

Cortland County

Draft

Solid Waste Management Plan

APRIL 2014

Barton
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Cortland County

Draft

Local Solid Waste Management Plan

April 2014

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EXECUTIVE SUMMARY

The purpose of the Cortland County Solid Waste Management Plan is to identify the path to be pursued for managing solid waste generated in Cortland County during a ten-year planning period, in an economically and environmentally sound manner that is consistent with the State's solid waste management policy. The initial year of this ten-year planning period will commence following approval of this Plan by the New York State Department of Environmental Conservation (NYSDEC).

The residents, businesses, industries, and institutions in Cortland County generate solid waste every day. The question about how to increase recovery, to decrease disposal, and to reduce waste generation, now and in the future, creates the need for a plan such as this one.

The purpose of the Local Solid Waste Management Plan (LSWMP) is to: 1) serve as a countywide framework for the coordination of solid waste management; 2) establish countywide solid waste goals and objectives -- including goals for waste reduction, recycling, and energy recovery -- and a plan to monitor progress toward the goals; and 3) satisfy NYSDEC requirements for solid waste planning and comprehensive recycling analyses.

Cortland County serves as the solid waste planning unit for all municipalities within the County. This LSWMP recognizes, however, that local municipalities, the NYSDEC, private waste haulers, neighboring solid waste planning units, and private facility owners all play important roles in Cortland County's current and future management of solid waste and recyclable materials.

The County owns and operates one central landfill facility in the Towns of Solon/Cortlandville/Homer and owns a materials recovery facility (MRF) in the City of Cortland, which is currently operated by a private entity as a consolidation center for recyclable materials that are trucked off-site for processing at a MRF. Additionally, four Towns within the County (Virgil, Truxton, Solon, and Freetown) provide recyclables drop-off centers for their residents. At this time, the Town of Solon is not operating their drop-off center. Some of these Towns deliver their collected recyclables to the County MRF and others use private haulers to market their recyclables. Generators and haulers are not required to deliver waste or recyclables to the County facilities and businesses may self-market their recyclables. Therefore, not all waste and recyclables pass through the County facilities. It is currently estimated that slightly more than 20 percent of the mixed Municipal Solid Waste (MSW) and nearly 75 percent of the Construction and Demolition (C&D) debris is managed outside of the County.

The City of Cortland and the Villages of Homer and Marathon each currently provide municipal collection services to their residents, through collection service contracts entered into by each municipality with a private hauling company that is procured through a public bidding process. Except as noted for these three municipalities that provide a municipal collection service, each generator of solid waste and recyclable materials in Cortland County, whether it be an individual resident, business or institutional facility, is responsible for delivering its solid waste and recyclable materials to an appropriate solid waste management/recycling facility. Residents will either use a residential drop-off facility or hire a private hauling company to pick up their solid waste and recyclable materials. Businesses and institutional facilities will either transport materials in their own trucks or will hire a private hauling company to deliver their solid waste and recyclable materials to an appropriate facility. Cortland County does not collect or transport materials from individual generators of solid waste and recyclables.

The Solid Waste Management Act of 1988 established a State Solid Waste Management Policy. The policy defines the following solid waste management priorities in New York State:

- first, to reduce the amount of solid waste generated;
- second, to reuse material for the purpose for which it was originally intended or to recycle material that cannot be reused;
- third, to recover, in an environmentally acceptable manner, energy from solid waste that cannot be economically and technically reused or recycled; and
- fourth, to dispose of solid waste that is not being reused, recycled or from which energy is not being recovered, by land burial or other methods approved by the Department (from New York State Environmental Conservation Law (ECL) 27-0106.1).

NYSDEC recently (December 2010) issued a statewide SWMP, *Beyond Waste: A Sustainable Materials Management Strategy for New York*. It defines broad statewide objectives for waste reduction, reuse and recycling, waste-to-energy, landfilling, and special issues consistent with the State Solid Waste Management Policy. The quantitative goal of *Beyond Waste* is to reduce the amount of waste New Yorkers dispose by preventing waste generation and increasing reuse, recycling, composting and other organic material recycling methods. Based on the data gathered and compiled for this LSWMP, the County has identified program strategies to work toward during a ten-year LSWMP planning period that is consistent with the State Solid Waste Management Policy. The strategies set forth below were identified with the goal of further enhancing the reuse and recycling of materials generated in Cortland County and providing for the means to recover energy in an environmentally sound manner from solid waste that has not been reused or recycled. Each strategy and

corresponding goal will be evaluated for feasibility and cost effectiveness on an individual basis according to the implementation schedule included in Chapter 7.0.

Program Strategy #1 – Evaluate Regional Solid Waste Partnership Opportunity

Cortland County, Onondaga County and the Onondaga County Resource Recovery Agency (OCCRA) have proposed a regional solid waste partnership to help manage the solid waste streams within the two counties. The proposed Cortland-Onondaga Regional Solid Waste Partnership (partnership) includes the following key components:

- Cortland County will enhance its waste reduction, reuse and recycling opportunities by gaining access to OCRRA programs such as (but not limited to) public outreach programs that promote waste reduction and recycling, yard and food waste composting, C&D debris recycling, and opportunities to use a year round household hazardous waste facility and/or expand the number of annual household hazardous waste collection events in Cortland County.
- Cortland County will generate electricity from its non-recycled MSW by delivering it via a new transfer station to OCRRA's environmentally sound Waste-to-Energy (WTE) facility.
- OCRRA will haul all of the non-hazardous ash residue generated at its Waste-to-Energy (WTE) facility to the Cortland County Landfill for disposal.
- Fuel usage and greenhouse gas emissions associated with trucking waste materials between Cortland County and OCRRA's WTE facility will be minimized by back hauling Cortland County's MSW to the WTE facility in the same trucks that deliver ash residue to the Cortland County Landfill.

This Program Strategy is a key determining factor in proceeding with future program strategies listed below; therefore, an evaluation of whether to move forward with the partnership is scheduled to be completed during the first year of the planning period.

The other Program Strategies associated with this LSWMP include the following:

Program Strategy #2 – Increase Recycling at County Facilities

Goal: Increase recyclables recovery at County owned and/or operated facilities.

Program Strategy #3 – Construction & Demolition Debris Recycling

Goal: Increase diversion of C&D or remodeling debris from the landfill.

Program Strategy #4 – Product Reuse Collection and Distribution Programs

Goal: Promote product reuse to increase waste diversion.

Program Strategy #5 – Product Stewardship Framework

Goal: Shift government funded waste diversion to one that relies on product stewardship.

Program Strategy #6 – Household Hazardous Waste Collection

Goal: Increase collection rates and divert more HHW materials from disposal and wastewater facilities.

Program Strategy #7 – Expand Mercury Collection Program

Goal: Provide residents with a convenient and safe method of disposal of mercury containing devices.

Program Strategy #8 – Expand Mandatory E-Waste Recycling Program

Goal: Educate residents of proper E-waste recycling programs.

Program Strategy #9 – Pharmaceutical Education Program

Goal: Educate residents of proper Pharmaceutical management to reduce the instances of improper disposal or flushing.

Program Strategy #10 – Support Yard Waste Composting Efforts

Goal: Encourage yard waste composting to increase diversion of yard waste from the solid waste disposal stream.

Program Strategy #11 – Promote Backyard Composting through Education and Training Programs

Goal: Encourage backyard composting to divert more food and yard waste from the solid waste disposal stream.

Program Strategy #12 – Management of Organics

Goal: Increase diversion of food and yard waste requiring disposal.

Program Strategy #13 – Monitor Management of Animal Mortalities

Goal: Monitor success of Cornell Waste Management Institute (CWMI) and New York State Department of Environmental Conservation (NYSDEC) research methods for the management and composting of animal carcasses.

Program Strategy #14 – Public Outreach and Education

Goal: Educate residents to increase recycling and waste diversion and reduce improper disposal of materials

Program Strategy #15 – Improving Solid Waste and Recycling Data Compilation

Goal: To obtain a more complete data set to assist with the implementation of the program strategies.

Program Strategy #16 – Evaluate the Advantages and Disadvantages of Flow Control

Goal: To determine if adopting a flow control policy would be beneficial to Cortland County.

Chapter 1 - Planning Unit Description

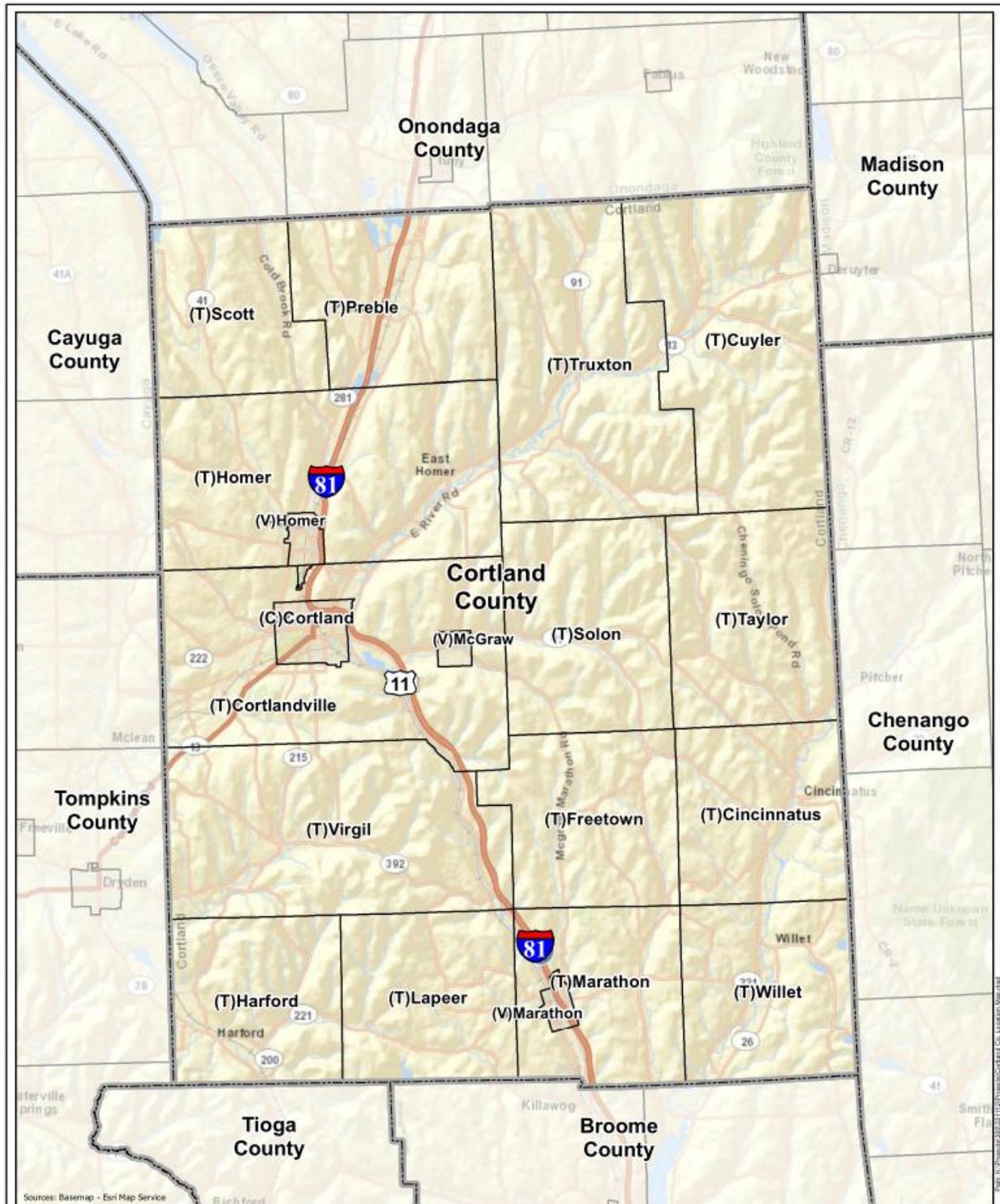
1.1 Size, Location, Population

1.1.1 Physical Setting

The gateway to the scenic Finger Lakes region, Cortland County is a small rural county situated between Syracuse, Ithaca and Binghamton. As shown on Figure 1-1, Cortland County is bordered by Onondaga County to the north; Madison County to the northeast; Chenango County to the east; Broome and Tioga Counties to the south; and Tompkins and Cayuga Counties to the west. Cortland County has a land area of 502 square miles with a population density of 98 per square mile (sq mi). The County is approximately 98% rural in character, with approximately 2% characterized as suburban in character. The relatively small City of Cortland is the only city located within the County¹. Cortland County is located within an hour automobile drive from the urban cities of Syracuse, Utica, and Binghamton.

¹ U.S. Census, 2010.

Figure 1- 1 Municipalities in Cortland County



1.1.2 Neighboring Planning Units

Table 1-1 lists the neighboring planning units along with possible opportunities for inter-jurisdictional programs or issues that may impact implementation of the County's LSWMP and achievement of its goals. Further evaluation of these opportunities or potential impacts will be discussed in Chapter 6, and tasks will be included in the Implementation Schedule.

Table 1- 1 Potential Impacts or Opportunities with Neighbors That Could Affect LSWMP Implementations

Neighboring Planning Unit	Existing or Potential Inter-Jurisdiction Considerations/Impacts	Effects of Opportunities or Impacts to Implement the LSWMP
Onondaga County ²	Home of Onondaga County Resource Recovery Agency (OCRRA) and their municipal waste to energy (WTE) facility, Onondaga Resource Recovery Facility (RRF) operated under a lease agreement with Covanta. Has had a flow control law since 2003 but currently manages the flow of waste and recyclables through contracts with private haulers. Waste tipping fee and recyclables revenue provides financing for all program components. Approximately 95% of the MSW generated in this Planning Unit is treated through the WTE facility and the ash residue is disposed at an out of county landfill. Long-term solid waste management partnership opportunity.	Source of information and collaboration. Several OCRRA programs may be made available to Cortland County residents through potential Regional Solid Waste Partnership is further discussed in Chapter 6.
Madison County ³	Has flow control for solid waste and only accepts waste from Madison County residents and businesses. Owns and operates the Madison County Landfill with an annual permit limit of 61,000 tons/year. Also owns and operates three transfer stations that offer recyclables drop-off, yard waste composting, and brush chipping. Recyclable materials are processed at a dual stream MRF that is operated by the Madison County ARC and that is located on the County's landfill site. Private haulers are required to obtain a license from the County.	No known impacts on implementing the LSWMP.

² <https://ocrra.org/>

³ <http://www.madisoncountyrecycles.com/>

Neighboring Planning Unit	Existing or Potential Inter-Jurisdiction Considerations/Impacts	Effects of Opportunities or Impacts to Implement the LSWMP
Chenango County ⁴	No flow control. Owns and operates the Chenango County Landfill in the Town of Pharsalia, two (2) transfer stations, and three (3) small yard waste composting facilities. The landfill is permitted to accept 41,550 tons/year. All recyclables delivered to the transfer stations or landfill must be source separated by the residents or businesses into their individual recyclable components.	No known impacts on implementing the LSWMP.
Broome County ⁵	No flow control. Extensive recycling program available to residents and businesses. Owns and operates the Broome County Landfill with an annual permit limit of 232,000 tons/year, and a HHW facility that is open to Broome County and Tioga County residents. The County also operates a composting facility and two drop off sites for recyclables. Most, if not all, MSW from the County is disposed in the Broome County Landfill. Privately owned and operated recycling facilities are available in Broome County for use by local residents and businesses.	Potentially receives recyclables from Cortland County, which could decrease potential recycling revenue to Cortland County.
Tioga County ⁶	Tioga County offers a municipal collection service for recyclable materials to County residents. A privately owned and operated single stream recycling facility is located within County. A privately owned and operated transfer station in the Town of Barton is available for use by County waste generators. Residents may drop off their solid waste at the Tioga Waste Management Facility in Owego or contract with a private hauler for curbside pick-up. Most solid waste is reportedly disposed at the Chemung County Landfill by private haulers. HHW facility in Broome County is available to Tioga County residents.	Potentially receives recyclables from Cortland County, which could decrease potential recycling revenue to Cortland County.
Tompkins County ⁷	Tompkins County has entered in to a contract with a private hauling company to provide residential curbside collection of recyclable materials in all municipalities within the County. Residents may contract with private haulers for waste collection or they may drop off their waste at the Recycling and Solid Waste Center	Source of information for examples of funding, data collection and public outreach programs.

⁴ <http://www.co.chenango.ny.us/dpw/waste-management/>

⁵ <http://www.gobroomecounty.com/solidwaste>

⁶ <http://www.tiogacountyny.com/departments/public-works/solid-waste.html>

⁷ <http://recycletompkins.org/>

Neighboring Planning Unit	Existing or Potential Inter-Jurisdiction Considerations/Impacts	Effects of Opportunities or Impacts to Implement the LSWMP
	(RSWC). All solid waste set out for curbside collection must have a trash tag affixed to the bag or can. The County also charges a Solid Waste Annual Fee, based on a schedule of rates per residence and non-residence, to help pay for its solid waste management and recycling programs. Waste disposal takes place at privately operated disposal facilities located outside of Tompkins County. The RSWC only accepts waste from in county residents, businesses or haulers. County contracts with Cayuga Compost for organics management. The Division of Solid Waste in Tompkins County's Department of Public Works has 13 full time employees. Private haulers are required to be licensed and provide annual collection data reports.	
Cayuga County ⁸	City of Auburn operates a landfill with an annual permit limit of 96,000 tons/year. Cayuga County solid waste management is managed under the Planning and Economic Development department, which offers residents HHW collection events and e-waste collection events. There does not appear to be an organized recycling program county-wide. The City of Auburn collects recyclables and waste for the City residents.	City of Auburn Landfill has historically received waste from Cortland County from private haulers.

1.1.3 Population and Number of Households in the Local Planning Unit^{9,10}

According to the U.S. Census data for 2010, Cortland County's population is approximately 49,336, and is distributed over 1 City, 3 villages and 15 towns, with 17,915 households. Cortland County's population increased from 48,963 in 1990 to 49,336 persons in 2010, an increase of 400 persons. Cortland County is anticipated to become less populated through the next 30 years, according to Cornell University's Program of Applied Demographics; the projections estimate the population of Cortland County to be 46,184 by the year 2040, a decrease of 3,152 persons.

⁸ <http://www.cayugacounty.us/DoingBusiness/PlanningandEconomicDevelopment/SolidWasteManagement.aspx>

⁹ U.S. Census, 2010.

¹⁰ Cornell University's Program of Applied Demographics, 2010.

Planning Unit Members

1.1.4 Planning Unit Membership and Impacts on Implementing LSWMP

Table 1-2 includes a list of the planning unit members as well as conditions that pose a significant impact to implementing the LSWMP and achievement of the LSWMP goals. Currently, the members are not involved in preparing or implementing the plan; however the members could play a significant role in the gathering of information and numbers of materials collected and recycled within the towns, at various businesses, schools, and other recycling facilities. The significant impacts are discussed further in Section 1.4 of this chapter.

Table 1- 2 - Planning Unit Membership¹¹

Municipal Member	Population Density - Character	Role in LSWMP Preparation	Role in LSWMP Implementation	Unique Conditions or Issues ¹²
Towns				
Cincinnatus, Town	41.4/sq mi rural	None	Data collection, network with schools and education outreach program	Private haulers contract directly with residents for waste and recycling program.
Cortlandville, Town	170/sq mi rural	None	Same as above	Private haulers contract directly with residents for waste and recycling program.
Cuyler, Town	22.5/sq mi rural	None	Same as above	Private haulers contract directly with residents for waste and recycling program.
Freetown, Town	29.6/sq mi rural	None	Same as above	Private haulers contract directly with residents for waste program. Recycling transfer station available to residents.
Harford, Town	39.4/sq mi rural	None	Same as above	Private haulers contract directly with residents for waste and recycling program.
Homer, Town	126/sq mi rural	None	Same as above	Private haulers contract directly with residents for waste and recycling program.
Lapeer, Town	30.4/sq mi rural	None	Same as above	Private haulers contract directly with residents for waste and recycling program.
Marathon,	78.8/sq mi	None	Same as above	Private haulers contract directly with

¹¹ Cortland County, New York. (2013, September 21). In *Wikipedia, The Free Encyclopedia*. Retrieved 14:35, October 1, 2013, from http://en.wikipedia.org/w/index.php?title=Cortland_County,_New_York&oldid=573874998

¹² Further evaluation will be completed as part of Program Strategy #15 discussed in Chapter 6.

Municipal Member	Population Density - Character	Role in LSWMP Preparation	Role in LSWMP Implementation	Unique Conditions or Issues¹²
Town	rural			residents for waste and recycling program.
Preble, Town ¹³	51.6/sq mi rural	None	Same as above	Private haulers contract directly with residents for waste and recycling program. Agriculture, small businesses, construction/carpentry contractors, restaurants, light industry.
Scott, Town	52.7/sq mi rural	None	Same as above	Private haulers contract directly with residents for waste and recycling program.
Solon, Town	36.3/sq mi rural	None	Same as above	Private haulers contract directly with residents for waste and recycling program.
Taylor, Town	17.4/sq mi rural	None	Same as above	Private haulers contract directly with residents for waste and recycling program.
Truxton, Town	25.3/sq mi rural	None	Same as above	Transfer station and private haulers. Labrador Mountain ski center.
Virgil, Town ¹⁴	50.8/sq mi rural	None	Same as above	Transfer station and private haulers. Small businesses, Greek Peak Resort, raceway, private recycling & trash hauler. Wastewater Treatment Plant.
Willet, Town	40.4/sq mi rural	None	Same as above	Private haulers contract directly with residents for waste and recycling program.
Villages, City				
Homer, Village ¹⁵	1,935/sq mi suburban	None	Same as above	Municipal curbside waste and recycling program. Private hauler contracts with the village. Special events: Various events on the Village Green, Sock Hop with Vintage Car Show, Farmers' Market, Firemen Field Days, WinterFest. Small retail businesses and restaurants. Annual Amnesty Day for Village of Homer residents. Village compost site available to village residents. City of Cortland and Village of Homer share a tub grinder for yard waste management, which provides residents with compost through a giveback program.

¹³ <http://www.preble-ny.org>

¹⁴ <http://www.virgilny.com>

¹⁵ <http://www.homerny.org/>

Municipal Member	Population Density - Character	Role in LSWMP Preparation	Role in LSWMP Implementation	Unique Conditions or Issues ¹²
Marathon, Village ¹⁶	835/sq mi suburban	None	Same as above	Municipal curbside waste and recycling program. Private hauler contracts with the village. Businesses: Marathon Boat Group, a major manufacturer of aluminum canoes, and Kurtz Welding Inc., which manufactures bodies for fire trucks and petroleum tankers. Six active churches, 1,200 students at the local school. Wastewater treatment facility that disposes of biosolids at the Cortland County Landfill.
McGraw, Village	1,053/sq mi suburban	None	Same as above	Private haulers contract directly with residents for waste and recycling program. Small businesses, school, fire department.
Cortland – City ¹⁷	4,871/sq mi suburban	None	Same as above	City-wide curbside waste and recycling collection contracted by a private hauler through the DPW. Wastewater treatment plant (Leroy R. Summerson WWTF – has anaerobic digestion for biosolids management with biosolids disposal at the Cortland County Landfill as necessary), 3 schools, library, college, large industries, most populated area in Cortland County, with apartment housing, requiring more waste/recycling pickups. BOCES Campus, special events. City of Cortland and Village of Homer share a tub grinder for yard waste management, which provides residents with compost through a giveback program.

¹⁶ <http://www.nypa.gov/partners/marathon.htm>

¹⁷ <http://www.cortland.org/city/dpw/index.html>

Seasonal Variations and Unique Circumstances

There are several seasonal variations which occur within Cortland County which could affect implementation of the LSWMP and achievement of its goals.

- Spring is a large cleanup time and influx of brush, downed trees, lawn debris, and scrap metal from residences. The impacts and effects of these wastes are discussed in Section 1.4.1.
- Summer brings the end of the school year, and brings with it cleanout wastes from lockers, equipment left behind, and wastes from any remodels or construction projects at schools and colleges, as well as agricultural clean ups. The impacts and effects of these wastes are discussed in Section 1.4.2.
- There are also many large events held within the County during the year, including Homer Winterfest, Great Cortland Pumpkinfest, and Cortland County Junior Fair. The impacts and effects of these events are discussed in Section 1.4.4.
- Summer also brings an increase of yard wastes, agricultural wastes and cleanups, as well as garden wastes which could all be composted. The impacts and effects of these wastes are discussed in Section 1.4.1.
- Waste water treatment plants bring their sludges to the County Landfill throughout the year, which requires special handling at the landfill.
- Fall brings the return of students to school and college. With this brings new electronics, books, etc. This also brings a larger amount of food wastes. All school and college wastes are managed by private haulers and no generation or recovery data is available. The impacts and effects of these wastes are discussed in Section 1.4.2.
- There are public libraries within the County. Potential recycling options for waste/recyclable materials generated at libraries are discussed in Section 1.4.3.
- Winter is the slower season for wastes being brought to the landfill. This is due in part to the reduction of wastes from large scale events.
- There are a number of large manufacturers, small manufacturers, businesses, nursing homes, jails and other institutional facilities which manage their own waste and recyclables. Recycling activities and data for these facilities are unknown. Recycling programs and data collection will be discussed in the Solid Waste Management Program Strategies in Chapter 6. Tasks will be included in the Implementation Schedule to evaluate and implement new or improved recycling programs, including packaging and organics recovery, and to collect data.

Overview of Solid Waste Generation Sources within Cortland County

Today, Cortland County is noted for the production of Computer Numeric Control (CNC) milling machines; hospitality supplies; medical instruments and components; textiles; electrical components; plastic consumer goods; components for NASA and a variety of other goods and services. A new yogurt and cheese plant and agritourism center is moving forward on an approximately 113 acre site in Cortlandville.

Agri-business flourishes yet, consistent with the pattern elsewhere in New York State, the number of farms has declined while farm size and yield have increased. Continued growth in the service and light industry sectors is contributing to the growing strength of the Central New York region.¹⁸

Cornell University, Syracuse University, State University of New York Binghamton and Ithaca College are all within an easy 45 minute drive of the City of Cortland. The State University of New York College at Cortland is located in the County.

1.1.5 Spring and Summer Residential and Agricultural Wastes

Table 1-3 lists seasonal residential and agricultural variations in waste, along with conditions and impacts that affect implementation of the LSWMP and achievement of its goals.

Table 1- 3 - Impacts of Residential and Agricultural Wastes within the Planning Unit^a

Source of Wastes	Unique Circumstance or Situation	Quantity/Quality Impacts	Impacts On LSWMP
Spring Residential Cleanup	Spring Cleanup	Seasonal influx of brush, downed trees, lawn debris, and scrap metal	Possible composting of organics; will need more data on types of material, and amounts to be composted.
Summer Growing Season	Seasonal	Yard and garden wastes. Agricultural organics and agricultural plastics wastes and cleanups, which have cleanliness and bulky issues for recycling	Possible composting of organics; will need more data on types of material, and amounts to be composted.

^aInformation and data in table to be revised throughout the Planning Period as more details become available.

¹⁸ <http://www.cortland.org/community/history/history7.htm>

The possibility of recycling organics, such as by composting or anaerobic digestion, will be discussed in the Solid Waste Management Program Strategies in Chapter 6, and tasks will be included in the Implementation Schedule as appropriate.

1.1.6 Schools

Table 1-4 lists the schools in the planning unit, along with conditions and impacts that affect implementation of the LSWMP and achievement of its goals.

Table 1- 4 - Impacts of Schools Within The Planning Unit^a

Source of Wastes	Unique Situation or Circumstances	Quantity/Quality Impacts	Impacts On LSWMP
State University of New York at Cortland	Summer cleanout/ construction. Seasonal food wastes from cafeterias. Wastes from events held at the schools. Private hauling of school wastes.	Locker/dorm content, equipment left behind, C&D need recycling plan implemented. Influx of food wastes. Paper, books and electronics recycling.	Possible organics composting. Lack of data available. Further evaluation needed.
Tompkins Cortland Community College Extension Campus	Same as above	Same as above	Same as above
Onondaga-Cortland-Madison BOCES - McEvoy Campus - Cortland Alternative School	Same as above	Same as above	Same as above
Cincinnatus CSD	Same as above	Same as above	Same as above.
Cortland CSD (including Cortland Enlarged City School District)	Same as above	Same as above	Same as above
Homer CSD	Same as above and participates in an organics composting program with a local farmer	Same as above	Same as above
Marathon CSD	Same as above	Same as above	Same as above
McGraw CSD	Same as above	Same as above	Same as above

^aInformation and data in table to be revised throughout the Planning Period as more details become available.

All the schools within the planning unit generate various amounts and types of waste and recyclable materials, but specific details are unknown. Typically these schools contract with private haulers to manage the wastes and recyclables. Given that private haulers manage these materials, the types and quantities are not reported individually. Steps to improve the reporting of data to

the planning unit will be discussed in the Solid Waste Management Program Strategies in Chapter 6. Tasks will be included in the Implementation Schedule to evaluate and implement new or improved recycling programs, including organics recovery, and to collect data.

1.1.7 Libraries

Table 1-5 lists the libraries in the planning unit, along with conditions and impacts that affect implementation of the LSWMP and achievement of its goals.

Table 1- 5 - Impacts of Libraries Within the Planning Unit^a

Source of Wastes	Unique Situation or Circumstances	Quantity/Quality Impacts	Impacts On LSWMP
Phillips Free Library Village of Homer	Member of Finger Lakes Library System, which connects public libraries in Cayuga, Cortland, Seneca, Tioga, and Tompkins Counties. Periodic cleanouts. Private hauling of all library wastes.	Large amounts of books and magazines. Data unavailable.	Opportunity for Finger Lakes Library System to coordinate a recycling management program among libraries. Further evaluation needed.
Kellogg Free Library Town of Cincinnatus	Same as above.	Same as above.	Same as above.
Peck Memorial Library Village of Marathon	Same as above.	Same as above.	Same as above.
Lamont Memorial Library City of Cortland	Same as above.	Same as above.	Same as above.
Cortland Free Library City of Cortland	Same as above.	Same as above.	Same as above.

^aInformation and data in table to be revised throughout the Planning Period as more details become available.

It is not known what these Libraries are now doing with their wastes that they are generating. Possible recycling programs and data collection will be discussed in the Solid Waste Management Program Strategies in Chapter 6. This could include recycling programs for cardboard, out-dated books and periodicals, and for materials generated from any events held at the library facilities. Tasks will be included in the Implementation Schedule to evaluate and implement new or improved recycling programs, and to collect data, as appropriate.

1.1.8 Jails, Institutions, Nursing Homes

Table 1-6 lists the jails, institutions and nursing homes in the planning unit, along with conditions and impacts that affect implementation of the LSWMP and achievement of its goals.

Table 1- 6 - Impacts of Jails, Institutions, Nursing Homes Within The County^a

Source of Wastes	Facility Type/Unique Situation or Circumstances	Quantity/Quality Impacts	Impacts On LSWMP
Cortland Regional Medical Center City of Cortland	Periodic cleanouts. Food wastes. Medical waste. No data available.	Unknown quantity of MSW and recyclable materials. Potential for high quantity of medical waste.	Needs further evaluation related to existing disposal and recycling activities. Need data. Possible compost of food wastes
Cortland County Correctional Facility City of Cortland	Correctional facility. 60 bed facility. Food wastes.	Unknown. Needs further evaluation.	Same as above
Elizabeth Brewster House, Inc. Village of Homer	Adult home. Periodic cleanouts. Possible large quantities of food wastes. No data available.	Unknown. Needs further evaluation.	Need data. Need for education and outreach.
Central NY DDSO	Same as above.	Same as above	Same as above
Franziska Racker Centers	Same as above.	Same as above	Same as above
Green Briar Village of Homer	Same as above.	Same as above	Same as above
Walden Place Assisted Living Community City of Cortland	Assisted living. Periodic cleanouts. Possible large quantities of food wastes. No data available.	Same as above	Same as above

^aInformation and data in table to be revised throughout the Planning Period as more details become available.

It is not known what these institutions are doing with their wastes currently. Data needs to be collected as to what types of waste/recyclable materials they generate and where they are disposing/recycling of said materials. It also needs to be determined if they are able to compost any of their wastes such as food wastes. Possible recycling programs and data collection will be discussed further in Chapter 6.

1.1.9 Special Events within the Planning Unit

Table 1-7 lists the special events in the planning unit, along with conditions and impacts that affect implementation of the LSWMP and achievement of its goals.

Table 1- 7 - Impacts of Special Events Within The Planning Unit¹⁹

Sources of Wastes	Unique Situation or Circumstances	Quantity/Quality Impacts	Impacts On LSWMP
Cincinnatus Corn Festival	Many vendors with packaging/food waste and recycling of drink bottles.	Unknown what is done with the wastes generated at this event and what is recycled or total amounts generated.	There are many waste/recyclable materials that could be captured from these events. Possibility of composting organics and recycling of packaging. Data needed.
Homer Winterfest	Same as above.	Same as above.	Same as above.
Central New York Maple Festival	Same as above.	Same as above.	Same as above.
Chill-A-Bration	Same as above.	Same as above.	Same as above.
Water Festival	Same as above.	Same as above.	Same as above.
Bluegrass on the Green	Same as above.	Same as above.	Same as above.
St. Anthony's Festival	Same as above.	Same as above.	Same as above.
Homer Summer Concerts on the Green	Same as above.	Same as above.	Same as above.
Concerts in Court House Park	Same as above.	Same as above.	Same as above.
Holiday in Homer	Same as above.	Same as above.	Same as above.
Take of Downtown and Sidewalk Festival	Same as above.	Same as above.	Same as above.
Cortland County Junior Fair	Same as above.	Same as above.	Same as above.
Annual Bluegrass Ramble	Same as above.	Same as above.	Same as above.
Cortland County Chautauqua	Same as above.	Same as above.	Same as above.
Cortland Arts and Wine Festival	Same as above.	Same as above.	Same as above.
Cortland Celtic Festival	Same as above.	Same as above.	Same as above.
National Brockway Truck Show	Same as above.	Same as above.	Same as above.

¹⁹ <http://www.experiencecortland.com/>

Sources of Wastes	Unique Situation or Circumstances	Quantity/Quality Impacts	Impacts On LSWMP
1890 Union Fair	Same as above.	Same as above.	Same as above.
Cortland Antique Auto Show	Same as above.	Same as above.	Same as above.
NYS Draft Horse Show & Sale	Same as above.	Same as above.	Same as above.
The Great Cortland Pumpkinfest	Same as above.	Same as above.	Same as above.
Southern Tier Antique Truck Show	Same as above.	Same as above.	Same as above.

^aInformation and data in table to be revised throughout the Planning Period as more details become available.

The potential of capturing recycling and wastes from special events could be increased dramatically. It is unknown at this time if any wastes are being captured or recycled at these events. It needs to be investigated as to what events are held, when and where they are held, what types of waste/recyclable materials are being generated, and how they are currently being managed. Possible recycling programs and data collection will be discussed in the Solid Waste Management Program Strategies in Chapter 6. Tasks will be included in the Implementation Schedule to evaluate and implement new or improved recycling programs, including packaging and organics recovery, and to collect data.

Membership Changes

The membership of the Planning Unit has not changed since its inception. The same towns, villages, and one city still remain a part of this Planning Unit. It is not anticipated that there will be any changes of municipalities within the Planning Unit.

There have been a few changes in schools, and colleges being introduced to the planning unit. There has also been a reduction in the number of operating farms within the unit since the last LSWMP. There has been some commercial growth, as well as some commercial businesses have left the planning unit, resulting in a difference in the types of waste received. The impacts of schools and colleges and commercial establishments and related LSWMP tasks are addressed in Section 1.4.

The retail businesses have increased within the planning unit. There are now many larger retail businesses located in the Cortland area, where there were only small retail shops in the original LSWMP. This increases the amount of packaging wastes generated as well as organics, or food waste in the case of

more grocery stores. It is presently assumed that the large majority of these retail businesses recycle their own cardboard which is received in shipment of their products. This will need to be evaluated further to obtain current data. The impacts of retail businesses and related LSWMP tasks are addressed in Section 1.4.

Table 1-8 summarizes the changes to the planning unit since the last LSWMP and the impacts to be considered for this plan.

Table 1- 8 - Impacts of Planning Unit Changes on LSWMP

Planning Unit Changes	Quantitative and Qualitative Impacts	Impacts on LSWMP
Fewer Operating Farms	Less organics, less agricultural plastics	Less organics for possible composting
Large Retail businesses	More packaging materials	More recycling data needs to be collected
Fewer Manufacturing Businesses	Less wastes from manufacturing	Less waste generated, less materials available for recycling
More Food Manufacturers	More Food Wastes, More sludges	Increased food waste handling and management requirements, possibility of organics to be composted
More Sewer Treatment Plants	More sludges	Increased sludge management requirements, possibility of anaerobic digestion or composting of biosolids

There have been quite a few changes in the manufacturing businesses in the Planning Unit since the original Plan. Several businesses have left the area, and some have started up or expanded. They are very diverse in the type of manufacturing that is occurring. There is a data collection need to determine the types and amounts of waste/recyclable materials generated and how such materials are currently managed, as a precursor to developing potentially appropriate waste diversion and recycling initiatives during the LSWMP planning period at these businesses.

Chapter 2 - Solid Waste and Recyclables Quantities and Types

This chapter provides information on the waste streams generated in Cortland County.

2.1 Waste Types

Cortland County's solid waste stream has five primary components: municipal solid waste (MSW), non-hazardous industrial waste, construction and demolition debris, municipal sewage treatment plant sludge/biosolids, and processed scrap metal (e.g., scrap vehicles) waste.

For the purposes of this study, **MSW** consists of waste generated in homes, businesses, institutions, and the commercial portion of waste discarded by industries. The residential component includes, but is not limited to, newspapers and magazines, glass, metal, plastic containers, food waste, household goods including bulky items like furniture and appliances, textiles, and yard trimmings. The commercial waste stream tends to contain higher percentages of office paper, corrugated cardboard, and scrap metals. Commercial waste is the non-hazardous waste generated by businesses such as restaurants, retail stores, schools and hospitals, professional office, and manufacturing facilities.

As a regulatory requirement, each solid waste management facility is required to submit annual reports to the DEC. These annual reports provide information with regard to the quantities of materials managed and often identify the geographic locations where the waste materials were generated. The data from the DEC annual reports is readily available and generally reliable. It can also be assumed that the materials collected and processed at the Cortland County material recovery facility and other similar recycling facilities in the County are being separated from the household, business, institutional and commercial wastes classified as MSW, and are considered to be another component of that waste stream. Due to the fact that these types of recyclables handling facilities must also compile annual reports to the DEC, this data is also relatively easy to gather. Yard waste is a component of the MSW waste stream that is difficult to quantify. Implementation of a plan to collect data and estimate MSW by material type, including estimating residential yard waste generation and recovery is further discussed in Chapter 6 (Program Strategy #15).

Non-hazardous industrial waste is typically generated by manufacturing facilities as a result of an industrial process and is made up of materials such as sludge, ash, and dust. According to annual reports submitted to DEC, some portion of these materials are disposed of in local landfills; however, the homogeneous nature and relatively large quantity of these wastes typically available can also make them useful as feedstocks for other processes or result in unique management methods. Therefore, only partial data

for the generation of these materials within the county is currently available. Implementation of a plan to collect data and estimate MSW by material type, including estimating industrial waste generation and recovery, considering these circumstances is further discussed in Chapter 6 (Program Strategy #15).

Construction and demolition debris (C&D) is generated by the residential, commercial, industrial, and institutional sectors and typically consists of wood, masonry, soil, land clearing debris, plumbing fixtures and other construction related items. Many of the upstate New York landfills report C&D as a separate disposal stream, and therefore, the quantity disposed of from Cortland County residents can be identified from those landfill annual reports. However, many of these materials can be recycled and reused (e.g., clean fill material, mulch, or recycled aggregate). Data from these types of operations and uses has been difficult to obtain. Implementation of a plan to collect data and estimate MSW by material type, including estimating C&D generation and recovery, considering these circumstances is further discussed in Chapter 6 (Program Strategy #15).

Municipal treatment plants generate sludge/biosolids that require special handling and management. Much of this material is landfilled and the data is readily available from the annual reports to DEC.

Processed scrap metals are typically generated by commercial or industrial sectors, but in potentially large quantities which makes it worth monitoring. Data from these types of operations and uses is difficult to obtain. Implementation of a plan to collect data and estimate MSW by material type, including estimating scrap metals generation and recovery, considering these circumstances is further discussed in Chapter 6 (Program Strategy #15).

Availability of Generation and Recovery Estimates

2.1.1 Data Sources and Methodology

As discussed above, much of the following waste generation estimates were derived from available reports provided to the DEC by permitted landfills, sewage treatment plants, and recycling centers. Limitations associated with the data are as follows and will be considered when evaluating and implementing new or improved data collection efforts as described in Program Strategy #15.

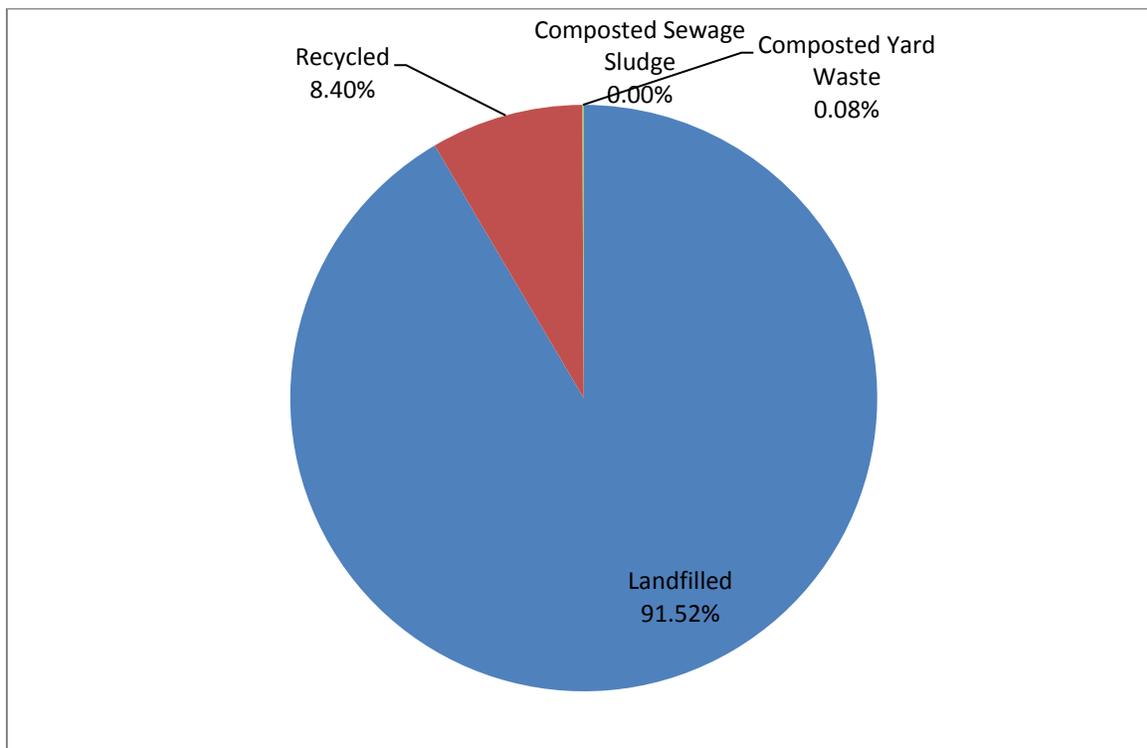
- **Incomplete data:** Data on the public sector solid waste management is often incomplete.
- **Inconsistent data:** Where data exists, different methods have been used from year to year and facility to facility to collect and categorize it.

- **Unavailable data:** Data on privately managed waste is generally unavailable.

2.1.2 Estimation of Total Waste Generation in Cortland County

In 2012, based on annual reports submitted to DEC, Cortland County residents and businesses generated approximately 63,386 tons of waste (including potentially recyclable materials) based on available data. Figure 2-1 shows the overall method of management for the waste. The fraction for each waste management sector was determined by analyzing annual tonnage reports for those facilities that reported accepting waste from Cortland County. Based on the information available to interpret, the majority of the waste is landfilled (58,010 tons or 91.5 percent) while the remainder is recycled (5,327 tons or 8.4 percent) or composted (49 tons or 0.1 percent).

Figure 2- 1 - Estimated Waste Management Methods in Cortland County in 2012



Source: DEC, Facility Annual Reports, 2012; and DEC, Biosolids Management in New York State, 2011 and Self Reporting

Cortland County has three municipal sewage treatment plants (STPs) or wastewater treatment plants (WWTPs). Table 2-1 shows the method of sludge management utilized.

Table 2- 1 - Municipal Sewage Sludge Generation and Management Summary

Treatment Plant	Treatment Method	Dewatering Device	Dry Tons/Year	Use/Disposal Method	Location
LeRoy R Summerson WWTF (City of Cortland)	Anaerobic Digestion	Belt Filter Press	2811	Landfill	Cortland County Landfill
Marathon (V) WWTF	Anaerobic Digestion	Drying Beds	44	Landfill	Cortland County Landfill
Virgil (T) SD1 WWTP	Lime Stabilization	None	---	Landfill	Cortland County Landfill
Total			2,855		
Total Sewage Sludge Composted On-site			0		
Total Sewage Sludge Landfilled			2,855		
Total Municipal Sewage Sludge Generated			2,855		

Source: DEC, *Biosolids Management in New York State, 2011*; DEC Annual Facility Reports, 2012

Table 2-2 provides further detail on the types of waste managed through each method; however, a complete breakdown of waste generated as a whole for Cortland County is not available due to the lack of comprehensive data available at this time. Tasks are included in the Implementation Schedule to investigate the implementation of a survey and reporting program as well as any other programs that might be useful and necessary to collect generation and recovery data in general accordance with this format. Table 2-2 provides a waste generation baseline, which will be expanded as data becomes more readily available and can be incorporated into future waste generation analysis.

Table 2- 2 - Estimation of Total 2012 Waste Tonnage By Facility

	Amount (Tons)	Percentage of Tons Landfilled	% of Total Generation
Landfilled ¹			
<i>Cortland County Landfill, Seneca Meadows Landfill, Ontario County Landfill, High Acres Landfill, City of Auburn Landfill, Sunstream Corporation, and Transferred thru Superior Disposal Transfer Station</i>			
MSW	26,410	45.5	41.7
Construction and Demolition Debris	28,092	48.4	44.3
Sewage Sludge	2,855	4.9	4.5
Industrial	652	1.1	1.0
Construction and Demolition Debris Alternative Daily Cover/Beneficial Use Determination Material	0	0.0	0.0
Total	58,010	100.0	91.5
		Percentage of Tons Diverted	
Diverted			
Composted Sewage Sludge ²	0	0.0	0.0
Composted Yard Waste	49	0.9	0.1
Recovered Food Scraps	0	0.0	0.0
Recycled ³	5,327	99.1	8.4
Processed Construction & Demolition Material	0	0.0	0.0
Total	5,376	100.0	8.5
Total Waste Generation	63,386		

1. The NYSDEC 2012 Facility Annual Reports provided the tonnages landfilled at the various landfills.
2. The NYSDEC report, *Biosolids Management in New York State, 2011* provided the most recent data for STPs. Refer to Table 2-1.
3. The NYSDEC 2012 Recyclables Handling and Recovery Facility Reports provided the tonnages recycled at the various recovery facilities. The following recovery facilities received materials from Cortland County: Cortland County MRF, Leach's Transfer Station, Superior Disposal Transfer Station, Syracuse MRF, and non-program/private recycling entities.
4. Shaded categories are considered to be part of the MSW category, and will be utilized in the MSW composition analysis and projections (31,786 tons) in Table 2-3.

Estimation of Potential MSW Recovery

As previously discussed, an incomplete set of disposal and recovery data is available for the County to compile and review; therefore, with the assistance of the DEC's waste composition and recovery projection tool, the following section provides Cortland County with an estimated **MSW** waste composition for future planning purposes. The complete tables are provided in Appendix A. **MSW** composition includes residential, commercial and institutional waste generators; consequently, for the purposes of this analysis, we have excluded the following from the **MSW** composition estimates: separately managed C&D debris, several organics streams (biosolids, septage, agricultural materials, etc.), industrial waste, medical and biohazardous materials, and scrap metal managed outside of the MSW management structures. Additionally, the quantities of containers (i.e., aluminum, glass and PET) collected as part of the Recoverable Container Act (RCA) are typically not reported to databases that are available to individual counties. With the DEC's assistance, the table below provides some assumptions as to the quantity of containers recovered as part of RCA in 2012.²⁰

The following table provides an estimate based on the total tons of **MSW** generated in Table 2-2 within the County that could be recovered or diverted from a waste disposal location if the appropriate programs were in place.

²⁰ According to 2010 RCA data from the DEC, 59% of deposit containers are recovered. Of the containers, 80% of Aluminum containers are deposits, 50% of glass containers are deposits, and 45% of PET containers are deposits.

Table 2- 3 - Estimated MSW Recoverable Materials in Cortland County²¹

Material	Estimated MSW Tons Generated (2012)	Estimated % of Total Tons Generated (2012)	Estimate of Actual MSW Tons Diverted (2012)	% of Each Material Diverted (2012)
Newspaper	1,211	3.81%	494	40.78%
Corrugated Cardboard	3,074	9.67%	1,444	46.97%
Other Recyclable Paper				
Paperboard	736	2.32%	244	33.12%
Office Paper	657	2.07%	258	39.27%
Junk Mail	647	2.03%	238	36.79%
Other Commercial Printing	621	1.95%	258	41.61%
Magazines	322	1.01%	133	41.24%
Books	132	0.42%	76	57.26%
Bags	119	0.37%	61	51.10%
Phone Books	95	0.30%	70	73.71%
Poly-Coated	77	0.24%	1	1.63%
Other Recyclable Paper (Total)	3,406	10.72%	1,339	39.31%
Other Compostable Paper	2,159	6.79%	0	0.00%
Total Paper	9,850	30.99%	3,277	33.26%
Ferrous/Aluminum Containers		0.00%		
Ferrous Containers	480	1.51%	130	27.16%
Aluminum Containers	182	0.57%	86	47.20%
Ferrous/Aluminum Containers (Total)	662	2.08%	216	32.66%
Other Ferrous Metals	1,680	5.29%	964	57.36%
Other Non-Ferrous Metals				
Other aluminum	77	0.24%	0	0.41%
Automotive batteries	214	0.67%	0	0.00%
Other non-aluminum	132	0.41%	0	0.00%
Other Non-Ferrous Metals (Total)	422	1.33%	0	0.07%
Total Metals	2,764	8.70%	1,180	42.69%

²¹ MSW as quantified in this table excludes C&D debris, non-hazardous industrial wastes and sewage sludges.

Material	Estimated MSW Tons Generated (2012)	Estimated % of Total Tons Generated (2012)	Estimate of Actual MSW Tons Diverted (2012)	% of Each Material Diverted (2012)
PET Containers	309	0.97%	162	52.48%
HDPE Containers	282	0.89%	87	30.72%
Other Plastic (3-7) Containers	50	0.16%	30	58.56%
Film Plastic	1,838	5.78%	0	0.00%
Other Plastic				
Durables	998	3.14%	0	0.00%
Non-Durables	535	1.68%	0	0.00%
Packaging	405	1.27%	0	0.00%
Other Plastic (Total)	1,939	6.10%	0	0.00%
Total Plastics	4,418	13.90%	278	6.30%
Glass Containers	1,262	3.97%	964	76.34%
Other Glass	145	0.46%	0	0.00%
Total Glass	1,407	4.43%	964	68.48%
Food Scraps	4,124	12.97%	0	0.00%
Yard Trimmings	770	2.42%	49	6.42%
Total Organics	4,894	15.40%	49	1.01%
Clothing Footwear, Towels, Sheets	1,248	3.93%	0	0.00%
Carpet	433	1.36%	0	0.00%
Total Textiles	1,681	5.29%	0	0.00%
Total Wood	1,940	6.10%	0	0.00%
C&D Materials	2,461	7.74%	0	0.00%
Other Durables	576	1.81%	0	0.00%
Diapers	498	1.57%	0	0.00%
Electronics	428	1.35%	154	35.94%
Tires	571	1.80%	14	2.45%
HHW	111	0.35%	0	0.00%
Fines	188	0.59%	0	0.00%
Total Miscellaneous	4,832	15.20%	168	3.48%
Total	31,786	100.00%	5,916	18.61%

Source: DEC MSW Combined Composition Analysis and Projections; 2012 DEC Facility Annual Reports.

Based on the quantities of diverted materials that were reported to the DEC or estimated, Cortland County diverted approximately 5,916 tons of material (18.6 percent) from the MSW disposal stream in 2012. The table above indicates that 31,786²² tons of **MSW** materials are generated and available for diversion from residential, commercial and institutional generators. Not all the categories are populated for the 2012 actual recovery quantities due to the fact that not all categories are accounted for individually. Several materials identified above are collected and recovered at the recycling centers or other similar facilities in Cortland County; however, there are no mechanisms for gathering data for the individual materials at this time. Therefore, a program strategy (Program Strategy #15) has been added to evaluate and implement data collection efforts. Chapters 3 and 6 describe the existing systems for recovering these materials as well as possible future program strategies during this planning period to increase the County's diversion rate.

Estimation of Potential C&D Debris Recovery

Construction and demolition (C&D) debris can be assessed separately from MSW or industrial wastes. By utilizing the DEC's C&D composition and recovery projection tool, the following section provides Cortland County with an estimated C&D debris composition for future planning purposes. The complete tables are included in Appendix A. According to DEC, their analysis and the waste composition and recovery projection tool considers the variations in the C&D waste stream resulting from the construction, remodeling, repair and demolition of utilities, structures and roads and includes land clearing debris from both the building and infrastructure generating sectors. Variations within the building sector from new construction, renovation and demolition activities are considered from both the residential and non-residential generating sectors.

Based on the data reported in the DEC annual reports, the following table provides an overview of the tons of C&D debris that could be recovered or diverted from a waste disposal location if the appropriate programs were in place.

²² Excludes processed C&D, asbestos, industrial waste, sewage sludge, contaminated soil, beneficial use determination materials previously reported in Table 2-2.

Table 2- 4 - Estimated C&D Debris Recoverable in Cortland County

Material	Estimated Components of C&D Debris Tons Generated in 2012 per DEC Model	% of Total C&D Debris Generated (2012)	Tons of C&D Debris Diverted per 2012 Data Obtained	
			Tons Diverted	% Diverted
Concrete/Asphalt/Rock/Brick	9,942	35.39%	0	0%
Wood	4,157	14.80%	0	0%
Roofing	1,385	4.93%	0	0%
Drywall	713	2.54%	0	0%
Soil/Gravel	7,645	27.22%	0	0%
Metal	1,660	5.91%	0	0%
Plastic	111	0.40%	0	0%
Corrugated/Paper	562	2.00%	0	0%
Other	1,916	6.82%	0	0%
Total	28,092	100%	0	0%

Source: 2012 DEC Facility Annual Reports and Appendix I.

No data was reported to the DEC for diverted C&D materials in 2012. The table above indicates that 28,092 tons of C&D materials could potentially be available for diversion from residential and non-residential construction, renovation or demolition projects. A task has been added to the Implementation Schedule to evaluate and implement data collection efforts. Chapters 3 and 6 describe the existing systems for recovering these materials as well as possible future programs during this planning period to increase the County's diversion rate.

Chapter 3 - Existing Program Description

3.1 Current Solid Waste Management System

Cortland County serves as the Planning Unit for all municipalities within the County. The County owns and operates one central landfill in the Towns of Solon/Cortlandville/Homer and owns a materials recovery facility (MRF) in the City of Cortland, which is currently operated by a private entity as a consolidation center for recyclable materials that are trucked off-site for processing at a MRF. Additionally, four Towns within the County (Virgil, Truxton, Solon, and Freetown) provide recyclables drop-off centers for their residents. At this time, the Town of Solon is not operating their drop-off center. Some of these Towns deliver their collected recyclables to the County MRF and others use private haulers to market their recyclables. Generators and haulers are not required to deliver waste or recyclables to the County facilities and businesses may self-market their recyclables. Therefore, not all waste and recyclables pass through the County facilities. It is currently estimated that slightly more than 20 percent of the MSW and nearly 75 percent of the C&D debris is managed outside of the County.

Given the rural nature of Cortland County, a limited variety of collection services are used in the County to collect and transport solid wastes to landfills and recycling centers/transfer stations. Methods include residential drop-off or private contracts. Most entities transport their waste and recyclables directly to the landfill or transfer station for proper management by the County. Cortland County does not collect or transport materials from the source. In some cases, private haulers contract on an individual basis to collect and transport the waste and recyclables to a transfer station or disposal location of their choice. Municipal collection contracted with a private hauler is provided in the City of Cortland, Village of Marathon, and the Village of Homer. A summary of waste disposal activities by waste type follows.

3.2 Solid Waste Management Facilities and Recovery Efforts

Program Strategy #15 is included in the Implementation schedule and involves collecting and evaluating data and information regarding capacity/expected life, service areas, operating status, and other issues to resolve/areas for improvement including data collection, education, outreach and enforcement needs, etc., for every facility / program that manages MSW, biosolids, C&D, processed scrap metal, and/or industrial waste generated in Cortland County. The evaluations are to assess the effectiveness and/or needs of these facilities and programs and Cortland County's activities related to them, to determine what improvements, partnerships, or other alternatives should be evaluated for implementation and what the resulting future recovery goals could be. For Planning Unit owned facilities/programs, infrastructure/components, age, operating

dates, size, regulatory status, partnerships/ opportunities, contracts, improvements or changes, and resources/ needs/ costs /revenue/reference to economic analyses will also be compiled. Landfill Facilities

Cortland County currently operates one (1) solid waste landfill within the County's borders, which began accepting waste in 1991 (West Side Extension Landfill). The County-owned landfill property is located on Townline Road in the Towns of Solon/Cortlandville/Homer. Other closed landfills are present on the property (Pine Tree Landfill and Old Cortland County Landfill). Out of county waste is prohibited from being accepted at the landfill currently. Specific quantities received in 2012 were previously discussed in Chapter 2. The existing annual permit limit is 44,500 tons per year, and the remaining constructed capacity as of December 31, 2012 was 1,104,600 cubic yards, which anticipated a site life of approximately 22 years depending on waste receipts. All waste operations undertaken at the Cortland County Landfill are done in accordance with DEC Part 360 regulations and any special conditions set forth in the Operating Permit issued by the DEC. Municipal solid waste (MSW), asbestos waste, C&D debris, commercial/industrial waste, and sewage treatment plant sludge are accepted. There are no other active landfills within Cortland County.

Additionally, other landfills, located outside of Cortland County, are available for the disposal of MSW. These out-of-County landfills are summarized below in Table 3-1.

Table 3- 1 - Solid Waste Landfills Servicing Cortland County

Solid Waste Facility	Facility Address	Permitted Capacity (cubic yards)	Expected Site Life (years)	Operating Status
High Acres Landfill	425 Perinton Parkway Fairport, New York	52,500,000	40	Private
Ontario County Landfill	3555 Post Farm Road Seneca, New York	3,373,843	3.3	Municipally owned; Operated by Casella; No Flow Control; Expansion Permit application under review by DEC.
Seneca Meadows Landfill	1786 Salcman Road Waterloo, New York	30,893,000	10	Private; Largest Landfill in NYS
City of Auburn Landfill	311 North Division Street Auburn, New York	800,073	5.5	Municipally owned

Source: DEC Annual Facility Reports (2012)

Each of these out-of-county landfills accepted waste that was generated in Cortland County in 2012. Other landfills also exist throughout New York State; however, they may have disposal restrictions or are located outside a reasonable service area to accept waste generated in Cortland County.

3.2.1 Transfer Stations

Most residents and commercial/industrial entities that are either not served by or elect not to contract with a private hauler, deliver their waste and recyclables to a municipally or privately operated transfer station. A listing of the transfer station facilities in Cortland County is presented in the following Table 3-2.

Table 3- 2 - Registered Transfer Stations in Cortland County

Transfer Station Name	Owner/Operator	Facility Address	Disposal Destination	Age/ Expected Life	Infrastructure Components
Town of Virgil Transfer Station	Town of Virgil	1486 VanDonsel Road Town of Virgil, NY	Cortland County Landfill & MRF	Unknown	Accepts municipal solid waste and recyclables.
Town of Truxton	Town of Truxton	Academy Street Truxton, NY 13158	Cortland County Landfill or MRF	Unknown	Truxton residents ONLY. Recyclables and waste drop off facility.
Town of Solon	Town of Solon	Non-operational at this time.			
Town of Freetown	Town of Freetown	2369 McGraw-Marathon Road Marathon, NY 13803	Cortland County MRF	Unknown	Recyclables drop off facility
Leach's Custom Trash Service Transfer Station	Leach's Custom Trash Service	1834 State Route 13N Cortlandville, NY	City of Auburn Landfill (waste); Broome County (recyclables)	Unknown	Accepts municipal solid waste and recyclables.

Source: DEC Annual Facility Reports (2012)

3.2.2 Existing Efforts to Recover Recyclables

Cortland County contracts with a private operator (Casella Recycling) to operate a MRF on South Pendleton Street in the City of Cortland. Materials accepted at this location are consolidated and trucked to Casella's Ontario County single stream recycling facility (zero-sort single stream program).

Cortland County Local law #5 of 1992 and its amendment in 1995 (see Appendix B) require all generators to source separate recyclables. Recyclables that are mandatory to source separate currently include newspaper, corrugated cardboard, magazines, catalogs, metal containers, clear glass containers and #1 and #2 plastic containers. Additional voluntary recyclables accepted include office paper, white paper, junk mail, telephone directories, school paper, kraft paper & bags, wrapping paper, soft covered books, #3 - #7 plastic containers, colored glass, empty aerosol cans, and empty paint cans. Electronic equipment subject to New York State's Electronic Equipment Recycling and Reuse Act of 2010 are also accepted at the MRF. The MRF accepts recyclables from individuals and haulers free of charge. Materials are accepted in single stream or two streams, mixed paper and mixed containers. Scrap metal and tires are accepted for recycling at the landfill. Recyclables are not required to be delivered to the MRF and businesses may self-market these materials.

3.2.3 Residential Sector Recycling Facilities and Efforts

Table 3-2, above, provides a summary of the transfer stations that accept recyclables. As mentioned above, Cortland County contracts with a private operator (Casella Recycling) to operate a MRF on South Pendleton Street in the City of Cortland. Materials accepted at this location are consolidated and trucked to Casella's Ontario County single stream recycling facility (zero-sort single stream program). There are no other known recycling facilities located within Cortland County.

Two basic systems currently exist in Cortland County for the collection of recyclables: curbside collection and residential drop off sites (i.e., transfer stations). Residents who elect not to hire a private hauler typically drop-off recyclables at their local transfer station. Transfer stations do not charge for the acceptance of recyclables. The City of Cortland and Village of Homer offer curbside collection to their residents. Recycling flyers available to residents are provided in Appendix C for further information.

Bulk Items, which includes larger items such as appliances and televisions, are handled at the transfer stations. In most cases, scrap metal collection is free and collected in a separate container from other bulk items. Metal is traditionally one of the more highly valued recyclable materials.

Not all data is available for the residential recycling sector; therefore, Chapter 6 includes solid waste management program strategies to address data collection, education, outreach and enforcement needs, etc., for each facility or program that manages residential recyclables generated in Cortland County. The evaluations are to assess the effectiveness and/or needs of these facilities and programs and Cortland County's activities related to them, to determine what improvements, partnerships, or other alternatives should be evaluated for implementation and what the resulting future recovery goals could be.

3.2.4 Commercial Sector Recycling Facilities and Efforts

On the commercial front, shopping centers, hospitals, and medical office buildings are establishments that generate large volumes of waste and recyclable materials. These establishments may contract directly with a recycling operation to collect and manage their recyclables or they may utilize drop off facilities or transfer stations.

Since there is no reporting requirement for these commercial entities, quantities and types of waste/recyclable materials disposed or recovered in Cortland County have not been made readily available to the County. Program Strategy #15 in Chapter 6 is intended to address the issue of the lack of data being reported by the various commercial entities. Additionally, Program Strategy #14 (Public Outreach and Education) will include the commercial recycling sector. The evaluations are to assess the effectiveness and/or needs of these facilities and programs and Cortland County's activities related to them, to determine what improvements, partnerships, or other alternatives should be evaluated for implementation and what the resulting future recovery goals could be.

3.2.5 Agricultural Sector Recycling Efforts

The Towns of Homer, Preble and Scott are located in the northwest section of Cortland County and have traditionally been recognized for their many small dairy farms; yet many of these farms have diversified over time to include significant cash crop production. Farmers in Homer, Preble and Scott maintain significant acres of land in agricultural fields, pasture land and woodland, which totals about two-thirds of the geographic area of the three towns. With the presence of these farmlands, agricultural plastics could represent a significant

waste stream produced within the County. The agricultural plastics that farmers use, such as plastic baling twine, greenhouse plastics, hay bale wraps, mulch film, and pesticide containers are not currently included in the list of acceptable recyclables items in Cortland County. As such, many of these materials end up in the County landfill or buried at their point of origin. Program Strategy #15 in Chapter 6 is intended to identify the quantity and type of this waste stream to determine what improvements, partnerships, or other alternatives should be evaluated to manage this sector. Future planning periods will address the issue of implementing an agricultural sector recycling effort.

3.2.6 C&D Sector Processing Facilities and Efforts

Collection of C&D debris for processing is not provided by the County and collection must be contracted for independently with private haulers or contractors. Program Strategy #3 in Chapter 6 looks at evaluating the need of these facilities and programs in Cortland County to determine what partnerships, or other alternatives should be evaluated for implementation and what the resulting future recovery goals could be.

3.2.7 Institutional Recycling Efforts

Large educational institutions, such as local school districts, Cortland State University, prisons, nursing homes, hospitals, and senior living complexes, tend to produce large quantities of paper wastes and food wastes. Sections 1.4.2 and 1.4.4 in Chapter 1 provided an overview of several of these institutions. These institutions manage their own waste and recyclables. Cortland County does not monitor and enforce recycling efforts at these facilities; however, they would most certainly benefit from waste reduction and recovery efforts. Since there is no reporting requirement for these institutional entities, quantities and types of waste disposed or recovered in Cortland County has not been made available to the County. Program Strategy #15 in Chapter 6 is intended to address the issue of the lack of data being reported by these various entities. Additionally, Program Strategy #14 (Public Outreach and Education) will include the institutional recycling sector and how best to increase recycling efforts. The evaluations are to assess the effectiveness and/or needs of these facilities and programs and Cortland County's activities related to them, to determine what improvements, partnerships, or other alternatives should be evaluated for implementation and what the resulting future recovery goals could be.

3.2.8 Public Sector Recycling Efforts

Municipal recycling efforts in the Planning Unit revolve almost entirely around the County's program. Although the recycling efforts are managed for the

County by the County, Program Strategy #2 in Chapter 6 focuses on increasing recycling at public facilities, such as public schools, municipal spaces, and special events. Additionally, Program Strategies #14 and #15 will assist with the data gathering, public outreach, and educational components. It will be important to understand the current recycling efforts within the public sector before determining the appropriate plan of action and goals; therefore, Program Strategy #15 will be an integral part with gathering the necessary data to assess the current recycling programs at the public sector level. Once the existing recycling efforts are determined, a plan of action to reach out to public sector employees and community members will be developed through Program Strategy #2 to ultimately increase recycling efforts.

3.2.9 Industrial Facility Recycling Efforts

There are a number of industries located within Cortland County, such as Marietta Corporation, Cortland Line Corporation, and Pall Trinity Micro Corporation. Information related to industrial recycling efforts was unavailable at the time this report was completed. As discussed in Chapter 6, Program Strategy #15 will be pursued to gather more data in the way of surveys to industrial facilities within the County, which in turn will be tied to Program Strategy #14 associated with the public outreach and education at the industrial facility level.

The evaluations are to assess the effectiveness and/or needs of these facilities and programs and Cortland County's activities related to them, to determine what improvements, partnerships, or other alternatives should be evaluated for implementation and what the resulting future recovery goals could be.

Public Space / Events Recycling Efforts

Public space and special event recycling efforts are currently handled individually by each event sponsor or municipality. The impacts of special events within the Planning Unit are provided in Table 1-5 in Section 1.4.5 of this report. Program Strategy #14 contains some action items related to special events that are proposed to be considered during this planning period.

Processed Scrap Metal Recycling

According to research conducted by the US Environmental Protection Agency, recycling scrap metals can be quite beneficial to the environment. Using recycled scrap metal in place of virgin iron ore can yield²³:

- 75% savings in energy
- 90% savings in raw materials used
- 86% reduction in air pollution
- 40% reduction in water use
- 76% reduction in water pollution
- 97% reduction in mining wastes

Processed scrap metal is not currently monitored by Cortland County; however, through strategies discussed in Chapter 6, a method for gathering this information is proposed through Program Strategy #15. Once an understanding of how scrap metal is processed or managed in Cortland County, then the next step would be to implement an educational program (Program Strategy #14) to disseminate information regarding the benefits of scrap recycling and the opportunities available for processing scrap metal.

3.2.10 Public Education Efforts to Promote Recycling

The County's contract with Casella Recycling includes education and outreach by Casella. To date, they have completed some outreach efforts to increase recycling and awareness. For example, Casella was instrumental in launching the new battery recycling program. In addition, the County has an education program specifically for school age children. Presentations are given throughout the year focusing on waste reduction and recycling as well as distribution of recycling information.

The County's other public education efforts are primarily on the website and at the MRF. Subtasks associated with Program Strategy #14 are included in the implementation schedule for maintaining the website and other education efforts, including compiling information regarding private sector education efforts, to determine what additional education efforts should be implemented by or on behalf of Cortland County.

²³ <http://www.norstar.com.au/Recycling/Processing/Benefits.aspx>

3.2.11 Organic Wastes Diversion

Interest in organic waste diversion has increased over the last few years, particularly because it has the potential to divert a significant portion of the waste stream away from landfills. The composting process can be applied to yard waste, food waste, MSW, sewage sludge, non-hazardous industrial sludge, or some combination of these materials. Program Strategies 10, 11, and 12 in Chapter 6 are included in the implementation schedule for evaluating and implementing recovery of these organics, including collecting data and information regarding organics generation and management in Cortland County, and investigating existing partnership opportunities such as supplying food waste and scraps to an existing anaerobic digestion or other composting facilities.

3.2.12 Yard Trimmings

Yard waste composting is a feasible means of waste reduction that requires little technological sophistication and could ultimately reduce the quantity of solid waste disposal in the County. Much of the Planning Unit's service area is rural and, like other rural areas around the state and the country, residents tend to manage yard trimmings on their own property. Therefore, materials collected for centralized composting are lower than in suburban areas where yard trimmings tend to be handled centrally.

The Village of Homer and the City of Cortland are the only municipalities within Cortland County that provide for seasonal leaf and tree limb drop off locations. The drop-off locations are open to residents all year round and curbside collection events are offered two times per year. Additionally, the Village of Homer and City of Cortland share the use of a tub grinder. The generated compost is then provided to the residents as part of a community give back program.

3.2.13 Food Scraps/Food Processing Waste/Food Banks

There are no known food waste collection programs or multi-user composting facilities within Cortland County with the exception of SUNY Cortland's program discussed in Chapter 6 (Program Strategy #12). Food waste collection programs are not currently monitored by Cortland County; however, through implementation tasks discussed in Chapter 6, a method for gathering this information is proposed through Program Strategy #15. Once an understanding of how food waste is processed or managed in Cortland County, then the next step would be to implement an educational program (Program Strategy #14) to disseminate information regarding the benefits of food waste collection or composting programs.

3.2.14 Biosolids/Sewage Sludge Handling

According to DEC records, biosolids generated in Cortland County were managed as identified in the following table, Table 3-3. Additional details related to these facilities are provided in Table 2-1 in Chapter 2.

Table 3- 3 - Municipal Sewage Sludge Disposal Summary

Facility Name	Disposal Destination
LeRoy R Summerson WWTF (City of Cortland)	Cortland County Landfill
Marathon (V) WWTF	Cortland County Landfill
Virgil (T) SD1 WWTP	Cortland County Landfill

3.3 Status of Existing Recovery Efforts

As demonstrated in the previous section, Cortland County's residents and commercial, industrial and institutional waste generators have several outlets to divert their waste from disposal to reduction, reuse and recycling. However, unlike solid waste data that is reported to the DEC annually, a complete set of waste diversion data is not readily available since much of it is not required to be reported by private entities to any agency (except for those facilities that must submit recycling reports to DEC). At this time, the majority of the residential and light commercial recyclables data has been reported by the recycling centers and is summarized in Table 2-2 in Chapter 2. Private businesses within the County are not currently required to report the destinations of their recyclables. As referenced in Table 2-2 in Chapter 2, based on 63,386 tons of waste (including recyclable materials) generated within Cortland County in 2012, 58,010 tons were disposed in landfills and 5,376 tons of materials were diverted either by composting or recycling. Consequently, Cortland County's current overall waste diversion rate is estimated at 8.2%. When examining just the MSW component of the overall waste stream, the County's MSW diversion rate is estimated at 18.6% -- this excludes contaminated soil, sewage sludge, construction and demolition debris, processed scrap metal, and industrial waste.

Since there is no reporting requirement for these entities, quantities and types of waste disposed or recovered in Cortland County has not been made readily available to the County. Program Strategy #15 (Recycling Surveys and Reporting) in Chapter 6 is intended to address the issue of the lack of data being reported by these various entities. Additionally, Program Strategy #14 (Public Outreach and Education) will include the various recycling sectors and how best to increase recycling efforts. The evaluations are to assess the effectiveness and/or needs of these facilities and programs and Cortland County's activities related to them, to determine what

improvements, partnerships, or other alternatives should be evaluated for implementation and what the resulting future recovery goals could be.

3.4 Markets Discussion

Cortland County's existing solid waste management practices are previously discussed in this chapter. Given that Casella Recycling operates the MRF, the County relies on them to determine the end markets for recyclable materials. Cortland County maintains communication with Casella Recycling to understand the available end markets for recyclables materials, and will continue to do so during this planning period. Other private recyclers or municipalities within the County evaluate the markets as needed. Currently there are several markets for each type of recyclable material collected and processed for sale. The current process involves spot marketing each load as it becomes available, in this way the private recyclers or municipalities are able to receive the highest current market prices as the loads become available. The list of brokers buying products is updated on an ongoing basis. This keeps the prices for the recyclable products sold at the highest possible prices. There is a listing of Recyclable Markets on the Empire State Development web site that the private recyclers or municipalities utilize as necessary. Contracts with recycling markets are typically negotiated when the recyclables are ready for delivery and depend on factors such as quantities, degree of separation, degree of processing, shipping arrangements, length of contract, and market fluctuations. These factors are often negotiable; and buyers consider all the associated costs when developing a contract. In many cases, quantity, processing, and delivery requirements are flexible because buyers simply pay less for the products that suit their specifications less than ideally. Impurities in the delivered recyclables that exceed set percentage levels may be grounds for rejection of the entire load. Quality assurance is consequently of utmost importance, since brokers will contemplate accepting no further materials once contamination beyond acceptable limits is discovered.

Chapter 4 – Future PU projections and SW changes

Previous sections of this Plan discussed the quantities of waste generated, disposed and diverted from the waste stream. This section will present the projected municipal solid waste (MSW) diversion rates as well as the projected construction and demolition (C&D) debris diversion rates for the duration of the planning period. Recycling rate projections were increased over the course of the planning period. These future waste generation projections are depicted in the tables provided in Appendix A.

As previously indicated, the data reported in this Plan was based on the best available data at the time this report was prepared. Future tasks in the Implementation Schedule include improving data gathering methods and reporting to improve upon the County's known data. With the help of improved data, the County will have a clearer picture of the programs that should be evaluated and implemented.

4.1 Anticipated Changes to the Local Planning Unit

Cortland County is proposing to enter into a regional solid waste partnership agreement with Onondaga County Resource Recovery Agency (OCRRA) for landfilling ash residue from the OCRRA waste to energy (WTE) facility. In return, OCRRA proposes to haul Cortland County's waste to its WTE facility for processing. More discussion of this proposed partnership will be discussed in Chapter 6.

4.2 Anticipated Changes to the Waste Stream

It is anticipated that with the changes to the Planning Unit described above, more opportunities for waste diversion will be made to residents, which should in turn increase the County's waste diversion percentage. Chapter 6 will described the various programs that will be made available to County residents and how these tasks and goals will be implemented.

Chapter 5 – Alternative Technology Evaluation

The objective of the alternatives technology evaluation is to provide an overall summary of the alternatives available to Cortland County related to waste management and recycling technologies. Cortland County, Onondaga County and the Onondaga County Resource Recovery Agency (OCCRA) have proposed a regional solid waste partnership to help manage the solid waste streams within the two counties. The proposed partnership would allow for substantial cost savings while providing important environmental benefits to both counties. Further details related to this proposed agreement are summarized in Chapter 6.

However, a required element of a LSWMP is to review alternative technologies available to the County. Consequently, DEC has generated a reference document, known as “Generic Technology Assessment for Solid Waste Management” that may be utilized for completing the evaluation of alternative treatment or disposal technologies. Section 5.1 below provides a general overview of the different disposal technologies that are available, which the County will continue to monitor with regard to their successes and challenges throughout the planning period. Section 5.2 briefly discusses the different recovery options that the County may examine during the planning period to determine if their recyclables recovery efforts should be modified. The technologies summarized below will be evaluated for feasibility and cost effectiveness on an individual basis depending on staff and resource availability.

5.1 General Overview of Disposal Technology Options Available

Pyrolysis/Gasification

Pyrolysis systems use a vessel which is heated to temperatures of 750°F to 1,650°F, in the absence or near absence of free oxygen. The temperature, pressure, reaction rates, and internal heat transfer rates are used to control pyrolytic reactions in order to produce specific synthetic gas (syngas) products. These syngas products are composed primarily of hydrogen (H₂), carbon monoxide (CO), carbon dioxide (CO₂), and methane (CH₄). The syngas can be utilized in boilers, gas turbines, or internal combustion engines to generate electricity, or alternatively can be used in the production of chemicals. Some of the volatile components of MSW form tar and oil, and can be removed for reuse as a fuel. The balance of the organic materials that are not volatile, or liquid that is left as a char material, can be further processed or used for its adsorption properties (activated carbon). Inorganic materials form a bottom ash that requires disposal, although it is reported that some pyrolysis ash can be used for manufacturing brick materials. Under typical operations, the ash is landfilled.

Gasification is a similar process to pyrolysis, but which requires the partial oxidation of a feedstock to generate syngas. Oxygen must be provided for the reaction, but at a quantity less than is required for complete combustion. The primary syngas products are H₂ and CO with smaller quantities of CH₄ produced at lower temperatures. Similar to pyrolysis, the syngas product may be used for heating, electricity generation, fuel, fertilizers or chemical products, or in fuel cells. Byproduct residues such as slag and ash are produced and require disposal in a landfill.

Pyrolysis and gasification of MSW have too short a history in the United States for proper analysis of economic feasibility. There are currently about one hundred mixed MSW gasification plants in the world, primarily in Japan, that have a successful history of continuous operation. The capital cost of developing this technology for Cortland County is yet unanalyzed but estimated to be at least 10% higher than conventional WTE plants. This conceptual estimate is based on a short history of pyrolysis/gasification development for MSW applications in the United States, a lack of established pyrolysis or gasification plants, the relatively small amount of MSW generated in Cortland County, and the greater complexity of the technology. According to a recent EPA study²⁴ of pyrolysis and gasification technologies, the cost to process mixed MSW is approximately \$90 per ton which is significantly higher than landfill operational costs in New York State. There are no current full scale operational systems in New York State for MSW treatment. One plant for the pyrolysis of plastics, located in Niagara Falls, NY, is commercially operational and one gasification plant has been commissioned in Montgomery, NY using only portions of the MSW waste stream.

Mixed Municipal Solid Waste Composting

Mixed MSW composting is typically an aerobic composting process that breaks down all organic portions of the waste into compost material. Waste is typically collected at the facility as a mixed stream. The process requires intense pre- and post-processing, treatment and sorting to remove inert materials such as plastic or glass, which diminish the quality of compost products. Some MSW composting facilities also accept biosolids. Wastes are typically loaded into a rotating bioreactor drum for two to four days. Screening processes are used to separate unacceptable wastes, which are landfilled as process residue, from the raw compost which is stored in a maturation area for approximately one month to allow biological decomposition to occur.

Facilities such as this do not have a well-established track record in the United States. There are currently 13 mixed MSW composting facilities in operation in the United States, including one in Delaware County, New York. Typical issues associated with the reliable and cost effective operation of such facilities include quality of compost,

²⁴ State of Practice for Emerging Waste Conversion Technologies, USEPA Office of Research and Development, October 2012

retail/wholesale outlet for compost generated, disposal location for bypass material, and odors.

As mentioned above, Delaware County operates a mixed MSW composting facility, which has been successful as it relates to their needs. Their facility met the need of extending the life of their current landfill facility due to declining capacity and difficulty in siting a new landfill. This facility allowed the landfill to be operational for another 50 years. The cost of this facility was approximately \$20 million, which includes a rather complex odor control component. The facility became operational in 2007, which serves a rural population of about 47,000 people. This facility handles approximately 100 tons per day of waste materials, consisting of a blend of MSW and biosolids. The mixed MSW composting facility is one part of Delaware County's integrated solid waste management system.

Plasma Arc Gasification

Plasma arc gasification is a waste treatment technology that uses electrical energy and the high temperatures created by an electrical arc gasifier. This arc breaks down waste primarily into elemental gas and solid waste (slag), in a device called a plasma converter. The process has been touted as a net generator of electricity, although this will depend upon the composition of input wastes. It will also reduce the volume of waste requiring land disposal.

There are currently 10 plasma arc gasification facilities in operation in Japan and Taiwan, but only one that operates on a large scale (all others are < 50 TPD) and uses mixed MSW as its only feedstock. A small MSW facility (93 TPD) is in operation in Canada. In the United States, St. Lucie County in Florida obtained a permit to construct a large scale MSW plasma arc gasification facility, but due to vendor and funding issues this project was never implemented.

To date, this technology has not been proven to be economically feasible within the United States for MSW management.

Mechanical/Biological Treatment

Mechanical-biological treatment (MBT) systems are similar to mixed MSW composting systems in that intense sorting is required as the first step in the waste treatment process. This is considered the mechanical phase of the treatment, where recyclable and non-organic materials are removed from the waste stream, prior to the biological treatment. The biological treatment phase involves bio-drying of the remaining organic materials for production of refuse derived fuel, or RDF. RDF can be used in place of fossil fuel products, such as a replacement for coal in electricity production. There are currently over 70 active MBT systems in operation across

Europe, with a majority of these facilities operating as pilot scale projects (exact numbers are not available).

To date, this technology has not been proven to be economically feasible within the United States for MSW management.

Anaerobic Digestion

Anaerobic digestion is a biological process by which microorganisms digest organic material in the absence of oxygen, producing a solid byproduct (digestate) and a gas (biogas). In the past, anaerobic digestion has been used extensively to stabilize sewage sludge, but is more recently under consideration as a method to process the organic fraction of MSW. In anaerobic digestion, biodegradable material is converted by a series of bacterial groups into methane and CO₂. In a primary step called hydrolysis, a first bacterial group breaks down large organic molecules into small units like sugars. In the acidification process, another group of bacteria converts the resulting smaller molecules into volatile fatty acids, mainly acetate, but also hydrogen (H₂) and CO₂. A third group of bacteria, the methane producers or methanogens, produce a medium-Btu biogas consisting of 50-70% methane, as well as CO₂. This biogas can be collected and used for a variety of purposes including electricity production or converted to high BTU natural gas. Anaerobic digestion facilities are utilized extensively for the treatment of agricultural, wastewater sludge and organic wastes such as food wastes. Mixed MSW anaerobic digestion facilities are more common in foreign countries. There are currently over 200 MSW anaerobic digestion facilities operating across Europe. Many of these facilities are smaller scale projects, designed to provide treatment of wastes for small towns and villages. There are two such facilities in operation in Canada, each in the Toronto, Ontario area.

Specific to the United States, few mixed MSW anaerobic digestion facilities exist, as the technology has not proven economically feasible. An EPA study²⁵ estimates that waste processing costs using anaerobic digestion are close to \$115 per ton of MSW, which is even higher than pyrolysis/gasification. At this time, only two commercially operational MSW anaerobic digestion facilities exist, both in Ohio. Several more facilities exist but accept only a portion of the MSW waste stream, such as source separated organics, food manufacturing industry waste, or a mixed agricultural/food waste. Many are still in a demonstration phase and are not fully operational. In New York State, there are many anaerobic digesters in operation in the wastewater and agricultural markets, with some anaerobic facilities being converted into mixed organic waste facilities. Two anaerobic digesters have been permitted in Region 9 by Quasar Energy Group. These systems will manage regional biomass residuals (organic waste)

²⁵ State of Practice for Emerging Waste Conversion Technologies, USEPA Office of Research and Development, October 2012

to produce electricity that would be sold to NYSEG. Under the regional biomass residual model, there is still the need to manage other portions of the waste stream that cannot be recycled. These wastes are typically landfilled. In addition, digestate and liquids from the anaerobic digester process must also be managed, which may be recycled, landfilled or processed at a wastewater treatment plant depending on their constituents.

Ethanol Production

Ethanol production from a mixed MSW waste stream requires an intensive sorting process as the first processing step. All recyclable and inert materials must be removed to produce an organic waste stream for ethanol production. This material is then chopped, fluffed, and fed into a hydrolysis reactor. The effluent of this reactor is mostly a sugar solution, which is prepared for fermentation. This solution is detoxified and introduced to a fermenter, in which microorganisms convert the sugar to ethanol and CO₂. Next, the solution is introduced into an energy-intensive process that combines distillation and dehydration to bring the ethanol concentration up to fuel grade (99%) ethanol. A solid residue of unfermented solids and microbial biomass is recovered through the anaerobic digestion process, and its marketability as a compost material depends on the purity of feedstock as well as its visual quality. Solid residues can be burned or gasified if alternative methods of reuse are not feasible. Various pilot scale facilities are operating in the United States and Europe, but many have reverted to more homogeneous feedstocks such as wastewater treatment sludge and food processing wastes, because obtaining the homogeneous input stream from mixed MSW has proven difficult.

Technology Assessment Conclusions

Should any of the technologies discussed above be implemented, it is imperative that long term waste commitments would be required to undertake a full scale program within Cortland County. Cortland County does not propose evaluating the feasibility of these alternative waste disposal options during the 10 year planning period; however, Cortland County does acknowledge that they are available and should advances in the above technologies occur, the County will reassess these opportunities during the next planning period.

5.2 Alternative Programs for Recyclables, Organics, Waste Reduction and Reuse

Chapter 6, Solid Waste Management Program Strategies, will provide an overview of the subtasks anticipated to be undertaken during the course of this planning period to improve the County's waste diversion rate.

Chapter 6 – Solid Waste Management Program Strategies

The purpose and statutory framework for the Cortland County Solid Waste Management Plan is described above in the Executive Summary.

Based on the data gathered and discussed in the preceding Chapters, the County has identified program strategies to work toward during a ten-year LSWMP planning period that is consistent with the State Solid Waste Management Policy. The strategies set forth below were identified with the goal of further enhancing the reuse and recycling of materials generated in Cortland County to reduce the quantity of materials requiring disposal, while providing for the means to recover energy in an environmentally sound manner from solid waste that has not been reused or recycled.. Each strategy and corresponding goal will be evaluated for feasibility and cost effectiveness on an individual basis according to the implementation schedule included in Chapter 7.0.

The NYSDEC's rules and regulations for Comprehensive Solid Waste Management Planning (Subpart 360-15 of 6NYCRR Part 360) require that all solid waste management plans provide for the management of solid waste within the planning unit for a minimum of a ten-year period. Since the County's current LSWMP has expired, the County proposes that this LSWMP planning period be for a 10-year period after DEC approval of this document.

The County can address and report any changes to their solid waste planning efforts that take place over the 10-year planning period to the Department as part of the solid waste management plan compliance reports that Cortland County is required to prepare and submit to the Department every two years. An example outline of a compliance report is included in Appendix D for reference.

6.1 Selection of an Integrated Solid Waste Management System

Program Strategy #1 – Evaluate Regional Solid Waste Partnership Opportunity

As described above in the Executive Summary, Cortland County, Onondaga County and the Onondaga County Resource Recovery Agency (OCCRA) have proposed a regional solid waste partnership to help manage the solid waste streams within the two counties. The proposed Cortland-Onondaga Regional Solid Waste Partnership (partnership) is expected to allow for substantial cost savings while providing important environmental benefits to both counties.

OCRRA manages the solid waste system in Onondaga County including a Waste to Energy (WTE) Facility, recycling program, yard and food waste composting programs, education program, year round household hazardous waste collection, recycling and other successful green programs. The OCRRA WTE and recycling programs are implemented through successful public-private partnership agreements.

Cortland County owns and operates the Cortland County Landfill. In addition to the landfill, Cortland County manages the County recycling program, education program, and an annual household hazardous waste collection event. The Cortland County recycling facility is currently operated under a public-private partnership agreement. Due to budget constraints, other green solid waste programs in Cortland County have been slow to develop.

This partnership could provide much needed revenue to Cortland County, while significantly reducing ash transport and disposal costs for OCRRA. The Cortland County Landfill is underutilized and is facing financial concerns. Since the economic downturn in late 2008 and the result of increased recycling efforts by Onondaga County residences and businesses, OCRRA's WTE facility has not been running at full capacity. This partnership could increase economic benefits for Cortland County and OCRRA, as a result of the waste exchange described below.

OCRRA currently hauls ash from the WTE facility located in the Town of Onondaga, New York to the High Acres Landfill located near Rochester, New York. Cortland County currently accepts approximately 25,000 tons per year of non-hazardous municipal solid waste at the County landfill facility located approximately 5 miles east of the City of Cortland. Under the proposed Cortland-Onondaga Regional Solid Waste Partnership, OCRRA would haul up to 90,000 tons of non-hazardous ash residue from the WTE facility to the Cortland County Landfill annually, although the amount currently generated is less than that. The same OCRRA trucks would then haul approximately 25,000 tons of non-hazardous municipal solid waste from Cortland County back to the WTE facility for processing each year. To accommodate the temporary holding, loading and transfer of waste to OCRRA, Cortland County proposes to permit and construct a transfer station on the existing landfill property.

The Cortland County Landfill's existing 6 NYCRR Part 360 solid waste management facility permit allows for up to 44,500 tons of non-hazardous municipal solid waste to be accepted annually. The landfill's permit would need to be modified to include a tonnage increase that would authorized the disposal of up to 95,000 tons to accommodate the added ash tonnage as well as the transfer station operations. The landfill permit modification would need to be submitted to and approved by the DEC. Significantly, however, the currently constructed double composite liner system at the Cortland County Landfill will provide sufficient disposal capacity for the additional

tonnage for more than the ten year planning period of this Local Solid Waste Management Plan. Indeed, based on the higher disposal tonnages associated with the proposed regional partnership, it is currently estimated that it will be 17 years before new lined disposal capacity will be needed at the Cortland County Landfill.

Currently, Onondaga County Law prohibits the importation of municipal solid waste from outside the county to a landfill or WTE Facility in Onondaga County. There is, however, a provision in the current law that permits the legislature to approve exemptions to this law. As such, it would not require a repeal of the existing law, but rather the approval of an exemption to the existing law. Similarly, Cortland County's local solid waste management law prohibits importation of waste from outside Cortland County. This law will require modification by the Cortland County Legislature. These local legislative approvals in each county are part of this proposed project.

This Plan proposes that this partnership be evaluated as a Program Strategy during the first year of the implementation schedule as described in Chapter 7.0 to determine if the partnership described above would provide the most opportunities for reaching the goals set forth for waste diversion and waste reduction in Cortland County. The County has made an effort to present the proposed partnership project to the majority of the municipalities in the County. To date, the County has presented at 17 of the 19 municipalities. The following program strategies anticipate the successful implementation of the partnership and the opportunities that would be possible with the partnership. Should the evaluation of Program Strategy #1 determine that the partnership is not the optimal solid waste management system available to Cortland County, approaches to the proposed program strategies would be revised and updated in the required Solid Waste Management Plan Compliance Report(s) submitted to the DEC every two years.

6.2 Program Strategies to Increase Recyclables Recovery

Should the evaluation of Program Strategy #1 determine that the proposed partnership is the optimal solid waste management system selected for Cortland County, many opportunities could be available for Cortland County to partner with OCRRA on other solid waste programs. Due to the economic downturn, both OCRRA and Cortland County have struggled to find the resources to fund its green solid waste programs. As a result, cost-cutting measures have had a negative impact on environmental programs and outreach efforts. Finding innovative ways to save money means more funding for community services including recycling infrastructure, recycling education, organics management, as well as mercury collection programs for fluorescent bulbs and batteries. Should the partnership be formalized, Cortland County residents and businesses will have access to an expanded reuse, reuse and recycle

education program, , OCRRA's C&D recycling program and OCRRA's successful food and yard waste composting facility.

Cortland County understands that various tasks will need to be completed to promote a successful recyclables recovery program. The following sub-sections summarize solid waste management program strategies that encourage greater waste diversion and more recycling.

Program Strategy #2 – Increase Recycling at County Facilities

Cortland County is interested in taking the initiative to promote recycling at county owned facilities. Cortland County would act as a model to other municipalities within Cortland County to increase recycling by their staff. Cortland County realizes that in order to increase recycling county-wide, their staff must be on board to achieve this goal. Through the development of an internal sub-committee, Cortland County staff will prepare a plan to increase recycling at county owned and/or operated facilities. Later in the planning period the sub-committee will review expanding this goal to public events, schools, institutions, etc. The implementation schedule in Chapter 7 provides an outline of the resources and subtasks necessary to increase recycling at county owned facilities.

Goal: Increase recyclables recovery at County owned and/or operated facilities.

Program Strategy #3 – Construction & Demolition Debris Recycling

During this planning period, Cortland County will set a C&D material recycling goal for County funded projects. While this goal would likely not be mandatory, it would encourage contractors performing construction and demolition work for Cortland County to commit to meeting the diversion goal, or provide documentation as to why the goal could not be met. This would set an example for other municipally funded work in the County, as well as providing a way to jump-start the coordination of C&D recycling options between waste handlers and contractors.

Goal: Increase diversion of C&D or remodeling debris from the landfill.

Currently, landfilling C&D waste is more economical than recycling it in most cases. As of the preparation of this LSWMP, there are no known full scale mixed C&D waste recycling facilities in operation in the vicinity of Cortland County. One method the County will explore as a means to encourage C&D waste diversion, without incurring costs that would be associated with developing new infrastructure, would be to encourage the separation of portions of the waste stream at the source. Wood and masonry materials can be recycled if properly separated from other materials. In Onondaga County, C&D or remodeling debris can be brought to OCRRA's Ley Creek

Drop-Off Site where it is sorted and the majority of it is converted to electricity at the Waste-to-Energy facility.

Chapter 7 – Implementation Schedule provides the milestones through the planning period that are anticipated to implement this task.

Program Strategy #4 – Product Reuse Collection and Distribution Programs

Product reuse is one of the most efficient forms of recycling. Cortland County proposes to assess the feasibility of providing a system by which their residents can drop off used, but still usable items free of charge. Items would be salvaged from the existing recycling streams, such as bulk metal, book recycling, small appliances, construction materials free of nails or screws, and used electronics recycling. These items would then be made available to residents for a fee. Additional reuse centers are available to county residents, such as, Salvation Army, Goodwill, and Habitat for Humanity ReStore, which is located to the north in Syracuse. Cortland County will encourage these types of reuse centers throughout Cortland County for increased convenience to residents.

Goal: Promote product reuse to increase waste diversion.

A Materials Exchange program is an alternative product reuse outlet. Materials exchanges facilitate the exchange of materials or wastes from one party, which has no use for that material, to another party that views the materials as a valuable commodity. These facilities foster waste reduction efforts through the reuse of materials, thus eliminating the need to process the materials for recovery or disposal. These facilities are not regulated by the DEC. Through economic development, the County would be supportive of a private or public entity developing a similar program within Cortland County. Chapter 7 – Implementation Schedule provides the milestones through the planning period that are anticipated to implement this strategy.

Program Strategy #5 – Product Stewardship Framework

Product Stewardship is based on the concept that producers selling a product should be responsible for designing, managing, and financing a stewardship program that addresses the lifecycle impacts of their products, including end-of-life management. It is a nationwide undertaking to encourage government, at the State level, to implement product stewardship legislation based on the same framework principles in order to maintain a consistent starting point for nationwide implementation of a product stewardship policy. The New York Product Stewardship Council is working to implement the principles of product stewardship in New York State. Cortland County intends to work together with the New York Product Stewardship Council to coordinate

Goal: Shift government funded waste diversion to one that relies on product stewardship.

and participate in product stewardship initiatives locally. It is the intent of Cortland County to adopt these product stewardship framework principles through a resolution. Chapter 7 – Implementation Schedule provides the milestones through the planning period that are anticipated to support this initiative.

Program Strategy #6 – Household Hazardous Waste Collection

Although specific household hazardous waste (HHW) generation data for the County is not easily obtainable, it is generally estimated that HHW makes up an average of 0.34% of the MSW waste stream. While this equates to a fairly minimal amount of material, the toxicity of this material makes it an important target for removal from the landfilled or combusted waste stream.

Goal: Increase collection rates and divert more HHW materials from disposal and wastewater facilities.

Historically Cortland County's Highway Department has sponsored an annual Household Hazardous Waste Clean-Up Day at the County's recycling center. One event per year has occurred between August 2007 and August 2013. The household hazardous waste clean-up program has provided residents of the County with an opportunity to dispose of their unwanted or out-dated household hazardous materials in a convenient, economical and environmentally sound manner. It is expected that these annual events will continue to occur.

Should the Cortland-Onondaga Partnership be implemented, Cortland County residents will have the option to utilize the household hazardous waste year-round drop-off benefit that OCRRA provides to Onondaga County residents. Currently, OCRRA's events are open to residents of Onondaga County only, but implementation of the partnership agreement could allow them to be open to Cortland County residents as well. In addition, through Program Strategy #1, Cortland County will pursue having OCRRA's current HHW subcontractor available to visit Cortland County two (2) times per month to provide Cortland County residents with a convenient HHW collection event option within the County on a more regular basis. With the expansion of Cortland County's HHW program, the goal is to increase collection rates and divert more HHW materials away from sources where they do not belong: landfills, wastewater treatment facilities, or waste to energy facilities. Chapter 7 will further detail the implementation of this program strategy over the course of the planning period.

Program Strategy #7 – Expand Mercury Collection Program

It is well known that mercury is an extremely toxic substance that does not break down easily once released to the environment, and therefore its disposal needs to be controlled. Mercury is used in some

Goal: Provide residents with a convenient and safe method of disposal of mercury containing devices.

consumer products; examples include thermometers, thermostats, and automotive switches. Compact fluorescent lamps (CFLs) contain a small amount of mercury; approximately 3-5 milligrams. Expended CFL's should be managed properly, in the same manner as other household hazardous waste products like paint, batteries and non-digital thermostats. Many CFL retail outlets, such as Home Depot, offer safe disposal or recycling.

Many residents use and discard batteries into the waste stream. Although waste batteries are a small amount of the solid waste stream, they are a concentrated source of some types of heavy metals. The main constituents of concern for human health and the environment include: cadmium, lead and mercury.

Reusable/rechargeable batteries are preferred over single-use batteries provided the rechargeable batteries are recycled after their useful life is over. As of June 8, 2011, New York retail locations that sell rechargeable batteries are required to accept used batteries of the same type for recycling. Additionally, as of December 15, 2011, it is against the law for New Yorkers to knowingly dispose of rechargeable batteries in the garbage.

Currently, residents may drop off mercury containing materials at the recycling center on the household hazardous waste day, which is usually held once a year. Also, the recycling center has recently implemented a battery collection program year round available to the MRF users and residents. The County will develop an inventory of drop-off locations for the proper disposal of mercury containing products such as thermometers and thermostats, which will be maintained and updated on the County's website. Additionally, should the partnership be implemented, the Rock Cut Road Drop-off site (an OCRRA facility) would be open to Cortland County residents during regular hours of operation. Chapter 7 will further detail the implementation tasks expected to undertake Program Strategy #6.

Program Strategy #8 – Expand Mandatory E-Waste Recycling Program

Presently the County has a limited E-Waste Recycling program, which relies on other entities to sponsor E-waste collection days. The New York State Electronic Equipment Recycling and Reuse Act was signed into law on May 28, 2010. It requires manufacturers to set up and fund programs for the collection and recycling of electronic waste in New York State. This relatively new law relieves New York local municipalities, such as Cortland County, of the costly burden of managing e-waste, and provides free and convenient recycling of electronics to consumers and businesses in New York State.

Goal: Educate residents of proper E-waste recycling programs.

The County's list of mandatory recycled items does not include computers, computer monitors, and televisions; however, the County does accept these materials for recycling. As the technology in consumer electronics evolves, the quantity of electronic waste, or E-waste, entering the waste stream will continue to grow. The County will evaluate expanding the list of mandatory recycled items to include E-wastes such as computers, computer monitors, televisions, cell phones and digital cameras. This would require the adoption of a local law to include these items as mandatory recyclables.

Additionally, should the Cortland-Onondaga Partnership be implemented, OCRRA's E-waste educational materials would be available for Cortland County to utilize to expand the program. OCRRA currently directs residents to "greener gadgets" to locate a retailer that participates in a take-back program in your area. This link could also be shared on Cortland County's website.



Chapter 7 will further detail the subtasks necessary to expand the E-waste recycling program.

Program Strategy #9 – Pharmaceutical Education Program

Until recently, consumers have been told to flush unwanted drugs. With technological advances and research, low levels of drugs are being found in our surface waters. We know that some drugs pass largely unaltered through our wastewater treatment plants and enter rivers and other waters. Drugs from health care facilities, pharmaceutical manufacturing facilities and farms can also find their way into the water.

Goal: Educate residents of proper Pharmaceutical management to reduce the instances of improper disposal or flushing.

Cortland County's sheriff's department currently schedules pharmaceutical collection events within the County. The Cortland Prevention Services also has drop boxes at the Village of Homer Police Department, City of Cortland Police Department, and County Sheriff's office. The County will post information on its website to ensure proper promotion of these events.

Should the partnership be implemented between Cortland County and OCRRA, materials destined for disposal in Cortland County will ultimately be managed at the Waste-to-Energy facility. While medical disposal events are held throughout the nation, they are unnecessary in a community which has a Waste-to-Energy Facility. Medicine brought to special disposal events are ultimately destroyed at Waste-to-Energy

Facilities. Educating residents of the proper method of placing medication in the trash will occur should the partnership be implemented. Chapter 7 will detail the implementation tasks necessary to educate the residents of Cortland County on the proper management of pharmaceuticals.

6.3 Program Strategies to Increase Organics Recovery

One recyclable material stream that the County has not yet addressed on a long-term basis is the organic waste stream. Interest in organic waste diversion has increased over the last few years, particularly because it has the potential to divert a significant portion of the waste stream away from landfills. The composting process can be applied to yard waste, food waste, MSW, sewage sludge, non-hazardous industrial sludge, or some combination of these materials.

Program Strategy #10 – Support Yard Waste Composting Efforts

Much of the Planning Unit's service area is rural and, like other rural areas around the state and the country, residents tend to manage yard trimmings on their own property, which will be further discussed in Program Strategy #11. The Village of Homer and the City of Cortland are the only municipalities within Cortland County that provide for seasonal leaf and tree limb drop off locations. It is anticipated that initially the County will implement a program that would gather information from existing programs so that an accurate analysis of the existing yard waste composting program can be made.

Goal: Encourage yard waste composting to increase diversion of yard waste from the solid waste disposal stream.

Cortland County encourages, as the first step in the hierarchy of yard waste management, that residents and businesses implement grass-cycling (leaving their grass clippings on the lawn), and/or backyard composting for yard waste disposal. Should the Cortland-Onondaga Partnership be implemented, a second option could be available to Cortland County residents. OCRRA operates yard waste compost drop-off facilities at their Amboy and Jamesville compost sites, which would be made available to Cortland County residents as part of the partnership. The following materials are acceptable: garden waste, grass, hay, leaves, plants, straw, brush, hedge trimmings, pine cones, pine needles, sticks, tree limbs and trunks, and vines. It is anticipated that OCRRA will accept shipments of food waste and yard waste directly from Cortland County residents and haulers servicing the Cortland County community and charge said residents/haulers the same tip fee they would charge haulers from Onondaga County.

During the planning period it will be evaluated whether these programs need to be better promoted or enhanced so that residents and businesses utilize the various services available. Cortland County will support existing educational partners, such as

Soil and Water Conservation and Cornell Cooperative Extension, as well as potential new partners, to bolster yard waste composting education in the County. The implementation schedule in Chapter 7 provides a year by year breakdown of the different steps necessary to undertake this task.

Program Strategy #11 – Promote Backyard Composting through Education and Training Programs

While composting of all organic waste can be an effective method of low technology recycling that can significantly reduce the stream of waste destined for a disposal facility, collection of these materials on a household basis can prove both difficult and expensive. Another method for removal of these wastes from the disposal waste stream is to implement a backyard composting program, through which residents are provided information regarding the methods of backyard composting. It is anticipated that many residents are already participating in a backyard composting program of their own; however, this task would allow for the program to become more formalized and allow residents to share information amongst themselves. As part of the proposed partnership with OCRRA, educational materials generated by OCRRA for their residents will be made available to Cortland County residents. OCRRA's website currently contains educational information on how to successfully compost organic material like food and yard waste both indoors and outdoors at one's home.

<p>Goal: Encourage backyard composting to divert more food and yard waste from the solid waste disposal stream.</p>

Based on the estimates calculated for this plan, there is a potential to divert several thousand tons of organics from the MSW waste stream on an annual basis by increasing backyard composting efforts. With the implementation of this task primarily in Year 4 through Year 7, it is anticipated that the diversion rates will increase. Additionally, with the gathering of data proposed as part of this Plan, the diversion percentages are expected to increase based on better reporting. The implementation schedule in Chapter 7 provides an outline of this implementation task.

Program Strategy #12 – Management of Organics

There are no known food waste collection programs or multi-user composting facilities within Cortland County with the exception of SUNY Cortland's program discussed below. Food waste collection programs are not currently monitored by Cortland County; however, a method for gathering this information is proposed as part of Program Strategy #15. Once an understanding of how food waste is processed or managed in Cortland County, then the next step would be to implement an educational program (Program Strategy #14) to disseminate

<p>Goal: Increase diversion of food and yard waste requiring disposal.</p>
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information regarding the benefits of food waste collection or composting programs. Additionally, as stated previously, OCRRA's organic composting services will be made available to Cortland County residents should the partnership be implemented.

According to the estimates derived from the DEC's waste composition tool, food scraps comprise approximately 13% of the MSW stream in Cortland County. Many community organizations and institutions are taking the initiative to research options for the management of these materials. Currently, Cortland County does not have the resources available to conduct a food scraps program county-wide; however, the County is supportive of other organizations such as SUNY Cortland, OCRRA, and private entities implementing food scrap composting programs.

Existing programs at SUNY Cortland's dining facilities (operated by Auxiliary Services Corporation[ASC]) include:

- In 2013, ASC purchased the "LeanPath" measurement equipment and system that identifies areas where food waste can be reduced.
- In 2013, Neubig Dining added a pulper to chop up all food scrap waste. A local farmer takes it to compost.
- Central Production composts all food waste.
- Food remaining in dining halls before semester breaks is donated to local food pantries.
- To reduce the amount of consumer food coming to the dish return, Neubig Dining now serves entrees.

Cortland County is receptive to linking farmers, institutions and businesses together to share valuable information related to managing organics. However, Cortland County is not equipped to track institutional food waste generation or commercial food waste generation. Based on the examples provided above, it is clear that the institutions within Cortland County are taking an active role in organics management, which Cortland County supports and would be willing to promote. Chapter 7 – Implementation Schedule provides the milestones through the planning period that are anticipated to implement this task.

Program Strategy #13 – Monitor Management of Animal Mortalities

According to the Cornell Waste Management Institute (CWMI), over 25,000 dead deer carcasses are managed annually by the New York State Department of Transportation (NYSDOT). Disposal options are limited and appropriate disposal is expensive. Current NYSDOT practices include

Goal: Monitor success of CWMI and NYSDOT research methods for the management and composting of animal carcasses.

contracting with service providers to pick up and dispose of the animals, dragging animals further off the road or placing them in pits and depressions off side roads. These methods are becoming less acceptable as rural areas become more populated and there is increased concern for environmental quality.

Cortland County currently does not have a compost management plan for road kill, slaughter waste or other non-farm related animal mortalities. CWMI has worked with the NYSDOT to research methods of management and composting of this type of material. The method of static pile carcass composting has shown some benefits. More examples of this type of management method need to be carried out before Cortland County would be in a position to consider instituting a county operated animal carcass composting program. However, Cortland County supports the efforts that CWMI and NYSDOT have made towards alternative methods of disposal for the dead carcasses, and will continue to monitor the progress being made. Chapter 7 – Implementation Schedule provides the milestones through the planning period that are anticipated to evaluate this task.

6.4 Public Education Elements

Cortland County has taken the initiative to promote recycling in schools through presentations and distribution of recycling information. If financial and personnel resources allow, the County proposes to continue this program in the local schools, as well as expanding into public facilities (such as municipal office buildings) as referenced in Program Strategy #2.

Program Strategy #14 – Public Outreach and Education

Public outreach and education regarding waste diversion programs and responsible disposal of special wastes has been identified as a key component of the solid waste management program in Cortland County.

Goal: Educate Residents to Increase Recycling and Waste Diversion and Reduce Improper Disposal of Materials

Cortland County is dedicated to education and believes that this is best accomplished, and provides the greatest benefit, when practiced in partnership with the community, since impacts and benefits of management decisions reach across property boundaries. Waste streams that could experience higher diversion rates through further public education efforts have been identified. Specifically, the waste handling areas that should receive the most focus initially are:

- Recycling
- Yard Waste Composting Facilities
- Backyard Composting

- HHW Collection Events
- C&D Debris Diversion Opportunities
- Mercury Containing Materials Disposal Options
- E-waste Management Options
- Pharmaceuticals Management

During this planning period, the County will evaluate its current and potential education methods for promoting reuse and the County's recycling law. The County will evaluate the feasibility of adding recycling education at public events, specifically in the areas where they can team with local companies and not for profit agencies to encourage the recycling of specific waste streams. Additionally, OCRRA currently has a robust recycling and waste diversion education program, which will be tapped into should the partnership with OCRRA occur. As discussed previously, various OCRRA programs will be made available to Cortland County residents including their impressive and informative website, which encourages waste diversion and recycling at home, at work, and at school.

To the extent that sufficient funds and resources are available, much of the education will be focused in local public schools as well as colleges and universities and public events, which were all previously listed in Chapter 1 – Tables 1-4 and 1-7. This will provide the most exposure to the maximum quantity of people for each effort. Later in the planning period, other groups such as, libraries (Table 1-5) and jails, institutions, nursing homes (Table 1-6) could be added to the outreach program. Additionally, the County and their partners will likely employ local media in an effort to promote specific collection and education events.

Providing information to these generators regarding options for implementing recycling programs, as well as providing resources for in-house training programs, may also offer a valuable method for increasing diversion rates in these types of facilities. Chapter 7 – Implementation Schedule provides the milestones through the planning period that are anticipated to evaluate this task.

Program Strategy #15 - Improving Solid Waste and Recycling Data Compilation

The County has a recycling program, with many materials being mandatory to recycle. While the County offers recycling options, the Annual Solid Waste and Recyclables Inventory produced by the County consistently reports recycling percentages below the County's recycling goals set forth in the original plan. It is the County's belief that this is due to the fact that reported recycling numbers are based solely on the materials that are handled through the County's solid waste management system. While most solid waste is required to be handled through this system, and therefore is completely accounted for, the same requirement does not apply to

recyclable materials. Therefore, large recyclables producers such as big box stores, and even private recyclables collection companies, may ship recyclable products directly to the end user for a profit, bypassing the County recycling facilities. As a result, these materials are not being accounted for in the County's recycling reports.

The County would undertake several recycling data surveys over the course of the planning period, which would be distributed to various generators in the County in order to compile a more complete set of recycling data. These surveys will be used to help assess what materials could be available for use in new programs such as organics composting and construction and demolition (C&D) material recycling. The survey would most likely be conducted in stages, with the largest waste producers being contacted first. The groups of generators could include: (1) retail businesses (groceries, restaurants, stores); (2) industries; (3) schools and institutions; (4) libraries, jails and nursing homes; (5) the public sector and special events. Survey recipients would be asked for data such as: recyclable material (metals, plastic, and paper) produced per year, organic material produced per year, C&D material produced per year, and current disposal/recycling methods. Intermediate facilities such as confidential paper shredding services may also be contacted to determine how much material they receive from within Cortland County. This information would then be compiled to help the County more accurately determine the actual recycling rate within the County, which recycling efforts are most effective, and which new recycling methods would be most prudent for the County to pursue.

Goal: To obtain a more complete data set to assist with the implementation of the program strategies.

In addition to generator data, solid waste management facility data will be collected as well. For every facility/program that manages MSW, biosolids, C&D, processed scrap metal, and/or industrial waste generated in Cortland County, requested information could include information regarding:

- capacity/expected life,
- service areas, and
- operating status.

For Planning Unit owned facilities/programs information could include:

- infrastructure/components,
- age,
- operating dates,
- size,
- regulatory status,
- partnerships/ opportunities,
- contracts,

- improvements or changes, and
- resources/ needs/ costs.

Program Strategy #16 – Evaluate the Advantages and Disadvantages of Flow Control

Legal uncertainty with respect to the power of municipal governments to direct the flow of waste to publicly-owned solid waste management facilities has been reduced as a result of a United States Supreme Court decision involving the Oneida-Herkimer Solid Waste Authority. Consequently, many counties have contemplated updating and implementing their local laws to designate facilities to be utilized for the management of solid waste generated within their counties.

In its plan, *Beyond Waste*, the NYSDEC discourages planning units from relying too heavily on disposal facilities outside of their planning unit. It stresses that planning for disposal, based on estimated generation rates, within each planning unit allows each planning unit to maintain sufficient waste management infrastructure to handle wastes in the most environmentally and fiscally responsible manner, and to ensure adequate capacity for disposal over its planning period. The NYSDEC identifies flow control as a tool to be used by planning units to enforce this principle. Furthermore, *Beyond Waste* states that “Flow control can be an important financial and planning tool to ensure delivery of sufficient solid waste to satisfy debt payments for capital intensive facilities and to generate revenue that can support waste reduction and recycling initiatives. It also ensures that materials are directed to a facility that the municipality determines is safe and appropriate for handling its waste.”

Goal: To determine if adopting a flow control policy would be beneficial to Cortland County.

Chapter 7 – Implementation Schedule (with integrated recovery goals)

While some of the program enhancements outlined above are already in the planning stages, some will require a higher level of feasibility analysis, funding, and planning before implementation. The preliminary implementation schedule for the proposed plan is outlined in the table below. As pursuit of implementing these proposed enhancements continues, and further information is gathered regarding the feasibility of implementing these programs, this schedule will be updated as needed via the biennial LSWMP Compliance Reports, which are planned to be issued by the County every 2 years per DEC requirements.

Cortland County - Implementation Schedule

Program Strategy	Year									
	2015 1	2016 2	2017 3	2018 4	2019 5	2020 6	2021 7	2022 8	2023 9	2024 10
1) Evaluate Regional Solid Waste Partnership Opportunity	Evaluate benefits and feasibility of a regional solid waste partnership with OCRRA and Onondaga County.	Work with OCRRA to extend OCRRA's waste reduction, reuse, recycling and composting opportunities to Cortland County waste generators.								Update tasks for new 10 year planning period depending on progress.
2) Increase Recycling at County-Owned Facilities		Apply for NYSDEC Grant to cover 50% of the salary for a recycling coordinator. Define a waste diversion goal for county owned facilities.	Prepare a plan to increase recycling rates at County-owned facilities. Evaluate current recycling procedures at County owned facilities.	Preliminarily quantify recycling diversion rates at facilities. Encourage "Green Teams" within county offices to support additional recycling opportunities at county facilities.	Draft a model resolution that can be used by municipalities within the County to encourage a similar program for increasing recycling efforts on the local level.	Initiate internal recycling campaign. Coordinate with other municipalities to share ideas to promote recycling. Implement a recycling campaign through signage, email notifications, contests, etc.	Review expanding the recycling campaign to include public events, schools, institutions, etc.		Update tasks for new 10 year planning period depending on progress.	
3) Increase Construction and Demolition Debris Recycling		Gather data related to C&D generation and diversion from Program Strategy #14 (data gathering).			Establish a C&D waste diversion and recycling goal. Initially focus on County funded projects.	Identify other municipalities with C&D recycling programs, and determine if the programs could be adapted to Cortland County's needs.	If determined to be feasible, the County could prepare a plan that lays out how the program would be structured including: implementation, education, tracking, documentation, etc.	Monitor and assess opportunities for meeting or increasing the goal.	Monitor and assess opportunities for meeting or increasing the goal.	Determine next step for C&D Debris Recycling.
Promote and encourage the separation of portions of the waste stream at the source. C&D or remodeling debris can be brought to OCRRA's Ley Creek Drop-Off Site.										

Cortland County - Implementation Schedule

Program Strategy	Year										
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	
	1	2	3	4	5	6	7	8	9	10	
4) Product Reuse Collection and Distribution Programs	Inventory existing product reuse programs.	Prepare and distribute biennial recycling survey, including survey of interest in product reuse or exchange. Include an item on the waste generator surveys related to materials that may be useful to others and whether the business would be interested or willing to exchange those materials.	Disseminate information to those interested in Product Reuse based on results of the survey.	Prepare and distribute biennial recycling survey, including survey of interest in product reuse or exchange. Include an item on the waste generator surveys related to materials that may be useful to others and whether the business would be interested or willing to exchange those materials.		Provide avenues for businesses to communicate related to possible exchange of materials versus the alternative of disposing of them.	Assess the feasibility of providing a materials exchange program for Cortland County residents.	Disseminate information. If sufficient funds and resources are available, the County's educational program could include educating businesses about material exchange opportunities.	Prepare and distribute biennial recycling survey, including survey of interest in product reuse or exchange. Include an item on the waste generator surveys related to materials that may be useful to others and whether the business would be interested or willing to exchange those materials.	Provide avenues for businesses to communicate related to possible exchange of materials versus the alternative of disposing of them.	Provide avenues for businesses to communicate related to possible exchange of materials versus the alternative of disposing of them.
	Support existing product reuse operations and encourage additional product reuse facilities through economic development.										
5) Support Product Stewardship Framework	Reach out to the New York Product Stewardship Council to learn more about Product Stewardship and Extended Producer Responsibility (EPR).	Educate county staff and County Legislature of benefits to supporting the product stewardship initiative.	Review other NY communities that have passed a Product Stewardship resolution showing their support. Determine if passing a similar resolution in Cortland County would be beneficial.	Work with the NY Product Stewardship Council to draft a resolution that would fit the needs of Cortland County.	If supported by the Legislature, pass a Product Stewardship resolution.	Support the NY Product Stewardship Council and remain educated on product stewardship initiatives.					Update tasks for new 10 year planning period depending on progress.

Cortland County - Implementation Schedule

Program Strategy	Year									
	2015 1	2016 2	2017 3	2018 4	2019 5	2020 6	2021 7	2022 8	2023 9	2024 10
6) Provide Additional HHW Collection Opportunities to County Residents		Apply for NYSDEC Grant to cover 50% of the salary for a recycling coordinator.	Undertake a promotional campaign to educate residents of the availability of the year-round HHW collection facility provided by OCRRA.	Compare quantities managed at the OCRRA HHW facility and at the Cortland County events. Identify areas for potential improvement and make HHW program changes as appropriate .		To the extent sufficient funding and resources are available and the service is needed, add additional collection events in Cortland County.			If the need is apparent, add an additional collection event per year and rotate the location of the event.	Update and modify the Plan to reflect successes and challenges.
	With assistance from OCRRA, monitor quantities of HHW dropped off at the OCRRA HHW facility.									
Provide at least one (1) HHW Collection Event per year within Cortland County.										
7) Expand Mercury Collection Program		Apply for NYSDEC Grant to cover 50% of the salary for a recycling coordinator.	Inventory existing mercury collection programs (public and private) within Cortland County. Post drop-off locations on the County's website.	Promote existing drop-off locations and continue to update County's website.	Promote existing drop-off locations and continue to update County's website.	Promote existing drop-off locations and continue to update County's website.	Promote existing drop-off locations and continue to update County's website.	Promote existing drop-off locations and continue to update County's website.	Promote existing drop-off locations and continue to update County's website.	Promote existing drop-off locations and continue to update County's website.
	Provide at least one (1) HHW Collection Event per year within Cortland County where mercury containing materials will be accepted.									

Cortland County - Implementation Schedule

Program Strategy	Year									
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
	1	2	3	4	5	6	7	8	9	10
8) Expand Mandatory E-Waste Recycling Program		Apply for NYSDEC Grant to cover 50% of the salary for a recycling coordinator.	Inventory existing e-waste collection events (public and private) within Cortland County. Post events on the County's website.	Promote existing collection events and continue to update County's website.	Promote existing collection events and continue to update County's website.	Promote existing collection events and continue to update County's website.	Promote existing collection events and continue to update County's website.	Promote existing collection events and continue to update County's website.	Promote existing collection events and continue to update County's website.	Promote existing collection events and continue to update County's website.
				Evaluate expanding the list of mandatory recycled items in Cortland County's local recycling law to include E-wastes. Review other aspects of the law to determine if any other modifications are necessary. Program Strategy #4 may be addressed at the same time.	Draft a revised local recycling law and bring to County Legislature for approval.	Promote changes to local recycling law on the County's website.	Promote changes to local recycling law on the County's website.	Promote changes to local recycling law on the County's website.	Promote changes to local recycling law on the County's website.	
9) Pharmaceutical Education Program		Apply for NYSDEC Grant to cover 50% of the salary for a recycling coordinator.	Undertake a promotional campaign to educate residents of the proper management of pharmaceuticals. Utilize OCRRA's educational materials as templates to educate Cortland County residents.			Continue to promote proper management of pharmaceuticals via Cortland County's website.	Continue to promote proper management of pharmaceuticals via Cortland County's website.	Continue to promote proper management of pharmaceuticals via Cortland County's website.	Continue to promote proper management of pharmaceuticals via Cortland County's website.	Continue to promote proper management of pharmaceuticals via Cortland County's website.

Cortland County - Implementation Schedule

Program Strategy	Year									
	2015 1	2016 2	2017 3	2018 4	2019 5	2020 6	2021 7	2022 8	2023 9	2024 10
10) Support Yard Waste Composting Efforts		Apply for NYSDEC Grant to cover 50% of the salary for a recycling coordinator.	Inventory existing yard waste and organics management programs (public and private) within Cortland County.	Encourage and promote private compost operations through economic development. Maintain communication with municipalities and educational partners related to existing or ongoing yard waste composting education programs. Evaluate if Cortland County should provide county residents with yard waste drop off location(s) where the material would be bulk hauled to OCRRA's facilities for composting.		Use input from local municipalities and other counties with similar programs to determine type of program that would be feasible.		Set diversion goals as a method of tracking the success of the program.	Update and modify the Plan to reflect successes and challenges.	Update tasks for new 10 year planning period depending on progress.
	Promote OCRRA's existing yard waste compost program that is available to Cortland County residents.									
11) Promote Backyard Composting through Education and Training Programs		Apply for NYSDEC Grant to cover 50% of the salary for a recycling coordinator.		Identify training materials available on the NYSDEC and Cornell Cooperative Extension websites for assistance in developing training courses or locating backyard composting demonstration sites. Place links on Cortland County's website for these training course materials.	Enhance backyard composting by developing partnerships with outside organizations (Soil and Water Conservation District, Cornell Cooperative Extension) and by providing (or funding) backyard demonstration sites or educational events.		Update and modify the Plan to reflect successes and challenges.	Update tasks for remainder of the planning period depending on progress.	Update tasks for new 10 year planning period depending on progress.	
	Monitor backyard composting demonstration site(s) for successes and failures.									

Cortland County - Implementation Schedule

Program Strategy	Year									
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
	1	2	3	4	5	6	7	8	9	10
12) Support Organics Management		Apply for NYSDEC Grant to cover 50% of the salary for a recycling coordinator.	Inventory existing yard waste and organics management programs (public and private) within Cortland County. Determine which programs require support or have successes to share.		Approach organics management programs requiring support or expansion and provide necessary opportunities or access to successful programs. Encourage local programs to share their successes with others.		Determine level of involvement required from County or continue as a source to share information among generators.	Promote successful organics management programs via Cortland County's website.	Continue to be advised of organics management programs within Cortland County and provide any additional future support as deemed necessary.	
13) Monitor Management of Animal Mortalities	Monitor progress of CWMI and NYSDOT regarding animal mortality and composting.	Report in the Biennial Compliance report any new developments in animal carcass composting activities.	Monitor progress of CWMI and NYSDOT regarding animal mortality and composting.	Report in the Biennial Compliance report any new developments in animal carcass composting activities.	Monitor progress of CWMI and NYSDOT regarding animal mortality and composting.	Report in the Biennial Compliance report any new developments in animal carcass composting activities.	Monitor progress of CWMI and NYSDOT regarding animal mortality and composting.	Report in the Biennial Compliance report any new developments in animal carcass composting activities.	Monitor progress of CWMI and NYSDOT regarding animal mortality and composting.	Report in the Biennial Compliance report any new developments in animal carcass composting activities.
14) Encourage Public Outreach and Education Program		Apply for NYSDEC Grant to cover 50% of the salary for a recycling coordinator.	Work with OCRRA's public education outreach team to draft a preliminary education plan regarding waste diversion and responsible waste disposal. Focus initial plan on recycling, yard waste composting, backyard composting, HHW collection opportunities, C&D debris diversion, mercury containing materials disposal options, e-waste management, and pharmaceutical management options. The plan should expect the initial audience to include: residents, local public schools as well as colleges and universities, and attendees at public events.		If deemed appropriate, partner with a local organization, college, or university to implement the public outreach and education plan or determine feasibility of utilizing OCRRA's robust education team.	Expand the education plan to include other groups, such as, municipalities, libraries, jails, institutions, and nursing homes. Add details related to product reuse and organics management to the education plan that would be most beneficial for these additional audience members.		Expand the education plan to include other groups, such as, commercial retail stores and industries. Add details related to product stewardship or extended producer responsibility, waste prevention, waste diversions, and organics management to the education plan that would be most beneficial for commercial and industry audiences.		Update tasks for new 10 year planning period depending on progress.

Cortland County - Implementation Schedule

Program Strategy	Year									
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
	1	2	3	4	5	6	7	8	9	10
15) Improving Solid Waste & Recycling Data Compilation		Apply for NYSDEC Grant to cover 50% of the salary for a recycling coordinator. Prepare a survey template for distribution to waste generators.	Prepare and distribute surveys to retail businesses (groceries, restaurants, stores).	Tabulate and interpret data from surveys. Utilize to implement other tasks or modify tasks. Follow up with interested generators to improve their waste diversion programs.	Prepare and distribute surveys to industries.	Tabulate and interpret data from surveys. Utilize to implement other tasks or modify tasks. Follow up with interested generators to improve their waste diversion programs.	Prepare and distribute surveys to schools and institutions.	Tabulate and interpret data from surveys. Utilize to implement other tasks or modify tasks. Follow up with interested generators to improve their waste diversion programs.	Prepare and distribute surveys to libraries, jails, nursing homes, and the public sector (municipalities).	Tabulate and interpret data from surveys. Utilize to implement other tasks or modify tasks. Follow up with interested generators to improve their waste diversion programs.
		Prepare a survey template for distribution to facilities or haulers that <u>manage</u> MSW, biosolids, C&D, processed scrap metal, and industrial waste.	Prepare and distribute surveys.	Tabulate and interpret data from surveys. Utilize to implement other tasks or modify tasks.	Prepare and distribute surveys.	Tabulate and interpret data from surveys. Utilize to implement other tasks or modify tasks.	Prepare and distribute surveys.	Tabulate and interpret data from surveys. Utilize to implement other tasks or modify tasks.	Prepare and distribute surveys.	Tabulate and interpret data from surveys. Utilize to implement other tasks or modify tasks.
16) Local Flow Control Law for Use if Needed	Assess the need to consider implementation of flow control within the County as deemed necessary.	If flow control is implemented, monitor and enforce, as necessary.								Update tasks for new 10 year planning period depending on progress.

Cortland County - Implementation Schedule

Program Strategy	Year									
	2015 1	2016 2	2017 3	2018 4	2019 5	2020 6	2021 7	2022 8	2023 9	2024 10
Optimal MSW Recycling Diversion Goals	23%	26%	30%	34%	38%	42%	46%	50%	54%	58%
Optimal C&D Diversion Goals	33%	50%	50%	52%	58%	58%	58%	60%	62%	63%

Notes:

1. The above implementation schedule includes tasks and subtasks. Details related to required resources to achieve the projected results can be found in each implementation task description in Chapter 6. The bulk of the tasks are expected to be undertaken in the earlier years of the planning period, and more detail will be added through compliance reports for all impending tasks as the planning period progresses.
2. It should be understood that these recycling diversion projections are intended for use as a planning tool only and as such are not a commitment of achievement by the County. As programs progress and new information becomes available, these projections are expected to evolve and require revision over time. Accordingly, to remain a valuable planning tool, it is expected these optimal rate projections will be updated or revised in each biennial compliance report along with the implementation schedule, as necessary.

Chapter 8 – State Environmental Quality Review (SEQR) Determination

A SEQRA review for the LSWMP will be undertaken prior to the adoption of the final plan. All required SEQRA documents will be maintained in a file at the County Office Building as well as in Appendix E of this plan.

Chapter 9 – Public Participation/Notification to Neighboring Jurisdictions

The Draft LSWMP has been presented at the Solid Waste Committee Meeting. The County will hold an open public comment period on the draft plan, during which, a public information meetings will be held; specifically including public presentations to the Solid Waste Committee and the County Legislature. In addition, all neighboring counties will be notified about the draft SWMP's availability, and it will be posted on the county website for review.

Chapter 10 – Plans for LSWMP Distribution

The County will provide public notice regarding the completion of the Draft LSWMP on the county website. The website posting will indicate that the plan can be viewed through the county website and that hard copies are available for public review at local libraries and the county office building. Public comments, once received, will be included in Appendix F.

Each neighboring county will be notified in writing of the completion of the plan and its availability for review.

Chapter 11 – Resolution Adopting the LSWMP

The Cortland County Legislature will enact a resolution adopting the Final Solid Waste Management Plan upon its completion, and a copy of the resolution will be included in Appendix G in the final LSWMP.

Appendix A

Detailed Waste Composition Spreadsheets

- A1 – MSW Composition Table
- A2 – MSW Diversion Table
- A3 – C&D Composition Table
- A4 – C&D Diversion Table

A1 – MSW Composition Table

Cortland County
Municipal Solid Waste (MSW) Detailed Composition Analysis Year 2012

Material	MSW GENERATED									Planning Unit/ Municipality Percentage
	Rural			Suburban			Urban			
	98.00%			2.00%			0.00%			
	Residential	Comm/Inst	Combined	Residential	Comm/Inst.	Combined	Residential	Comm/Inst.	Combined	
	58.00%	42.00%	100.00%	55.00%	45.00%	100.00%	52.00%	48.00%	100.00%	100.00%
Newspaper	5.20%	1.90%	3.81%	5.00%	1.90%	3.61%	6.60%	2.00%	4.39%	3.81%
Corrugated Cardboard	6.60%	13.90%	9.67%	6.60%	13.90%	9.89%	6.90%	13.70%	10.16%	9.67%
Other Recyclable Paper										
Paperboard	3.20%	1.10%	2.32%	3.30%	1.00%	2.27%	3.60%	0.90%	2.30%	2.32%
Office Paper	0.80%	3.80%	2.06%	0.90%	4.20%	2.39%	1.10%	5.80%	3.36%	2.07%
Junk Mail	3.00%	0.70%	2.03%	3.20%	0.70%	2.08%	3.50%	0.70%	2.16%	2.03%
Other Commercial Printing	1.70%	2.30%	1.95%	1.70%	2.40%	2.02%	2.30%	2.60%	2.44%	1.95%
Magazines	1.10%	0.90%	1.02%	1.00%	0.80%	0.91%	1.10%	1.00%	1.05%	1.01%
Books	0.50%	0.30%	0.42%	0.50%	0.30%	0.41%	0.60%	0.40%	0.50%	0.42%
Bags	0.50%	0.20%	0.37%	0.50%	0.20%	0.37%	0.60%	0.20%	0.41%	0.37%
Phone Books	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.20%	0.25%	0.30%
Poly-Coated	0.20%	0.30%	0.24%	0.20%	0.20%	0.20%	0.30%	0.20%	0.25%	0.24%
Other Recyclable Paper (Total)	11.30%	9.90%	10.71%	11.60%	10.10%	10.93%	13.40%	12.00%	12.73%	10.72%
Other Compostable Paper	6.80%	6.80%	6.80%	6.40%	6.40%	6.40%	6.80%	6.80%	6.80%	6.79%
Total Paper	29.90%	32.50%	30.99%	29.60%	32.30%	30.82%	33.70%	34.50%	34.08%	30.99%
Ferrous/Aluminum Containers										
Ferrous Containers	1.90%	1.00%	1.52%	1.20%	0.70%	0.98%	1.40%	0.70%	1.06%	1.51%
Aluminum Containers	0.70%	0.40%	0.57%	0.60%	0.30%	0.47%	0.50%	0.40%	0.45%	0.57%
Ferrous/Aluminum Containers (Total)	2.60%	1.40%	2.10%	1.80%	1.00%	1.44%	1.90%	1.10%	1.52%	2.08%
Other Ferrous Metals	5.20%	5.40%	5.28%	5.00%	5.80%	5.36%	3.30%	3.70%	3.49%	5.29%
Other Non-Ferrous Metals										
Other aluminum	0.20%	0.30%	0.24%	0.20%	0.30%	0.25%	0.20%	0.30%	0.25%	0.24%
Automotive batteries	0.80%	0.50%	0.67%	0.70%	0.40%	0.57%	0.20%	0.20%	0.20%	0.67%
Other non-aluminum	0.50%	0.30%	0.42%	0.30%	0.40%	0.35%	0.40%	0.20%	0.30%	0.41%
Other Non-Ferrous Metals (Total)	1.50%	1.10%	1.33%	1.20%	1.10%	1.16%	0.80%	0.70%	0.75%	1.33%
Total Metals	9.30%	7.90%	8.71%	8.00%	7.90%	7.96%	6.00%	5.50%	5.76%	8.70%
PET Containers	1.10%	0.80%	0.97%	0.90%	0.80%	0.86%	1.20%	1.00%	1.10%	0.97%
HDPE Containers	1.10%	0.60%	0.89%	0.90%	0.70%	0.81%	1.00%	0.70%	0.86%	0.89%
Other Plastic (3-7) Containers	0.20%	0.10%	0.16%	0.20%	0.20%	0.20%	0.20%	0.20%	0.20%	0.16%
Film Plastic	5.70%	5.90%	5.78%	5.50%	5.80%	5.64%	5.80%	5.80%	5.80%	5.78%
Other Plastic										
Durables	3.10%	3.20%	3.14%	3.00%	3.20%	3.09%	3.20%	3.30%	3.25%	3.14%
Non-Durables	1.60%	1.80%	1.68%	1.60%	1.80%	1.69%	1.80%	1.90%	1.85%	1.68%
Packaging	1.40%	1.10%	1.27%	1.40%	1.10%	1.27%	1.50%	1.10%	1.31%	1.27%
Other Plastic (Total)	6.10%	6.10%	6.10%	6.00%	6.10%	6.05%	6.50%	6.30%	6.40%	6.10%

A2 – MSW Diversion Table

**Cortland County
Municipal Solid Waste (MSW) Combined Composition Analysis and Projections**

Material	Tons Generated	% of Total	2012		2015		2016		2017		2018		2019		2020		2021		2022		2023		2024	
			Tons	%	Tons	%																		
			Diverted	Diverted	Diverted	Diverted																		
Newspaper	1,211	3.81%	494	40.78%	541	44.70%	589	48.62%	636	52.55%	684	56.47%	731	60.39%	779	64.31%	826	68.23%	874	72.16%	921	76.08%	969	80.00%
Corrugated Cardboard	3,074	9.67%	1,444	46.97%	1,545	50.27%	1,647	53.57%	1,748	56.88%	1,850	60.18%	1,951	63.48%	2,053	66.79%	2,154	70.09%	2,256	73.39%	2,358	76.70%	2,459	80.00%
Other Recyclable Paper																								
Paperboard	736	2.32%	244	33.12%	271	36.81%	298	40.50%	325	44.18%	353	47.87%	380	51.56%	407	55.25%	434	58.94%	461	62.62%	488	66.31%	516	70.00%
Office Paper	657	2.07%	258	39.27%	285	43.34%	311	47.42%	338	51.49%	365	55.56%	392	59.64%	418	63.71%	445	67.78%	472	71.85%	499	75.93%	525	80.00%
Junk Mail	647	2.03%	238	36.79%	259	40.11%	281	43.44%	302	46.76%	324	50.08%	345	53.40%	367	56.72%	388	60.04%	410	63.36%	431	66.68%	453	70.00%
Other Commercial Printing	621	1.95%	258	41.61%	273	43.95%	287	46.29%	302	48.63%	316	50.97%	331	53.31%	345	55.65%	360	57.98%	375	60.32%	389	62.66%	404	65.00%
Magazines	322	1.01%	133	41.24%	144	44.62%	155	48.00%	166	51.37%	176	54.75%	187	58.12%	198	61.50%	209	64.87%	220	68.25%	231	71.62%	242	75.00%
Books	132	0.42%	76	57.26%	77	58.53%	79	59.81%	81	61.08%	82	62.36%	84	63.63%	86	64.90%	87	66.18%	89	67.45%	91	68.73%	93	70.00%
Bags	119	0.37%	61	51.10%	62	52.49%	64	53.88%	66	55.27%	67	56.66%	69	58.05%	71	59.44%	72	60.83%	74	62.22%	76	63.61%	77	65.00%
Phone Books	95	0.30%	70	73.71%	70	73.84%	71	73.97%	71	74.10%	71	74.23%	71	74.35%	71	74.48%	71	74.61%	71	74.74%	71	74.87%	72	75.00%
Poly-Coated	77	0.24%	1	1.63%	5	6.47%	9	11.31%	12	16.14%	16	20.98%	20	25.82%	23	30.65%	27	35.49%	31	40.33%	35	45.16%	38	50.00%
Other Recyclable Paper (Total)	3,406	10.72%	1,339	39.31%	1,447	42.48%	1,555	45.65%	1,663	48.82%	1,771	51.99%	1,879	55.16%	1,987	58.33%	2,095	61.50%	2,203	64.67%	2,311	67.84%	2,419	71.01%
Other Compostable Paper	2,159	6.79%	0	0.00%	65	3.00%	130	6.00%	194	9.00%	259	12.00%	324	15.00%	389	18.00%	453	21.00%	518	24.00%	583	27.00%	648	30.00%
Total Paper	9,850	30.99%	3,277	33.26%	3,598	36.53%	3,920	39.80%	4,242	43.06%	4,564	46.33%	4,885	49.60%	5,207	52.86%	5,529	56.13%	5,851	59.40%	6,172	62.66%	6,494	65.93%
Ferrous/Aluminum Containers		0.00%																						
Ferrous Containers	480	1.51%	130	27.16%	151	31.44%	172	35.73%	192	40.01%	213	44.30%	233	48.58%	254	52.86%	274	57.15%	295	61.43%	316	65.72%	336	70.00%
Aluminum Containers	182	0.57%	86	47.20%	91	49.98%	96	52.76%	101	55.54%	106	58.32%	111	61.10%	116	63.88%	121	66.66%	126	69.44%	131	72.22%	136	75.00%
Ferrous/Aluminum Containers (Total)	662	2.08%	216	32.66%	242	36.53%	267	40.40%	293	44.27%	319	48.15%	344	52.02%	370	55.89%	396	59.76%	421	63.63%	447	67.50%	473	71.37%
Other Ferrous Metals	1,680	5.29%	964	57.36%	985	58.62%	1,006	59.89%	1,027	61.15%	1,049	62.42%	1,070	63.68%	1,091	64.94%	1,112	66.21%	1,134	67.47%	1,155	68.74%	1,176	70.00%
Other Non-Ferrous Metals																								
Other aluminum	77	0.24%	0	0.41%	4	5.37%	8	10.33%	12	15.28%	16	20.24%	19	25.20%	23	30.16%	27	35.12%	31	40.08%	35	45.04%	38	50.00%
Automotive batteries	214	0.67%	0	0.00%	20	9.50%	41	19.00%	61	28.50%	81	38.00%	101	47.50%	122	57.00%	142	66.50%	162	76.00%	183	85.50%	203	95.00%
Other non-aluminum	132	0.41%	0	0.00%	7	5.00%	13	10.00%	20	15.00%	26	20.00%	33	25.00%	40	30.00%	46	35.00%	53	40.00%	59	45.00%	66	50.00%
Other Non-Ferrous Metals (Total)	422	1.33%	0	0.07%	31	7.34%	62	14.61%	92	21.88%	123	29.15%	154	36.42%	184	43.68%	215	50.95%	246	58.22%	277	65.49%	307	72.76%
Total Metals	2,764	8.70%	1,180	42.69%	1,258	45.50%	1,335	48.30%	1,413	51.11%	1,490	53.92%	1,568	56.72%	1,646	59.53%	1,723	62.33%	1,801	65.14%	1,878	67.94%	1,956	70.75%
PET Containers	309	0.97%	162	52.48%	171	55.23%	179	57.98%	188	60.73%	196	63.49%	205	66.24%	213	68.99%	222	71.74%	230	74.50%	239	77.25%	247	80.00%
HDPE Containers	282	0.89%	87	30.72%	96	34.15%	106	37.58%	116	41.01%	125	44.43%	135	47.86%	145	51.29%	155	54.72%	164	58.14%	174	61.57%	184	65.00%
Other Plastic (3-7) Containers	50	0.16%	30	58.56%	30	59.70%	31	60.84%	31	61.99%	32	63.13%	32	64.28%	33	65.42%	34	66.57%	34	67.71%	35	68.86%	35	70.00%
Film Plastic	1,838	5.78%	0	0.00%	74	4.00%	147	8.00%	221	12.00%	294	16.00%	368	20.00%	441	24.00%	515	28.00%	588	32.00%	662	36.00%	735	40.00%
Other Plastic																								
Durables	998	3.14%	0	0.00%	30	3.00%	60	6.00%	90	9.00%	120	12.00%	150	15.00%	180	18.00%	210	21.00%	240	24.00%	270	27.00%	300	30.00%
Non-Durables	535	1.68%	0	0.00%	19	3.50%	37	7.00%	56	10.50%	75	14.00%	94	17.50%	112	21.00%	131	24.50%	150	28.00%	169	31.50%	187	35.00%
Packaging	405	1.27%	0	0.00%	26	6.50%	53	13.00%	79	19.50%	105	26.00%	132	32.50%	158	39.00%	184	45.50%	211	52.00%	237	58.50%	263	65.00%
Other Plastic (Total)	1,939	6.10%	0	0.00%	75	3.87%	150	7.74%	225	11.61%	300	15.48%	375	19.35%	450	23.21%	525	27.08%	600	30.95%	675	34.82%	750	38.69%
Total Plastics	4,418	13.90%	278	6.30%	446	10.09%	613	13.87%	780	17.66%	947	21.45%	1,115	25.23%	1,282	29.02%	1,449	32.80%	1,617	36.59%	1,784	40.38%	1,951	44.16%
Glass Containers	1,262	3.97%	964	76.34%	975	77.20%	986	78.07%	997	78.94%	1,007	79.80%	1,018	80.67%	1,029	81.53%	1,040	82.40%	1,051	83.27%	1,062	84.13%	1,073	85.00%
Other Glass	145	0.46%	0	0.00%	9	6.00%	17	12.00%	26	18.00%	35	24.00%	43	30.00%	52	36.00%	61	42.00%	70	48.00%	78	54.00%	87	60.00%
Total Glass	1,407	4.43%	964	68.48%	983	69.87%	1,003	71.27%	1,023	72.66%	1,042	74.06%	1,062	75.45%	1,081	76.85%	1,101	78.24%	1,121	79.64%	1,140	81.03%	1,160	82.43%
Food Scraps	4,124	12.97%	0	0.00%	206	5.00%	412	10.00%	619	15.00%	825	20.00%	1,031	25.00%	1,237	30.00%	1,443	35.00%	1,650	40.00%	1,856	45.00%	2,062	50.00%
Yard Trimmings	770	2.42%	49	6.42%	110	14.27%	170	22.13%	231	29.99%	291	37.85%	352	45.71%	412	53.57%	473	61.42%	533	69.28%	594	77.14%</		

**Cortland County
Municipal Solid Waste (MSW) Combined Composition Analysis and Projections**

Material	Tons Generated	% of Total	2012		2015		2016		2017		2018		2019		2020		2021		2022		2023		2024	
			Tons	%	Tons	%	Tons	%	Tons	%	Tons	%	Tons	%	Tons	%	Tons	%	Tons	%	Tons	%	Tons	%
			Diverted	Diverted	Diverted	Diverted	Diverted	Diverted	Diverted	Diverted	Diverted	Diverted	Diverted	Diverted	Diverted	Diverted	Diverted	Diverted	Diverted	Diverted	Diverted	Diverted	Diverted	Diverted
Total Wood	1,940	6.10%	0	0.00%	68	3.50%	136	7.00%	204	10.50%	272	14.00%	340	17.50%	407	21.00%	475	24.50%	543	28.00%	611	31.50%	679	35.00%
C&D Materials	2,461	7.74%	0	0.00%	111	4.50%	221	9.00%	332	13.50%	443	18.00%	554	22.50%	664	27.00%	775	31.50%	886	36.00%	997	40.50%	1,107	45.00%
Other Durables	576	1.81%	0	0.00%	23	4.00%	46	8.00%	69	12.00%	92	16.00%	115	20.00%	138	24.00%	161	28.00%	184	32.00%	207	36.00%	230	40.00%
Diapers	498	1.57%	0	0.00%	12	2.50%	25	5.00%	37	7.50%	50	10.00%	62	12.50%	75	15.00%	87	17.50%	100	20.00%	112	22.50%	124	25.00%
Electronics	428	1.35%	154	35.94%	177	41.35%	200	46.75%	223	52.16%	247	57.56%	270	62.97%	293	68.38%	316	73.78%	339	79.19%	362	84.59%	386	90.00%
Tires	571	1.80%	14	2.45%	64	11.21%	114	19.96%	164	28.72%	214	37.47%	264	46.23%	314	54.98%	364	63.74%	414	72.49%	464	81.25%	514	90.00%
HHW	111	0.35%	0	0.00%	9	8.00%	18	16.00%	27	24.00%	35	32.00%	44	40.00%	53	48.00%	62	56.00%	71	64.00%	80	72.00%	88	80.00%
Fines	188	0.59%	0	0.00%	4	2.00%	8	4.00%	11	6.00%	15	8.00%	19	10.00%	23	12.00%	26	14.00%	30	16.00%	34	18.00%	38	20.00%
Total Miscellaneous	4,832	15.20%	168	3.48%	400	8.28%	632	13.08%	864	17.88%	1,096	22.68%	1,328	27.48%	1,560	32.28%	1,791	37.08%	2,023	41.88%	2,255	46.68%	2,487	51.48%
Total	31,786	100.00%	5,916	18.61%	7,166	22.54%	8,415	26.47%	9,664	30.40%	10,913	34.33%	12,163	38.26%	13,412	42.19%	14,661	46.12%	15,910	50.05%	17,160	53.98%	18,409	57.91%

Population (Actual & Projected)	49,336	yr2010	48,736	est.	48,436	est.	48,136	est.	47,836	est.	47,536	est.	47,236	est.	46,936	est.	46,636	est.	46,336	est.	46,036	est.	45,736	est.
MSW Generated (tons)	31,786		58,946		59,085		58,886		58,684		58,480		58,275		58,136		57,995		57,850		57,703		57,553	
MSW Diverted (tons)			5,916		7,166		8,415		9,664		10,913		12,163		13,412		14,661		15,910		17,160		18,409	
MSW Disposed (tons)			53,030		51,920		50,471		49,020		47,567		46,112		44,724		43,334		41,940		40,543		39,144	
Per Capita MSW Generated (lbs)	1,289		2,419		2,440		2,447		2,454		2,460		2,467		2,477		2,487		2,497		2,507		2,517	
Per Capita MSW Diverted (lbs)			243		296		350		404		459		515		571		629		687		745		805	
Per Capita/year MSW Disposed (lbs)			2,176		2,144		2,097		2,050		2,001		1,952		1,906		1,858		1,810		1,761		1,712	
Per Capita/day MSW Disposed (lbs)			6.0		5.9		5.7		5.6		5.5		5.3		5.2		5.1		5.0		4.8		4.7	

A3 – C&D Composition Table

A4 – C&D Diversion Table

**Cortland County
Construction and Demolition (C&D) Debris Combined Composition Analysis and Projections**

Material	Tons Generated	% of Total	YEAR 1		YEAR 2		YEAR 3		YEAR 4		YEAR 5		YEAR 6		YEAR 7		YEAR 8		YEAR 9		YEAR 10			
			2011		2015		2016		2017		2018		2019		2020		2021		2022		2023		2024	
			Tons Diverted	% Diverted																				
Concrete/Asphalt/Rock/Brick	9,942	35.39%	0	0.00%	4,474	45.00%	8,451	85.00%	8,451	85.00%	8,451	85.00%	8,948	90.00%	8,948	90.00%	8,948	90.00%	8,948	90.00%	8,948	90.00%	8,948	90.00%
Wood	4,157	14.80%	0	0.00%	1,663	40.00%	1,663	40.00%	1,663	40.00%	1,663	40.00%	1,871	45.00%	1,871	45.00%	1,871	45.00%	2,078	50.00%	2,078	50.00%	2,078	50.00%
Roofing	1,385	4.93%	0	0.00%	416	10.00%	624	15.00%	624	15.00%	624	15.00%	1,039	25.00%	1,039	25.00%	1,039	25.00%	1,247	30.00%	1,247	30.00%	1,247	30.00%
Drywall	713	2.54%	0	0.00%	71	10.00%	107	15.00%	107	15.00%	107	15.00%	143	20.00%	143	20.00%	143	20.00%	143	20.00%	178	25.00%	178	25.00%
Soil/Gravel	7,645	27.22%	0	0.00%	1,529	20.00%	1,911	25.00%	1,911	25.00%	2,294	30.00%	2,676	35.00%	2,676	35.00%	2,676	35.00%	2,676	35.00%	3,058	40.00%	3,058	40.00%
Metal	1,660	5.91%	0	0.00%	830	50.00%	830	50.00%	913	55.00%	913	55.00%	996	60.00%	996	60.00%	1,079	65.00%	1,162	70.00%	1,245	75.00%	1,328	80.00%
Plastic	111	0.40%	0	0.00%	11	10.00%	11	10.00%	11	10.00%	17	15.00%	17	15.00%	17	15.00%	17	15.00%	22	20.00%	22	20.00%	22	20.00%
Corrugated/Paper	562	2.00%	0	0.00%	84	15.00%	112	20.00%	112	20.00%	140	25.00%	140	25.00%	168	30.00%	168	30.00%	168	30.00%	197	35.00%	225	40.00%
Other	1,916	6.82%	0	0.00%	192	10.00%	240	12.50%	287	15.00%	335	17.50%	383	20.00%	431	22.50%	479	25.00%	527	27.50%	575	30.00%	479	25.00%
Total	28,092	100.00%	0	0.00%	9,270	33.00%	13,949	49.65%	14,080	50.12%	14,544	51.77%	16,213	57.71%	16,289	57.98%	16,420	58.45%	16,972	60.42%	17,549	62.47%	17,565	62.52%

Appendix B

Copy of the Local Solid Waste Law

ON MOTION OF MR. TROY

RESOLUTION NO. 254-12

ADOPT PROPOSED LOCAL LAW NO. 4 FOR THE YEAR 2012

WHEREAS, The Cortland County Legislature wishes to correct/consolidate previously adopted local laws relating to the County's Solid Waste Plan, AND

WHEREAS, the Cortland County Solid Waste Committee has reviewed and recommended the adoption of the attached Local Law, AND

WHEREAS, the law sat the required seven days on legislators desks, a public hearing was held August 23, 2012, and proper notice of said public hearing was provided, NOW, THEREFORE BE IT

RESOLVED, that, upon approval of the County Attorney, the attached local law, titled Local Law No. 4 of 2012 - "A Local Law To Establish A Program For The Collection, Transportation And Disposal Of Solid Waste And Recyclables At The Cortland County Landfill," is hereby adopted by the Cortland County Legislature

**Local Law No. 4 of 2012 - “A Local Law To Establish A Program For The
Collection, Transportation And Disposal Of Solid Waste And Recyclables At The
Cortland County Landfill.”**

Be it enacted by the County Legislature of the County of Cortland as follows:

SECTION I.

LEGISLATIVE INTENT

The County Legislature hereby finds that a safe, sanitary, efficient, economical and environmentally sound manner of conducting solid waste management is declared to be of importance to the health, safety, and welfare of the inhabitants of the County of Cortland. Control of the collection, transportation, and disposal of solid waste and recyclables in the county is essential to the economy and general welfare of the citizens of Cortland County.

This local law is intended to supersede all prior local laws and enactments relative to solid waste and recyclable programs in Cortland County; including, but not limited to, Local Laws Number 3 of 1981, Number 5 of 1992 and Number 3 of 2002.

SECTION II.

DEFINITIONS

- a. The term “Beneficial Use Determination” shall mean a designation made by the NYS Department of Environmental Conservation as to whether the 6 NYCRR Part 360 Solid Waste Management Facilities regulations have jurisdiction over waste material which is to be beneficially used. Once the Department of Environmental Conservation grants a Beneficial Use Determination (or “BUD”), the waste material ceases to be considered solid waste for the purposes of Part 360 when used as described. There are 16 pre-determined BUDs listed in 6 NYCRR Part 360-1.15(b). In situations where a particular reuse is not specifically identified in Part 360-1.15(b), generators and potential users can petition the Department of Environmental Conservation for a case-specific BUD in accordance with the 6 NYCRR Part 360-1.15(d).
- b. The term “Board of Hearing” shall mean the board described in Section V(1) of this local law.
- c. The term “Cortland County Legislature” shall mean the duly elected County Legislature of Cortland County.
- d. The term “Commercial Waste” shall mean solid waste generated by stores, offices, institutions, restaurants, warehouses, non-manufacturing activities in industrial facilities and agricultural enterprises.

- e. The term “Commercial Waste Permit” shall mean the permit issued pursuant to Section IV (1) of this local law.
- f. The term “Construction and Demolition Debris” shall mean solid waste resulting from construction, remodeling, repair and demolition of structures, roads, buildings, and land clearing. Such wastes include, but are not limited to, bricks, concrete and other masonry materials, soil, rock, lumber, road spoils, paving material and tree and bush stumps.
- g. The term “Contractor” shall mean any individual, association, partnership, firm, corporation, not-for-profit organization, municipality, educational institution or any other person so deemed by the department, engaged in the commercial collection, pickup, transfer, removal and/or disposal of Commercial Waste, Construction and Demolition Debris and/or Industrial Waste excluding Refuse.
- h. The term “County” shall mean Cortland County, a municipal corporation of the State of New York, with offices at 60 Central Avenue, Cortland, New York 13045.
- i. The term “County Landfill” shall mean the landfill owned and operated by the County of Cortland and located on Town Line Road in the Towns of Cortlandville and Solon, New York, or any other landfill owned and/or operated, or caused to be operated by, the County of Cortland.
- j. The term “Department” shall mean Cortland County Solid Waste/Recycling as a part of the Cortland County Highway Department, or its successor.
- k. The term “Electronic Equipment Recycling” shall have the meaning specified in the NYS Environmental Conservation Law, Article 27, Title 26, also known as the “*NYS Electronic Equipment Recycling and Reuse Act*”.
- l. The term “Facility” shall mean any Solid Waste management facility owned or operated, or caused to be operated by the County, or any such other facility or facilities in or out of County that accepts or disposes of Solid Waste and/or Recyclables generated, originated or brought into the County, including, but not limited to landfills, transfer stations, materials, recovery facilities, drop-off centers, and resource recovery facilities.
- m. The term “Hazardous Waste” shall mean those materials, substances, or wastes including, but not limited to, pesticides and containers used for pesticides, other waste which appears on the list or satisfies the characteristics of hazardous waste promulgated by the New York State Commissioner of the Department of Environmental Conservation, (6 NYCRR Parts 370, 373, 376), and any other material determined, now or in the future, to be hazardous by state or federal rule, regulation and/or statute.

- n. The term “Farm” shall have the meaning specified in 6 NYCRR §360-1.2, as the same may be amended, suspended or replaced.
- o. The term “Industrial Waste” shall mean Solid Waste generated by manufacturing or industrial processes. Such waste may include, but is not limited to the following manufacturing processes: electric power generation, fertilizer/agricultural chemicals, inorganic chemicals, iron and steel manufacturing, leather and leather products, non-ferrous metals manufacturing/foundries, organic chemicals, plastics and resins manufacturing, pulp and paper industry, rubber and miscellaneous plastic products, stone, glass, clay and concrete products, textile manufacturing, transportation equipment, and water treatment. This term does not include oil or gas drilling, production and treatment wastes (such as brines, oil, and fluids) or overburden, spoil or tailings resulting from mining, or solution mining brine and insoluble component wastes.
- p. The term “Infectious Waste” shall have the meaning specified in 6 NYCRR 360-1.2 as the same may be amended, superseded or replaced.
- q. The term “M.R.F. Recycling Facility” shall mean the materials recovery facility located at 137 South Pendleton Street, Cortland, New York.
- r. The term “Open Dump” shall mean a Solid Waste disposal area which does not comply with the required public health and environmental control practices.
- s. The term “Person” or “Persons” shall mean any individuals, company, partnership, association, firm, corporation, municipality or any other entity.
- t. The term “Private Business/Farm Permit” shall mean the permit issued pursuant to Section IV(2) of this local law.
- u. The term “Processor” shall mean a primary user of the particular material such as Recyclables, including, but not limited to, glass factories, detinner, plastic recovery facility, paper mill or a consolidator of the material.
- v. The term “Prohibited Materials” shall mean the following materials, as may be modified from time to time by the Department, and these materials shall not be accepted at the County Landfill or any other Facility in the County:
 - i. Well drilling debris (i.e., tailings from the drilling of wells or hydraulic fracturing)
 - ii. Septic tank pumpings
 - iii. Liquid wastes
 - iv. Pesticides and chemicals
 - v. Junked vehicles, car parts, motor parts
 - vi. Explosives

- vii. Compressed gas tanks
- viii. Fluorescent bulbs (including compact fluorescent bulbs)
- ix. Hot ashes, other burning or hot loads
- x. Sealed containers
- xi. Hazardous waste
- xii. Large dead animals
- xiii. Motor oil
- xiv. Friable asbestos
- xv. Sludge (without a permit)
- xvi. Batteries

w. The term “Recyclables” shall mean such material designated from time to time by the Department which under any applicable law or regulation is not Hazardous Waste and which can be reasonably separated from the Solid Waste stream and held for its material recycling or reuse value. The following materials as may be modified from time to time by the Department, shall be considered Recyclables:

- i. glass
- ii. newspapers
- iii. corrugated cardboard
- iv. metal containers
- v. plastic containers (marked with recycling triangle, numbers 1 through 7)
- vi. residential metal appliances (with statement of purging CFC or Freon)
- vii. tires (for an additional fee)

x. The term “Refuse” shall mean putrescible and incidental non-putrescible Solid Waste including, but not limited to, animal, vegetable and paper waste. Refuse originates primarily in homes, business and restaurants, and has characteristics similar to that Solid Waste collected and disposed of as part of normal residential and commercial collections.

y. The term “Resident” shall mean any individual who is a legal resident of the County or any individual who is a temporary resident of the County.

z. The term “Residential Waste Permit” shall mean the permit issued for the disposal of Solid Waste generated from houses, apartments and other residential dwellings.

z. The term “Solid Waste” shall mean all materials or substances discarded or rejected as being spent, useless, worthless or in excess to the owners at the time of such discard or rejection, including but not limited to garbage, refuse, industrial and commercial waste, sludges from air or water pollution control facilities or water supply treatment facilities, rubbish, ashes, contained gaseous material, incinerator residue, demolition and construction debris and offal but not including sewage and other highly diluted water carried materials or substances and those in

gaseous form, special nuclear or by-product material within the meaning of the Atomic Energy Act of 1954, as amended, or waste which appears on the list or satisfies characteristics of hazardous waste promulgated by the New York State Commissioner of the Department of Environmental Conservation. (See also NYS County Law §226-b)

- aa. The term “Source Separation” shall mean the dividing of solid waste into some or all of its component parts at the point of generation, including the separation of recyclables from each other, or the separation of recyclables from other solid waste. (6 NYCRR §360-1.2 (160)). The residue remaining after recyclables are removed from the waste stream is not considered source separated material.
- bb. The term “Waste Collector” shall mean any individual, association, partnership, firm, corporation, not-for-profit organization, municipality, educational institution, or any other person so deemed by the Department, engaged in the commercial collection, pick-up, transfer, removal and/or disposal of Solid Waste and/or Recyclables generated, originated or brought within the boundaries of the County.

SECTION III.

ADMINISTRATION

- a. The Department, or its successor, shall be primarily responsible for all ministerial and administrative duties described or reasonably required by the terms of this local law.
- b. The Cortland County Legislature, pursuant to New York State County Law §226-b, may, by resolution, establish schedules of rates or fees to be charged for any solid waste collection or management facilities or services provided, including, but not limited to, the establishment of solid waste permit, tipping and user fees. Such fees shall commence upon the adoption or effective date of such resolution and continue until modified, amended or rescinded.
- c. The Department, or its successor, shall administer the program of registering and permitting all waste collectors, contractors and other persons collecting, transporting or disposing of Solid Waste and Recyclables in the County. This includes the issuance, renewal, and revocation of all permits described in this local law.
- d. The Department, or its successor, may promulgate rules in connection with the operation of the County Landfill or any other Facility.

- e. The Department, or its successor, shall issue warning notices, and may initiate proceedings pursuant to Section V of this local law subject to the approval of the Cortland County Legislature or its designee.
- f. The Department, or its successor, may encourage and conduct studies, investigations and research relating to various aspects of Solid Waste Management as it deems necessary or as requested by the Cortland County Legislature.

SECTION IV.

STANDARDS AND REGULATIONS

- 1. Commercial Waste Permit Requirements
 - a. No waste collector or contractor shall collect, transport or dispose of Solid Waste at the Cortland County Landfill without obtaining a Commercial Waste Permit issued by the County.
 - b. All applications for Commercial Waste Permits shall be in writing and shall contain such information as requested by the Department, but at a minimum, as set forth in this local law. All Commercial Waste Permit information shall be verified by the applicant as required by this local law and the Department. The applicant shall file with any application proof of insurance and shall pay the required permit fee as set forth in this local law.
 - c. All Commercial Waste Permit holders must provide curbside recycling pick-up to their residential and commercial customers, either directly or by subcontracting a duly licensed contractor to provide this service to their commercial and residential customers.
 - d. Each Commercial Waste Permit applicant shall be required to pay a Commercial Waste Permit fee per vehicle. The fees, rates, or charges for Commercial Waste Permit holders shall be established by resolution of the Cortland County Legislature and such charges shall commence upon the adoption or effective date of such resolution and continue until modified, amended or rescinded.
 - e. Proof of insurance shall be filed with the application executed by the representatives of an insurance company, duly authorized and qualified by the Department, evidencing that said insurance company has issued motor vehicle liability and property damage insurance policies covering the following:
 - i. All operations of the applicant or any other person, firm or corporation employed by him in transporting Solid Waste and/or Recyclables.

- ii. The disposal of such Solid Waste and/or Recyclables to and within the designated and approved County Landfill and/or Facility.
 - iii. Protecting the public and any person from injuries or damages sustained by reason of transporting Solid Waste and/or Recyclables.
 - iv. The certificate or affidavit to be filed with the application shall be executed by the representatives of a duly qualified insurance company evidencing that said insurance company shall provide to the County of Cortland at least 30 days notice of any cancellation or reduction of coverage, and further evidencing that said insurance company has issued commercial vehicle insurance policies.
- f. Upon receipt of the application and the proper proof of insurance and the payment of the Commercial Waste Permit fee, the Department shall thereupon issue the applicant a Commercial Waste Permit. A Commercial Waste Permit shall expire on the next December 31st following the date of issue. Upon issuance of the Commercial Waste Permit, the Department shall affix the Commercial Waste Permit identification sticker issued to each and every vehicle operated by the permitted commercial hauler.
- g. Renewal of Commercial Waste permits shall be in the same manner and subject to the same conditions as original Commercial Waste Permits, and also shall be subject to any additional requirement in effect at the time of application for renewal as specified by the Department or the Cortland County Legislature.
- h. Whenever proof, by means of an affidavit, is submitted to the Department that a Commercial Waste Permit issued for the purpose set forth in this local law has been lost or destroyed, the Department shall, upon payment of \$5.00 by the applicant, issue a new Commercial Waste Permit in lieu of the one which was lost or destroyed.
- i. No Commercial Waste Permit issued pursuant to the provision of this local law shall be transferable.
- j. All collection, transportation and/or disposal of Solid Waste and/or Recyclables shall be in strict conformance with the rules and regulations prescribed in this local law and as such rules and regulations may hereafter be amended or supplemented by the Department.

- k. All vehicles used in the collection, transportation and/or disposal of Solid Waste and/or Recyclables shall be maintained in a sanitary condition and shall be constructed as to prevent leakage in transit. The body of the vehicle shall be wholly enclosed or shall at all times be kept covered with an adequate cover. Operation of vehicles shall be done in such a manner as to prevent spilling or loss of contents.
- l. Any Commercial Waste Permit issued pursuant to this local law shall be in the nature of a privilege subject to the terms and conditions set forth in this local law and as amended or supplemented by the Department, and shall not be deemed to create a property interest with respect to the Commercial Waste Permit in the holder.
- m. All such Commercial Waste Permit requirements specified herein, including, but not limited to, Commercial Waste Permit fees and insurance coverage amounts, may be amended or adjusted from time to time by resolution of the Legislature of Cortland County.

2. Residential Waste Permit and Private Business / Farm Permit Requirements

- a. Residential Waste Permits shall be available and are required for passenger cars, vans, station wagons and pick-up trucks (up to one ton capacity). All other vehicles must be registered under the provisions applicable to a Commercial Waste Permit or Private Business/Farm Permit. The Department, in its sole discretion, may require any vehicle, regardless of type or size, transporting Solid Waste and/or Recyclables for compensation paid to the owner or operator, to comply with the provisions applicable to a Commercial Waste Permit or Private Business/Farm Permit.
- b. Persons and contractors not holding Commercial Waste Permits may obtain a Private Business/Farm Permit for the collection, transportation and/or disposal of Solid Waste other than Refuse at the County Landfill. A Private Business/Farm Permit must be obtained from the Department. The fees, rates or charges for Private Business/Farm Permit holders shall be established by resolution of the Cortland County Legislature, and such charges shall commence upon the adoption or effective date of such resolution and continue until modified, amended or rescinded. Holders of a Private Business / Farm Permit shall be required to make immediate cash payment of the required fee for the first 90 days, and once a month thereafter.
- c. The Department may, at its sole discretion, require certain Private Business/Farm Permit holders to provide proof of insurance in a form and amount satisfactory to the Department before such Private Business/Farm Permit holder may dispose of Solid Waste and/or Recyclables at the County Landfill or any other Facility.

- d. Residential Waste Permit holders and Private Business/Farm Permit holders shall strictly comply with all rules and regulations prescribed by the Department.
- e. All Residential Waste Permit and Private Business/Farm Permit requirements specified herein, including, but not limited to, Residential Waste Permit fees and Private Business/Farm Permit fees, may be amended or adjusted from time to time by resolution of the Cortland County Legislature.

3. Disposal of Solid Waste

- a. No waste collector, contractor, or other person shall dispose of Solid Waste at the County Landfill or any Facility for the disposal of Solid Waste, without a Commercial Waste Permit, Residential Waste Permit, or Private Business/Farm Permit.
- b. Only Solid Waste generated within the County will be accepted at the County Landfill or at any other Approved Landfill Facility located in the County. Combined loads containing Solid Waste from within the County as well as from a contiguous County will not be accepted for disposal at the County Landfill .
- c. Recyclable material generated within the County and from out of the County will be accepted at the Recycle Facility located in the County.
- d. The County Landfill will accept BUD material from outside the county as defined and allowed under the rules and regulations of the NYS Department of Environmental Conservation and the Cortland County Legislature.
- e. The County Landfill is authorized to accept construction and demolition debris subject to prior approval.
- f. Anyone entering the County Landfill or any other Facility to dispose of Solid Waste must adhere to the rules and regulations as posted, and must follow the instructions of the attendant on duty.
- g. Nothing within this local law shall be construed at any time to restrict the ability of the Department to refuse to accept Hazardous Waste or other Prohibited Materials at the County Landfill or any other Facility.
- h. No Waste Collector, Contractor, or other Person shall dispose of Solid Waste at the County Landfill or at any other Facility unless such Person or entity shall pay the tipping fee.
- i. Tipping fees for Commercial Waste Permit holders, Private Business/Farm Permit holders, and Residential Waste Permit holders shall be established by resolution of the Cortland County Legislature, and such charges shall commence upon the

adoption or effective date of such resolution and continue until modified, amended or rescinded. A minimum fee per transaction shall be established by resolution of the Cortland County Legislature, and such charges shall commence upon the adoption or effective date of such resolution and continue until modified, amended or rescinded.

- j. Commercial Waste Permit holders and Private Business/Farm Permit holders will be billed monthly by the County. Such bills must be paid within 30 days of the mailing of the fee statement. Such bills unpaid within 30 days of mailing will be charged an additional 2% per month finance charge. Failure to make payments when due shall result in suspension or revocation of the Commercial Waste Permit or Private Business / Farm Permit.
- k. All Solid Waste Permit disposal requirements specified in this subsection including, but not limited to, tipping fees, permit costs, etc., may be amended or adjusted from time to time by resolution of the Cortland County Legislature.
- l. There shall be no Open Dumps in the County. This shall not be construed as to prohibit disposal areas located within the property boundaries of a farm for Solid Waste generated from that farm as otherwise permitted by law except in cases creating a public health nuisance.

4. Disposal of Recyclables

- a. All persons generating Solid Waste, and/or Waste Collectors and Contractors operating in the County, must separate from the Solid Waste stream those Recyclables designated by the Department. The Recyclables stream, as may be further modified from time to time by the Department, must be separated into two categories:

- (1) newspaper, magazines and corrugated cardboard; and
- (2) plastic, glass, aluminum and metal.

This number of Recyclables categories for separation will be set by resolution of the Cortland County Legislature, subject to DEC approval, and such charges shall commence upon the adoption or effective date of such resolution and continue until modified, amended or rescinded.

- b. Any individual, firm or corporation depositing contaminated and/or non-recyclable material as recyclable will be charged accordingly and any license or permit is subject to suspension or cancellation.
- c. Electronic Equipment Recycling shall comply with the requirements of Environmental Conservation Law Article 27, Title 26. Manufacturers of covered electronic equipment (CCE) are required to provide the county with at least one

- convenient method of recycling. Municipalities are not required to provide electronic waste collection and recycling programs. If the County of Cortland chooses to do so, with the permission of the Cortland County Legislature by resolution, the county may voluntarily enter into agreements with manufacturers or collective electronic waste acceptance programs to provide collection services to assist manufacturers in meeting their obligations under the Electronic Equipment Recycling and Reuse Act; and/or collect electronic equipment that is not included in the Act as covered electronic equipment.
- d. Recyclables and Solid Waste must be separately packaged or contained in proper containers as specified in this local law or as designated by the Department. If plastic bags are utilized for this purpose, the bags shall be transparent to facilitate viewing of their contents.
 - e. Commercial Waste generators may elect to contract with a Processor of Recyclable material and have such material delivered directly to the Processor from the place of generation or place of business. All Recyclables sold in this manner must be reported to the Department for inclusion in data required by the New York State Department of Environmental Conservation.
 - f. The Department may maintain Recyclable drop-off stations under agreement with the various municipalities for use by existing Recyclable drop-off stations located in the Towns. The Department reserves the right to increase, decrease, or eliminate the number, or relocate such Recyclable drop-off stations.
 - g. Tipping fees or disposal charges may be imposed by resolution of the Cortland County Legislature at any Facility located in the County for the disposal of Recyclables.
 - h. All Recyclable disposal requirements specified in this subsection may be adjusted from time to time by resolution of the Cortland County Legislature.

SECTION V.

ENFORCEMENT

- 1. Civil Sanctions (except for non-payment of tipping fees covered in Section V)
 - a. The Department shall have the right to impose a civil penalty and/or suspend or revoke any Commercial Waste Permit, Residential Waste Permit, or Private Business/Farm Permit if the holder of such permit violates any of the provisions of this local law. Revocation, suspension or civil penalty may only follow a written notice of violation and, if demanded, a hearing as provided for in this local law.

- b. Upon any violation of the provisions of this local law, the Department shall serve notice of violation in person or by ordinary and certified mail sent to the holder of any permit issued pursuant to this local law at the address set forth in the permit application on file with the Department. Such notice shall state the Department's intent to revoke or suspend, and/or impose a civil penalty upon the permit holder.
- c. Any holder of a Commercial Waste Permit, Residential Waste Permit or Private Business/Farm Permit may demand a hearing as allowed by Section V(1) of this local law by serving upon the Department a written request for a hearing. Such request must be received by the Department within twenty (20) days of the date of service of notice. Upon receipt of such demand, a hearing shall be scheduled and held at the offices of the County of Cortland during regular business hours.
- d. Upon the expiration of such twenty (20) day notice period provided for in Section V(1)(c) of this local law, or the majority determination of the Board of Hearing, the revocation, suspension and/or civil penalty in the notice or as modified by the Board of Hearing, shall be effective.
- e. The Board of Hearing shall consist of the three (3) members, each appointed by a majority vote of the Cortland County Legislature at the first regular meeting following the biennial organizational meeting. The term of office shall coincide with that of the Legislature appointing the members. The Chairman of the Board of Hearing shall be selected by the Chairman of the County Legislature. Members shall be residents of the County of Cortland. One member shall be an elected or appointed officer or employee of the County. In no instance shall elected or appointed officers or employees constitute a majority of the Board of Hearing.
- f. The Board of Hearing shall promulgate rules and regulations in furtherance of its powers and duties, including rules governing the conduct of adjudicatory proceedings and appeals relating to the assessment of civil penalties authorized by this local law. The Board of Hearing shall have the authority to conduct investigations necessary to carry out the provisions of this law. Pursuant to this power and duty, the Board of Hearing may administer oaths or affirmations, subpoena witnesses (whether or not a County officer, employee or appointed official), compel their attendance and require the production of any document, book or record deemed relevant or material to resolving the adjudicatory proceeding.
- g. The Board of Hearing shall make a complete record of all adjudicatory proceedings conducted before it. A final decision, determination or order adverse to a party in an adjudicatory proceeding shall be in writing and stated in the record and shall include findings of fact and conclusions of law or reasons for the decision, determination or order. Findings of fact, if set forth in

statutory language, shall be accompanied by a concise and explicit statement of the underlying facts supporting the findings. If, in accordance with agency rules, a party submitted proposed findings of fact, the decision, determination or order shall include a ruling upon each proposed finding. A copy of the decision, determination or order shall be delivered or mailed forthwith to each party and to his attorney of record.

- h. Any person who violates any of the provisions of this local law may be required to pay a civil penalty not to exceed \$2000.00 for each violation. Such civil penalty must be paid in full before any permit issued pursuant to this local law can be reinstated.

SECTION VI.

SEVERABILITY

If any part of this local law, as originally enacted or as amended from time to time, is found to be illegal, or its application to any person or circumstances is held to be invalid, the remainder and the application of its provisions to persons or circumstances other than those to which it is held invalid, shall not be affected thereby and shall remain in full force and effect.

SECTION VII.

EFFECTIVE DATE

cc. This local law shall take effect upon filing in the Office of the Secretary of State as provided by Section 27 of the Municipal Home Rule Law.

Appendix C
Municipal Programs

ZERO-SORT®

**CARDBOARD
PAPER
PLASTIC
GLASS
ALUMINUM
TIN**

For more information on Zero-Sort Recycling, please contact:

County office:

Recycling Center Hours:

Sunday:	<input type="text"/>
Monday:	<input type="text"/>
Tuesday:	<input type="text"/>
Wednesday:	<input type="text"/>
Thursday:	<input type="text"/>
Friday:	<input type="text"/>
Saturday:	<input type="text"/>



137 1/2 South Pendleton Street
Cortland, NY 13045

HOW RECYCLING GETS DONE®

Zero-Sort is the single bin recycling service that puts more of your stuff back into the world and less of it into the landfill. No separation or sorting of materials needed – it all goes into the same bin – please make sure containers are rinsed and free of food.

ACCEPTED MATERIALS

Labels and caps can be left on all containers.

- Newspapers
- Magazines
- Catalogs
- Telephone/Soft/Hard Cover Books
- Junk Mail/Envelopes (All Types), Staples/Paperclips are Ok
- Cereal & Shoe Boxes
- All Corrugated Boxes
- Milk & Juice Cartons
- Bottles/Containers (Numbered 1-7)
- Soda/Juice/Water Bottles (Glass or Plastic)
- Milk Jugs, Bleach/Detergent, Shampoo Bottles
- Food Containers (Cottage Cheese/Margarine/Yogurt)
- Glass Bottles/Jars
- Aluminum (Pie Plates/Trays/Foil)
- Metal Cans (Tin/Steel/Aluminum)
- Empty Aerosol Containers

NOT ACCEPTED IN ZERO-SORT RECYCLING

The following items are not acceptable as recyclables.

- Plastic Bags/Film
- Stretch Wrap
- Styrofoam
- Ceramics
- Window Glass
- Mirrors
- Light Bulbs
- Dishes
- Hard/Brittle Plastic (I.E. Monitors, Keyboards, Some Children's Toys)

Notable Notes:

Homer Police Department

Emergency 911
Non-emergency 749-2022

Homer Fire Department

Emergency 911
Non-emergency 749-3121

Homer Recreation Department

Jeff Lewis 749-2161

Town of Homer Assessor

The Village has adopted the Town Tax Roll
31 N. Main St., Homer 749-3153

Code Enforcement Officer

Craig Umbehauer 749-3322

Justice of the Peace

Gary Shiffer, Justice 749-2326

Dog Control

Lindsay Kemp 423-2888

David Harum Senior Center

31 N. Main St., Homer 749-2362

Philips Free Library

31 South Main St., Homer 749-4616

Cortland County Recycling Center

South Franklin Street, Cortland
607-753-8468

Solid Waste Management

Cortland County Landfill

Townline Rd., McGraw 756-8077

Homer Central School

District Office 749-7241

*Questions?
Call the Village Clerk's Office
607-749-3322*



Trash and Recycling Facts

Village of Homer

53 South Main Street, Homer, NY 13077

www.homerny.org



Mayor

Genevieve A. Suits

Village Clerk -Treasurer

Lou Anne Randall

Village Board of Trustees:

Michael Berry
Paul Gower
Kevin Slack
Alexandra Mulvihill

Revised 3/27/13
Recycling Brochure
DKStevens



Place Recyclables curbside by 7 a.m. on your trash collection day

ALL Recyclables may be combined in one container.

Newspaper/Junk Mail/Good Paper

Newspapers, catalogs, magazines and shiny inserts, ads and phonebooks, good office & copy paper, junk mail, school paper, wrapping paper, non-metallic cards, envelopes, cereal, shoe boxes, cake mix boxes. Also, books less than 1-inch thick- no hard covers. Can be placed in a paper bag or reusable container but must be kept dry. Do not place in plastic bags.

Paper Milk and Juice Cartons

Paper milk and juice cartons; drink boxes and soy milk containers. Rinse cartons, drain and flatten, if possible. Discard lids from cartons and straws from drink boxes. Put in with Plastic, Cans & Glass.

PLASTIC & METAL CANS & GLASS

Place in a reusable container, that is not and does not resemble a trashcan, and that can be easily dumped:

1. **Plastic** containers numbered 1 - 7 Rinse clean and remove caps, labels may stay on.

Not accepted: motor oil containers, toys, furniture, styrofoam, plastic bags

Metal food and beverage cans. Cans must be rinsed thoroughly and flattened whenever possible. No paint cans.

Aerosol cans, Empty aerosol cans through normal use. Remove caps, do not remove nozzles.

2. **Glass**

Clean clear, brown and green glass jars and bottles Rinse clean, remove rings and caps. No light bulbs, china, ceramics, plate or auto glass, Pyrex, crystal or mirrors.

Cardboard (Corrugated Only) picked up every week

Flatten boxes and cartons. Remove staples and as much tape as possible. Keep dry. Put with paper.

Not Recyclable: Dirty pizza, detergent, gift, and wet boxes – please discard in regular garbage.

Household Chemicals - Please call the Cortland County Solid Waste Dept. at 756-8077 for how to dispose of these. Do not place any household chemicals in your garbage. Thank you

Syracuse Haulers is our trash/recycling hauler - if you have any questions or complaints please call the Village Clerk's Office at 749-3322 IMPORTANT: Imported trash and recycling – is subject to prosecution. Please call if you see anything unusual.



Trash Notes:

Wednesday: All residences on James St. and south of James. Also Rt. 281 and west of Rt. 281 plus Phelps Dr.

Thursday: All residences North of James St. and all of Main, North Main and South Main Streets.

Regular trash, in a clear plastic bag and recycling, in a reusable container, must be placed curbside by 7 a.m. on your collection day. No trash bag or container shall exceed 25 lbs., or exceed 10 bags per household or 6 bags per apartment unit. Winter: Avoid white containers. Place trash and recycling in a cleared area near the street or curb.

Trash may be put out the night before collection. Trash receptacles must be removed from curbside following collection. (Sect 131-4 of the Village Code of Ordinances)

Regular trash is what is normally generated in a week's time.

Improperly prepared recyclables and trash will, unfortunately, be tagged and left at the curb.

Holiday schedule: Pick up is subject to change, residents should consult the Cortland Standard for pickup schedule or call the office.



To prevent trash bags from being torn apart by crows, contents tagged & left at the curb by trash collectors, we recommend you place trash bags in a covered container.



Compost Site

**Open Every Day 10 am – 5 pm
April 1 thru Nov. 30**

The Village's compost site is located next to the Village Garage on North Fulton Street.

Materials accepted are garden debris, grass clippings, leaves and branches.

*We do **not** accept trees, only branches.*

If you bring debris in plastic bags, please be sure to take the bags home with you.

Residents who remove or have trees removed from their properties must make arrangements for the trees to be taken to an acceptable site.

Residents are permitted to bring branches from storm damage or tree trimming.

The compost site is **only** for Village residents to drop off grass, leaves, etc. If you observe non-residents, commercial landscapers or trash haulers using the site, please note the license plate number or any identifying information and report them to the Police Dept. at 749-2022.

Signs are posted at the site to direct you where to put your composting materials. Please note especially the direction branches need to be placed in the pile. **Anyone** is free to take chips or compost at any time.



How to Recycle Paper

Put all paper in
PAPER bin.

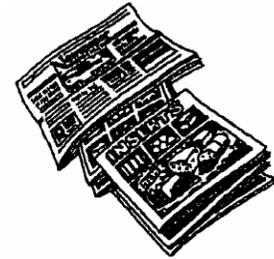
 **No plastic bags!**

Do not mix paper with
containers

Newspaper

YES Glossy ads and magazines are OK. May be mixed with other paper types.

NO Plastic bags, product samples or plastic wrap.

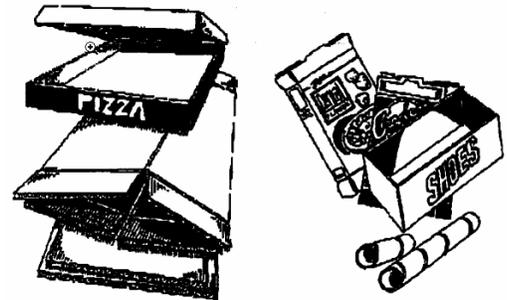


Corrugated Cardboard & Boxboard

shipping cartons and single-layer cardboard

YES Corrugated boxes, including clean pizza boxes, brown paper bags; cereal and cracker boxes; paper egg cartons. Remove any plastic liners. Flatten corrugated boxes. Must be no larger than 4 feet x 4 feet. Stack **next to** the recycling bin.

NO Wax- or plastic-coated boxes. No food. No frozen food boxes or containers.



Mixed Paper

includes white office paper

YES Junk mail, copier/printer paper, magazines, fax paper, non-metallic wrapping paper and greeting cards, spiral notebooks, manila folders, phone books, soft-cover books. Staples, paper clips, and plastic windows are OK.

NO Carbon paper, blueprint paper, Tyvek® envelopes, waxed paper, photo paper or hardcover books.

No plastic bags.



All trash (no yard debris) must be out to the curb by 7:00 a.m. on your scheduled pickup day. If your pick-up day falls on one of the listed holidays, it will be one day behind. All other pick-ups may be one day behind for the rest of the holiday week. Trash must be in clear plastic bags not weighing over 25 pounds per bag. Single family homes and businesses are limited each week to 10 bags and multiple dwellings are limited to 6 bags per unit.

Holidays having an effect on trash collection: Thanksgiving, November 26, 2009.

How to Recycle Containers

Put all containers in
CONTAINER bin.

No Plastic bags!

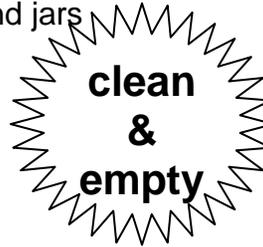
Do not mix containers
with paper.

Glass Bottles and Jars

clear, green & brown
bottles and jars

YES Food and beverage containers only. Discard lids and caps. Rinse clean. Labels and neck rings are OK

NO Plate glass, drinking glasses or crystal, Pyrex®, Visionware, light bulbs, medicine bottles, ceramics, hazardous product bottles, wire or lids.



Metal Cans and Aluminum Foil

YES Food and beverage containers only. **Rinse clean.** Labels are OK. Aerosol cans must be empty: dispose of caps and use contents up according to directions.

NO Plastic bags, food residue, pesticide cans, syringes, gas or propane containers.

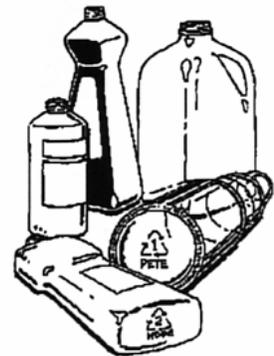
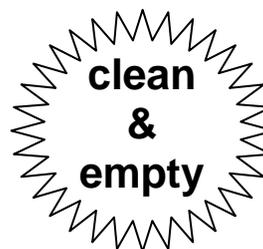


Plastic Bottles and Jugs

#1 - #7 household
bottles & jugs only

YES Household product, beverage or food bottles and jugs with **narrow necks.** Discard lids. Labels and neck rings are OK. **Rinse and crush.**

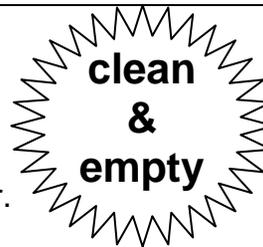
NO Wide-mouth, yogurt-type containers; take-out containers, microwave trays, lids or 6-pack rings. No pesticide or motor oil containers. No plastic bags. Do not tie the jugs with string.



Paper Milk and Juice Cartons

YES Milk and Juice cartons; drink and soymilk boxes. **Rinse,** drain and flatten. Put in with other containers – **not** with Recyclable Paper.

NO Plastic screw-on tops, drinking straws or food.



Appendix D

Example Compliance Report Outline

APPENDIX D: COMPLIANCE REPORT OUTLINE

Cortland County Solid Waste Management Plan

Compliance Report

**Reporting Period:
January 1, 20XX - December 31, 20XX**

February 20XX

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- Appendix A – 20XX Cortland County Solid Waste and Recyclables Inventory
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Appendix E
SEQR Determination

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Resolution Adopting Plan