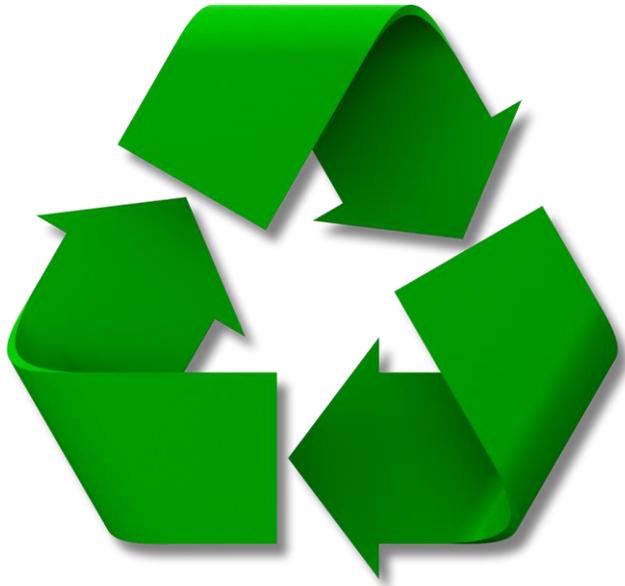


# Division of Solid Waste Management

## 2015 Summary



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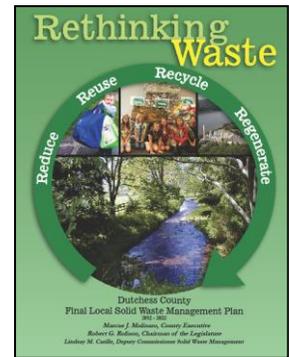
## 2015 Annual Summary

Dutchess County serves as a New York State designated local solid waste management planning unit. The Division of Solid Waste Management (Division), representing the Dutchess County Planning Unit, is responsible for the formulation and implementation of programs for the collection and disposal of solid waste generated within the County. Responsibilities include having a NYS Department of Environmental Conservation (DEC) approved ten-year Local Solid Waste Management Plan, biennial compliance reporting to NYS DEC, and enforcement of Local Law No 3 of 2014 Dutchess County Solid Waste Materials Management Rules and Regulations.

The Division maintains liaison with the Dutchess County Resource Recovery Agency (RRA), who oversees the waste-to-energy facility (WTE), and county, state, and federal agencies in reference to the operation, maintenance and safety of solid waste facilities. The Division is currently staffed by a Deputy Commissioner, Compliance Inspector and Senior Program Assistant.

In April of 2013, the Dutchess County Local Solid Waste Management Plan, *Rethinking Waste*, was adopted by Dutchess County Legislature and subsequently approved by New York State Department of Environmental Conservation (NYS DEC) June 2013. The ten-year plan for the management of solid waste has three main goals:

- Decrease solid waste generation;
- Increase reuse and recycling; and
- Convert the remaining waste to electricity and minimize the use of landfills for solid waste disposal.



### RECYCLING, COMPOSTING AND REUSE

#### **Recycling Rate:**

A recycling rate is determined by totaling the amount of Municipal Solid Waste (MSW) and Construction and Demolition (C&D) debris disposed of, then totaling the amount recycled, and dividing the recycled amount by the combined total.

$$\text{Recycling rate} = \frac{\text{Total Recycled}}{\text{Total (Recycled and Disposed)}} \times 100$$

<b>Rethinking Waste Projections and Actual Rates</b>							
	2010 Actual	2012 Actual	2013 Actual	2014 Projected	2014 Actual	<b>2015 Projected</b>	<b>2015 Actual</b>
MSW only recycling rate	22.9%	31.1%	31.8%	34.1%	36.4%	<b>39.4%</b>	<b>36.4%</b>
MSW and C&D debris recycling rate*	26.4%	38.6%	40.5%	37.2%	46.4%	<b>43.2%</b>	<b>43.8%</b>
Combined recycling rate with ADC ash**	N/A	51.9%	53.7%	N/A	60.7%	<b>N/A</b>	<b>58.3%</b>
* Includes C&D debris used as Alternate Daily Cover (ADC) at landfills.							
** Ash used as ADC and ferrous metals were included in the recycling total and subtracted from the MSW incinerated total, to avoid counting this material twice.							
N/A = Not applicable.							

County-wide, 109,082 tons of the total 299,625 tons of MSW generated is recycled. 154,915 tons were converted to electricity (6,470 tons of this are metals which are recovered and included in recycling) and approximately 42,000 tons were landfilled, primarily at the Ontario County Landfill located over 230 miles northwest of Dutchess County.

This is the first year since 2010 that the County's MSW recycling rate did not increase and did not meet projections. In 2015, Dutchess County disposal and recovery tonnages increased at the same rate. This may be due to the increases seen in recycling with the switch to single stream collection, which we saw between 2012 and 2014, leveling off. It may also be due to what the industry is calling the evolving ton, meaning the weight of recyclables has decreased due to the decline in newspaper tonnage, plastics increasingly being used over glass and aluminum, and due to increasingly lightweight packaging being used. According to the latest figures from the U.S. EPA, stagnant recycling rates are being seen across the country and in 2013 the recovery rate was 34.3%, 0.2 percentage points below the 2012 recovery rate.

### **Organics Diversion:**

The diversion of food scraps, leaves and brush for composting is an essential part of recycling, and increasing food scrap diversion is a critical component to increasing the County's recycling rate. Most municipalities collect brush and leaves on a seasonal basis, either curbside or through drop-off locations. The amount of leaves and brush composted at the municipal level is unknown, as most do not track volume. The Division's recommended method of disposal for leaves and grass clippings is mulching (leaving them on the lawn), or through backyard composting.

There are several institutions that do divert food scraps from the waste stream, and the number has increased since the adoption of Rethinking Waste. In 2015, over 4000 tons of food scraps from various sources were diverted. The following data, which is not all-inclusive, was reported to the Division for 2015:

- As noted in Rethinking Waste, all of the area colleges have robust recycling/sustainability programs, including food scrap diversion. Vassar College and the Culinary Institute of America contract with private haulers to transport their organics to a private composting facility, and Bard College composts onsite. Marist College installed a food pulper/dehydration system, which pulps and dehydrates food scraps, producing minimal residue which is sent to a water treatment plant.
- Grocery stores in the area, in addition to recycling over 3700 tons of cardboard and plastics, diverted over 1200 tons of food waste, not including food donations.
- McEnroe Organic Farm is the only composting facility in the County that can accept food scraps in addition to yard and animal waste. They are currently permitted to process up to 40,000 cubic yards of materials a year.
- Zero to Go, a company in Beacon, collected and composted over 14 tons of food waste from local restaurants and local special events. The main mode of collection was by bicycle.

Working with Cornell Cooperative Extension of Dutchess County Agricultural and Horticultural program staff, backyard composting was promoted through demonstrations and events. In 2015, Cornell trained residents on how to construct a compost pile, and reached over 900 individuals at the Dutchess County Fair booth, which included displays on composting and recycling.



## **FACILITIES**

### **Recycling:**

Approximately 85% of the County's single stream recycling (plastics, metals, and paper/cardboard) is processed at ReCommunity Beacon, a privately-run single stream facility which opened in 2012.

There are several in-county facilities that recycle construction and demolition (C&D) debris, such as asphalt, concrete, brick, and clean wood. In 2015, of the more than 89,000 tons of C&D debris generated, over 39,000 tons of C&D debris was recycled and over 33,000 tons was used as alternate daily cover (ADC) at landfills, according to facilities that provide reports to the Division.

### **Transfer Stations:**

The County currently has 18 transfer stations, which are facilities where MSW is unloaded from residents' vehicles and briefly held until transfer to the end point of disposal: a WTE, landfill or recycling facility. Three transfer stations are privately run, six are run through contract with a private company, and nine are municipally-run. Not all municipalities have a transfer station, and not all transfer stations accept residential garbage. County residents in fifteen municipalities have the choice of using a transfer station and/or contracting for curbside pick-up.

### **Composting:**

There are several private facilities in-County that process yard waste, clean wood, and manure for compost, and in 2015 over 18,000 tons of organics were composted. As stated previously, there is only one in-county facility that can accept food scraps, but there are several facilities that accept other organic materials and turn the materials into compost.

### **Resource Recovery Agency (RRA) operation of the Waste-to-Energy Facility (WTE):**

The RRA oversees the WTE operation with a staff of three full-time employees. A private company, currently Wheelabrator Dutchess County, operates the WTE. The facility, in operation since 1989, provides stable, long-term employment at a relatively high wage to over forty people.

The 1984 agreement between the RRA and the County provides for a Net Service Fee (NSF) to be paid, based upon a formula outlined in the agreement, if the expenses of the RRA exceed revenues. In fiscal year 2014 a NSF was required in the amount of \$915,563. In 2015 there was no NSF requested.

Of the MSW that was generated in Dutchess County, but not recycled in 2015 (excluding the metals recovered), the WTE processed 154,982 tons. This represents approximately 78% of the total tons of MSW that were disposed; 22% of the total tons of MSW were landfilled. The MSW processed at the in-county WTE avoided the need to transport over 154,000 tons of waste to distant landfills.

The MSW processed at the WTE is converted to electricity and sold to Central Hudson. In 2015 a net of 44,207 megawatt hours (Mwhs) was generated. The facility can turn 450 tons of waste into 9.3 megawatts (MW) of renewable power every day, enough to power over 10,000 homes. The facility uses a small portion of the gross Mwhs generated to operate the facility.

The facility recovered 6,470 tons of recyclable metals in 2015. These metals would otherwise have been lost forever in a landfill. The RRA also provides recycling containers onsite for all residents to use, and collected over 94 tons of recyclables in 2015.

The RRA hosted a Household Hazardous Waste Collection and Electronics Recycling Event in 2015. The event was attended by 410 residents resulting in the recycling of 40,440 pounds of chemical waste, 55,645 pounds of electronics, 395 pounds of fluorescent bulbs, and the safe disposal of 352 pounds of pharmaceuticals. The RRA also provides safe disposal of pharmaceuticals for local law enforcement agencies and to other counties. In 2015 over 5,500 pounds of additional medications were incinerated. The cost for the event was approximately \$30,600, with expectation of 50% reimbursement by DEC for the costs of the chemicals collection.

### **Reuse:**

One of the best ways to reduce the amount of trash that is landfilled or incinerated is reuse. Reusing materials, rather than throwing them out, reduces waste and can provide others needed clothing and goods. Materials that can be reused include clothing, furniture, tools, books, and more. It is estimated that the average person throws away about 70 pounds of clothing per year, which for Dutchess County would mean over 20 million pounds per year. There is no need to throw these materials in the trash. Even textiles that can't be reused are sold for recycling and turned into other products, such as wiping cloths or carpet padding.

One of the largest thrift shops in Dutchess County, Goodwill Industries of Greater New York & Northern New Jersey, whose income supports nonprofit programs, did provide donation bin totals for the Wappingers Falls store. In 2015, 3,849,880 pounds (over 1900 tons) of donations were received from almost 30,000 donors!

### **2015 Accomplishments**

- Submitted the NYS DEC required 2015 Annual Report Form – Planning Unit Recycling Report providing 2014 recycling rate figures. The 2014 recycling rate was 36.4%, exceeding projections.
- Submitted the required 2015 Biennial Compliance Report to NYS DEC and the County, outlining the 2013 and 2014 accomplishments and progress towards implementing the Local Solid Waste Management Plan, *Rethinking Waste*.
- Held the third annual Earth Day event with the Market Street complex clean-up event.



*Earth Day 2015*

- To celebrate America Recycles Day, an eyeglass, sunglass and hearing aid collection and recycling event was held. The glasses collected were given to the LaGrange Lions Club for processing and donation. In total 268 eyeglasses, 60 sunglasses and 6 hearing aids were collected. According to the Lions Club, this was more than what they normally collect in three years or more.
- Staff worked with Cornell Cooperative Extension to promote backyard composting and organics diversion through several presentations, including the DC Fair.



- Gave 7 solid waste and recycling presentations to schools, helped conduct 1 school waste audit, and conducted 4 waste assessments for 3 schools and 1 institution.

- Submitted the first progress report and final report to Keep America Beautiful with recycling data for the public space recycling bins which were awarded to Dutchess County for use in Bowdoin and Wilcox Parks. In a one-year period over 1 ton of cans and bottles were collected and recycled.



- Recycling bins, through the bin loan program, were provided for 7 events. The largest event was the Walkway Marathon Expo and the Marathon. The Walkway Marathon was a Zero to Landfill event and over 760 pounds of materials were recycled and 380 pounds of food scraps composted.
- The first Dutchess County Conditionally Exempt Small Quantity Generator (CESQG) hazardous waste collection event was held. This event allows small generators of hazardous waste, such as schools and municipalities, to safely and economically dispose of their materials. Fifteen schools and one municipality participated, and 3,750 pounds of flammable materials, 25 pounds of mercury and 190 pounds of chemicals were collected. The event was held at the Dutchess County Resource Recovery Agency and coordinated by the Division of Solid Waste Management.
- The Division supervises the issuance of permits and licenses as may be required of haulers, and enforces Dutchess County's Local Law No. 3 of 2014, Dutchess County Solid Waste Materials Management and Licensing Rules and Regulations. In 2015 the Division renewed 15 licenses, which were due to expire, and processed 13 new license applications, for a total of 36 licensed haulers at the end of 2015. The Compliance Inspector identified 11 occurrences of unlicensed haulers and the haulers either paid the fine or obtained a license. Renewals and new licensing fees of \$19,395 were collected and \$900 in fines collected.
- Over 160 recycling compliance inspections were completed, including inspections of 146 multi-family housing complexes. All non-compliant multi-family residences, of which there were 23, are now compliant. Complexes new to recycling were provided flyers for tenants on how and what to recycle, as were those with insufficient recycling equipment and participation.
- Staff answered 277 information requests, sent letters to haulers operating illegally in the County and to haulers advertising they operate in the County but are not licensed.
- Attended 10 Senior Picnics, providing recycling and educational information. The Town of Poughkeepsie Senior Picnic was a Zero Waste event. The goal of a zero waste event is to divert 90% or more waste from landfills by recycling and composting. We diverted 100% of the waste from landfills by composting 92% of the waste and recycling 7.6% of the waste, with the remaining 0.4% of the waste going to the waste-to-energy facility where it was converted to electricity.



*Zero Waste Event*