remind current residents of what is recyclable, to alert those who recently moved to the area of the recycling rules, and to inform the public of special events.

To keep the public abreast of the recycling program, OCRRA continued its extensive public communication program throughout 2010. OCRRA's public message promotes the "why" of recycling and the difference one person can make in preserving natural resources for future generations. This campaign, launched in 2009, was based on community surveys asking what messages would resonate. It uses the slogan "Save the World a Little Each Day," demonstrating that the simple act of recycling can help the environment in a meaningful way. This campaign also emphasizes the OCRRA website as a community resource. See a sample ad below.



In 2010, approximately \$175,000 was spent on direct public education through TV, web, and print media campaigns. In addition to paid media advertising, OCRRA continues to publish its quarterly newsletter, which contains articles written by OCRRA staff that highlight special recycling events, stand-out businesses and schools, and inform the public about specific recyclable materials. OCRRA distributes the newsletter as an insert in the local Pennysaver, which reaches over 151,000 people on a quarterly basis. About 5,000 newsletters each quarter reach the public via public libraries, government offices (village and town clerks), and special events as well.

OCRRA also has an extensive and user-friendly website (www.OCRRA.org), which was highlighted throughout the 2010 advertising campaign. It boasts easy navigation and enhanced search features to allow users to quickly find recycling options for their unwanted items. It also allows users to make online reservations for household hazardous waste days. In addition, it houses a recycling supply order form, which allows businesses, schools, and apartment buildings to order free recycling containers and decals with a few simple clicks. The new form has helped Recycling Specialists streamline the ordering process and serve customers faster and more efficiently.

Perhaps one of OCRRA's most effective means of communication is via email. Through an email blast system, emails covering various recycling topics and upcoming events are sent twice a month to approximately 17,000 people. In addition to the main list, OCRRA has the ability to create smaller sub-lists and send emails to select groups of people (such as compost site users or school teachers). The web software also allows for tracking of the number of people that open the emails, click on specific links, or forward it to others. Email blasts are an inexpensive and effective way of reaching thousands of people and are growing in popularity as the email address list grows each year.

New in 2010 was a [Facebook page](#), effectively launching OCRRA into the social media platform. The page has allowed people to actively engage in discussion about recycling and OCRRA's services. New information about upcoming special events, highlights of local recycling and waste reduction achievements, and links to recycling-related news articles are posted on a regular basis.

Residential Recycling and Composting

July, 2010 marked the 20th anniversary of Onondaga County's recycling program. To celebrate, OCRRA organized a community-wide contest, the "Best Blue Bin on the Block" contest, which recognized excellent recyclers. From August to November, OCRRA enforcement officers scoured Onondaga County neighborhoods, looking for blue bins set out to the curb with the correct items inside. Each month, 25 residents were randomly selected to win gift cards to Byrne Dairy, a local convenience store. In December, seven grand prize winners were selected to receive gift cards to various local businesses, as well as two SONY laptops, donated by RockTenn, a local paper recycling company. All gift cards were donated by their respective businesses. This contest was a way for OCRRA to say thank you to residents for 20 years of dedication to recycling and to increase awareness of the recycling program. *(Above: Grand prize -winner Shiela Liegel, of Syracuse, poses with her new laptop and representatives from RockTenn and OCRRA.)*



OCRRA also coordinated 15 community blue bin giveaways in 2010, at various grocery stores, farmer's markets, and other events throughout Onondaga County. At these events, residents were given a free blue bin, recycling instructions, and OCRRA staff were on hand to answer any questions. Residents took home over 4,000 blue bins from these events.

In addition, OCRRA continued its partnership with the Northern Onondaga County Library System (NOPL) to host Master and Backyard Composting classes, furthering compost education and awareness in the community. This low cost (\$15 fee), 3-day class brought composting knowledge to many Onondaga County residents.

Apartment Recycling

Onondaga County has hundreds of multi-unit apartment buildings, which present a unique set of challenges to recycling, such as space constraints and inconvenient recycling bin locations. To assist residents in 2010, OCRRA Recycling Specialists visited hundreds of apartment complexes and spoke with numerous landlords and property managers to ensure that proper recycling occurred. To help facilitate a great recycling system, OCRRA provided brochures, magnets, decals, and containers (*at right*), as well as presentations at group meetings.



Business Recycling

OCRRA's Recycling Specialists regularly call on businesses in Onondaga County to help them design effective collection systems for recyclables. During 2010, OCRRA continued to provide free consultations, as well as free containers and decals to all types of businesses.

In the fall of 2009, OCRRA began the [Blue Ribbon Recycler](#) Program to recognize businesses that demonstrate recycling excellence in the workplace. Each applicant to the program must meet specific criteria in regards to recycling, such as providing recycling containers for all employees and purchasing recycled paper. Once a Recycling Specialist determines that a business qualifies, it receives a certificate from OCRRA and recognition on the OCRRA website. If a business does not meet all criteria, it provides an opportunity to identify areas for improvement. The Blue Ribbon Recycler Program is an incentive for businesses to achieve recycling excellence by offering them recognition that they can then share with their clients and customers. To date, there are 43 certified Blue Ribbon Recyclers.



Recycling at Schools

Schools generate a significant portion of the recyclables in a community, in the form of paper, cardboard, and containers. Because of this and the importance of educating children early about recycling, schools were a major focus of OCRRA's public education in 2010. OCRRA's Recycling Educator and Recycling Specialists provided over 600 presentations and assemblies for schools throughout the county in 2010. In addition, OCRRA gave out its annual Vonnell Mastri award in June, honoring a school with an excellent recycling program in the city of Syracuse. In 2010, the award went to Syracuse Expeditionary Learning Middle School, in the Syracuse City School District.

In the fall of 2010, OCRRA revamped the [school section](#) of the website to include more up-to-date information, recycling lesson plans and activities, and an in-school recycling and waste reduction how-to guide. It also provides links to other sources of recycling education and guides.

OCRRA continued its [School Recycling Pledge](#) program in 2010. Began in 2008, the school pledge was created based on social marketing research, which indicates that people who sign a pledge promising to perform a particular behavior will be more likely to actually do the behavior. As a result of this research, OCRRA had large, framed pledges custom-printed for each of the 157 schools in Onondaga County. These encourage a teamwork approach to recycling and illustrate each school's commitment to keeping recyclables out of the trash. At the end of 2010, more than 120 Onondaga County schools had their pledge, with very positive feedback about increased awareness and recycling volume.

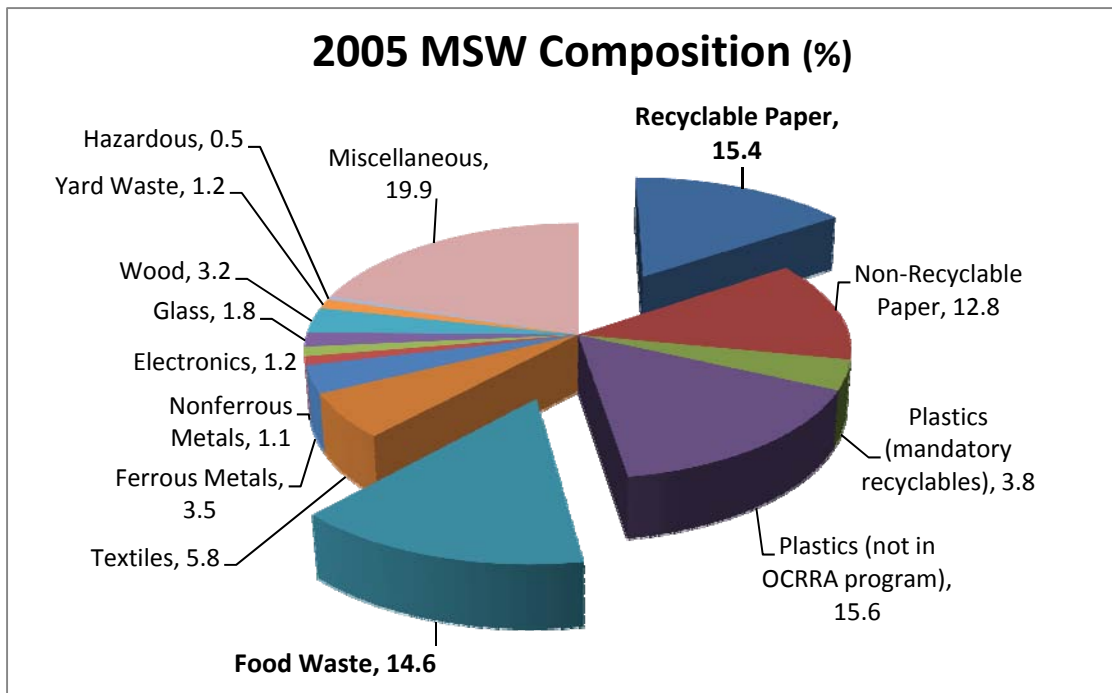
2005 Waste Quantification & Classification

In September 2005, OCRRA conducted a Waste Quantification & Classification study to measure the composition of curbside recyclables and Municipal Solid Waste (MSW), brought to the Waste-to-Energy plant operated by Covanta Energy. Samples from these streams were sorted, as delivered, into more than 50 categories. Similar studies in 1993 and 1998 have been used to inform decisions concerning the

expansion of the list of mandatory recyclables and public communications. The 2005 study allowed more current examination of recycling trends.

According to the findings of the study, the majority of mandatory recyclable materials (78%) are indeed being recycled. However, approximately 15% of MSW is recyclable fiber (cardboard, office paper, newspaper, and magazines) and 14% is food waste (see Figure 3). These constitute the largest volume by far of potentially recyclable material that ends up in the trash. This information has allowed OCRRA to focus its efforts on capturing more recyclable paper through its business and school recycling campaigns and more food waste through the expansion of its composting program.

Figure 3



4. Highlights of the 2010 OCRRA Recycling Program

Again in 2010, OCRRA's award-winning recycling programs demonstrated sound environmental solutions, excellent public participation, and quality disposal and recycling services for the residents of Onondaga County. While the year brought challenges, due to budget constraints, and programs underwent changes for various reasons (i.e., battery program changes, see below), OCRRA was still able to maintain its high level of service for the public.

➤ NEW RECYCLABLE

In 2010, OCRRA was pleased to announce the addition of **#5 plastics** to the list of mandatory recyclables. Beginning in July 2010, OCRRA residents and businesses were asked to recycle #5 plastics, such as tubs, wide-mouth containers, and prescription pill bottles. This decision was based on market research and consultations with the Material Recovery Facilities.

➤ AWARDS

OCRRA's recycling and waste reduction program was recognized by multiple organizations in 2010 for excellence in service and communication. The New York State Association for Reduction, Reuse, and Recycling ([NYSAR](#)³) awarded OCRRA's Recycling staff the *Recycler of the Year Award* in the "Public Sector, Team" category. In addition, OCRRA was the recipient of two awards from [Keep America Beautiful](#); the First Place National Award for Litter Prevention, for the annual Earth Day Litter Clean-up, and the First Place National Award for Waste Reduction and Recycling, for the success of the "Save the World a Little Each Day" public education campaign. Finally, OCRRA was awarded "Compost Program of the Year" from the [US Composting Council](#), a national non-profit professional organization that promotes organics composting.

➤ COMMUNITY COLLECTION CENTER

In 2007, OCRRA officially opened the Community Collection Center (C3), a 9,000 ft² commercial warehouse-type space that allows for year-round collection of certain recyclable materials. Onondaga County residents were able to drop-off electronics, including televisions, computer components, old VCRs and stereos; books; batteries; fluorescent light bulbs; cell phones; and smoke detectors year-round. The materials then were shipped to various facilities for processing and recycling.

This facility was closed in March 2010 due to the high cost burden of disposal of materials, particularly electronics. While open, OCRRA accepted over 1.7 million pounds of electronics and over 700,000 pounds of books. Since closing, OCRRA has directed residents to other local avenues for recycling of these items. Due to state Extended Producer Responsibility (EPR) legislation for electronic recycling, more local outlets have opened up for residents to recycle these items.

➤ BATTERIES

In 2010, residents were able to properly dispose of their old batteries through OCRRA's program at C3 (until March), at local grocery stores, and during a July curbside collection. In 2010, a total of 81 tons were removed from the trash, 6 tons of which were rechargeable batteries.

OCRRA's household battery collection program underwent changes in 2010 as a result of new federal regulations aimed at reducing safety hazards. The new regulations state: (1) batteries must be separated by

type before they are transported by haulers and (2) rechargeable batteries must be placed in individual bags or have their terminals taped before they are transported. Previously, household batteries were collected at nine area grocery stores year-round and in bags curbside in July, with all types mixed together.

To comply with the regulations, OCRRA created new collection containers for the local grocery stores that allow for the separation of alkaline, rechargeable, and button batteries. This new system began in 2010. In addition, the annual July curbside collection changed to only allow alkaline batteries in the special bags distributed by OCRRA.

Not only do these program changes comply with new regulations, they allow OCRRA to easily remove rechargeable batteries for recycling at no charge. Previously, OCRRA paid to have all mixed batteries properly disposed of. Now, because rechargeable batteries are separated, OCRRA uses [Call2Recycle®](#), a no-charge rechargeable battery recycling organization funded by the battery industry. This is an example of an EPR program that is beneficial to both the environment and solid waste planning units. In 2010, OCRRA sent over 8,000 pounds of rechargeable batteries out for recycling at no disposal cost; residents in the OCRRA service area are now recycling more rechargeable batteries per capita than any other large community in New York State.

➤ YARD AND FOOD WASTE COMPOSTING

OCRRA's two compost sites offer a convenient service for residents, municipal, and commercial entities to drop-off their yard waste from April to November. Finished compost from the previous year is available for residents to take home as well. Residents purchase compost passes for \$10, which allows them to drop off yard waste and take away up to 6 cubic yards of compost. In 2010, residents purchased over 3,300 compost passes and made over 21,000 visits to both compost sites. In addition, there were hundreds of commercial and municipal drop-offs throughout the 2010 season.

Approximately 5,000 tons of yard waste was delivered to the two sites in 2010 for compost processing. In addition, another 4,400 tons of wood waste was received for mulch processing.

In 2008, OCRRA began accepting institutional and commercial food waste at its Amboy Compost Site. It began as a pilot project using an extended aerated static pile system (EASP), which allows the piles to maintain aerobic conditions. In this system, the food waste is covered with finished compost and injected with air. This project has been met with great success and continues to grow. In 2010, over 1,200 tons of commercial food waste was processed at OCRRA's Amboy site on a minimal footprint, with minimal staffing and investment, all without regulatory violation. Included in this total are approximately seven tons of food waste from Syracuse University's Food Services Department (*see photo, at right*), as well as food waste from the Syracuse City School District. OCRRA's EASP system enables the agency to process both pre- and post-consumer foods, including meat, and has become a valuable resource for the region's diversion efforts.



OCRRA's goal is to develop the Amboy Compost Site into an innovative, 13-acre, yard and food waste composting facility, to cost-effectively optimize the region's recycling and reuse opportunities. OCRRA projects that over 9,000 tons of institutional and commercial food waste will be processed at the facility annually by the year 2015. The project will serve as an environmentally sound, cost-effective model for replication by municipalities across New York State.

➤ BOOKS

OCRRA collected over 63,000 pounds (32 tons) of unwanted books for recycling in a two-week drop off period in 2010. In an effort to encourage reuse, groups from libraries, schools, and non-profits are invited to sort through old books to take for their own enrichment and literacy missions in the community before they are shipped out for recycling. Therefore, hundreds of books were removed for reuse prior to recycling.

➤ ELECTRONICS

Onondaga County residents were able to drop off old computer equipment and TVs at C3 until March 2010. OCRRA also held two e-waste collection events in 2010. A \$10 fee was charged per TV, computer monitor, and laptop; all other equipment was collected at no charge. Between C3 and the two collection events, Onondaga County residents dropped off 406,000 pounds (203 tons) of e-waste to OCRRA for recycling.

Since the e-waste recycling program's inception in 2002, OCRRA has collected nearly **4 million pounds of e-waste**. In anticipation of New York's newly passed EPR law, which takes affect in April 2011, OCRRA is steering residents toward other local electronics recycling outlets. These locations are convenient and, beginning in 2011, will not charge a fee for electronic waste. This new legislation will be a welcome change, transferring the financial burden to recycle e-waste from local governments to manufacturers – which in turn will encourage manufacturers to design products that are easier to recycle.

➤ FLUORESCENT LIGHT BULBS

Fluorescent light bulb use is on the rise due to high energy costs. However, these energy efficient bulbs contain mercury, a potentially harmful chemical. To encourage residents to dispose of these properly and keep mercury out of the trash, OCRRA partners with local hardware stores to provide residents with convenient locations to drop off old bulbs. From the stores they are shipped off for proper disposal. There are 15 participating stores throughout the county. Over 5,000 bulbs were collected in 2010 at these stores.

➤ HOUSEHOLD HAZARDOUS WASTE DAYS



Household Hazardous Waste (HHW) Days continue to be one of the most popular services the OCRRA offers. These events allow residents to safely dispose of their hazardous waste, keeping these materials out of the waste stream. Three six-hour HHW Days were held in 2010, serving over 2,000 households. Among the hazardous wastes collected at these events were adhesives and resins; oil-based paint; paint thinner; solvents; thermometers, thermostats, and other mercury containing products, pesticides, and fluorescent light bulbs. Direct costs included the fee charged by the vendor to conduct the event; battery and propane

cylinder handling. Indirect costs included staffing for the day of the event, as well as preparation for advertising, handling reservations, and sending out confirmation packets to the households that made appointments for each event. *(Above: An Environmental Products & Services employee unloads residents' hazardous waste at one of OCRRA's 2010 Household Hazardous Waste Days.)*

➤ MERCURY THERMOMETER AND THERMOSTAT EXCHANGE PROGRAM

OCRRA continued a mercury thermometer exchange program at the Rock Cut Road Transfer Station. OCRRA partners with Onondaga County Department of Water Environment Protection and Covanta Energy to provide residents with non-mercury thermometers in exchange for their old mercury thermometers. The mercury thermometers collected were properly disposed of as part of OCRRA's HHW collection program. This exchange program helps prevent mercury contained in household thermometers from escaping into the environment when the thermometers are broken or thrown away. In 2004, mercury **thermostat** collection was added to this program.

➤ SHRED-O-RAMA



In response to increasing public concern over identity theft, OCRRA held its seventh annual Shred-O-Rama in 2010. This September event took place at Alliance Bank Stadium in Syracuse. Over 1,100 residents dropped off 27 tons of confidential documents to be shredded. Paper was shredded on site and then recycled by Confidata, a local shredding company. OCRRA also continues to operate a commercial shredding machine for residential use at the Rock Cut Road Transfer Station. *(At left: OCRRA Recycling Specialist Dave Nettle helps unload residents' confidential papers for shredding at the 2010 Shred-O-Rama.)*

➤ WASTE DISPOSAL COST RELIEF FOR LOCAL CHARITIES

In 2010, OCRRA again provided a "recycling credit" to the local Rescue Mission, Salvation Army, and Habitat for Humanity for each documented ton of material (clothing, furniture, etc.) recycled through their organizations. The organizations were credited toward their monthly waste disposal fees through the OCRRA system, with certain limitations. In 2010, OCRRA credited these organizations with approximately \$44,000; effectively relieving them of much of their waste disposal costs.

➤ EXTENDED PRODUCER RESPONSIBILITY

EPR was at the forefront of NYS solid waste policy debate in 2010. EPR requires manufacturers and retailers to take responsibility for the safe and environmentally sound disposal of items they make and sell. This includes reducing toxic materials used for manufacturing, but the most relevant aspect for waste management is the requirement to implement some form of a take-back and reuse and/or recycling program.

In 2010, New York State passed the [Electronic Equipment Recycling and Reuse Act](#), which ensures that manufacturers are responsible for the recycling costs of electronics, whether physically or financially. This law, which will go into effect in April 2011, will be a release from the cost burden of handling and recycling the electronic waste stream for many municipalities. According to the law, residents will have access to convenient drop-off locations at no charge. That, along with a phased in electronics ban from municipal solid waste, will incentivize recycling of e-waste and put the costs onto the manufacturers. There are already some take-back locations in Onondaga County for e-waste; OCRRA expects there to be more coming online this year.

In addition to e-waste, in 2010 New York State adopted legislation to require manufacturers of rechargeable batteries to provide recycling for their products, physically or financially. This entails manufacturers providing outlets for recycling at all retail locations that sell rechargeable batteries at no charge to the consumer.

OCRRA is an active member of the Product Stewardship Institute, a national non-profit group which partners with local government agencies to advocate for EPR policies. In the future, OCRRA hopes to see further discussion of New York State EPR laws, particularly for mercury-containing devices, such as old thermostats, thermometers and fluorescent light bulbs; CFC-containing appliances, such as air conditioners; old appliances; oil-based paint; and packaging.

➤ **COMMUNITY EVENTS AND PUBLIC OUTREACH**

OCRRA is committed to maintaining high levels of community participation through its recycling program. In 2010, OCRRA's recycling team participated in numerous area events and fairs, including the Taste of Westcott Street (for Syracuse University students), Huntington Family Center Picnic (for Syracuse's Near Westside residents), and CNY Blooms. A variety of recycling information was distributed including blue bins, recycling instructions, and numerous recycling-related promotional items. OCRRA interacted with thousands of people at these events.

In addition to events, OCRRA Recycling Specialists conducted multiple presentations to a wide variety of audiences, including school-age children, business office staff, teachers, Rotary Clubs, and neighborhood groups. These presentations all provided information to the public on recycling instructions, as well as the importance of environmental stewardship. OCRRA Recycling Specialists also shared their expertise with the recycling community by presenting at various conferences in 2010, including the Solid Waste Association's Recycling Conference in Lake George and the North American Association for Environmental Education's annual conference in Buffalo, NY.

Earth Day

OCRRA's Annual Earth Day Litter Clean-Up is a community-wide, two-day event, occurring in April each year. In 2010, 8,700 volunteers collected over 71,000 pounds of litter. Volunteer groups consisted of schools, Girl and Boy Scout troops, community and neighborhood groups, and businesses. This program has been a continued success since 1994, with over 1.8 million pounds of litter cleaned up to date. This year, OCRRA was recognized by Keep America Beautiful, a national non-profit organization focusing on litter cleanup and recycling, as a first place winner for the Annual Earth Day Litter Clean-Up.

Beyond these noteworthy activities, a host of other services and accomplishment continued to be provided through the recycling program, including:

- ♻️ A year-round recycling drop off six days per week for mandatory recyclables at OCRRA Transfer Stations. This service includes a no-charge drop-off for household scrap metal and office paper from small businesses;
- ♻️ Submitted grant applications to support a variety of OCRRA programs, including advertising and public education, food-waste composting, household hazardous waste collection, recycling containers, and recycling personnel costs; and
- ♻️ Participation in solid waste associations. All members of OCRRA's recycling team are members of the New York State Association of Recycling, Reduction and Reuse (NYSAR³).

OCRRA's recycling team members are:

- Andrew Radin; Director of Recycling and Waste Reduction
- Greg Gelewski; Recycling and Waste Reduction Operations Manager
- Ann Fordock, David Nettle, and Sarah Stewart; Recycling Specialists
- Jeff Singer and Allison Stuart; Recycling Aides
- Elaine Van Avery; Recycling Educator (Contracted Service Provider)
- Tom Furgeson; Compost Site Technician
- Seasonal Compost Site Gatekeepers